

SIEMENS

SENTRON • SIVACON • ALPHA

Low-Voltage Power Distribution and Electrical Installation Technology

Protection, Switching, Measuring and Monitoring
Devices, Switchboards and Distribution Systems

Catalog
LV 10

Edition
10/2019

siemens.com/lowvoltage

Making sure power makes its way

Consistent, safe and intelligent low-voltage power distribution and electrical installation technology

Whether industries, infrastructures or buildings: Each environment depends on a reliable power supply.

Which is why products and systems featuring maximum safety and optimum efficiency are in demand. This comprehensive portfolio for low-voltage power distribution and electrical installation technology covers every requirement – from the switchboard to the socket outlet.

We are there when you need us

Your personal contact can be found at
www.siemens.com/lowvoltage/contact

Catalog LV 10 · 10/2019

You will find the latest edition and all future editions in the Siemens Industry Online Support at
www.siemens.com/lowvoltage/catalogs

Refer to the Industry Mall for current prices
www.siemens.com/industrymall

The products and systems listed in this catalog are developed and manufactured using a certified quality management system in accordance with DIN EN ISO 9001:2008.

Technical data

The technical specifications are for general information purposes only. Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

All illustrations are not binding.



Low-Voltage Power Distribution and Electrical Installation Technology

	Introduction	1/2
Protecting	Air Circuit Breakers	1/1
	Molded Case Circuit Breakers	2/1
	Miniature Circuit Breakers	3/1
	Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)	4/1
	Switching Devices	5/1
	Overvoltage Protection Devices	6/1
	Fuse Systems	7/1
Protecting, Switching and Isolating	Switch Disconnectors	8/1
Switching and Isolating	Transfer Switching Equipment and Load Transfer Switches	9/1
Measuring and Monitoring	Measuring Devices, Power Monitoring and Digitalization Solutions	10/1
	Monitoring Devices	11/1
Distribution	Transformers, Power Supply Units and Socket Outlets	12/1
	Busbar Systems	13/1
	Terminal Blocks	14/1
	Power Distribution Boards, Motor Control Centers and Distribution Boards	15/1
	Busbar Trunking Systems	16/1
	System Cubicles, System Lighting and System Air-Conditioning	17/1
	Appendix	A/1

I

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

A

The fast route to the product

New overviews and matrix tables for better orientation within the catalog

Introduction | Products and their applications in infrastructure

Products and their applications in infrastructure

Siemens LV 10 - 10/2019

Products and their applications in industry | Introduction

Products and their applications in industry

Siemens LV 10 - 10/2019

Overview of products and their applications

On pages [1/6](#) to [1/9](#) you can find an overview of the diverse portfolio of catalog LV 10.

Introduction | Overview of protection, switching, measuring and monitoring tasks

Overview of protection, switching, measuring and monitoring tasks

The functions presented here are available in combination or individually. Details can be found in the respective chapter.

Overview of protection, switching, measuring and monitoring tasks | Introduction

Device class	Type	Rated current AC	Page	Line protection	Motor protection	Generator protection	Starter protection	Isolating function	Current limitation	Overvoltage protection "1"	Short-circuit protection category "1"	Short-circuit protection category "2"	Short-circuit protection category "3"	Groundfault protection "G"	Metering function	Personnel safety / element protection	Overvoltage protection	Preventative fire protection	Switching function
AC circuit breakers	3NA	16 - 1600 A	3/1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Molded case circuit breakers	3NA	16 - 1600 A	3/1	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Miniature circuit breakers (Semi-rigid circuit breakers)	5SY/5S	0 - 80 A	3/6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
RCCBs	5SV2 / 5SM	16 - 125 A	4/5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
RCDs	5SV1 / 5S1	0 - 40 A	4/5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC fault detection devices, AFDDs	5SM5	0 - 40 A	4/5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
AC fault detection devices, AFDDs	5SV6	0 - 40 A	4/5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ON/OFF switches	5S11	32 - 125 A	5/14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Overvoltage protection	5S27	-	6/6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fuses DO	5S6 / 5S8	-	3/6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Photovoltaic fuses	5S9	-	3/6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SV MCC fuses	5S6	-	3/6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SVOR semi-conductors	3S2	16 - 250 A	3/6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Switch disconnectors	3S3	16 - 1600 A	3/6	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Fuse switch disconnectors	3S4	0 - 630 A	3/14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Special disconnectors with fuse	3S4	0 - 630 A	3/14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Transfer switching equipment	3S7	0 - 630 A	3/16	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Transfer switching equipment	3S7	16 - 6300 A	3/5	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PAC measuring device	3CT	Any	10/22	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Motor starter protection	3S9	-	Catalog IC 10	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
3BT contactor	-	-	Catalog IC 10	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Siemens LV 10 - 10/2019

Protection, switching, measuring and monitoring tasks

From page [1/12](#) onwards, the catalog LV 10 portfolio is dedicated to the most important protection, switching, measuring and monitoring tasks.

Miniature Circuit Breakers | Devices for all applications

System overview | Miniature Circuit Breakers

Devices for all applications

Miniature circuit breakers for basic applications



Ideal for standard applications
The SSL miniature circuit breakers are the new standard with B and C tripping characteristics for applications up to 63 A. They can be used to disconnect or isolate equipment.

The SSL devices are mainly installed in meter panels and small distribution boards to protect circuits for lamps, cookers and even machines, for example, in residential or commercial buildings.

Miniature circuit breakers for advanced applications



Ideal for industrial applications
For circuits with motors or large lamps, semiconductor or strong pulse generating equipment such as transformers and solenoid valves, the S5Y and S5P devices are optimized for industrial applications and are proven in use.

The S5Y devices offer you top quality and functionality for installation in complex buildings and industry. With a rated breaking capacity of up to 25 kA, they are able to handle the most challenging requirements at a rated current of 0.3 to 80 A.

- Special Features
• Dual-chamber terminals
• Simple to detach without tools using sliding catches
• Separate switching position indication
• A wide range of accessories

Device protection switches for advanced applications



Ideal for devices in industry
Device protection switches from Siemens offer optimum protection for all applications in AC and DC control circuits in industrial applications and plant engineering.

Electronic device protection switches are optimally suited to protecting, for example, relays, programmable controllers, motors, sensors, actuators and valves. A current analysis in conjunction with fast tripping in the event of a fault avoid the danger of overloading the switched-mode power supply.

Thermomagnetic device protection switches are used to protect solenoid valves, servo motors, signal lamps or even PLC inputs. Everywhere where loads have to be precisely protected from overloads and short-circuits.

System overview

Basic units and accessories

Miniature circuit breakers for basic applications



Miniature circuit breakers for advanced applications



Device protection switches for advanced applications



Electromechanical accessories



Mechanical accessories



Busbars and accessories



34 Siemens LV 10 - 10/2019

Siemens LV 10 - 10/2019 35

System overview

An overview of the basic units and accessories can be found in the system overview at the beginning of the chapter or section. The color helps you recognize the accessory at a glance.

Miniature Circuit Breakers | Quick selection guide

Quick selection guide | Miniature Circuit Breakers

Miniature circuit breakers

For basic applications for buildings and infrastructure

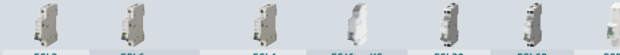


Table with columns: Standards, Basic data, Approvals, Dimensions, Characteristics, Ambient conditions, and Performance data. Rows include details for SSL3, SSL6, SSL4, S5Y6...KS, SSL30, SSL60, and S5P3.

36 Siemens LV 10 - 10/2019

Siemens LV 10 - 10/2019 37

Overview of basic units

The overviews at the beginning of the chapters and sections help you make a quick advance selection of the basic units. You can use the important technical data to compare the basic units. Page references quickly take you to the suitable devices.

The fast route to the product

New overviews and matrix tables for better orientation within the catalog

Miniature Circuit Breakers | Basic units

5SY4 miniature circuit breakers

10 kA

Basic units | Miniature Circuit Breakers

Rated current	1P 230/400 V AC				2P 230 V AC				3P 400 V AC				3P+N 400 V AC				4P 400 V AC				
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	
0.5 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
3 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
6 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
10 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
16 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
20 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
25 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
32 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
40 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
50 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
63 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
80 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
100 A	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Mounting concept

Accessories

Accessories	Article No.	Key fault detection devices (AFDD)	Article No.
Auxiliary switches (AS)	Standard For low power For high power (with diode)	For each pole (1P) L up to 30 A L up to 40 A	3SMA011-2 3SMA012-2
7 NO	Standard	Electromechanical relays (EMR)	EMR011-2
7 NC	Standard	Without integrated auxiliary switch	EMR012-2
7 CO	For low power	With integrated auxiliary switch	EMR013-2
1 CO	Standard	Without integrated auxiliary switch	EMR014-2
1 CO	Standard	With integrated auxiliary switch	EMR015-2
Remote controlled mechanisms (RC mech.)	Standard	Basic	RCM011-2 RCM012-2 RCM013-2 RCM014-2 RCM015-2
Power	Standard	Power	RCM016-2 RCM017-2 RCM018-2 RCM019-2 RCM020-2
Power with AED	Standard	Power with AED	RCM021-2 RCM022-2 RCM023-2 RCM024-2 RCM025-2
Power with extended function	Standard	Power with extended function	RCM026-2 RCM027-2 RCM028-2 RCM029-2 RCM030-2
Adapters for remote controlled mechanisms (RC mech.)	Standard	Adapters for remote controlled mechanisms (RC mech.)	RCM031-2 RCM032-2 RCM033-2 RCM034-2 RCM035-2

Product page

The article number matrix shows you on the spot which product variants are available. The matching accessories are clearly dedicated to each basic device – often directly on the same page.

Air Circuit Breakers | 3WL10

Structure of the article numbers

Basic configuration

For a complete and verified configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl10-configurator

3WL10 | Air Circuit Breakers

Basic unit and ETU	3WL10															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Rated current	100 A	125 A	160 A	200 A	250 A	320 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A
Breaking capacity	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ETU 3-series (with/without communication link)	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU
ETU 6-series	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU	Without ETU
Number of poles	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole	3-pole
Connection	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame	Without frame

Motor

Operating mechanism	Article No.
Manual operating mechanism	3W101-2
Spring charging motor	3W102-2
24 ... 30 V ACDC	3W103-2
48 ... 150 V ACDC	3W104-2
110 V ACDC	3W105-2
230 V ACDC	3W106-2

Auxiliary releases, closing coils

Without closing coil (CC), with remote reset magnet (RM)	Article No.	With closing coil (CC), with remote reset magnet (RM)	Article No.
24 V ACDC	3W107-2	24 V ACDC	3W108-2
48 V ACDC	3W109-2	48 V ACDC	3W110-2
110 V ACDC	3W111-2	110 V ACDC	3W112-2
120 ... 127 V ACDC	3W113-2	120 ... 127 V ACDC	3W114-2
200 ... 240 V ACDC	3W115-2	200 ... 240 V ACDC	3W116-2
240 ... 250 V ACDC	3W117-2	240 ... 250 V ACDC	3W118-2
110 V ACDC	3W119-2	110 V ACDC	3W120-2
230 V ACDC	3W121-2	230 V ACDC	3W122-2

Configurable products

For products which are conveniently configurable online, the structure of the article numbers is clearly displayed. A link takes you directly to the configurator which permits complete and verified configuration.

new Search function

Search for new products by entering new in the text field of the search function:



Clickable article numbers

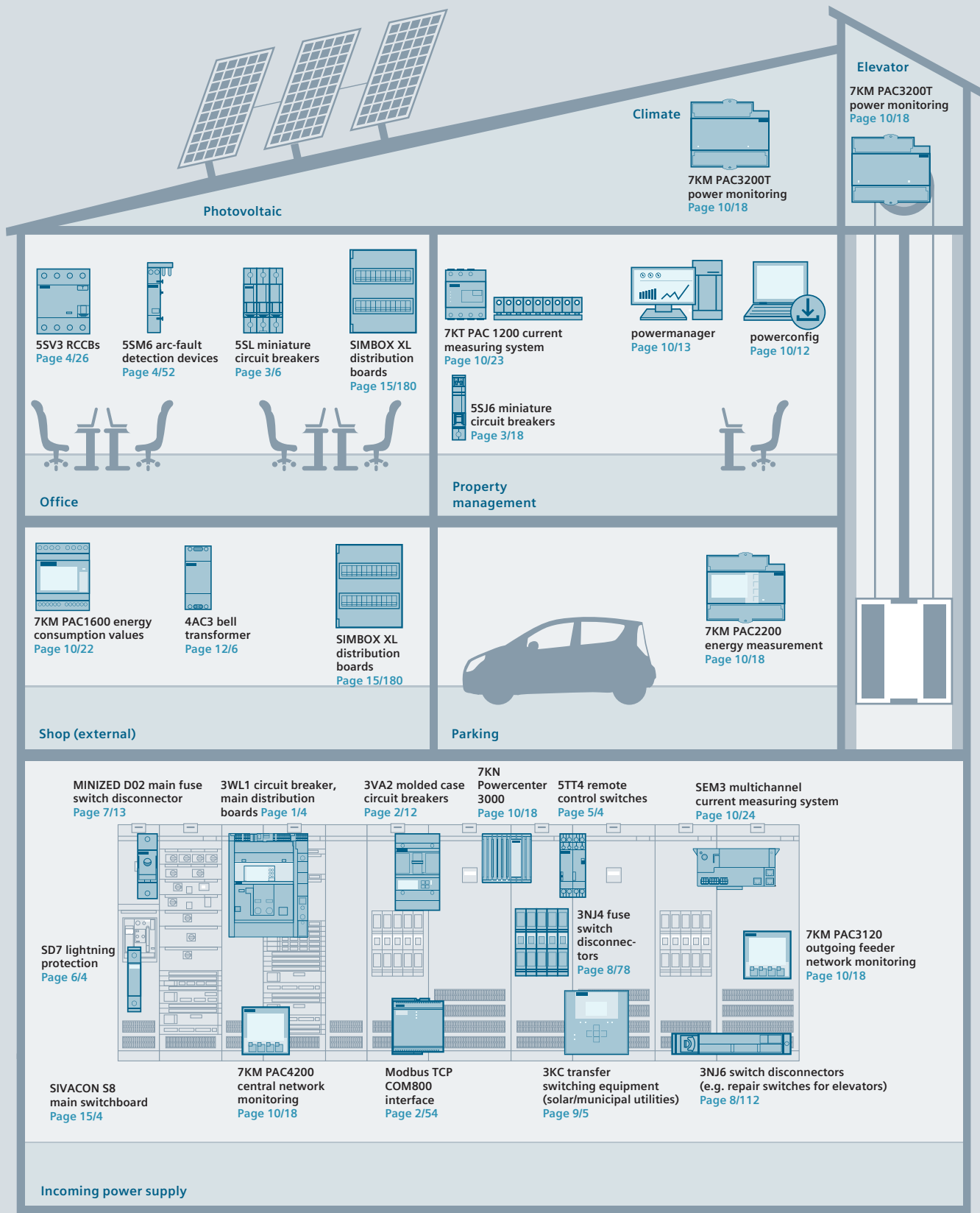
Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog

3VA2025-5HL36-0AA0



or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

Products and their applications in infrastructure



Products and their applications in industry

Climate

- 7KM PAC3200T power monitoring [Page 10/18](#)
- 3VA molded case circuit breakers [Page 2/6](#)

Office

- 5SV3 RCCBs [Page 4/26](#)
- 5SM6 arc-fault detection devices [Page 4/52](#)
- 5SL miniature circuit breakers [Page 3/6](#)
- SIMBOX XL distribution boards [Page 15/180](#)
- 7KM PAC3220 network monitoring [Page 10/18](#)
- 5SJ6 miniature circuit breakers [Page 3/18](#)
- SIMATIC Energy Suite TIA Portal energy management [Page 10/16](#)

Control room

Manufacturing

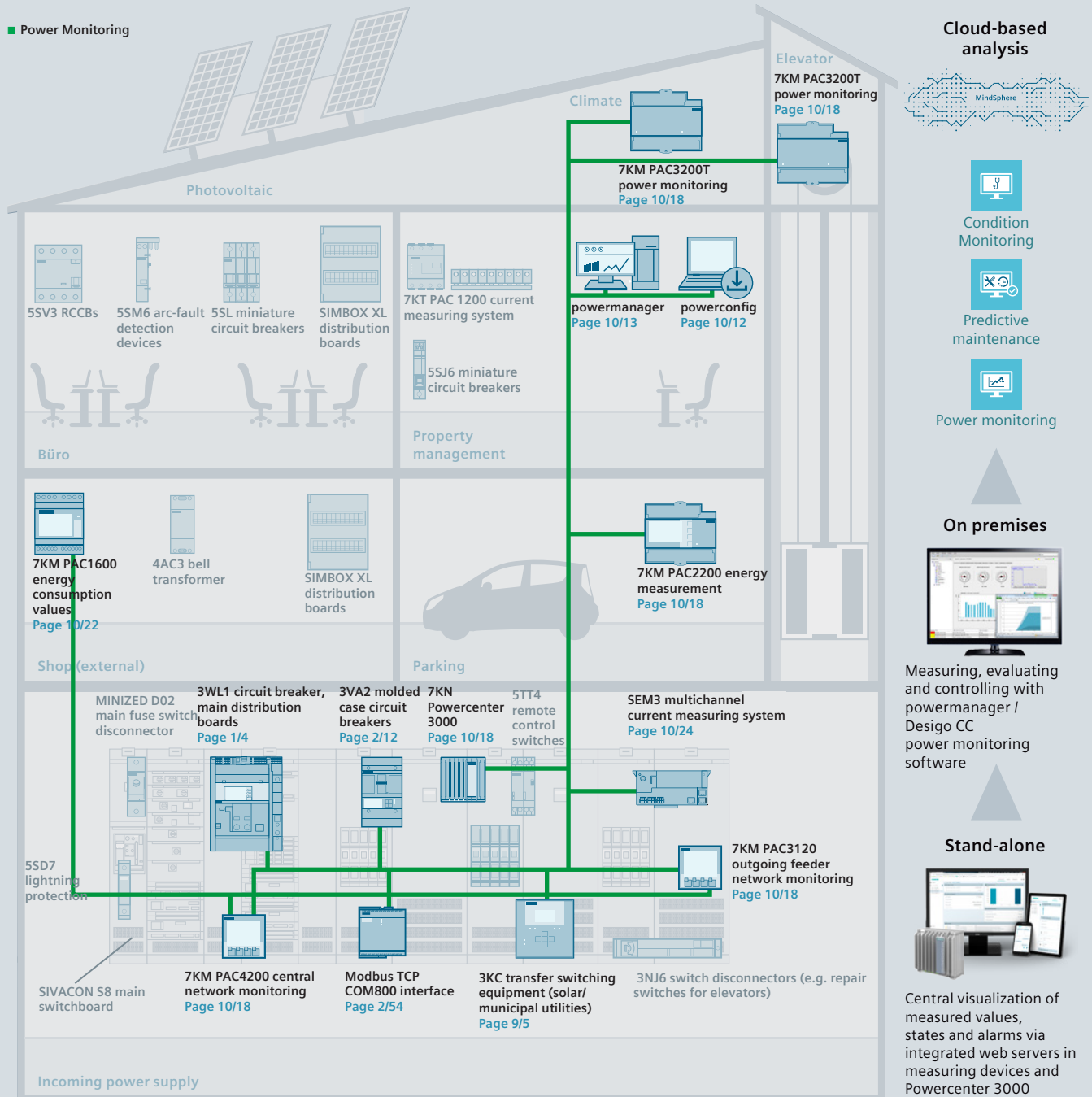
- RCD residual current protective device [Page 2/50](#)
- 3VA molded case circuit breakers [Page 2/6](#)
- 3NJ4 switch disconnectors [Page 8/78](#)
- SIMATIC S7-1500 controller [Page 10/17](#)
- 3VA molded case circuit breakers [Page 2/6](#)
- 7KM PAC3220 network monitoring [Page 10/18](#)
- 5SM6 arc-fault detection devices [Page 4/52](#)
- SIVACON 8MF1 system cubicle [Page 17/4](#)
- 5SY17 device protection switches [Page 3/40](#)
- 7KM PAC3220 network monitoring [Page 10/18](#)
- 3VA2 molded case circuit breakers [Page 2/12](#)
- 5SV3 RCCBs [Page 4/26](#)
- SIMATIC ET200SP motor starter [Catalog ST70](#)
- SINAMICS G120 frequency converter [Catalog D31.1](#)
- SIMOCODE pro motor management system [Catalog IC10](#)
- 5SY miniature circuit breakers [Page 3/8](#)
- ALPHA 160 distribution board [Page 15/151](#)
- 5SY miniature circuit breakers [Page 3/8](#)
- 5SM6 arc-fault detection devices [Page 4/52](#)

Mounting

Incoming power supply

- MINIZED D0 main fuse switch disconnectors [Page 7/13](#)
- 3WL1 circuit breaker, main distribution boards [Page 1/4](#)
- 3WL1 circuit breaker, main distribution boards [Page 1/4](#)
- 3VA2 molded case circuit breakers [Page 2/12](#)
- 5SD7 lightning protection [Page 6/4](#)
- SIVACON S8 main switchboard [Page 15/4](#)
- 7KM PAC4200 central network monitoring [Page 10/18](#)
- Modbus TCP COM800 interface [Page 2/54](#)
- 7KM PAC3220 network monitoring [Page 10/18](#)

Examples of digitalization in infrastructure



Examples of digitalization in industry



Cloud-based analysis



Condition Monitoring



Predictive maintenance



Power monitoring

On premises

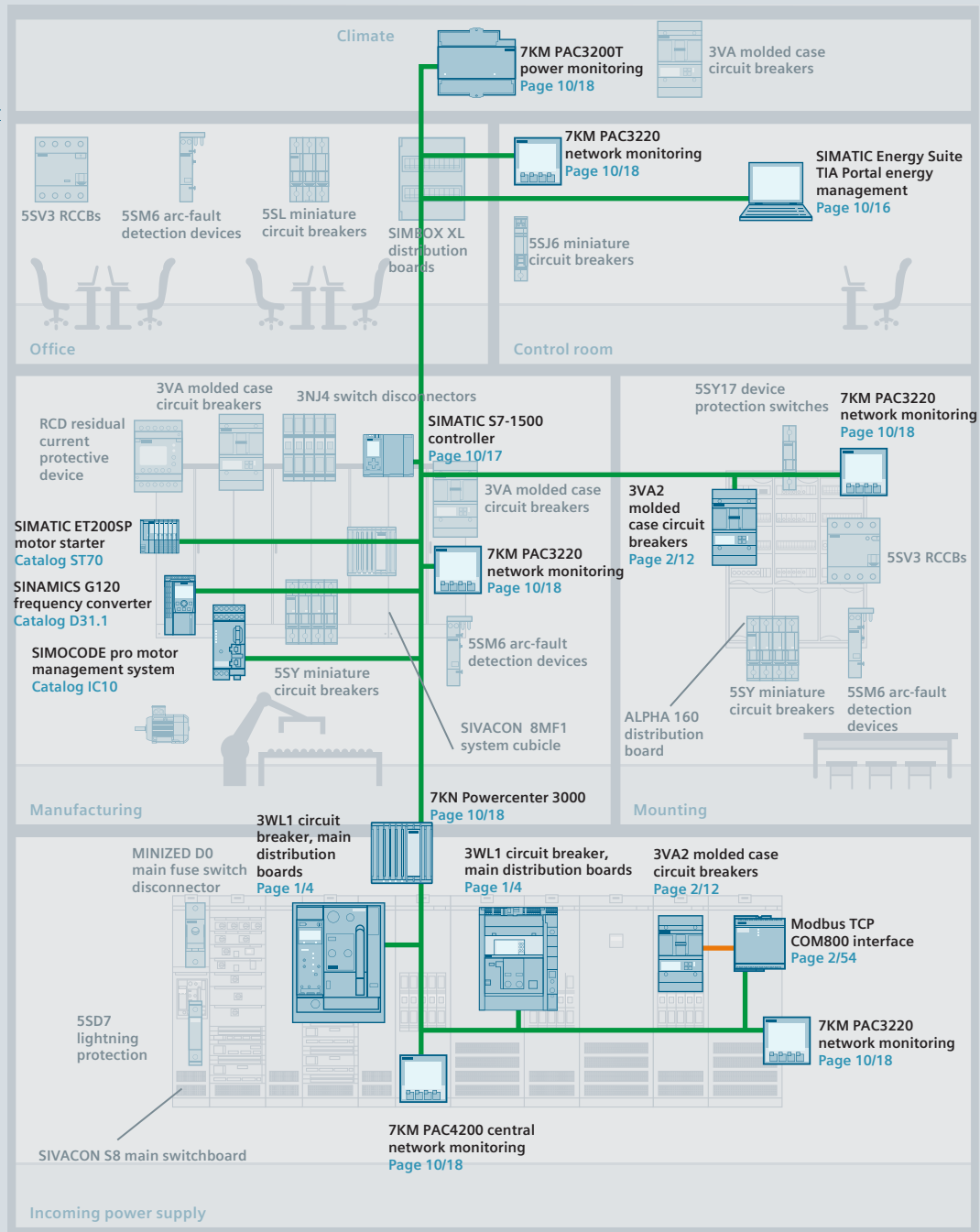


Measuring, evaluating and controlling with SIMATIC Energy Suite / TIA Portal

Stand-alone



Central visualization of measured values, states and alarms via integrated web servers in measuring devices and Powercenter 3000



Introduction to the topic of digitalization and Industry 4.0

In industrial automation, the demand for communication capability, data transparency and flexibility is growing constantly. To enable industrial switchgear technology to meet this demand, the use of bus systems and intelligent switching devices is unavoidable.

Digitalization

Switching, protection and measuring devices in power distribution systems can display important information on local visualization via integrated communication, e.g. in powercenter, or transmit it to energy data management systems (EDMS), e.g. powermanager, as well as to cloud systems and applications.

- Diagnostics management
- Fault management – SMS alarm
- Maintenance management – predictive maintenance
- Cost center management – MID

1. Visualization and plant transparency (HMI)



- Greater operational reliability thanks to remote access to the plant.
- Plant visualization for central and simple access to all device information.

2. Digital documentation



- Uniform access to digital data and documentation.
- Provision of extensive CAx data for systems and components during planning and operation.
- Support in planning and process creation using SIMARIS planning tools, product and system configurators.

3. Power monitoring



- Fulfilling the ISO 50001 by detecting and transparently presenting the energy flows within energy distribution.

4. Optimization and retrofit



- Retrofitting solutions such as SEM3 offer a simple option for integrating energy monitoring into existing systems.
- Energy monitoring and plant transparency help you efficiently plan plant expansion.

5. Maintenance management



- Maintenance support, even remotely, by transparently presenting the status of a switchgear and controlgear assembly.

6. Emergency management

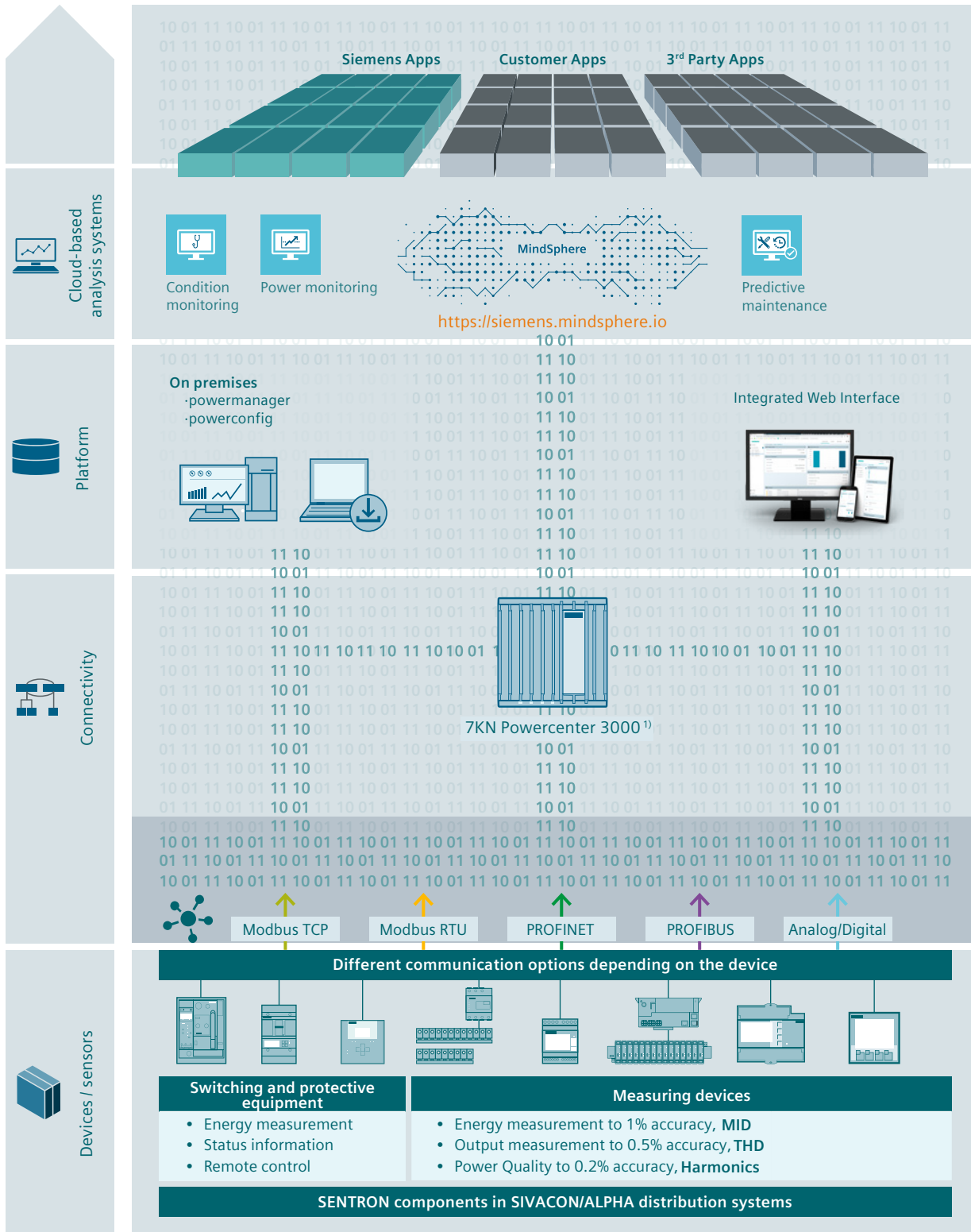


- Quick error localization which therefore leads to a minimization of outage times.

7. Cybersecurity



- Protection from unauthorized access and manipulation to switchgear and controlgear assemblies and devices ensures integrity, availability and confidentiality.



¹⁾ Modbus TCP

Overview of protection, switching, measuring and monitoring tasks

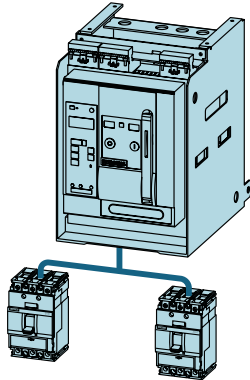
The functions presented here are available in combination or individually. Details can be found in the respective chapter.

				Line protection	Motor protection	Generator protection	Starter protection	Isolating function
Device class	Type	Rated current AC	Page					
Air circuit breakers	3WL	630 ... 6300 A	1/4	■	■	■		■
Molded case circuit breakers	3VA	16 ... 1600 A	2/1	■	■	■	■	■
Miniature circuit breakers (automatic circuit breakers)	5SY / 5SL	0 ... 80 A	3/6					■
RCCB	5SV3 / 5SM3	16 ... 125 A	4/6	■				■
RCBOs	5SU1 / 5SV1	0 ... 40 A	4/6	■				■
Arc fault detection devices, AFDDs	5SM6	0 ... 40 A	4/6					
Arc fault detection devices, AFDD-MCBs	5SV6	0 ... 40 A	4/6	■				■
ON/OFF switches	5TL1	32 ... 125 A	5/14					
Overvoltage protection	5SD7	–	6/6					■
Fuses D0	5SG / 5SA		7/6	■			■	
Photovoltaic fuses			7/6	■				
LV HRC fuses			7/6	■	■		■	
SITOR semiconductors			7/6	■		■	■	
Switch disconnectors	3LD	16 ... 250 A	8/6					■
	3KD	16 ... 1,600 A	8/6					■
Fuse switch disconnectors	3NP	0 ... 630 A	8/74		with suitable fuse links		with suitable fuse links	■
Switch disconnector with fuse	3NJ	0 ... 630 A	8/78			■		
	3KF	0 ... 630 A	8/96			■		
Transfer switching equipment	3KC	16 ... 3,200 A	9/5					■
PAC measuring devices	7KT	Any	10/22					
Motor starter protectors	3RV		Catalog IC 10		■			■
3RT contactor			Catalog IC 10					■

Current limitation	Overload protection "L"	Short-circuit protection, delayed "S"	Short-circuit protection, instantaneous "I"	Ground-fault protection "G"	Metering function	Personnel safety / fault current protection	Overvoltage protection	Preventative fire protection	Switching function
■	■	■	■	■	■	■ / ■			
■	■		■			■ / ■			
■	■		■			■ / ■			
■	■		■					■	
■	■		■				■	■	
■	■		■						
■	■		■						
■	■		■						
with suitable fuse links	with suitable fuse links		with suitable fuse links						
■	■		■		■				■

Overview of protection, switching, measuring and monitoring tasks

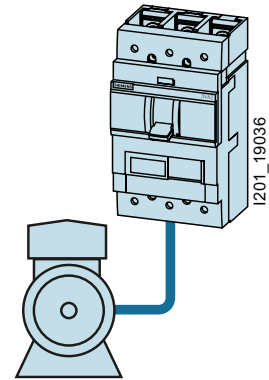
Line protection



The trip units for line protection are designed to provide overload and short-circuit protection for:

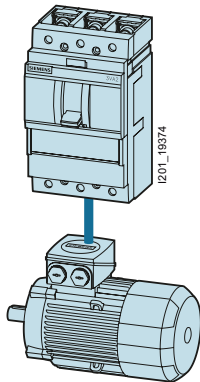
- Cables
- Leads
- Non-motor loads

Generator protection



The setting values of the trip units are matched to protecting generators.

Motor protection

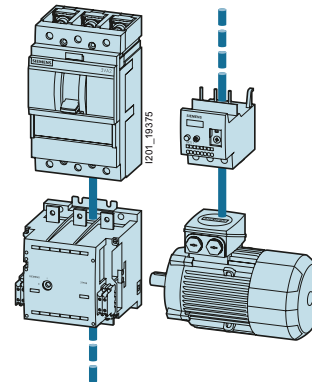


The overload and short-circuit releases are designed for optimal protection and direct starting of three-phase AC squirrel-cage motors.

The molded case circuit breakers for motor protection have phase-failure sensitivity and a thermal image that protects the motor against overheating.

The adjustable time lag class enables users to adjust the overload release to the startup conditions of the motor to be protected.

Protection for starter combinations (starter protection)



Starter combinations consist of:

Molded case circuit breaker + contactor + overload relay.

The molded case circuit breaker handles short-circuit protection and the isolating function. The task of the contactor is the operational switching of the feeder. The overload relay handles overload protection that can be specially matched to the motor.

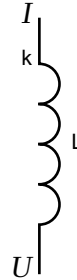
The molded case circuit breaker for the starter combination is therefore equipped with an adjustable and instantaneous short-circuit release.

Isolating function as per IEC 60947-2/3



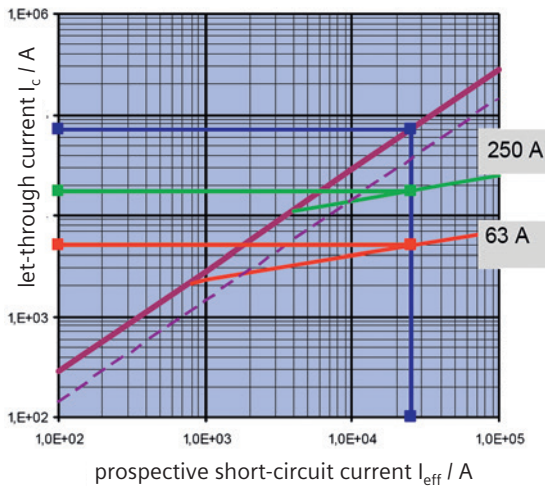
Isolating is opening the conducting path all the while creating a sufficient distance for protecting persons

Metering function



In metering functions, the current flow is detected either using current transformers or current measuring systems with Rogowski coils. The measured value is processed with an electronic switch. The result is subsequently routed to a display.

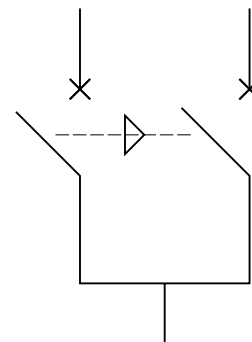
Current limitation / let-through current characteristic curves



The let-through current characteristic specifies to which values the prospective short-circuit current is limited by "current-limiting" devices. Current-limiting devices are, e.g., compact circuit breakers, MCBs or fuses.

The X axis displays the expected, uninfluenced effective value I_{eff} (=prospective short-circuit current I_{eff}), calculated using SIMARIS design, e.g.. Depending on the device and the relevant current limitation, the let-through current I_c (= instantaneous value or peak value) can be read on the Y axis.

Switching function

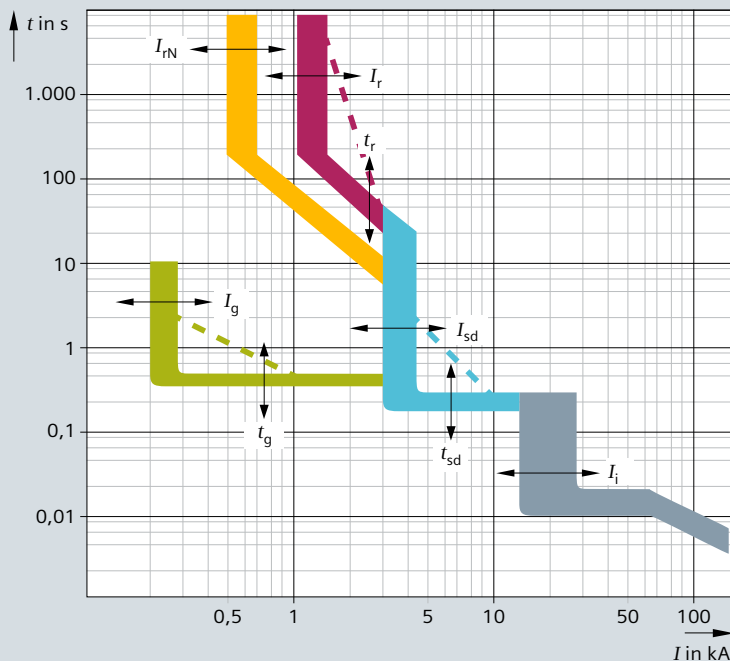


Transfer switches switch from one busbar section to a different one or from one power supply to a different one. Transfer switching equipment switches from one supply network to an alternative network in the event of network fluctuations.

Overview of protection, switching, measuring and monitoring tasks

The protection function performed by the circuit breaker in the power distribution network is defined by the choice of trip unit. The trip unit are divided in

- thermal-magnetic overload release (TMTU = thermal-magnetic trip unit; previously known as electromechanical trip units) and
- electronic trip unit (ETU = electronic trip unit).



TIPO4_13_038_DE

- L** **Overload protection "L"**
Standard I^2t
Optional I^4t - - - -
- S** **Short-circuit protection, delayed "S"**
Standard $t_{sd} = \text{const.}$
Optional I^2t - - - -
- I** **Short-circuit protection, instantaneous "I"**
- N** **Neutral protection "N"**
Option: Off - 0.5 - 1.0 - 2.0 $\times I_r$
- G** **Ground-fault protection "G"**
Standard $t_g = \text{const.}$
Optional I^2t - - - -

Overload protection "L"

Current-dependent delayed overload releases are offered with optional characteristic curves ($I^2t = \text{current-dependent delay}$) depending on the trip unit type.

Short-circuit protection, delayed "S"

For time adjustment of protection function in series to achieve selective behavior amongst the protection devices. In addition to the standard characteristic curves and settings, optional functions for certain applications are offered:

- Current-independent trip units
The desired delay time (t_{sd}) is defined and set as of a set current value (Pickup I_{sd}) for this standard S function.
- Current-dependant trip units
The product I^2t remains constant for this optional S function. The delay time t_{sd} is set for a specific reference point (e.g. $6 \times I_n$). This function is generally used to improve the selectivity behavior.

Short-circuit protection, instantaneous "I"

Depending on the circuit breaker, I releases can be used either with fixed or adjustable conventional tripping current I_i or with the function which can be activated or deactivated as required.

Neutral protection "N"

Inverse-time delayed overload release for the neutral conductor are offered at 50 and 200% of the overload release. A four-pole circuit breaker is selected or an external current sensor is included for the N conductor.

Ground-fault protection "G"

In addition to the standard function (current-independent), an optional function ($I^2t = \text{current-dependent delay}$) is offered to protect the system against leakage current via ground.

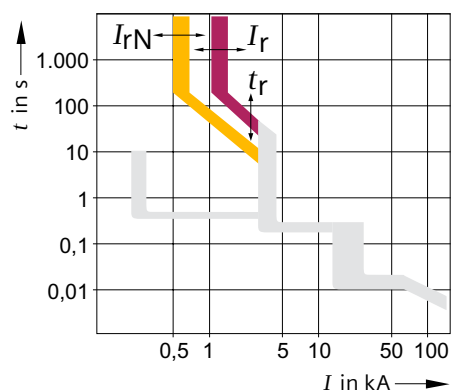
Overload protection "L"

The ID letter for overload protection is L (stands for "Long-time delay"). The trip unit is inverse-time delayed and exhibits the following characteristics depending on the trip unit type:

- Bimetal characteristic with thermal-magnetic trip units
- I^2t characteristic with electronic trip units

The letters I_r refer to the current setting value, and t_r to the associated time delay.

The time delay with the device-specific reference point defines the current-dependent curve shape of the setpoint characteristic. With circuit breakers, this trip unit reference point corresponds to 6 times the current setting value I_r . The following mathematical equation determines the remaining curve of the setpoint characteristic: $I^2t = \text{constant}$

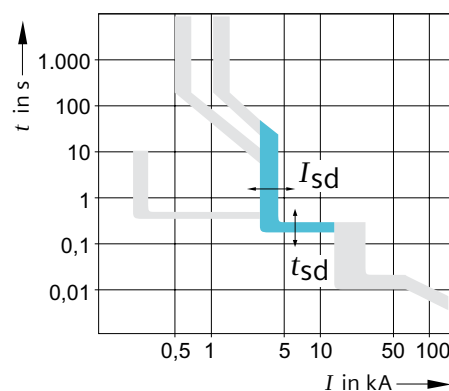


Short-circuit protection, delayed "S"

The ID letter for short-time delayed short-circuit protection is "S" (stands for "Short-time delay"). The S function of the trip unit can be used to implement time-selective short-circuit tripping in low-voltage networks in which multiple molded case circuit breakers are installed in series.

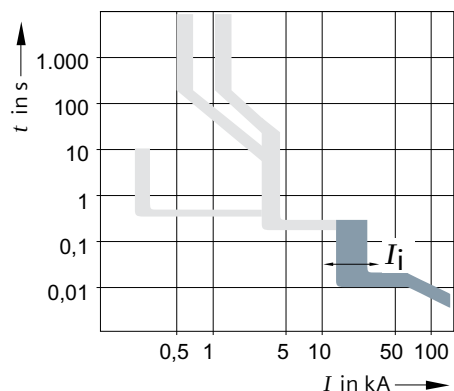
The short-time delayed short-circuit protection function protects phases L1 to L3 and the neutral conductor. The protection function responds if the current in at least one phase exceeds the set tripping current I_{sd} for the set delay period t_{sd} .

The S release has a characteristic curve with current-dependent characteristic I^2t , i.e. the delay time is dependent on the energy content of the short-circuit current present.



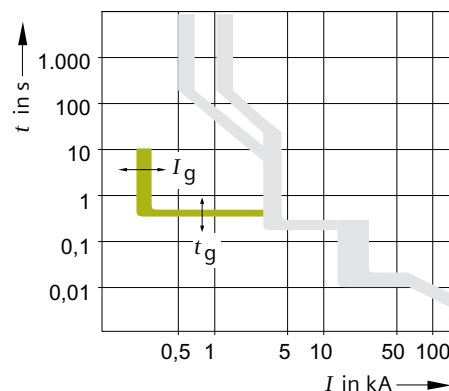
Short-circuit protection, instantaneous "I"

The ID letter for instantaneous short-circuit protection is "I" (stands for "Instantaneous"). This short-circuit protection function protects phases L1 to L3. The instantaneous short-circuit protection function responds if the instantaneous value equal to the rms of the current in at least one phase exceeds the instantaneous tripping current I_i .



Ground-fault protection "G"

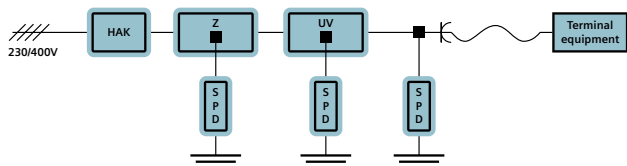
A ground-fault refers to a fault whereby an external conductor comes into contact with ground and current flows into the ground. Ground-fault protection protects against the flow of current to ground in the rated current range. As ground-fault currents can produce arcing, ground-fault protection consequently offers extended fire protection.



Overview of protection, switching, measuring and monitoring tasks

Overvoltage protection

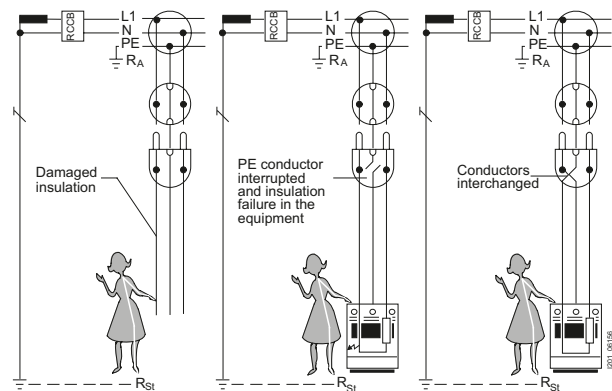
Overvoltage protection refers to the protection of electrical and electronic devices against excessively high electrical voltages. Overvoltage can be caused by switching operations or electrostatic discharging (ESD).



Personnel safety / fault current protection

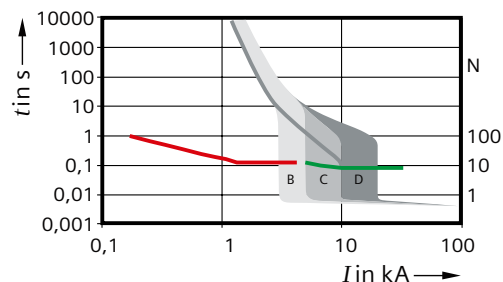
Protection in the event of direct contact:
Additional protection contact refers to direct contact with a part that is live under operating conditions.

Protection in the case of indirect contact:
Fault protection refers to contact with an electrically conductive part which is not live under operating conditions.



Preventative fire protection

Arc-fault detection devices evaluate occurring faults in the current and voltage wave using an electronic switch and shutting off the current when it recognizes a contact fault. This prevents overheating at poor contact points which can prevent fires.

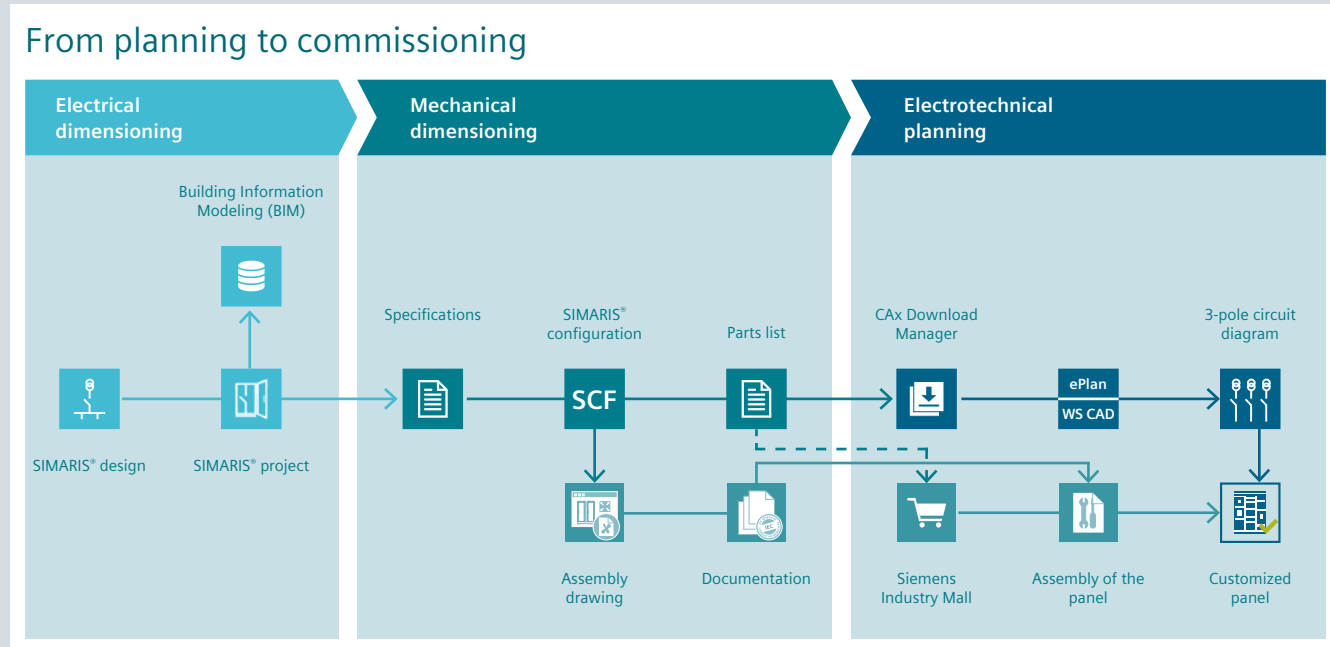


Potential failure causes

- Damaged cable insulation, e.g. by nails, screws or brackets
- The risk of a cable break exists for cables with a too-tight bending radius
- Cables which are laid through open doors and windows can be crushed when doors or windows are closed resulting in damaged insulation and arcing faults
- Environmental influences such as UV rays, temperature, humidity, gases can damage or age the insulation
- Damage caused by rodents
- Loose contact, e.g. caused by too low torque
- Conductor damaged by claw fixing

SIMARIS® planning tools

for planning and visualizing the power distribution system



Highlights

- Thorough support of the engineering process with interlinked software tools
- Provision of extensive CAx data for systems and components
- Reduction of cost and time aspects during planning

Distribution systems

For industrial plants or in infrastructure

SIVACON S8 power distribution boards and motor control centers

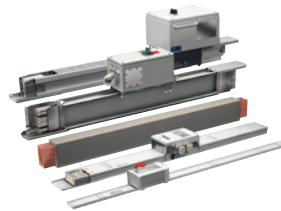
- Reliable, economical, flexible and communication-capable
- For all applications in infrastructure and process industry



[See page 15/4 for the overview](#)

SIVACON 8PS busbar trunking systems

- For economic and reliable power supply
- Space-saving and simple to install
- Low fire load, good electromagnetic compatibility



[See page 16/4 for the overview](#)

SIVACON S4 power distribution boards

- Modular system for safe, end-to-end, cost-efficient power distribution up to 4000 A
- System for creating design-verified switchgear assemblies in accordance with IEC 61439
- Flexible application, thanks to a range of installation methods and variable accessories
- Simplified installation and device connection makes assembly faster



[See page 15/12 for the overview](#)

ALPHA UNIVERSAL distribution boards (NF technology)

- Comprehensive portfolio with wall-mounted and floor-mounted distribution boards for currents between 125 A to 800 A
- Easy planning and assembly thanks to modular platform structure



[See page 15/106 for the overview](#)

ALPHA 3200 power distribution boards

- Compact, space-saving construction
- Perfectly matched to the SENTRON components



[See page 15/4 for the overview](#)

ALPHA distribution boards (DIN technology)

- Comprehensive portfolio with wall-mounted and floor-mounted distribution boards for currents between 160 A to 1,250 A



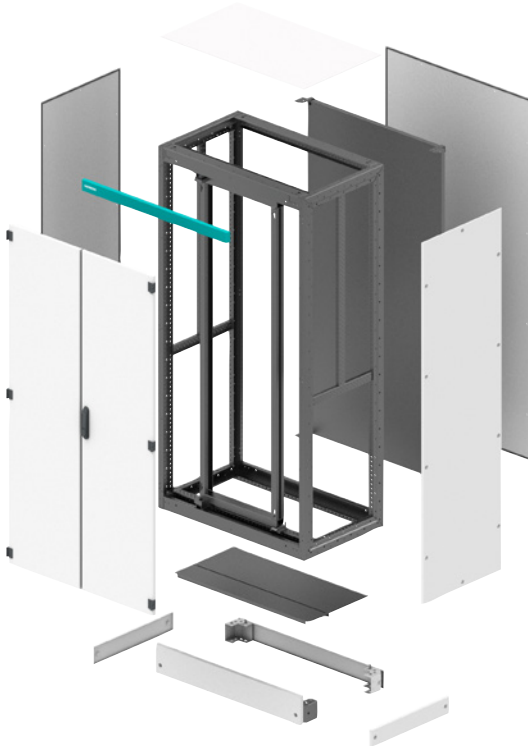
[See page 15/138 for the overview](#)

Control cabinets / System cubicles

For plant engineering, process control, network technology,
secondary systems / energy automation

SIVACON 8MF1 system cubicles

- Modular system
- Fully assembled, adapted according to your specifications, or entirely customized



See page 17/8 for the overview

SIVACON 8MR system air-conditioning

Ensures fault-free operation of the electrical and electronic built-in units installed in the cubicle, even under the harshest ambient conditions.



See page 17/36 for the overview

SIVACON 8MF/8MR system lighting

Offers optimum lighting conditions during installation or maintenance. The LED technology conserves energy and is maintenance-free.



See page 17/34 for the overview

Reliable, versatile and perfectly integrated.

All power distribution systems rely on a secure infeed of electrical energy. The 3WL air circuit breakers reliably protect electrical equipment from damage or fire resulting from short circuit, ground fault or overload failures.

The 3WL air circuit breakers are used as incoming-feeder, tie, and outgoing-feeder circuit breakers in electrical installations in industry, buildings and infrastructure applications. They have the ability to communicate and can easily be integrated into higher-level control and energy management systems.

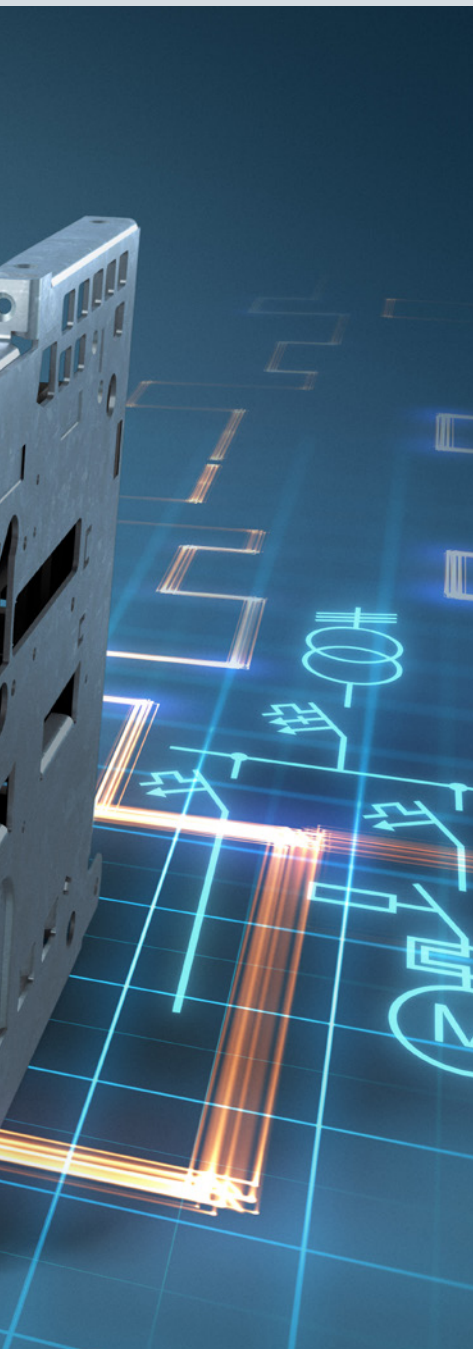
The 3WL air circuit breakers switch and protect motors, capacitors, generators, transformers, busbars and cables. The modular design and standardized range of accessories enable the circuit breakers to be adapted flexibly to different applications. UL 489-compliant versions are available for international use.

The 3WL air circuit breakers can optionally be equipped with a communication module and integrated into higher-level energy management systems. Auxiliary, signaling and position switches report status and fault diagnostics remotely to higher-level control systems.



Air Circuit Breakers

1



All the information you need	1/2
Quick selection guide	1/4
Basic units for AC and DC	1/4
Basic units for AC	1/6
Basic units for DC	1/10
Electronic trip unit ETU	1/14
Connection	1/18
Operating mechanism, auxiliary release, auxiliary switch	1/19
3WL10	1/20
System overview	1/20
Structure of the article numbers	1/22
Accessory options	1/24
Online configurator highlights	1/26
Guide frames	1/28
Electronic trip units ETU and accessories	1/29
Accessories and spare parts	1/32
3WL11 – 3WL13	1/38
System overview	1/38
Structure of the article numbers	1/40
Online configurator highlights	1/44
Accessory options	1/46
Guide frames	1/57
Accessories and spare parts	1/58

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about air circuit breakers, please visit our website

www.siemens.com/3WL

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technical basic information – 3WL air circuit breakers ([109767789](#))
- 3WL air circuit breakers – Quick selection guide ([109751638](#))

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Siemens YouTube channel

Our video range

- 3WL air circuit breakers (general) bit.ly/2ZH1rXH

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Air circuit breakers sie.ag/2IXiZjB

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

Configurators

Exactly the right circuit breaker for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your 3WL air circuit breaker at www.siemens.com/lowvoltage/3wl10-configurator or www.siemens.com/lowvoltage/3wl-configurator

For your configured 3WL air circuit breaker, you can additionally find

- 3D views
- CAD data
- Unit wiring diagrams
- Dimension drawings

... can be found in our online services

Commissioning + operation

Configuration software

powerconfig

The combined commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON family.

www.siemens.com/powerconfig

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

Training and tutorials

Our training courses can be found at www.siemens.com/sitrain-lowvoltage

- Protection systems in low-voltage power distribution (WT-LVAPS)
- 3WL air circuit breakers (WT-LVA3WL)
- Communication with SENTRON components (LV-COM)
- Maintenance and operation of 3WL circuit breakers (LV-CBMAIN)

Video tutorial on the 3WL air circuit breaker – descriptive supplement to Operating Instructions

www.lowvoltage.siemens.com/wcms/3wl-tutorial

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Low-voltage protection devices selectivity tables (109748621)
- System manual – 3WL/3VL circuit breakers with communication capability – Modbus (39850157)
- System manual – 3WL/3VL circuit breakers with communication capability – PROFIBUS (12560390)
- Equipment manual - 3VA27 molded case circuit breakers & 3WL10 air circuit breakers (109753821)
- Communications manual – 3WL air circuit breakers via COM35 – PROFINET IO, Modbus TCP (109757987)
- Communication manual – 3WL10 air circuit breakers & 3VA27 molded case circuit breakers (109760220)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Technical overview of air circuit breakers



The fast way to get you to our online services

This page provides you with comprehensive information and links on air circuit breakers

www.siemens.com/lowvoltage/product-support (109766020)

Basic units for AC and DC

IEC 60947-2

1

AC



3WL10

3WL11

Basic data		3WL10			3WL11			
Rated voltage	V	Up to 690			Up to 1000			
Rated currents	A	630 ... 1250			630 ... 2000			
Size		0			1			
Installation type		Withdrawable	Fixed-mounted	Withdrawable	Fixed-mounted	Withdrawable	Fixed-mounted	
Number of poles		3/4-pole	3/4-pole	3/4-pole	3/4-pole	3/4-pole	3/4-pole	
Dimensions								
Width (3-pole 4-pole)	mm	278 348	210 280	320 410	320 410			
Height (standard) A05, A15, A16, DC greater than 600 V)	mm	363.5	296	468 518	462			
Depth	mm	271	183	471	357			
Approvals								
General product approvals		VDE, EAC, CCC, CE, C-Tick			VDE, EAC, CCC, CE, C-Tick			
Marine / shipbuilding		RMRS			ABS, DNV, LR, BV, GL, PRS, RMRS			
Breaking capacity		B	N	S	N	S	H	
Rated short-circuit breaking capacity								
Rated operational voltage U_e up to 415 V AC I_{cu} I_{cs}	kA	42 42	55 50	66 50	55 55	66 66	85 85	
Rated operational voltage U_e up to 500 V AC I_{cu} I_{cs}	kA	42 42	50 50	50 50	55 55	66 66	85 85	
Rated operational voltage U_e up to 690 V AC I_{cu} I_{cs}	kA	– –	42 42	50 50	42 42	50 50	66 66	
Rated operational voltage up to 690 V AC +20% ⁶⁾ , with Z option: A16 I_{cu} I_{cs}	kA	– –	– –	50 50	– –	– –	– –	
Rated operational voltage U_e up to 1000 V AC, with Z option: A05 I_{cu} I_{cs}	kA	– –	– –	– –	– –	– –	50 50	
Rated operational voltage U_e up to 1150 V AC, with Z option: A15 I_{cu} I_{cs}	kA	– –	– –	– –	– –	– –	– –	
Rated short-time withstand current I_{cw} ⁵⁾								
Rated short-time withstand current I_{cw} at U_e up to 500 V AC	0.5 s	kA	–	–	–	55	66	85
	1 s	kA	42	42	50	50	66	85
	2 s	kA	–	–	–	35 ¹⁾ /45 ²⁾	45	70
	3 s	kA	24	24	36	35 ¹⁾ /45 ²⁾	35	60
Rated short-time withstand current I_{cw} at U_e up to 690 V AC	0.5 s	kA	–	–	–	42	50	66
	1 s	kA	42	42	50	42	50	66
	2 s	kA	–	–	–	35 ¹⁾ /42 ²⁾	45	66
	3 s	kA	24	24	36	30 ¹⁾ /45 ²⁾	35	60
Rated short-time withstand current I_{cw} at DC	1 s	kA	–	–	–	–	–	–
Rated conditional short-circuit current I_{cc} of the non-automatic air circuit breakers								
Up to 500 V AC	kA	–	42	50	55	66	85	
Up to 690 V AC	kA	–	42	50	42	50	66	
Up to 1000 V/1150 V AC, with Z option: A05	kA	–	–	–	–	–	50/–	
Up to 1000 V/1150 V AC, with Z option: A15	kA	–	–	–	–	–	–	
Up to 220 V/300 V DC	kA	–	–	–	–	–	–	
Up to 600 V/1000 V DC	kA	–	–	–	–	–	–	

¹⁾ Size 1 with $I_{n,max.} \leq 2500$ A

²⁾ Size 1 with $I_{n,max.} = 3200$ A and $I_{n,max.} = 4000$ A

³⁾ Rated operational voltage $U_e = 1150$ V

⁴⁾ Rated operational voltage $U_e = 1000$ V

⁵⁾ At a rated voltage ≥ 690 V the I_{cw} value of the circuit breaker corresponds with the I_{cu} or I_{cs} value

AC

DC

**3WL12****3WL13****3WL11****3WL12**

Up to 1150 800 ... 4000 2				Up to 1150 4000 ... 6300 3			1000 DC 2000 1		Up to 600/1000 DC 1000 ... 4000 2					
Withdrawable 3/4-pole		Fixed-mounted 3/4-pole		Withdrawable 3/4-pole		Fixed-mounted 3/4-pole		Fixed-mounted 4-pole		Withdrawable 3/4-pole		Fixed-mounted 3/4-pole		
460 590		460 590		704 914		704 914		410		460 590		460 590		
468 518		462		468 518		462		462		468 518		462		
471		357		471		357		357		471		357		
VDE, EAC, CCC, CE, C-Tick ABS, DNV, LR, BV, GL, PRS, RMRS				VDE, EAC, CCC, VDE, CE, C-Tick ABS, DNV, LR, BV, GL, PRS, RMRS			VDE, EAC, CCC, CE, C-Tick ABS, DNV, LR, BV, GL, PRS, RMRS		VDE, EAC, CCC, CE, C-Tick ABS, DNV, LR, BV, GL, PRS, RMRS		VDE, EAC, CCC, CE, C-Tick ABS, DNV, LR, BV, GL, PRS, RMRS		VDE, EAC, CCC, CE, C-Tick ABS, DNV, LR, BV, GL, PRS, RMRS	
N	S	H	C ⁷⁾	H	C 3p	C 4p	DC		DC					
66 66	85 85	100 100	130 130	100 100	150 150	130 130	-		-					
66 66	85 85	100 100	130 130	100 100	150 150	130 130	-		-					
50 50	75 75	85 85	100 100	85 85	150 150	130 130	-		-					
- -	- -	- -	- -	- -	- -	- -	-		-					
- -	- -	85 85	- -	85 85	125 125	125 125	-		-					
- -	- -	50 50	- -	70 70	- -	- -	-		-					
66	85	100	100	100	130	120	-		-					
66	85	85	100	100	130	120	-		-					
66	66 ³⁾ /85 ⁴⁾	66 ³⁾ /85 ⁴⁾	85	100	130	120	-		-					
55 ³⁾ /66 ⁴⁾	55 ³⁾ /75 ⁴⁾	55 ³⁾ /75 ⁴⁾	75	100	130	120	-		-					
50	75	85	100	85	130	120	-		-					
50	75	85	100	85	130	120	-		-					
50	66 ³⁾ /75 ⁴⁾	66 ³⁾ /85 ⁴⁾	85	85	130	120	-		-					
50	55 ³⁾ /75 ⁴⁾	55 ³⁾ /75 ⁴⁾	75	85	130	120	-		-					
-	-	-	-	-	-	-	20		35 ⁸⁾ /30 ⁹⁾ /25 ¹⁰⁾ /20 ¹¹⁾					
66	85	100	130	100	130	120	-		-					
50	75	85	100	85	130	120	-		-					
-	-	85/85	-	85/85	-	-	-		-					
-	-	-/50	-	70/70	-	-	-		-					
-	-	-	-	-	-	-	20/20		35/30					
-	-	-	-	-	-	-	20/20		25/20					

Breaking capacity

B	Basic
N	ECO
S	Standard
H	High
C	Very high
DC	DC

⁶⁾ At 690 V AC +5% the $I_{cu} = I_{cs} = 85$ kA
⁷⁾ Up to 3200 A rated current.

⁸⁾ At $U_e = 220$ V DC
⁹⁾ At $U_e = 300$ V DC

¹⁰⁾ At $U_e = 600$ V DC
¹¹⁾ At $U_e = 1000$ V DC

Basic units for AC

IEC 60947-2

1

3WL10



3WL11



	630 A	800 A	1000 A	1250 A	1000 A	1250 A
--	-------	-------	--------	--------	--------	--------

Rated current								
Isolating function acc. to EN 60947-2			Yes					
Utilization category			B					
Permissible ambient temperature	During operation (in operation with LCD max. 55 °C) ¹⁾	°C	-25 ... +70			-40 ... +70		
	Storage	°C	-40 ... +70			-40 ... +80		
Mounting position								
Degree of protection			IP20 without cabinet door, IP30 with door sealing frame, IP54 with cover			IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover		
Supply								
Voltage								
Rated operational voltage U_e at 50/60 Hz	1000 V version	V AC	Up to 690			690/1000		
Rated insulation voltage U_i		V AC	1000			1000		
Rated impulse withstand voltage U_{imp}	Main conducting paths	kV	12			12		
	Auxiliary circuits	kV	4			4		
	Control circuits ⁹⁾	kV	2.5			2.5		
Rated rotor operational voltage U_{er}		V				2000		
Permissible load for withdrawable versions ^{2) 4)}								
At rear horizontal main connections	Up to 55 °C (Cu bare)	A	630	800	1000	1250	1000	1250
	Up to 60 °C (Cu bare)	A	630	800	1000	1250	1000	1250
	Up to 70 °C	A	630	800	1000	1250	1000 ⁸⁾	1210 ⁸⁾
Power loss at I_n								
With three-phase symmetrical load, complete device (3/4p)	Fixed-mounted circuit breaker	W	31	50	78	122	100	105
	Withdrawable circuit breaker	W	62	100	156	244	195	205
Switching cycles								
Switching times								
Make time		ms	<20	<20	<20	<20	35	
Opening time		ms	<20	<20	<20	<20	38	
Electrical make time (through closing coil) ⁵⁾		ms	<50	<50	<50	<50	80	
Electrical opening time (through shunt release)		ms	<35	<35	<35	<35	73	
Electrical opening time (instantaneous undervoltage release)		ms	<50	<50	<50	<50	73	
Opening time due to ETU, instantaneous short-circuit release		ms	25	25	25	25	50	
Service life: Breaking capacity N and S, 3/4-pole								
Mechanical	Without maintenance	Operating cycles	20000	20000	20000	20000	15000	15000
	With maintenance ⁶⁾	Operating cycles	–	–	–	–	25000	25000
Electrical	Without maintenance 440 V	Operating cycles	8000 ⁷⁾	8000 ⁷⁾	8000 ⁷⁾	8000 ⁷⁾	–	–
	Without maintenance 690 V	Operating cycles	8000 ⁷⁾	8000 ⁷⁾	8000 ⁷⁾	6500 ⁷⁾	10000	10000
	With maintenance ⁶⁾	Operating cycles	– ⁷⁾	– ⁷⁾	– ⁷⁾	– ⁷⁾	25000	25000
Service life: Breaking capacity H, 3-pole								
Mechanical	Without maintenance	Operating cycles	–	–	–	–	10000	10000
	With maintenance ⁶⁾	Operating cycles	–	–	–	–	15000	15000
Electrical	Without maintenance 690 V	Operating cycles	–	–	–	–	7500	7500
	Without maintenance 1000 V, with Z option: A05	Operating cycles	–	–	–	–	1000	1000
	Without maintenance 1150 V, with Z option: A15	Operating cycles	–	–	–	–	–	–
	With maintenance ⁶⁾	Operating cycles	–	–	–	–	15000	15000

¹⁾ The LCD on the 3WL10 is always active.

²⁾ 4000 A, size 2 in fixed-mounted version, 3-pole

⁴⁾ ETU76B with graphics display can be used up to max. 55 °C.

⁵⁾ Make time through closing coil for synchronization purposes (short-time excited) 50 ms.

⁶⁾ Maintenance means: Replacing main contact elements and arc chutes (see Operating Manual). Greasing the breaker mechanism on the 3WL10, no replacement of components.

3WL11



3WL12



3WL13



1600 A 2000 A 800 A 1000 A 1250 A 1600 A 2000 A 2500 A 3200 A 4000 A 4000 A 5000 A 6300 A

Yes

B

-40 ... +70

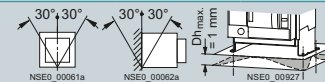
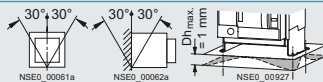
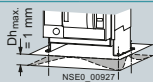
-40 ... +70

-40 ... +70

-40 ... +80

-40 ... +80

-40 ... +80



IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover

IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover

IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover

690/1000

690/1000

690/1000

1000

1000

1000

12

12

12

4

4

4

2.5

2.5

2.5

2000

2000

2000

1600	2000	800	1000	1250	1600	2000	2500	3200	3950	4000	5000	5920
1600	1930	800	1000	1250	1600	2000	2500	3020	3810	4000	5000	5810
1490 ⁸⁾	1780 ⁸⁾	800 ⁸⁾	1000 ⁸⁾	1250 ⁸⁾	1600 ⁸⁾	2000 ⁸⁾	2280 ⁸⁾	2870 ⁸⁾	3600 ⁸⁾	4000 ⁸⁾	5000 ⁸⁾	5500 ⁸⁾

150	240	40	45	80	85	180	270	410	750	520	630	900
350	440	85	95	165	175	320	520	710	925	810	1050	1600

35

35

35

38

34

34

80

100

100

73

73

73

73

73

73

50

50

50

15000	15000	10000	10000	10000	10000	10000	10000	10000	10000	-	-	-
25000	25000	17500	17500	17500	17500	17500	17500	17500	17500	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-
10000	10000	7500	7500	7500	7500	7500	7500	4000	2000	-	-	-
25000	25000	17500	17500	17500	17500	17500	17500	17500	17500	-	-	-

10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	5000	5000	5000
15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000
7500	7500	7500	7500	7500	7500	7500	7500	4000	2000	2000	2000	2000
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
-	-	500	500	500	500	500	500	500	500	500	500	500
15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000

⁷⁾ Periodic greasing of breaker mechanism on 3WL10 (see Manual), components not to be replaced
⁸⁾ Cu painted black

⁹⁾ Motorized operating mechanism $U_{imp}=1.2$ kV

Basic units for AC

IEC 60947-2 (continued)

3WL10



3WL11



	630 A	800 A	1000 A	1250 A	1000 A	1250 A
--	-------	-------	--------	--------	--------	--------

			630 A	800 A	1000 A	1250 A	1000 A	1250 A
Switching cycles								
Service life: Breaking capacity H, 4-pole								
Mechanical	Without maintenance	Operating cycles	–	–	–	–	10000	10000
	With maintenance ⁶⁾	Operating cycles	–	–	–	–	15000	15000
Electrical	Without maintenance 690 V	Operating cycles	–	–	–	–	7500	7500
	Without maintenance 1000 V	Operating cycles	–	–	–	–	1000	1000
	Without maintenance 1150 V ⁷⁾	Operating cycles	–	–	–	–	–	–
	With maintenance ⁶⁾	Operating cycles	–	–	–	–	10000	10000
Service life: Breaking capacity C								
Mechanical	Without maintenance	Operating cycles	–	–	–	–	–	–
	With maintenance ⁶⁾	Operating cycles	–	–	–	–	–	–
Electrical	Without maintenance 690 V	Operating cycles	–	–	–	–	–	–
	With maintenance 690 V ⁶⁾	Operating cycles	–	–	–	–	–	–
Switching frequency⁸⁾								
Mechanical/electrical	690 V version	1/h	60/30	60/30	60/30	60/30	–	–
	1000 V / 1150 V version	1/h	–	–	–	–	–	–
Connection								
Minimum phase size								
Copper bars, bare	Unit, mm ²		2× 40× 5	2× 50× 5	2× 50× 10 ¹²⁾ 2× 50× 8 ¹³⁾	2× 50× 10 ¹²⁾ 2× 50× 8 ¹²⁾	1× 60× 10	2× 40× 10
Copper bars, painted black	Unit, mm ²		–	–	–	–	1× 60× 10	2× 40× 10
Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)								
Standard connection = screw	Without end sleeve				–		2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16); 1× 2.5 mm ² (AWG 14)	
	With end sleeve acc. to DIN 46228 Part 2				–		1× 0.5 ... 1× 1.5 mm ² (AWG 20 ... 16)	
	With twin end sleeve				–		2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16)	
Screwless connection technology	Without end sleeve			0.5 ... 2.5 mm ² (AWG 20 ... 14)			2× 0.5 ... 2× 2.5 mm ² (AWG 20 ... 14)	
	With end sleeve acc. to DIN 46228 Part 2			0.5 ... 1.5 mm ² (AWG 20 ... 16)			2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16)	
Position signaling switches								
Screwless connection technology					1× 0.5 ... 1× 2.5 mm ² (AWG 20 ... 14)		1× 0.5 ... 1× 2.5 mm ² (AWG 20 ... 14)	
Weights								
3-pole	Fixed-mounted circuit breaker	kg			14		43	43
	Withdrawable circuit breaker	kg			17.3		45	45
	Guide frames	kg			21		25	25
4-pole	Fixed-mounted circuit breaker	kg			16		50	50
	Withdrawable circuit breaker	kg			19.3		54	54
	Guide frames	kg			25		30	30

⁶⁾ Maintenance means: Replacing main contact elements and arc chutes (see Operating Manual).

⁷⁾ Size 2 with order code "A15" and size 3. Data for very high breaking capacity.

⁸⁾ Minimum interval time between 2 tripping operations

⁹⁾ 3-pole switching with breaking capacity N and S: 45/h.

3WL11



3WL12



3WL13



1600 A		2000 A		800 A		1000 A		1250 A		1600 A		2000 A		2500 A		3200 A		4000 A		4000 A		5000 A		6300 A	
10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	5000	5000	5000	5000	5000	5000
15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000	10000	10000	10000
7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500	4000	2000	2000	2000	2000	2000	2000
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
–	–	–	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
10000	10000	10000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	15000	10000	10000	10000	10000	10000	10000
–	–	–	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	–	5000	5000	5000	5000	5000	5000
–	–	–	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	–	10000	10000	10000	10000	10000	10000
–	–	–	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	4000	–	1000	1000	1000	1000	1000	1000	1000
–	–	–	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	10000	8000	–	–	–	–	–	–	–	–
–	20/20	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	60/60 ¹²⁾	
–	–	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20	20/20
2× 50× 10	3× 50× 10	1× 50× 10	1× 60× 10	2× 40× 10	2× 50× 10	3× 50× 10	2× 100× 10	3× 100× 10	4× 120× 10	4× 100× 10	6× 100× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10
2× 50× 10	3× 50× 10	1× 50× 10	1× 60× 10	2× 40× 10	2× 50× 10	3× 50× 10	2× 100× 10	3× 100× 10	4× 100× 10	4× 100× 10	6× 100× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10	6× 120× 10
2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16); 1× 2.5 mm ² (AWG 14)	2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16); 1× 2.5 mm ² (AWG 14)										2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16); 1× 2.5 mm ² (AWG 14)														
1× 0.5 ... 1× 1.5 mm ² (AWG 20 ... 16)	1× 0.5 ... 1× 1.5 mm ² (AWG 20 ... 16)										1× 0.5 ... 1× 1.5 mm ² (AWG 20 ... 16)														
2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16)	2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16)										2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16)														
2× 0.5 ... 2× 2.5 mm ² (AWG 20 ... 14)	2× 0.5 ... 2× 2.5 mm ² (AWG 20 ... 14)										2× 0.5 ... 2× 2.5 mm ² (AWG 20 ... 14)														
2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16)	2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16)										2× 0.5 ... 2× 1.5 mm ² (AWG 20 ... 16)														
1× 0.5 ... 1× 2.5 mm ² (AWG 20 ... 14)	1× 0.5 ... 1× 2.5 mm ² (AWG 20 ... 14)										1× 0.5 ... 1× 2.5 mm ² (AWG 20 ... 14)														
43	43	56	56	56	56	56	59	64	85	82	82	90	90	90	90	90	90	90	90	90	90	90	90	90	
45	45	60	60	60	60	60	63	68	121	88	88	96	96	96	96	96	96	96	96	96	96	96	96	96	
25	25	31	31	31	31	31	39	45	52	60	60	70	70	70	70	70	70	70	70	70	70	70	70	70	
50	50	67	67	67	67	67	71	77	103	99	99	108	108	108	108	108	108	108	108	108	108	108	108	108	
54	54	72	72	72	72	72	76	82	146	106	106	108	108	108	108	108	108	108	108	108	108	108	108	108	
30	30	37	37	37	37	37	47	54	62	84	84	119	119	119	119	119	119	119	119	119	119	119	119	119	

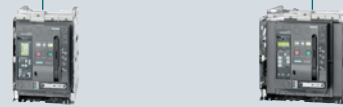
¹²⁾ Horizontal¹³⁾ Vertical

Basic units for DC

IEC 60947-2

1

3WL11 3WL12



2000 A 1000 A 2000 A 4000 A

Rated current		1		2		
Size		1		2		
Isolating function acc. to EN 60947-2		Yes				
Utilization category		B				
Permissible ambient temperature	Operation	°C		-40 ... +70		
	Storage	°C		-40 ... +80		
Mounting position						
Degree of protection		IP20 without cabinet door, IP41 with door sealing frame, IP55 with cover				
Supply						
Voltage						
Rated operational voltage U_e at 50/60 Hz	1000 V version	V DC	1000	600/1000		
Rated insulation voltage U_i		V DC	1000	1000		
Rated impulse withstand voltage U_{imp}	Main conducting paths	kV	12	12		
	Auxiliary circuits	kV	4	4		
	Control circuits	kV	2.5	2.5		
Permissible load						
At rear horizontal main connections	Up to 40 °C (Cu black painted)	A	2000	1000	2000	4000
	Up to 55 °C (Cu black painted)	A	1910	1000	2000	3640
	Up to 60 °C (Cu black painted)	A	1850	1000	2000	3500
	Up to 70 °C (Cu black painted)	A	1710	1000	1950	3250
Power loss at I_n						
With symmetrical load	Withdrawable circuit breaker	W	150	280	770	1640
Switching cycles						
Switching times						
Make time		ms	35	35		
Opening time		ms	38	34		
Electrical make time (through activation solenoid) ¹⁾		ms	100	100		
Electrical opening time (through shunt release)		ms	73	73		
Electrical opening time (instantaneous undervoltage release)		ms	73	73		
Endurance ³⁾						
Mechanical	Without maintenance	Operating cycles	10000	10000	10000	10000
	With maintenance ²⁾	Operating cycles	15000	17500	17500	17500
Electrical	Without maintenance	Operating cycles	1000	6000	6000	4000
	Without maintenance 1000 V	Operating cycles	1000	1000	1000	1000
	With maintenance ²⁾	Operating cycles	2000	17500	17500	17500

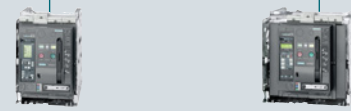
¹⁾ Make time through activation solenoid for synchronization purposes (short-time excited) 50 ms.

²⁾ Maintenance means: Replace main contact elements and arc chutes (see Operating Manual).

³⁾ Further technical specifications on request.

⁴⁾ At $U_e = 220$ V DC

3WL11 3WL12



2000 A 1000 A 2000 A 4000 A

Breaking capacity						
Short-circuit breaking capacity I_{cc}						
Up to 220 V DC	kA	20		35		
Up to 300 V DC	kA	20		30		
Up to 600 V DC	kA	20		25		
Up to 1000 V DC	kA	20		20		
Rated short-time withstand current I_{cw}						
0.5 s	kA	–		–		
1 s	kA	20		35 ⁴⁾ / 30 ⁵⁾ / 25 ⁶⁾ / 20 ⁷⁾		
2 s	kA	–		–		
3 s	kA	–		–		
Breaking capacity						
Switching frequency						
690 V version	1/h	–	60	60	60	
1000 V version	1/h	20	20	20	20	
Connection						
Auxiliary conductor (Cu) max. number of auxiliary conductors × cross-section (solid/stranded)						
Standard connection = strain-relief clamp	Without end sleeve	2 × 0.5 ... 2 × 1.5 mm ² (AWG 20 ... 16); 1 × 2.5 mm ² (AWG 14)				
	With end sleeve acc. to DIN 46228 Part 2	1 × 0.5 ... 1 × 1.5 mm ² (AWG 20 ... 16)				
	With twin end sleeve	2 × 0.5 ... 2 × 1.5 mm ² (AWG 20 ... 16)				
Optional connection = tension spring	Without end sleeve	2 × 0.5 ... 2 × 2.5 mm ² (AWG 20 ... 14)				
	With end sleeve acc. to DIN 46228 Part 2	2 × 0.5 ... 2 × 1.5 mm ² (AWG 20 ... 16)				
Weights						
3-pole	Fixed-mounted circuit breaker	kg	43	56	56	64
	Withdrawable circuit breaker	kg	–	60	60	68
	Guide frames	kg	–	31	31	45
4-pole	Fixed-mounted circuit breaker	kg	50	67	67	77
	Withdrawable circuit breaker	kg	–	72	72	82
	Guide frames	kg	–	37	37	54

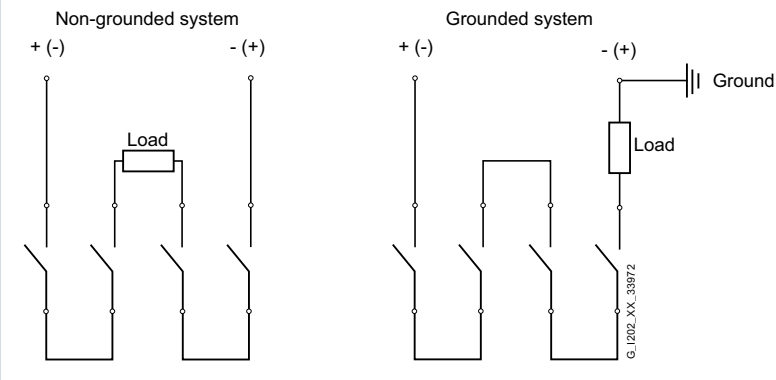
⁵⁾ At $U_e = 300$ V DC⁷⁾ At $U_e = 1000$ V DC.⁶⁾ At $U_e = 600$ V DC

Basic units for DC

Application examples size 1

Permissible interconnection circuit diagrams for size 1,
1000 V DC non-automatic air circuit breakers

1



Application examples size 2

The connection to the circuit breakers is not dependent on direction and polarity; the circuit diagrams can be adapted accordingly. If the parallel or series connections are made directly to the connecting bars, for thermal reasons the continuous load on the circuit breakers must only be 80% of the permissible operational current. If the parallel or series connection is made at a distance of 1 m from the connecting bars, the circuit breaker can be used at full operational current load.

1

Required contact gaps at rated voltage	For 3-pole non-automatic air circuit breakers		For 4-pole non-automatic air circuit breakers	
	1-pole	2-pole	1-pole	2-pole
Rated operational voltage <300 V + 10%		 <small>NSS0_00539</small> only with grounded system ²⁾	 only with grounded system ³⁾	 only with grounded system ³⁾
Rated operational voltage >300 V + 10% ... 600 V + 10%		 only with grounded system	 only with grounded system ²⁾	 only with grounded system ²⁾
Rated operational voltage >600 V + 10% ... 1000 V + 10%⁴⁾		 only with grounded system	 <small>NSS0_00595</small> only with grounded system	 only with grounded system

¹⁾ Conducting paths series-connected
²⁾ 2 parallel conducting paths
³⁾ 3 parallel conducting paths
⁴⁾ Version for 1000 V required, order with "-Z" and order code A05
 Grounded system
 Load

Electronic trip unit ETU

With watchdog monitoring

3WL10



		ETU320 (LI)	ETU350 (LSI)	ETU360 (LSIG)
Basic protection functions				
L Overload protection (L tripping operation)	Setting range of operating value $I_r = I_n \times \dots$	0.4 0.5 0.6 0.7 0.75 0.8 0.85 0.9 0.95 1 Default 0.4	0.4 0.5 0.6 0.7 0.75 0.8 0.85 0.9 0.95 1 Default 0.4	0.4 0.5 0.6 0.7 0.75 0.8 0.85 0.9 0.95 1 Default 0.4
	Switchable overload protection (from I^2t - to I^4t -dependent function)	–	–	–
	Setting range of delay t_r at I^2t (Reference point $6 \times I_n$)	0.75 1 2 5 8 10 14 17 21 25 s Default 0.75 s	0.75 1 2 5 8 10 14 17 21 25 s Default 0.75 s	0.75 1 2 5 8 10 14 17 21 25 s Default 0.75 s
	Setting range of delay t_r at I^4t (Reference point $6 \times I_n$)	–	–	–
	Thermal memory can be switched on/off	Permanently switched on	Permanently switched on	Permanently switched on
	Phase failure sensitivity / asymmetry	–	–	–
S Short-time delay short-circuit protection (ST tripping)	Setting range of operating value $I_{sd} = I_n \times \dots$	–	1 1.5 2 2.5 3 4 6 8 10 Default OFF	1 1.5 2 2.5 3 4 6 8 10 Default OFF
	Setting range of delay time t_{sd} at I^2t	–	0.1 0.2 0.3 0.4 0.5 (Ref. $10 \times I_n$)	0.1 0.2 0.3 0.4 0.5 (Ref. $10 \times I_n$)
	Setting range of delay time t_{sd} ($t = \text{const.}$)	–	0.08 0.15 0.22 0.3 0.4 s	0.08 0.15 0.22 0.3 0.4 s
	ZSI function	–	–	–
I Instantaneous short-circuit protection (INST tripping operation)	Setting range $2 = I_n \times \dots$	OFF 1.5 2 3 4 6 8 10 12 15	OFF 1.5 2 3 4 6 8 10 12 15	OFF 1.5 2 3 4 6 8 10 12 15
N Neutral conductor protection	Neutral conductor setting range $I_N = I_n \times \dots$	OFF 50% 100% 200%	OFF 50% 100% 200%	OFF 50% 100% 200%
G Ground-fault tripping (GF tripping) Detection of ground-fault current through summation current formation with internal or external N conductor transformer	Tripping function can be switched on/off	–	–	■
	Alarm function can be switched on/off	–	–	Permanently switched on
	Detection of ground-fault current through external current transformer	–	–	–
	Setting range of the operating current $I_g = I_n \times \dots$	–	–	0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 1
	Setting range of the operating current I_g for alarm	–	–	–
	Setting range of the delay time t_g	–	–	0.1 0.2 0.4 0.6 0.8 s (fixed delay)
	Switchable grounding protection characteristic (I^2t -dependent function)	–	–	$t = \text{const.} / I^2t$ Default I^2t
	Setting range of delay time t_g at I^2t	–	–	0.1 0.2 0.4 0.6 0.8 s (Ref. $2 \times I_n$) (I^2t dependent) Default 0.1 (I^2t)
	ZSI-G function	–	–	–

¹⁾ Sizes 1 and 2 / size 3

3WL10



3WL11 – 3WL13



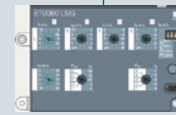
1

ETU650 (LSI)	ETU660 (LSIG)	ETU15B (LI)	ETU25B (LSI)	ETU27B (LSIG)	ETU45B (LSIG)	ETU76B (LSIG)
0.4 ... 1 Default 1 (in steps of 0.001)	0.4 ... 1 Default 1 (in steps of 0.001)	0.5 0.55 0.6 0.65 0.7 0.75 0.8 0.85 0.9 1	0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.8 0.9 1	0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.8 0.9 1	0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.8 0.9 1	0.4 ... 1
■	■	–	–	–	■	■
0.75 ... 36 s (in steps of 0.25 s) Default 36 s	0.75 ... 36 s (in steps of 0.25 s) Default 36 s	10 s fixed	10 s fixed	10 s fixed	■	■
0.75 ... 5 s (in steps of 0.25 s) Default 5 s	0.75 ... 5 s (in steps of 0.25 s) Default 5 s	–	–	–	2 3.5 5.5 8 10 14 17 21 25 30 s	2 ... 30 s
■	■	–	–	–	■	■
2% ... 90% (default 50%)	2% ... 90% (default 50%)	–	At $t_{sd} = 20$ ms (M)	At $t_{sd} = 20$ ms (M)	At $t_{sd} = 20$ ms (M)	■ (on/off)
0.6 ... 10 OFF (in steps of 0.1)	0.6 ... 10 OFF (in steps of 0.1)	–	1.25 1.5 2 2.5 3 4 6 8 10 12	1.25 1.5 2 2.5 3 4 6 8 10 12	1.25 1.5 2 2.5 3 4 6 8 10-12 OFF	$1.25 \times I_n \dots 0.8 \times I_{cw}$ OFF
0.05 ... 0.5 s (Ref. $10 \times I_n$)	0.05 ... 0.5 s (Ref. $10 \times I_n$)	–	–	–	100-200-300-400 ms	100 ... 400 ms
0.05 ... 0.4 s	0.05 ... 0.4 s	–	0.08 0.15 0.22 0.3 0.4	0.08 0.15 0.22 0.3 0.4	0.05 ... 0.4 s Default 0.05 (in steps of 0.01)	0.05 ... 0.4 s Default 0.05 (in steps of 0.01)
–	–	–	–	–	by CubicleBUS module	by CubicleBUS module
OFF 1.5 ... 15 (in steps of 0.1)	OFF 1.5 ... 15 (in steps of 0.1)	2 3 4 5 6 7 8	Fixed at $2 \geq 20 \times I_{nr}$ max. 50 kA	Fixed at $2 \geq 20 \times I_{nr}$ max. 50 kA	OFF 1.5 2.2 3 4 6 8 10 12 $0.8 \times I_{cs}$	OFF $1.5 \times I_n \dots 0.8 \times I_{cs}$
OFF 50% 100% 150% 200%	OFF 50% 100% 200%	–	–	■	OFF 0.5 ... 1	OFF 0.2 ... 2
–	■	–	–	■	■	■
–	■	–	–	–	–	■
–	Alternative Rc or G-ret ground-fault monitoring	–	–	–	■	■
–	0.1 ... 1 (in steps of 0.001) $I_g = I_n \times$	–	–	A ¹⁾ (100/400 A) B ¹⁾ (300/600 A); C ¹⁾ (600/800 A) D ¹⁾ (900/1000 A); E ¹⁾ (1200/1200 A)	A ¹⁾ (100/400 A) B ¹⁾ (300/600 A); C ¹⁾ (600/800 A) D ¹⁾ (900/1000 A); E ¹⁾ (1200/1200 A)	BG 1, 2: 100 ... 1200 A BG 3: 400 ... 1200 A
–	50% ... 90% $\times I_r$ (in steps of 1%) PreAlarm	–	–	–	A ¹⁾ (100/400 A); B ¹⁾ (300/600 A); C ¹⁾ (600/800 A); D ¹⁾ (900/1000 A); E ¹⁾ (1200/1200 A)	BG 1, 2: 100 ... 1200 A BG 3: 400 ... 1200 A
–	0.1 ... 1 s Default 0.1 s (in steps of 0.05 s)	–	–	100 200 300 400 500 ms	100 200 300 400 500 ms	100 ... 500 ms
–	$t = \text{const.} / I^2 t$ Default const.	–	–	$t = \text{const.}$	$t = \text{const.} / I^2 t$ Default const.	$t = \text{const.} / I^2 t$ Default const.
–	0.1 ... 1 s (in steps of 0.05 s) (Ref. $2 \times I_n$)	–	–	–	100 200 300 400 500 ms	100 ... 500 ms
–	–	–	–	–	by CubicleBUS module	by CubicleBUS module

Electronic trip unit ETU

With watchdog monitoring (continued)

3WL10



		ETU320 (LI)	ETU350 (LSI)	ETU360 (LSIG)
Parameter set changeover	Switchable between parameter set A and B	–	–	–
LCD		–	–	–
Voltage tap on top/bottom		–	–	–
Metering function		–	–	–
Tripping operation as a result of extended protection function: (including: phase asymmetry current/voltage, harmonic distortion current/voltage, under/overvoltage, phase rotation direction, active power in/opposite to normal direction, under/over-frequency, protection functions dependent on direction of power flow)				
Mode of communication				
Communication PROFIBUS PROFINET Modbus RTU Modbus TCP		–	–	–
Output modules				
Signals via relay: Overload warning, load shedding / load carrying, leading signal, overload tripping 200 ms, temperature alarm, phase asymmetry, instantaneous short-circuit release, short time-delayed short-circuit release, overload trip, neutral conductor trip, auxiliary relay, ETU faults, grounding protection tripping and grounding protection alarm (only with grounding protection module)		IOM300	IOM300	IOM300

Increment size when settings are made for the ETU76B using the menu

From ... to	Increment size
0 ... 1	0.1
1 ... 100	1
100 ... 500	5
500 ... 1000	10
1000 ... 1600	50
1600 ... 10000	100
10000 ... max.	1000

3WL10

3WL11 – 3WL13



1

ETU650 (LSI)	ETU660 (LSIG)	ETU15B (LI)	ETU25B (LSI)	ETU27B (LSIG)	ETU45B (LSIG)	ETU76B (LSIG)
■	■	–	–	–	–	■
Integrated	Integrated	–	–	–	Optional	Integrated
Optional	Optional	–	–	–	Optional	Optional
Basic/Advanced	Basic/Advanced	–	–	–	Metering function Plus	Metering function Plus
■	■	–	–	–	■	■
■	■	–	–	–	■	■
IOM040/IOM300	IOM040/IOM300	–	–	–	■	■

Connection

Main circuit connection

1

Connection	3WL10		3WL11 – 3WL13			
	Fixed-mounted	Withdrawable	Fixed-mounted		Withdrawable	
Front	Direct	Extended	1-hole	2-hole	1-hole	2-hole
	Extended					
	Broadened					
Rear	Vertical	Vertical	Vertical		Vertical	Flanges
	Horizontal	Horizontal	Horizontal		Horizontal	
		Broadened				
cable	Cable terminals	Cable lug				

Auxiliary circuit connections

3WL 10: Withdrawable / fixed-mounted version

- Direct engagement of the auxiliary conductor vertically onto the circuit breaker or horizontally in the guide frame



Screwless connection technology (push in)

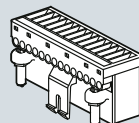
3WL11 – 3WL13: Withdrawable versions

- Connection of the internal auxiliary switches to the male connector on the switch side
- When fully inserted, connection with the sliding contact module in the guide frame

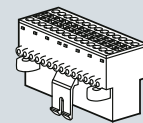
3WL11 – 3WL13: Fixed-mounted version

- Engagement of the auxiliary supply connectors directly onto the circuit breaker

Coding pins on the connectors prevent them being inserted in the wrong slots



Screw connection (SIGUT) (standard)



Screwless connection technology (tension spring) (optional)

Operating mechanism, auxiliary release, auxiliary switch

Operating mechanism

The circuit breakers are available with various optional operating mechanisms:

- Manual operating mechanism with mechanical closing (standard design)
- Manual operating mechanism with mechanical and electrical closing
- Motorized operating mechanism with mechanical and electrical closing

The operating mechanisms with electrical closing are suitable for synchronization tasks.

	Available for air circuit breakers	
	3WL10	3WL11 – 3WL13
Closing coils (CC)	■	■
Undervoltage releases (UVR) / shunt releases (ST)	■	■
Shunt releases (ST)	■	■
Remote reset magnets (RR)	■	■
Spring charging motor (MO)	■	■
Mechanical operating cycles counters	■	■

3WL10 system overview

IEC AC ..

For a complete and verified configuration of your molded-case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl10-configurator

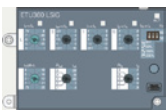
1

Basic units



Size 0

Releases



Electronic trip units ETU (LI, LSI, LSIG)



Electronic trip units ETU (LSI, LSIG)

Accessories



Communication and I/O modules



Rating plugs



Breaker Connect modules

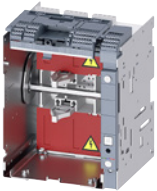


Metering function (Basic/Advanced)



External ground fault transformers

Main conductor connections



Fixed-mounted, withdrawable versions



Rear vertical/horizontal connections



Front connections



Front connections, extended



Terminals for CU/AL cable connection

Motors



Spring charging motor

Accessories



Remote reset magnets



Mechanical operating cycles counters

Auxiliary releases / closing coils



Shunt releases,
undervoltage releases



Closing coils

Auxiliary switches and signaling switches



Auxiliary, alarm, and
signaling switches



Position signaling switches

Interlocking



Interlocking sets



Locking devices



Locking mechanisms



Door sealing frames



Protective covers

Structure of the article numbers

Basic configuration

For a complete and verified configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl10-configurator

1

			6	7	8	9	10	11	12	13	14	15	16	
			3	W	L	1	0							
			0	6	-									
			0	8										
			1	0										
			1	2										
Basic unit and ETU														
Rated current	630 A		0	6										
	800 A		0	8										
	1000 A		1	0										
	1250 A		1	2										
Breaking capacity	B	Basic ($I_{cu} = 42$ kA at 440 V)			1									
	N	ECO ($I_{cu} = 55$ kA at 440 V)			2									
	S	Standard ($I_{cu} = 66$ kA at 440 V)			3									
Without ETU	Without metering function					A	A							
ETU 3-series (without a communication link)	Without metering function	With ETU	ETU320 (LI)		A	B								
			ETU350 (LSI)		A	C								
			ETU360 (LSIG)		A	D								
ETU 6-series	With ETU		ETU650 (LSI)			E								
			ETU660 (LSIG)			F								
	Without a communication link	Without metering function			A									
		With a communication link	Without metering function			B								
	With a communication link	Without metering function	Basic	Voltage tap on bottom		C								
				Voltage tap on top		D								
		Metering function	Advanced	Voltage tap on bottom		E								
		Voltage tap on top		F										
Number of poles	Fixed-mounted versions	3-pole						0						
		4-pole	Neutral left					1						
			Neutral right					2						
		Withdrawable	3-pole						3					
	4-pole		Neutral left						4					
			Neutral right						5					
Connection¹⁾														
Installation type	Withdrawable	Without frame											0	
		Rear vertical connection											1	
		Rear horizontal connection											2	
		Adapter for compression lug connection (rear)											4	
		Front-accessible, extended terminal for main circuit connection											5	
														5
	Fixed-mounted versions	Rear vertical connection												1
														2
														3
		Rear horizontal connection	Front terminal for main circuit connection											3
			Circular conductor terminals (front)											4
			Front-accessible, extended terminal for main circuit connection											5

¹⁾ Broadened connections available as accessories.

3WL10

6	7	8	9	10	11	12	13	14	15	16
---	---	---	---	----	----	----	----	----	----	----

1

Motor

Operating mechanisms	Manual operating mechanism		0
	Spring charging motor	24 ... 30 V AC/DC	1
		48 ... 60 V AC/DC	2
		110 V AC/DC	3
		230 V AC/DC	4

Auxiliary releases, closing coils

Closing coil (CC), remote reset magnet (RR)	Without closing coil (CC), without remote reset magnet (RR)		A
	Closing coils (CC)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
	Closing coil (CC) and additionally a remote reset magnet (RR)	240 ... 250 V AC/DC	J
		24 V AC/DC	K
		110 V AC/DC	L
		220 V AC/DC	M

2nd auxiliary release	Without 2nd auxiliary release		A	
	With undervoltage release (UVR)	24 V AC/DC	B	
		30 V AC/DC	C	
		48 V AC/DC	D	
		60 V AC/DC	E	
		110 ... 120 V AC/DC	F	
		120 ... 127 V AC/DC	G	
		220 ... 240 V AC/DC	H	
		240 ... 250 V AC/DC	J	
		380 ... 400 V AC/DC	K	
		415 ... 440 V AC/DC	L	
		With undervoltage release (UVR), delayable with external time-delay device; Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC	M
			110 ... 127 V AC/DC	N
			220 ... 250 V AC/DC	P
	With 2nd shunt release (ST2)		24 V AC/DC	Q
		30 V AC/DC	R	
		48 V AC/DC	S	
		60 V AC/DC	T	
		110 ... 120 V AC/DC	U	
		120 ... 127 V AC/DC	V	
220 ... 240 V AC/DC		W		
240 ... 250 V AC/DC	X			

1st auxiliary release	Without 1st auxiliary release		0
	Shunt release (ST)	24 V AC/DC	1
		30 V AC/DC	2
		48 V AC/DC	3
		60 V AC/DC	4
		110 ... 120 V AC/DC	5
		120 ... 127 V AC/DC	6
		220 ... 240 V AC/DC	7
		240 ... 250 V AC/DC	8

Accessory options

Configure your air circuit breaker easily online at
www.siemens.com/lowvoltage/3wl10-configurator

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL.....-.....-..... -Z

Order code

Accessories for basic configuration

Mounting options for fixed mounting

- In the basic configuration, the fixed-mounted circuit breaker is mounted onto the rear panel; floor mounting is an option; in addition, the device must be modified if it is to be extended with functionalities such as external auxiliary switches or mechanical interlocks.¹⁾

Mounting options for fixed mounting ¹⁾					
Floor mounting	Mounting support standard	A	0	7	
	Mounting support extended ²⁾	S	5	6	
Rear panel mounting onto mounting plate	Side wall extended ²⁾	S	5	7	

Accessories for electronic trip units ETU

Rating plugs

- The electronic trip units are equipped as standard with a rating plug for setting the rated current I_n , which is equal to the maximum rated circuit breaker current ($<I_{n\max}$). The rated current of the selected rating plug must be less than or equal to $I_{n\max}$.
- To downrate the circuit breaker, the rated current of less than $I_{n\max}$ is selected for the rating plug by means of a Z option.
- Other functions can also be activated using rating plugs (L = OFF or Rc protection).

Rating plug					
For setting the rated current I_n	For all ETU	400 A	B	0	4
		630 A	B	0	6
		800 A	B	0	8
		1000 A	B	1	0
For setting the rated current I_n , with overload protection L = OFF	For ETU 6-series	400 A	L	0	4
		630 A	L	0	6
		800 A	L	0	8
		1000 A	L	1	0
		1250 A	L	1	2
For setting the rated current I_n , For enabling of the residual current protection function. The residual current function is only possible with the MF Advanced metering function.	For ETU660 only	400 A	G	0	4
		630 A	G	0	6
		800 A	G	0	8
		1250 A	G	1	2

Communication modules

- No more than two different communication modules can be used at the same time.
- When using an IOM040 digital I/O module (Z option K56), only one communication module can be used.

Communication modules					
COM040	PROFIBUS	F	0	2	
COM041	PROFINET	F	0	3	
COM043	Modbus TCP	F	1	1	
COM042	Modbus RTU	F	1	2	

Breaker Connect modules

- When a circuit breaker with a communications interface is ordered, a Breaker Connect module for external 24 V DC power supply of the electronic components is also supplied ready installed.
- By means of this Z option, the Breaker Connect module for 24 V DC is replaced by a Breaker Connect module for 110–240 V AC/DC.

Breaker Connect modules	110 ... 240 V AC/DC	F	2	6

I/O modules internal

I/O modules internal	Digital I/O module IOM040	2 inputs, 2 outputs	K	5	6

¹⁾ These functionalities can be applied directly to the frame of the withdrawable circuit breaker, without any modification of the side wall.

²⁾ Not possible in connection with or as an alternative to the mounting support, standard (A07)

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL.....-.....-..... -Z

Order code

Accessories for the motor

Mechanical operating cycles counter, 5-digit

C 0 1

Auxiliary switches and signaling switches

- Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard.
- For currents <100 mA for PLC connections, these auxiliary and signaling switches can be replaced.
- The auxiliary/signaling switches for 24 V DC digital signals are designed for a
 - minimum load above 1 mA at 5 V DC and a
 - maximum breaking capacity of 100 mA at 24 V DC.

Position signaling switches for guide frames ¹⁾ 2 CO | 2 CO | 2 CO (connected | test | disconnected position)

K 5 5

Signaling switches				
Ready-to-close signaling switches		1 CO digital, 24 V DC	K	5 0
Tripped signaling switches (S24)		1 CO digital, 24 V DC	K	5 3
Spring charged signaling switches (S21)		1 CO digital, 24 V DC	K	5 4

Auxiliary switches	ON / OFF AUX	4 CO digital, 24 V DC	K	5 1
		2 CO 400 V AC + 2 CO digital, 24 V DC	K <td>5 2</td>	5 2

Locking, blocking and interlocking

Locking devices ¹⁾	To prevent movement of withdrawable circuit breaker	Cylinder lock	Made by Ronis	R	7 8
		For no more than 3 padlocks, 8 mm		R	6 5
Locking mechanisms	To prevent movement to disconnected position			R	7 9
Locking devices	To prevent unauthorized activation in the operator panel (safe OFF)	Cylinder lock, made by Ronis		S	0 8
		For no more than 3 padlocks, plastic 4 mm		S	2 2
		For no more than 1 padlock, metal 7 mm		S	2 3
		For no more than 2 padlocks, metal 8 mm		S	0 7
Interlocking sets	For mechanical ON and/or OFF on the operator panel	For no more than 3 padlocks, plastic 4 mm		S	4 2
		For no more than 1 padlock, metal 7 mm		S	4 3
		For no more than 2 padlocks, metal 8 mm		S	4 4
Protective covers	For mechanical ON/OFF, not lockable		S	4 1	
Door sealing frame IP30	IP3x		T	3 0	

¹⁾ Can be used not only when guide frame is ordered separately, but also with complete order (breaker + guide frame).

Online configurator highlights

www.siemens.com/lowvoltage/configurators

1

Search function with global direct input

Searches for specific terms and jumps to MLFB based on input to the correct configurator

SIEMENS
Ingenuity for Life

Log in Additional actions Support Language

Configurators for Low-voltage List of products

Search for (e.g. 3WL1110-4EB36-6EQ8-Z A05+80...)

1 Select Type of Product 2 Select Category

Product list stores multiple configurations and can transfer them collectively to the shopping cart

List of products

Projectdata Load product list

Actions

No.	Article	Quantity	Unit price:	Documents
1	3WL1106-2EB62-1AA2 / Fixed-mounted circuit breaker 3-pole, Size 1, IEC In=630 A to 690 V, 50/60 Hz AC Icu=55 kA at 500 V Rear horizontal connection Overcurrent release ETU 45 LSIN protection adjustable 0.4-1 in with cubicle bus Opt.... Further details	1 Piece	on request	> all documents for position
+ 2	3VA2450-6KP32-0AA0 / 3VA molded case circuit breaker circuit breaker 3VA2 IEC frame 630 breaking capacity class H Icu=85kA @ 415V 3-pole, line protection ETU850, LSI, In=500A overload protection In=200A...500A short-circuit protection Ibd=0.6...10x In,... Further details	1 Piece	on request	> all documents for position

Recall completed configurations for modification or additional configuration

List of products

Projectdata Load product list

Actions

No.	Article	Quantity	Unit price:	Documents
1	3WL1106-2EB62-1AA2 / Fixed-mounted circuit breaker 3-pole, Size 1, IEC In=630 A to 690 V, 50/60 Hz AC Icu=55 kA at 500 V Rear horizontal connection Overcurrent release ETU 45 LSIN protection adjustable 0.4-1 in with cubicle bus Opt.... Further details	1 Piece	on request	> all documents for position
+ 2	3VA2450-6KP32-0AA0 / 3VA molded case circuit breaker circuit breaker 3VA2 IEC frame 630 breaking capacity class H Icu=85kA @ 415V 3-pole, line protection ETU850, LSI, In=500A overload protection In=200A...500A short-circuit protection Ibd=0.6...10x In,... Further details	1 Piece	on request	> all documents for position

Duplicate Configure

Responsive Design

SIEMENS
Ingenuity for Life

Log in Additional actions Support Language

Configurators for Low-voltage List of products

Search for (e.g. 3WL1110-4EB36-6EQ8-Z A05+80...)

1 Select Type of Prod... 2 Select Category

www.siemens.com/lowvoltage/3wl10-configurator

1

Download an ePlan Selector for 3WL10

Mouseover display of characteristic curves to show the protection function

Choose value...	Trip units	Protective function	Communication capability	Metering capability	Display
	Non-automatic breaker	-	-	-	-
	ETU120	LI	-	-	-
	ETU150	LI	-	-	-
	ETU160	LI	-	-	-
	ETU165	LI	-	-	-
	ETU166	LI	-	-	-

Direct entry of an already known MLFB or parts of an MLFB

3WL Air Circuit Breakers

Product Information | **Configurators**

Select a Configurator: 3WL10 Air Circuit-Breakers, FS0

3WL10 Air Circuit-Breakers, FS0

Selection - Tool for air circuit breakers (ACB) SENTRON 3WL10 from 630 A to 1250 A

- for selective line protection
- for motor protection
- non-automatic circuit breaker

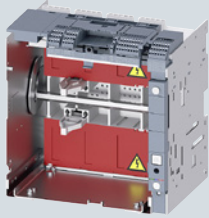
Using this configurator, you can precisely select the optimum circuit breaker configuration for your application. Comprehensive CAx-data support of the device is provided after successful configuration.

MLFB direct input (complete):

Guide frames

1

Guide frames for ordering separately without circuit breakers



- Guide frames without breakers up to 1250 A
- **Note:** All CB bus modules for communication COM04x / IOM300 / Breaker Connect module, as well as COMPSS signaling switches are configured without frames in the withdrawable circuit breaker and defined there by means of Z options, and are included with the switching device. The PSS standard is always included in the frame and can be changed to an electronics-capable signal by means of a Z option.

Number of poles	Connection type	Article No.
3-pole	Rear vertical	3VW8112-0AA01
	Rear horizontal	3VW8112-0AB01
	4x 240 mm ² Cu/Al cable connection, for compression lugs	3VW8112-0AD01
	Front connection bars, extended	3VW8112-0AE01
4-pole	Rear vertical	3VW8112-0BA01
	Rear horizontal	3VW8112-0BB01
	4x 240 mm ² Cu/Al cable connection, for compression lugs	3VW8112-0BD01
	Front connection bars, extended	3VW8112-0BE01

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3VW8.....-.....-..... -Z

Order code

--	--	--

Locking, blocking and interlocking

Locking devices	To prevent movement of withdrawable circuit breaker	Cylinder lock, made by Ronis	R	7	8
		For no more than 3 padlocks, 8 mm	R	6	5
Locking mechanisms	To prevent movement to disconnected position (only in combination with R78 or R65)		R	7	9

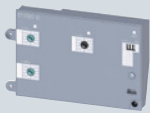
Auxiliary/signaling switches


Position signaling switch PSS for guide frame	For 24 V DC digital signals, for minimum currents	2 CO 2 CO 2 CO (connected test disconnected position)	K	5	5
---	---	---	---	---	---

Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard. For currents <100 mA for PLC connections, these auxiliary and signaling switches can be modified. The auxiliary/signaling switches for 24 V DC digital signals are designed for

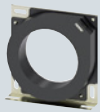
- a minimal load from 1 mA at 5 V DC and
- a maximum breaking capacity of 100 mA at 24 V DC.


Electronic trip units ETU and accessories

Electronic trip units (ETU)					
	Version	With communications / metering function / enhanced protection functions	Type	Protective function	Article No.
	With rotary coding switches	No	ETU320	LIN	3VW9011-5AA00
			ETU350	LSIN	3VW9012-5AA00
			ETU360	LSING	3VW9012-7AA00
	With display	Yes	ETU650	LSIN	3VW9017-5AA00
			ETU660	LSING	3VW9017-7AA00

Metering functions for ETU650 or ETU660				
	Description	Protective function / version	Arrangement	Article No.
	Metering function	MF Basic	–	3VW9011-0AT01
		MF Advanced	–	3VW9011-0AT04
	Set of cables for voltage tap for MF	For 4-pole circuit breakers with neutral right	Top or bottom	3VW9011-0AT08
			Top	3VW9011-0AT75
		For 4-pole circuit breakers with neutral left	Bottom	3VW9011-0AT76
			Top	3VW9011-0AT72
		For 3-pole circuit breakers	Bottom	3VW9011-0AT73

External current transformers for N conductor			
	Accessory for	Purpose	Article No.
	ETU320, ETU350, ETU360, ETU650, ETU660	For 3-pole circuit breakers only	3VW9011-0AA30

External current transformers for grounded transformer star point			
	Accessory for	G_{ret} (ground return)	Article No.
	ETU660	100 A	3VW9011-0GF30
		250 A	3VW9011-0GF31

Summation current transformers external Rc-CT for residual current measurement			
	<ul style="list-style-type: none"> Only with MF Advanced metering function and Rc rating plug 		
	Accessory for	Purpose	Article No.
	ETU660	For external residual current measurement	3VW9011-0RC30

Remote reset magnets RR for the circuit breakers including tripped signal			
	<ul style="list-style-type: none"> Remote reset magnet (RR) for resetting the circuit breaker after tripping as a result of overcurrent conditions 		
	Accessory for	Voltage	Article No.
	ETU320, ETU350, ETU360, ETU650, ETU660	24 V DC	3VW9011-0AK03
		110 V AC/DC	3VW9011-0AK05
250 V AC/DC		3VW9011-0AK06	

Replacement batteries for electronic trip units ETU		
	Accessory for	Article No.
	ETU320, ETU350, ETU360, ETU650, ETU660	3VW9011-0AT38

1

Electronic trip units ETU and accessories

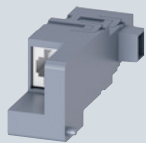
Rated current module / rating plug



- Only one module is possible per circuit breaker.

Accessory for	Version	Rated current I_n	Article No.
ETU320, ETU350, ETU360, ETU650, ETU660	Rating plugs for setting ($< I_{n,max}$) the rated current I_n	400 A	3VW9011-0AA53
		630 A	3VW9011-0AA55
		800 A	3VW9011-0AA56
		1000 A	3VW9011-0AA57
		1250 A	3VW9011-0AA58
ETU 6-series	Rating plugs without overload protection (L = OFF) and for setting ($< I_{n,max}$) the rated current I_n	400 A	3VW9011-0LF53
		630 A	3VW9011-0LF55
		800 A	3VW9011-0LF56
		1000 A	3VW9011-0LF57
		1250 A	3VW9011-0LF58
ETU660	Rating plug Rc for ETU660, for enabling the residual current protection function and setting ($< I_{n,max}$) of the rated current I_n . The residual current function is only possible with the MF Advanced metering function.	400 A	3VW9011-0RC53
		630 A	3VW9011-0RC55
		800 A	3VW9011-0RC56
		1250 A	3VW9011-0RC58

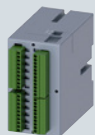
CB bus modules - communication modules



- Contains the communication module
- No more than two different communication modules can be used at the same time.
- When using a digital I/O module IOM040 (Z option K56) only one communication module can be used.
- Can only be used with ETUs of the 6-series and a Breaker Connect module for connection to the circuit breaker. This can also be configured directly on the device by means of a Z option if the communications interface to the ETU 6-series is selected.

Communication modules	Protocol	Article No.
COM040	PROFIBUS	3VW9011-0AT15
COM041	PROFINET	3VW9011-0AT14
COM043	Modbus TCP	3VW9011-0AT16
COM042	Modbus RTU	3VW9011-0AT17

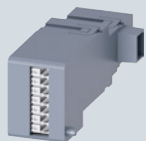
CB bus modules - I/O modules external IOM300



- For snapping onto standard mounting rail

Accessory for	Maximum switching current per contact	Inputs	Outputs	Article No.
ETU 6-series	<ul style="list-style-type: none"> 2 A at DC ≤ 30 V 0.8 A at 50 V DC 0.2 A at 150 V DC 4 A at 250 V AC 	11	10	3VW9011-0AT20

CB bus modules - I/O modules internal IOM040



- When using a digital I/O module IOM040, only one communication module can be used.

Accessory for	Maximum switching current per contact	Inputs	Outputs	Article No.
ETU 6-series	<ul style="list-style-type: none"> 2 A at DC ≤ 30 V 0.8 A at 50 V DC 0.2 A at 150 V DC 4 A at 250 V AC 	2	2	3VW9011-0AT30

Actuator module COM ACT



- For switching the circuit breaker on/off remotely via communication
- Actuation of the closing coil (CC) and the 1st shunt release (ST)
- Can only be used in combination with a communication module, spring charging motor, closing coil and 1st shunt release.
- Automatically included if the communications interface of the ETU 6-series is selected in the basic circuit breaker configuration.

Accessory for	Article No.
ETU 6-series	3VW9011-0AT10

Breaker Connect modules



- For the external power supply for the electronics components

Voltage	Article No.
110 ... 240 V AC/DC	3VW9011-0AT06
24 ... 48 V DC	3VW9011-0AT07

Auxiliary contact signaling switch for communications interface



- Auxiliary contacts for signaling the readiness to close or for position signaling switches of the withdrawable positions.
- Can only be used in combination with communication module.
- Can be combined with standard position signaling switches or ready-to-close signaling contacts.
- Note: Both signaling switches are automatically included in the basic circuit breaker if the communications interface of the ETU 6-series is selected (COM PSS only with withdrawable versions).

Function	Article No.
Ready-to-close signaling switch for communication COM RTC	3VW9011-0AT11
Position signaling switch COM PSS (for withdrawable breakers only)	3VW9011-0AT12

Test devices and Breaker Data Adapters



- Can be used for all ETU 3-series and 6-series


Function	Type	Article No.
Test device <ul style="list-style-type: none"> • For the trip test via ETU and tripping solenoid including release • The ETU and the tripping solenoids are activated by means of a battery built into the test device. • On activation in the ETU 6-series, the parameters can be configured on the display 	TD310	3VW9011-0AT32
Breaker Data Adapter <ul style="list-style-type: none"> • As gateway for parameterization of the ETU with powerconfig • For generation of a report of the set parameters with powerservice 	TD410	3VW9011-0AT34
Test devices and Breaker Data Adapters <ul style="list-style-type: none"> • As gateway for parameterization of the ETU with powerconfig <ul style="list-style-type: none"> – Testing a tripping operation using powerconfig • For use with the powerservice software <ul style="list-style-type: none"> – Testing of the basic protection functions LSING – Testing of the enhanced protection functions – Test data storage – Readout of ETU buffer – Generation of a report of the set parameters 	TD420	3VW9011-0AT33

Accessories and spare parts

Accessories for connection

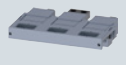


Front terminals for main circuit connections acc. to IEC 60947-2

- To be ordered separately for top and bottom

Fixing	Version	Mounted onto	Number of poles / quantity	Article No.
	Front terminals for main circuit connection	Front terminals for main circuit connection	3-pole / 3 units	3VW9011-0AL01
			4-pole / 4 units	3VW9011-0AL02
	Extended main terminals, including insulating plate and phase barriers, standard	Front terminals for main circuit connection	3-pole / 3 units	3VW9011-0AL77
			4-pole / 4 units	3VW9011-0AL78
	Broadened main terminals, including insulating plate and extended phase barriers	Front terminals for main circuit connection, top	3-pole / 3 units	3VW9011-0AL73
			Front terminals for main circuit connection, bottom	3-pole / 3 units
Front terminals for main circuit connection, top, bottom	Flange of the guide frame	4-pole / 4 units	3VW9011-0AL74	
		3-pole / 3 units	3VW9011-0AN01	
Withdrawable	Front-accessible terminals for main circuit connection	Flange of the guide frame	4-pole / 4 units	3VW9011-0AN02
			3-pole / 3 units	3VW9011-0AN73
Broadened main circuit connections	Front-accessible terminals for main circuit connection	Front-accessible terminals for main circuit connection	4-pole / 4 units	3VW9011-0AN74
			3-pole / 3 units	3VW9011-0AN74



Rear terminals for main circuit connections acc. to IEC 60947-2

- To be ordered separately for top and bottom

Fixing	Version	Mounted onto	Number of poles / quantity	Article No.
	Rear terminals for main circuit connection; rotatable for horizontal / vertical connection, including terminal cover	Rear terminals for main circuit connection	3-pole / 3 units	3VW9011-0AL32
			4-pole / 4 units	3VW9011-0AL33
	Rear terminals for main circuit connection; rotatable for horizontal / vertical connection, including terminal cover	Rear terminals for main circuit connection	3-pole / 3 units	3VW9011-0AN32
			4-pole / 4 units	3VW9011-0AN33
	Broadened main circuit connections	Rear horizontal main connections	3-pole / 3 units	3VW9011-0AN75
			4-pole / 4 units	3VW9011-0AN76

Cu-/Al cable connections

- To be ordered separately for top and bottom

Fixing	Version	Mounted onto	Number of poles / quantity	Article No.
	Circular conductor terminals 4 × 240 mm ² for front cable connection, including insulating plate and high, extended terminal cover	Front terminals for main circuit connection	3-pole / 3 units	3VW9011-0AL71
			4-pole / 4 units	3VW9011-0AL72
	Set of circular conductor connection pieces 4 × 240 mm ² for compression lugs, rear cable connection	Rear vertical main connections	3-pole / 3 units	3VW9011-0AN71
			4-pole / 4 units	3VW9011-0AN72

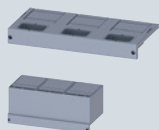
Auxiliary supply connectors in push-in version

- Auxiliary conductor terminal in push-in version for upgrading fixed-mounted breakers and guide frames.
- The device is always fitted at the factory with the exact number of auxiliary conductor terminals required.

Version	Article No.
Push-in	3VW9011-0AB11

Accessories for connection

Terminal covers for fixed circuit breakers



- Finger-proof for front main circuit connection for fixed-mounting
- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.

Version	Number of poles / quantity	Article No.
Standard	3-pole / 2 units	3VW9723-OWD30
	4-pole / 2 units	3VW9724-OWD40
Extended	3-pole / 2 units	3VW9723-OWF30
	4-pole / 2 units	3VW9724-OWF40

Phase barriers for fixed breakers



- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.
- For operating voltages >440 V AC the use of phase barriers is mandatory; up to 440 V AC their use is optional.

Height	Number of poles / quantity	Article No.
100 mm (Standard)	3-pole / 4 units	3VW9723-OWA00
	4-pole / 6 units	3VW9724-OWA10
200 mm (extended)	3-pole / 4 units	3VW9723-OWA01
	4-pole / 6 units	3VW9724-OWA11

Support for mounting the fixed-mounted breaker on the floor

- For fixed-mounted versions



Version	Purpose	Article No.
Mounting support standard (circuit breaker feet) (= Z option A07)		3VW9011-0BB51
Mounting support extended (circuit breaker feet), including mechanical transmission of switch position on circuit breaker side panel (= Z option S56)	<ul style="list-style-type: none"> • Fixation for external auxiliary switches AUX 15 W (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16) • Mutual mechanical interlockings for 3WL/3VA (for 3VW9011-0BB21) 	3VW9011-0BB52

Extension kit for modification of the side wall of the fixed-mounted breaker



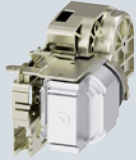
- For fixed-mounted versions
- Rear wall fixing on mounting plate
- For modification for mechanical transmission of switch position on circuit breaker side panel (= Z option S57)

Version	Purpose	Article No.
Extension kit for side wall	<ul style="list-style-type: none"> • Fixation for external auxiliary switches AUX 15 W (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16) • Mutual mechanical interlockings for 3WL/3VA (for 3VW9011-0BB21) 	3VW9011-0BB53

Accessories and spare parts

Motor

Spring charging motor (MO)



- For automatic charging of the stored-energy operating mechanism

Voltage	Article No.
24 ... 30 V AC/DC	3VW9011-0AF01
48 ... 60 V AC/DC	3VW9011-0AF02
100 ... 130 V AC/DC	3VW9011-0AF03
220 ... 250 V AC/DC	3VW9011-0AF04

Mechanical operating cycles counters



- In combination with a spring charging motor
- 5 digits

Article No.
3VW9011-0AH07

Auxiliary releases, closing coils

Closing coils / shunt releases CC / ST



Voltage	Article No.
24 V AC/DC	3VW9011-0AD01
30 V AC/DC	3VW9011-0AD02
48 V AC/DC	3VW9011-0AD03
60 V AC/DC	3VW9011-0AD04
110 ... 120 V AC/DC	3VW9011-0AD05
120 ... 127 V AC/DC	3VW9011-0AD06
220 ... 240 V AC/DC	3VW9011-0AD07
240 ... 250 V AC/DC	3VW9011-0AD08
380 ... 400 V AC	3VW9011-0AD17
415 ... 440 V AC	3VW9011-0AD18

TD320 function test unit for closing coil / shunt release



Version	Article No.
For all closing coils / shunt releases	3VW9011-0AT31

Auxiliary/signaling switches



- The auxiliary/signaling switches for 24 V DC digital signals are designed for a
 - minimum load above 1 mA at 5 V DC and a
 - maximum breaking capacity of 100 mA at 24 V DC.

Type	Contacts	Article No.
Ready-to-close signal RTC	1 CO standard	3VW9011-0AH01
	1 CO digital	3VW9011-0AH02
Auxiliary switch ON/OFF AUX	4 CO standard	3VW9011-0AG01
	4 CO digital	3VW9011-0AG02
	2 CO standard + 2 CO digital	3VW9011-0AG03
External auxiliary switch ON/OFF AUX	15 CO standard	3VW9011-0AG05
	15 CO digital	3VW9011-0AG06
Tripped signaling switch S24	1 CO standard	3VW9011-0AH14
	1 CO digital	3VW9011-0AH15
Spring charged signaling switch S21	1 CO standard	3VW9011-0AH10
	1 CO digital	3VW9011-0AH08
Position signaling switch PSS (for withdrawable devices)	2 CO 2 CO 2 CO (connected test disconnected position) standard	3VW9011-0AH11
	2 CO 2 CO 2 CO (connected test disconnected position) digital	3VW9011-0AH12

Auxiliary releases, closing coils

Fixing for external auxiliary switches AUX 15 CO



Version	Article No.
For fixed-mounted circuit breakers with rear panel or floor mounting (in combination with Z option S56 or S57)	3VW9011-0AG15
For guide frames	3VW9011-0AG17

Undervoltage releases UVR



Voltage	Article No.
24 V AC/DC	3VW9011-0AE01
30 V AC/DC	3VW9011-0AE02
48 V AC/DC	3VW9011-0AE03
60 V AC/DC	3VW9011-0AE04
110 ... 120 V AC/DC	3VW9011-0AE05
120 ... 127 V AC/DC	3VW9011-0AE06
220 ... 240 V AC/DC	3VW9011-0AE07
240 ... 250 V AC/DC	3VW9011-0AE08
380 ... 400 V AC	3VW9011-0AE17
415 ... 440 V AC	3VW9011-0AE18

External time-delay device for undervoltage release



Voltage	Article No.
24 ... 30 V AC/DC	3VW9011-0AE10
48 V AC/DC	3VW9011-0AE11
60 V AC/DC	3VW9011-0AE15
110 ... 127 V AC/DC	3VW9011-0AE12
220 ... 250 V AC/DC	3VW9011-0AE13

Interlocking

Locking devices



Description	Type	Version	Article No.
To prevent movement of withdrawable circuit breaker	Cylinder lock (replacement for R78) For no more than 3 padlocks, 8 mm (replacement for R65)	Made by Ronis	3VW9011-0BA80
			3VW9011-0BA87

Locking mechanisms



Description	Article No.
To prevent movement of the withdrawable circuit breaker in disconnected position (replacement for R79)	3VW9011-0BA84

Locking devices



Description	Version	Article No.
To prevent unauthorized activation in the operator panel (safe OFF)	Cylinder lock, made by Ronis (replacement for S08)	3VW9011-0BA33
	For no more than 3 padlocks, plastic 4 mm (replacement for S22)	3VW9011-0BA41
	For no more than 1 padlock, metal 7 mm (replacement for S23)	3VW9011-0BA42
	For no more than 2 padlocks, metal 8 mm (replacement for S07)	3VW9011-0BA44

Padlockable protective cover ON/OFF on the operator panel



Description	Version	Article No.
For mechanical ON and/or OFF on the operator panel	For no more than 3 padlocks, plastic 4 mm (replacement for S42)	3VW9011-0BA22
	For no more than 1 padlock, metal 7 mm (replacement for S43)	3VW9011-0BA23
	For no more than 2 padlocks, metal 8 mm (replacement for S44)	3VW9011-0BA24

Accessories and spare parts

Interlocking

Protective cover for mechanical ON/OFF



Description	Version	Article No.
For mechanical ON/OFF	Not lockable (replacement for S41)	3VW9011-0BA21

Mutual mechanical interlockings



- Mutual mechanical interlocking for 3WL / 3VA with Bowden cable 2 m

Fixing	Mounting	Article No.
Fixed-mounted	Rear panel or floor mounting	3VW9011-0BB21
Withdrawable	Mounting onto guide frame	3VW9011-0BB22

Bowden cable, separate

- One required for each circuit breaker

Variant	Article No.
1000 mm	3VW9011-0BB23
2000 mm	3WL9111-0BB45-0AA0
3000 mm	3WL9111-0BB46-0AA0

Locking mechanism for control cabinet door



- To prevent opening of the cabinet door in ON position
- It additionally prevents the circuit breaker from being closed when the control cabinet door is open

Fixing	Version	Article No.
Fixed mounting onto side panel or floor	Direct fixed interlocking	3VW9011-0BB10
	Locking with Bowden cable	3VW9011-0BB16
Withdrawable	Direct fixed interlocking	3VW9011-0BB14
	Locking with Bowden cable	3VW9011-0BB18

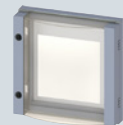
Door sealing frame IP30



- Can be used up to IP3x degree of protection

Version	Article No.
For fixed-mounted breakers	3VW9011-0AP01
For withdrawable breakers	3VW9011-0AP02

Protective cover IP54



- Lockable for fixed-mounted and withdrawable breakers
- For implementing degrees of protection IP4x and IP54 when installing in switchboard doors
- Cannot be combined with IP30 door sealing frame and door mounted rotary operator

Version	Article No.
Lock with unique key	3VW9011-0AP03
Lock with standard key	3VW9011-0AP13

System overview 3WL11 – 3WL13

IEC AC 630 – 6300 A, IEC DC ..

For a complete and verified configuration of your molded-case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl-configurator

1

Basic units



Sizes 1 to 3

ETU



LI



LSI



LSING



LSIN, LSING



LSIN, LSING

Accessories



Communication modules



Rating plugs



Remote reset magnets

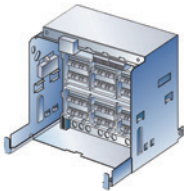


Breaker status sensors (BSS)

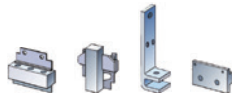


Ground-fault modules

Connection



Fixed-mounted, withdrawable versions



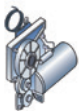
Main connection vertical, horizontal, front, flange

Accessories

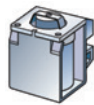


Auxiliary conductor plug-in system

Operating mechanisms and auxiliary releases



Motorized operating mechanisms



Auxiliary releases

Accessories

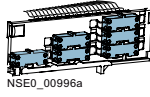


Closing coils

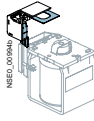
Auxiliary switches



Auxiliary switches



Position signaling switches



Signaling switches

Accessories

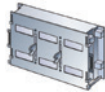


Position signaling switches

Further accessories



Door sealing frames



Shutters



EMERGENCY-OFF pushbuttons



Operating cycle counters



Support brackets



Grounding connections

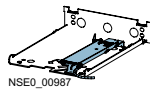
Interlocking



Interlocking sets



Key operation



Locking mechanisms

Structure of the article numbers

Basic configuration for AC circuit breakers

For a complete and verified configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl-configurator

1

		5	6	7	8	9	10	11	12	13	14	15	16
3WL1					-					-			
Basic unit and ETU													
Size	1	1											
	2	2											
	3	3											
Rated current	630 A		0	6									
	800 A		0	8									
	1000 A		1	0									
	1250 A		1	2									
	1600 A		1	6									
	2000 A		2	0									
	2500 A		2	5									
	3200 A		3	2									
	4000 A		4	0									
	5000 A		5	0									
	6300 A		6	3									
Breaking capacity	N ECO				2								
	S Standard				3								
	H High				4								
	C Very high				5								
Electronic trip units	Without electronic trip unit				-	A	A						
	With electronic trip unit, without ground-fault tripping	ETU 15B		LI		B	B						
		ETU 25B		LSI		C	B						
		ETU 45B (without display)		LSIN		E	B						
		ETU 45B (with display)		LSIN		F	B						
		ETU 76B		LSIN		N	B						
	With electronic trip unit, with ground-fault tripping	ETU 27B (without display)		LSING		D	G						
		ETU 45B (without display)		LSING		E	G						
		ETU 45B (with display)		LSING		F	G						
		ETU 76B		LSING		N	G						
Number of poles	3-pole (3WL upgrade)								6				
	4-pole (3WL upgrade)								7				
Connection													
Installation type	Fixed-mounted	Vertical											1
		Horizontal											2
		Front single hole											3
		Front double hole											4
	Withdrawable	Without guide frame											5
		Horizontal											6
		Vertical											7
		Flanges											8

3WL1



1

Operating mechanisms and auxiliary releases

Operating mechanism	Manual operating mechanisms	With mechanical operation	1
		With mechanical and electrical operation	2 3
		110 V AC 50/60 Hz / 110 V DC 230 V AC 50/60 Hz / 220 V DC	
	Motorized operating mechanisms	With mechanical and electrical operation	4 5 6
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC 110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC 24 V DC	
1st auxiliary release	Without		A
	With	24 V DC	B
		30 V DC	C
		48 V DC	D
		60 V DC	E
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	F
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	G
2nd auxiliary release	Without		A
	With shunt release	24 V DC	B
		30 V DC	C
		48 V DC	D
		60 V DC	E
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	F
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	G
	With undervoltage release, instantaneous	24 V DC	J
		30 V DC	K
		48 V DC	L
		60 V DC	U
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	N
		380 ... 415 V AC 50/60 Hz	P
With undervoltage release, delay 0.2 ... 3.2 s	48 V DC	Q	
	110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	R	
	208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	S	
	380 ... 415 V AC 50/60 Hz	T	

Auxiliary switches

1st auxiliary switch block	2 NO + 2 NC	2
1st + 2nd auxiliary switch block	4 NO + 4 NC	4
	6 NO + 2 NC	7
	5 NO + 3 NC	8

Structure of the article numbers

Basic configuration for DC circuit breakers

For a complete and verified configuration of your air circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/3wl-configurator

1

	5	6	7	8	9	10	11	12	13	14	15	16	
3WL1													
Basic unit and ETU													
Size	1												
	2												
Rated current	1000 A	1	0										
	2000 A	2	0										
	4000 A	4	0										
Breaking capacity	DC			8									
Electronic trip units	Without electronic trip unit					A	A						
Number of poles	3-pole (3WL upgrade)							6					
	4-pole (3WL upgrade)							7					
Connection													
Installation type	Fixed-mounted	Vertical										1	
		Horizontal										2	
		Front single hole											3
		Front double hole											4
	Withdrawable	Without guide frame											5
		Horizontal											6
		Vertical											7
		Flanges											8

3WL1

5	6	7	8	9	10	11	12	13	14	15	16
---	---	---	---	---	----	----	----	----	----	----	----

Operating mechanisms and auxiliary releases

Operating mechanism	Manual operating mechanisms	With mechanical operation		1
		With mechanical and electrical closing, closing coil suitable for uninterrupted duty, 100% RD	110 V AC 50/60 Hz / 110 V DC	2
			230 V AC 50/60 Hz / 220 V DC	3
	Motorized operating mechanisms and closing coils	With mechanical and electrical closing, closing coil suitable for uninterrupted duty, 100% RD	208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	4
			110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	5
			24 V DC	6
1st auxiliary release	Without			A
	With shunt release 100% RD	24 V DC		B
		30 V DC		C
		48 V DC		D
		60 V DC		E
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC		F
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC		G
2nd auxiliary release	Without			A
	With shunt release 100% RD	24 V DC		B
		30 V DC		C
		48 V DC		D
		60 V DC		E
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC		F
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC		G
		With undervoltage release, instantaneous (≤ 80 ms), short-delay (≤ 200 ms)	24 V DC	
	30 V DC			K
	48 V DC			L
	60 V DC			U
	110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC			M
	208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC			N
	380 ... 415 V AC 50/60 Hz			P
With undervoltage release, delay 0.2 ... 3.2 s	48 V DC		Q	
	110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC		R	
	208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC		S	
	380 ... 415 V AC 50/60 Hz		T	

Auxiliary switches

1st auxiliary switch block	2 NO + 2 NC	2
1st + 2nd auxiliary switch block	4 NO + 4 NC	4
	6 NO + 2 NC	7
	5 NO + 3 NC	8

Online configurator highlights

www.siemens.com/lowvoltage/3wl-configurator

Ungroup into individual components:
Divides the finished complete article number into single article numbers

SIEMENS
Ingenuity for Life

Additional actions Support Language

on request
Recommended retail price

The configuration is complete. You can order this product.

Basic breaker ETU Connection Motor and auxiliary releases Auxiliary switches Accessories Locking Result CAD/CAE 13.7

Ordering individual components

Yes No

Print Export as Excel

Name	Order number	Properties
Basic breaker	3WL1216-3FG62-1AA2	Order quantity: 1 ST
Mutualised operating mechanisms	3WL9111-0M01-0MAD	Order quantity: 1 ST
Closing interlock	3WL9111-0A01-0MAD	Order quantity: 1 ST
Mutual mechanical interlocking	3WL9111-0B01-0MAD	Order quantity: 1 ST

Automatic generation of the 3D model, 2D dimension drawing and the internal circuit diagram according to IEC

The configuration is complete. You can order this product.

Filter (e.g. "power", ...)

Basic breaker ETU Connection Motor and auxiliary releases Auxiliary switches Accessories Locking Result CAD/CAE 13.7

Basic breaker

Preview

Area Model View | Wire frame view | Unit Wiring Diagram IEC | 3D view
Dimension drawing



Download – quick links

Basic breaker

Click2CAD

Download – all CAD formats

View Area Model View

View option Isometric

File type Joint Photography Experts Group (*.jpg)

Start generation

Download – all documents

open documents dialog

Direct entry of an already known article number or parts of an article number

3WL Air Circuit Breakers

Product Information Configurators

Select a Configurator 3WL Upgrade Air Circuit Breakers

3WL Upgrade Air Circuit Breakers



Selection - Tool for air circuit breakers (ACB) SENTRON 3WL from 630 A to 1250 A

- for selective line protection
- for motor protection
- non-automatic circuit breaker

Using this configurator, you can precisely select the optimum circuit breaker configuration for your application. Comprehensive CAx-data support of the device is provided after successful configuration.

To start the configurator with a preallocation use the direct input e.g. 3WL1116-3EB66-4FG4-Z K07+S07+C01+T40

Start

MLFB direct input (complete):

3WL

Start

Accessory options

Configure your air circuit breaker easily online at
www.siemens.com/lowvoltage/3wl-configurator

1

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-..... -Z

Order code

Accessories for basic configuration

Rated voltage 1000 V AC and 690 V IT networks

- Only for circuit breakers of size 1 - 3 with high breaking capacity H and of size 3 C class.
- Cannot be combined with rated voltage 1150 V AC, order code "A15".

Rated voltage	Size 1 ¹⁾	Up to 2000 A	A	0	5
	Size 2 ^{1) 2)}	Up to 4000 A	A	0	5
	Size 3 ¹⁾	Up to 6300 A	A	0	5

Rated voltage 1150 V AC

- Only for circuit breakers with high breaking capacity H (8th digit of the Article No. is a "4").
- Cannot be combined with rated voltage 1000 V AC, order code "A05".

Rated voltage	Size 2 ^{1) 2)}	Up to 4000 A	A	1	5
	Size 3 ^{1) 3)}	Up to 6300 A	A <th>1</th> <th>5</th>	1	5

Rated voltage 690 V AC (+ 20%)

- Only for 3WL11 circuit breakers, size 1, with high breaking capacity H (8th digit of the Article No. is a "4").

Rated voltage	Size 1	Up to 2000 A	A	1	6
---------------	--------	--------------	---	---	---

¹⁾ When ordering withdrawable circuit breaker and guide frame separately, specify order code "A05" for withdrawable circuit breaker and guide frame.

²⁾ Not possible for circuit breakers with very high breaking capacity C.

³⁾ Front connections are tinned as standard.

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Order code

1

Accessories for electronic trip units ETU

Rating plugs

- Only one module is possible per circuit breaker (not in conjunction with electronic trip unit ETU15B).
- As standard, the electronic trip units are equipped with a rating plug which is equal to the maximum rated circuit breaker current ($I_{n \max}$).
The rated current of the selected rating plug must be less than $I_{n \max}$.

Module	Sizes 1, 2		B	0	2
		250 A	B	0	2
		315 A	B	0	3
		400 A	B	0	4
		500 A	B	0	5
		630 A	B	0	6
		800 A	B	0	8
		1000 A	B	1	0
	Sizes 1, 2, 3	1250 A	B	1	2
		1600 A	B	1	6
		2000 A	B	2	0
	Sizes 2, 3	2500 A	B	2	5
		3200 A	B	3	2
		4000 A	B	4	0
	Size 3	5000 A	B	5	0
		6300 A	B	6	3

Communication and measurement function

Breaker status sensor (BSS)		F	0	1
PROFIBUS DP communication port ¹⁾	including COM15 and breaker status sensor (BSS)	F	0	2
MODBUS RTU communication port ¹⁾	including COM16 and breaker status sensor (BSS)	F	1	2
PROFINET IO / Modbus TCP communication port ¹⁾ new	including COM35 and breaker status sensor (BSS)	F	3	5

Metering function Plus (communication modules not included)

Metering function Plus	With internal voltage tap on the lower main conducting paths	F	3	6
	With internal voltage tap on the upper main conducting paths	F	3	7
	For combination with external voltage transformer	F	3	8

EMC filter

- Common-mode interference suppressor filters (e.g. in converter applications)
- Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB.

EMC filter		F	3	1
------------	--	---	---	---

Overload and short-circuit protection for neutral conductors

- Only possible with 4-pole circuit breaker with ETU27B to ETU76B

Internal current transformer for N conductor	Size 1	F	2	3
	Size 2	F	2	3
	Size 3	F	2	3

¹⁾ When ordering withdrawable circuit breaker and guide frame separately, specify order code "F02", "F12" or "F35" only for withdrawable circuit breaker.

Accessory options

Configure your air circuit breaker easily online at
www.siemens.com/lowvoltage/3wl-configurator

1

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Order code

Remote resetting

Automatic reset of the reclosing lockout

- Remote reset for displays and reset buttons including automatic reset of the reclosing lockout

Remote reset magnets

24 V DC	
48 V DC	
110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	
208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	

K	0	1
K	1	0
K	1	1
K	1	2
K	1	3

Connection

Tinned version of the customer's connections on the guide frame

- Only for circuit breakers in withdrawable version with horizontal connection or flange connection.
- The normal delivery time increases to 15 work days.

Customer's connections ¹⁾²⁾

Size 1	
Size 2	
Size 3	

A	0	8
A	0	8
A	0	8

Connection technology for main connections (fixed mounting)

Top: ³⁾ horizontal Bottom: accessible from front, single hole	Size 1	Up to 1600 A	N	1	1
	Size 2	Up to 3200 A	N	1	1
	Size 3 ⁴⁾	Up to 4000 A	N	1	1
Top: vertical Bottom: horizontal	Size 1	Up to 2000 A	N	2	0
	Size 2	Up to 3200 A	N	2	0
	Size 3	Up to 5000 A	N	2	0
Top: horizontal Bottom: vertical	Size 1	Up to 2000 A	N	2	4
	Size 2	Up to 3200 A	N	2	4
	Size 3	Up to 5000 A	N	2	4

Connection technology for main connections (withdrawable versions)

Top and bottom: ⁵⁾⁶⁾ accessible from front, single hole	Size 1	Up to 1600 A	P	0	0
	Size 2	Up to 3200 A	P	0	0
	Size 3	Up to 4000 A	P	0	0
Top and bottom: ⁵⁾ accessible from front, double hole	Size 1	Up to 1600 A	P	0	1
	Size 2	Up to 3200 A	P	0	1
	Size 3	Up to 4000 A	P	0	1
Top: ⁵⁾⁶⁾ horizontal Bottom: accessible from front, single hole	Size 1	Up to 1600 A	P	0	7
	Size 2	Up to 3200 A	P	0	7
	Size 3	Up to 4000 A	P	0	7

¹⁾ Front connections are tinned as standard.

²⁾ The permissible temperature-rise limits according to IEC 60947-2 are 5 K lower for a tin surface than for a silver surface.

³⁾ Not for 3WL1 size 1 with high breaking capacity H and circuit breakers with very high breaking capacity C.

⁴⁾ Not for size 3 with very high breaking capacity C.

⁵⁾ Not for size 2 and 3 circuit breakers with very high breaking capacity C.

⁶⁾ Not for 3WL1 size 1 with high breaking capacity H

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Order code

--	--	--

1

Connection

Connection technology for main connections (withdrawable versions)

Top: vertical Bottom: horizontal	Size 1	Up to 2000 A	P	1	8
	Size 2	Up to 3200 A	P	1	8
	Size 3	Up to 5000 A	P	1	8
Top: ¹⁾ connecting flange Bottom: horizontal	Size 1	Up to 2000 A	P	1	9
	Size 2	Up to 3200 A	P	1	9
	Size 3	Up to 4000 A	P	1	9
Top: horizontal Bottom: vertical	Size 1	Up to 2000 A	P	2	3
	Size 2	Up to 3200 A	P	2	3
	Size 3	Up to 5000 A	P	2	3
Top: ¹⁾ horizontal Bottom: connecting flange	Size 1	Up to 2000 A	P	2	8
	Size 2	Up to 3200 A	P	2	8
	Size 3	Up to 4000 A	P	2	8

Connection technology for auxiliary conductors (for fixed-mounted and withdrawable versions)

Connection technology for screwless terminals (tension spring)	Fixed-mounted	N	6	1
	Withdrawable	P	6	1

Operating mechanisms and auxiliary releases

Motorized operating mechanisms	Only possible if the 13th digit of the Article No. = "1"	24 ... 30 V DC	M	0	1
		48 ... 60 V DC	M	0	3
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M	0	5
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	M	0	6
Mechanical operating cycles counter, 5-digit ²⁾			C	0	1
Closing coils	• Suitable for uninterrupted duty, 100% OP • Only possible if the 13th digit of the Article No. = "1"	24 V DC	M	2	1
		30 V DC	M	2	2
		48 V DC	M	2	3
		60 V DC	M	2	4
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M	2	5
	• Not suitable for uninterrupted duty, 5% OP, synchronizable ³⁾ • Only possible if the 13th digit of the Article No. = "1"	208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	M	2	6
		24 V DC	M	3	1
		48 V DC	M	3	3
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M	3	5
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	M	3	6
Opening coils (shunt releases) ³⁾⁴⁾	Not suitable for uninterrupted duty, 5% OP, synchronizable	24 V DC	M	4	1
		48 V DC	M	4	3
		110 ... 127 V AC 50/60 Hz / 110 ... 125 V DC	M	4	5
		208 ... 240 V AC 50/60 Hz / 220 ... 250 V DC	M	4	6

¹⁾ Not for size 2 and 3 circuit breakers with very high breaking capacity C.

²⁾ Only possible with motorized operating mechanism.

³⁾ Overexcited, i.e. switching time 50 ms (standard >80 ms).

⁴⁾ Only possible if the 14th digit of the Article No. for the circuit breaker is "A", i.e. "without 1st auxiliary release".

Accessory options

Configure your air circuit breaker easily online at
www.siemens.com/lowvoltage/3wl-configurator

1

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Order code

Auxiliary switches and signaling switches

Position signaling switches for guide frames	1 CO 1 CO 1 CO (connected test disconnected position)	R	1	5
	3 CO 2 CO 1 CO (connected test disconnected position)	R	1	6
Signaling switches	Ready-to-close signaling switches (S20)	C	2	2
	Spring charged signaling switch ¹⁾ (S21)	C	2	0
	For the first auxiliary release ¹⁾ (S22)	C	2	6
	For the second auxiliary release ¹⁾ (S23)	C	2	7
	1st tripped signaling switch ¹⁾²⁾ (S24)	K	0	7
	2nd tripped signaling switch ¹⁾²⁾³⁾ (S25)	K	0	6

Further accessories

Pushbuttons / shutdown switches / closing lockouts

EMERGENCY-OFF pushbuttons	Mushroom pushbutton instead of the mechanical OFF pushbutton	S	2	4	
Electrical ON button S10 in the operator panel ¹⁾	Possible only for circuit breakers with closing coil	With sealing cap	C	1	1
		With CES lock	C	1	2
Motor shutdown switch on control panel ⁴⁾ (S12)		S	2	5	

Special packaging for increased transport requirements (moisture protection)

Cardboard packaging with water-repellent coating on corrugated cardboard (moisture protection)		A	6	1
--	--	---	---	---

Arc chute covers

- Not available for
 - 1000 V version (order code "A05"),
 - DC version
 - 4000 A size 2
 - 1150 V version (order code "A15")
 - 130 kA version, size 2
 - 150 kA version, size 3

Arc chute covers	3-pole, 4-pole	R	1	0
------------------	----------------	---	---	---

Shutters

Shutter: 2-part, lockable, with padlocks ¹⁾	3-pole, 4-pole	R	2	1
--	----------------	---	---	---

¹⁾ Not possible with "communications interface" option, order code "F02", "F12" or "F35".

²⁾ Not available for non-automatic air circuit breakers.
³⁾ Only possible with option "K07".

⁴⁾ Only for breakers with motorized operating mechanism, not possible with order codes "C11", "C12".

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Order code

Further accessories

Transformer (without iron core), Rogowski coil only

- Used in converter applications with high harmonic components; can only be used with ETU45B or ETU76B
 - External 24 V DC supply required
 - Undervoltage release required
- Comprises:
 - 3 (3-pole) or 4 (4-pole) transformers
 - 24 V DC relay
 - Warning signs
 - Manual

Transformer	3-pole, 4-pole	Size 2, size 3	K	6	0
-------------	----------------	----------------	---	---	---

Operating manual, printed version

French/Italian	A	1	1
Spanish/Portuguese	A	1	2

Interlocking

Mechanical interlocks

- Interlocking module with Bowden cable 2 m

Mutual mechanical interlockings	For fixed-mounted breakers	S	5	5
	For withdrawable circuit breakers with guide frame	R	5	5
	For guide frames (ordered separately)	R	5	6
	For withdrawable circuit breakers (ordered separately)	R	5	7

Locking devices (for fixed-mounted and withdrawable versions)

- The disconnecter unit fulfills the requirements for main circuit breakers according to EN 60204-1

Locking devices	To prevent unauthorized activation in the operator panel	Made by CES	S	0	1
		Made by IKON	S	0	3
		Assembly kit FORTRESS or Castell ¹⁾	S	0	5
		Assembly kit for padlocks ²⁾	S	0	7
		Made by Ronis	S	0	8
		Made by Profalux	S	0	9

Locking devices (for fixed-mounted and withdrawable versions)

Locking devices	For operating mechanism handle with padlock ²⁾	S	3	3
-----------------	---	---	---	---

¹⁾ Locks must be ordered from the manufacturer.

²⁾ Padlock not included in the scope of supply.

Accessory options

Configure your air circuit breaker easily online at
www.siemens.com/lowvoltage/3wl-configurator

To specify the options, add "-Z" to the complete Article No. and indicate the appropriate order code(s).

3WL....-.....-.... -Z

Order code

Interlocking

Locking devices (for withdrawable version)

- The disconnecter unit fulfills the requirements for main circuit breakers acc. to EN 60204-1, consisting of a lock in the guide frame, active in the connected position, function is retained when circuit breaker is replaced.
- Not possible in combination with order code "R81", "R85" or "R86".

Locking devices	To prevent unauthorized activation in the operator panel	Made by CES	R	6	1
		Made by Ronis	R	6	8
		Made by Profalux	R	6	0

Locking devices (for withdrawable version)

- Safety lock for mounting onto the circuit breaker

Locking devices	To prevent movement of withdrawable circuit breaker	Made by CES	S	7	1
		Made by Profalux	S	7	5
		Made by Ronis	S	7	6

Locking mechanisms

- Not possible in combination with order code "R81", "R85" or "R86".

For fixed-mounted circuit breakers	To prevent opening of the cabinet door in ON position		S	3	0
For withdrawable circuit breakers	To prevent opening of the cabinet door in connected position		R	3	0
	To prevent activation when the cabinet door is open ^{1) 3)}		R	4	0
	To prevent movement when the cabinet door is open ²⁾		R	5	0

Locking mechanisms to prevent movement of the withdrawable circuit breaker in disconnected position

- Consisting of Bowden cable and lock in the cabinet door
- Not possible in combination with order code "R30", "R50", "R61", "R68" or "R60".

Made by CES			R	8	1
Made by Profalux			R	8	5
Made by Ronis			R	8	6

Seals

Door sealing frame for degree of protection IP41			T	4	0
---	--	--	---	---	---

Accessories from current catalog

Use of the withdrawable circuit breaker in combination with an older guide frame

- Reduction of the technical specifications for withdrawable circuit breakers 3WL1 for use in combination with older guide frames supplied
 - as complete circuit breaker with 3WL1....3-.... or 3WL1....4-.... or
 - as 3WL92...A-.... or
 - as 3WL92...B-.... or
 - as 3WL92...D-.... or
 - as 3WL92...E-.... or
- for sizes 1 to 3.

Use of the circuit breaker in older guide frames, including the appropriate guide frame coding			A	4	1
---	--	--	---	---	---

¹⁾ Not available in combination with R50

²⁾ Not available in combination with R40

³⁾ Combination with R81, R85 and R86 on request

Further technical specifications

Manual operating mechanism

3WL11 – 3WL13

Switching on/charging the stored-energy operating mechanism		
Maximum force required to operate the hand lever		≤230 N
Required number of strokes on the hand lever		9

Closing coils

3WL11 – 3WL13

Primary operating range		
Primary operating range		0.85 ... 1.1 × U _s
Extended operating range for battery operation	At 24 V DC, 48 V DC 60 V DC, 110 V DC 220 V DC	0.7 ... 1.26 × U _s
Rated voltage		
Rated control supply voltage U _s	50/60 Hz AC	110 ... 127 V, 208 ... 240 V
	DC	24 V, 30 V, 48 V, 60 V, 110 ... 125 V, 220 ... 250 V
Operation		
Power consumption	AC/DC	15 VA/15 W
Min. command duration at U _s for the closing coil		60 ms
Short-circuit protection		
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic; manual operating mechanism with mechanical and electrical closing		1 A TDz (slow)/1 A
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic; motor and closing coil for the same rated control supply voltages; motorized operating mechanism with mechanical and electrical closing		6 A TDz (slow)/2 A
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic (for different rated control supply voltages)	At U _s = 24 ... 30 V	6 A
	At U _s = 48 ... 60 V	6 A
	At U _s = 110 ... 125 V DC/ 110 ... 127 V AC	2 A
	At U _s = 220 ... 250 V DC/ 208 ... 240 V AC	2 A

Motor

3WL11 – 3WL13

Primary operating range		
Primary operating range		0.85 ... 1.1 × U _s
Extended operating range for battery operation	At 24 V DC, 48 V DC 60 V DC, 110 V DC 220 V DC	0.7 ... 1.26 × U _s
Operation		
Power consumption of motor	AC/DC	24/30 V DC, 110 W; 48/60 V DC, 120 W; 110 ... 127 V AC/110 ... 125 V DC, 150 W; 200 ... 240 V AC/220 ... 250 V DC, 130 W
Time required to charge the spring energy store at 1 × U _s		≤10 s
Short-circuit protection		
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic; motor and closing coil for the same rated control supply voltages		6 A TDz (slow)/2 A
Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic (for different rated control supply voltages)	At U _s = 24 ... 30 V	6 A
	At U _s = 48 ... 60 V	6 A
	At U _s = 110 ... 125 V DC/ 110 ... 127 V AC	2 A
	At U _s = 220 ... 250 V DC/ 208 ... 240 V AC	2 A

Signals of the electronic trip unit

3WL11 – 3WL13

Signals of the electronic trip unit	
Measuring accuracy of the electronic trip unit	Protection functions acc. to EN 60947; current indication ≤10%; metering function for base quantities ≤1%; metering function for derived quantities ≤4%

Accessory options

Further technical specifications

Undervoltage releases UVR (F3) and UVR-t_d (F4)

3WL11 – 3WL13

Primary operating range		
Response values	Pickup	$\geq 0.85 \times U_s$ (circuit breaker can be closed)
	Dropout	$0.35 \dots 0.7 \times U_s$ (circuit breaker is tripped)
Primary operating range		$0.85 \dots 1.1 \times U_s$
Extended operating range for battery operation	At 24 V DC, 30 V DC, 48 V DC, 110 V DC, 220 V DC	$0.85 \dots 1.26 \times U_s$
Rated voltage		
Rated control supply voltage U_s	Instantaneous 50/60 Hz AC	110 ... 127 V, 208 ... 240 V, 380 ... 415 V
	Instantaneous DC	24 V, 30 V, 48 V, 60 V, 110 ... 125 V, 220 ... 250 V ¹⁾
	Delayed 50/60 Hz AC	110 ... 127 V, 208 ... 240 V, 380 ... 415 V
	Delayed DC	48 V, 110 ... 125 V, 220 ... 250 V
Operation		
Power consumption (pickup/uninterrupted duty)	AC	20/5 VA
	DC	20/5 W
Opening time of the circuit breaker		
Opening time of the circuit breaker at $U_s = 0$		200 ms
Version UVR (F3)	Instantaneous	73 ms
	With delay	200 ms
Version UVR-t _d (F4)	With delay, $t_d = 0.2$ to 3.2 s	$0.2 \dots 3.2$ s
	Reset through additional NC contact – direct tripping	≤ 100 ms
Short-circuit protection		
Smallest permissible DIAZED fuse (operational class gL)/miniature circuit breaker with C characteristic		1 A TDz (slow)/1 A

Shunt release (ST) (F1, F2)

3WL11 – 3WL13

Primary operating range				
Version		For continuous command (100% OP), locks out on momentary-contact commands	5% OP	With spring energy store consisting of shunt release and capacitor storage device
Response values	Pickup	$> 0.7 \times U_s$ (circuit breaker is tripped)	$> 0.7 \times U_s$ (circuit breaker is tripped)	–
Primary operating range		$0.7 \dots 1.1 \times U_s$	$0.7 \dots 1.1 \times U_s$	$0.85 \dots 1.1 \times U_s$
Extended operating range for battery operation	At 24 V DC, 48 V DC, 60 V DC, 110 V DC, 220 V DC	$0.7 \dots 1.26 \times U_s$	$0.7 \dots 1.26 \times U_s$	–
Rated voltage				
Rated control supply voltage U_s	50/60 Hz AC	110 ... 127 V, 208 ... 240 V	110 ... 127 V, 208 ... 240 V	110 V, 230 V
	DC	24 V, 30 V, 48 V, 60 V, 110 ... 125 V, 220 ... 250 V	24 V, 48 V, 110 ... 125 V, 220 ... 250 V	110 V, 220 V
Operation				
Power consumption	AC/DC	15 VA/15 W	15 VA/15 W	1 VA/1 W
Min. command duration at U_s		60 ms	25 ms	–
Storage time at U_s / Recharging time at U_s		–	–	max. 5 min/ min. 5 s
Opening time of the circuit breaker				
Opening time of the circuit breaker at $U_s = 100\%$	At AC/DC	80 ms	50 ms	80 ms
Short-circuit protection				
Smallest permissible DIAZED fuse (operational class gL)/automatic circuit breaker with C characteristic		1 A TDz (slow)/1 A	1 A TDz (slow)/1 A	1 A TDz (slow)/1 A

¹⁾ 24 V and 30 V only with undervoltage release UVR (F3)

Remote reset magnet for mechanical tripped indicator (F7)

3WL11 – 3WL13

Primary operating range

Primary operating range		0.85 ... 1.1 × U _s
Extended operating range for battery operation	At 24 V DC, 48 V DC 110 V DC 220 V DC	0.7 ... 1.26 × U _s

Operation

Power consumption	AC/DC	50 VA/50 W
Min. command duration at U _s for the remote reset magnet		60 ms

Short-circuit protection

Smallest permissible DIAZED fuse (operational class gL)/ automatic circuit breaker with C characteristic		2 A TDz (slow)/1 A at 24 V DC and 48 V DC, 1 A TDz (slow)/1 A at 110 V and 208 ... 250 V
---	--	---

Contact position-driven auxiliary switches (S1, S2, S3, S4, S7, S8)

3WL11 – 3WL13

Rated voltage

Rated insulation voltage U _i	AC/DC	500 V
Rated operational voltage U _e	AC/DC	500 V
Rated impulse withstand voltage U _{imp}		4 kV
Contact reliability		From 1 mA at 5 V DC

Breaking capacity

Alternating current 50/60 Hz	Rated operational voltage U _e	24 ... 230 V	380 V, 400 V		
	Rated operational current I _e /AC-12	10 A	10 A		
	Rated operational current I _e /AC-15	4 A	3 A		
Direct current	Rated operational voltage U _e	24 V	48 V	110 V	220 V
	Rated operational current I _e /DC-12	10 A	8 A	3.5 A	1 A
	Rated operational current I _e /DC-13	8 A	4 A	1.2 A	0.4 A

Short-circuit protection

Largest permissible DIAZED fuse (operational class gL)	10 A TDz, 10 A Dz
Largest permissible miniature circuit breaker with C characteristic	10 A

Ready-to-close signaling switches (S20) (acc. to DIN VDE 0630)

3WL11 – 3WL13

Breaking capacity

Alternating current 50/60 Hz	Rated operational voltage U _e	250 V	
	Rated operational current I _e	8 A	
Direct current	Rated operational voltage U _e	125 V	250 V
	Rated operational current I _e	0.4 A	0.2 A
	Contact reliability	From 1 mA at 5 V DC	

Short-circuit protection

Largest permissible DIAZED fuse (operational class gL)	2 A Dz (quick)
--	----------------

Accessory options

Further technical specifications

Tripped signaling switches (S24) and signaling switches for auxiliary releases (S22, S23) (acc. to DIN VDE 0630)

3WL11 – 3WL13

Breaking capacity				
Alternating current 50/60 Hz	Rated operational voltage U_e	250 V		
	Rated operational current $I_e/AC-12$	8 A		
Direct current	Rated operational voltage U_e	24 V	125 V	250 V
	Rated operational current $I_e/DC-12$	6 A	0.4 A	0.2 A
	Contact reliability	From 1 mA at 5 V DC		
Short-circuit protection				
Largest permissible DIAZED fuse (operational class gL)		6 A Dz (quick)		
Tripped signaling switches				
Signal duration after tripping		Until manual or electrical remote reset (option)		

Position signaling switches on guide frame

3WL11 – 3WL13

Type of contacts				
Message	"Circuit breaker in connected position"	3 CO	or	1 CO
	"Circuit breaker in test position"	2 CO	or	1 CO
	"Circuit breaker in disconnected position"	1 CO	or	1 CO
Contact reliability (valid from April 1, 2020)		From 1 mA at 5 V DC		
Rated voltage				
Rated insulation voltage U_i	50/60 Hz AC	440 V		
	DC	250 V		
Rated operational voltage U_e	250 V			
Rated impulse withstand voltage U_{imp}	4 kV			
Breaking capacity				
Rated operational current I_e	$I_e/AC-12$	24 V 10 A, 110/127 V 10 A, 220/240 V 10 A, 320/440 V 10 A		
	$I_e/AC-15$	220/240 V 4 A, 320/440 V 3 A		
	$I_e/DC-12$	24 V 10 A, 48 V 2.5 A, 220/240 V 0.2 A		
	$I_e/DC-13$	24 V 3.0 A, 220/240 V 0.1 A		
	A 300 (AC)	120 V 6 A, 240 V 3 A		
	R 300 (DC)	125 V 0.22 A, 250 V 0.11 A		
Short-circuit protection				
Largest permissible DIAZED fuse (operational class gL)		8 A TDz (slow)		
Largest permissible automatic circuit breaker with C characteristic		8 A TDz (slow)		

Guide frames

To configure your guide frame, please use the new functionality in our configurator at www.siemens.com/lowvoltage/3wl-configurator

		5	6	7	8	9	10	11	12	13	14	15	16
3WL9		2	1	–	–	–	–	–	–	–	–	–	1
Size	1		1										
	2		2										
	3		3										
Max. rated circuit breaker current I_n	1000 A				1								
	1600 A				2								
	2000 A				3								
	2500 A				4								
	3200 A				5								
	4000 A				6								
	5000 A				7								
	6300 A				8								
Number of poles	3-pole					F							
	4-pole					G							
Main connection	Front, single hole						A						
	Front, double hole						B						
	Horizontal						C						
	Vertical						D						
	Connecting flange						E						
Breaking capacity $I_{cu} = I_{cs}$	Up to 55 kA											N	
	Up to 66 kA											S	
	Up to 85 kA											H	
	Up to 100 kA											H	
	Up to 130 kA											C	
	Up to 150 kA											C	

Options

		5	6	7	8	9	10	11	12	13	14	15	16
3WL9		2	1	–	–	–	–	–	–	–	–	–	1
Number of auxiliary supply connectors	Without ²⁾							0					
	1 connector							1					
	2 connectors							2					
	3 connectors							3					
	4 connectors							4					
Type of auxiliary circuit connections	Without ²⁾							0					
	With screw terminals (SIGUT, standard)							1					
	With screwless terminals (tension spring)							2					
Position signaling switches	Without												0
	1 CO 1 CO 1 CO (connected test isolated position)												1
	3 CO 2 CO 1 CO (connected test isolated position)												2
Shutters	Without												A
	With shutter, 2-part, lockable												B

Accessories and spare parts

Accessories for electronic trip units ETU

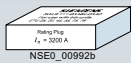
Protective devices with device holder and optional metering function



- For replacement in existing circuit breakers, please specify the circuit breaker ID No. when ordering.

Type	With protection function	Metering function	Article No.
ETU15B	LI	Without	3WL9311-5AA00-0AA2
ETU25B	LSI	Without	3WL9312-5AA00-0AA2
ETU27B	LSING	Without	3WL9312-7AA00-0AA2
ETU45B (without display)	LSIN(G)	Without	3WL9314-5AA00-0AA2
		With metering function Plus new	3WL9314-5AA30-0AA2
ETU76B	LSIN(G)	Without	3WL9317-6AA00-0AA2
		With metering function Plus new	3WL9317-6AA30-0AA2

Rating plugs



- With the rating plug selected, the maximum rated current $I_{n, \max}$ of the circuit breaker must not be exceeded. The following applies: $I_n \leq I_{n, \max}$.

Size	Rated current I_n	Article No.
1, 2	250 A	3WL9111-0AA51-0AA0
	315 A	3WL9111-0AA52-0AA0
	400 A	3WL9111-0AA53-0AA0
	500 A	3WL9111-0AA54-0AA0
	630 A	3WL9111-0AA55-0AA0
	800 A	3WL9111-0AA56-0AA0
	1000 A	3WL9111-0AA57-0AA0
1, 2, 3	1250 A	3WL9111-0AA58-0AA0
	1600 A	3WL9111-0AA61-0AA0
	2000 A	3WL9111-0AA62-0AA0
2, 3	2500 A	3WL9111-0AA63-0AA0
	3200 A	3WL9111-0AA64-0AA0
	4000 A	3WL9111-0AA65-0AA0
3	5000 A	3WL9111-0AA66-0AA0
	6300 A	3WL9111-0AA67-0AA0

Ground-fault modules



- Alarm and tripping
- For direct measurement of the ground-fault current, e.g. in the star point of the transformer, a 1200 A/1 A current transformer, class 1, is required. The internal load of the 3WL circuit breaker is 0.11 m. If the ground-fault current is to be determined using the vectorial sum of the phases, a transformer must be installed in the neutral conductor.

Type	Accessory for	Article No.
GFM AT 45B	ETU45B	3WL9111-0AT53-0AA0
GFM AT 55B – 76B	ETU76B	3WL9111-0AT56-0AA0

Display



Accessory for	Version	Article No.
ETU45B	4-line	3WL9111-0AT81-0AA0

Internal current transformers, for N conductor including wiring kit


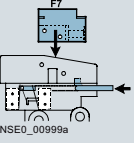
ETU Release 2	Size	Article No.
–	1	3WL9111-0AA11-0AA0
	2	3WL9111-0AA12-0AA0
	3	3WL9111-0AA13-0AA0
✓	1	3WL9111-0AA14-0AA0
	2	3WL9111-0AA15-0AA0
	3	3WL9111-0AA16-0AA0

External current transformers for N conductor

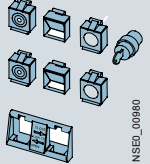
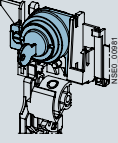
Copper connection pieces	Size	Article No.
–	1	3WL9111-0AA21-0AA0
	2	3WL9111-0AA22-0AA0
	3	3WL9111-0AA23-0AA0
✓	1	3WL9111-0AA31-0AA0
	2	3WL9111-0AA32-0AA0
	3	3WL9111-0AA33-0AA0



Accessories for electronic trip units ETU

EMC filter					
<ul style="list-style-type: none"> Common-mode interference suppressor filters (e.g. in IT networks, caused by frequency converters) Insertion loss (asymmetric) in the range 40 kHz to 10 MHz >40 dB. 					
Versions			Article No.		
Only for ETU Release 2			3WL9111-0AK34-0AA0		
Sealable and lockable covers					
	Accessory for			Article No.	
	ETU15B to ETU45B			3WL9111-0AT45-0AA0	
	ETU76			3WL9111-0AT46-0AA0	
Automatic reset of the reclosing lockout					
Version			Article No.		
Spare part for option K01			3WL9111-0AK21-0AA0		
Remote reset magnets					
	<ul style="list-style-type: none"> For mechanical tripped indicator Spare part for options K10 to K13 Note: <ul style="list-style-type: none"> Automatic reset of the reclosing lockout 3WL9111-0AK21-0AA0 is also required 				
	Voltage			Article No.	
	24 V DC			3WL9111-0AK03-0AA0	
48 V DC			3WL9111-0AK04-0AA0		
120 V AC / 125 V DC			3WL9111-0AK05-0AA0		
208 ... 250 V AC / 208 ... 250 V DC			3WL9111-0AK06-0AA0		
Retrofittable internal wiring					
Purpose	Male multipoint connector	Accessory for	Article No.		
Internal CubicleBUS wiring for connection to terminal X8	With blade connector for retrofitting the communication	ETU45B and ETU76B	3WL9111-0AK30-0AA0		
For connection of the external N and G transformers to terminal X8	Without male connector	Not for ETU Release 2 ETU Release 2	3WL9111-0AK31-0AA0 3WL9111-0AK33-0AA0		

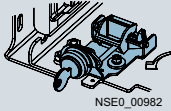
Locking devices and interlocks

Padlockable protective cover ON / OFF						
<ul style="list-style-type: none"> Consisting of two transparent covers each for sealing or for attaching padlocks (padlocks not included in scope of supply) Cover with 6.35 mm hole (for tool actuation) Lock mount for safety lock for key operation 						
	Version			Article No.		
	Without safety lock			3WL9111-0BA21-0AA0		
	Made by CES			3WL9111-0BA22-0AA0		
Made by IKON			3WL9111-0BA24-0AA0			
Locking devices against unauthorized closing, in the operator panels						
<ul style="list-style-type: none"> The disconnecter unit fulfills the requirements for main circuit breakers acc. to EN 60204-1 Spare part for options S01 to S09 						
	Variant		Scope of supply		Article No.	
	Assembly kit FORTRESS or Castell		Without locks, cylinders or keys		3WL9111-0BA31-0AA0	
	Made by Ronis		Locks, cylinders and keys included		3WL9111-0BA33-0AA0	
	Made by KIRK-Key		Without locks, cylinders or keys		3WL9111-0BA34-0AA0	
	Made by Profalux		Locks, cylinders and keys included		3WL9111-0BA35-0AA0	
	Made by CES		Locks, cylinders and keys included		3WL9111-0BA36-0AA0	
	Made by IKON		Locks, cylinders and keys included		3WL9111-0BA38-0AA0	
Assembly kit for padlocks		Without padlock		3WL9111-0BA41-0AA0		

Accessories and spare parts

Locking devices and interlocks

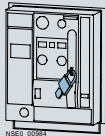
Locking devices against unauthorized closing, for withdrawable circuit breakers



- The disconnecter unit fulfills the requirements for main circuit breakers acc. to EN 60204-1
- Consisting of lock in the guide frame, active in connected position, function is retained when circuit breaker is replaced
- Spare part for option R60, R61, R68

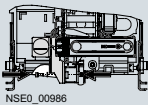
Variant	Scope of supply	Article No.
Made by CES	Locks, cylinders and keys included	3WL9111-0BA51-0AA0
Made by IKON	Locks, cylinders and keys included	3WL9111-0BA53-0AA0
Made by KIRK-Key ¹⁾	Without locks, cylinders or keys	3WL9111-0BA57-0AA0
Made by Ronis	Locks, cylinders and keys included	3WL9111-0BA58-0AA0
Made by Profalux	Locks, cylinders and keys included	3WL9111-0BA50-0AA0

Locking devices for operating mechanism handle with padlock



Version	Scope of supply	Article No.
Spare part for S33	Without padlock	3WL9111-0BA71-0AA0

Locking device against movement of the withdrawable circuit breaker



- Safety lock for mounting onto the circuit breaker
- Spare part for option S71, S75, S76

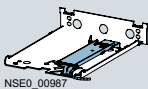
Variant	Scope of supply	Article No.
Made by CES	Locks, cylinders and keys included	3WL9111-0BA73-0AA0
Made by IKON	Locks, cylinders and keys included	3WL9111-0BA75-0AA0
Made by Profalux	Locks, cylinders and keys included	3WL9111-0BA76-0AA0
Made by Ronis	Locks, cylinders and keys included	3WL9111-0BA77-0AA0
Made by KIRK-Key ¹⁾	Without locks, cylinders or keys	3WL9111-0BA80-0AA0

Interlocking systems

- 2 of the same keys for 3 circuit breakers
- Locking device in OFF position
- Lock in the operator panel
- A maximum of 2 circuit breakers can be switched on

Variant	Article No.
Made by CES	3WL9111-0BA43-0AA0

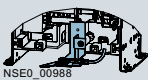
Locking devices to prevent movement of the withdrawable circuit breakers in disconnected position



- Consisting of Bowden cable and lock in the cabinet door on the circuit breaker
- Spare part for option R81, R85, R86
- **Note:**
 - Not possible in combination with "Locking mechanism to prevent opening of the cabinet door" (order code "R30") or "Locking mechanism to prevent movement with the cabinet door open" (order code "R50").).

Variant	Article No.
Made by CES	3WL9111-0BA81-0AA0
Made by IKON	3WL9111-0BA83-0AA0
Made by Profalux	3WL9111-0BA85-0AA0
Made by Ronis	3WL9111-0BA86-0AA0

Locking devices to prevent opening of the cabinet door in ON position

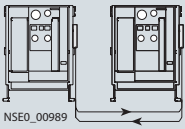




- Fixed-mounted
- Defeatable
- **Note:**
 - Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86").

Version	Article No.
Spare part for option S30	3WL9111-0BB12-0AA0

¹⁾ Locks, cylinders and keys must be ordered from the manufacturer.

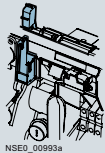
Locking devices and interlocks

Locking devices to prevent opening of the cabinet door			
<ul style="list-style-type: none"> • Guide frames • Defeatable • Note: <ul style="list-style-type: none"> – Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86"). 			
Version			Article No.
Spare part for option R30			3WL9111-0BB13-0AA0
Locking devices to prevent movement with the cabinet door open			
<ul style="list-style-type: none"> • Guide frames • Note: <ul style="list-style-type: none"> – Not possible in combination with "Locking mechanism to prevent movement of the withdrawable circuit breakers in disconnected position" (order codes "R81", "R85" or "R86"). 			
Version			Article No.
Spare part for option R50			3WL9111-0BB15-0AA0
Mutual mechanical interlockings			
<ul style="list-style-type: none"> • With Bowden cable 2000 mm (one required for each circuit breaker) 			
	Type	When ordered separately	Spare part for
	Fixed-mounted circuit breaker	–	Option S55
	Module for withdrawable circuit breakers with guide frame	–	Option R55
	Module for guide frame	✓	Option R56
	Module for withdrawable circuit breaker	✓	Option R57
	Adapter for size 3 withdrawable circuit breaker	✓	–
			3WL9111-0BB21-0AA0
			3WL9111-0BB24-0AA0
			3WL9111-0BB22-0AA0
			3WL9111-0BB23-0AA0
			3WL9111-0BB30-0AA0
Couplings on the circuit breaker (with ring) for mutual interlocking			
<ul style="list-style-type: none"> • Can be used in all circuit breakers 			
			Article No.
			3WL91112-8AH47-0AA0
Bowden cables			
	Length	Article No.	
	2000 mm	3WL9111-0BB45-0AA0	
	3000 mm	3WL9111-0BB46-0AA0	
	4500 mm	3WL9111-0BB47-0AA0	
Test devices			
Manual tester, Release 2 for electronic trip units ETU15B to ETU76B			
	<ul style="list-style-type: none"> • For testing the electronic trip unit functions of all 3WL ETUs (Release 1 and Release 2) 		
			Article No.
			3WL9111-OAT32-0AA0
Function test device			
<ul style="list-style-type: none"> • For testing the tripping characteristics for electronic trip units ETU15B to ETU76B (Release 1 and Release 2) 			
			Article No.
			3WL9111-OAT44-0AA0
TD400 Kit IEC			
<ul style="list-style-type: none"> • Commissioning /Service Tool for IEC 3WL (ETU Release 2) and 3VA • With adapter, cable and case 			
			Article No.
			3VW9011-OAT40
TD400 adapter (spare part)			
	Version	Article No.	
	for 3VA	3VW9011-OAT43	
	for 3WL ETU Release 1	3VW9011-OAT44	
	for 3WL ETU Release 2	3VW9011-OAT45	

Accessories and spare parts

Indicators and control elements

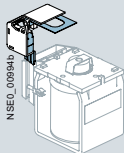
Ready-to-close signaling switches (S20)



NSE0_00993a

Version	Contacts	Article No.
Spare part for option C22	1 NO contact	3WL9111-0AH01-0AA0

Signaling switch (S22 or S23).



NSE0_00994a

- Not possible with communication port, order code "F02", "F12" or "F35"
- Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

Version	Contacts	Article No.
Spare part for options C26 to C27	1st or 2nd auxiliary release	3WL9111-0AH02-0AA0

1st tripped signaling switch (S24)

- Not possible with communication port, order code "F02", "F12" or "F35"
- Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

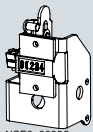
Version	Contacts	Article No.
Spare part for option K07	1 CO contact	3WL9111-0AH14-0AA0

2nd tripped signaling switch (S25)

- Not possible with communication port, order code "F02", "F12" or "F35"
- Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally
- Can only be used in combination with 1st tripped signaling switch

Version	Contacts	Article No.
Spare part for option K06	1 NO contact	3WL9111-0AH17-0AA0

Operating cycle counters



NSE0_00995a

- Only in conjunction with motorized operating mechanism.

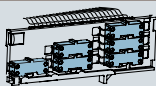
Version	Version	Article No.
Spare part for option C01	Mechanical	3WL9111-0AH07-0AA0

Spring charged signaling switch

- Not possible with communication port, order code "F02", "F12" or "F35".
- Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally

Version	Contacts	Article No.
Spare part for option C20	1 NO contact	3WL9111-0AH08-0AA0

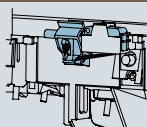
Position signaling switches for guide frames



NSE0_00996a

Version	Contacts	Article No.
Spare part for options R15 to R16	1st block (3 CO contacts)	3WL9111-0AH11-0AA0
	2nd block (6 CO contacts)	3WL9111-0AH12-0AA0

Electrical ON button (S10) for operator panel



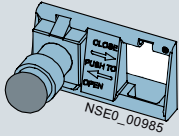
NSE0_00997a

- Not possible with communication port, order code "F02", "F12" or "F35"
- Not possible with motor shutdown switch
- Button + wiring (Auxiliary supply connection X7 required for circuit breakers or guide frames. If this is not already available, please order additionally)
- **Note:**
 - Possible only for circuit breakers with closing coil.

Version	Variants	Article No.
Spare part for options C11 to C12	With sealing cap C11	3WL9111-0AJ02-0AA0
	With CES assembly kit C12	3WL9111-0AJ03-0AA0
	With IKON assembly kit	3WL9111-0AJ05-0AA0

Indicators and control elements

Motor cutout switch (S12)	
<ul style="list-style-type: none"> Mounting onto operator panel Not possible with electrical ON button 	
Version	Article No.
Spare part for option S25	3WL9111-0AJ06-0AA0
EMERGENCY OFF pushbuttons	
<ul style="list-style-type: none"> Mushroom pushbutton instead of the mechanical OFF pushbutton 	
Variant	Article No.
Spare part for option S24	3WL9111-0BA72-0AA0



Auxiliary conductor connections

Male connectors for circuit breakers ①	
	Article No.
	3WL9111-0AB01-0AA0
Extension for male connector	
<ul style="list-style-type: none"> Male connector must be ordered separately 	
Version	Article No.
1000 V	3WL9111-0AB02-0AA0
Male connectors and extension	
Version	Article No.
1000 V	3WL9111-0AB10-0AA0
Auxiliary supply connection for circuit breakers or guide frames ②	
Version	Article No.
Screw connection (SIGUT)	3WL9111-0AB03-0AA0
Screwless connection technology (tension spring)	3WL9111-0AB04-0AA0
Coding kits ③	
Version	Article No.
For fixed-mounted X5 to X8	3WL9111-0AB07-0AA0
Sliding contact modules for guide frames ④	
	Article No.
	3WL9111-0AB08-0AA0
One-part sliding contact modules for guide frames	
Version	Article No.
Screw terminals (SIGUT)	3WL9111-0AB18-0AA0
Blanking blocks for circuit breakers	
	Article No.
	3WL9111-0AB12-0AA0

For a complete auxiliary current connection you must order:

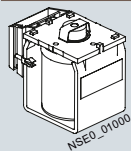
Fixed-mounted version: ① + ② + ③

Withdrawable version: ① + ④ + ② and ① + ⑤

Accessories and spare parts

Auxiliary releases

Closing coils / shunt releases



Version	Voltage	Article No.
100% OP	24 V DC	3WL9111-0AD01-0AA0
	30 V DC	3WL9111-0AD02-0AA0
	48 V DC	3WL9111-0AD03-0AA0
	60 V DC	3WL9111-0AD04-0AA0
	110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AD05-0AA0
	220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AD06-0AA0
5% OP Switching time 50 ms (standard >80 ms).	24 V DC	3WL9111-0AD11-0AA0
	48 V DC	3WL9111-0AD12-0AA0
	110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AD13-0AA0
	220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AD14-0AA0

Undervoltage release



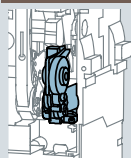
Version	Voltage	Article No.
Instantaneous	24 V DC	3WL9111-0AE01-0AA0
	30 V DC	3WL9111-0AE02-0AA0
	48 V DC	3WL9111-0AE03-0AA0
	60 V DC	3WL9111-0AE07-0AA0
	110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AE04-0AA0
	220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AE05-0AA0
Delayed	380 ... 415 V AC	3WL9111-0AE06-0AA0
	48 V DC	3WL9111-0AE11-0AA0
	110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AE12-0AA0



220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AE13-0AA0
380 ... 415 V AC	3WL9111-0AE14-0AA0

Operating mechanism

Motorized operating mechanisms

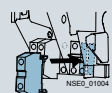


- Auxiliary supply connection X5 required for circuit breakers or guide frames. If this is not already available, please order additionally

Voltage	Article No.
24 ... 30 V DC	3WL9111-0AF01-0AA0
48 ... 60 V DC	3WL9111-0AF02-0AA0
110 ... 125 V DC/110 ... 127 V AC	3WL9111-0AF03-0AA0
220 ... 250 V DC/208 ... 240 V AC	3WL9111-0AF04-0AA0




Auxiliary contacts

Auxiliary switch blocks




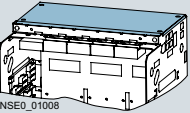
Contacts	Article No.
2 NO contacts + 2 NC contacts	3WL9111-0AG01-0AA0
2 NO contacts	3WL9111-0AG02-0AA0
1 NO contact + 1 NC contact	3WL9111-0AG03-0AA0

Door sealing frames, hoods, shutters

Door sealing frames						
	Version	Article No.				
	Spare part for option T40	3WL9111-0AP01-0AA0				
Protective cover IP55						
	<ul style="list-style-type: none"> Cannot be used in conjunction with door sealing frames Hood removable and can be opened on both sides 					
				Article No.		
			3WL9111-0AP02-0AA0			
Shutters						
	Version	Number of poles	Size	Breaking capacity	Article No.	
	Spare part for option R21	3-pole	1	N, S, H	3WL9111-0AP04-0AA0	
			2	N, S, H	3WL9111-0AP06-0AA0	
				C	3WL9111-0AP43-0AA0	
			3	H, C	3WL9111-0AP07-0AA0	
			4-pole	1	N, S, H	3WL9111-0AP08-0AA0
				2	N, S, H	3WL9111-0AP11-0AA0
				C	3WL9111-0AP44-0AA0	
		3		H, C	3WL9111-0AP12-0AA0	

Arc chute

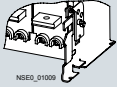
Arc chute				
	Voltage	Size	Breaking capacity	Article No.
	690 V	1	N, S, H	3WL9111-0AS01-0AA0
		2	N, S, H	3WL9111-0AS02-0AA0
			C	3WL9111-0AS10-0AA0
	1000 V/1150 V	3	H, C	3WL9111-0AS03-0AA0
		2	H, C	3WL9111-0AS05-0AA0
3		H, C	3WL9111-0AS06-0AA0	

Arc chute covers				
	<ul style="list-style-type: none"> Parts kit for guide frame Spare part for option R10 Not available for <ul style="list-style-type: none"> 1000 V version (order code "A05"), 1150 V version (order code "A15") DC version, 4000 A size 2, Circuit breakers with very high breaking capacity C. 			
	Number of poles	Size	Article No.	
3-pole	1	3WL9111-0AS32-0AA0		
	2	3WL9111-0AS36-0AA0		
	3	3WL9111-0AS38-0AA0		
4-pole	1	3WL9111-0AS42-0AA0		
	2	3WL9111-0AS44-0AA0		
	3	3WL9111-0AS46-0AA0		

Accessories and spare parts

Coding for withdrawable version

Coding for withdrawable version

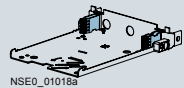


- By customer, for 36 coding variants

Size	Article No.
1 and 2	3WL9111-0AR12-0AA0
3	3WL9111-0AR13-0AA0

Grounding connections

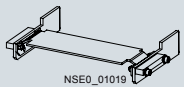
Grounding connection between the guide frame and the withdrawable circuit breaker



- Order 2× for 30 kA ground short-circuit current
- Contacting modules for guide frame

Size	Article No.
1 and 2 ¹⁾	3WL9111-0BA01-0AA0
3	3WL9111-0BA02-0AA0

Contacting modules for withdrawable circuit breakers



Number of poles	Size	Article No.
3-pole	1	3WL9111-0BA05-0AA0
	2 ¹⁾	3WL9111-0BA06-0AA0
	3	3WL9111-0BA07-0AA0
4-pole	1	3WL9111-0BA08-0AA0
	2 ¹⁾	3WL9111-0BA04-0AA0
	3	3WL9111-0BA10-0AA0

¹⁾ Cannot be used for size 2 with very high breaking capacity C and size 2, 4000 A.

Support brackets

Support brackets



- For mounting fixed-mounted circuit breakers on vertical plane
- Only for sizes 1 and 2 (1 set = 2 units)

Article No.
3WL9111-0BB50-0AA0

CubicleBUS modules

- Each CubicleBUS module is supplied with a 0.2 m pre-assembled cable to connect the modules with each other. A longer pre-assembled cable is required for connection to the circuit breaker.
- All communication components, CubicleBUS modules and measurement functions are available for the electronic trip units ETU45B and ETU76B.

CubicleBUS modules



Type	Article No.
Digital output modules with rotary coding switch, relay outputs	3WL9111-0AT26-0AA0
Digital output modules, configurable, relay outputs	3WL9111-0AT20-0AA0
Digital input module	3WL9111-0AT27-0AA0
Analog output module	3WL9111-0AT23-0AA0
ZSI module	3WL9111-0AT21-0AA0

Preassembled cables for CubicleBUS modules

For connection to 3WL	Length	Article No.
With COM15/COM16/COM35	0.5 m	3WL9111-0BC04-0AA0
	1 m	3WL9111-0BC02-0AA0
	2 m	3WL9111-0BC03-0AA0
Without COM15/COM16/COM35	2 m	3WL9111-0BC05-0AA0




Voltage transformers

- Required for 3WL circuit breakers with metering function Plus, if no direct voltage tap is available.
- 380 ... 690 V/100 V, class 0.5

Number of poles	Metering function	Article No.
3-pole	With measurement function Plus	3WL9111-0BB68-0AA0

Retrofitting and spare parts

- For retrofitting the COM15, COM16 or COM35 communication modules in withdrawable 3WL circuit breakers with Z options A05 (1000 V AC), A15 (1150 V AC) or A16 (690 V + 20%), the following additional assembly kits are required: 3WL9111-0AT62-0AA0 for circuit breakers size 1 or 3WL9111-0AT63-0AA0 for circuit breakers size 2/3

COM35 PROFINET IO / Modbus TCP modules new		
	Version	Article No.
	For electronic trip units ETU45B and ETU76B	3WL9111-0AT65-0AA0
PROFINET IO / Modbus TCP retrofit kits new		
	<ul style="list-style-type: none"> Retrofit kit for the PROFINET IO / Modbus TCP communication including COM35, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units 	Article No.
		3WL9111-0AT66-0AA0
PROFIBUS retrofit kits		
	<ul style="list-style-type: none"> Retrofit kit for the PROFIBUS communication including COM15, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units 	Article No.
		3WL9111-0AT12-0AA0
COM15 PROFIBUS modules		
	Version	Article No.
	For electronic trip units ETU45B and ETU76B	3WL9111-0AT15-0AA0
COM16 Modbus RTU modules		
	Version	Article No.
	For electronic trip units ETU45B and ETU76B	3WL9111-0AT17-0AA0
Modbus RTU retrofit kits IEC		
	<ul style="list-style-type: none"> Retrofit kit for the Modbus communication including COM16, BSS and set of cables for all 3WL air circuit breakers with ETU45B and ETU76B electronic trip units 	Article No.
		3WL9111-0AT18-0AA0
Additional parts for retrofitting the COM15/COM16/COM35 communication modules		
	<ul style="list-style-type: none"> In withdrawable 3WL circuit breakers with Z options: <ul style="list-style-type: none"> – A05 (1000 V AC) or – A15 (1150 V AC) or – A16 (690 V + 20%) 	
	Size	Article No.
	1	3WL9111-0AT62-0AA0
	2/3	3WL9111-0AT63-0AA0
Breaker status sensors (BSS)		
	Version	Article No.
	<ul style="list-style-type: none"> For acquisition via communication of the circuit breaker states ON / OFF / tripped For electronic trip units ETU45B and ETU76B 	3WL9111-0AT16-0AA0

Accessories and spare parts

Interfaces

Interface to the IEC 61850 **new**

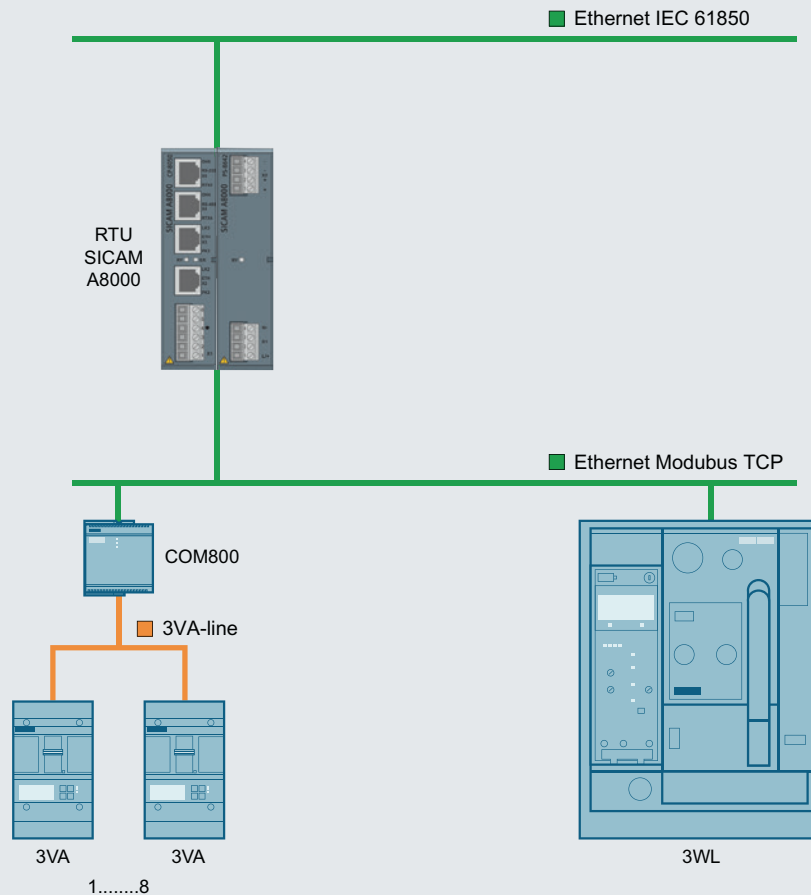
- The SICAM A8000 as an intelligent data concentrator ensures the connection of the circuit breakers from the SENTRON portfolio via the MODBUS TCP/IP protocol and the forwarding of the data via communication protocols (such as IEC61850, IEC60870-5-104, IEC60870-5-101, MODBUS and DNP) to higher-level systems.

Type	CPU module	Operating voltage	Article No.
SICAM CP-8021 ¹⁾	4 interfaces	–	6MF28021AA00
SICAM PS-8620	–	24 ... 60 V DC (12 W)	6MF28620AA00
SICAM PS-8622	–	110 ... 220 V DC (12 W)	6MF28622AA00



¹⁾ Designed for maximum data volumes of 20 devices each with 50 data points

You will find further information at:
www.siemens.com/sicam-a8000



Storage devices

Capacitor storage devices

- For shunt releases
- Storage time 5 min
- Also suitable for 3VL, 3VA and 3WN circuit breakers
- **Note:**
 - Rated control supply voltage must match the rated control supply voltage of the shunt release.

Rated control supply voltage/rated operational voltage		Article No.
50/60 Hz AC	DC	
220 ... 240 V	220 ... 250 V	3WL9111-0BA14-0AA0

Retrofitting and spare parts new

Metering function Plus for retrofitting

- As spare part or for retrofitting the metering function Plus with an external voltage transformer
 - For ETU45B or ETU76B Release 2
 - Voltage transformer required
 - Voltage converter included
 - A measuring accuracy of 3% is achieved if retrofitted.
 - Fixing accessories and cable included

Article No.
3WL9111-0AT05-0AA0

Voltage converter

Version	Article No.
As spare part	3WL9111-0AT06-0AA0

Components for conversion of an existing internal voltage tap²⁾

- Conversion requires 3 components for 3-pole 3WL
- Conversion requires 4 components for 4-pole 3WL
- Conversion of a metering function (Z option A05) is not possible.

Conversion of internal voltage tap to main contact	Size	Article No.
From bottom to top	1	3WL9111-0AT71-0AA0
	2	3WL9111-0AT72-0AA0
	3	3WL9111-0AT73-0AA0
From top to bottom	1	3WL9111-0AT74-0AA0
	2	3WL9111-0AT75-0AA0
	3	3WL9111-0AT76-0AA0

Transformers (without iron core), Rogowski coil only (instrument transformer for the protection function)

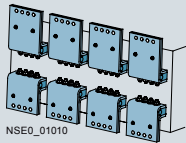
- Used in converter applications with high harmonic components; can only be used with ETU45B or ETU76B
 - External 24 V DC supply required
 - Undervoltage release required (e.g. 3WL9111-0AE01-0AA0)
- As retrofit kit or as spare part. With new circuit breakers, please use the Z option K60
- **Scope of supply:**
 - Transformer
 - Warning signs
 - Manual

Number of poles	Size	Article No.
3-pole	1	3WL9111-0AA42-0AA0
	2	3WL9111-0AA43-0AA0
	3	3WL9111-0AA44-0AA0
4-pole	1	3WL9111-0AA45-0AA0
	2	3WL9111-0AA46-0AA0
	3	3WL9111-0AA47-0AA0

Accessories and spare parts

Main conductor connections, fixed-mounted versions (essential accessory)

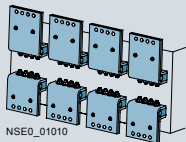
Front-accessible main connections, single hole at top



- Not for 3WL1 size 1 with high breaking capacity H

Size	Rated current I_n	Article No.
1	Up to 1000 A	3WL9111-0AL01-0AA0
	1250 ... 1600 A	3WL9111-0AL02-0AA0
2 ⁴⁾	Up to 2000 A	3WL9111-0AL03-0AA0
	Up to 2500 A	3WL9111-0AL04-0AA0
	Up to 3200 A	3WL9111-0AL05-0AA0
3	Up to 4000 A	3WL9111-0AL06-0AA0

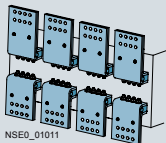
Front-accessible main connections, single hole at bottom



- Not for 3WL1 size 1 with high breaking capacity H

Size	Rated current I_n	Article No.
1	Up to 1000 A	3WL9111-0AL51-0AA0
	1250 ... 1600 A	3WL9111-0AL52-0AA0
2 ⁴⁾	Up to 2000 A	3WL9111-0AL53-0AA0
	Up to 2500 A	3WL9111-0AL54-0AA0
	Up to 3200 A	3WL9111-0AL55-0AA0
3	Up to 4000 A	3WL9111-0AL56-0AA0

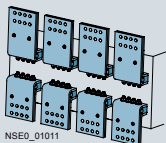
Front-accessible main connections according to DIN 43673, double hole at top



- Not for 3WL1 size 1 with high breaking capacity H

Size	Rated current I_n	Article No.
1	Up to 1000 A ¹⁾	3WL9111-0AL07-0AA0
	1250 ... 2000 A ⁵⁾	3WL9111-0AL08-0AA0
2 ⁴⁾	Up to 2000 A	3WL9111-0AL11-0AA0
	Up to 2500 A	3WL9111-0AL12-0AA0
	Up to 3200 A	3WL9111-0AL13-0AA0
3	Up to 4000 A	3WL9111-0AL14-0AA0

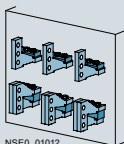
Front-accessible main connections according to DIN 43673, double hole at bottom



- Not for 3WL1 size 1 with high breaking capacity H

Size	Rated current I_n	Article No.
1	Up to 1000 A ¹⁾	3WL9111-0AL57-0AA0
	1250 ... 2000 A ⁵⁾	3WL9111-0AL58-0AA0
2 ⁴⁾	Up to 2000 A	3WL9111-0AL61-0AA0
	Up to 2500 A	3WL9111-0AL62-0AA0
	Up to 3200 A	3WL9111-0AL63-0AA0
3	Up to 4000 A	3WL9111-0AL64-0AA0

Rear vertical main connections



Size	Rated current I_n	Article No.
1 ²⁾	Up to 2000 A	3WL9111-0AM01-0AA0
2 ³⁾	Up to 3200 A	3WL9111-0AM02-0AA0
3	Up to 6300 A	3WL9111-0AM03-0AA0

¹⁾ Not for 3WL1 size 1 with high breaking capacity H

²⁾ In the case of vertical connection size 1 with breaking capacity N and S, up to 1000 A one 3WL9 111-0AM01-0AA0 vertical connection is required, up to 2000 A or with breaking capacity H two 3WL9 111-0AM01-0AA0 vertical connections are required.

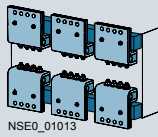
³⁾ In the case of vertical connection size 2, up to 2500 A one 3WL9 111-0AM02-0AA0 vertical connection is required, up to 3200 A two 3WL9 111-0AM02-0AA0 vertical connections are required.

⁴⁾ Not for circuit breakers with very high breaking capacity C.

⁵⁾ Can be used for size 1 with H breaking capacity of 630 A ... 2000 A.

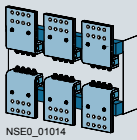
Main conductor connections, withdrawable versions (essential accessory)

Front-accessible main connections, single hole top or bottom ^{1) 2)}



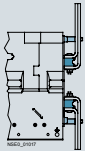
Size	Rated current I_n	Article No.
1	Up to 1000 A	3WL9111-0AN01-0AA0
	1250 ... 1600 A	3WL9111-0AN02-0AA0
2 ³⁾	Up to 2000 A	3WL9111-0AN03-0AA0
	Up to 2500 A	3WL9111-0AN04-0AA0
	Up to 3200 A	3WL9111-0AN05-0AA0
3	Up to 4000 A	3WL9111-0AN06-0AA0

Front-accessible main circuit connections, according to DIN 43673, double hole at top or at bottom ¹⁾



Size	Rated current I_n	Article No.
1	Up to 1000 A ²⁾	3WL9111-0AN07-0AA0
	1250 ... 2000 A ⁵⁾	3WL9111-0AN08-0AA0
2 ³⁾	Up to 2000 A	3WL9111-0AN11-0AA0
	Up to 2500 A	3WL9111-0AN12-0AA0
	Up to 3200 A	3WL9111-0AN13-0AA0
3	Up to 4000 A	3WL9111-0AN14-0AA0

Supports for front and DIN connecting bars



Number of poles	Size	Article No.
3-pole for 3 bars	1	3WL9111-0AN41-0AA0
	2	3WL9111-0AN42-0AA0
	3	3WL9111-0AN43-0AA0
4-pole for 4 bars	1	3WL9111-0AN44-0AA0
	2	3WL9111-0AN45-0AA0
	3	3WL9111-0AN46-0AA0

Rear vertical main connections

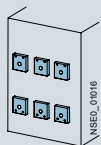


Size	Rated current I_n	Terminal pieces	Article No.
1	Up to 1000 A ²⁾		3WL9111-0AN15-0AA0
	1250 ... 2000 A ⁵⁾		3WL9111-0AN16-0AA0
2	Up to 2000 A ³⁾		3WL9111-0AN17-0AA0
	Up to 2500 A ³⁾		3WL9111-0AN18-0AA0
	Up to 3200 A ³⁾		3WL9111-0AN21-0AA0
	1600 ... 3200 A ⁴⁾		3WL9111-0AN38-0AA0
3	Up to 5000 A		3WL9111-0AN22-0AA0
	Up to 6300 A	3 units for 3-pole switches	3WL9111-0AN23-0AA0
	Up to 6300 A, top	4 units for 4-pole switches	3WL9111-0AN20-0AA0
	Up to 6300 A, bottom	4 units for 4-pole switches	3WL9111-0AN10-0AA0

Rear Horizontal Main Connections

Size	Rated current I_n	Article No.
1	Up to 1000 A ²⁾	3WL9111-0AN32-0AA0
	1250 ... 2000 A ⁵⁾	3WL9111-0AN33-0AA0
2	Up to 2000 A ³⁾	3WL9111-0AN34-0AA0
	Up to 2500 A ³⁾	3WL9111-0AN35-0AA0
	Up to 3200 A ³⁾	3WL9111-0AN36-0AA0
	1600 ... 3200 A ⁴⁾	3WL9111-0AN47-0AA0
3	Up to 5000 A	3WL9111-0AN37-0AA0

Connecting flange



Size	Rated current I_n	Article No.
1	Up to 1000 A ²⁾	3WL9111-0AN24-0AA0
	1250 ... 2000 A ⁵⁾	3WL9111-0AN25-0AA0
2 ³⁾	Up to 2000 A	3WL9111-0AN26-0AA0
	Up to 2500 A	3WL9111-0AN27-0AA0
	Up to 3200 A	3WL9111-0AN28-0AA0
3	Up to 4000 A	3WL9111-0AN31-0AA0

¹⁾ When using front-accessible mains connections (withdrawable circuit breakers) supports are required.

²⁾ Not for 3WL1 size 1 with high breaking capacity H

³⁾ Not for circuit breakers with very high breaking capacity C.

⁴⁾ Only for circuit breakers with very high breaking capacity C.

⁵⁾ Can be used for size 1 with H breaking capacity of 630 A ... 2000 A.

Accessories and spare parts

Conversion kit

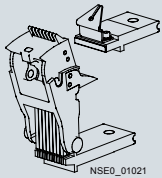
Conversion kit for converting fixed-mounted circuit breakers into withdrawable circuit breakers

- Guide frames and sliding contact modules must be ordered separately.
- Conversion from fixed-mounted to withdrawable is not possible for 3WL1 circuit breakers with very high breaking capacity C

Number of poles	Size	Article No.
3-pole	1	3WL9111-0BC11-0AA0
	2	3WL9111-0BC12-0AA0
	3	3WL9111-0BC13-0AA0
4-pole	1	3WL9111-0BC14-0AA0
	2	3WL9111-0BC15-0AA0
	3	3WL9111-0BC16-0AA0

Main contact elements

Main contact elements^{2) 4)}



- **Notes:**
 - The circuit breaker ID No. must be specified when ordering³⁾
 - Specified for each connection (depending on the number of poles on the circuit breaker, order 3 or 4 units)
 - Article No. is automatically adapted to the circuit breaker ID No.

Size	I_n max.	Article No.
1	Up to 2000 A	3WL9111-0AM90 L1Y
2	Up to 2500 A	3WL9111-0AM91 L1Y
	Up to 4000 A	3WL9111-0AM92 L1Y
3	Up to 6300 A	3WL9111-0AM93 L1Y

²⁾ Not for circuit breakers with very high breaking capacity C.

³⁾ Please specify the circuit breaker ID No. in plain text when ordering.

⁴⁾ Replacement of the main contact elements for 3WL1 circuit breakers with very high breaking capacity C is only possible at the factory.



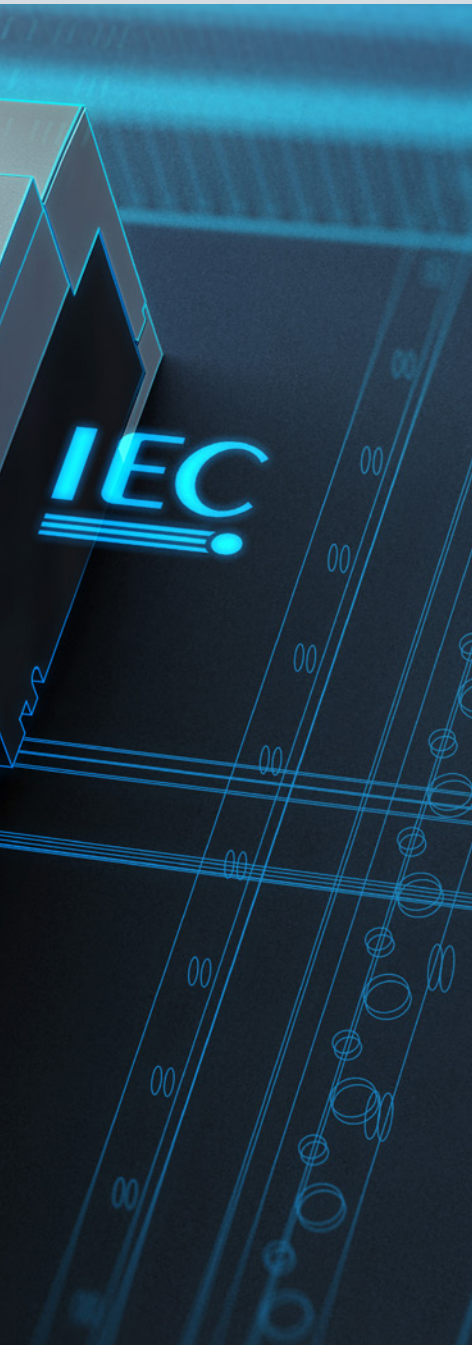
One system. For all applications.

Requirements for cost- and energy-efficient operation of electrical power distribution are on the increase. Whether in industrial plants, in infrastructure or in buildings: As a modular, highly adaptable system, the 3VA series of molded case circuit breakers ensures fully reliable protection of personnel and plant, and supports every process phase – from planning to operation of electrical power distribution.

Comprehensively certified. Deployable worldwide.

3VA molded case circuit breakers are available in various ranges with IEC approval; other ranges are available that comply with standard IEC 60947 and standard UL 489. The system is therefore ideally suited for mechanical engineering companies and switchgear manufacturers. The full range of functionalities of molded case circuit breakers can be used for plant and equipment operating in Europe and North America, with absolute standards compliance assured.

Molded Case Circuit Breakers



All the information you need	2/2
Molded case circuit breakers for all applications	2/4
Quick selection guide	2/6
Basic units and accessories	2/6
3VA1 basic units up to 1000 A	2/8
3VA2 basic units up to 1600 A	2/12
Trip units	2/16
Online configurator highlights	2/18
3VA10 – 3VA25	2/20
System overview	2/20
Structure of the article numbers	2/22
Internal accessories	2/24
Manual operators	2/26
Motor operators	2/32
Connection technology	2/34
Plug-in and draw-out technology	2/48
Residual current devices RCD	2/50
Communication	2/52
Locking, blocking and interlocking	2/58
Cover frame and mounting	2/60
3VA27	2/62
System overview	2/62
Structure of the article numbers	2/64
Accessory options	2/68
Guide frame	2/70
Electronic trip unit ETU and accessories	2/71
Accessories for connection and insulation	2/74
Motor operators and manual operators	2/76
Auxiliary release, closing coil	2/77
Interlocking	2/79
3VL	2/81
3VL up to 1600 A, IEC	2/81

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about molded case circuit breakers, please visit our website
www.siemens.com/3VA

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – 3VA molded case circuit breakers ([109766672](https://www.siemens.com/lowvoltage/109766672))

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products
www.siemens.com/conversion-tool

Siemens YouTube channel

Our video range

- 3VA molded case circuit breakers (general)
bit.ly/2xNxIFA

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Molded case circuit breakers sie.ag/2mmLcAk

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

Configurators

Exactly the right circuit breaker for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your 3VA molded case circuit breaker at

www.siemens.com/lowvoltage/3va-configurator
www.siemens.com/lowvoltage/3va27-configurator

For your configured 3VA molded case circuit breaker, you can additionally find

- 3D views
- CAD data
- Unit wiring diagrams
- Dimension drawings

... can be found in our online services

Commissioning + operation

Configuration software

powerconfig

The combined commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON family.

www.siemens.com/powerconfig

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions 3VA10 – 3VA25, 3VA27
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual 3VA selectivity **(109743975)**
- System manual – 3VA communication IEC / UL **(98746267)**
- Equipment manual – 3VA molded case circuit breakers with IEC certificate **(90318775)**
- Equipment manual – 3VA27 molded case circuit breakers & 3WL10 air circuit breakers **(109753821)**
- Communication manual – 3WL10 air circuit breakers & 3VA27 molded case circuit breakers **(109760220)**

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at

www.siemens.com/sitrain-lowvoltage

- Protection systems in low-voltage power distribution (WT-LVAPS)
- Communication with SENTRON components (LV-COM)

Technical overview of molded case circuit breakers



The fast way to get you to our online services

This page provides you with comprehensive information and links on molded case circuit breakers

www.siemens.com/lowvoltage/product-support **(109767421)**

Molded case circuit breakers for all applications

2



3VA10 ... 3VA15 molded case circuit breakers

Setting standards for standard applications

The 3VA1 molded case circuit breaker is ideally suited for your standard applications in infrastructure and industrial facilities. It is equipped with a thermal-magnetic trip unit, and offers reliable protection for plants and generators.

With its compact dimensions and depth of just 70 mm, the 3VA1 molded case circuit breaker can even fit into locations where space is limited. Thanks to its cover size of 45 mm, it is also ideally suited for use in distribution boards up to 250 A.

Special features

- Compact design
- AC/DC applications
- No derating up to +50 °C
- Optimized for distribution boards (45 mm cover size)
- Universal platform of accessories
- 1, 2, 3 or 4-pole versions



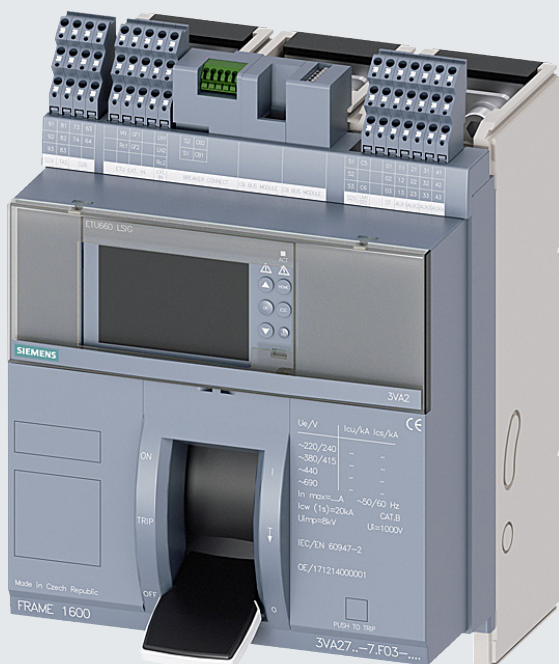
3VA20 ... 3VA25 molded case circuit breakers

The power to deliver in demanding applications

If you are looking for a solution that lets you handle your most technically demanding projects in industrial and infrastructure applications with ease, the 3VA2 molded case circuit breaker has the special capabilities you need. It combines high breaking capacity, a range of electronic trip units (ETUs), very good selectivity properties, and various additional functionalities.

Special features

- Very good selective protection response
- AC applications
- No derating up to +50 °C
- Integrated metering function
- Connection to a communication system
- Performance range from 25 ... 1000 A



3VA27 molded case circuit breaker

Depending on the application, the 3VA27 molded case circuit breaker handles line/motor and starter protection for low-voltage electrical power distribution, and supplements the existing IEC portfolio with a rated current of 1600 A.

Special features

- Choice between two ranges of electronic trip units with a number of equipment versions
- Variable and versatile connections
- Connection to a communication system
- Can be used as a platform circuit breaker with the 3WL10 ACB, with an extensive range of common accessories
- Performance range from 800 ... 1600 A

Basic units and accessories

2



Protective functions	3VA10	3VA11	3VA12	3VA13	3VA14	3VA15 new
Size	100 A	160 A	250 A	400 A	630 A	1000 A
Switch disconnectors						
No protection	–	■	■	■	■	–
Thermal-magnetic						
Line protection	■	■	■	■	■	■
Starter protection	–	■	■	■	■	■
Electronic						
Line protection	–	–	–	–	–	–
Line and generator protection	–	–	–	–	–	–
Line and generator protection, with display	–	–	–	–	–	–
Line and generator protection, with display, with metering function	–	–	–	–	–	–
Motor protection	–	–	–	–	–	–
Motor protection, with display	–	–	–	–	–	–
Motor protection, with display, with metering function	–	–	–	–	–	–
Starter protection	–	–	–	–	–	–

Accessories

Size	100 A	160 A	250 A	400 A	630 A	1000 A
Accessories						
Auxiliary switches and signaling switches	■	■	■	■	■	■
Auxiliary releases	■	■	■	■	■	■
Connection technology	■	■	■	■	■	■
Plug-in version	–	■	■	■	■	–
Withdrawable	–	–	■	■	■	–
Front rotary operating mechanism	■	■	■	■	■	■
Door mounted rotary operator	■	■	■	■	■	■
Side wall mounted rotary operator	■	■	■	■	■	–
MO310 motor operator (mounted onto the side)	–	■	–	–	–	–
MO320 motor operator (mounted onto the front)	–	■	■	■	■	–
Motor operator with SEO520 stored energy operator	–	–	–	–	–	–
Motor operator (MO), integrable	–	–	–	–	–	–
Locking, blocking and interlocking	■	■	■	■	■	■
Residual current device (mounted onto the side)	–	■	■	–	–	–
Residual current device (mounted underneath)	–	■	■	–	–	–
Communications interface	–	–	–	–	–	–
EFB300	–	–	–	–	–	–
TD300, TD400 and TD500	–	–	–	–	–	–
Cover frame	■	■	■	■	■	■
DIN rail adapter	■	■	–	–	–	–
Busbar adapter	■	■	■	■	■	–

■ Available – Not available/not present

* On request



3VA20 **3VA21** **3VA22** **3VA23** **3VA24** **3VA25** **3VA27**

100 A 160 A 250 A 400 A 630 A 1000 A 1600 A

-	-	-	-	-	-	-	■
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
-	■	■	■	■	■	■	■
-	■	■	■	■	■	■	■
-	■	■	■	■	■	■	■
-	■	■	■	■	■	■	■

100 A 160 A 250 A 400 A 630 A 1000 A 1600 A

■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	■
■	■	■	■	■	■	■	■
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
-	-	-	-	-	-	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
■	■	■	■	■	■	-	-
-	-	-	-	-	-	-	-
■	■	■	■	■	■	-	-

3VA1 basic units up to 1000 A

Technical data

2



			3VA10	3VA11	3VA11						
Electrical characteristics according to IEC 60947-2											
Number of poles			3/4-pole	1-pole	2-pole						
Size			100 A	160 A	160 A						
Rated operational current I_n at 50 °C ambient temperature			16 ... 100 A	16 ... 160 A	16 ... 160 A						
Rated operational voltage U_n 50/60 Hz AC			690 V	415 V	415 V						
Rated insulation voltage U_i			800 V	500 V	500 V						
Rated impulse withstand voltage U_{pulse}			8 kV	8 kV	8 kV						
Use in IT networks			■	■	■						
Frequency			0 ... 400 Hz	0 ... 400 Hz	0 ... 400 Hz						
Breaking capacity			B	N	S	N	S	M	N	S	M
Rated ultimate short-circuit breaking capacity I_{cu}											
50/60 Hz AC	220 ... 240 V	kA	25	36	55	25	36	55	36	55	85
	380 ... 415 V	kA	16	25	36	5	6	6	25	36	55
	440 V	kA	8	16	25	–	–	–	–	–	–
	500 V	kA	5	5	7	–	–	–	–	–	–
	690 V	kA	5	5	7	–	–	–	–	–	–
DC	125 V (1 switching pole)	kA	–	–	–	16	25	30	16	25	30
	250 V (2 switching poles)	kA	25	36	55	–	–	–	36	55	85
	500 V (3 switching poles)	kA	25	36	55	–	–	–	–	–	–
	600 V (4 switching poles)	kA	8	16	25	–	–	–	–	–	–
Rated operational short-circuit breaking capacity I_{cs}											
50/60 Hz AC	220 ... 240 V	kA	25	36	55	25	35	55	36	55	85
	380 ... 415 V	kA	16	25	36	5	6	6	25	36	55
	440 V	kA	8	16	25	–	–	–	–	–	–
	500 V	kA	5	5	5	–	–	–	–	–	–
	690 V	kA	5	5	5	–	–	–	–	–	–
DC	125 V (1 switching pole)	kA	–	–	–	16	25	30	16	25	30
	250 V (2 switching poles)	kA	25	36	55	–	–	–	36	55	85
	500 V (3 switching poles)	kA	25	36	55	–	–	–	–	–	–
	600 V (4 switching poles)	kA	8	16	25	–	–	–	–	–	–
Dimensions											
	A	mm	76.2 (3P) 101.6 (4P)		25.4		50.8				
	B	mm	130		130		130				
	C	mm	70		70		70				
	D	mm	88		88		88				

■ Available

– Not available/not present

* On request



3VA11

3VA12

3VA13

3VA14

3VA15 new

3/4-pole	3/4-pole	3/4-pole	3/4-pole	3/4-pole
160 A	250 A	400 A	630 A	1000 A
16 ... 160 A	160 ... 250 A	320 ... 400 A	500 ... 630 A	630 ... 1000 A
690 V	690 V	690 V	690 V	690 V
800 V	800 V	800 V	800 V	800 V
8 kV	8 kV	8 kV	8 kV	8 kV
■	■	■	■	■
0 ... 400 Hz	0 ... 400 Hz	0 ... 400 Hz	0 ... 400 Hz	Up to 500 V 0 ... 400 Hz

N	S	M	H	S	M	H	S	M	H	C	S	M	H	C	M	H	C
36	55	85	100	55	85	100	55	85	100	200	55	85	100	200	85	110	200
25	36	55	70	36	55	70	36	55	70	110	36	55	70	110	55	85	110
16	25	36	55	25	36	36	*	*	*	*	*	*	*	*	*	*	*
7	7	10	10	10	15	15	25	36	55	70	25	36	55	70	36	55	70
7	7	10	10	7	10	10	7	7	10	10	7	7	10	10	25	35	35
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	-	-	-
36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	-	-	-
16	25	36	55	25	36	55	8	16	25	25	8	16	25	25	-	-	-

76.2 (3P) 101.6 (4P)	105 (3P) 140 (4P)	138 (3P) 184 (4P)	138 (3P) 184 (4P)	210 (3P) 280 (4P)
130	158	248	248	320
70	70	110	110	120
88	88	137	137	253

3VA1 basic units up to 1000 A

Application

2



		3VA10	3VA11	3VA11
Electrical characteristics according to IEC 60947-2				
Number of poles		3/4-pole	1-pole	2-pole
Size		100 A	160 A	160 A
Rated operational current I_n at 50 °C ambient temperature		16 ... 100 A	16 ... 160 A	16 ... 160 A
3VA1 molded case circuit breakers for line protection, standard applications (IEC 60947-2)				
Service life (make-break operations)				
Mechanical (NO contact – NC contact)		20000	20000	20000
Electrical	380 ... 415 V	I_n 9000	9000	9000
		$I_n/2$ 15000	15000	15000
	690 V	6300	6300	6300
Trip Units				
TM210	FTFM	■	■	■
TM220	ATFM	–	–	–
TM240	ATAM	–	–	–
3VA1 molded case circuit breakers for starter protection (IEC 60947-4-1 standards and specifications acc. to AC-1)				
Rated operational current I_n at 50 °C ambient temperature		A	–	–
Service life (switching cycles)				
Mechanical (NO contact – NC contact)			–	–
Electrical	380 ... 415 V		–	–
Trip Units				
TM120M	AM	–	–	–
Switch disconnectors (IEC 60947-3)				
Electrical characteristics according to IEC 60947-3				
Rated uninterrupted current I_u at 50 °C ambient temperature		A	–	–
Rated operational voltage U_e 50/60 Hz AC		V	–	–
Rated operational voltage U_e DC		V	–	–
Rated conditional short-circuit current I_q with upstream 3VA1 circuit breaker		kA	–	–
Permissible rated short-time current I_{cw} (1 s)		kA	–	–

■ Available

– Not available/not present

* On request

**3VA11****3VA12****3VA13****3VA14****3VA15 new**

2

3VA11	3VA12	3VA13	3VA14	3VA15 new
3/4-pole 160 A 16 ... 160 A	3/4-pole 250 A 160 ... 250 A	3/4-pole 400 A 320 ... 400 A	3/4-pole 630 A 500 ... 630 A	3/4-pole 1000 A 630 ... 1000 A
20000 9000 15000 6300	20000 8000 14000 5400	15000 6000 12000 4200	15000 4000 8000 2800	10000 5000 * *
■ ■ ■	– – ■	– – ■	– – ■	– – ■
32 ... 125	160, 200	250	400 ... 500	630 ... 800
20000 8000	20000 8000	15000 6000	15000 4000	10000 4000
■	■	■	■	■
63 ... 160 690 500 (3P), 600 (4P) 70 at 415 V 2	250 690 500 (3P), 600 (4P) 70 at 415 V 3	400 690 500 (3P), 600 (4P) * 4.8	630 (3P), 500 (4P) 690 500 (3P), 600 (4P) * 7.6 (3P), 6 (4P)	– – – – –

3VA2 basic units up to 1600 A

Technical data

2



3VA20

3VA21

Electrical characteristics according to IEC 60947-2

Number of poles	3/4-pole	3/4-pole
Size	100 A	160 A
Rated operational current I_n at 50 °C ambient temperature	25 ... 100 A	25 ... 160 A
Rated operational voltage U_n 50/60 Hz AC	690 V	690 V
Rated insulation voltage U_i	800 V	800 V
Rated impulse withstand voltage U_{pulse}	8 kV	8 kV
Use in IT networks	■	■
Frequency	50/60 Hz	50/60 Hz

Breaking capacity

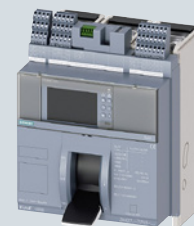
		M	H	C	L	M	H	C	L	
Rated ultimate short-circuit breaking capacity I_{cu}										
50/60 Hz AC	220 ... 240 V	A	85	110	150	200	85	110	150	200
	380 ... 415 V	A	55	85	110	150	55	85	110	150
	440 V	A	55	85	110	150	55	85	110	150
	500 V	A	36	55	85	100	36	55	85	100
	690 V	A	2	2	2	25	2.5	2.5	2.5	25
DC	125 V (1 switching pole)	A	–	–	–	–	–	–	–	–
	250 V (2 switching poles)	A	–	–	–	–	–	–	–	–
	500 V (3 switching poles)	A	–	–	–	–	–	–	–	–
	600 V (4 switching poles)	A	–	–	–	–	–	–	–	–
Rated service short-circuit breaking capacity I_{cs}										
50/60 Hz AC	220 ... 240 V	A	85	110	150	200	85	110	150	200
	380 ... 415 V	A	55	85	110	150	55	85	110	150
	440 V	A	55	85	110	150	55	85	110	150
	500 V	A	36	55	85	100	36	55	85	100
	690 V	A	2	2	2	18	2.5	2.5	2.5	18
DC	125 V (1 switching pole)	A	–	–	–	–	–	–	–	–
	250 V (2 switching poles)	A	–	–	–	–	–	–	–	–
	500 V (3 switching poles)	A	–	–	–	–	–	–	–	–
	600 V (4 switching poles)	A	–	–	–	–	–	–	–	–

Dimensions

	A	mm	105 (3P) 140 (4P)	105 (3P) 140 (4P)
	B	mm	181	181
	C	mm	86	86
	D	mm	107	107

■ Available – Not available/not present

* On request



3VA22				3VA23				3VA24				3VA25			3VA27		
3/4-pole				3/4-pole				3/4-pole				3/4-pole			3/4-pole		
250 A				400 A				630 A				1000 A			1600 A		
160 ... 250 A				250 ... 400 A				400 ... 630 A				630 ... 1000 A			800 ... 1600 A		
690 V				690 V				690 V				690 V			690 V		
800 V				800 V				800 V				800 V			1000 V		
8 kV				8 kV				8 kV				8 kV			8 kV		
■				■				■				■			■		
50/60 Hz				50/60 Hz				50/60 Hz				50/60 Hz			50/60 Hz		
M	H	C	L	M	H	C	L	M	H	C	L	M	H	C	M	H	C
85	110	150	200	85	110	150	*	85	110	150	*	85	110	200	100	150	200
55	85	110	150	55	85	110	*	55	85	110	*	55	85	110	55	85	110
55	85	110	150	55	85	110	*	55	85	110	*	*	*	*	55	85	100
36	55	85	100	36	55	85	*	36	55	85	*	36	55	85	36	55	85
3	3	3	25	5	5	5	*	6	6	6	*	25	35	35	25	36	50
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
85	110	150	200	85	110	150	*	85	110	150	*	85	110	150	100	150	200
55	85	110	150	55	85	110	*	55	85	110	*	55	85	110	55	85	110
55	85	110	150	55	85	110	*	55	85	110	*	*	*	*	55	85	100
36	55	85	100	36	55	65	*	36	55	85	*	36	55	65	36	55	63
3	3	3	18	5	5	5	*	6	6	6	*	19	19	19	25	36	36
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
105 (3P) 140 (4P)				138 (3P) 184 (4P)				138 (3P) 184 (4P)				210 (3P) 280 (4P)			210 (3P) 280 (4P)		
181				248				248				320			291		
86				110				110				120			171 (toggle operating mechanism) 183 (stored energy operating mechanism)		
107				137				137				253			225		

3VA2 basic units up to 1600 A

Application

2



3VA20

3VA21

Electrical characteristics according to IEC 60947-2

Number of poles			3/4-pole	3/4-pole
Size			100 A	160 A
Rated operational current I_n at 50 °C ambient temperature			25 ... 100 A	25 ... 160 A
Service life (make-break operations)				
Mechanical (NO contact – NC contact)				
Electrical	380 ... 415 V	I_n	15000	14000
		$I_n/2$	20000	20000
	690 V		10500	9800

Trip units

ETU320	LI	■	■
ETU330	LIG	■	■
ETU340	ELISA LI	–	■
ETU350	LSI	■	■
ETU550/ETU850	LSI	■	■
ETU560/ETU860	LSIG	■	■
ETU650	LSI	–	–
ETU360	LSIG	–	–
ETU660	LSIG	–	–

3VA2 molded case circuit breakers for motor/starter protection (IEC 60947-4-1 standards and specifications acc. to AC-1)

Rated operational current I_n at 50 °C ambient temperature			–	25 ... 100 A
Service life (make-break operations)				
Mechanical (NO contact – NC contact)				
Electrical	380 ... 415 V		–	14000
Trip units				
ETU310M	I	–	–	■
ETU350M	LSI	–	–	■
ETU550M	LSI	–	–	■
ETU860M	LSIG	–	–	■
ETU320	LI	–	–	–
ETU350	LSI	–	–	–
ETU360	LSIG	–	–	–
ETU650	LSIG	–	–	–
ETU660	LSIG	–	–	–

■ Available – Not available/not present

* On request










3VA22	3VA23	3VA24	3VA25	3VA27
3/4-pole 250 A	3/4-pole 400 A	3/4-pole 630 A	3/4-pole 1000 A	3/4-pole 1600 A
160 ... 250 A	250 ... 400 A	400 ... 630 A	630 ... 1000 A	800 ... 1600 A
25000	20000	20000	10000	10000
12000	6000	4000	5000	2000
17000	12000	8000	–	–
8400	4200	2800	1000	–
■	■	■	■	■
■	■	■	■	–
■	■	■	■	–
■	■	■	■	■
■	■	■	■	–
■	■	■	■	–
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■
160 ... 200 A	250 A	400 ... 500 A	630 ... 800 A	800 ... 1600 A
25000	20000	15000	10000	10000
12000	6000	4000	4000	2000
■	■	■	–	–
■	■	■	■	–
■	■	■	■	–
■	■	■	■	–
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■
–	–	–	–	■

Trip units

Protection system for 3VA molded case circuit breakers up to 1000 A

2

Trip units	Thermal-magnetic	Electronic	Electronic with display	Electronic with display and metering function
	 TM240 I _n /A I _n /A I201_19035	 ETU350 LSI I _n /A t/s I _n =I t _r /s I _n ×I ACT AL1 AL2 I201_18828	 ETU550M LSI ACT COM AL1 AL2 ESC OK I201_19701	 ETU860M LSIG ACT COM AL1 AL2 ESC OK I201_18484
	TM 2-series	ETU 3-series	ETU 5-series	ETU 8-series
Protection function				
Line protection	TM210, TM220, TM240	ETU320, ETU330, ETU340, ETU350	ETU550, ETU560	ETU850, ETU860
Starter protection	TM120M	ETU310M	–	–
Motor protection	–	ETU350M	ETU550M	ETU860M
Integrated functions				
Parameterizing	Setting and reading the parameters • In A	Setting and reading the parameters • In A and s	Setting and reading the parameters • Via display and communication • Fine setting of the parameters • Reading the measured values	Setting and reading the parameters • Via display and communication • Fine setting of the parameters • Reading the measured values
Status display	–	Indicating the ETU status via LEDs	Indicating the ETU status via LEDs	Indicating the ETU status via LEDs
Interface	–	Interface for test devices	Interface for test devices	Interface for test devices
Metering function	–	–	–	Metering function integrated
Optional expansions				
24 V module	–	–	 24 V module for continuous power supply (also without primary current through the molded case circuit breaker)	 24 V module for continuous power supply (also without primary current through the molded case circuit breaker)
External function box	–	 EFB300 external function box for connection to the ETU	 EFB300 external function box for connection to the ETU	 EFB300 external function box for connection to the ETU
Communication module	–	–	 COM060 communication module	 COM060 communication module
Breaker data server	–	–	 COM800/COM100 breaker data server with interface to • PROFIBUS • PROFINET • Modbus RTU • Ethernet (Modbus TCP)	 COM800/COM100 breaker data server with interface to • PROFIBUS • PROFINET • Modbus RTU • Ethernet (Modbus TCP)
External display	–	–	 DSP800 external display for installing in the cubicle door	 DSP800 external display for installing in the cubicle door
Test device	–	 TD300/TD400/TD500 test device	 TD300/TD400/TD500 test device	 TD300/TD400/TD500 test device

Protection functions of the 3VA1 with thermal-magnetic trip unit

	TM120M AM	TM210 FTFM	TM220 ATFM	TM240 ATAM
Protections				
Starter protection	■	–	–	–
Line protection	–	■	■	■
Version available with				
1-pole and 2-pole breakers	–	■	–	–
3-pole breaker	■	■	■	■
4-pole breaker	–	■	■	■
Available protection parameters				
I_r adjustable	–	–	■	■
I_i adjustable	■	–	–	■
I_r fixed	–	■	–	–
I_i fixed	–	■	■	–
I_N ¹⁾	–	■	■	■

¹⁾ 3VA10 only without N protection
 3VA11, 3VA12, 3VA13, 3VA14 without, 50% or 100% N protection
 50% N protection from $I_N \geq 100$ A

Protection functions of the 3VA2 with electronic trip unit

	ETU310M I	ETU320 LI	ETU330 LIG	ETU340 ELISA®	ETU350 LSI	ETU350M LSI	ETU550 LSI	ETU550M LSI	ETU560 LSIG	ETU850 LSI	ETU860 LSIG	ETU860M LSIG
Protection												
Starter protection	■	–	–	–	–	–	–	–	–	–	–	–
Motor protection	–	–	–	–	–	■	–	■	–	–	–	■
Line protection	–	■	■	■	■	–	■	–	■	■	■	–
Generator protection	–	■	■	–	■	–	■	–	■	■	■	–
Version available with												
3-pole without external neutral conductor transformer	■	■	■	■	■	■	–	■	–	–	–	■
3-pole with external neutral conductor transformer	–	–	–	–	–	–	■	–	■	■	■	–
4-pole with protected neutral conductor transformer	–	■	■	■	■	–	■	–	■	■	■	–
Available protection parameters												
Characteristic in L range	I^2t	I^2t	I^2t	I^4t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t	I^2t
I_r	–	■	■	■	■	■	■	■	■	■	■	■
t_r at $6 \times I_r$	–	■	■	–	■	–	■	–	■	■	■	–
t_c	–	–	–	–	–	■	–	■	–	–	–	■
t_p	–	–	–	–	–	–	–	■	–	–	–	■
Thermal image	■	■	■	■	■	■	■	■	■	■	■	■
Thermal image can be switched on/off	–	–	–	–	–	–	■	–	■	■	■	–
I_{sd}	–	–	–	–	■	■	■	■	■	■	■	■
t_{sd} at $8 \times I_r$	–	–	–	–	■	■	■	■	■	■	■	■
Characteristic in S range: I^2t_{sd}	–	–	–	–	■	–	■	–	■	■	■	–
Characteristic in S range: selectable I^2t_{sd} / t_{sd}	–	–	–	–	–	–	■	–	■	■	■	–
I_i	■	■	■	■	■	■	■	■	■	■	■	■
I_N ¹⁾	–	■	■	■	■	–	■	–	■	■	■	–
I_g	–	–	■	–	–	–	–	■	■	–	■	■
t_g at $2 \times I_g$	–	–	■	–	–	–	–	■	■	–	■	■
Characteristic in G range: I^2t_g	–	–	■	–	–	–	–	■	■	–	■	■
Characteristic in G range: selectable I^2t_g / t_g	–	–	■	–	–	–	–	■	■	–	■	■
Ground-fault alarm function	–	–	–	–	–	–	–	■	■	–	■	■
Blocking protection	–	–	–	–	–	–	–	–	–	–	–	■
ZSI in combination with an EFB external function box	–	■	■	■	■	■	■	■	■	■	■	■

¹⁾ Available in a version with external current transformer for N conductor or 4-pole breaker

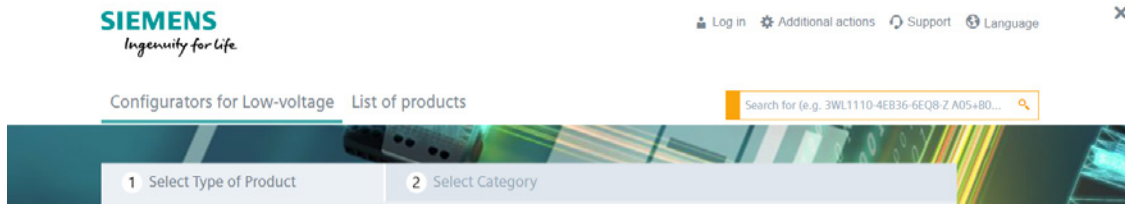
Online configurator highlights

siemens.com/lowvoltage/configurators

2

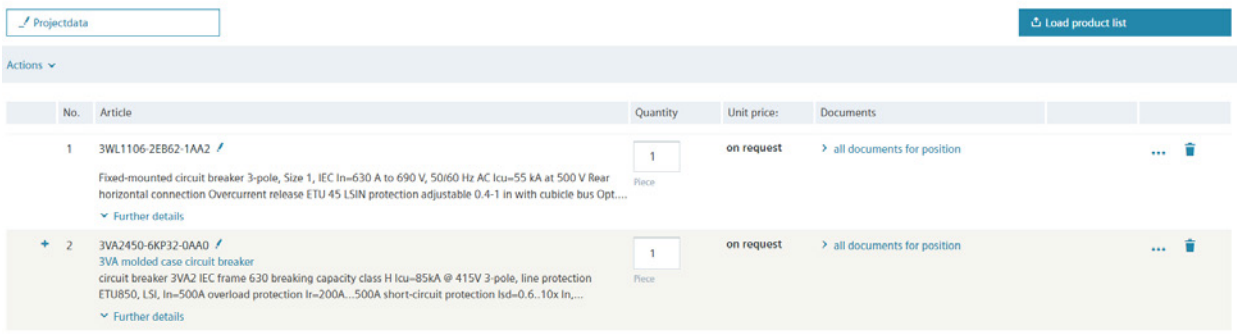
Search function with global direct input

Searches for specific terms and jumps to MLFB based on input to the correct configurator



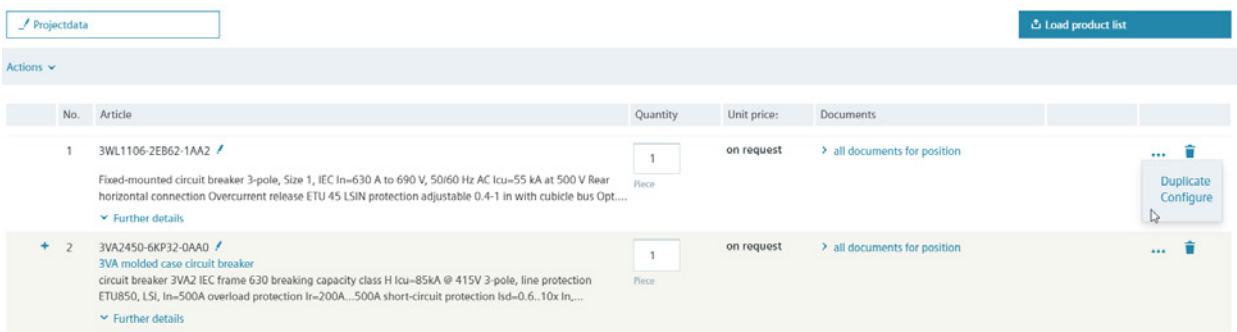
Product list stores multiple configurations and can transfer them collectively to the shopping cart

List of products

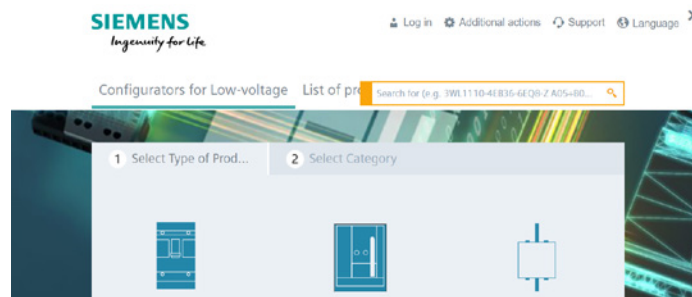


Recall completed configurations for modification or additional configuration

List of products



Responsive Design



www.siemens.com/lowvoltage/3va-configurator and
www.siemens.com/lowvoltage/3va27-configurator

Visualization of the internally mountable accessories (slot assignment)

The configuration is complete. You can order this product.

Basic configuration | Trip units | Type of mounting | Connection technology | Auxiliary release/auxiliary switch | Mountable accessories | Result | CAD/CAM

2019_08.02

Assembly option

Field Assembly

Auxiliary release


Shunt trip left (STL)
110-127 V AC 50/60 Hz / DC

Shunt trip left (STL ED)
None

Undervoltage release (LVR)
None

Universal release (LUN)
None

Slot assignment



Auxiliary switch/alarm switch (changeover contacts - Form C)

Auxiliary switch type HP

AUX auxiliary switch

LCS leading auxiliary switch

Auxiliary switch type HQ

AUX auxiliary switch

AUX auxiliary switch, suitable for electronic circuits

LCS leading auxiliary switch

LCS leading auxiliary switch, suitable for electronic circuits

Alarm switch type HP

EAS alarm switch

Alarm switch type HQ

EAS alarm switch

EAS alarm switch, suitable for electronic circuits

EAS electrical alarm switch

EAS electrical alarm switch, suitable for electronic circuits

Download the individual edz files for 3VA

The configuration is complete. You can order this product.

Basic configuration | Trip units | Type of mounting | Connection technology | Auxiliary release/auxiliary switch | Mountable accessories | Result | CAD/CAM

2019_08.02


Selection

Assembly drawing

3VA molded-case circuit breaker

Preview

3D view | Unit Wiring Diagram IEC | Dimension drawing | Area Model View | Wire frame view



Download - all CAD formats

View: Area Model View

View option: Isometric

File type: Bitmap (*.bmp)

Start generation

Download - all documents

open documents dialog

Documentation and reporting

Choose languages for the data sheet: deutsch

Project data for the datasheet

Download selection of document types

Datasheets (PDF)

EPLAN Macro (EDZ)

Selection of download format

All in a ZIP file

Start generation

Component documentation

3VA molded case circuit breaker (3VA2580-7M312-0A02)

Datasheet (PDF)

EPLAN Macro (EDZ)

© Siemens AG | Application information

Automatic generation of the 3D model, 2D dimension drawing and the internal circuit diagram according to IEC

The configuration is complete. You can order this product.

Basic configuration | Trip units | Type of mounting | Connection technology | Auxiliary release/auxiliary switch | Mountable accessories | Result | CAD/CAM

2019_08.02

Selection

Assembly drawing

3VA molded-case circuit breaker

Communication

Main contactor connections

Form type


Auxiliary release/auxiliary switch

STL 110-127 V AC 50/60 Hz / DC

Mountable accessories

Preview

3D view | Unit Wiring Diagram IEC | Dimension drawing | Area Model View | Wire frame view



Download - all CAD formats

View: Area Model View

View option: Isometric

File type: Bitmap (*.bmp)

Start generation

Download - all documents

open documents dialog

System overview

For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA

2

Basic units



3VA1 for standard applications

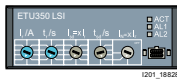


3VA2 for selective applications

Trip unit



Thermal-magnetic trip unit (TMTU)



Electronic trip unit (ETU)



Electronic trip unit (ETU) with display, and optionally with metering function

Trip unit accessories



24 V module



Communication module



Breaker data server



External display



Test device

Installation type



Fixed-mounted



Draw-out unit, complete kit



Plug-in unit, complete kit

Supplementary accessories



Auxiliary circuit connector



Door feedthrough



Position signaling switch



Cylinder lock adapter



Crank

Main conductor connection



Front bus connectors extended



Front bus connectors offset



Circular conductor terminal



Box terminal



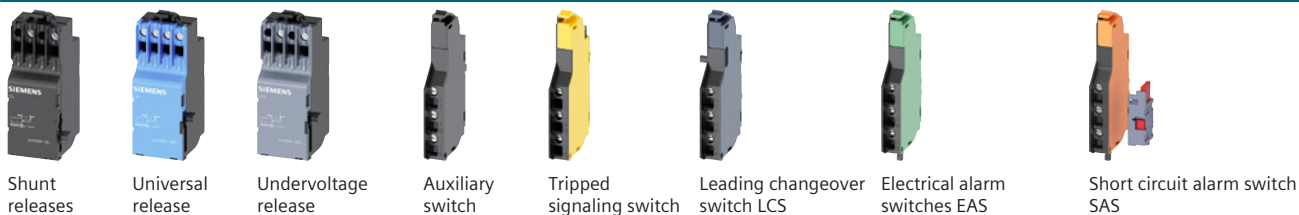
Flat terminals

Connection accessories



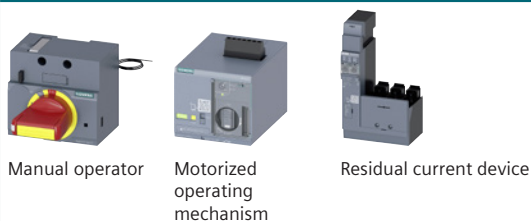
Insulation accessories

Auxiliary releases/auxiliary switches



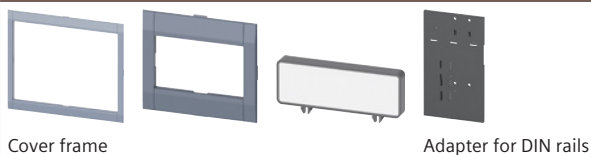
Shunt releases Universal release Undervoltage release Auxiliary switch Tripped signaling switch Leading changeover switch LCS Electrical alarm switches EAS Short circuit alarm switch SAS

Mountable accessories



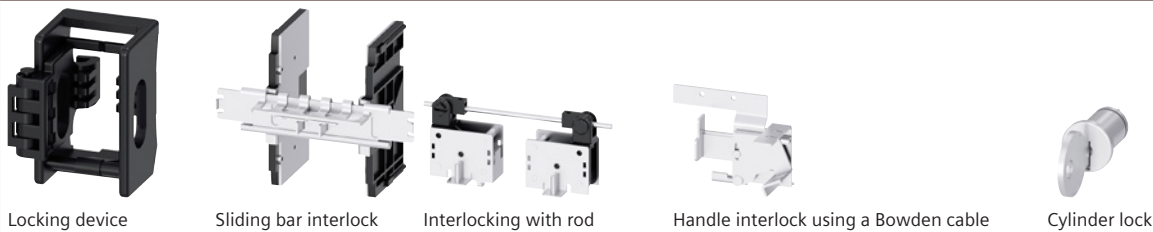
Manual operator Motorized operating mechanism Residual current device

Additional circuit breaker accessories



Cover frame Adapter for DIN rails

Mechanical interlocks



Locking device Sliding bar interlock Interlocking with rod Handle interlock using a Bowden cable Cylinder lock

Structure of the article numbers

Basic configuration

For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA

		3VA	4	5	6	7	8	9	10	11	12	-	OAA0
Trip units	Thermal-magnetic												
	Electronic												
Size	100 A												
	160 A												
	250 A												
	400 A												
	630 A												
	1000 A												
Current setting of the inverse-time delayed overload protection	8 A												0 8
	12.5 A												9 2
	16 A												9 6
	20 A												2 0
	25 A												2 5
	32 A												3 2
	40 A												4 0
	50 A												5 0
	63 A												6 3
	80 A												8 0
	100 A												1 0
	125 A												1 2
	160 A												1 6
	200 A												2 0
	250 A												2 5
	320 A												3 2
	400 A												4 0
	500 A												5 0
	630 A												6 3
	800 A												8 0
	1000 A												1 0
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 380 ... 415 V	Without overload protection, without short-circuit protection												1
	16 kA												2
	25 kA												3
	36 kA												4
	55 kA												5
	70 kA												6
	85 kA												6
	110 kA												7
	150 kA												8

		3VA										- 0AA0					
		4	5	6	7	8	9	10	11	12							
		3VA10	3VA11	3VA12	3VA13	3VA14	3VA15	3VA20	3VA21	3VA22	3VA23	3VA24	3VA25				
Protection function thermal-magnetic	No protection	-	■	■	■	■	-	-	-	-	-	-	-	SD100	-	A	
	Line protection	■	■	-	-	-	-	-	-	-	-	-	-	TM210	FTFM	D	
		-	■	-	-	-	-	-	-	-	-	-	-	TM220	ATFM	E	
		-	■	■	■	■	■	-	-	-	-	-	-	TM240	ATAM	F	
	Starter protection	-	■	-	-	-	-	-	-	-	-	-	-	TM110M	FM	G	
		-	■	■	■	■	■	-	-	-	-	-	-	TM120M	AM	H	
Protection function thermal-magnetic, neutral conductor protection	No protection												A				
	Line protection	Without neutral conductor protection											E				
		50% neutral conductor protection											F				
		100% neutral conductor protection											G				
	Starter protection	Without neutral conductor protection											M				
Protection function solid-state	Line protection	-	-	-	-	-	-	■	■	■	■	■	■	ETU340	ELISA LI	H	K
		-	-	-	-	-	-	■	■	■	■	■	■	ETU320	LI	H	L
		-	-	-	-	-	-	■	■	■	■	■	■	ETU330	LIG	H	M
	Line and generator protection	-	-	-	-	-	-	■	■	■	■	■	■	ETU350	LSI	H	N
	Line and generator protection, with display	-	-	-	-	-	-	■	■	■	■	■	■	ETU550	LSI	J	P
		-	-	-	-	-	-	■	■	■	■	■	-	ETU560	LSIG	J	Q
	Line and generator protection, with display, with metering function	-	-	-	-	-	-	■	■	■	■	■	-	ETU850	LSI	K	P
		-	-	-	-	-	-	■	■	■	■	■	■	ETU860	LSIG	K	Q
	Motor protection	-	-	-	-	-	-	■	■	■	■	■	■	ETU350M	LSI	M	N
	Motor protection, with display	-	-	-	-	-	-	■	■	■	■	■	■	ETU550M	LSI	M	P
	Motor protection, with display, with metering function	-	-	-	-	-	-	■	■	■	■	■	■	ETU860M	LSIG	M	Q
Starter protection	-	-	-	-	-	-	■	■	■	■	■	-	ETU310M	I	M	S	
Number of poles	1-pole	-	■	-	-	-	-	-	-	-	-	-			1		
	2-pole	-	■	-	-	-	-	-	-	-	-	-			2		
	3-pole	■	■	■	■	■	■	■	■	■	■	■			3		
	4-pole	■	■	■	■	■	■	■	■	■	■	■			4		
Connection technology	Nut keeper kit	■	■	■	■	■	■	■	■	■	■	■			2		
	Box terminal	■	■	-	-	-	-	■	-	-	-	-			6		

Internal accessories

Auxiliary switches and alarm switches

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

2

3VA20

3VA21

3VA22

3VA23

3VA24

3VA25

3VA12

3VA13

3VA14

3VA15

3VA10

3VA11

Auxiliary switches AUX

- Used to signal the position of the main contacts of the molded case circuit breaker
- The contacts of the auxiliary switch and the molded case circuit breaker close in unison



Type	Width	I _e	U _e AC/DC	Version					
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard					3VA9988-0AA12
		<1 A	24 V/24 V	Electronic-compatible					3VA9988-0AA13
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard					3VA9988-0AA11

Leading changeover switches LCS

- Used for load shedding, for example
- Signal the opening of the main contacts with a lead time of 20 ms in advance of circuit breaker trips



Type	Width	I _e	U _e AC/DC	Version					
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	–				3VA9988-0AA22
		<1 A	24 V/24 V	Electronic-compatible	–				3VA9988-0AA23
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard	–				3VA9988-0AA21

Trip alarm switches TAS

- Signal every circuit breaker tripping operation
- Are actuated whenever the molded case circuit breaker switches to the TRIP position



Type	Width	I _e	U _e AC/DC	Version					
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard					3VA9988-0AB12
		<1 A	24 V/24 V	Electronic-compatible					3VA9988-0AB13
HP	14 mm (2 slots)	10 A	600 V/250 V	Standard					3VA9988-0AB11

Short circuit alarm switches SAS

- Signal tripping operations only if they have been initiated by a short circuit
- The tripping operation must be reset by deliberate acknowledgement of the fault before the molded case circuit breaker can be switched to ON again



Type	Width	I _e	U _e AC/DC	Version					
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	3VA9988-0AB32	3VA9988-0AB32	3VA9988-0AB34	3VA9988-0AB36	–
		<1 A	24 V/24 V	Electronic-compatible	3VA9988-0AB33	3VA9988-0AB33	3VA9988-0AB35	3VA9988-0AB37	–

Electrical alarm switches EAS

- Are actuated as soon as the main contacts of the molded case circuit breaker open in the event that the breaker is tripped by the ETU



Type	Width	I _e	U _e AC/DC	Version					
HQ	7 mm (1 slot)	6 A	240 V/250 V	Standard	–	–	–	–	3VA9988-0AB22
		<1 A	24 V/24 V	Electronic-compatible	–	–	–	–	3VA9988-0AB23

Auxiliary releases

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA













2

			3VA10	3VA20	3VA25																																																																																															
			3VA11	3VA21																																																																																																
			3VA12	3VA22																																																																																																
			3VA13	3VA23																																																																																																
			3VA14	3VA24																																																																																																
			3VA15																																																																																																	
Shunt trips left STL																																																																																																				
	<ul style="list-style-type: none"> Used for remote-controlled tripping of the molded case circuit breaker Have particularly low power consumption Especially suitable for electrical interlocking in the EI variant 																																																																																																			
	<table border="1"> <thead> <tr> <th>Version</th> <th>U_e 50/60 Hz AC</th> <th>U_e DC</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Standard</td> <td>–</td> <td>12 V</td> <td></td> <td></td> <td>3VA9988-OBL10</td> </tr> <tr> <td></td> <td>24 V</td> <td>24 ... 30 V</td> <td></td> <td></td> <td>3VA9988-OBL30</td> </tr> <tr> <td></td> <td>48 ... 60 V</td> <td>48 ... 60 V</td> <td></td> <td></td> <td>3VA9988-OBL31</td> </tr> <tr> <td></td> <td>110 ... 127 V</td> <td>110 ... 127 V</td> <td></td> <td></td> <td>3VA9988-OBL32</td> </tr> <tr> <td></td> <td>208 ... 277 V</td> <td>220 ... 250 V</td> <td></td> <td></td> <td>3VA9988-OBL33</td> </tr> <tr> <td></td> <td>380 ... 600 V</td> <td>–</td> <td></td> <td></td> <td>3VA9988-OBL20</td> </tr> <tr> <td>Electrical (EI)</td> <td>–</td> <td>24 V</td> <td></td> <td></td> <td>3VA9988-OBM10</td> </tr> </tbody> </table>	Version	U _e 50/60 Hz AC	U _e DC				Standard	–	12 V			3VA9988-OBL10		24 V	24 ... 30 V			3VA9988-OBL30		48 ... 60 V	48 ... 60 V			3VA9988-OBL31		110 ... 127 V	110 ... 127 V			3VA9988-OBL32		208 ... 277 V	220 ... 250 V			3VA9988-OBL33		380 ... 600 V	–			3VA9988-OBL20	Electrical (EI)	–	24 V			3VA9988-OBM10																																																			
Version	U _e 50/60 Hz AC	U _e DC																																																																																																		
Standard	–	12 V			3VA9988-OBL10																																																																																															
	24 V	24 ... 30 V			3VA9988-OBL30																																																																																															
	48 ... 60 V	48 ... 60 V			3VA9988-OBL31																																																																																															
	110 ... 127 V	110 ... 127 V			3VA9988-OBL32																																																																																															
	208 ... 277 V	220 ... 250 V			3VA9988-OBL33																																																																																															
	380 ... 600 V	–			3VA9988-OBL20																																																																																															
Electrical (EI)	–	24 V			3VA9988-OBM10																																																																																															
Shunt trips flexible STF																																																																																																				
	<ul style="list-style-type: none"> Used for remote-controlled tripping of the molded case circuit breaker Flexible installation 																																																																																																			
	<table border="1"> <thead> <tr> <th>Version</th> <th>U_e 50/60 Hz AC</th> <th>U_e DC</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td>24 V</td> <td>–</td> <td>–</td> <td></td> <td>3VA9988-OBA20</td> </tr> <tr> <td></td> <td>48 ... 60 V</td> <td>–</td> <td>–</td> <td></td> <td>3VA9988-OBA21</td> </tr> <tr> <td></td> <td>110 ... 127 V</td> <td>–</td> <td>–</td> <td></td> <td>3VA9988-OBA22</td> </tr> <tr> <td></td> <td>208 ... 277 V</td> <td>–</td> <td>–</td> <td></td> <td>3VA9988-OBA23</td> </tr> <tr> <td></td> <td>380 ... 500 V</td> <td>–</td> <td>–</td> <td></td> <td>3VA9988-OBA24</td> </tr> <tr> <td></td> <td>600 V</td> <td>–</td> <td>–</td> <td></td> <td>3VA9988-OBA25</td> </tr> </tbody> </table>	Version	U _e 50/60 Hz AC	U _e DC					24 V	–	–		3VA9988-OBA20		48 ... 60 V	–	–		3VA9988-OBA21		110 ... 127 V	–	–		3VA9988-OBA22		208 ... 277 V	–	–		3VA9988-OBA23		380 ... 500 V	–	–		3VA9988-OBA24		600 V	–	–		3VA9988-OBA25																																																									
Version	U _e 50/60 Hz AC	U _e DC																																																																																																		
	24 V	–	–		3VA9988-OBA20																																																																																															
	48 ... 60 V	–	–		3VA9988-OBA21																																																																																															
	110 ... 127 V	–	–		3VA9988-OBA22																																																																																															
	208 ... 277 V	–	–		3VA9988-OBA23																																																																																															
	380 ... 500 V	–	–		3VA9988-OBA24																																																																																															
	600 V	–	–		3VA9988-OBA25																																																																																															
Universal releases UNI																																																																																																				
	<ul style="list-style-type: none"> Combination of shunt release and undervoltage release 																																																																																																			
	<table border="1"> <thead> <tr> <th>Version</th> <th>U_e 50/60 Hz AC</th> <th>U_e DC</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td>–</td> <td>12 V</td> <td></td> <td></td> <td>3VA9908-0BD11</td> </tr> <tr> <td></td> <td>–</td> <td>24 V</td> <td></td> <td></td> <td>3VA9908-0BD12</td> </tr> <tr> <td></td> <td>–</td> <td>48 V</td> <td></td> <td></td> <td>3VA9908-0BD13</td> </tr> </tbody> </table>	Version	U _e 50/60 Hz AC	U _e DC					–	12 V			3VA9908-0BD11		–	24 V			3VA9908-0BD12		–	48 V			3VA9908-0BD13																																																																											
Version	U _e 50/60 Hz AC	U _e DC																																																																																																		
	–	12 V			3VA9908-0BD11																																																																																															
	–	24 V			3VA9908-0BD12																																																																																															
	–	48 V			3VA9908-0BD13																																																																																															
Undervoltage releases UVR																																																																																																				
	<ul style="list-style-type: none"> Trips the molded case circuit breaker in the event that the rated voltage of a monitored circuit drops below a minimum permissible limit or fails altogether 																																																																																																			
	<table border="1"> <thead> <tr> <th>Version</th> <th>U_e 50/60 Hz AC</th> <th>U_e DC</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td>–</td> <td>12 V</td> <td></td> <td></td> <td>3VA9908-0BB10</td> </tr> <tr> <td></td> <td>–</td> <td>24 V</td> <td></td> <td></td> <td>3VA9908-0BB11</td> </tr> <tr> <td></td> <td>24 V</td> <td>–</td> <td></td> <td></td> <td>3VA9908-0BB20</td> </tr> <tr> <td></td> <td>–</td> <td>48 V</td> <td></td> <td></td> <td>3VA9908-0BB12</td> </tr> <tr> <td></td> <td>48 V</td> <td>–</td> <td></td> <td></td> <td>3VA9908-0BB21</td> </tr> <tr> <td></td> <td>–</td> <td>60 V</td> <td></td> <td></td> <td>3VA9908-0BB13</td> </tr> <tr> <td></td> <td>60 V</td> <td>–</td> <td></td> <td></td> <td>3VA9908-0BB22</td> </tr> <tr> <td></td> <td>110 V</td> <td>–</td> <td></td> <td></td> <td>3VA9908-0BB23</td> </tr> <tr> <td></td> <td>120 ... 127 V</td> <td>–</td> <td></td> <td></td> <td>3VA9908-0BB24</td> </tr> <tr> <td></td> <td>–</td> <td>125 ... 127 V</td> <td></td> <td></td> <td>3VA9908-0BB14</td> </tr> <tr> <td></td> <td>208 ... 230 V</td> <td>–</td> <td></td> <td></td> <td>3VA9908-0BB25</td> </tr> <tr> <td></td> <td>–</td> <td>220 ... 230 V</td> <td></td> <td></td> <td>3VA9908-0BB15</td> </tr> <tr> <td></td> <td>–</td> <td>250 V</td> <td></td> <td></td> <td>3VA9908-0BB16</td> </tr> <tr> <td></td> <td>380 ... 400 V</td> <td>–</td> <td></td> <td></td> <td>3VA9908-0BB26</td> </tr> <tr> <td></td> <td>440 ... 480 V</td> <td>–</td> <td></td> <td></td> <td>3VA9908-0BB27</td> </tr> </tbody> </table>	Version	U _e 50/60 Hz AC	U _e DC					–	12 V			3VA9908-0BB10		–	24 V			3VA9908-0BB11		24 V	–			3VA9908-0BB20		–	48 V			3VA9908-0BB12		48 V	–			3VA9908-0BB21		–	60 V			3VA9908-0BB13		60 V	–			3VA9908-0BB22		110 V	–			3VA9908-0BB23		120 ... 127 V	–			3VA9908-0BB24		–	125 ... 127 V			3VA9908-0BB14		208 ... 230 V	–			3VA9908-0BB25		–	220 ... 230 V			3VA9908-0BB15		–	250 V			3VA9908-0BB16		380 ... 400 V	–			3VA9908-0BB26		440 ... 480 V	–			3VA9908-0BB27			
Version	U _e 50/60 Hz AC	U _e DC																																																																																																		
	–	12 V			3VA9908-0BB10																																																																																															
	–	24 V			3VA9908-0BB11																																																																																															
	24 V	–			3VA9908-0BB20																																																																																															
	–	48 V			3VA9908-0BB12																																																																																															
	48 V	–			3VA9908-0BB21																																																																																															
	–	60 V			3VA9908-0BB13																																																																																															
	60 V	–			3VA9908-0BB22																																																																																															
	110 V	–			3VA9908-0BB23																																																																																															
	120 ... 127 V	–			3VA9908-0BB24																																																																																															
	–	125 ... 127 V			3VA9908-0BB14																																																																																															
	208 ... 230 V	–			3VA9908-0BB25																																																																																															
	–	220 ... 230 V			3VA9908-0BB15																																																																																															
	–	250 V			3VA9908-0BB16																																																																																															
	380 ... 400 V	–			3VA9908-0BB26																																																																																															
	440 ... 480 V	–			3VA9908-0BB27																																																																																															
Time-delay devices for undervoltage releases																																																																																																				
	<table border="1"> <thead> <tr> <th>Version</th> <th>U_e 50/60 Hz AC</th> <th>U_e DC</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td>110 V</td> <td>110 V</td> <td></td> <td></td> <td>3VA9988-0BF21</td> </tr> <tr> <td></td> <td>230 V</td> <td>230 V</td> <td></td> <td></td> <td>3VA9988-0BF22</td> </tr> <tr> <td></td> <td>–</td> <td>24 V</td> <td></td> <td></td> <td>3VA9988-0BF23</td> </tr> </tbody> </table>	Version	U _e 50/60 Hz AC	U _e DC					110 V	110 V			3VA9988-0BF21		230 V	230 V			3VA9988-0BF22		–	24 V			3VA9988-0BF23																																																																											
Version	U _e 50/60 Hz AC	U _e DC																																																																																																		
	110 V	110 V			3VA9988-0BF21																																																																																															
	230 V	230 V			3VA9988-0BF22																																																																																															
	–	24 V			3VA9988-0BF23																																																																																															

Manual operators

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

2

			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25																																																																								
Front mounted rotary operators																																																																															
<ul style="list-style-type: none"> • Handle • For IEC • Degree of protection IP30 • For 3-pole and 4-pole breakers 																																																																															
<table border="1"> <thead> <tr> <th>Version</th> <th>Illumination kit</th> <th>Door interlock</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td rowspan="4">  Standard (gray) </td> <td rowspan="2">Without</td> <td>Without</td> <td>3VA9157-0EK11</td> <td>3VA9257-0EK11</td> <td>3VA9267-0EK11</td> <td>3VA9467-0EK11</td> <td>3VA9687-0EK11</td> <td></td> </tr> <tr> <td>With</td> <td>3VA9157-0EK21</td> <td>3VA9257-0EK21</td> <td>3VA9267-0EK21</td> <td>3VA9467-0EK21</td> <td>3VA9687-0EK21</td> <td></td> </tr> <tr> <td rowspan="2">With</td> <td>Without</td> <td>3VA9157-0EK13</td> <td>3VA9257-0EK13</td> <td>3VA9267-0EK13</td> <td>3VA9467-0EK13</td> <td>–</td> <td></td> </tr> <tr> <td>With</td> <td>3VA9157-0EK23</td> <td>3VA9257-0EK23</td> <td>3VA9267-0EK23</td> <td>3VA9467-0EK23</td> <td>–</td> <td></td> </tr> <tr> <td rowspan="4">  EMERGENCY-STOP (red/yellow) </td> <td rowspan="2">Without</td> <td>Without</td> <td>3VA9157-0EK15</td> <td>3VA9257-0EK15</td> <td>3VA9267-0EK15</td> <td>3VA9467-0EK15</td> <td>3VA9687-0EK15</td> <td></td> </tr> <tr> <td>With</td> <td>3VA9157-0EK25</td> <td>3VA9257-0EK25</td> <td>3VA9267-0EK25</td> <td>3VA9467-0EK25</td> <td>3VA9687-0EK25</td> <td></td> </tr> <tr> <td rowspan="2">With</td> <td>Without</td> <td>3VA9157-0EK17</td> <td>3VA9257-0EK17</td> <td>3VA9267-0EK17</td> <td>3VA9467-0EK17</td> <td>–</td> <td></td> </tr> <tr> <td>With</td> <td>3VA9157-0EK27</td> <td>3VA9257-0EK27</td> <td>3VA9267-0EK27</td> <td>3VA9467-0EK27</td> <td>–</td> <td></td> </tr> </tbody> </table>									Version	Illumination kit	Door interlock							 Standard (gray)	Without	Without	3VA9157-0EK11	3VA9257-0EK11	3VA9267-0EK11	3VA9467-0EK11	3VA9687-0EK11		With	3VA9157-0EK21	3VA9257-0EK21	3VA9267-0EK21	3VA9467-0EK21	3VA9687-0EK21		With	Without	3VA9157-0EK13	3VA9257-0EK13	3VA9267-0EK13	3VA9467-0EK13	–		With	3VA9157-0EK23	3VA9257-0EK23	3VA9267-0EK23	3VA9467-0EK23	–		 EMERGENCY-STOP (red/yellow)	Without	Without	3VA9157-0EK15	3VA9257-0EK15	3VA9267-0EK15	3VA9467-0EK15	3VA9687-0EK15		With	3VA9157-0EK25	3VA9257-0EK25	3VA9267-0EK25	3VA9467-0EK25	3VA9687-0EK25		With	Without	3VA9157-0EK17	3VA9257-0EK17	3VA9267-0EK17	3VA9467-0EK17	–		With	3VA9157-0EK27	3VA9257-0EK27	3VA9267-0EK27	3VA9467-0EK27	–	
Version	Illumination kit	Door interlock																																																																													
 Standard (gray)	Without	Without	3VA9157-0EK11	3VA9257-0EK11	3VA9267-0EK11	3VA9467-0EK11	3VA9687-0EK11																																																																								
		With	3VA9157-0EK21	3VA9257-0EK21	3VA9267-0EK21	3VA9467-0EK21	3VA9687-0EK21																																																																								
	With	Without	3VA9157-0EK13	3VA9257-0EK13	3VA9267-0EK13	3VA9467-0EK13	–																																																																								
		With	3VA9157-0EK23	3VA9257-0EK23	3VA9267-0EK23	3VA9467-0EK23	–																																																																								
 EMERGENCY-STOP (red/yellow)	Without	Without	3VA9157-0EK15	3VA9257-0EK15	3VA9267-0EK15	3VA9467-0EK15	3VA9687-0EK15																																																																								
		With	3VA9157-0EK25	3VA9257-0EK25	3VA9267-0EK25	3VA9467-0EK25	3VA9687-0EK25																																																																								
	With	Without	3VA9157-0EK17	3VA9257-0EK17	3VA9267-0EK17	3VA9467-0EK17	–																																																																								
		With	3VA9157-0EK27	3VA9257-0EK27	3VA9267-0EK27	3VA9467-0EK27	–																																																																								
Door mounted rotary operators with tolerance compensation																																																																															
<ul style="list-style-type: none"> • Shaft 300 mm (325 mm for 3VA15/3VA25) • With mounting tolerance compensation • Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25) • Degree of protection IP65 • For 3-pole and 4-pole breakers 																																																																															
<table border="1"> <thead> <tr> <th>Version</th> <th>Illumination kit</th> <th>Door interlock</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td rowspan="2">  Standard (gray) </td> <td rowspan="2">Without</td> <td>With</td> <td>3VA9157-0FK21</td> <td>3VA9257-0FK21</td> <td>3VA9267-0FK21</td> <td>3VA9467-0FK21</td> <td>3VA9687-0FK21</td> <td></td> </tr> <tr> <td>With</td> <td>3VA9157-0FK23</td> <td>3VA9257-0FK23</td> <td>3VA9267-0FK23</td> <td>3VA9467-0FK23</td> <td>3VA9467-0FK23</td> <td></td> </tr> <tr> <td rowspan="2">  EMERGENCY-STOP (red/yellow) </td> <td rowspan="2">Without</td> <td>With</td> <td>3VA9157-0FK25</td> <td>3VA9257-0FK25</td> <td>3VA9267-0FK25</td> <td>3VA9467-0FK25</td> <td>3VA9687-0FK25</td> <td></td> </tr> <tr> <td>With</td> <td>3VA9157-0FK27</td> <td>3VA9257-0FK27</td> <td>3VA9267-0FK27</td> <td>3VA9467-0FK27</td> <td>3VA9467-0FK27</td> <td></td> </tr> </tbody> </table>									Version	Illumination kit	Door interlock							 Standard (gray)	Without	With	3VA9157-0FK21	3VA9257-0FK21	3VA9267-0FK21	3VA9467-0FK21	3VA9687-0FK21		With	3VA9157-0FK23	3VA9257-0FK23	3VA9267-0FK23	3VA9467-0FK23	3VA9467-0FK23		 EMERGENCY-STOP (red/yellow)	Without	With	3VA9157-0FK25	3VA9257-0FK25	3VA9267-0FK25	3VA9467-0FK25	3VA9687-0FK25		With	3VA9157-0FK27	3VA9257-0FK27	3VA9267-0FK27	3VA9467-0FK27	3VA9467-0FK27																															
Version	Illumination kit	Door interlock																																																																													
 Standard (gray)	Without	With	3VA9157-0FK21	3VA9257-0FK21	3VA9267-0FK21	3VA9467-0FK21	3VA9687-0FK21																																																																								
		With	3VA9157-0FK23	3VA9257-0FK23	3VA9267-0FK23	3VA9467-0FK23	3VA9467-0FK23																																																																								
 EMERGENCY-STOP (red/yellow)	Without	With	3VA9157-0FK25	3VA9257-0FK25	3VA9267-0FK25	3VA9467-0FK25	3VA9687-0FK25																																																																								
		With	3VA9157-0FK27	3VA9257-0FK27	3VA9267-0FK27	3VA9467-0FK27	3VA9467-0FK27																																																																								
Door mounted rotary operators without tolerance compensation new																																																																															
<ul style="list-style-type: none"> • Shaft 300 mm (325 mm for 3VA15/3VA25) • Handle with masking plate 75 × 75 mm (100 × 100 mm for 3VA15/3VA25) • Degree of protection IP65 • For 3-pole and 4-pole breakers 																																																																															
<table border="1"> <thead> <tr> <th>Version</th> <th>Illumination kit</th> <th>Door interlock</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>  Standard (gray) </td> <td>Without</td> <td>With</td> <td>3VA9157-0FK61</td> <td>3VA9257-0FK61</td> <td>3VA9267-0FK61</td> <td>3VA9467-0FK61</td> <td>3VA9687-0FK61</td> <td></td> </tr> </tbody> </table>									Version	Illumination kit	Door interlock							 Standard (gray)	Without	With	3VA9157-0FK61	3VA9257-0FK61	3VA9267-0FK61	3VA9467-0FK61	3VA9687-0FK61																																																						
Version	Illumination kit	Door interlock																																																																													
 Standard (gray)	Without	With	3VA9157-0FK61	3VA9257-0FK61	3VA9267-0FK61	3VA9467-0FK61	3VA9687-0FK61																																																																								
Door mounted rotary operators without handle																																																																															
<ul style="list-style-type: none"> • For IEC • Degree of protection IP30 • For 3-pole and 4-pole breakers 																																																																															
<table border="1"> <thead> <tr> <th>Version</th> <th>Illumination kit</th> <th>Door interlock</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>  With shaft stub (gray) </td> <td>–</td> <td>Without</td> <td>3VA9157-0GK00</td> <td>3VA9257-0GK00</td> <td>3VA9267-0GK00</td> <td>3VA9467-0GK00</td> <td>3VA9687-0GK00</td> <td></td> </tr> </tbody> </table>									Version	Illumination kit	Door interlock							 With shaft stub (gray)	–	Without	3VA9157-0GK00	3VA9257-0GK00	3VA9267-0GK00	3VA9467-0GK00	3VA9687-0GK00																																																						
Version	Illumination kit	Door interlock																																																																													
 With shaft stub (gray)	–	Without	3VA9157-0GK00	3VA9257-0GK00	3VA9267-0GK00	3VA9467-0GK00	3VA9687-0GK00																																																																								

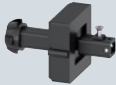
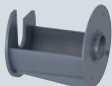

			3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25	
Side wall mounted rotary operators								
	<ul style="list-style-type: none"> Rotary operator with shaft 300 mm Handle with masking plate 75 × 75 mm Degree of protection IP65 For 3-pole and 4-pole breakers 							
Version	Mounting bracket	Illumination kit						
Standard (gray)	Without	Without	3VA9157-OPK11	3VA9257-OPK11	3VA9267-OPK11	3VA9467-OPK11	–	
		With	3VA9157-OPK13	3VA9257-OPK13	3VA9267-OPK13	3VA9467-OPK13	–	
EMERGENCY-STOP (red/yellow)	Without	Without	3VA9157-OPK15	3VA9257-OPK15	3VA9267-OPK15	3VA9467-OPK15	–	
		With	3VA9157-OPK17	3VA9257-OPK17	3VA9267-OPK17	3VA9467-OPK17	–	
Side wall mounted rotary operators with mounting plates								
	<ul style="list-style-type: none"> Rotary operator with short shaft and mounting plate for mounting directly on the side wall Handle with masking plate 75 × 75 mm Degree of protection IP65 For 3-pole and 4-pole breakers 							
Version	Mounting bracket	Illumination kit						
Standard (gray)	With	Without	3VA9157-OPK51	3VA9257-OPK51	3VA9267-OPK51	–	–	
		With	3VA9157-OPK53	3VA9257-OPK53	3VA9267-OPK53	–	–	
EMERGENCY-STOP (red/yellow)	With	Without	3VA9157-OPK55	3VA9257-OPK55	3VA9267-OPK55	–	–	
		With	3VA9157-OPK57	3VA9257-OPK57	3VA9267-OPK57	–	–	
Extended DIN rails for N/PE terminals new								
	Version	Rated current						
	For mounting plate	Up to 250 A	3VA9987-OGL30	3VA9987-OGL30	3VA9987-OGL30	–	–	
Auxiliary switch modules for rotary operating mechanisms new								
	Version							
	2× leading to "ON"		3VA9257-OGX10	3VA9257-OGX10	3VA9467-OGX10	3VA9467-OGX10	–	
	2× leading to "ON" and 1× leading to "OFF"		–	–	3VA9467-OGX20	3VA9467-OGX20	–	
Mounting adapters for side wall mounted rotary operators new								
	Version							
	Necessary accessories for 3VA side wall mounted rotary operators, if 3VA9...-OGX.0 auxiliary switch modules are used		3VA9257-OGX01	3VA9257-OGX01	3VA9467-OGX01	–	–	
Masking plates, standard new								
	Version							
	Necessary accessories for door mounted rotary operators and 3VA side wall mounted rotary operators, if 3VA9...-OGX.0 auxiliary switch modules are used		8UD1900-0BB01	8UD1900-0BB01	8UD1900-0BB01	8UD1900-0BB01	–	
Masking plates, EMERGENCY STOP new								
	Version							
	Necessary accessories for door mounted rotary operators and 3VA side wall mounted rotary operators, if 3VA9...-OGX.0 auxiliary switch modules are used		8UD1900-0BB05	8UD1900-0BB05	8UD1900-0BB05	8UD1900-0BB05	–	

Manual operators

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

2

		3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
Supplementary handles for door mounted rotary operators						
	• For operation when cabinet door is open					
	Version					
	Standard (gray)	3VA9287-0GC01	3VA9287-0GC01	3VA9487-0GC01	3VA9487-0GC11	3VA9687-0GC01
EMERGENCY-STOP (red/yellow)	3VA9287-0GC05	3VA9287-0GC05	3VA9487-0GC05	3VA9487-0GC15	3VA9687-0GC05	
Handles						
	• With masking plate					
	Version	Tolerance compensation				
	Standard (gray)	With		8UD1721-0AB21	8UD1731-0AB21	8UD1741-0AB21
		Without		8UD1721-0AB11	8UD1731-0AB11	8UD1741-0AB11
EMERGENCY-STOP (red/yellow)	With		8UD1721-0AB25	8UD1731-0AB25	8UD1741-0AB25	
	Without		8UD1721-0AB15	8UD1731-0AB15	8UD1741-0AB15	
Handle extensions						
	• Note: The handle lever extension is already included in the scope of supply of the breakers.					
					3VA9487-0SC10	3VA9987-0SC10
Shafts						
	Versions	Length				
	8 × 8 mm	300 mm		8UD1900-2WA00		–
		600 mm		8UD1900-2WB00		–
	12 × 12 mm	300 mm	–	–	–	8UD1900-4WA00
	600 mm	–	–	–	8UD1900-4WB00	
Adapters for shafts						
	Versions	Purpose				
	8 × 8 mm	With door mounted rotary operator and side wall mounted rotary operator		8UD1900-2DA00		–
	12 × 12 mm	For door mounted rotary operator		–	–	8UD1900-4DA00
Door couplings						
	Versions					
	8 × 8 mm			8UD1900-2HA00		–
	12 × 12 mm			–	–	8UD1900-4HA00

		3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
Mounting tolerance compensations						
Versions						
	8 × 8 mm	8UD1900-2GA00				–
	12 × 12 mm	–	–	–	–	8UD1900-4GA00
Fixing brackets for shafts						
		3VA9287-0GA80		3VA9487-0GA80		3VA9687-0GA80
Variable depth adapters						
	Size					
	8 × 8 mm	3VA9487-0GB10				–


Manual operators

Configure your molded case circuit breaker easily online at www.siemens.com/lowvoltage/configurator-3VA

2

					3VA20	
					3VA21	
					3VA22	
					3VA23	
					3VA24	
		3VA10	3VA13	3VA15		3VA25
		3VA11	3VA14			
		3VA12				

Labeling plates for manual operators

	3VA9087-OSX10
---	---------------

Illumination kits for manual operators

- 24 V DC voltage

Version	Rated current					
Front rotary operating mechanism	100 ... 250 A	8UD1900-0KA10	–	–	–	–
	100 ... 630 A	–	8UD1900-0KA20	–	8UD1900-0KA20	–
	630 ... 1000 A	–	–	8UD1900-0KA30	–	8UD1900-0KA30
Door mounted rotary operator and side wall mounted rotary operator	100 ... 630 A	8UD1900-0KA20	8UD1900-0KA20	8UD1900-0KA20	8UD1900-0KA20	–
	630 ... 1000 A	–	–	–	–	8UD1900-0KA30

Cylinder locks (type Kaba), standard masking plates

Purpose	Key					
For door mounted rotary operator and side wall mounted rotary operator (in the masking plate)	1	8UD1900-0MB01	8UD1900-0MB01	–	8UD1900-0MB01	–
	2	8UD1900-0NB01	8UD1900-0NB01	–	8UD1900-0NB01	–
	3	8UD1900-0PB01	8UD1900-0PB01	–	8UD1900-0PB01	–
	4	8UD1900-0QB01	8UD1900-0QB01	–	8UD1900-0QB01	–

Cylinder locks (type Kaba), EMERGENCY OFF masking plates

Purpose	Key					
For door mounted rotary operator and side wall mounted rotary operator (in the masking plate)	1	8UD1900-0MB05	8UD1900-0MB05	–	8UD1900-0MB05	–
	2	8UD1900-0NB05	8UD1900-0NB05	–	8UD1900-0NB05	–
	3	8UD1900-0PB05	8UD1900-0PB05	–	8UD1900-0PB05	–
	4	8UD1900-0QB05	8UD1900-0QB05	–	8UD1900-0QB05	–

Cylinder locks (type Ronis)

- Includes a lock with 2 keys
- For locking or interlocking
- For installation in all rotary operators
- For mounting in the adapter kit for the accessories compartment
- Note: The cylinder lock adapter for rotary operators is also needed for locking or interlocking circuit breakers via rotary operators

Key					
1				3VA9980-0VL10	
3				3VA9980-0VL30	
4				3VA9980-0VL40	

Cylinder lock adapters for rotary operators

- To mount the cylinder lock in the rotary operator (also possible with door mounted rotary operator and side wall mounted rotary operator)

Rated current					
100 ... 630 A	3VA9980-0LF20	3VA9980-0LF20	–	3VA9980-0LF20	–
1000 A	–	–	3VA9680-0LF20	–	3VA9680-0LF20

Motor operators

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

2

Side mounted motor operators (MO310)



- Cover size 45 mm

Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically		Break time, typically		Rated operational power
		for 3VA1	for 3VA2	for 3VA1	for 3VA2	
■	■	<300 ms	–	<300 ms	–	250 W, max. 500 W (60 ms)

Motor operators without stored energy operators (MO320)



Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically		Break time, typically		Rated operational power
		for 3VA1	for 3VA2	for 3VA1	for 3VA2	
■	■	<800 ms (160 A, 250A)	<1000 ms (250 A), <1700 ms (630 A)	<800 ms (160 A, 250A)	<1000 ms (250 A), <1400 ms (630 A)	250 W, max. 500 W (60 ms)

Motor operators with stored energy operators (SEO520)



- Synchronizable remote operating mechanism with optional communication link
- Has two spring assemblies that are used to switch the 3VA2 molded case circuit breaker on and off quickly. This new principle in the MCCB area ensures fast, reliable and easily controllable switching sequences, especially in load transfer switching applications.
- The connection with the COM060 communication module, via a plug-in connection, integrates the SEO520 into the communication environment of the 3VA molded case circuit breakers and ensures that the molded case circuit breaker can also be switched via the supported communication networks and the powerconfig and powermanager software packages.
- **Note:** On account of the fast switching times, the SEO520 cannot be used with a leading changeover switch LCS.

Addressable via control signals	Isolating features in accordance with IEC/EN 60947-1	Make time, typically		Break time, typically		Rated operational power
		for 3VA1	for 3VA2	for 3VA1	for 3VA2	
■	■	–	<80 ms	–	<80 ms	300 W, max. 500 W (60 ms)

Mechanical operating cycles counters (for installation in the SEO520)



Mounting	Article No.
For installation in the SEO520	3VA9987-0HX10

Cylinder lock adapters for SEO520



Mounting	Article No.
For installation of cylinder locks in the SEO520	3VA9980-0LF30

Cylinder locks (type Ronis)



Key	Article No.
1	3VA9980-0VL10
3	3VA9980-0VL30
4	3VA9980-0VL40

		3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
Rated control supply voltage	With communication				
42 ... 60 V AC, 24 ... 60 V DC	–	3VA9117-0HB10	–	–	–
110 ... 230 V AC, 110 ... 250 V DC	–	3VA9117-0HB20	–	–	–
Rated control supply voltage	With communication				
24 ... 60 V DC	–	3VA9157-0HA10	3VA9257-0HA10	3VA9267-0HA10	3VA9467-0HA10
110 ... 230 V AC, 110 ... 250 V DC	–	3VA9157-0HA20	3VA9257-0HA20	3VA9267-0HA20	3VA9467-0HA20
Rated control supply voltage	With communication				
24 V DC	–	–	–	3VA9267-0HC10	–
42 ... 60 V AC/DC	–	–	–	3VA9267-0HC20	–
110 ... 230 V AC, 110 ... 250 V DC	–	–	–	3VA9267-0HC30	–
24 V DC	Yes	–	–	3VA9267-0HC15	–
110 ... 230 V AC, 110 ... 250 V DC	Yes	–	–	3VA9267-0HC35	–



Reset mode

All motor operators have the following reset modes:

Reset mode 1: Automatic reset
Reset mode 2: Reset via OFF-signal

The motor operator with SEO520 stored energy operator additionally has:

Reset mode 3: Reset via OFF-signal with additional acknowledge signal

Connection technology



- ① For mounting onto the circuit breaker
② For mounting onto withdrawable and plug-in units

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

3VA10
3VA11

Box terminals

	Connection options	Scope of supply	Copper stranded	
	① ②	3 single terminals	1.5 ... 70 mm ²	3VA9153-OJA11
			6 ... 120 mm ²	–
			25 ... 185 mm ²	–
			50 ... 185 mm ²	–
			35 ... 300 mm ²	–
	① ②	4 single terminals	1.5 ... 70 mm ²	3VA9154-OJA11
			6 ... 120 mm ²	–
			25 ... 185 mm ²	–
			50 ... 185 mm ²	–
			35 ... 300 mm ²	–

Nut keeper units

	Connection options	Scope of supply	Max. tap width	Max. tap thickness		
	① ②	3 single terminals	17 mm	6.5 mm	3VA9113-OQA00	
			25 mm	8 mm	–	
			35 mm	10 mm	–	
			Nut keeper kit for 3-pole breakers, 1 terminal cover	50 mm	25 mm	–
				① ②	4 single terminals	17 mm
25 mm	8 mm	–				
35 mm	10 mm	–				
Nut keeper kit for 4-pole breakers, 1 terminal cover	50 mm	28 mm				–

Circular conductor terminals, 1 cable

	Connection options	Scope of supply	Copper/aluminum stranded	
	① ②	3 single terminals	1.5 ... 10 mm ² new	3VA9113-OJB10
			1.5 ... 50 mm ²	–
			10 ... 95 mm ²	3VA9113-OJB11
			16 ... 185 mm ²	–
			35 ... 185 mm ²	–
			50 ... 300 mm ²	–
	① ②	4 single terminals	1.5 ... 10 mm ² new	3VA9114-OJB10
			1.5 ... 50 mm ²	–
			10 ... 95 mm ²	3VA9114-OJB11
			16 ... 185 mm ²	–
			35 ... 185 mm ²	–
			50 ... 300 mm ²	–

¹⁾ Only permitted up to 400 A

²⁾ Maximum current-carrying capacity of copper cables 380 A. Maximum current-carrying capacity of aluminum cables 310 A

	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
–	–	–	–
3VA9253-0JA11	3VA9163-0JA12	–	–
–	3VA9263-0JA12	–	–
3VA9253-0JA12	–	–	–
–	–	3VA9483-0JA13 ¹⁾	–
–	–	–	–
3VA9254-0JA11	3VA9164-0JA12	–	–
–	3VA9264-0JA12	–	–
3VA9254-0JA12	–	–	–
–	–	3VA9484-0JA13 ¹⁾	–
–	–	–	–
3VA9213-0QA00	3VA9203-0QA00	–	–
–	–	3VA9403-0QA00	–
–	–	–	3VA9603-0QA00
–	–	–	–
3VA9214-0QA00	3VA9204-0QA00	–	–
–	–	3VA9404-0QA00	–
–	–	–	3VA9604-0QA00
–	–	–	–
–	3VA9103-0JB11	–	–
–	–	–	–
–	3VA9263-0JB12	–	–
3VA9253-0JB12	–	–	–
–	–	3VA9383-0JB13 ²⁾	–
–	3VA9104-0JB11	–	–
–	–	–	–
–	3VA9264-0JB12	–	–
3VA9254-0JB12	–	–	–
–	–	3VA9384-0JB13 ²⁾	–

Connection technology



- 1 For mounting onto the circuit breaker
2 For mounting onto withdrawable and plug-in units

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

3VA10
3VA11

Circular conductor terminals with auxiliary conductor terminals, 1 cable²⁾

Image	Connection options		Scope of supply	Copper/aluminum stranded	Product code
	1	2			
	1	2	3 single terminals	1.5 ... 10 mm ² new	3VA9113-OJG10
				1.5 ... 50 mm ²	–
				10 ... 95 mm ²	3VA9113-OJG11
				16 ... 185 mm ²	–
				35 ... 185 mm ²	–
	1	2	4 single terminals	1.5 ... 10 mm ² new	3VA9114-OJG10
				1.5 ... 50 mm ²	–
				10 ... 95 mm ²	3VA9114-OJG11
				16 ... 185 mm ²	–
				35 ... 185 mm ²	–
		50 ... 300 mm ²	–		

Circular conductor terminals, 2 cables

Image	Connection options		Scope of supply	Copper/aluminum stranded	Aux. conductor terminal	Product code
	1	2				
	1	2	3 single terminals, 1 short terminal cover	120 ... 300 mm ²	No	–
					Yes ²⁾	–
	1	2	4 single terminals, 1 short terminal cover	120 ... 300 mm ²	No	–
					Yes ²⁾	–

Circular conductor terminals, 3 cables

Image	Connection options		Scope of supply	Copper/aluminum stranded	Aux. conductor terminal	Product code
	1	2				
	1	2	3 single terminals, 1 short terminal cover	120 ... 185 mm ²	No	–
					Yes ²⁾	–
	1	2	4 single terminals, 1 short terminal cover	120 ... 185 mm ²	No	–
					Yes ²⁾	–

Auxiliary conductor terminals for box terminals²⁾

Image	Version		Product code
	1	2	
	1	2	3VA9110-0WB00
			3VA9150-0WB00

Auxiliary conductor terminals for busbars²⁾

Image	Version		Product code
	1	2	
	1	2	3VA9110-0WC00
			3VA9150-0WC00

¹⁾ Maximum current-carrying capacity of copper cables 380 A
Maximum current-carrying capacity of aluminum cables 310 A

²⁾ Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²

	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA12			
–	–	–	–
–	3VA9103-OJG11	–	–
–	–	–	–
–	3VA9263-OJG12	–	–
3VA9253-OJG12	–	–	–
–	–	3VA9383-OJG13 ¹⁾	–
–	3VA9104-OJG11	–	–
–	–	–	–
–	3VA9264-OJG12	–	–
3VA9254-OJG12	–	–	–
–	–	3VA9384-OJG13 ¹⁾	–
–	–	–	3VA9503-OJB23
–	–	–	3VA9503-OJG23
–	–	–	3VA9504-OJB23
–	–	–	3VA9504-OJG23
–	–	–	3VA9503-OJB32
–	–	–	3VA9503-OJG32
–	–	–	3VA9504-OJB32
–	–	–	3VA9504-OJG32
3VA9200-0WB00	3VA9200-0WB00	3VA9480-0WB00	–
3VA9280-0WB00	3VA9280-0WB00	3VA9480-0WB00	–
3VA9200-0WC00	3VA9200-0WC00	3VA9480-0WC00	–
3VA9280-0WC00	3VA9280-0WC00	3VA9480-0WC00	–

Connection technology



- ① For mounting onto the circuit breaker
② For mounting onto withdrawable and plug-in units

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

2

Front bus connectors extended



Number of poles	Connection options	Scope of supply	Max. tap width	Max. tap thickness
1P	① –	1 busbar connection piece	22 mm	8 mm
3P	① ②	3 single terminals, 2 phase barriers	22 mm	8 mm
			32 mm	10 mm
			40 mm	12.5 mm
			50 mm	28 mm
4P	① ②	4 single terminals, 3 phase barriers	22 mm	8 mm
			32 mm	10 mm
			40 mm	12.5 mm
			50 mm	28 mm

Front bus connectors offset

- Distance between pole centers:
 - 100/160 A = 35 mm
 - 250 A = 45 mm
 - 400/630 A = 70 mm



Number of poles	Connection options	Scope of supply	Max. tap width	Max. tap thickness
3P	① ②	3 single terminals, 2 phase barriers	30 mm	8 mm
			35 mm	10 mm
			60 mm	12.5 mm
4P	① ②	4 single terminals, 3 phase barriers	30 mm	8 mm
			35 mm	10 mm
			60 mm	12.5 mm

Bus connectors edgewise



Number of poles	Connection options	Scope of supply	Max. tap width	Max. tap thickness
3P	① ②	3 single terminals, 2 phase barriers	20 mm	6 mm
			25 mm	7 mm
			40 mm	8 mm
4P	① ②	4 single terminals, 3 phase barriers	20 mm	6 mm
			25 mm	7 mm
			40 mm	8 mm

Nut keeper units, right-angled¹⁾



Number of poles	Connection options	Scope of supply	Max. tap width	Max. tap thickness
3P	① ②	3 single terminals, 2 phase barriers	22 mm	8 mm
			32 mm	10 mm
			40 mm	12.5 mm
4P	① ②	4 single terminals, 3 phase barriers	22 mm	8 mm
			32 mm	10 mm
			40 mm	12.5 mm

¹⁾ Can only be connected to breaker side N, 1, 3, 5

	3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9151-QQB00		–	–	–	–
3VA9153-QQB00		–	–	–	–
–	3VA9253-QQB00	3VA9263-QQB00	–	–	–
–	–	–	3VA9483-QQB00	–	–
–	–	–	–	3VA9603-QQB00	–
3VA9154-QQB00		–	–	–	–
–	3VA9254-QQB00	3VA9264-QQB00	–	–	–
–	–	–	3VA9484-QQB00	–	–
–	–	–	–	3VA9604-QQB00	–
3VA9153-QQC00		–	–	–	–
–	3VA9253-QQC00	3VA9263-QQC00	–	–	–
–	–	–	3VA9483-QQC00	–	–
3VA9154-QQC00		–	–	–	–
–	3VA9254-QQC00	3VA9264-QQC00	–	–	–
–	–	–	3VA9484-QQC00	–	–
3VA9153-QQD00		–	–	–	–
–	3VA9253-QQD00	3VA9263-QQD00	–	–	–
–	–	–	3VA9483-QQD00	–	–
3VA9154-QQD00		–	–	–	–
–	3VA9254-QQD00	3VA9264-QQD00	–	–	–
–	–	–	3VA9484-QQD00	–	–
3VA9113-QQG00		–	–	–	–
–	3VA9213-QQG00	3VA9223-QQG00	–	–	–
–	–	–	3VA9403-QQG00	–	–
3VA9114-QQG00		–	–	–	–
–	3VA9214-QQG00	3VA9224-QQG00	–	–	–
–	–	–	3VA9404-QQG00	–	–

Connection technology






- ❶ For mounting onto the circuit breaker
- ❷ For mounting onto withdrawable and plug-in units




Configure your molded case circuit breaker easily online at www.siemens.com/lowvoltage/configurator-3VA

2

Rear connection studs flat

	Number of poles	Connection options	Scope of supply
	1P	❶ ❷	1 short connection stud flat 1 long connection stud flat
	3P	❶ ❷	2 short connection studs flat, 1 long connection stud flat
	4P	❶ ❷	2 short connection studs flat, 2 long connection studs flat

Rear connection studs round

	Number of poles	Connection options	Scope of supply
	1P	❶ ❷	1 short connection stud round 1 long connection stud round
	3P	❶ ❷	1 long connection stud round, 2 short connection studs round
	4P	❶ ❷	2 long connection studs round, 2 short connection studs round

3VA10 3VA11		3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9111-0QE10	3VA9211-0QE10		3VA9201-0QE10	3VA9401-0QE10	–
3VA9111-0QE20	3VA9211-0QE20		3VA9201-0QE20	3VA9401-0QE20	–
3VA9113-0QE00	3VA9213-0QE00		3VA9203-0QE00	3VA9403-0QE00	–
3VA9114-0QE00	3VA9214-0QE00		3VA9204-0QE00	3VA9404-0QE00	–
3VA9111-0QF10	3VA9211-0QF10		3VA9201-0QF10	3VA9401-0QF10	–
3VA9111-0QF20	3VA9211-0QF20		3VA9201-0QF20	3VA9401-0QF20	–
3VA9113-0QF00	3VA9213-0QF00		3VA9203-0QF00	3VA9403-0QF00	–
3VA9114-0QF00	3VA9214-0QF00		3VA9204-0QF00	3VA9404-0QF00	–

Connection technology



- ① For mounting onto the circuit breaker
② For mounting onto withdrawable and plug-in units

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

2

Circular conductor terminals, 2P



Connection options	Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
① –	2 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm ²	Yes ¹⁾ No
		6	1.5 ... 35 mm ²	No

Circular conductor terminals, 3P



Connection options	Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
① –	3 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm ²	Yes ¹⁾ No
			50 ... 240 mm ²	Yes ¹⁾ No
		2	25 ... 150 mm ²	Yes ¹⁾ No
			70 ... 300 mm ²	Yes ¹⁾ No
		4	120 ... 240 mm ²	Yes ¹⁾ No
			6	1.5 ... 35 mm ²
– ②	3 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm ²	Yes ¹⁾ Yes ¹⁾
			50 ... 240 mm ²	Yes ¹⁾ Yes ¹⁾
		2	25 ... 150 mm ²	Yes ¹⁾ Yes ¹⁾
			70 ... 300 mm ²	Yes ¹⁾ Yes ¹⁾
		4	120 ... 240 mm ²	Yes ¹⁾ No
			6	1.5 ... 35 mm ²

Circular conductor terminals, 4P



Connection options	Scope of supply	Number of cables	Copper/aluminum stranded	Aux. conductor terminal
① –	4 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm ²	Yes ¹⁾ No
			50 ... 240 mm ²	Yes ¹⁾ No
		2	25 ... 150 mm ²	Yes ¹⁾ No
			70 ... 300 mm ²	Yes ¹⁾ No
		4	120 ... 240 mm ²	Yes ¹⁾ No
			6	1.5 ... 35 mm ²
– ②	4 single terminals, 1 extended terminal cover, 1 insulation plate	1	25 ... 150 mm ²	Yes ¹⁾ Yes ¹⁾
			50 ... 240 mm ²	Yes ¹⁾ Yes ¹⁾
		2	25 ... 150 mm ²	Yes ¹⁾ Yes ¹⁾
			70 ... 300 mm ²	Yes ¹⁾ Yes ¹⁾
		4	120 ... 240 mm ²	Yes ¹⁾ No
			6	1.5 ... 35 mm ²

¹⁾ Maximum current-carrying capacity 15 A
Maximum cable connection up to 2.5 mm²

3VA10 3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
3VA9112-0JC12	–	–	–	–
3VA9112-0JJ12	–	–	–	–
3VA9112-0JF60	–	–	–	–
3VA9113-0JC12	–	–	–	–
3VA9113-0JJ12	–	–	–	–
–	3VA9213-0JC13	3VA9223-0JC13	–	–
–	3VA9213-0JJ13	3VA9223-0JJ13	–	–
–	3VA9213-0JC22	3VA9223-0JC22	–	–
–	3VA9213-0JJ22	3VA9223-0JJ22	–	–
–	–	–	3VA9403-0JC23	–
–	–	–	3VA9403-0JJ23	–
–	–	–	–	3VA9603-0JC43
–	–	–	–	3VA9603-0JJ43
3VA9113-0JF60	3VA9213-0JF60	3VA9223-0JF60	3VA9303-0JF60	–
3VA9153-0JC12	–	–	–	–
–	3VA9253-0JC13	3VA9263-0JC13	–	–
–	3VA9253-0JC22	3VA9263-0JC22	–	–
–	–	–	3VA9483-0JC23	–
3VA9153-0JF60	3VA9253-0JF60	3VA9263-0JF60	3VA9383-0JF60	–
3VA9114-0JC12	–	–	–	–
3VA9114-0JJ12	–	–	–	–
–	3VA9214-0JC13	3VA9224-0JC13	–	–
–	3VA9214-0JJ13	3VA9224-0JJ13	–	–
–	3VA9214-0JC22	3VA9224-0JC22	–	–
–	3VA9214-0JJ22	3VA9224-0JJ22	–	–
–	–	–	3VA9404-0JC23	–
–	–	–	3VA9404-0JJ23	–
–	–	–	–	3VA9604-0JC43
–	–	–	–	3VA9604-0JJ43
3VA9114-0JF60	3VA9214-0JF60	3VA9224-0JF60	3VA9304-0JF60	–
3VA9154-0JC12	–	–	–	–
–	3VA9254-0JC13	3VA9264-0JC13	–	–
–	3VA9254-0JC22	3VA9264-0JC22	–	–
–	–	–	3VA9484-0JC23	–
3VA9154-0JF60	3VA9254-0JF60	3VA9264-0JF60	3VA9384-0JF60	–

Connection technology



- ❶ For mounting onto the circuit breaker
- ❷ For mounting onto withdrawable and plug-in units

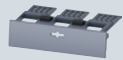
Configure your molded case circuit breaker easily online at www.siemens.com/lowvoltage/configurator-3VA

2

3VA10

3VA11

Terminal covers specially for fixed mounting



Version	Number of poles	Mounting location		
Short	1P	❶ –	3VA9111-OWD10	3VA9111-OWD10
	2P	❶ –	3VA9111-OWD20	3VA9111-OWD20
	3P	❶ –	3VA9111-OWD30	3VA9111-OWD30
	4P	❶ –	3VA9111-OWD40	3VA9111-OWD40
Extended ¹⁾	2P	❶ –	3VA9111-OWF20	3VA9111-OWF20
	3P	❶ –	3VA9111-OWF30	3VA9111-OWF30
	4P	❶ –	3VA9111-OWF40	3VA9111-OWF40
Broadened ¹⁾	3P	❶ –	3VA9111-OWG30	3VA9111-OWG30
	4P	❶ –	3VA9111-OWG40	3VA9111-OWG40

Terminal covers specially for plug-in and draw-out units (spare part)



- To provide circuit breaker touch protection
- For mounting to the molded case circuit breaker
- Included in scope of supply: Cover for the infeed and outgoing terminal

Version	Number of poles	Mounting location		
Short	3P	❶ –	3VA9113-OKB01	3VA9113-OKB01
	4P	❶ –	3VA9114-OKB01	3VA9114-OKB01

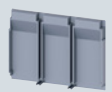
Terminal covers for plug-in or draw-out sockets



- For touch protection in the termination area of the plug-in or draw-out socket
- For mounting onto the plug-in or draw-out socket

Version	Number of poles	Mounting location		
Short	3P	– ❷	–	3VA9153-OKB03
	4P	– ❷	–	3VA9154-OKB03
Extended ¹⁾	3P	– ❷	–	3VA9153-OKB04
	4P	– ❷	–	3VA9154-OKB04
Broadened ¹⁾	3P	– ❷	–	3VA9153-OKB05
	4P	– ❷	–	3VA9154-OKB05

Insulating plates



Version	Number of poles	Mounting location		
Standard	2P	❶ –	3VA9111-OWJ20	3VA9111-OWJ20
	3P	❶ –	3VA9111-OWJ30	3VA9111-OWJ30
	4P	❶ –	3VA9111-OWJ40	3VA9111-OWJ40
Broadened	3P	❶ –	3VA9111-OWK30	3VA9111-OWK30
	4P	❶ –	3VA9111-OWK40	3VA9111-OWK40

¹⁾ Including insulating plate

	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24	3VA15 3VA25
–	–	–	–
–	–	–	–
3VA9211-OWD30	3VA9221-OWD30	3VA9481-OWD30	3VA9601-OWD30
3VA9211-OWD40	3VA9221-OWD40	3VA9481-OWD40	3VA9601-OWD40
–	–	–	–
3VA9211-OWF30	3VA9221-OWF30	3VA9481-OWF30	–
3VA9211-OWF40	3VA9221-OWF40	3VA9481-OWF40	–
–	–	–	–
3VA9211-OWG30	3VA9221-OWG30	3VA9401-OWG30	–
3VA9211-OWG40	3VA9221-OWG40	3VA9401-OWG40	–
–	–	–	–
3VA9213-OKB01	3VA9123-OKB01	3VA9353-OKB01	–
3VA9214-OKB01	3VA9124-OKB01	3VA9354-OKB01	–
–	–	–	–
3VA9253-OKB03	3VA9163-OKB03	3VA9353-OKB03	–
3VA9254-OKB03	3VA9164-OKB03	3VA9354-OKB03	–
–	–	–	–
3VA9253-OKB04	3VA9163-OKB04	3VA9353-OKB04	–
3VA9254-OKB04	3VA9164-OKB04	3VA9354-OKB04	–
–	–	–	–
3VA9253-OKB05	3VA9163-OKB05	3VA9353-OKB05	–
3VA9254-OKB05	3VA9164-OKB05	3VA9354-OKB05	–
–	–	–	–
3VA9211-OWJ30	3VA9221-OWJ30	3VA9481-OWJ30	–
3VA9211-OWJ40	3VA9221-OWJ40	3VA9481-OWJ40	–
3VA9211-OWK30	3VA9221-OWK30	3VA9481-OWK30	–
3VA9211-OWK40	3VA9221-OWK40	3VA9481-OWK40	–

Connection technology

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA

2

3VA10

3VA11

Phase barriers (fixed mounting, plug-in and draw-out units)



Scope of supply

2 phase barriers

3VA9152-0WA00

DC insulation plates for 3VA1 for fixed-mounted molded case circuit breakers



Number of poles

3P

3VA9113-0SG10

4P

3VA9114-0SG10

Side plates for 3VA1 for fixed-mounted molded case circuit breakers



Number of poles

2P

Mounting

On 2-pole molded case circuit breakers

3VA9112-0SG20

		3VA13 3VA14		
		3VA20 3VA21	3VA23 3VA24	3VA15 3VA25
3VA12		3VA22		
3VA9252-0WA00	3VA9262-0WA00	3VA9482-0WA00	3VA9602-0WA00	
-	-	-	-	
-	-	-	-	
-	-	-	-	

Plug-in and draw-out technology

The main differences between plug-in units and draw-out units are convenience of operation and the potential for functional expansion.





Thanks to plug-in and draw-out technology:




- Molded case circuit breakers can be replaced quickly and easily for overhauls or servicing
- Electrical isolation and clearly visible isolating distance
- The socket can be interlocked to prevent the 3VA molded case circuit breaker from being plugged in or moved in
- Identical connection technology for all molded case circuit breakers, whether they are plug-in, draw-out or fixed-mounted units

In addition, draw-out technology offers:

- Transmission of the position of the molded case circuit breaker via communication (CONNECT, TEST, DISCONNECT)
- The ability to test the auxiliary and control circuit connections in the test position of the draw-out unit, without contacted main current paths
- Transmission of the state of the molded case circuit breaker (ON, OFF, TRIP) via the COM060 communication module

Configure your molded case circuit breaker easily online at www.siemens.com/lowvoltage/configurator-3VA

	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
Draw-out units, complete kits				
	<ul style="list-style-type: none"> • Scope of supply: <ul style="list-style-type: none"> – Draw-out socket – Conversion kit – Mounting screw kit • Note: The crank handle for the draw-out unit must be ordered separately. 			
Number of poles				
3P	–	3VA9213-OKD00	3VA9123-OKD00	3VA9323-OKD00
4P	–	3VA9214-OKD00	3VA9124-OKD00	3VA9324-OKD00
Draw-out units, conversion kits				
	<ul style="list-style-type: none"> • Scope of supply: <ul style="list-style-type: none"> – Screw-fastened terminal covers for molded case circuit breakers – Side panels – Plug-in contacts – Cable cages – Autotrip plunger • Note: The crank handle for the draw-out unit must be ordered separately. 			
Number of poles				
3P	–	3VA9213-OKD10	3VA9123-OKD10	3VA9323-OKD10
4P	–	3VA9214-OKD10	3VA9124-OKD10	3VA9324-OKD10
Plug-in units, complete kits				
	<ul style="list-style-type: none"> • Scope of supply: <ul style="list-style-type: none"> – Plug-in base – Conversion kit – Mounting screw kit 			
Number of poles				
3P	3VA9113-OKP00	3VA9213-OKP00	3VA9123-OKP00	3VA9323-OKP00
4P	3VA9114-OKP00	3VA9214-OKP00	3VA9124-OKP00	3VA9324-OKP00
Plug-in units, conversion kits				
	<ul style="list-style-type: none"> • Scope of supply: <ul style="list-style-type: none"> – Screw-fastened terminal covers for molded case circuit breakers – Plug-in contacts – Cable cages – Autotrip plunger 			
Number of poles				
3P	3VA9113-OKP10	3VA9213-OKP10	3VA9123-OKP10	3VA9323-OKP10
4P	3VA9114-OKP10	3VA9214-OKP10	3VA9124-OKP10	3VA9324-OKP10

	3VA11	3VA12	3VA20 3VA21 3VA22	3VA13 3VA14 3VA23 3VA24
Cable cages for plug-in/draw-out units (spare part)				
	<ul style="list-style-type: none"> Cable duct for routing of the required cables from the internal accessories on the back of the circuit breaker 			
Number of poles				
3P/4P	3VA9157-OKB02	3VA9257-OKB02	3VA9167-OKB02	3VA9367-OKB02
Door feedthroughs				
	–	3VA9257-OKT00	3VA9167-OKT00	3VA9367-OKT00
Autotrip plungers (spare part)				
	Version			
Plug-in unit	3VA9157-OKP81	3VA9257-OKP81	3VA9267-OKP81	3VA9457-OKP81
Draw-out unit	–	3VA9257-OKD81	3VA9267-OKD81	3VA9457-OKD81

2

Accessories

Communication links for draw-out unit				
	Scope of supply			Article No.
	Set of cables with three special position signaling switches, 3VA9987-OKC10 connecting cables			3VA9987-OKC00
Position signaling switches for draw-out unit and plug-in unit				
				Article No.
				3VA9987-OKB00
Connecting cables				
	Purpose			Article No.
	Connection of position signaling switches for communication with COM060			3VA9987-OKC10
Crank handles for draw-out units				
	Version	Scope of supply		Article No.
	Insulated	Including crank handle holder		3VA9987-OKD81
Auxiliary circuit connectors				
	<ul style="list-style-type: none"> Each auxiliary circuit connector is designed for 4 cables. 			
	Version			Article No.
	For all draw-out units			3VA9987-OKD80
	For all plug-in units			3VA9987-OKP80
Cylinder locks				
	<ul style="list-style-type: none"> Scope of supply: <ul style="list-style-type: none"> – 1 lock with 2 keys For locking or interlocking Note: Not for 3VA15/3VA25! 			
	Key	Lock number	Article No.	
	1	1	3VA9980-0VL10	
	3	3	3VA9980-0VL30	
	4	4	3VA9980-0VL40	
Cylinder lock adapters for draw-out units				
	<ul style="list-style-type: none"> To prevent unauthorized withdrawal or insertion of the circuit breaker into the draw-out unit Circuit breaker can be locked in the CONNECT, TEST and DISCONNECT positions 			
	Purpose			Article No.
	For fitting a cylinder lock in the right-hand side wall of the draw-out unit			3VA9980-0LF40

Residual current devices RCD

According to IEC 60947-2 Annex B (Type A, Type B) and according to DIN VDE 0664-400 (Type B+)

Configure your molded case circuit breaker easily online at www.siemens.com/lowvoltage/configurator-3VA

Mounted onto the side (left)

- Can be mounted onto switch disconnectors and molded case circuit breakers



Number of poles	Type	Sensitivity ³⁾	Rated residual response current $I_{\Delta n}$	Limit value of non-tripping time Δt	Rated voltage U_e	Fault current frequency	Pre-alarm			Tripped signal			
							Light	NO	COM	TRIP	NO	COM	
3-pole	RCD510	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–	■	■	–
4-pole	RCD310	Type A	0.03 ... 5 A.	instantaneous	127 ... 480 V AC	50/60 Hz	1	–	–	–	■	■	–
	RCD510	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–	■	■	–

Mounted below (under trip unit)

- Can be mounted onto molded case circuit breakers



Number of poles	Type	Sensitivity ³⁾	Rated residual response current $I_{\Delta n}$	Limit value of non-tripping time Δt	Rated voltage U_e	Fault current frequency	Pre-alarm			Tripped signal			
							Light	NO	COM	TRIP	NO	COM	
3-pole	RCD520	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–	■	■	–
	RCD520B ^{1/4)} new	Type B	0.03 ... 5 A.	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	–	■	■	–
	Type B+	0.03 ... 0.3 A.	–	–	–	–	–	–	–	–	–	–	–
4-pole	RCD820 ²⁾	Type A	0.03 ... 30 A ⁵⁾	0 ... 10 s	127 ... 690 V AC	50/60 Hz	2	■	■	■	■	■	■
	RCD320	Type A	0.03 ... 5 A.	instantaneous	127 ... 480 V AC	50/60 Hz	1	–	–	–	■	■	–
	RCD520	Type A	0.03 ... 5 A.	0 ... 3 s	127 ... 480 V AC	50/60 Hz	1	–	–	–	■	■	–
	RCD520B ⁴⁾ new	Type B	0.03 ... 5 A.	0 ... 10 s	127 ... 690 V AC	0 ... 100 kHz	1	■	–	–	■	■	–
	Type B+	0.03 ... 0.3 A.	–	–	–	–	–	–	–	–	–	–	–
	RCD820 ²⁾	Type A	0.03 ... 30 A ⁵⁾	0 ... 10 s	127 ... 690 V AC	50/60 Hz	2	■	■	■	■	■	■

Residual current releases (spare part) **new**



Version	Scope of supply
For RCD310 or RCD510	RCD, RCR-RCD cables

¹⁾ 3-pole version in 4-pole enclosure

²⁾ With energy infeed from below, the required auxiliary switch (AUX) must be ordered separately

³⁾ Type A: pulse current sensitive, type B/B+: universal current sensitive

⁴⁾ Sensitivity selectable for type B/B+

⁵⁾ $I_{\Delta n} = 30A$: type AC

⁶⁾ If the molded case circuit breaker has no box terminals as connections, a set of box terminals must be ordered additionally for the taps below the thermal-magnetic trip units.

⁷⁾ 1 set of box terminals is included in scope of supply of the RCD510 (3VA921.-ORS20).

Modular residual current devices type A/B (according to IEC 60947-2 Annex M)
See monitoring devices, page 11/1

			3VA11	3VA12	3VA20 3VA21	3VA22	3VA23	3VA24
Monitoring mode (tripping can be disabled as an option)	Remote test/ remote reset	Communica- tion-capable						
■	–	–	3VA9113-ORS20 ⁶⁾	3VA9213-ORS20 ⁷⁾	–	–	–	–
■	–	–	3VA9114-ORS10 ⁶⁾	–	–	–	–	–
■	–	–	3VA9114-ORS20 ⁶⁾	3VA9214-ORS20 ⁷⁾	–	–	–	–
Monitoring mode (tripping can be disabled as an option)	Remote test/ remote reset	Communica- tion-capable						
–	–	–	3VA9113-ORL20	3VA9213-ORL20	–	–	–	–
■	–	–	3VA9113-ORL21	–	–	–	–	–
■	■	■	–	–	3VA9123-ORL30	3VA9223-ORL30	3VA9323-ORL30	3VA9423-ORL30
–	–	–	3VA9114-ORL10	–	–	–	–	–
–	–	–	3VA9114-ORL20	3VA9214-ORL20	–	–	–	–
■	–	–	3VA9114-ORL21	–	–	–	–	–
■	■	■	–	–	3VA9124-ORL30	3VA9224-ORL30	3VA9324-ORL30	3VA9424-ORL30
			3VA9988-0BR10	3VA9988-0BR10	–	–	–	–

Communication

2

Metering function ¹⁾			ETU 5-series	ETU 8-series	Display in ETU	Display DSP800	Communication COM800/COM100
Current							
Phase and neutral conductor currents	I_1, I_2, I_3, I_N	A	■	■	□	□	■
Residual current to ground	I_g	A	■	■	□	□	■
Phase with highest load		A	■	■	□	□	■
Mean value over the three phase currents	$I_{\text{leading axis}} = (I_1 + I_2 + I_3)/3$	A	–	■	–	□	■
Asymmetry of the phase currents	I_{nba}	%	–	■	–	□	■
THD of the 3 phases	$\text{THDI}_1, \text{THDI}_2, \text{THDI}_3$	%	–	■	–	□	■
Voltage							
Phase voltages incl. mean value	$U_{12}, U_{23}, U_{31}, U_{\text{phavg}}$	V	–	■	□	□	■
Voltages to N conductor incl. mean value	$U_{1N}, U_{2N}, U_{3N}, U_{\text{Navg}}$	V	–	■	–	□	■
Voltage unbalance		%	–	■	–	□	■
THD phase/phase and phase/N	$\text{THDI}_1, \text{THDI}_2, \text{THDI}_3$	%	–	■	–	□	■
Power							
Active power, total and per phase	$P_1, P_2, P_3, P_{\text{tot}}$	kW	–	■	□ (P_{tot})	□	■
Apparent power, total and per phase	$S_1, S_2, S_3, S_{\text{tot}}$	kVA	–	■	–	□	■
Reactive power, total and per phase	$Q_1, Q_2, Q_3, Q_{\text{tot}}$	kVAr	–	■	□	□	■
Power factor of the fundamental	$P_{F1}, P_{F2}, P_{F3}, P_{\text{Favg}}$		–	■	□ (PF_{avg})	□	■
Energy							
Active energy, infeed and feedback	E_p	kWh	–	■	□	□	■
Reactive energy, infeed and feedback	E_q	kVArh	–	■	–	□	■
Apparent energy	E_s	kVAh	–	■	–	□	■
Frequency							
Present frequency	f	Hz	–	■	□	□	■
Maximum pointer function							
Min./max. current, voltage, power	With time stamp	–	–	–	–	–	■

¹⁾ Depending on ETU version ■ Available □ Displayable – Not available

3VA20	3VA23
3VA21	3VA24
3VA22	3VA25

COM060 communication modules

- For mounting in the right-hand accessories compartment of the 3VA2 molded case circuit breaker (including ETU power supply)
- Including a T-Connector



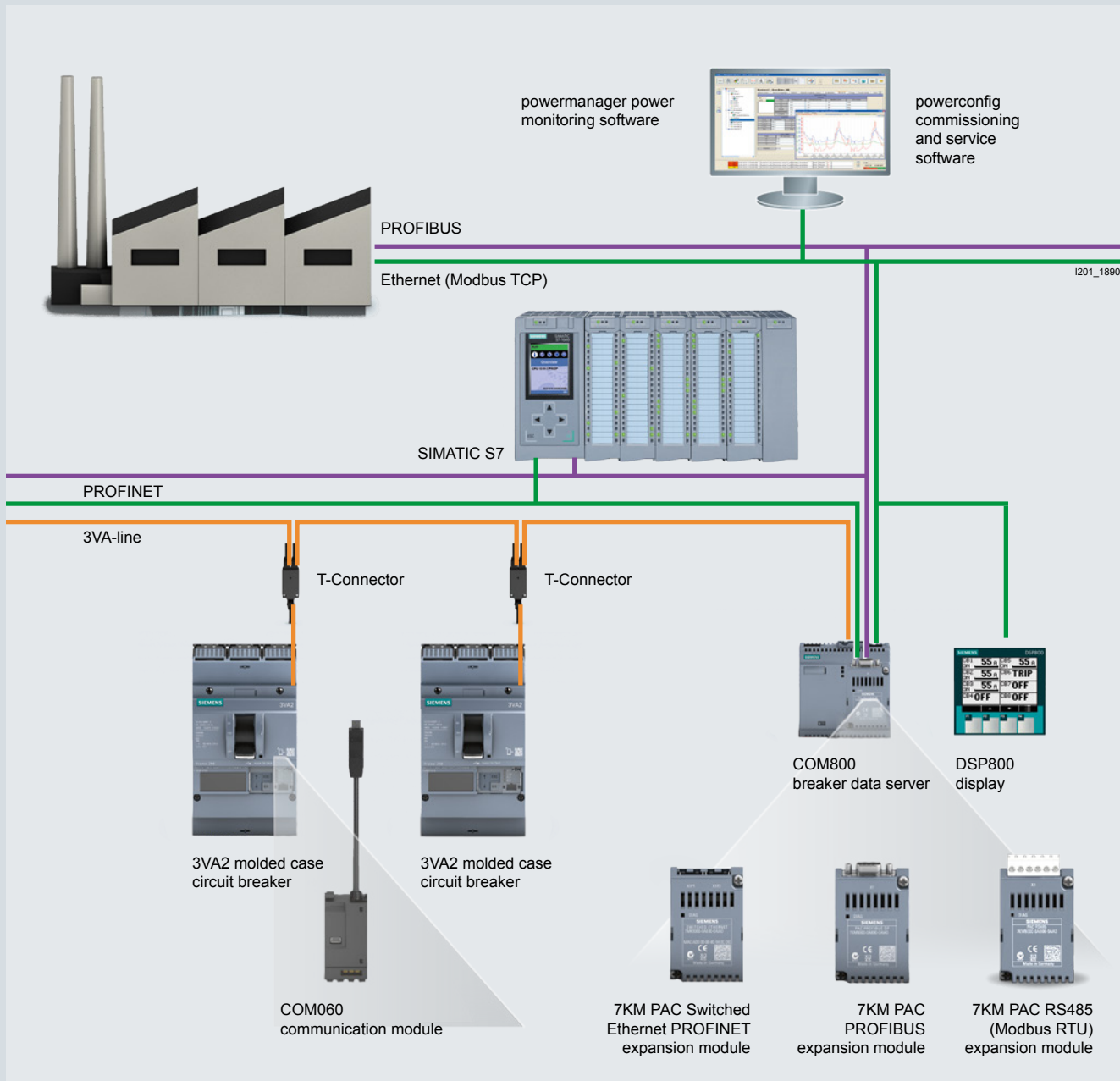
Purpose	3VA20-22	3VA23-25
Communication to the COM800/COM100 breaker data server via 3VA line	3VA9187-0TB10	3VA9387-0TB10

24 V modules

- 24 V DC
- For mounting in the right-hand accessories compartment of the 3VA2



Purpose	3VA20-22	3VA23-25
Optional energy supply for the ETU, also includes continuous operation of the ETU display and the metering function of the ETU 8-series	3VA9187-0TB50	3VA9387-0TB50



Communication

Breaker data server

COM800 breaker data servers



Version

Central communication module for connection of up to eight 3VA2 molded case circuit breakers via the 3VA line, Ethernet 10/100 Mbps interface module socket for inserting an optional PROFIBUS DP or PROFINET module, 2 terminating resistors

Article No.

3VA9987-0TA10

COM100 breaker data servers



Version

Central communication module for connection of a 3VA2 molded case circuit breaker via the 3VA line, Ethernet 10/100 Mbps interface module socket for inserting an optional PROFIBUS DP or PROFINET module, 2 terminating resistors

Article No.

3VA9987-0TA20

7KM PAC PROFIBUS DP expansion modules



Purpose

Used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to PROFIBUS DPV1. Supplies the state and measured variables of the 3VA molded case circuit breaker for the PROFIBUS DP master. Receives information (e.g. commands) from the PROFIBUS DP master and transmits them to the 3VA molded case circuit breaker.

Article No.

7KM9300-0AB01-0AA0

7KM PAC Switched Ethernet PROFINET expansion modules



Purpose

Used for connecting the COM800/COM100 breaker data server, and the connected 3VA molded case circuit breakers, to PROFINET via two Ethernet interfaces. Supplies the state and measured variables of the 3VA molded case circuit breakers to PROFINET via the PROFINET IO, PROFinergy and Modbus TCP protocols.

Article No.

7KM9300-0AE01-0AA0

7KM PAC RS485 Modbus RTU expansion modules



Purpose

Used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to Modbus RTU. Supplies the state and measured variables of the 3VA molded case circuit breaker for the Modbus RTU master. Receives information (e.g. commands) from the Modbus RTU master and transmits them to the 3VA molded case circuit breaker.

Article No.

7KM9300-0AM00-0AA0

Interfaces to IEC 61850 **new**

- The SICAM A8000 smart breaker data server connects the circuit breakers from the SENTRON portfolio via the MODBUS TCP/IP protocol and transmits data via communication protocols (e.g.: IEC 61850, IEC 60870-5-104, IEC 60870-5-101, MODBUS and DNP) to higher-level systems.



Type

SICAM CP-8021 ¹⁾

Processor assembly

4 interfaces

Operating voltage

Article No.

6MF28021AA00

SICAM PS-8620

–

24 ... 60 V DC (12 W)

6MF28620AA00

SICAM PS-8622

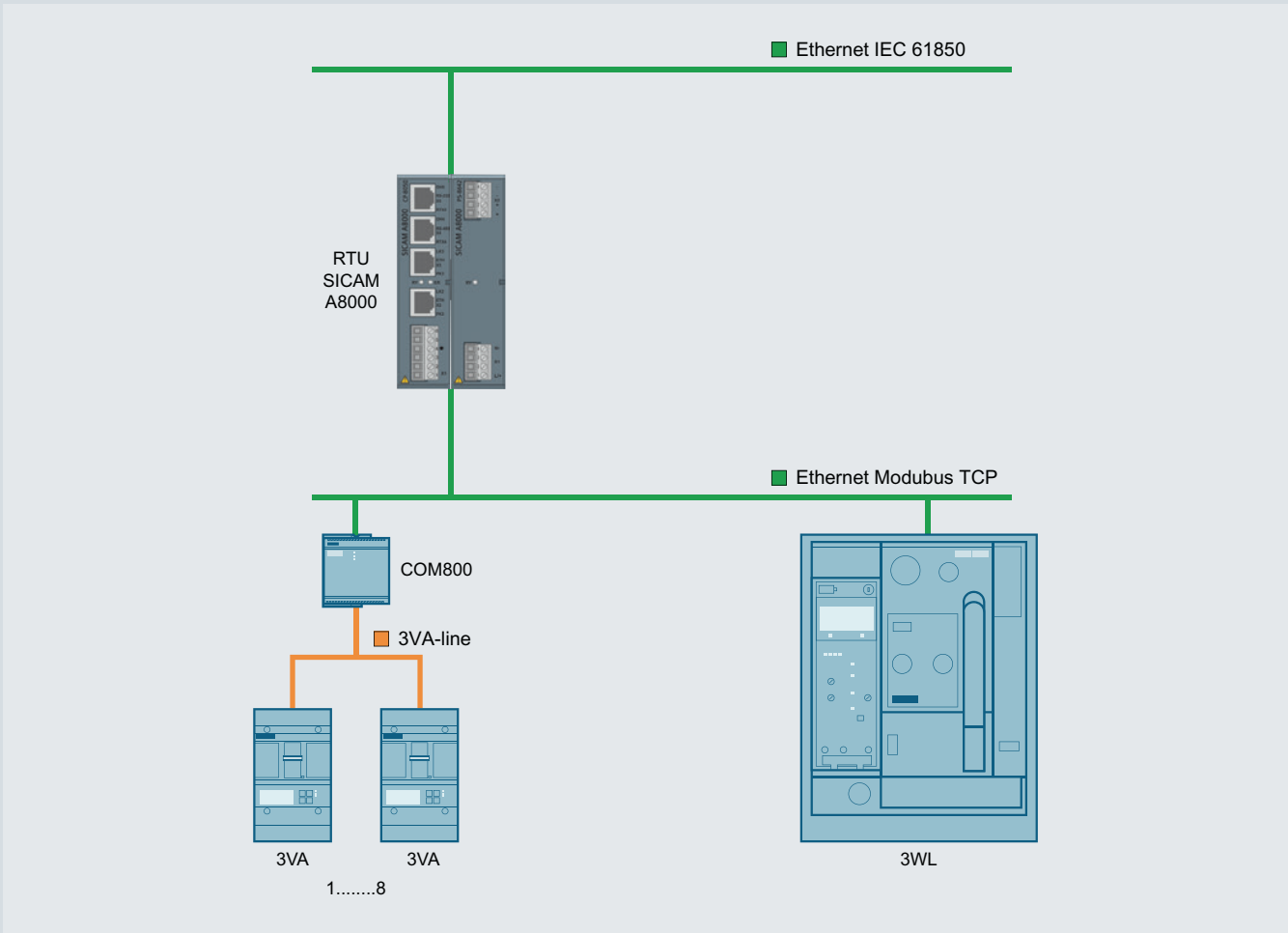
–

110 ... 220 V DC (12 W)

6MF28622AA00

¹⁾ Designed for quantities of max. 20 devices, each with 50 data points

You will find further information at:
www.siemens.com/sicam-a8000




Communication

Accessories for communication

T-connectors (spare part)			
	Purpose		Article No.
	Provides a stub connection to the COM060 and loops through to the next circuit breaker.		3VA9987-0TG10
DIN rail adapters			
	Purpose		Article No.
	For snapping the T-Connector onto a DIN rail.		3VA9987-0TG11
Prefabricated connecting cables, T-connector – T-connector or T-connector – COM800/COM100			
	Length		Article No.
	0.4 m		3VA9987-0TC10
	1 m		3VA9987-0TC20
	2 m		3VA9987-0TC30
	4 m		3VA9987-0TC40
Prefabricated connecting cables for extending the COM060 – T-connector stub connection			
	Length		Article No.
	0.4 m		3VA9987-0TF20
	0.8 m		3VA9987-0TF10
Additional bus terminating resistors (spare part)			
	Purpose		Article No.
	For COM800 and COM060		3VA9987-0TE10
Voltage tap for external N conductors (spare part)			
	Purpose		Article No.
	Cable for connection of the star point for the metering function of the 8-series ETU, length 1.5 m		3VA9987-0UC10
External current transformer for N conductors			
	Purpose	Rated current I_n	Article No.
	For 3VA2 3-pole molded case circuit breakers, for 5 and 8-series ETUs, including connecting cables	25 ... 150 A	3VA9007-0NA10
		160 ... 350 A	3VA9107-0NA10
		400 ... 630 A	3VA9307-0NA10
External current transformers as straight-through transformers			
	Rated current I_n		Article No.
	25 ... 150 A		3VA9077-0NA10
	160 ... 350 A		3VA9177-0NA10
	400 ... 630 A		3VA9377-0NA10
	600 ... 1250 A		3VA9677-0NA10
Connecting cables for external current transformers for N conductors (spare part)			
			Article No.
			3VA9907-0NB10

Display

DSP800 displays		
	Purpose	Article No.
	For displaying the status and measured values of up to eight devices <ul style="list-style-type: none"> • 3VA2 via COM800/100 • 3VA27 • 3WL10 • 3WL11-13 • PAC3200T 	3VA9987-0TD10

External function box

EFB300 external function boxes



- 4 digital outputs for information output
- 1 digital input
- ZSI functionality
- S0-Interface
- Including cable 1.5 m in length

Purpose

For connection to the ETU of 3VA2 molded case circuit breakers

Article No.

3VA9987-0UA10

Connecting cables for EFB300



Length

1.5 m

3.0 m

Purpose

For 3VA2 with EFB

For 3VA2 with EFB

For 3VA2 with EFB and RCD820

Article No.

3VA9987-0UB10

3VA9987-0UB20

3VA9987-0UB30

Test devices

TD300 test devices



Purpose

For activation of the ETU and initiation of a test tripping operation

Connection

On the front interface of the ETU

Article No.

3VA9987-0MA10

TD400 test devices



- Energy supply via batteries or the USB-C interface
- USB-C interface for connecting a PC with powerconfig
- Bluetooth interface for connection to a PC, smartphone or tablet
- ETU parameterization
- Including adapter and connecting cable to 3VA2 molded case circuit breaker and IEC 3WL (ETU release 2)
- Including case

Purpose

Initiation of a test tripping operation

Connection

On the front interface of the ETU (3VA and IEC 3WL ETU release 2)

Article No.

3VW9011-0AT40

TD500 test devices



- USB interface for connecting a PC with powerconfig
- Including external power supply
- Including connecting cable to 3VA2 molded case circuit breaker

Purpose

Initiation of various test tripping operations (LSING), ETU parameterization

Connection

On the front interface of the ETU

Article No.

3VA9987-0MB10

External power supplies for TD500 (spare part)



Voltage

110 ... 240 V

Article No.

3VA9987-0MX10

Connecting cables for connecting TD500 to 3VA2 molded case circuit breakers (spare part)



Article No.

3VA9987-0MY10

Locking, blocking and interlocking

2

		3VA11	3VA12	3VA20 3VA21 3VA22
Locking				
<ul style="list-style-type: none"> The locking devices make it possible to lock the 3VA molded case circuit breakers in either the OFF or the ON operating position. 				
Version				
	Cylinder lock	Key 1 (lock number 1)		3VA9980-OVL10
		Key 3 (lock number 3)		3VA9980-OVL30
		Key 4 (lock number 4)		3VA9980-OVL40
	Adapter kit for mounting the cylinder lock (type Ronis) in the accessories compartment of the molded case circuit breaker	3VA9157-OLF10	3VA9257-OLF10	3VA9167-OLF10
	Locking device for toggle operating mechanism		3VA9088-OLB10	3VA9388-OLB10
Interlocking				
<ul style="list-style-type: none"> Using interlocking technology, it is possible to mutually interlock two or more molded case circuit breakers. The interlock system is designed to ensure that no more than one molded case circuit breaker can be operated at a time. The following methods of interlocking can be used on 3VA molded case circuit breakers: <ul style="list-style-type: none"> Front interlock Rear interlock 				
Version				
	Cylinder lock	Key 1 (lock number 1)		3VA9980-OVL10
		Key 3 (lock number 3)		3VA9980-OVL30
		Key 4 (lock number 4)		3VA9980-OVL40
	Sliding bar interlock	3VA9158-0VF30	3VA9258-0VF30	3VA9168-0VF30
	Module for handle interlock using a Bowden cable	3VA9157-0VF10	3VA9257-0VF10	3VA9167-0VF10
	Bowden cable	Length 0.6 m		3VA9980-0VC10
		Length 1.0 m		3VA9980-0VC20
		Length 1.5 m		3VA9980-0VC30
	Rear interlock with rod	Circuit breaker, fixed-mounted		3VA9088-0VM10
		Plug-in/draw-out technology		3VA9088-0VM30
	Mounting frame for rear interlock with rod	Profile rails	3VA9088-0VK10	–
		Mounting panels	3VA9158-0VK20	3VA9258-0VK20

¹⁾ Available from Q1/2020

²⁾ With mounting frame for rear interlock.

Can be used with breaker 3VA15 from "E02" and 3VA25 from "E05" (Line protection CB with TMTU, 3-Series ETU and 5-Series ETU)

3VA13	
3VA14	
3VA23	3VA15
3VA24	3VA25

3VA9980-0VL10	–
3VA9980-0VL30	–
3VA9980-0VL40	–
3VA9367-0LF10	3VA9587-0LF10
3VA9388-0LB10	3VA9588-0LB10

Locking

Use in	Locking in OFF position	Locking in ON position	Front mounting	Rear mounting	Interlocked breakers
Breakers, motor-drive mechanisms, manual operators, withdrawable technology	■	■	■	–	–
Circuit breaker	■	■	■	–	–
Circuit breaker	■	■	■	–	–

Interlocking

3VA9980-0VL10	–
3VA9980-0VL30	–
3VA9980-0VL40	–
3VA9368-0VF30	–
3VA9367-0VF10	3VA9587-0VF10
3VA9980-0VC10	
3VA9980-0VC20	
3VA9980-0VC30	
3VA9088-0VM10	3VA9588-0VM10 ^(1) 2)
3VA9088-0VM30	3VA9588-0VM10 ^(1) 2)
–	–
3VA9468-0VK20	–

Use in	Locking in OFF position	Locking in ON position	Front mounting	Rear mounting	Interlocked breakers
Breakers, manual operators	■	■	■	–	Unlimited
Circuit breaker	–	–	■	–	3
Circuit breaker	–	–	■	–	3
Circuit breaker, fixed-mounted	–	–	–	■	2
Plug-in/draw-out technology	–	–	–	■	
	–	–	–	■	


Cover frame and mounting

2


3VA10
3VA11

3VA12


Cover frames for door cutouts for molded case circuit breakers

	Number of poles	Door cut-out with trip unit	3VA10 3VA11	3VA12
	3P	No		3VA9053-OSB10
Yes			3VA9053-OSB20	3VA9253-OSB20
4P	No		3VA9054-OSB10	3VA9254-OSB10
	Yes		3VA9054-OSB20	3VA9254-OSB20


Cover frames for MO320 motor operators

	Purpose	3VA10 3VA11	3VA12
	MO320 motor operator		3VA9053-OSB20
Motor operator with SEO520 stored energy operator		–	–


Cover frames for RCD320, RCD520 and RCD820 residual current devices

	Number of poles	3VA10 3VA11	3VA12
	3P		3VA9053-OSB10
4P		3VA9054-OSB10	3VA9254-OSB10

Cover frames for front mounted rotary operators

	3VA10 3VA11	3VA12
	3VA9053-OSB10	3VA9253-OSB10


Cover frames for door feedthroughs

	3VA10 3VA11	3VA12
	–	3VA9253-OSB20


Labeling plates for cover frame

	3VA10 3VA11	3VA12
	–	3VA9087-OSX10

Adapters for DIN rails for 3VA1 molded case circuit breakers

	Number of poles	3VA10 3VA11	3VA12
	1P		3VA9181-OSH10
2P		3VA9182-OSH10	–
3P and 4P		3VA9187-OSH10	–
3P and 4P in connection with RCD310 or RCD510		3VA9187-OSH20	–

Mounting screw kits

	Purpose	Number of poles	3VA10 3VA11	3VA12
	For fixed-mounted breakers		1P	3VA9111-OSS10
2P and 3P (apart from 125 A/160 A with 55 kA and 70 kA)			3VA9116-OSS10	
3P (125 A/160 A with 55 kA and 70 kA) and 4P			3VA9114-OSS10	
3P			–	–
4P			–	–
For plug-in technology		3P and 4P	–	–
		For plug-in technology	–	3VA9114-OSS10
		For plug-in and draw-out technology	–	3VA9114-OSS10

Adapter for 60 mm busbar system (8US), [see page 13/26](#)

	3VA13	
	3VA14	
3VA20	3VA23	3VA15
3VA21	3VA24	3VA25
3VA22		
3VA9163-0SB10	3VA9383-0SB10	3VA9503-0SB10
3VA9163-0SB20	3VA9363-0SB20	3VA9503-0SB20
3VA9164-0SB10	3VA9384-0SB10	3VA9504-0SB10
3VA9164-0SB20	3VA9364-0SB20	3VA9504-0SB20
3VA9257-0SB30	3VA9387-0SB30	–
3VA9167-0SB30	–	–
3VA9253-0SB10	3VA9303-0SB40	–
3VA9254-0SB10	3VA9304-0SB40	–
3VA9163-0SB10	3VA9383-0SB10	3VA9503-0SB50
3VA9253-0SB20	3VA9353-0SB20	–
3VA9087-0SX10		
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
–	–	–
3VA9126-0SS10	–	–
3VA9124-0SS10	–	–
–	3VA9328-0SS10	3VA9517-0SS10
–	–	–
3VA9124-0SS10	3VA9328-0SS10	–

System overview

For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA27

2

Basic units

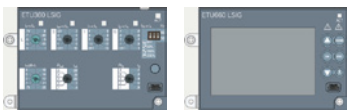


Handle



Stored energy operator

Trip units



Electronic trip unit (ETU)

Accessories



Communication module



Rating plugs

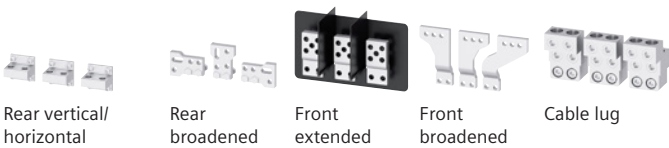


Breaker Connect module



Test devices and breaker data adapters

Main conductor connections



Rear vertical/horizontal

Rear broadened

Front extended

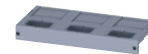
Front broadened

Cable lug

Accessories



Phase barriers



Terminal cover

Motors



Spring charging motor

Accessories



Mechanical operating cycles counter (MOC)

Auxiliary releases / closing coils



Undervoltage release (UVR) / Shunt release (ST)



Closing coil (CC) / Remote reset magnet (RR)

Auxiliary switches



Tripped signaling switch

Ready-to-close signaling switch (RTC)

Auxiliary switch ON/OFF (AUX)

Tripped signaling switch (S24)

Trip alarm switch (TAS)

Further accessories



Padlockable protective cover

Locking device

Locking mechanism

Door sealing frame

Protective cover

Mutual mechanical interlocking

Manual operator

Structure of the article numbers

Basic configuration with toggle operating mechanism

For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA27

3VA27 6 7 8 9 10 11 12 13 14 15 16

2

Basic units and ETUs

Rated current	800 A	8	0																
	1000 A	1	0																
	1250 A	1	2																
	1600 A	1	6																
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 380 ... 415 V	Toggle operating mechanism	55 kA		5															
		85 kA		6															
		110 kA		7															
Protection function solid-state	Without ETU									A									
	With ETU	ETU320	LI							B									
		ETU350	LSI							C									
		ETU360	LSIG							D									
		ETU650	LSI							E									
		ETU660	LSIG							F									
Trip units	Without communications interface	Without metering function								A									
		With communications interface								B									
	With communications interface	Without metering function									C								
			Metering function Basic	Voltage tap on bottom								D							
		Metering function Advanced		Voltage tap on top								E							
					Voltage tap on bottom							F							
		Voltage tap on top																	
Number of poles	Fixed-mounted versions	3-pole															0		
		4-pole	Neutral left														1		
	Neutral right															2			
	Withdrawable	3-pole															3		
		4-pole	Neutral left															4	
Neutral right																5			

Connection

Installation type	Withdrawable	Withdrawable circuit breaker without guide frame (guide frame must be ordered separately)																0		
		Fixed-mounted breaker / withdrawable breaker	Rear vertical connection																	1
	Rear horizontal connection																	2		
	Front terminal for main circuit connection																		3	
	Front-accessible, extended terminal for main circuit connection																		5	
	Front-accessible, broadened terminal for main circuit connection																		6	
	Rear broadened bus connectors																		7	

3VA27 6 7 8 9 10 11 12 13 14 15 16

Alarm switch combinations

Alarm switches	Without	0
	With tripped signaling switch TAS and tripped signaling switch S25	1
	With two leading changeover switches S26	2
	With tripped signaling switch TAS and tripped signaling switch S25 and two leading changeover switches S26	3

Auxiliary releases, closing coils

Closing coil (CC), remote reset magnet (RR)	Without		A
2nd auxiliary release	Without 2nd auxiliary release		A
	With undervoltage release (UVR)	24 V AC/DC	B
		30 V AC/DC	C
		48 V AC/DC	D
		60 V AC/DC	E
		110 ... 120 V AC/DC	F
		120 ... 127 V AC/DC	G
		220 ... 240 V AC/DC	H
		240 ... 250 V AC/DC	J
		380 ... 400 V AC/DC	K
		415 ... 440 V AC/DC	L
	With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC	M
		110 ... 127 V AC/DC	N
		220 ... 250 V AC/DC	P
	With 2nd shunt release (ST2)	24 V AC/DC	Q
		30 V AC/DC	R
		48 V AC/DC	S
		60 V AC/DC	T
		110 ... 120 V AC/DC	U
		120 ... 127 V AC/DC	V
220 ... 240 V AC/DC		W	
240 ... 250 V AC/DC		X	
1st auxiliary release	Without 1st auxiliary release		0
	Shunt release (ST)	24 V AC/DC	1
		30 V AC/DC	2
		48 V AC/DC	3
		60 V AC/DC	4
		110 ... 120 V AC/DC	5
		120 ... 127 V AC/DC	6
		220 ... 240 V AC/DC	7
		240 ... 250 V AC/DC	8

2

Structure of the article numbers

Basic configuration with stored energy operating mechanism

For a complete and verified configuration of your molded case circuit breaker, please use our online configurator at www.siemens.com/lowvoltage/configurator-3VA27

3VA27 6 7 8 9 10 11 12 13 14 15 16

2

Basic units and ETUs

Rated current	800 A	8	0																	
	1000 A	1	0																	
	1250 A	1	2																	
	1600 A	1	6																	
Short-circuit breaking capacity $I_{cu} = I_{cs}$ at 380 ... 415 V	Stored energy operating mechanism	55 kA		1																
		85 kA		2																
		110 kA		3																
Protection function solid-state	Without ETU																			
	With ETU	ETU320	LI								A									
		ETU350	LSI								B									
		ETU360	LSIG								C									
		ETU650	LSI								D									
		ETU660	LSIG								E									
										F										
Trip Units	Without communications interface	Without metering function																		
											A									
	With communications interface	Without metering function																		
		Metering function Basic	Voltage tap on bottom																	
			Voltage tap on top																	
		Metering function Advanced	Voltage tap on bottom																	
Voltage tap on top																				
Number of poles	Fixed-mounted versions	3-pole																0		
		4-pole	Neutral left																1	
			Neutral right																	2
	Withdrawable	3-pole																	3	
		4-pole	Neutral left																	4
			Neutral right																	

Connections

Installation type	Withdrawable	Withdrawable circuit breaker without guide frame (guide frame must be ordered separately)																	0		
		Fixed-mounted breaker / withdrawable breaker	Rear vertical connection																		1
	Rear horizontal connection																			2	
	Front terminal for main circuit connection																			3	
	Front-accessible, extended terminal for main circuit connection																			5	
	Front-accessible, broadened terminal for main circuit connection																			6	
	Rear broadened bus connectors																				7

		6	7	8	9	10	11	12	13	14	15	16	
		3VA27											
				-					-				
Motor													
Operating mechanisms	Manual operator												0
	Spring charging motor	24 ... 30 V AC/DC											1
		48 ... 60 V AC/DC											2
		110 V AC/DC											3
		230 V AC/DC											4
Auxiliary releases, closing coils, remote reset magnets													
Closing coil (CC), remote reset magnet (RR)	Without												A
	Closing coil (CC)	24 V AC/DC											B
		30 V AC/DC											C
		48 V AC/DC											D
		60 V AC/DC											E
		110 ... 120 V AC/DC											F
		120 ... 127 V AC/DC											G
		220 ... 240 V AC/DC											H
		240 ... 250 V AC/DC											J
	Closing coil (CC) and additional remote reset magnet (RR)	24 V AC/DC											K
		110 V AC/DC											L
		220 V AC/DC											M
	2nd auxiliary release	Without 2nd auxiliary release											
With undervoltage release (UVR)		24 V AC/DC											B
		30 V AC/DC											C
		48 V AC/DC											D
		60 V AC/DC											E
		110 ... 120 V AC/DC											F
		120 ... 127 V AC/DC											G
		220 ... 240 V AC/DC											H
		240 ... 250 V AC/DC											J
		380 ... 400 V AC/DC											K
		415 ... 440 V AC/DC											L
		With undervoltage release (UVR), delayable with external time-delay device Scope of supply: UVR + time-delay device	24 ... 30 V AC/DC										
110 ... 127 V AC/DC											N		
220 ... 250 V AC/DC											P		
With 2nd shunt release (ST2)		24 V AC/DC											Q
		30 V AC/DC											R
		48 V AC/DC											S
		60 V AC/DC											T
		110 ... 120 V AC/DC											U
		120 ... 127 V AC/DC											V
	220 ... 240 V AC/DC											W	
	240 ... 250 V AC/DC											X	
1st auxiliary release	Without 1st auxiliary release												0
	Shunt release (ST)	24 V AC/DC											1
		30 V AC/DC											2
		48 V AC/DC											3
		60 V AC/DC											4
		110 ... 120 V AC/DC											5
		120 ... 127 V AC/DC											6
		220 ... 240 V AC/DC											7
		240 ... 250 V AC/DC											8

Accessory options

Configure your molded case circuit breaker easily online at
www.siemens.com/lowvoltage/configurator-3VA27

To specify the options, add „Z“ to the complete Article No. and indicate the appropriate order code(s).

3VA27..-.....-.... -Z

Order code

2

Accessories for basic configuration

Mounting options for fixed mounting

- In the basic configuration, the fixed-mounted circuit breaker is mounted onto the rear panel. Floor mounting is possible as an option. The device must additionally be modified if it is to be extended to include functionalities such as external auxiliary switches or mechanical interlocks.¹⁾

Mounting options for fixed mounting ¹⁾								
Floor mounting	Mounting support standard		☉	⚡		A	0	7
		Mounting support extended ²⁾		☉	⚡	S	5	6
Rear panel mounting onto mounting plate	Side wall extended ²⁾		☉	⚡		S	5	7

Accessories for electronic trip units ETU

Rating plugs

- The electronic trip units are equipped as standard with a rating plug for setting the rated current I_n , which is equal to the maximum rated circuit breaker current ($< I_{n \max}$). The rated current of the selected rating plug must be less than or equal to $I_{n \max}$.
- To downrate the circuit breaker, a rated current smaller than $I_{n \max}$ is selected for the rating plug via a Z option.
- Other functions can also be activated using rating plugs (L = OFF or Rc protection).

Rating plug								
For setting the rated current I_n	For all ETU	400 A		☉	⚡	B	0	4
		630 A		☉	⚡	B	0	6
		800 A		☉	⚡	B	0	8
		1000 A		☉	⚡	B	1	0
		1200 A		☉	⚡	B	1	2
		For setting the rated current I_n , with overload protection L = OFF	For ETU 6-series	400 A		☉	⚡	L
630 A				☉	⚡	L	0	6
800 A				☉	⚡	L	0	8
1000 A				☉	⚡	L	1	0
1250 A				☉	⚡	L	1	2
1600 A				☉	⚡	L	1	6
For setting the rated current I_n , For enabling the residual current protection function. The residual current function is only possible with the MF Advanced metering function.	For ETU660 only	400 A		☉	⚡	G	0	4
		630 A		☉	⚡	G	0	6
		800 A		☉	⚡	G	0	8
		1250 A		☉	⚡	G	1	2

Communication modules

- Up to 2 different communication modules can be used at the same time.
- When using an IOM040 digital I/O module (Z option K56), only 1 communication module can be used.

Communication modules								
COM043	Modbus TCP		☉	⚡		F	1	1
COM042	Modbus RTU		☉	⚡		F	1	2

Breaker Connect modules

- When a circuit breaker with a communications interface is ordered, a Breaker Connect module for external 24 V DC power supply of the electronic components is also supplied ready installed as standard.
- By means of this Z option, the Breaker Connect module for 24 V DC is replaced by a Breaker Connect module for 110–240 V AC/DC.

Breaker Connect module								
110 ... 240 V AC/DC			☉	⚡		F	2	6

I/O modules internal

I/O modules internal								
IOM040 digital I/O module	2 inputs, 2 outputs		☉	⚡		K	5	6

☉ For molded case circuit breakers with stored energy operating mechanism

⚡ For molded case circuit breakers with toggle operating mechanism

¹⁾ These functionalities can be applied directly to the frame of the withdrawable circuit breaker, without any modification of the side wall.

²⁾ Not possible in connection with or as an alternative to the mounting support, standard (A07).

To specify the options, add „-Z“ to the complete Article No. and indicate the appropriate order code(s).

3VA27..-.....-.... -Z

Order code

Accessories for motors

5-digit mechanical operating cycles counter

☉ - C 0 1

Auxiliary switches and signaling switches

- Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard.
- For currents <100 mA for PLC connections, these auxiliary and signaling switches can be replaced.
- The auxiliary/signaling switches for 24 V DC digital signals are designed for a
 - minimum load above 1 mA at 5 V DC, and a
 - maximum breaking capacity of 100 mA at 24 V DC.

Position signaling switches for guide frames	2 CO 2 CO 2 CO (connected test disconnected position)	☉ ↗	K 5 5
Signaling switch	Ready-to-close signaling	1 CO contact digital 24 V DC	☉ - K 5 0
	Tripped signaling switch (S24)	1 CO contact digital 24 V DC	☉ ↗ K 5 3
	Spring charged signaling switch (S21)	1 CO contact digital 24 V DC	☉ - K 5 4
Auxiliary switch	On / Off AUX	4 CO contacts digital 24 V DC	☉ ↗ K 5 1
		2 CO contacts 400 V AC, and 2 CO contacts digital 24 V DC	☉ ↗ K 5 2

Locking, blocking and interlocking

Locking devices	To prevent movement of withdrawable circuit breaker	Cylinder lock	Made by Ronis	☉ ↗	R 7 8
		For no more than three 8-mm padlocks		☉ ↗	R 6 5
Locking mechanism	To prevent movement to disconnected position			☉ ↗	R 7 9
Locking device	To prevent unauthorized activation in the operator panel (safe OFF)	Cylinder lock, made by Ronis		☉ -	S 0 8
		For no more than 3 padlocks, plastic 4 mm		☉ -	S 2 2
		For no more than 1 padlock, metal 7 mm		☉ -	S 2 3
		For no more than 2 padlocks, metal 8 mm		☉ -	S 0 7
Padlockable protective cover	For mechanical ON and/or OFF on the operator panel	For no more than 3 padlocks, plastic 4 mm		☉ -	S 4 2
		For no more than 1 padlock, metal 7 mm		☉ -	S 4 3
		For no more than 2 padlocks, metal 8 mm		☉ -	S 4 4
Protective cover	For mechanical ON/OFF, not lockable			☉ -	S 4 1
Door sealing frame IP30	IP3x			☉ ↗	T 3 0

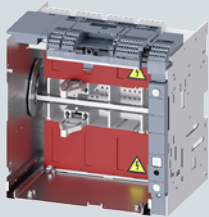
☉ For molded case circuit breakers with stored energy operating mechanism

↗ For molded case circuit breakers with toggle operating mechanism

Guide frames

3VA27

Guide frames for ordering separately without circuit breakers



- Guide frames without breakers up to 1250 A
- **Note:** All CB bus modules for communication COM04x / IOM300 / Breaker Connect module, as well as COMPSS signaling switches are configured without frames in the withdrawable circuit breaker and defined there by means of Z options, and are included with the switching device. PSS Standard is always included in the frame and can be changed to an electronics-capable signal by means of a Z option.

Number of poles	Connection type	Article No.
3-pole	Rear vertical	3VW8116-7AA01
	Rear horizontal	3VW8116-7AB01
	Front straight bus connectors extended	3VW8116-7AE01
	Broadened bus connectors	3VW8116-7AF01
	Rear broadened bus connectors	3VW8116-7AG01
4-pole	Rear vertical	3VW8116-7BA01
	Rear horizontal	3VW8116-7BB01
	Front straight bus connectors extended	3VW8116-7BE01
	Broadened bus connectors	3VW8116-7BF01
	Rear broadened bus connectors	3VW8116-7BG01

To specify the options, add „Z“ to the complete Article No. and indicate the appropriate order code(s).

3VW8....-.....-Z

Order code

Locking, blocking and interlocking

Locking device	To prevent movement of withdrawable circuit breaker	Cylinder lock, made by Ronis	☉	⚡	R	7	8
		For no more than 3 8-mm padlocks	☉	⚡	R	6	5
Locking mechanism	To prevent movement to disconnected position (only in combination with R78 or R65)		☉	⚡	R	7	9

Auxiliary/signaling switches

Position signaling switch PSS for guide frame	For 24 V DC digital signals, for minimum currents	2 CO 2 CO 2 CO (connected test disconnected position)	☉	⚡	K	5	5
---	---	---	---	---	---	---	---

Auxiliary and signaling switches for currents >100 mA and up to 400 V AC are installed as standard.

For currents <100 mA for PLC connections, these auxiliary and signaling switches can be modified.

The auxiliary/signaling switches for 24 V DC digital signals are designed for

- a minimum load above 1 mA at 5 V DC, and
- a maximum breaking capacity of 100 mA at 24 V DC.

☉ For molded case circuit breakers with stored energy operating mechanism

⚡ For molded case circuit breakers with toggle operating mechanism


Electronic trip unit ETU and accessories

3VA27


Electronic trip units (ETU)

Version	With communications / metering function, enhanced protection functions	Type	Protective function	Article No.
	With rotary coding switches No	ETU320	LIN	☉ ↙ 3VW9011-5AA00
		ETU350	LSIN	☉ ↙ 3VW9012-5AA00
		ETU360	LSING	☉ ↙ 3VW9012-7AA00
	With display Yes	ETU650	LSIN	☉ ↙ 3VW9017-5AA00
		ETU660	LSING	☉ ↙ 3VW9017-7AA00

Metering functions for ETU650 or ETU660

Description	Protective function / version	Arrangement	Article No.
	MF Basic	–	☉ ↙ 3VW9011-0AT01
	MF Advanced	–	☉ ↙ 3VW9011-0AT04
Set of cables for voltage tap for MF	For 4-pole circuit breakers with N conductor right	Top or bottom	☉ ↙ 3VW9011-0AT08
	For 4-pole circuit breakers with N conductor left	Top	☉ ↙ 3VW9011-0AT75
		Bottom	☉ ↙ 3VW9011-0AT76
	For 3-pole circuit breakers	Top	☉ ↙ 3VW9011-0AT72
Bottom		☉ ↙ 3VW9011-0AT73	

External current transformers for N conductors

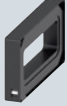
Accessory for	Purpose	Article No.
 ETU320, ETU350, ETU360, ETU650, ETU660	Only for 3-pole circuit breakers	☉ ↙ 3VW9011-0AA30

External current transformers for grounded transformer star points

Accessory for	G _{ret} (Ground return)	Article No.
 ETU660	100 A	☉ ↙ 3VW9011-0GF30
	250 A	☉ ↙ 3VW9011-0GF31


Summation current transformers external Rc-CT for residual current measurement

- Only with MF Advanced metering function and Rc rating plug

Accessory for	Purpose	Article No.
 ETU660	For external residual current measurement	☉ ↙ 3VW9011-ORC30

Remote reset magnets RR for the circuit breakers including tripped signal

- Remote reset magnet (RR) for resetting the circuit breaker after tripping as a result of overcurrent conditions

Accessory for	Voltage	Article No.
 ETU320, ETU350, ETU360, ETU650, ETU660	24 V DC	☉ – 3VW9011-0AK03
	110 V AC/DC	☉ – 3VW9011-0AK05
	250 V AC/DC	☉ – 3VW9011-0AK06

Replacement batteries for electronic trip unit ETU

Accessory for	Article No.
 ETU320, ETU350, ETU360, ETU650, ETU660	☉ ↙ 3VW9011-0AT38

☉ For molded case circuit breakers with stored energy operating mechanism

↙ For molded case circuit breakers with toggle operating mechanism

Electronic trip unit ETU and accessories

3VA27

Rated current modules / rating plugs



- Only one module is possible per circuit breaker.

Accessory for	Version	Rated current I_n	Article No.
ETU320, ETU350, ETU360, ETU650, ETU660	Rating plugs for setting ($< I_{n,max}$) the rated current I_n	400 A	3VW9011-0AA53
		630 A	3VW9011-0AA55
		800 A	3VW9011-0AA56
		1000 A	3VW9011-0AA57
		1250 A	3VW9011-0AA58
		1600 A	3VW9011-0AA61
ETU 6-series	Rating plug without overload protection (L = OFF) and for setting ($< I_{n,max}$) the rated current I_n	400 A	3VW9011-0LF53
		630 A	3VW9011-0LF55
		800 A	3VW9011-0LF56
		1000 A	3VW9011-0LF57
		1250 A	3VW9011-0LF58
		1600 A	3VW9011-0LF61
ETU660	Rating plug Rc for ETU660 for enabling the residual current protection function and setting ($< I_{n,max}$) the rated current I_n . The residual current function is only possible with the MF Advanced metering function.	400 A	3VW9011-0RC53
		630 A	3VW9011-0RC55
		800 A	3VW9011-0RC56
		1250 A	3VW9011-0RC58

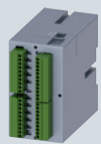
CB bus modules - communication modules



- Contains the communication module
- Up to 2 different communication modules can be used at the same time.
- When using a digital I/O module IOM040 (Z option K56), only 1 communication module can be used.
- Can only be used with ETU of the 6-series and require a Breaker Connect module for connection to the circuit breaker. This can also be configured directly on the device by means of a Z option if the communications interface to the ETU 6-series is selected.

Communication module	Protocol	Article No.
COM043	Modbus TCP	3VW9011-0AT16
COM042	Modbus RTU	3VW9011-0AT17

CB bus modules - I/O modules external IOM300



- For snapping onto standard mounting rail

Accessory for	Maximum switching current per contact	Inputs	Outputs	Article No.
ETU 6-series	<ul style="list-style-type: none"> 2 A at ≤ 30 V DC 0.8 A at 50 V DC 0.2 A at 150 V DC 4 A at 250 V AC 	11	10	3VW9011-0AT20

CB bus modules - I/O modules internal IOM040



- When using a digital I/O module IOM040, only 1 communication module can be used.

Accessory for	Maximum switching current per contact	Inputs	Outputs	Article No.
ETU 6-series	<ul style="list-style-type: none"> 2 A at ≤ 30 V DC 0.8 A at 50 V DC 0.2 A at 150 V DC 4 A at 250 V AC 	2	2	3VW9011-0AT30

☉ For molded case circuit breakers with stored energy operating mechanism

⚡ For molded case circuit breakers with toggle operating mechanism

3VA27

Actuator modules COM ACT



- For switching the circuit breaker on/off remotely via communication.
- Actuation of the closing coil (CC) and the 1st shunt release (ST).
- Can only be used in combination with a communication module, spring charging motor, closing coil and 1st shunt release.
- Automatically included if the communications interface of the ETU 6-series is selected in the basic circuit breaker configuration.

Accessory for

ETU 6-series

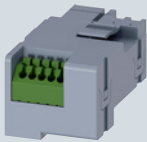


-

Article No.

3VW9011-0AT10

Breaker Connect modules



- For external power supply for the electronics components

Voltage

110 ... 240 V AC/DC



Article No.

3VW9011-0AT06

24 ... 48 V DC



3VW9011-0AT07

Auxiliary contact signals for communications interfaces



- Auxiliary contacts for signaling the readiness to close or for position signaling switches of the withdrawable positions.
- Can only be used in combination with communication module.
- Can be combined with standard position signaling switches or ready-to-close signaling contacts.
- Note: Both signaling switches are automatically included in the basic circuit breaker (COM PSS only with withdrawable versions) if the communications interface of the ETU 6-series is selected.

Function

Ready-to-close signaling switch for communication (COM RTC)



-

Article No.

3VW9011-0AT11

Position signaling switch COM PSS (for withdrawable breaker only)



3VW9011-0AT12

Test devices and breaker data adapters



- Usable for all ETU 3-series and 6-series

Description

Test device

Type

TD310



Article No.

3VW9011-0AT32

- For the trip test via ETU and tripping solenoid including release
- Activation of the ETU and the tripping solenoid by means of a battery built into the test device
- On activation in the ETU 6-series, the parameters can be configured on the display

Breaker data adapter

TD410



3VW9011-0AT34

- As gateway for parameterization of the ETU with powerconfig
- For generation of a report of the set parameters with powerservice

Test device and breaker data adapter

TD420



3VW9011-0AT33

- As gateway for parameterization of the ETU with powerconfig
 - Testing a tripping operation using powerconfig
- For use with the powerservice software
 - Testing of the basic protection functions LSING
 - Testing of the enhanced protection functions
 - Test data storage
 - Readout of ETU buffer
 - Generation of a report of the set parameters

For molded case circuit breakers with stored energy operating mechanism























For molded case circuit breakers with toggle operating mechanism

Accessories for connection and insulation

3VA27













Front terminals for main circuit connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom

Version	Description	Mounting onto	Number of poles / quantity	Article No.
Fixed-mounted	Front terminals for main circuit connection	–	3-pole / 3 units  	3VW9011-0AL01
			4-pole / 4 units  	3VW9011-0AL02
	Extended main terminals, including insulation plate and phase barriers, standard	Front terminals for main circuit connection	3-pole / 3 units  	3VW9011-0AL77
			4-pole / 4 units  	3VW9011-0AL78
	Broadened main terminals, including insulation plate and extended phase barriers	Front terminals for main circuit connection, top	3-pole / 3 units  	3VW9011-0AL73
			Front terminals for main circuit connection, bottom	3-pole / 3 units  
Front terminals for main circuit connection, top/bottom			4-pole / 4 units  	3VW9011-0AL74
Withdrawable	Front-accessible terminals for main circuit connection	Guide frame flange	3-pole / 3 units  	3VW9011-0AN01
			4-pole / 4 units  	3VW9011-0AN02
	Broadened main circuit connections	Front-accessible terminals for main circuit connection	3-pole / 3 units  	3VW9011-0AN73
4-pole / 4 units  			3VW9011-0AN74	









Rear terminals for main circuit connections acc. to IEC 60947-2


- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom


Fixing	Version	Mounting onto	Number of poles / quantity	Article No.
Fixed-mounted	Rear terminals for main circuit connection, rotatable for horizontal / vertical connection Including terminal cover	–	3-pole / 3 units  	3VW9011-0AL32
			4-pole / 4 units  	3VW9011-0AL33
Withdrawable	Rear terminals for main circuit connection, rotatable for horizontal / vertical connection Including terminal cover	–	3-pole / 3 units  	3VW9011-0AN32
			4-pole / 4 units  	3VW9011-0AN33
	Broadened main terminals	Rear horizontal main connections	3-pole / 3 units  	3VW9011-0AN75
4-pole / 4 units  			3VW9011-0AN76	

Cu-/Al cable connections acc. to IEC 60947-2

- Acc. to IEC 60947-2 for 3VA27 up to 1600 A (depending on application conditions)
- To be ordered separately for top and bottom

Fixing	Version	Mounting onto	Number of poles / quantity	Article No.
Fixed-mounted	Circular conductor terminals 4 x 240 mm ² for front cable connection, including insulation plate and high, extended terminal cover	Front terminals for main circuit connection	3-pole / 3 units  	3VW9011-0AL71
			4-pole / 4 units  	3VW9011-0AL72
Withdrawable	Set of circular conductor connection pieces 4 x 240 mm ² for cable lugs for rear cable connection	Rear vertical main connections	3-pole / 3 units  	3VW9011-0AN71
			4-pole / 4 units  	3VW9011-0AN72

 For molded case circuit breakers with stored energy operating mechanism

 For molded case circuit breakers with toggle operating mechanism

3VA27

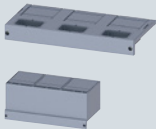
Auxiliary supply connectors in push-in version



- Auxiliary conductor terminal in push-in version for upgrading fixed-mounted breakers and guide frames.
- The device is always fitted at the factory with the exact number of auxiliary conductor terminals required.

Version	Article No.
Push-in	3VW9011-0AB11

Terminal covers for fixed circuit breakers



- Finger-proof for front terminals for main circuit connection for fixed-mounting
- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.

Version	Number of poles / quantity	Article No.
Standard	3-pole / 2 units	3VW9723-0WD30
	4-pole / 2 units	3VW9724-0WD40
Extended	3-pole / 2 units	3VW9723-0WF30
	4-pole / 2 units	3VW9724-0WF40

Phase barriers for fixed breakers



- Necessary isolation measures are always supplied with the corresponding connection technology and do not need to be ordered separately.
- For operating voltages >440 V AC the use of phase barriers is mandatory; up to 440 V AC their use is optional.

Height	Number of poles / quantity	Article No.
100 mm (standard)	3-pole / 4 units	3VW9723-0WA00
	4-pole / 6 units	3VW9724-0WA10
200 mm (extended)	3-pole / 4 units	3VW9723-0WA01
	4-pole / 6 units	3VW9724-0WA11

Supports for mounting the fixed-mounted breakers on the floor



- For fixed-mounted versions only

Version	Purpose	Article No.
Mounting support standard (circuit breaker feet) (= Z option A07)		3VW9011-0BB51
Mounting support extended (circuit breaker feet) including mechanical transmission of switch position on circuit breaker side panel (= Z option S56)	<ul style="list-style-type: none"> • Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16), • Mutual mechanical interlocking to 3WL/3VA (for 3VW9011-0BB21) 	3VW9011-0BB52

Extension kits for modification of the side wall of the fixed-mounted breakers



- For fixed-mounted breakers only
- Rear fixation on mounting plate
- For modification for mechanical transmission of switch position on circuit breaker side panel (= Z option S57)

Version	Purpose	Article No.
Extension kit for side wall	<ul style="list-style-type: none"> • Fixation for external auxiliary switches AUX 15 CO (3VW9011-0AG15) • Locking mechanism for control cabinet door, direct (for 3VW9011-0BB10) • Locking mechanism for control cabinet door, Bowden cable (for 3VW9011-0BB16), • Mutual mechanical interlocking to 3WL/3VA (for 3VW9011-0BB21) 	3VW9011-0BB53

☉ For molded case circuit breakers with stored energy operating mechanism

⚡ For molded case circuit breakers with toggle operating mechanism

Motor operators and manual operators

3VA27

Spring charging motor (MO)



Description	Version		Article No.
For automatic charging of the stored energy operating mechanism	24 ... 30 V AC/DC	☉ –	3VW9011-0AF01
	48 ... 60 V AC/DC	☉ –	3VW9011-0AF02
	100 ... 130 V AC/DC	☉ –	3VW9011-0AF03
	220 ... 250 V AC/DC	☉ –	3VW9011-0AF04

Mechanical operating cycles counter MOC



Description	Version		Article No.
Only possible in combination with a spring charging motor.	5 digits	☉ –	3VW9011-0AH07

Manual operators for circuit breakers with toggle operating mechanism

Description	Version	Color		Article No.
Front rotary operating mechanism incl. door sealing frame	Standard	Gray	– ↙	3VW9727-0EK11
	EMERGENCY STOP	Yellow-red	– ↙	3VW9727-0EK15
Door mounted rotary operator	Standard	Gray	– ↙	3VW9727-0FK21
	EMERGENCY STOP	Yellow-red	– ↙	3VW9727-0FK25
	Basic without handle		– ↙	3VW9727-0GK00
	Shaft stub		– ↙	8UD1900-3WD00
Handle	Gray		– ↙	8UD1861-0AB11
	Yellow-red		– ↙	8UD1861-0AB15

☉ For molded case circuit breakers with stored energy operating mechanism

↙ For molded case circuit breakers with toggle operating mechanism

Auxiliary release, closing coil

3VA27

Closing coils / shunt releases CC / ST



Version		Article No.
24 V AC/DC	☉ –	3VW9011-0AD01
30 V AC/DC	☉ –	3VW9011-0AD02
48 V AC/DC	☉ –	3VW9011-0AD03
60 V AC/DC	☉ –	3VW9011-0AD04
110 ... 120 V AC/DC	☉ –	3VW9011-0AD05
120 ... 127 V AC/DC	☉ –	3VW9011-0AD06
220 ... 240 V AC/DC	☉ –	3VW9011-0AD07
240 ... 250 V AC/DC	☉ –	3VW9011-0AD08
380 ... 400 V AC	☉ –	3VW9011-0AD17
415 ... 440 V AC	☉ –	3VW9011-0AD18

TD320 function test units for closing coils / shunt releases



- The TD320 test unit allows the operational availability and functions of the closing coils and shunt releases with a rated operational voltage between 24 V and 250 V (AC and DC) to be tested.
- The operational availability test is performed cyclically at intervals of 30 seconds.
- The unit has visual indicators in the form of LEDs on the front in order to display the following states:
 - LED POWER ON LIT: Correct function of the YO/YC test unit
 - LED DEACTIVATION LIT: Power supply failure, wire break
 - LED SHORT-CIRCUIT LIT: Winding short-circuit
 - LED DEACTIVATION and SHORT-CIRCUIT FLASHING: Incorrect power supply
 - LED DEACTIVATION and SHORT-CIRCUIT OFF: Closing coil / shunt release OK

Description		Article No.
For all closing coils / shunt releases	☉ –	3VW9011-0AT31

Auxiliary / signaling switches



- The auxiliary/signaling switches for 24 V DC digital signals are designed for a
 - minimum load above 1 mA at 5 V DC, and a
 - maximum breaking capacity of 100 mA at 24 V DC.
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted breakers a 3VW9011-0BB5x side wall modification.

Description	Version		Article No.
Ready-to-close signal RTC	1 CO standard	☉ –	3VW9011-0AH01
	1 CO digital	☉ –	3VW9011-0AH02
Auxiliary switch ON/OFF AUX	4 CO standard	☉ ↗	3VW9011-0AG01
	4 CO digital	☉ ↗	3VW9011-0AG02
	2 CO standard + 2 CO digital	☉ ↗	3VW9011-0AG03
External auxiliary switch ON/OFF AUX	15 CO standard	☉ ↗	3VW9011-0AG05
	15 CO digital	☉ ↗	3VW9011-0AG06
Tripped signaling switch S24	1 CO standard	☉ ↗	3VW9011-0AH14
	1 CO digital	☉ ↗	3VW9011-0AH15
Spring charged signaling switch S21	1 CO standard	☉ –	3VW9011-0AH10
	1 CO digital	☉ –	3VW9011-0AH08
Position signaling switches PSS (only with draw-out versions)	2 CO 2 CO 2 CO (connected test disconnected position) standard	☉ ↗	3VW9011-0AH11
	2 CO 2 CO 2 CO (connected test disconnected position) digital	☉ ↗	3VW9011-0AH12

☉ For molded case circuit breakers with stored energy operating mechanism

↗ For molded case circuit breakers with toggle operating mechanism

Auxiliary release, closing coil

3VA27

Auxiliary / signaling switches for toggle operating mechanisms



- Auxiliary and signaling switches are each offered in two versions:
 - Standard version for currents >100 mA and up to 400/250 V AC,
 - Minimum load above 100 mA at 24 V DC
 - Maximum breaking capacity 5 A at 250 V AC
 - Digital version for currents <100 mA for PLC connections, minimum load above 1 mA at 5 V DC, and maximum breaking capacity of 100 mA at 24 V DC
- For external auxiliary switches ON/OFF AUX 15 CO, a 3VW9011-0AG1x fixation must be ordered in addition, and for fixed-mounted breakers a 3VW9011-0BB5x side wall modification.

Description	Version		Article No.
Trip alarm switch TAS signals the trip position irrespective of the tripping reason	1 CO standard	– ↙	3VW9727-0AB11
	1 CO digital	– ↙	3VW9727-0AB13
Tripped signaling switch via auxiliary release S25 signals tripping operations via auxiliary releases (UVR, ST) in UVR/ST2 pocket	1 CO standard	– ↙	3VW9727-0AB41
	1 CO digital	– ↙	3VW9727-0AB43
Leading auxiliary switch S26 (2 units)	1 NO standard, 250 V AC	– ↙	3VW9727-0AA21

Fixation for external auxiliary switches AUX 15 CO



- External auxiliary switches ON/OFF AUX 15 CO must be ordered separately.

Version		Article No.
For fixed-mounted breakers with rear panel or floor mounting (in combination with Z option S56 or S57)	☉ ↙	3VW9011-0AG15
For guide frames	☉ ↙	3VW9011-0AG17

Undervoltage releases UVR



Version		Article No.
24 V AC/DC	☉ ↙	3VW9011-0AE01
30 V AC/DC	☉ ↙	3VW9011-0AE02
48 V AC/DC	☉ ↙	3VW9011-0AE03
60 V AC/DC	☉ ↙	3VW9011-0AE04
110 ... 120 V AC/DC	☉ ↙	3VW9011-0AE05
120 ... 127 V AC/DC	☉ ↙	3VW9011-0AE06
220 ... 240 V AC/DC	☉ ↙	3VW9011-0AE07
240 ... 250 V AC/DC	☉ ↙	3VW9011-0AE08
380 ... 400 V AC	☉ ↙	3VW9011-0AE17
415 ... 440 V AC	☉ ↙	3VW9011-0AE18

External time-delay devices for undervoltage releases



- With adjustable delay time from 0.5 to 3 s.
- Suitable for mounting onto DIN rail.

Version		Article No.
24 ... 30 V AC/DC	☉ ↙	3VW9011-0AE10
48 V AC/DC	☉ ↙	3VW9011-0AE11
60 V AC/DC	☉ ↙	3VW9011-0AE15
110 ... 127 V AC/DC	☉ ↙	3VW9011-0AE12
220 ... 250 V AC/DC	☉ ↙	3VW9011-0AE13

☉ For molded case circuit breakers with stored energy operating mechanism

↙ For molded case circuit breakers with toggle operating mechanism

Interlocking

3VA27

Locking devices to prevent movement of the withdrawable circuit breakers



Version	Article No.
Ronis cylinder lock (replacement for R78)	3VW9011-0BA80
Padlock 8 mm (replacement for R65), for no more than 3 padlocks	3VW9011-0BA87

Locking mechanisms to prevent movement of the withdrawable circuit breakers in disconnected position



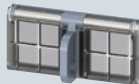
Description	Article No.
<ul style="list-style-type: none"> Only possible as a supplement in conjunction with R78 (3VW9011-0BA80) and/or R65 (3VW9011-0BA87). Locking mechanism (replacement for R79)	3VW9011-0BA84

Locking devices in OFF position



Description	Article No.
<ul style="list-style-type: none"> For fixed-mounted versions and withdrawable versions To prevent unauthorized activation in the operator panel (safe OFF) The disconnecter unit fulfills the conditions for a supply disconnecting (isolating) device acc. to EN 60204-1. Cylinder lock, made by Ronis (replacement for S08)	3VW9011-0BA33

Locking devices in OFF position



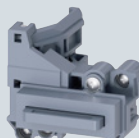
Description	Version	Article No.
Padlock 4 mm (replacement for S22)	Plastic for no more than 3 locks	3VW9011-0BA41
Padlock 7 mm (replacement for S23)	Metal for no more than 1 lock	3VW9011-0BA42
Padlock 8 mm (replacement for S07)	Metal for no more than 2 locks	3VW9011-0BA44

Locking devices in OFF position for toggle operating mechanisms with rotary operators



Description	Article No.
<ul style="list-style-type: none"> To prevent unauthorized activation in the case of molded case circuit breakers with rotary operator For Ronis	3VW9727-0VL10

Locking devices in OFF position for toggle operating mechanisms without rotary operators

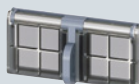


Description	Article No.
<ul style="list-style-type: none"> To prevent unauthorized activation in the operator panel in the case of molded case circuit breakers without rotary operator For padlocks	3VW9727-0LB10



For Ronis	3VW9727-0LF10
-----------	---------------

Padlockable protective covers ON/OFF on the operator panels



Description	Version	Article No.
Padlock 4 mm (replacement for S42)	Plastic for no more than 3 locks	3VW9011-0BA22
Padlock 7 mm (replacement for S43)	Metal for no more than 1 lock	3VW9011-0BA23
Padlock 8 mm (replacement for S44)	Metal for no more than 2 locks	3VW9011-0BA24

☉ For molded case circuit breakers with stored energy operating mechanism

⚡ For molded case circuit breakers with toggle operating mechanism

Interlocking

3VA27

Protective covers for mechanical ON/OFF



- Mechanical ON/OFF to protect against unintentional actuation on the operator panel.
- Not lockable.

Description

Not lockable (replacement for S41)

Article No.

3VW9011-0BA21

Mutual mechanical interlocking



- Mutual mechanical interlocking with Bowden cable 2 m

Fixing

Mounting

Article No.

Fixed-mounted

Rear panel or floor mounting



3VW9011-0BB21

Withdrawable

Mounting onto guide frame



3VW9011-0BB22

Bowden cables, separate

- One required for each circuit breaker

Variant

Article No.

1000 mm

3VW9011-0BB23

2000 mm

3WL9111-0BB45-0AA0

3000 mm

3WL9111-0BB46-0AA0

Locking mechanisms to prevent opening of the control cabinet doors in ON position



- To prevent opening of the control cabinet door in ON position
- It additionally prevents the circuit breaker from being closed when the control cabinet door is open.

Fixing

Version

Article No.

Fixed mounting on side panel or floor

Direct fixed interlocking



3VW9011-0BB10

Locking with Bowden cable



3VW9011-0BB16

Withdrawable

Direct fixed interlocking



3VW9011-0BB14

Locking with Bowden cable



3VW9011-0BB18

Door sealing frames IP30



- For IP4x and higher, you must order the protective cover IP54 3VW9011-0AP03 or 3VW9011-0AP13.

Description

Fixing

Version

Article No.

Replacement part
for Z option T30.

Fixed-mounted

IP3x



3VW9011-0AP01

Withdrawable

IP3x

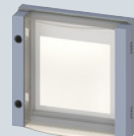


3VW9011-0AP02



3VW9011-0AP04

Protective covers IP54



- Protective cover / hood IP54 lockable for fixed-mounted breakers and withdrawable breakers
- For implementing degrees of protection IP4x and IP54 when installing in switchboard door.
- Cannot be combined with IP30 door sealing frame and door mounted rotary operator.

Description

Version

Article No.

Lock with unique key

IP54



3VW9011-0AP03

Lock with standard key

IP54



3VW9011-0AP13

For molded case circuit breakers with stored energy operating mechanism

For molded case circuit breakers with toggle operating mechanism

3VL up to 1600 A, IEC



3VL molded case circuit breaker



Product Discontinuation

The 3VL molded case circuit breaker up to 1600 A IEC will only be able to be ordered as a spare part from 10/2020, and will be removed from the order portfolio from 10/2025.

Documents available for downloading:

You can find comprehensive information on the 3VL molded case circuit breaker in the catalog excerpt.

3VL molded case circuit breaker ([109769073](#))



Protecting electrical installations from damage

The number of electrical loads is constantly increasing, which places an ever greater load on the electrical installation.

In the event of an overload or short-circuit, miniature circuit breakers safely cut off the connected circuit and reliably protect electrical installations and equipment from damage.

Miniature circuit breakers from the SENTRON portfolio are also simple to mount and install. The devices have a uniform design and, with the appropriate accessories, can be expanded by many additional functions.

For industry, buildings or infrastructure – with our versatile portfolio, you will find a suitable miniature circuit breaker for any application.

Miniature Circuit Breakers



All the information you need	3/2
Devices for all applications	3/4
System overview	3/5
Quick selection guide	3/6
Miniature circuit breakers	3/6
Device protection switches	3/10
Basic units	3/12
5SL3 miniature circuit breakers	3/12
5SL6 miniature circuit breakers	3/14
5SL4 miniature circuit breakers	3/16
5SJ6...-KS miniature circuit breakers	3/18
5SL30 miniature circuit breakers	3/20
5SL60 miniature circuit breakers	3/22
5SP3 selective main miniature circuit breakers (SHU)	3/24
5SY6 miniature circuit breakers	3/26
5SY4 miniature circuit breakers	3/28
5SP4 miniature circuit breakers	3/30
5SY5 miniature circuit breakers	3/32
5SY7 miniature circuit breakers	3/34
5SY8 miniature circuit breakers	3/36
5SJ4..HG.. miniature circuit breakers	3/38
5SY17 device protection switches	3/40
5SK9 device protection switches	3/41
Accessories	3/42
Overview of the modular system	3/42
Electrical accessories	3/44
Mechanical accessories	3/52
Standard busbars	3/54
Compact busbars	3/64
Accessories for busbars	3/66
Distribution blocks for standard rail mounting	3/72
SIKclip wiring system	3/75

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about miniature circuit breakers, please visit our website

www.siemens.com/mcb

www.siemens.com/protection-concept

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technical basic information – SENTRON protection concept ([109767456](#))
- Technology primer – Miniature circuit breakers ([109482304](#))

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Siemens YouTube channel

Our video range

- Miniature circuit breakers (general)
bit.ly/2kJP2Dq

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Miniature circuit breakers sie.ag/2kTFX15

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Miniature circuit breakers (45302792)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at

www.siemens.com/sitrain-lowvoltage

- Protection concept (WT-LVBPC)

Technical overview of miniature circuit breakers



The fast way to get you to our online services

This page provides you with comprehensive information and links on miniature circuit breakers

www.siemens.com/lowvoltage/product-support (109769082)

Devices for all applications

Miniature circuit breakers for basic applications



Ideal for standard applications

The 5SL miniature circuit breakers are the new standard with B and C tripping characteristics for applications up to 63 A. They can be used to disconnect or isolate equipment.

The 5SL devices are mainly installed in meter panels and small distribution boards to protect circuits for lamps, cookers and even machines, for example, in residential or commercial buildings.

Miniature circuit breakers for advanced applications



Ideal for industrial applications

For circuits with motors or large lamps, semiconductors or strong pulse-generating equipment such as transformers and solenoid valves - the 5SY and 5SP devices are optimized for industrial applications and are proven in use.

The 5SY devices offer you top quality and functionality for installation in complex buildings and industry. With a rated breaking capacity of up to 25 kA, they are able to handle the most challenging requirements at a rated current of 0.3 to 80 A.

Special features

- Dual-chamber terminals
- Simple to detach without tools using sliding catches
- Separate switching position indication
- A wide range of accessories

Device protection switches for advanced applications



Ideal for devices in industry

Device protection switches from Siemens offer optimum protection for all applications in AC and DC control circuits in industrial applications and plant engineering.

Electronic device protection switches are optimally suited to protecting, for example, relays, programmable controllers, motors, sensors, actuators and valves. A current analysis in conjunction with fast tripping in the event of a fault avoid the danger of overloading the switched-mode power supply.

Thermomagnetic device protection switches are used to protect solenoid valves, servo motors, signal lamps or even PLC inputs. Everywhere where loads have to be precisely protected from overloads and short-circuits.

System overview

Basic units and accessories

Miniature circuit breakers for basic applications



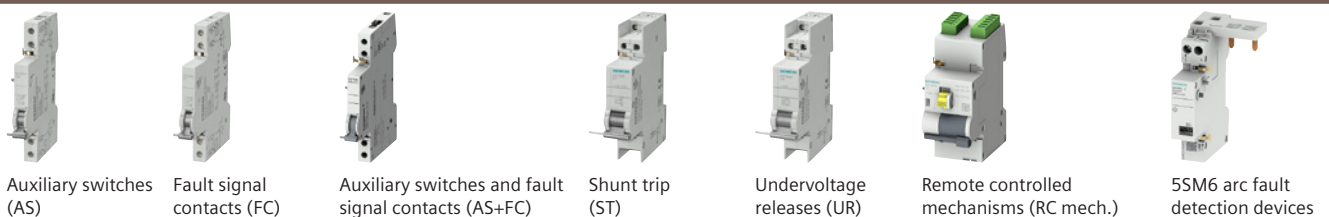
Miniature circuit breakers for advanced applications



Device protection switches for advanced applications



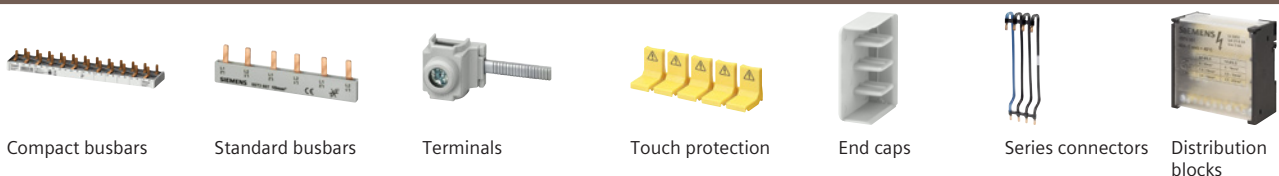
Electromechanical accessories



Mechanical accessories



Busbars and accessories



Miniature circuit breakers

For basic applications for buildings and infrastructure


5SL3

5SL6

Standards		IEC/EN 60898-1	IEC/EN 60898-1
Standards		IEC/EN 60898-1	IEC/EN 60898-1
Basic data			
Breaking capacity I_{cn} for AC (230/400 V) acc. to IEC/EN 60898-1 AC	kA	4.5	6
Rated current	A	0.3 ... 63	0.3 ... 63
Number of poles		1P 2P 3P 4P 1P+N 3P+N	1P 2P 3P 4P 1P+N 3P+N
Tripping characteristic		B C	B C
Approvals			
General product approvals		VDE, CEBC, TSE	VDE, CEBC, TSE
Marine classifications		–	–
Operational voltage			
Max. AC, acc. to EN 60898-1/-2, EN 60947-2	V	250/440	250/440
Max. DC per pole, acc. to EN 60898-1/-2, EN 60947-2	V	60	60
Max. AC, acc. to UL 1077, CSA C22.2 No.235	V	–	–
Rated voltage AC, acc. to UL 489	V	–	–
Rated impulse withstand voltage U_{imp}	kV	4	4
Rated frequency f_n	Hz	50/60	50/60
Connection			
Dual-chamber terminal		–	–
Conductor cross-section 1 wire	Solid/stranded	0.75 ... 35	0.75 ... 35
	Finely stranded with end sleeve	0.75 ... 25	0.75 ... 25
	Finely stranded without end sleeve	1 ... 35	1 ... 35
Conductor cross-section 2 wires (same cross-section and same conductor type)	Solid/stranded	0.75 ... 10	0.75 ... 10
	Finely stranded with end sleeve	0.75 ... 4	0.75 ... 4
	Finely stranded without end sleeve	1 ... 4	1 ... 4
Conductor cross-section 1-wire + busbar (pin thickness 1.5 mm)	Solid/stranded	10 ... 25	10 ... 25
	Finely stranded with non-insulated end sleeve	6 ... 25	6 ... 25
	Finely stranded with insulated end sleeve	6 ... 16	6 ... 16
Ambient conditions			
Ambient temperature	°C	–25 ... +45 ¹⁾	–25 ... +45 ¹⁾
Storage temperature	°C	–40 ... +75 ³⁾	–40 ... +75 ³⁾
Shock acc. to IEC 60068-2-27 150 m/s ² at 11 ms half-sine		–	–
Resistance to vibrations acc. to IEC 60068-2-6 50 m/s ² at 25 ... 150 Hz and 60 m/s ² at 35 Hz (4 s)		–	–
Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering)		–	–
Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles)		–	–
Pollution degree for overvoltage category		2/III	2/III
More information			
Catalog LV 10		See page 3/12	See page 3/14

¹⁾ Periodically +55 °C, max. 95% humidity

²⁾ Max. 95% humidity

³⁾ 95% humidity up to 55 °C

**5SL4****5SJ6...-KS****5SL30****5SL60****5SP3**

IEC/EN 60898-1

IEC/EN 60898-1

IEC/EN 60898-1

IEC/EN 60898-1

DIN VDE 0641-21

10

6

4.5

6

–

0.3 ... 63

10 ... 20

2 ... 40

2 ... 40

16 ... 100

1P | 2P | 3P | 4P | 1P+N | 3P+N

1P | 2P | 3P | 1P+N

1P+N

1P+N

1P | 2P | 3P | 4P

B | C | D

B | C

C

B | C

E

VDE, CEBC, IMQ

VDE

VDE, IMQ, NF, CCC

VDE, IMQ, NF, CCC

VDE

–

–

–

DNV-GL

–

250/440

250/440

250

250

–

60

60

72

72

–

–

–

–

–

–

–

–

–

–

–

4

4

4

4

4

50/60

50/60

50/60

50/60

50/60

–

Plug-in terminal on outgoing side

–

–

–

0.75 ... 35

1.5 ... 4 (top) | 0.75 ... 25 (bottom)

0.75 ... 16

0.75 ... 16

2.5 ... 50 (bottom)

0.75 ... 25

1.5 ... 2.5 (top) | 0.75 ... 25 (bottom)

0.75 ... 10

0.75 ... 10

2.5 ... 50 (bottom)

1 ... 35

1.5 ... 4

2.5 ... 16 (top)

0.75 ... 10

–

–

–

–

0.75 ... 4

–

–

–

–

1 ... 4

–

–

–

–

10 ... 25

–

–

–

–

6 ... 25

–

–

–

–

6 ... 16

–

–

–

–

–25 ... +55²⁾–25 ... +45¹⁾–25 ... +45¹⁾–25 ... +45¹⁾

–25 ... +55

–40 ... +75³⁾–40 ... +75³⁾

–40 ... +75

–40 ... +75

–40 ... +70

–

–

–

–

–

–

–

–

–

–

–

–

–

–

–

–

–

–

–

–

2/III

2/III

2/III

2/III

3/IV

[See page 3/16](#)[See page 3/18](#)[See page 3/20](#)[See page 3/22](#)[See page 3/24](#)

Miniature circuit breakers

For advanced applications for buildings and infrastructure and for industry and machine manufacturing


5SY6

5SY4



Standards

Standards	5SY6	5SY4
Standards	IEC/EN 60898-1 IEC/EN 60947-2 UL 1077	IEC/EN 60898-1 IEC/EN 60947-2 UL 1077

Basic data

Breaking capacity I_{cn} for AC (230/400 V) acc. to IEC/EN 60898-1 AC	kA	6	10	
Rated breaking capacity I_{cu} acc. to IEC/EN 60947-2 at U_e 230 V at U_e 400 V (1P, 1P+N) (2P, 3P, 4P, 3P+N)	I_n 0.3 ... 2 A	kA	30 30	35 35
	I_n 3 ... 6 A	kA	30 30	35 35
	I_n 8 ... 10 A	kA	15 15	20 20
	I_n 13 ... 32 A	kA	15 15	20 20
	I_n 40 A	kA	10 10	15 15
	I_n 50 ... 63 A	kA	10 10	15 15
	I_n 80 ... 125 A	kA	– –	10 10
Rated current	A	0.3 ... 63	0.3 ... 80	
Number of poles		1P 2P 3P 4P 1P+N 3P+N	1P 2P 3P 4P 1P+N 3P+N	
Tripping characteristic		B C	A B C D	

Approvals

General product approvals	VDE, IMQ, CCC, 	VDE, IMQ, CCC, 
Marine classifications	DNV-GL, LR, BV, RINA, ABS	DNV-GL, LR, BV, RINA, ABS

Operational voltage

Max. AC	Acc. to EN 60898-1/-2, EN 60947-2	V	250/440	250/440
	Acc. to UL 1077, CSA C22.2 No.235	V	277/480	277/480
Max. DC per pole	Acc. to EN 60898-1/-2, EN 60947-2	V	72 ¹⁾	72 ¹⁾
Rated voltage AC	Acc. to UL 489	V	–	–
Rated impulse withstand voltage U_{imp}		kV	4	4
Rated frequency f_n		Hz	50/60	50/60

Connection

Dual-chamber terminal			■	■
Conductor cross-section	Solid/stranded	mm ²	0.75 ... 35	0.75 ... 35
1 wire	Finely stranded, with end sleeve	mm ²	0.75 ... 25	0.75 ... 25
	Conductors (Cu 60/75 °C $I_n \leq 40$ A; 60 °C $I_n > 40$ A)		AWG 18 ... 4	AWG 18 ... 4

Ambient conditions

Ambient temperature	°C	–25 ... +55 ⁴⁾	–40 ... +70 ³⁾
Storage temperature	°C	–40 ... +75 ³⁾	–40 ... +75 ³⁾
Shock acc. to IEC 60068-2-27 150 m/s ² at 11 ms half-sine		■	■
Resistance to vibrations acc. to IEC 60068-2-6 50 m/s ² at 25 ... 150 Hz and 60 m/s ² at 35 Hz (4 s)		■	■
Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering)		–	■
Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles)		–	■
Pollution degree for overvoltage category		3/III	3/III ²⁾

More information

Catalog LV 10	See page 3/26	See page 3/28
---------------	---------------	---------------

¹⁾ Exempt: C/D 0.3 A ... 0.5 A

²⁾ 5SY54.. 4-pole, degree of pollution 2 for overvoltage category II

³⁾ 95% humidity up to 55 °C

⁴⁾ Max. 95% humidity

**5SP4****5SY5****5SY7****5SY8****5SJ4..HG..**IEC/EN 60898-1
UL 1077IEC/EN 60898-2
UL 1077IEC/EN 60898-1
IEC/EN 60947-2
UL 1077IEC/EN 60947-2
UL 1077IEC/EN 60947-2
UL 489

10

10

15

25

–

–|–

–|–

50|50

70|70

10

–|–

–|–

40|40

50|50

10

–|–

–|–

30|30

40|40

10

–|–

–|–

25|25

30|30

10

–|–

–|–

20|20

25|25

10

–|–

–|–

15|15

20|20

10

10|10

–|–

–|–

–|–

–

80 ... 125

0.3 ... 63

0.3 ... 63

0.3 ... 63

0.3 ... 63

1P|2P|3P|4P

1P|2P|4P

1P|2P|3P|4P|1P+N|3P+N

1P|2P|3P|4P|1P+N|3P+N

1P|2P|3P

B|C|D

B|C


B|C|D

C|D

B|C|D

VDE, CCC,

LRVDE, CCC,

ABSVDE, IMQ, CCC,

DNV-GL, LR, BV, RINA, ABS
ABSVDE, CCC,


LR

ABS

DNV-GL, LR, BV, RINA, ABS

ABS

–

250/440

250/440

250/440

250/440

250/440

277/480

–

277/480

277/480

–

72

250

72¹⁾72¹⁾

60

–

–

–

–

277/480

4

4

4

4

4

50/60

50/60

50/60

50/60

50/60

–

■

■

■

■

10 ... 50

0.75 ... 35

0.75 ... 35

0.75 ... 35

–

10 ... 35

0.75 ... 25

0.75 ... 25

0.75 ... 25

–

AWG 3 ... 1

AWG 18 ... 4

AWG 18 ... 4

AWG 18 ... 4

–

–25 ... +55⁴⁾–40 ... +70³⁾–40 ... +70³⁾–25 ... +55⁴⁾–25 ... +55⁴⁾–40 ... +75³⁾–40 ... +75³⁾–40 ... +75³⁾–40 ... +75³⁾–40 ... +75³⁾

–

■

■

–

■

■

■

■

■

■

–

■

■

–

–

■

■

■

–

–

3/III

3/III

3/III

3/III

3/III

See page 3/30

See page 3/32

See page 3/34

See page 3/36

See page 3/38

Device protection switches

For advanced applications for industry and machine manufacturing



5SY17

Standards

Standards	IEC 60934 UL 1077
-----------	----------------------

Basic data

Breaking capacity I_{cn}	for AC (230/400 V) acc. to IEC/EN 60898-1 AC	kA	3
Rated current		A	0.5 ... 16
Number of poles			1P+AS
DC tripping	Magnetic Thermal		F1 (2.5 ... 4 × I_n) F2 (4 ... 7 × I_n) 1.05 × holding current 1.35 × tripping current TC3 1.35 × I_n
	Electronic		–
Service life	Actuations		6000

Approvals

General product approvals	CCC, UL US
---------------------------	---------------

Operational voltage

Max. AC	Acc. to EN 60898-1/-2, EN 60947-2	V	250
	Acc. to UL 1077, CSA C22.2 No.235	V	277
Max. DC per pole		V	72
Rated impulse withstand voltage U_{imp}		kV	4
Rated frequency f_n		Hz	50/60

Connection

Dual-chamber terminal			–
Conductor cross-section 1 wire	Solid/stranded	mm ²	0.75 ... 16
	Finely stranded with end sleeve	mm ²	0.75 ... 10
	Finely stranded with insulated end sleeve	mm ²	0.75 ... 10
	Finely stranded without end sleeve	mm ²	0.75 ... 16
	Conductor cross-section AWG		–
2-wire (same cross-section)	Solid/stranded	mm ²	0.75 ... 4
	Finely stranded with end sleeve	mm ²	0.75 ... 2.5
	Finely stranded with insulated end sleeve	mm ²	0.75 ... 1.5
	Finely stranded without end sleeve	mm ²	0.75 ... 4

Ambient conditions

Ambient temperature	°C	–25 ... +60
Storage temperature	°C	–40 ... +70
Shock acc. to IEC 60068-2-27 150 m/s ² at 11 ms half-sine		–
Resistance to vibrations acc. to IEC 60068-2-6 50 m/s ² at 25 ... 150 Hz and 60 m/s ² at 35 Hz (4 s)		–
Resistant to shock and vibrations acc. to EN 61373 and EN 50155 "1B" (railway engineering)		–
Fire behavior of materials acc. to EN 45545-2 (fire protection on railway vehicles)		–
Pollution degree for overvoltage category	Acc. to IEC	2/III

More information

Catalog LV 10	See page 3/40
---------------	---------------

¹⁾ Max. 95% humidity



5SK9

EN 61000-6-2, EN 61000-6-3, EN 60068-2-78,
EN 50178, EN 60068-2-6, EN 60068-2-27,
UL 508, UL 2367

–
1 ... 8
1P+AS
–
–

Overload $1.2 \times I_n / 1s$ | Short-circuit $2 \times I_n / <10 ms$



–
–
30
0.5
–

–
0.2 ... 4
0.2 ... 2.5
0.2 ... 2.5
–
AWG 24 ... 12

–25 ... +60¹⁾
–40 ... +70
–
–
–
–
–

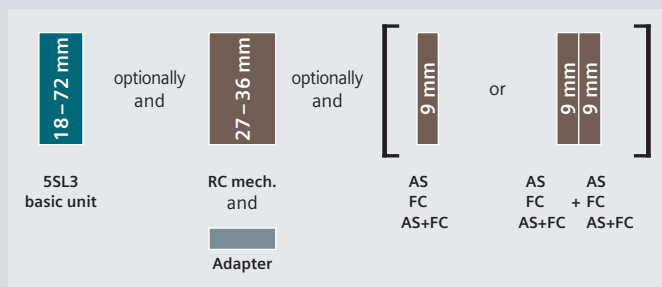
See page 3/41

5SL3 miniature circuit breakers

4.5 kA

Mounting width	1P	1P+N	2P	3P				
	230/400 V AC	230 V AC	400 V AC	400 V AC				
1 MW		2 MW	2 MW	3 MW				
Rated current I _n	Characteristic		Characteristic		Characteristic		Characteristic	
	B	C	B	C	B	C	B	C
0.3 A	–	5SL3114-7	–	5SL3514-7	–	5SL3214-7	–	–
0.5 A	–	5SL3105-7	–	5SL3505-7	–	5SL3205-7	–	–
1 A	–	5SL3101-7	–	5SL3501-7	–	5SL3201-7	–	5SL3301-7
1.6 A	–	5SL3115-7	–	5SL3515-7	–	5SL3215-7	–	–
2 A	–	5SL3102-7	–	5SL3502-7	–	5SL3202-7	–	5SL3302-7
3 A	–	5SL3103-7	–	5SL3503-7	–	5SL3203-7	–	5SL3303-7
4 A	–	5SL3104-7	–	5SL3504-7	–	5SL3204-7	–	5SL3304-7
6 A	5SL3106-6	5SL3106-7	5SL3506-6	5SL3506-7	5SL3206-6	5SL3206-7	5SL3306-6	5SL3306-7
8 A	–	5SL3108-7	–	5SL3508-7	–	5SL3208-7	–	–
10 A	5SL3110-6	5SL3110-7	5SL3510-6	5SL3510-7	5SL3210-6	5SL3210-7	5SL3310-6	5SL3310-7
13 A	5SL3113-6	5SL3113-7	5SL3513-6	5SL3513-7	5SL3213-6	5SL3213-7	–	–
16 A	5SL3116-6	5SL3116-7	5SL3516-6	5SL3516-7	5SL3216-6	5SL3216-7	5SL3316-6	5SL3316-7
20 A	5SL3120-6	5SL3120-7	5SL3520-6	5SL3520-7	5SL3220-6	5SL3220-7	5SL3320-6	5SL3320-7
25 A	5SL3125-6	5SL3125-7	5SL3525-6	5SL3525-7	5SL3225-6	5SL3225-7	5SL3325-6	5SL3325-7
32 A	5SL3132-6	5SL3132-7	5SL3532-6	5SL3532-7	5SL3232-6	5SL3232-7	5SL3332-6	5SL3332-7
40 A	5SL3140-6	5SL3140-7	5SL3540-6	5SL3540-7	5SL3240-6	5SL3240-7	5SL3340-6	5SL3340-7
50 A	5SL3150-6	5SL3150-7	5SL3550-6	5SL3550-7	5SL3250-6	5SL3250-7	5SL3350-6	5SL3350-7
63 A	5SL3163-6	5SL3163-7	5SL3563-6	5SL3563-7	5SL3263-6	5SL3263-7	5SL3363-6	5SL3363-7

Mounting concept



- AS Auxiliary switches
- FC Fault signal contacts
- AS+FC Auxiliary switches and fault signal contacts
- RC mech. Remote controlled mechanisms

- [See page 3/44](#)
- [See page 3/45](#)
- [See page 3/46](#)
- [See page 3/49](#)



3P+N 400 V AC 4 MW		4P 400 V AC 4 MW	
Characteristic		Characteristic	
B	C	B	C
–	–	–	–
–	–	–	–
–	5SL3601-7	–	5SL3401-7
–	–	–	–
–	5SL3602-7	–	5SL3402-7
–	5SL3603-7	–	5SL3403-7
–	5SL3604-7	–	5SL3404-7
5SL3606-6	5SL3606-7	–	5SL3406-7
–	5SL3608-7	–	–
5SL3610-6	5SL3610-7	–	5SL3410-7
5SL3613-6	5SL3613-7	–	5SL3413-7
5SL3616-6	5SL3616-7	–	5SL3416-7
5SL3620-6	5SL3620-7	–	5SL3420-7
5SL3625-6	5SL3625-7	–	5SL3425-7
5SL3632-6	5SL3632-7	–	5SL3432-7
5SL3640-6	5SL3640-7	–	5SL3440-7
5SL3650-6	5SL3650-7	–	5SL3450-7
5SL3663-6	5SL3663-7	–	5SL3463-7

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022

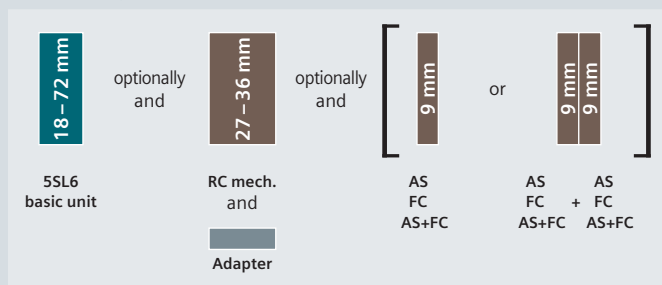
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Remote controlled mechanisms (RC mech.)		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		Article No.
1–2 MW		5ST3820-6
3–4 MW		5ST3820-7

5SL6 miniature circuit breakers

6 kA

Mounting width	1P 230/400 V AC	1P+N 230 V AC	2P 400 V AC	3P 400 V AC				
	1 MW 	2 MW 	2 MW 	3 MW 				
Rated current I _n	Characteristic		Characteristic		Characteristic		Characteristic	
	B	C	B	C	B	C	B	C
0.3 A	–	5SL6114-7	–	5SL6514-7	–	5SL6214-7	–	5SL6314-7
0.5 A	–	5SL6105-7	–	5SL6505-7	–	5SL6205-7	–	5SL6305-7
1 A	–	5SL6101-7	–	5SL6501-7	–	5SL6201-7	–	5SL6301-7
1.6 A	–	5SL6115-7	–	5SL6515-7	–	5SL6215-7	–	5SL6315-7
2 A	5SL6102-6	5SL6102-7	–	5SL6502-7	–	5SL6202-7	–	5SL6302-7
3 A	–	5SL6103-7	–	5SL6503-7	–	5SL6203-7	–	5SL6303-7
4 A	5SL6104-6	5SL6104-7	–	5SL6504-7	–	5SL6204-7	–	5SL6304-7
6 A	5SL6106-6	5SL6106-7	5SL6506-6	5SL6506-7	5SL6206-6	5SL6206-7	5SL6306-6	5SL6306-7
8 A	–	5SL6108-7	–	5SL6508-7	–	5SL6208-7	–	5SL6308-7
10 A	5SL6110-6	5SL6110-7	5SL6510-6	5SL6510-7	5SL6210-6	5SL6210-7	5SL6310-6	5SL6310-7
13 A	5SL6113-6	5SL6113-7	5SL6513-6	5SL6513-7	5SL6213-6	5SL6213-7	5SL6313-6	5SL6313-7
16 A	5SL6116-6	5SL6116-7	5SL6516-6	5SL6516-7	5SL6216-6	5SL6216-7	5SL6316-6	5SL6316-7
20 A	5SL6120-6	5SL6120-7	5SL6520-6	5SL6520-7	5SL6220-6	5SL6220-7	5SL6320-6	5SL6320-7
25 A	5SL6125-6	5SL6125-7	5SL6525-6	5SL6525-7	5SL6225-6	5SL6225-7	5SL6325-6	5SL6325-7
32 A	5SL6132-6	5SL6132-7	5SL6532-6	5SL6532-7	5SL6232-6	5SL6232-7	5SL6332-6	5SL6332-7
40 A	5SL6140-6	5SL6140-7	5SL6540-6	5SL6540-7	5SL6240-6	5SL6240-7	5SL6340-6	5SL6340-7
50 A	5SL6150-6	5SL6150-7	5SL6550-6	5SL6550-7	5SL6250-6	5SL6250-7	5SL6350-6	5SL6350-7
63 A	5SL6163-6	5SL6163-7	5SL6563-6	5SL6563-7	5SL6263-6	5SL6263-7	5SL6363-6	5SL6363-7

Mounting concept



- AS Auxiliary switches
- FC Fault signal contacts
- AS+FC Auxiliary switches and fault signal contacts
- RC mech. Remote controlled mechanisms

- [See page 3/44](#)
- [See page 3/45](#)
- [See page 3/46](#)
- [See page 3/49](#)



3P+N 400 V AC 4 MW		4P 400 V AC 4 MW	
Characteristic		Characteristic	
B	C	B	C
–	5SL6614-7	–	5SL6414-7
–	5SL6605-7	–	5SL6405-7
–	5SL6601-7	–	5SL6401-7
–	5SL6615-7	–	5SL6415-7
–	5SL6602-7	–	5SL6402-7
–	5SL6603-7	–	5SL6403-7
–	5SL6604-7	–	5SL6404-7
5SL6606-6	5SL6606-7	5SL6406-6	5SL6406-7
–	5SL6608-7	–	5SL6408-7
5SL6610-6	5SL6610-7	5SL6410-6	5SL6410-7
5SL6613-6	5SL6613-7	5SL6413-6	5SL6413-7
5SL6616-6	5SL6616-7	5SL6416-6	5SL6416-7
5SL6620-6	5SL6620-7	5SL6420-6	5SL6420-7
5SL6625-6	5SL6625-7	5SL6425-6	5SL6425-7
5SL6632-6	5SL6632-7	5SL6432-6	5SL6432-7
5SL6640-6	5SL6640-7	5SL6440-6	5SL6440-7
5SL6650-6	5SL6650-7	5SL6450-6	5SL6450-7
5SL6663-6	5SL6663-7	5SL6463-6	5SL6463-7

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022

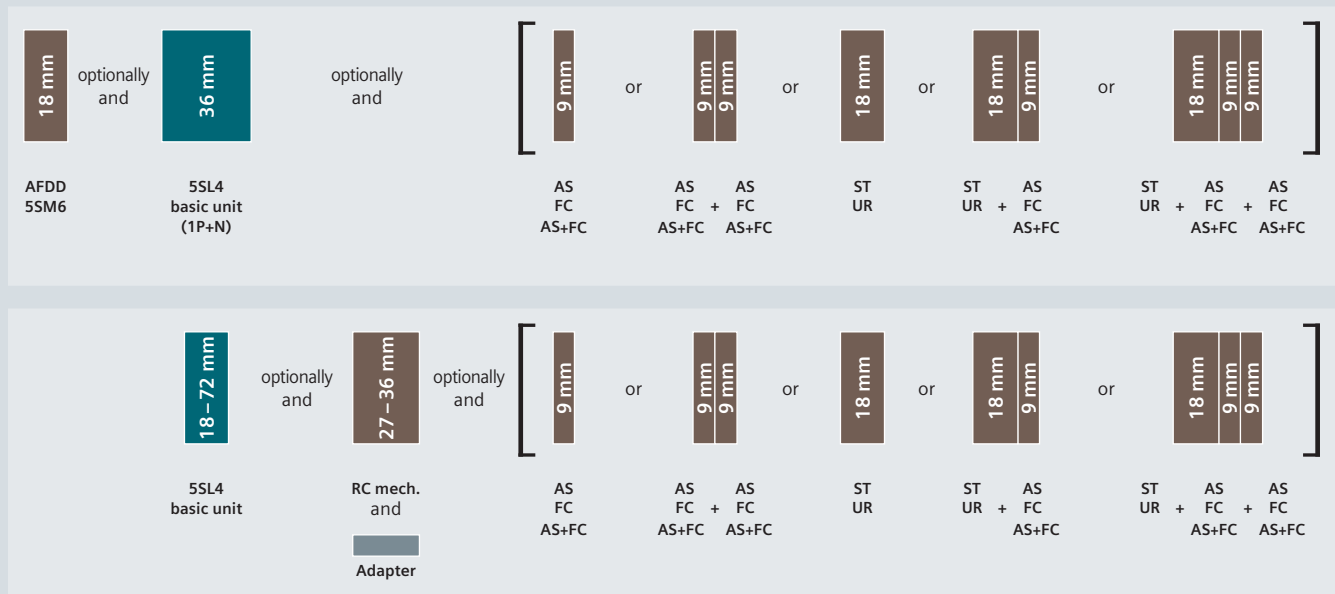
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Remote controlled mechanisms (RC mech.)		
Article No.		
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		Article No.
1–2 MW		5ST3820-6
3–4 MW		5ST3820-7

5SL4 miniature circuit breakers

10 kA

Mounting width	1P 230/400 V AC			1P+N 230 V AC			2P 400 V AC		
	1 MW			2 MW			2 MW		
Rated current I_n	Characteristic			Characteristic			Characteristic		
	B	C	D	B	C	D	B	C	D
0.3 A	–	5SL4114-7	5SL4114-8	–	5SL4514-7	5SL4514-8	–	5SL4214-7	5SL4214-8
0.5 A	–	5SL4105-7	5SL4105-8	–	5SL4505-7	5SL4505-8	–	5SL4205-7	5SL4205-8
1 A	5SL4101-6	5SL4101-7	5SL4101-8	5SL4501-6	5SL4501-7	5SL4501-8	5SL4201-6	5SL4201-7	5SL4201-8
1.6 A	–	5SL4115-7	5SL4115-8	–	5SL4515-7	5SL4515-8	–	5SL4215-7	5SL4215-8
2 A	5SL4102-6	5SL4102-7	5SL4102-8	5SL4502-6	5SL4502-7	5SL4502-8	5SL4202-6	5SL4202-7	5SL4202-8
3 A	5SL4103-6	5SL4103-7	5SL4103-8	5SL4503-6	5SL4503-7	5SL4503-8	5SL4203-6	5SL4203-7	5SL4203-8
4 A	5SL4104-6	5SL4104-7	5SL4104-8	5SL4504-6	5SL4504-7	5SL4504-8	5SL4204-6	5SL4204-7	5SL4204-8
6 A	5SL4106-6	5SL4106-7	5SL4106-8	5SL4506-6	5SL4506-7	5SL4506-8	5SL4206-6	5SL4206-7	5SL4206-8
8 A	5SL4108-6	5SL4108-7	5SL4108-8	5SL4508-6	5SL4508-7	5SL4508-8	5SL4208-6	5SL4208-7	5SL4208-8
10 A	5SL4110-6	5SL4110-7	5SL4110-8	5SL4510-6	5SL4510-7	5SL4510-8	5SL4210-6	5SL4210-7	5SL4210-8
13 A	5SL4113-6	5SL4113-7	5SL4113-8	5SL4513-6	5SL4513-7	5SL4513-8	5SL4213-6	5SL4213-7	5SL4213-8
16 A	5SL4116-6	5SL4116-7	5SL4116-8	5SL4516-6	5SL4516-7	5SL4516-8	5SL4216-6	5SL4216-7	5SL4216-8
20 A	5SL4120-6	5SL4120-7	5SL4120-8	5SL4520-6	5SL4520-7	5SL4520-8	5SL4220-6	5SL4220-7	5SL4220-8
25 A	5SL4125-6	5SL4125-7	5SL4125-8	5SL4525-6	5SL4525-7	5SL4525-8	5SL4225-6	5SL4225-7	5SL4225-8
32 A	5SL4132-6	5SL4132-7	5SL4132-8	5SL4532-6	5SL4532-7	5SL4532-8	5SL4232-6	5SL4232-7	5SL4232-8
40 A	5SL4140-6	5SL4140-7	5SL4140-8	5SL4540-6	5SL4540-7	5SL4540-8	5SL4240-6	5SL4240-7	5SL4240-8
50 A	5SL4150-6	5SL4150-7	5SL4150-8	5SL4550-6	5SL4550-7	5SL4550-8	5SL4250-6	5SL4250-7	5SL4250-8
63 A	5SL4163-6	5SL4163-7	5SL4163-8	5SL4563-6	5SL4563-7	5SL4563-8	5SL4263-6	5SL4263-7	5SL4263-8

Mounting concept



AFDD Arc fault detection devices [See page 3/50](#)
 AS Auxiliary switches [See page 3/44](#)
 FC Fault signal contacts [See page 3/45](#)

AS+FC Auxiliary switches and fault signal contacts [See page 3/46](#)
 ST Shunt trip [See page 3/47](#)

UR Undervoltage releases [See page 3/48](#)
 RC mech. Remote controlled mechanisms [See page 3/49](#)



3P 400 V AC 3 MW			3P+N 400 V AC 4 MW			4P 400 V AC 4 MW		
Characteristic			Characteristic			Characteristic		
B	C	D	B	C	D	B	C	D
–	5SL4314-7	5SL4314-8	–	5SL4614-7	5SL4614-8	–	5SL4414-7	5SL4414-8
–	5SL4305-7	5SL4305-8	–	5SL4605-7	5SL4605-8	–	5SL4405-7	5SL4405-8
5SL4301-6	5SL4301-7	5SL4301-8	5SL4601-6	5SL4601-7	5SL4601-8	5SL4401-6	5SL4401-7	5SL4401-8
–	5SL4315-7	5SL4315-8	–	5SL4615-7	5SL4615-8	–	5SL4415-7	5SL4415-8
5SL4302-6	5SL4302-7	5SL4302-8	5SL4602-6	5SL4602-7	5SL4602-8	5SL4402-6	5SL4402-7	5SL4402-8
5SL4303-6	5SL4303-7	5SL4303-8	5SL4603-6	5SL4603-7	5SL4603-8	5SL4403-6	5SL4403-7	5SL4403-8
5SL4304-6	5SL4304-7	5SL4304-8	5SL4604-6	5SL4604-7	5SL4604-8	5SL4404-6	5SL4404-7	5SL4404-8
5SL4306-6	5SL4306-7	5SL4306-8	5SL4606-6	5SL4606-7	5SL4606-8	5SL4406-6	5SL4406-7	5SL4406-8
5SL4308-6	5SL4308-7	5SL4308-8	5SL4608-6	5SL4608-7	5SL4608-8	5SL4408-6	5SL4408-7	5SL4408-8
5SL4310-6	5SL4310-7	5SL4310-8	5SL4610-6	5SL4610-7	5SL4610-8	5SL4410-6	5SL4410-7	5SL4410-8
5SL4313-6	5SL4313-7	5SL4313-8	5SL4613-6	5SL4613-7	5SL4613-8	5SL4413-6	5SL4413-7	5SL4413-8
5SL4316-6	5SL4316-7	5SL4316-8	5SL4616-6	5SL4616-7	5SL4616-8	5SL4416-6	5SL4416-7	5SL4416-8
5SL4320-6	5SL4320-7	5SL4320-8	5SL4620-6	5SL4620-7	5SL4620-8	5SL4420-6	5SL4420-7	5SL4420-8
5SL4325-6	5SL4325-7	5SL4325-8	5SL4625-6	5SL4625-7	5SL4625-8	5SL4425-6	5SL4425-7	5SL4425-8
5SL4332-6	5SL4332-7	5SL4332-8	5SL4632-6	5SL4632-7	5SL4632-8	5SL4432-6	5SL4432-7	5SL4432-8
5SL4340-6	5SL4340-7	5SL4340-8	5SL4640-6	5SL4640-7	5SL4640-8	5SL4440-6	5SL4440-7	5SL4440-8
5SL4350-6	5SL4350-7	5SL4350-8	5SL4650-6	5SL4650-7	5SL4650-8	5SL4450-6	5SL4450-7	5SL4450-8
5SL4363-6	5SL4363-7	5SL4363-8	5SL4663-6	5SL4663-7	5SL4663-8	5SL4463-6	5SL4463-7	5SL4463-8

Accessories

Auxiliary switches (AS)		Article No.	Undervoltage releases (UR)		Article No.
1 NO + 1 NC	Standard	5ST3010	With integrated auxiliary switch	230 V AC	5ST3040
	For low power	5ST3013		110 V DC	5ST3041
	For low power (with diode)	5ST3013-0XX01		24 V DC	5ST3042
2 NO	Standard	5ST3011	Without integrated auxiliary switch	230 V AC	5ST3043
	For low power	5ST3014		110 V DC	5ST3044
2 NC	Standard	5ST3012		24 V DC	5ST3045
	For low power	5ST3015	Remote controlled mechanisms (RC mech.)		Article No.
1 CO	Standard	5ST3016	Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
Fault signal contacts (FC)		Article No.		177 ... 270 V AC	5ST3054
1 NO + 1 NC		5ST3020	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
2 NO		5ST3021		177 ... 270 V AC	5ST3056
2 NC		5ST3022	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
Auxiliary switches and fault signal contacts (AS+FC)		Article No.		177 ... 270 V AC	5ST3058
1 CO (AS) + 1 CO (FC)		5ST3062	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Shunt trip (ST)		Article No.	Adapters for remote controlled mechanisms (RC mech.)		Article No.
110 ... 415 V AC		5ST3030	1–2 MW		5ST3820-6
24 ... 48 V AC/DC		5ST3031	3–4 MW		5ST3820-7
12 V DC new		5ST3031-0XX01	Arc fault detection devices (AFDD)		Article No.
			For basic units 1P+N (2 MW), not in combination with RC mech.	I_n up to 16 A	5SM6021-2
				I_n up to 40 A	5SM6024-2

5SJ6...-KS miniature circuit breakers

6 kA – plug-in terminal on outgoing side



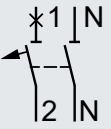

	1P 230/400 V AC		1P+N 230/400 V AC		2P 230/400 V AC		3P 230/400 V AC	
	1 MW		2 MW		2 MW		3 MW	
Mounting width								
Rated current I _n	Characteristic		Characteristic		Characteristic		Characteristic	
	B	C	B	C	B	C	B	C
10 A	5SJ6110-6KS	5SJ6110-7KS	5SJ6510-6KS	5SJ6510-7KS	5SJ6210-6KS	5SJ6210-7KS	5SJ6310-6KS	5SJ6310-7KS
13 A	5SJ6113-6KS	5SJ6113-7KS	5SJ6513-6KS	5SJ6513-7KS	5SJ6213-6KS	5SJ6213-7KS	5SJ6313-6KS	5SJ6313-7KS
16 A	5SJ6116-6KS	5SJ6116-7KS	5SJ6516-6KS	5SJ6516-7KS	5SJ6216-6KS	5SJ6216-7KS	5SJ6316-6KS	5SJ6316-7KS
20 A	5SJ6120-6KS	5SJ6120-7KS	5SJ6520-6KS	5SJ6520-7KS	5SJ6220-6KS	5SJ6220-7KS	5SJ6320-6KS	5SJ6320-7KS

3

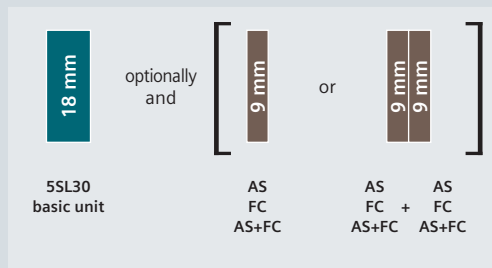
5SL30 miniature circuit breakers

1P+N 4.5 kA compact miniature circuit breakers

3

	1P+N (N pole right) 230 V AC	1P+N (N pole left) 230 V AC
Mounting width	2 MW 	2 MW 
Rated current I_n	Characteristic C	Characteristic C
2 A	5SL3002-7	5SL3002-7KL
4 A	5SL3004-7	5SL3004-7KL
6 A	5SL3006-7	5SL3006-7KL
8 A	5SL3008-7	5SL3008-7KL
10 A	5SL3010-7	5SL3010-7KL
13 A	5SL3013-7	5SL3013-7KL
16 A	5SL3016-7	5SL3016-7KL
20 A	5SL3020-7	5SL3020-7KL
25 A	5SL3025-7	5SL3025-7KL
32 A	5SL3032-7	5SL3032-7KL
40 A	5SL3040-7	5SL3040-7KL

Mounting concept



AS Auxiliary switches
 FC Fault signal contacts
 AS+FC Auxiliary switches and fault signal contacts

[See page 3/44](#)
[See page 3/45](#)
[See page 3/46](#)



Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Fault signal contacts (FC)		Article No.
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062

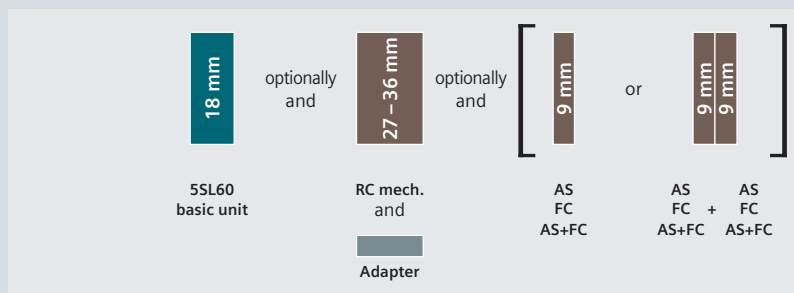
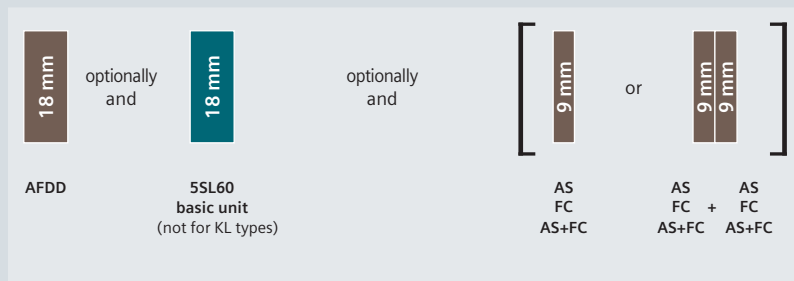
5SL60 miniature circuit breakers

1P+N 6 kA compact miniature circuit breakers

3

Mounting width	1P+N (N pole right) 230 V AC		1P+N (N pole left) 230 V AC	
	1 MW			
Rated current I _n	Characteristic		Characteristic	
	B	C	C	
2 A	–	5SL6002-7	5SL6002-7KL	
4 A	–	5SL6004-7	5SL6004-7KL	
6 A	5SL6006-6	5SL6006-7	5SL6006-7KL	
8 A	–	5SL6008-7	5SL6008-7KL	
10 A	5SL6010-6	5SL6010-7	5SL6010-7KL	
13 A	5SL6013-6	5SL6013-7	5SL6013-7KL	
16 A	5SL6016-6	5SL6016-7	5SL6016-7KL	
20 A	5SL6020-6	5SL6020-7	5SL6020-7KL	
25 A	5SL6025-6	5SL6025-7	5SL6025-7KL	
32 A	5SL6032-6	5SL6032-7	5SL6032-7KL	
40 A	5SL6040-6	5SL6040-7	5SL6040-7KL	

Mounting concept



- AFDD Arc fault detection devices
- AS Auxiliary switches
- FC Fault signal contacts
- AS+FC Auxiliary switches and fault signal contacts
- RC mech. Remote controlled mechanisms

- [See page 3/50](#)
- [See page 3/44](#)
- [See page 3/45](#)
- [See page 3/46](#)
- [See page 3/49](#)



Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062


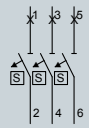
Remote controlled mechanisms (RC mech.)		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		Article No.
1 MW		5ST3820-6
Arc fault detection devices (AFDD)		Article No.
For basic units 2P (1 MW), not for KL types	I_n up to 16 A	5SM6011-2
	I_n up to 40 A	5SM6014-2

5SP3 selective main miniature circuit breakers (SHU)



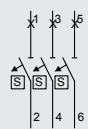
25 kA, mounting on a 40 mm busbar

3

1P 230/400 V AC		3 × 1P 230/400 V AC			
Mounting width	1.5 MW	4.5 MW			
					
Rated current I _n	Characteristic				
	E	L1	L2	L3	L1 + L2 + L3
16 A	E	5SP3716-2KK01	5SP3716-2KK02	5SP3716-2KK03	5SP3716-2
20 A	E	5SP3720-2KK01	5SP3720-2KK02	5SP3720-2KK03	5SP3720-2
25 A	E	5SP3725-2KK01	5SP3725-2KK02	5SP3725-2KK03	5SP3725-2
35 A	E	5SP3735-2KK01	5SP3735-2KK02	5SP3735-2KK03	5SP3735-2
40 A	E	5SP3740-2KK01	5SP3740-2KK02	5SP3740-2KK03	5SP3740-2
50 A	E	5SP3750-2KK01	5SP3750-2KK02	5SP3750-2KK03	5SP3750-2
63 A	E	5SP3763-2KK01	5SP3763-2KK02	5SP3763-2KK03	5SP3763-2

25 kA, mounting on a 40 mm busbar



3 × 1P 230/400 V AC	
Mounting width	4.5 MW
	
Rated current I _n	Characteristic
	E
80 A	5SP3780-1
100 A	5SP3791-1

Specific accessories

Busbar adapters



- For fitting 5SP37...-1 SHU circuit breakers
- Plug-on

Busbar spacing	Article No.
40 mm	5ST1328

Breaker blocking covers



Purpose

To prevent manual switching OFF

Purpose	Article No.
To prevent manual switching OFF	5ST1318

Operating protective covers (spare part)



- Multiple locking options against accidental and intentional operation
 - With padlock
 - With Phillips screwdriver
 - With special wrench (Antilux)
 - These can be installed by the operator or the power utility
- 3 units included with the main miniature circuit breaker (SHU) 5SP37...-1

Version

Transparent

Version	Article No.
Transparent	5ST1323

Terminal covers


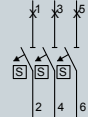
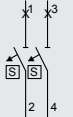

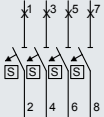


- Terminal covers in compliance with cladding dimensions acc. to DIN 43880
- 2 units required per device


Terminal covers	Article No.
Terminal covers in compliance with cladding dimensions acc. to DIN 43880	5ST1316



25 kA, mounting on a mounting rail

	1P 230/400 V AC	3× 1P 230/400 V AC	2P 230/400 V AC	3P 230/400 V AC	4P 230/400 V AC
Mounting width	1.5 MW 	4.5 MW 	3 MW 	4.5 MW 	6 MW 
Rated current I _n	Characteristic E	Characteristic E	Characteristic E	Characteristic E	Characteristic E
16 A	5SP3716-3	5SP3816-3	5SP3216-3	5SP3316-3	5SP3416-3
20 A	5SP3720-3	5SP3820-3	5SP3220-3	5SP3320-3	5SP3420-3
25 A	5SP3725-3	5SP3825-3	5SP3225-3	5SP3325-3	5SP3425-3
35 A	5SP3735-3	5SP3835-3	5SP3235-3	5SP3335-3	5SP3435-3
40 A	5SP3740-3	5SP3840-3	5SP3240-3	5SP3340-3	5SP3440-3
50 A	5SP3750-3	5SP3850-3	5SP3250-3	5SP3350-3	5SP3450-3
63 A	5SP3763-3	5SP3863-3	5SP3263-3	5SP3363-3	5SP3463-3

25 kA, mounting on a mounting rail or 40 mm busbar

	1P 230/400 V AC
Mounting width	1.5 MW 
Rated current I _n	Characteristic E
80 A	5SP3780
100 A	5SP3791



Specific accessories

Mounting plates



- For mounting on standard mounting rails according to EN 50022
- For 1 or 2 standard mounting rails, universal application, tier spacing 125 mm

Article No.
5ST1322

Busbar adapters



- For fitting 3 5SP37.. SHU circuit breakers
- Plug-on

Busbar spacing

40 mm

Article No.
5ST1328

Breaker blocking covers



Purpose

To prevent manual switching OFF

Article No.
5ST1318

Operating protective covers (spare part)



- Multiple locking options against accidental and intentional operation
 - With padlock
 - With Phillips screwdriver
 - With special wrench (Antilux)
 - These can be installed by the operator or the power utility

Version

Transparent

Article No.
5ST1323

Terminal covers



- Terminal covers in compliance with cladding dimensions acc. to DIN 43880
- 2 units required per device

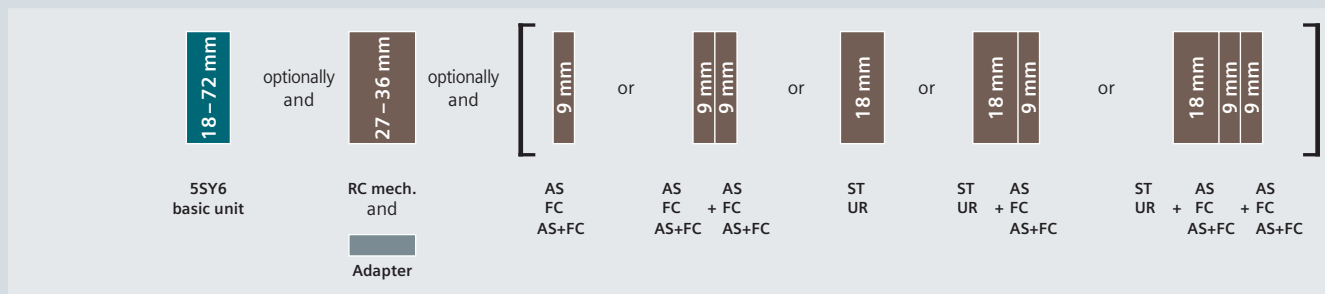
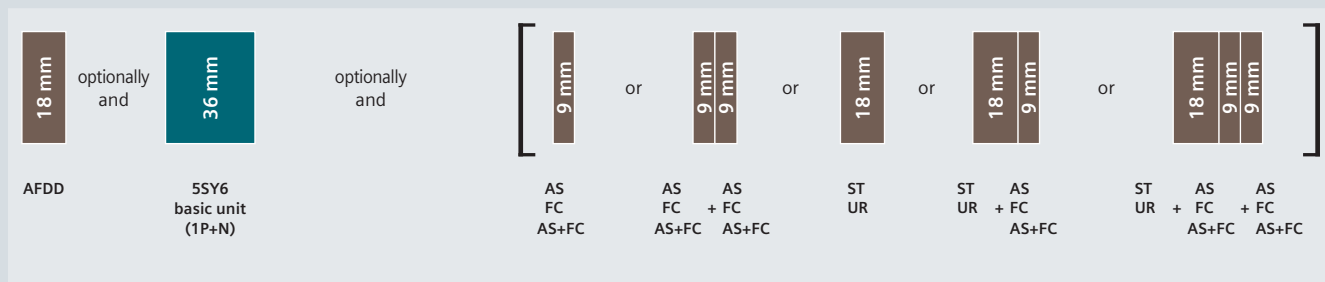
Article No.
5ST1316

5SY6 miniature circuit breakers

6 kA

Mounting width	1P	1P+N	2P	3P				
	230/400 V AC	230 V AC	400 V AC	400 V AC				
1 MW		2 MW	2 MW	3 MW				
Rated current I _n	Characteristic		Characteristic		Characteristic		Characteristic	
	B	C	B	C	B	C	B	C
0.3 A	–	5SY6114-7	–	5SY6514-7	–	5SY6214-7	–	5SY6314-7
0.5 A	–	5SY6105-7	–	5SY6505-7	–	5SY6205-7	–	5SY6305-7
1 A	–	5SY6101-7	–	5SY6501-7	–	5SY6201-7	–	5SY6301-7
1.6 A	–	5SY6115-7	–	5SY6515-7	–	5SY6215-7	–	5SY6315-7
2 A	5SY6102-6	5SY6102-7	–	5SY6502-7	–	5SY6202-7	–	5SY6302-7
3 A	–	5SY6103-7	–	5SY6503-7	–	5SY6203-7	–	5SY6303-7
4 A	5SY6104-6	5SY6104-7	–	5SY6504-7	–	5SY6204-7	–	5SY6304-7
5 A	–	5SY6111-7	–	–	–	5SY6211-7	–	5SY6311-7
6 A	5SY6106-6	5SY6106-7	5SY6506-6	5SY6506-7	5SY6206-6	5SY6206-7	5SY6306-6	5SY6306-7
8 A	–	5SY6108-7	–	5SY6508-7	–	5SY6208-7	–	5SY6308-7
10 A	5SY6110-6	5SY6110-7	5SY6510-6	5SY6510-7	5SY6210-6	5SY6210-7	5SY6310-6	5SY6310-7
13 A	5SY6113-6	5SY6113-7	5SY6513-6	5SY6513-7	5SY6213-6	5SY6213-7	5SY6313-6	5SY6313-7
15 A	–	5SY6118-7	–	–	–	5SY6218-7	–	5SY6318-7
16 A	5SY6116-6	5SY6116-7	5SY6516-6	5SY6516-7	5SY6216-6	5SY6216-7	5SY6316-6	5SY6316-7
20 A	5SY6120-6	5SY6120-7	5SY6520-6	5SY6520-7	5SY6220-6	5SY6220-7	5SY6320-6	5SY6320-7
25 A	5SY6125-6	5SY6125-7	5SY6525-6	5SY6525-7	5SY6225-6	5SY6225-7	5SY6325-6	5SY6325-7
30 A	–	5SY6130-7	–	–	–	5SY6230-7	–	5SY6330-7
32 A	5SY6132-6	5SY6132-7	5SY6532-6	5SY6532-7	5SY6232-6	5SY6232-7	5SY6332-6	5SY6332-7
40 A	5SY6140-6	5SY6140-7	5SY6540-6	5SY6540-7	5SY6240-6	5SY6240-7	5SY6340-6	5SY6340-7
50 A	5SY6150-6	5SY6150-7	5SY6550-6	5SY6550-7	5SY6250-6	5SY6250-7	5SY6350-6	5SY6350-7
63 A	5SY6163-6	5SY6163-7	5SY6563-6	5SY6563-7	5SY6263-6	5SY6263-7	5SY6363-6	5SY6363-7

Mounting concept



AFDD Arc fault detection devices [See page 3/50](#) AS+FC Auxiliary switches and fault signal contacts [See page 3/46](#) UR Undervoltage releases [See page 3/48](#)
 AS Auxiliary switches [See page 3/44](#) FC Fault signal contacts [See page 3/45](#) ST Shunt trip [See page 3/47](#) RC mech. Remote controlled mechanisms [See page 3/49](#)



3P+N 400 V AC 4 MW		4P 400 V AC 4 MW	
Characteristic		Characteristic	
B	C	B	C
–	5SY6614-7	–	5SY6414-7
–	5SY6605-7	–	5SY6405-7
–	5SY6601-7	–	5SY6401-7
–	5SY6615-7	–	5SY6415-7
–	5SY6602-7	–	5SY6402-7
–	5SY6603-7	–	5SY6403-7
–	5SY6604-7	–	5SY6404-7
–	–	–	–
5SY6606-6	5SY6606-7	5SY6406-6	5SY6406-7
–	5SY6608-7	–	5SY6408-7
5SY6610-6	5SY6610-7	5SY6410-6	5SY6410-7
5SY6613-6	5SY6613-7	5SY6413-6	5SY6413-7
–	–	–	–
5SY6616-6	5SY6616-7	5SY6416-6	5SY6416-7
5SY6620-6	5SY6620-7	5SY6420-6	5SY6420-7
5SY6625-6	5SY6625-7	5SY6425-6	5SY6425-7
–	–	–	–
5SY6632-6	5SY6632-7	5SY6432-6	5SY6432-7
5SY6640-6	5SY6640-7	5SY6440-6	5SY6440-7
5SY6650-6	5SY6650-7	5SY6450-6	5SY6450-7
5SY6663-6	5SY6663-7	5SY6463-6	5SY6463-7

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trip (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		Article No.
1–2 MW		5ST3820-1
3–4 MW		5ST3820-2
Arc fault detection devices (AFDD)		Article No.
For basic units 1P+N (2 MW), not in combination with RC mech.	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

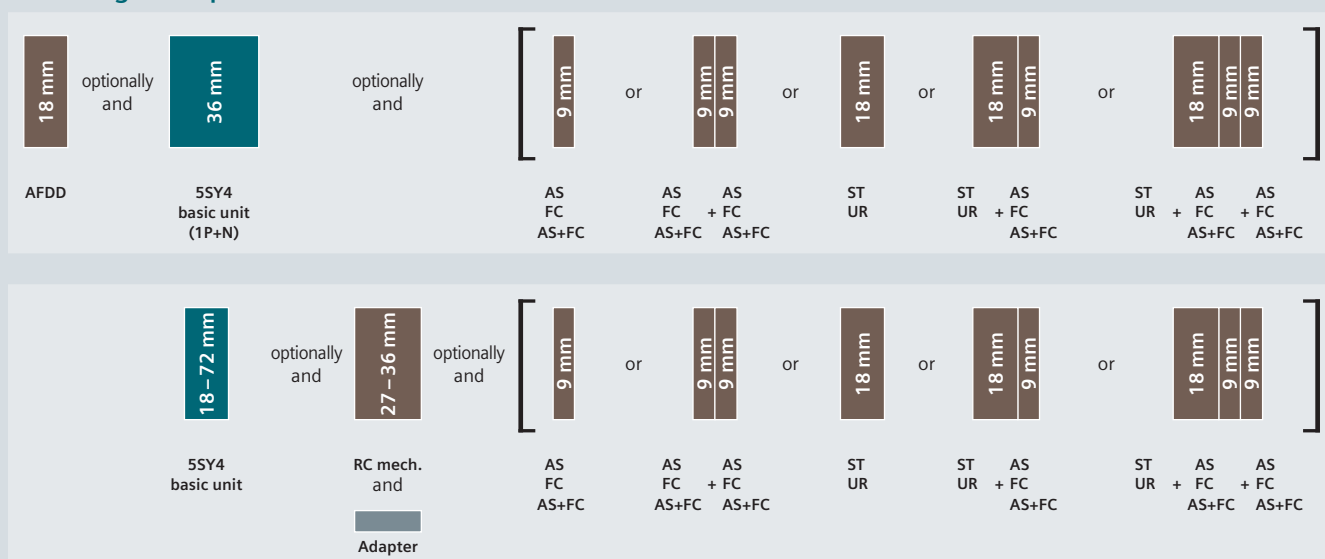
5SY4 miniature circuit breakers

10 kA



Rated current I_n	1P 230/400 V AC				1P+N 230 V AC				2P 400 V AC			
	Characteristic A	Characteristic B	Characteristic C	Characteristic D	Characteristic A	Characteristic B	Characteristic C	Characteristic D	Characteristic A	Characteristic B	Characteristic C	Characteristic D
0.3 A	-	-	5SY4114-7	5SY4114-8	-	-	5SY4514-7	5SY4514-8	-	-	5SY4214-7	5SY4214-8
0.5 A	5SY4105-5	-	5SY4105-7	5SY4105-8	-	-	5SY4505-7	5SY4505-8	5SY4205-5	-	5SY4205-7	5SY4205-8
1 A	5SY4101-5	-	5SY4101-7	5SY4101-8	5SY4501-5	-	5SY4501-7	5SY4501-8	5SY4201-5	-	5SY4201-7	5SY4201-8
1.6 A	5SY4115-5	-	5SY4115-7	5SY4115-8	5SY4515-5	-	5SY4515-7	5SY4515-8	5SY4215-5	-	5SY4215-7	5SY4215-8
2 A	5SY4102-5	5SY4102-6	5SY4102-7	5SY4102-8	5SY4502-5	-	5SY4502-7	5SY4502-8	5SY4202-5	-	5SY4202-7	5SY4202-8
3 A	5SY4103-5	-	5SY4103-7	5SY4103-8	5SY4503-5	-	5SY4503-7	5SY4503-8	5SY4203-5	-	5SY4203-7	5SY4203-8
4 A	5SY4104-5	5SY4104-6	5SY4104-7	5SY4104-8	5SY4504-5	-	5SY4504-7	5SY4504-8	5SY4204-5	-	5SY4204-7	5SY4204-8
5 A	-	-	5SY4111-7	-	-	-	-	-	-	-	5SY4211-7	-
6 A	5SY4106-5	5SY4106-6	5SY4106-7	5SY4106-8	5SY4506-5	5SY4506-6	5SY4506-7	5SY4506-8	5SY4206-5	5SY4206-6	5SY4206-7	5SY4206-8
8 A	5SY4108-5	-	5SY4108-7	5SY4108-8	5SY4508-5	-	5SY4508-7	5SY4508-8	5SY4208-5	-	5SY4208-7	5SY4208-8
10 A	5SY4110-5	5SY4110-6	5SY4110-7	5SY4110-8	5SY4510-5	5SY4510-6	5SY4510-7	5SY4510-8	5SY4210-5	5SY4210-6	5SY4210-7	5SY4210-8
13 A	5SY4113-5	5SY4113-6	5SY4113-7	5SY4113-8	5SY4513-5	5SY4513-6	5SY4513-7	5SY4513-8	5SY4213-5	5SY4213-6	5SY4213-7	5SY4213-8
15 A	-	-	5SY4118-7	-	-	-	-	-	-	-	5SY4218-7	-
16 A	5SY4116-5	5SY4116-6	5SY4116-7	5SY4116-8	5SY4516-5	5SY4516-6	5SY4516-7	5SY4516-8	5SY4216-5	5SY4216-6	5SY4216-7	5SY4216-8
20 A	5SY4120-5	5SY4120-6	5SY4120-7	5SY4120-8	5SY4520-5	5SY4520-6	5SY4520-7	5SY4520-8	5SY4220-5	5SY4220-6	5SY4220-7	5SY4220-8
25 A	5SY4125-5	5SY4125-6	5SY4125-7	5SY4125-8	5SY4525-5	5SY4525-6	5SY4525-7	5SY4525-8	5SY4225-5	5SY4225-6	5SY4225-7	5SY4225-8
30 A	-	-	5SY4130-7	-	-	-	-	-	-	-	5SY4230-7	-
32 A	5SY4132-5	5SY4132-6	5SY4132-7	5SY4132-8	5SY4532-5	5SY4532-6	5SY4532-7	5SY4532-8	5SY4232-5	5SY4232-6	5SY4232-7	5SY4232-8
35 A	-	-	5SY4135-7	-	-	-	-	-	-	-	5SY4235-7	-
40 A	5SY4140-5	5SY4140-6	5SY4140-7	5SY4140-8	5SY4540-5	5SY4540-6	5SY4540-7	5SY4540-8	5SY4240-5	5SY4240-6	5SY4240-7	5SY4240-8
45 A	-	-	5SY4145-7	-	-	-	-	-	-	-	5SY4245-7	-
50 A	5SY4150-5	5SY4150-6	5SY4150-7	5SY4150-8	5SY4550-5	5SY4550-6	5SY4550-7	5SY4550-8	5SY4250-5	5SY4250-6	5SY4250-7	5SY4250-8
60 A	-	-	5SY4160-7	-	-	-	-	-	-	-	5SY4260-7	-
63 A	5SY4163-5	5SY4163-6	5SY4163-7	5SY4163-8	5SY4563-5	5SY4563-6	5SY4563-7	5SY4563-8	5SY4263-5	5SY4263-6	5SY4263-7	5SY4263-8
80 A	-	5SY4180-6	5SY4180-7	-	-	-	5SY4580-7	-	-	5SY4280-6	5SY4280-7	-

Mounting concept





3P 400 V AC 3 MW				3P+N 400 V AC 4 MW				4P 400 V AC 4 MW			
Characteristic		Characteristic		Characteristic		Characteristic		Characteristic		Characteristic	
A	B	C	D	A	B	C	D	A	B	C	D
–	–	5SY4314-7	5SY4314-8	–	–	5SY4614-7	5SY4614-8	–	–	5SY4414-7	5SY4414-8
5SY4305-5	–	5SY4305-7	5SY4305-8	–	–	5SY4605-7	5SY4605-8	–	–	5SY4405-7	5SY4405-8
5SY4301-5	–	5SY4301-7	5SY4301-8	5SY4601-5	–	5SY4601-7	5SY4601-8	5SY4401-5	–	5SY4401-7	5SY4401-8
5SY4315-5	–	5SY4315-7	5SY4315-8	5SY4615-5	–	5SY4615-7	5SY4615-8	5SY4415-5	–	5SY4415-7	5SY4415-8
5SY4302-5	–	5SY4302-7	5SY4302-8	5SY4602-5	–	5SY4602-7	5SY4602-8	5SY4402-5	–	5SY4402-7	5SY4402-8
5SY4303-5	–	5SY4303-7	5SY4303-8	5SY4603-5	–	5SY4603-7	5SY4603-8	5SY4403-5	–	5SY4403-7	5SY4403-8
5SY4304-5	–	5SY4304-7	5SY4304-8	5SY4604-5	–	5SY4604-7	5SY4604-8	5SY4404-5	–	5SY4404-7	5SY4404-8
–	–	5SY4311-7	–	–	–	–	–	–	–	–	–
5SY4306-5	5SY4306-6	5SY4306-7	5SY4306-8	5SY4606-5	5SY4606-6	5SY4606-7	5SY4606-8	5SY4406-5	5SY4406-6	5SY4406-7	5SY4406-8
5SY4308-5	–	5SY4308-7	5SY4308-8	5SY4608-5	–	5SY4608-7	5SY4608-8	5SY4408-5	–	5SY4408-7	5SY4408-8
5SY4310-5	5SY4310-6	5SY4310-7	5SY4310-8	5SY4610-5	5SY4610-6	5SY4610-7	5SY4610-8	5SY4410-5	5SY4410-6	5SY4410-7	5SY4410-8
5SY4313-5	5SY4313-6	5SY4313-7	5SY4313-8	5SY4613-5	5SY4613-6	5SY4613-7	5SY4613-8	5SY4413-5	5SY4413-6	5SY4413-7	5SY4413-8
–	–	5SY4318-7	–	–	–	–	–	–	–	–	–
5SY4316-5	5SY4316-6	5SY4316-7	5SY4316-8	5SY4616-5	5SY4616-6	5SY4616-7	5SY4616-8	5SY4416-5	5SY4416-6	5SY4416-7	5SY4416-8
5SY4320-5	5SY4320-6	5SY4320-7	5SY4320-8	5SY4620-5	5SY4620-6	5SY4620-7	5SY4620-8	5SY4420-5	5SY4420-6	5SY4420-7	5SY4420-8
5SY4325-5	5SY4325-6	5SY4325-7	5SY4325-8	5SY4625-5	5SY4625-6	5SY4625-7	5SY4625-8	5SY4425-5	5SY4425-6	5SY4425-7	5SY4425-8
–	–	5SY4330-7	–	–	–	–	–	–	–	–	–
5SY4332-5	5SY4332-6	5SY4332-7	5SY4332-8	5SY4632-5	5SY4632-6	5SY4632-7	5SY4632-8	5SY4432-5	5SY4432-6	5SY4432-7	5SY4432-8
–	–	5SY4335-7	–	–	–	–	–	–	–	–	–
5SY4340-5	5SY4340-6	5SY4340-7	5SY4340-8	5SY4640-5	5SY4640-6	5SY4640-7	5SY4640-8	5SY4440-5	5SY4440-6	5SY4440-7	5SY4440-8
–	–	5SY4345-7	–	–	–	–	–	–	–	–	–
5SY4350-5	5SY4350-6	5SY4350-7	5SY4350-8	5SY4650-5	5SY4650-6	5SY4650-7	5SY4650-8	5SY4450-5	5SY4450-6	5SY4450-7	5SY4450-8
–	–	5SY4360-7	–	–	–	–	–	–	–	–	–
5SY4363-5	5SY4363-6	5SY4363-7	5SY4363-8	5SY4663-5	5SY4663-6	5SY4663-7	5SY4663-8	5SY4463-5	5SY4463-6	5SY4463-7	5SY4463-8
–	5SY4380-6	5SY4380-7	–	–	–	5SY4680-7	–	–	5SY4480-6	5SY4480-7	–

Accessories

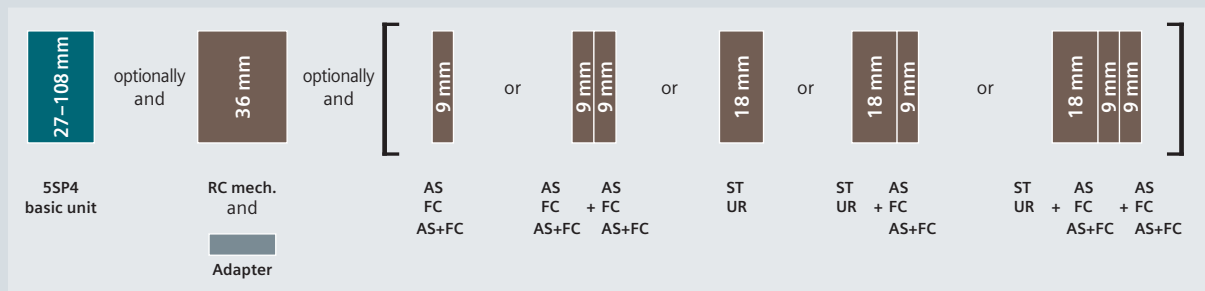
Auxiliary switches (AS)		Article No.	Arc fault detection devices (AFDD)		Article No.
1 NO + 1 NC	Standard	5ST3010	For basic units 1P+N (2 MW)	I_n up to 16 A	5SM6021-2
	For low power	5ST3013		I_n up to 40 A	5SM6024-2
	For low power (with diode)	5ST3013-0XX01			
2 NO	Standard	5ST3011	Undervoltage releases (UR)		Article No.
	For low power	5ST3014	With integrated auxiliary switch	230 V AC	5ST3040
2 NC	Standard	5ST3012		110 V DC	5ST3041
	For low power	5ST3015		24 V DC	5ST3042
1 CO	Standard	5ST3016	Without integrated auxiliary switch	230 V AC	5ST3043
				110 V DC	5ST3044
				24 V DC	5ST3045
Fault signal contacts (FC)		Article No.	Remote controlled mechanisms (RC mech.)		Article No.
1 NO + 1 NC		5ST3020	Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
2 NO		5ST3021		177 ... 270 V AC	5ST3054
2 NC		5ST3022	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
Auxiliary switches and fault signal contacts (AS+FC)		Article No.		177 ... 270 V AC	5ST3056
1 CO (AS) + 1 CO (FC)		5ST3062	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
Shunt trip (ST)		Article No.		177 ... 270 V AC	5ST3058
110 ... 415 V AC		5ST3030	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
24 ... 48 V AC/DC		5ST3031	Adapters for remote controlled mechanisms (RC mech.)		Article No.
12 V DC new		5ST3031-0XX01	1–2 MW		5ST3820-1
			3–4 MW		5ST3820-2

5SP4 miniature circuit breakers

10 kA

Mounting width	1P 230/400 V AC			2P 400 V AC		
	1.5 MW					
Rated current I _n	Characteristic			Characteristic		
	B	C	D	B	C	D
80 A	5SP4180-6	5SP4180-7	5SP4180-8	5SP4280-6	5SP4280-7	5SP4280-8
100 A	5SP4191-6	5SP4191-7	5SP4191-8	5SP4291-6	5SP4291-7	5SP4291-8
125 A	5SP4192-6	5SP4192-7	–	5SP4292-6	5SP4292-7	–

Mounting concept

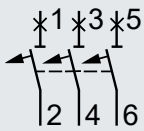


- AS Auxiliary switches [See page 3/44](#)
- FC Fault signal contacts [See page 3/45](#)
- AS+FC Auxiliary switches and fault signal contacts [See page 3/46](#)
- ST Shunt trip [See page 3/47](#)
- UR Undervoltage releases [See page 3/48](#)
- RC mech. Remote controlled mechanisms [See page 3/49](#)



3P
400 V AC

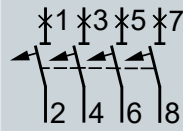
4.5 MW



4P

400 V AC

6 MW



Characteristic

B	C	D
5SP4380-6	5SP4380-7	5SP4380-8
5SP4391-6	5SP4391-7	5SP4391-8
5SP4392-6	5SP4392-7	–

Characteristic

B	C	D
5SP4480-6	5SP4480-7	5SP4480-8
5SP4491-6	5SP4491-7	5SP4491-8
5SP4492-6	5SP4492-7	–



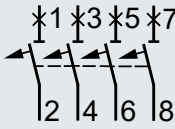
3

Accessories

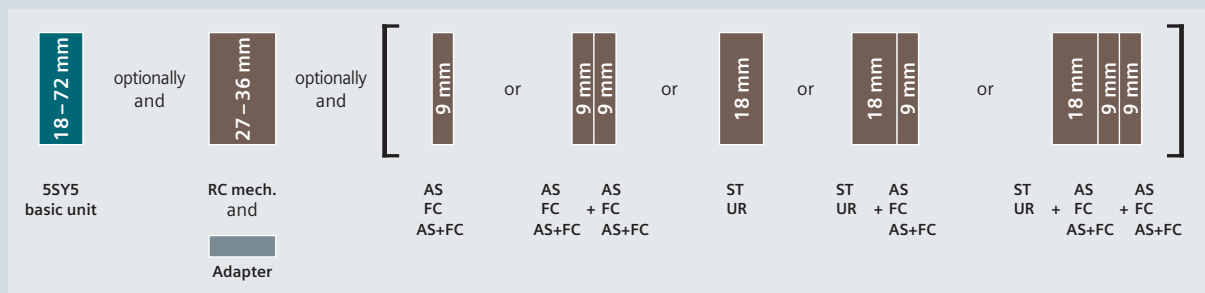
Auxiliary switches (AS)		Article No.	Undervoltage releases (UR)		Article No.
1 NO + 1 NC	Standard	5ST3010	With integrated auxiliary switch	230 V AC	5ST3040
	For low power	5ST3013		110 V DC	5ST3041
	For low power (with diode)	5ST3013-0XX01		24 V DC	5ST3042
2 NO	Standard	5ST3011	Without integrated auxiliary switch	230 V AC	5ST3043
	For low power	5ST3014		110 V DC	5ST3044
2 NC	Standard	5ST3012		24 V DC	5ST3045
	For low power	5ST3015	Remote controlled mechanisms (RC mech.)		
1 CO	Standard	5ST3016	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
Fault signal contacts (FC)		Article No.		177 ... 270 V AC	5ST3056
1 NO + 1 NC		5ST3020	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
2 NO		5ST3021		177 ... 270 V AC	5ST3058
2 NC		5ST3022	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Auxiliary switches and fault signal contacts (AS+FC)		Article No.	Adapters for remote controlled mechanisms (RC mech.)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062	1.5 MW		5ST3820-1
Shunt trip (ST)		Article No.	3–6 MW		5ST3820-2
110 ... 415 V AC		5ST3030			
24 ... 48 V AC/DC		5ST3031			
12 V DC new		5ST3031-0XX01			

5SY5 miniature circuit breakers

10 kA

	1P 230/400 V AC, 220 V DC		2P 400 V AC, 440 V DC		4P 400 V AC, 880 V DC	
Mounting width	1 MW 		2 MW 		4 MW 	
Rated current I _n	Characteristic		Characteristic		Characteristic	
	B	C	B	C	B	C
0.3 A	–	5SY5114-7	–	5SY5214-7	–	5SY5414-7
0.5 A	–	5SY5105-7	–	5SY5205-7	–	5SY5405-7
1 A	–	5SY5101-7	–	5SY5201-7	–	5SY5401-7
1.6 A	–	5SY5115-7	–	5SY5215-7	–	5SY5415-7
2 A	5SY5102-6	5SY5102-7	–	5SY5202-7	–	5SY5402-7
3 A	–	5SY5103-7	–	5SY5203-7	–	5SY5403-7
4 A	5SY5104-6	5SY5104-7	–	5SY5204-7	–	5SY5404-7
6 A	5SY5106-6	5SY5106-7	5SY5206-6	5SY5206-7	5SY5406-6	5SY5406-7
8 A	–	5SY5108-7	–	5SY5208-7	–	5SY5408-7
10 A	5SY5110-6	5SY5110-7	5SY5210-6	5SY5210-7	5SY5410-6	5SY5410-7
13 A	5SY5113-6	5SY5113-7	5SY5213-6	5SY5213-7	5SY5413-6	5SY5413-7
16 A	5SY5116-6	5SY5116-7	5SY5216-6	5SY5216-7	5SY5416-6	5SY5416-7
20 A	5SY5120-6	5SY5120-7	5SY5220-6	5SY5220-7	5SY5420-6	5SY5420-7
25 A	5SY5125-6	5SY5125-7	5SY5225-6	5SY5225-7	5SY5425-6	5SY5425-7
32 A	5SY5132-6	5SY5132-7	5SY5232-6	5SY5232-7	5SY5432-6	5SY5432-7
40 A	5SY5140-6	5SY5140-7	5SY5240-6	5SY5240-7	5SY5440-6	5SY5440-7
50 A	5SY5150-6	5SY5150-7	5SY5250-6	5SY5250-7	5SY5450-6	5SY5450-7
63 A	5SY5163-6	5SY5163-7	5SY5263-6	5SY5263-7	5SY5463-6	5SY5463-7

Mounting concept



- AS Auxiliary switches [See page 3/44](#)
- FC Fault signal contacts [See page 3/45](#)
- AS+FC Auxiliary switches and fault signal contacts [See page 3/46](#)
- ST Shunt trip [See page 3/47](#)
- UR Undervoltage releases [See page 3/48](#)
- RC mech. Remote controlled mechanisms [See page 3/49](#)



Accessories


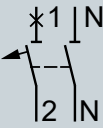
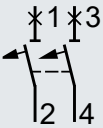
Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trip (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		Article No.
1–2 MW		5ST3820-1
4 MW		5ST3820-2

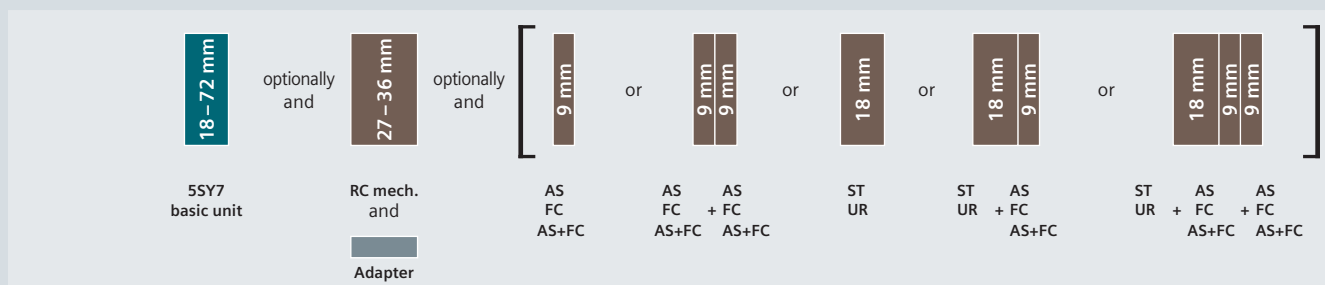
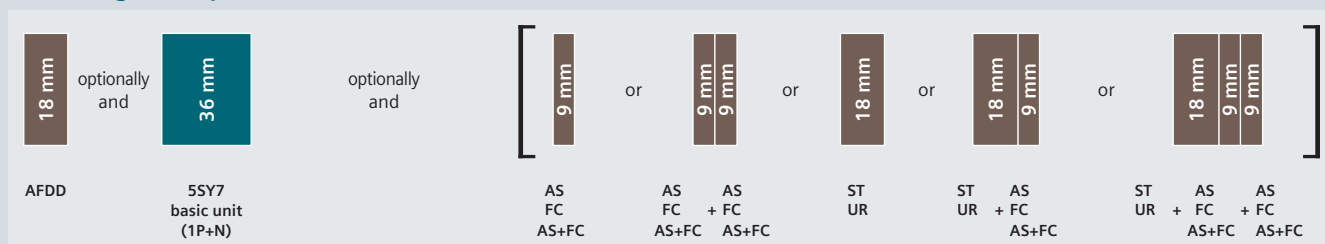
5SY7 miniature circuit breakers

15 kA

3

		1P 230/400 V AC			1P+N 230 V AC			2P 400 V AC		
Mounting width		1 MW 			2 MW 			2 MW 		
Rated current I_n	Main MCB, line side of meter	Characteristic			Characteristic			Characteristic		
		B	C	D	B	C	D	B	C	D
0.3 A	-	-	5SY7114-7	5SY7114-8	-	5SY7514-7	5SY7514-8	-	5SY7214-7	5SY7214-8
0.5 A	-	-	5SY7105-7	5SY7105-8	-	5SY7505-7	5SY7505-8	-	5SY7205-7	5SY7205-8
1 A	-	-	5SY7101-7	5SY7101-8	-	5SY7501-7	5SY7501-8	-	5SY7201-7	5SY7201-8
1.6 A	-	-	5SY7115-7	5SY7115-8	-	5SY7515-7	5SY7515-8	-	5SY7215-7	5SY7215-8
2 A	-	-	5SY7102-7	5SY7102-8	-	5SY7502-7	5SY7502-8	-	5SY7202-7	5SY7202-8
3 A	-	-	5SY7103-7	5SY7103-8	-	5SY7503-7	5SY7503-8	-	5SY7203-7	5SY7203-8
4 A	-	-	5SY7104-7	5SY7104-8	-	5SY7504-7	5SY7504-8	-	5SY7204-7	5SY7204-8
6 A	-	5SY7106-6	5SY7106-7	5SY7106-8	5SY7506-6	5SY7506-7	5SY7506-8	5SY7206-6	5SY7206-7	5SY7206-8
	■	5SY7106-6KK13	-	-	-	-	-	-	-	-
8 A	-	-	5SY7108-7	5SY7108-8	-	5SY7508-7	5SY7508-8	-	5SY7208-7	5SY7208-8
10 A	-	5SY7110-6	5SY7110-7	5SY7110-8	5SY7510-6	5SY7510-7	5SY7510-8	5SY7210-6	5SY7210-7	5SY7210-8
	■	5SY7110-6KK13	-	-	-	-	-	-	-	-
13 A	-	5SY7113-6	5SY7113-7	5SY7113-8	5SY7513-6	5SY7513-7	5SY7513-8	5SY7213-6	5SY7213-7	5SY7213-8
16 A	-	5SY7116-6	5SY7116-7	5SY7116-8	5SY7516-6	5SY7516-7	5SY7516-8	5SY7216-6	5SY7216-7	5SY7216-8
20 A	-	5SY7120-6	5SY7120-7	5SY7120-8	5SY7520-6	5SY7520-7	5SY7520-8	5SY7220-6	5SY7220-7	5SY7220-8
25 A	-	5SY7125-6	5SY7125-7	5SY7125-8	5SY7525-6	5SY7525-7	5SY7525-8	5SY7225-6	5SY7225-7	5SY7225-8
32 A	-	5SY7132-6	5SY7132-7	5SY7132-8	5SY7532-6	5SY7532-7	5SY7532-8	5SY7232-6	5SY7232-7	5SY7232-8
40 A	-	5SY7140-6	5SY7140-7	5SY7140-8	5SY7540-6	5SY7540-7	5SY7540-8	5SY7240-6	5SY7240-7	5SY7240-8
50 A	-	5SY7150-6	5SY7150-7	5SY7150-8	5SY7550-6	5SY7550-7	5SY7550-8	5SY7250-6	5SY7250-7	5SY7250-8
63 A	-	5SY7163-6	5SY7163-7	5SY7163-8	5SY7563-6	5SY7563-7	5SY7563-8	5SY7263-6	5SY7263-7	5SY7263-8

Mounting concept



AFDD Arc fault detection devices [See page 3/50](#) AS+FC Auxiliary switches and fault signal contacts [See page 3/46](#) UR Undervoltage releases [See page 3/48](#)
 AS Auxiliary switches [See page 3/44](#) ST Shunt trips [See page 3/47](#) RC mech. Remote controlled mechanisms [See page 3/49](#)
 FC Fault signal contacts [See page 3/45](#)



3P 400 V AC 3 MW			3P+N 400 V AC 4 MW			4P 400 V AC 4 MW		
Characteristic			Characteristic			Characteristic		
B	C	D	B	C	D	B	C	D
–	5SY7314-7	5SY7314-8	–	5SY7614-7	5SY7614-8	–	5SY7414-7	5SY7414-8
–	5SY7305-7	5SY7305-8	–	5SY7605-7	5SY7605-8	–	5SY7405-7	5SY7405-8
–	5SY7301-7	5SY7301-8	–	5SY7601-7	5SY7601-8	–	5SY7401-7	5SY7401-8
–	5SY7315-7	5SY7315-8	–	5SY7615-7	5SY7615-8	–	5SY7415-7	5SY7415-8
–	5SY7302-7	5SY7302-8	–	5SY7602-7	5SY7602-8	–	5SY7402-7	5SY7402-8
–	5SY7303-7	5SY7303-8	–	5SY7603-7	5SY7603-8	–	5SY7403-7	5SY7403-8
–	5SY7304-7	5SY7304-8	–	5SY7604-7	5SY7604-8	–	5SY7404-7	5SY7404-8
5SY7306-6	5SY7306-7	5SY7306-8	5SY7606-6	5SY7606-7	5SY7606-8	5SY7406-6	5SY7406-7	5SY7406-8
–	–	–	–	–	–	–	–	–
–	5SY7308-7	5SY7308-8	–	5SY7608-7	5SY7608-8	–	5SY7408-7	5SY7408-8
5SY7310-6	5SY7310-7	5SY7310-8	5SY7610-6	5SY7610-7	5SY7610-8	5SY7410-6	5SY7410-7	5SY7410-8
–	–	–	–	–	–	–	–	–
5SY7313-6	5SY7313-7	5SY7313-8	5SY7613-6	5SY7613-7	5SY7613-8	5SY7413-6	5SY7413-7	5SY7413-8
5SY7316-6	5SY7316-7	5SY7316-8	5SY7616-6	5SY7616-7	5SY7616-8	5SY7416-6	5SY7416-7	5SY7416-8
5SY7320-6	5SY7320-7	5SY7320-8	5SY7620-6	5SY7620-7	5SY7620-8	5SY7420-6	5SY7420-7	5SY7420-8
5SY7325-6	5SY7325-7	5SY7325-8	5SY7625-6	5SY7625-7	5SY7625-8	5SY7425-6	5SY7425-7	5SY7425-8
5SY7332-6	5SY7332-7	5SY7332-8	5SY7632-6	5SY7632-7	5SY7632-8	5SY7432-6	5SY7432-7	5SY7432-8
5SY7340-6	5SY7340-7	5SY7340-8	5SY7640-6	5SY7640-7	5SY7640-8	5SY7440-6	5SY7440-7	5SY7440-8
5SY7350-6	5SY7350-7	5SY7350-8	5SY7650-6	5SY7650-7	5SY7650-8	5SY7450-6	5SY7450-7	5SY7450-8
5SY7363-6	5SY7363-7	5SY7363-8	5SY7663-6	5SY7663-7	5SY7663-8	5SY7463-6	5SY7463-7	5SY7463-8

Accessories

Auxiliary switches (AS)		Article No.	Undervoltage releases (UR)		Article No.
1 NO + 1 NC	Standard	5ST3010	With integrated auxiliary switch	230 V AC	5ST3040
	For low power	5ST3013		110 V DC	5ST3041
	For low power (with diode)	5ST3013-0XX01		24 V DC	5ST3042
2 NO	Standard	5ST3011	Without integrated auxiliary switch	230 V AC	5ST3043
	For low power	5ST3014		110 V DC	5ST3044
2 NC	Standard	5ST3012		24 V DC	5ST3045
	For low power	5ST3015			
1 CO	Standard	5ST3016	Remote controlled mechanisms (RC mech.)		Article No.
Fault signal contacts (FC)		Article No.	Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
1 NO + 1 NC		5ST3020		177 ... 270 V AC	5ST3054
2 NO		5ST3021	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
2 NC		5ST3022		177 ... 270 V AC	5ST3056
Auxiliary switches and fault signal contacts (AS+FC)		Article No.	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
1 CO (AS) + 1 CO (FC)		5ST3062		177 ... 270 V AC	5ST3058
Shunt trip (ST)		Article No.	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
110 ... 415 V AC		5ST3030			
24 ... 48 V AC/DC		5ST3031	Adapters for remote controlled mechanisms (RC mech.)		Article No.
12 V DC new		5ST3031-0XX01	1–2 MW		5ST3820-1
			3–4 MW		5ST3820-2
			Arc fault detection devices (AFDD)		Article No.
			For basic units 1P+N (2 MW)	I_n up to 16 A	5SM6021-2
				I_n up to 40 A	5SM6024-2

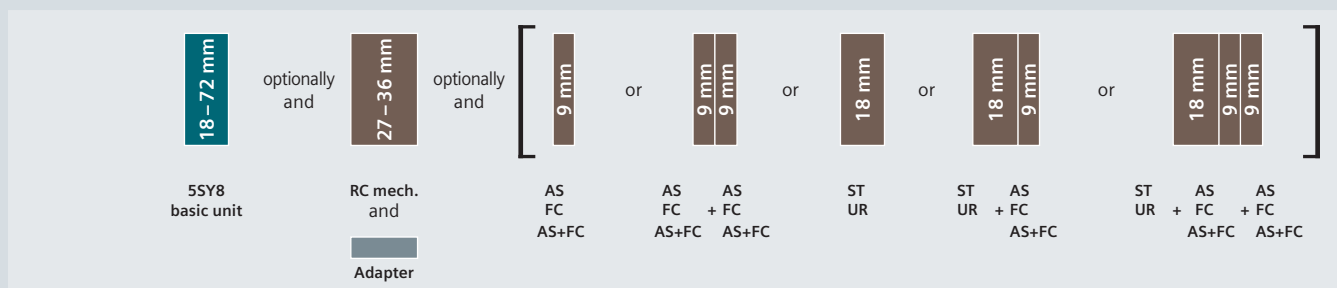
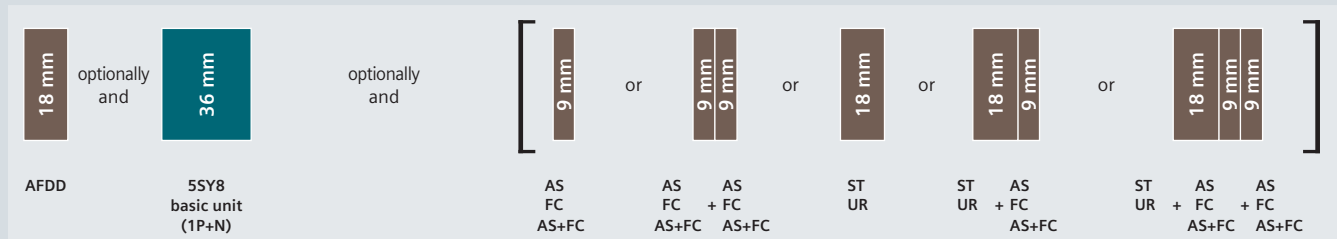
5SY8 miniature circuit breakers

25 kA

3

Mounting width	1P 230/400 V AC		1P+N 230 V AC		2P 400 V AC		3P 400 V AC	
	1 MW	2 MW	2 MW	3 MW	2 MW	3 MW	2 MW	3 MW
Rated current I _n	Characteristic		Characteristic		Characteristic		Characteristic	
	C	D	C	D	C	D	C	D
0.3 A	5SY8114-7	5SY8114-8	5SY8514-7	5SY8514-8	5SY8214-7	5SY8214-8	5SY8314-7	5SY8314-8
0.5 A	5SY8105-7	5SY8105-8	5SY8505-7	5SY8505-8	5SY8205-7	5SY8205-8	5SY8305-7	5SY8305-8
1 A	5SY8101-7	5SY8101-8	5SY8501-7	5SY8501-8	5SY8201-7	5SY8201-8	5SY8301-7	5SY8301-8
1.6 A	5SY8115-7	5SY8115-8	5SY8515-7	5SY8515-8	5SY8215-7	5SY8215-8	5SY8315-7	5SY8315-8
2 A	5SY8102-7	5SY8102-8	5SY8502-7	5SY8502-8	5SY8202-7	5SY8202-8	5SY8302-7	5SY8302-8
3 A	5SY8103-7	5SY8103-8	5SY8503-7	5SY8503-8	5SY8203-7	5SY8203-8	5SY8303-7	5SY8303-8
4 A	5SY8104-7	5SY8104-8	5SY8504-7	5SY8504-8	5SY8204-7	5SY8204-8	5SY8304-7	5SY8304-8
6 A	5SY8106-7	5SY8106-8	5SY8506-7	5SY8506-8	5SY8206-7	5SY8206-8	5SY8306-7	5SY8306-8
8 A	5SY8108-7	5SY8108-8	5SY8508-7	5SY8508-8	5SY8208-7	5SY8208-8	5SY8308-7	5SY8308-8
10 A	5SY8110-7	5SY8110-8	5SY8510-7	5SY8510-8	5SY8210-7	5SY8210-8	5SY8310-7	5SY8310-8
12.5 A	–	–	–	–	–	–	–	–
13 A	5SY8113-7	5SY8113-8	5SY8513-7	5SY8513-8	5SY8213-7	5SY8213-8	5SY8313-7	5SY8313-8
16 A	5SY8116-7	5SY8116-8	5SY8516-7	5SY8516-8	5SY8216-7	5SY8216-8	5SY8316-7	5SY8316-8
20 A	5SY8120-7	5SY8120-8	5SY8520-7	5SY8520-8	5SY8220-7	5SY8220-8	5SY8320-7	5SY8320-8
25 A	5SY8125-7	5SY8125-8	5SY8525-7	5SY8525-8	5SY8225-7	5SY8225-8	5SY8325-7	5SY8325-8
32 A	5SY8132-7	5SY8132-8	5SY8532-7	5SY8532-8	5SY8232-7	5SY8232-8	5SY8332-7	5SY8332-8
40 A	5SY8140-7	5SY8140-8	5SY8540-7	5SY8540-8	5SY8240-7	5SY8240-8	5SY8340-7	5SY8340-8
50 A	5SY8150-7	5SY8150-8	5SY8550-7	5SY8550-8	5SY8250-7	5SY8250-8	5SY8350-7	5SY8350-8
63 A	5SY8163-7	5SY8163-8	5SY8563-7	5SY8563-8	5SY8263-7	5SY8263-8	5SY8363-7	5SY8363-8

Mounting concept

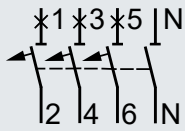


AFDD Arc fault detection devices [See page 3/50](#) AS+FC Auxiliary switches and fault signal contacts [See page 3/46](#) UR Undervoltage releases [See page 3/48](#)
 AS Auxiliary switches [See page 3/44](#) ST Shunt trips [See page 3/47](#) RC mech. Remote controlled mechanisms [See page 3/49](#)
 FC Fault signal contacts [See page 3/45](#)



3P+N
400 V AC

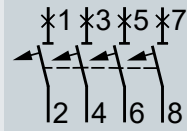
4 MW



4P

400 V AC

4 MW



Characteristic

C

D

Characteristic

C

D

5SY8614-7	5SY8614-8	5SY8414-7	5SY8414-8
5SY8605-7	5SY8605-8	5SY8405-7	5SY8405-8
5SY8601-7	5SY8601-8	5SY8401-7	5SY8401-8
5SY8615-7	5SY8615-8	5SY8415-7	5SY8415-8
5SY8602-7	5SY8602-8	5SY8402-7	5SY8402-8
5SY8603-7	5SY8603-8	5SY8403-7	5SY8403-8
5SY8604-7	5SY8604-8	5SY8404-7	5SY8404-8
5SY8606-7	5SY8606-8	5SY8406-7	5SY8406-8
5SY8608-7	5SY8608-8	5SY8408-7	5SY8408-8
5SY8610-7	5SY8610-8	5SY8410-7	5SY8410-8
–	–	–	–
5SY8613-7	5SY8613-8	5SY8413-7	5SY8413-8
5SY8616-7	5SY8616-8	5SY8416-7	5SY8416-8
5SY8620-7	5SY8620-8	5SY8420-7	5SY8420-8
5SY8625-7	5SY8625-8	5SY8425-7	5SY8425-8
5SY8632-7	5SY8632-8	5SY8432-7	5SY8432-8
5SY8640-7	5SY8640-8	5SY8440-7	5SY8440-8
5SY8650-7	5SY8650-8	5SY8450-7	5SY8450-8
5SY8663-7	5SY8663-8	5SY8463-7	5SY8463-8

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Shunt trip (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled mechanisms (RC mech.)		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		Article No.
1–2 MW		5ST3820-1
3–4 MW		5ST3820-2
Arc fault detection devices (AFDD)		Article No.
For basic units 1P+N (2 MW)	I _n up to 16 A	5SM6021-2
	I _n up to 40 A	5SM6024-2

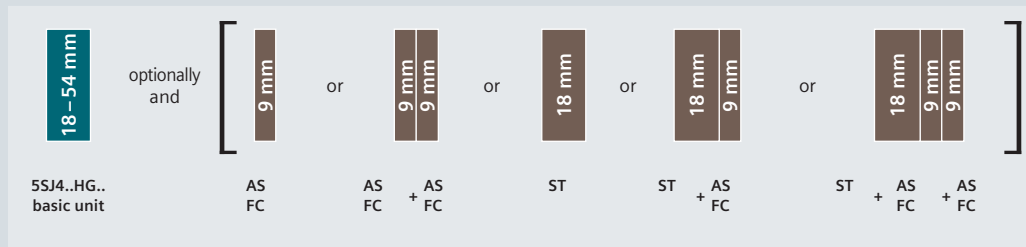
5SJ4..HG.. miniature circuit breakers

According to UL489, 14/10 kA

3

Mounting width	1P "same polarity only"			1P			
	240 V AC	240 V AC	240 V AC	240 V AC	480Y/277 V AC	240 V AC	480Y/277 V AC
1 MW							
Rated current I _n	Characteristic			Characteristic			
	B	C	D	C	C	D	D
0.3 A	–	5SJ4114-7HG40	5SJ4114-8HG40	5SJ4114-7HG41	5SJ4114-7HG42	5SJ4114-8HG41	5SJ4114-8HG42
0.5 A	–	5SJ4105-7HG40	5SJ4105-8HG40	5SJ4105-7HG41	5SJ4105-7HG42	5SJ4105-8HG41	5SJ4105-8HG42
1 A	–	5SJ4101-7HG40	5SJ4101-8HG40	5SJ4101-7HG41	5SJ4101-7HG42	5SJ4101-8HG41	5SJ4101-8HG42
1.6 A	–	5SJ4115-7HG40	5SJ4115-8HG40	5SJ4115-7HG41	5SJ4115-7HG42	5SJ4115-8HG41	5SJ4115-8HG42
2 A	–	5SJ4102-7HG40	5SJ4102-8HG40	5SJ4102-7HG41	5SJ4102-7HG42	5SJ4102-8HG41	5SJ4102-8HG42
3 A	–	5SJ4103-7HG40	5SJ4103-8HG40	5SJ4103-7HG41	5SJ4103-7HG42	5SJ4103-8HG41	5SJ4103-8HG42
4 A	–	5SJ4104-7HG40	5SJ4104-8HG40	5SJ4104-7HG41	5SJ4104-7HG42	5SJ4104-8HG41	5SJ4104-8HG42
5 A	–	5SJ4111-7HG40	5SJ4111-8HG40	5SJ4111-7HG41	5SJ4111-7HG42	5SJ4111-8HG41	5SJ4111-8HG42
6 A	5SJ4106-6HG40	5SJ4106-7HG40	5SJ4106-8HG40	5SJ4106-7HG41	5SJ4106-7HG42	5SJ4106-8HG41	5SJ4106-8HG42
8 A	–	5SJ4108-7HG40	5SJ4108-8HG40	5SJ4108-7HG41	5SJ4108-7HG42	5SJ4108-8HG41	5SJ4108-8HG42
10 A	5SJ4110-6HG40	5SJ4110-7HG40	5SJ4110-8HG40	5SJ4110-7HG41	5SJ4110-7HG42	5SJ4110-8HG41	5SJ4110-8HG42
13 A	5SJ4113-6HG40	5SJ4113-7HG40	5SJ4113-8HG40	5SJ4113-7HG41	5SJ4113-7HG42	5SJ4113-8HG41	5SJ4113-8HG42
15 A	5SJ4118-6HG40	5SJ4118-7HG40	5SJ4118-8HG40	5SJ4118-7HG41	5SJ4118-7HG42	5SJ4118-8HG41	5SJ4118-8HG42
16 A	5SJ4116-6HG40	5SJ4116-7HG40	5SJ4116-8HG40	5SJ4116-7HG41	5SJ4116-7HG42	5SJ4116-8HG41	5SJ4116-8HG42
20 A	5SJ4120-6HG40	5SJ4120-7HG40	5SJ4120-8HG40	5SJ4120-7HG41	5SJ4120-7HG42	5SJ4120-8HG41	5SJ4120-8HG42
25 A	5SJ4125-6HG40	5SJ4125-7HG40	5SJ4125-8HG40	5SJ4125-7HG41	5SJ4125-7HG42	5SJ4125-8HG41	5SJ4125-8HG42
30 A	5SJ4130-6HG40	5SJ4130-7HG40	5SJ4130-8HG40	5SJ4130-7HG41	5SJ4130-7HG42	5SJ4130-8HG41	5SJ4130-8HG42
32 A	5SJ4132-6HG40	5SJ4132-7HG40	5SJ4132-8HG40	5SJ4132-7HG41	5SJ4132-7HG42	5SJ4132-8HG41	5SJ4132-8HG42
35 A	5SJ4135-6HG40	5SJ4135-7HG40	5SJ4135-8HG40	5SJ4135-7HG41	5SJ4135-7HG42	5SJ4135-8HG41	–
40 A	5SJ4140-6HG40	5SJ4140-7HG40	5SJ4140-8HG40	5SJ4140-7HG41	5SJ4140-7HG42	5SJ4140-8HG41	–
45 A	5SJ4145-6HG40	5SJ4145-7HG40	5SJ4145-8HG40	5SJ4145-7HG41	–	5SJ4145-8HG41	–
50 A	5SJ4150-6HG40	5SJ4150-7HG40	5SJ4150-8HG40	5SJ4150-7HG41	–	5SJ4150-8HG41	–
60 A	5SJ4160-6HG40	5SJ4160-7HG40	5SJ4160-8HG40	5SJ4160-7HG41	–	5SJ4160-8HG41	–
63 A	5SJ4163-6HG40	5SJ4163-7HG40	5SJ4163-8HG40	5SJ4163-7HG41	–	5SJ4163-8HG41	–

Mounting concept



AS Auxiliary switches
 FC Fault signal contacts
 ST Shunt trip

[See page 3/44](#)
[See page 3/45](#)
[See page 3/47](#)



2P				3P			
240 V AC		480Y/277 V AC		240 V AC		480Y/277 V AC	
2 MW				3 MW			
Characteristic				Characteristic			
C	C	D	D	C	C	D	D
5SJ4214-7HG41	5SJ4214-7HG42	5SJ4214-8HG41	5SJ4214-8HG42	5SJ4314-7HG41	5SJ4314-7HG42	5SJ4314-8HG41	5SJ4314-8HG42
5SJ4205-7HG41	5SJ4205-7HG42	5SJ4205-8HG41	5SJ4205-8HG42	5SJ4305-7HG41	5SJ4305-7HG42	5SJ4305-8HG41	5SJ4305-8HG42
5SJ4201-7HG41	5SJ4201-7HG42	5SJ4201-8HG41	5SJ4201-8HG42	5SJ4301-7HG41	5SJ4301-7HG42	5SJ4301-8HG41	5SJ4301-8HG42
5SJ4215-7HG41	5SJ4215-7HG42	5SJ4215-8HG41	5SJ4215-8HG42	5SJ4315-7HG41	5SJ4315-7HG42	5SJ4315-8HG41	5SJ4315-8HG42
5SJ4202-7HG41	5SJ4202-7HG42	5SJ4202-8HG41	5SJ4202-8HG42	5SJ4302-7HG41	5SJ4302-7HG42	5SJ4302-8HG41	5SJ4302-8HG42
5SJ4203-7HG41	5SJ4203-7HG42	5SJ4203-8HG41	5SJ4203-8HG42	5SJ4303-7HG41	5SJ4303-7HG42	5SJ4303-8HG41	5SJ4303-8HG42
5SJ4204-7HG41	5SJ4204-7HG42	5SJ4204-8HG41	5SJ4204-8HG42	5SJ4304-7HG41	5SJ4304-7HG42	5SJ4304-8HG41	5SJ4304-8HG42
5SJ4211-7HG41	5SJ4211-7HG42	5SJ4211-8HG41	5SJ4211-8HG42	5SJ4311-7HG41	5SJ4311-7HG42	5SJ4311-8HG41	5SJ4311-8HG42
5SJ4206-7HG41	5SJ4206-7HG42	5SJ4206-8HG41	5SJ4206-8HG42	5SJ4306-7HG41	5SJ4306-7HG42	5SJ4306-8HG41	5SJ4306-8HG42
5SJ4208-7HG41	5SJ4208-7HG42	5SJ4208-8HG41	5SJ4208-8HG42	5SJ4308-7HG41	5SJ4308-7HG42	5SJ4308-8HG41	5SJ4308-8HG42
5SJ4210-7HG41	5SJ4210-7HG42	5SJ4210-8HG41	5SJ4210-8HG42	5SJ4310-7HG41	5SJ4310-7HG42	5SJ4310-8HG41	5SJ4310-8HG42
5SJ4213-7HG41	5SJ4213-7HG42	5SJ4213-8HG41	5SJ4213-8HG42	5SJ4313-7HG41	5SJ4313-7HG42	5SJ4313-8HG41	5SJ4313-8HG42
5SJ4218-7HG41	5SJ4218-7HG42	5SJ4218-8HG41	5SJ4218-8HG42	5SJ4318-7HG41	5SJ4318-7HG42	5SJ4318-8HG41	5SJ4318-8HG42
5SJ4216-7HG41	5SJ4216-7HG42	5SJ4216-8HG41	5SJ4216-8HG42	5SJ4316-7HG41	5SJ4316-7HG42	5SJ4316-8HG41	5SJ4316-8HG42
5SJ4220-7HG41	5SJ4220-7HG42	5SJ4220-8HG41	5SJ4220-8HG42	5SJ4320-7HG41	5SJ4320-7HG42	5SJ4320-8HG41	5SJ4320-8HG42
5SJ4225-7HG41	5SJ4225-7HG42	5SJ4225-8HG41	5SJ4225-8HG42	5SJ4325-7HG41	5SJ4325-7HG42	5SJ4325-8HG41	5SJ4325-8HG42
5SJ4230-7HG41	5SJ4230-7HG42	5SJ4230-8HG41	5SJ4230-8HG42	5SJ4330-7HG41	5SJ4330-7HG42	5SJ4330-8HG41	5SJ4330-8HG42
5SJ4232-7HG41	5SJ4232-7HG42	5SJ4232-8HG41	5SJ4232-8HG42	5SJ4332-7HG41	5SJ4332-7HG42	5SJ4332-8HG41	5SJ4332-8HG42
5SJ4235-7HG41	5SJ4235-7HG42	5SJ4235-8HG41	–	5SJ4335-7HG41	5SJ4335-7HG42	5SJ4335-8HG41	–
5SJ4240-7HG41	5SJ4240-7HG42	5SJ4240-8HG41	–	5SJ4340-7HG41	5SJ4340-7HG42	5SJ4340-8HG41	–
5SJ4245-7HG41	–	5SJ4245-8HG41	–	5SJ4345-7HG41	–	5SJ4345-8HG41	–
5SJ4250-7HG41	–	5SJ4250-8HG41	–	5SJ4350-7HG41	–	5SJ4350-8HG41	–
5SJ4260-7HG41	–	5SJ4260-8HG41	–	5SJ4360-7HG41	–	5SJ4360-8HG41	–
5SJ4263-7HG41	–	5SJ4263-8HG41	–	5SJ4363-7HG41	–	5SJ4363-8HG41	–

Accessories

Auxiliary switches (AS) acc. to UL 489	Article No.
1 NO + 1 NC	5ST3010-0HG
2 NO	5ST3011-0HG
2 NC	5ST3012-0HG
Fault signal contacts (FC) acc. to UL 489	Article No.
1 NO + 1 NC	5ST3020-0HG
2 NO	5ST3021-0HG
2 NC	5ST3022-0HG
Shunt trip (ST) acc. to UL 489	Article No.
110 ... 415 V AC	5ST3030-0HG
24 ... 48 V AC/DC	5ST3031-0HG

5SY17 device protection switches

Electromechanical

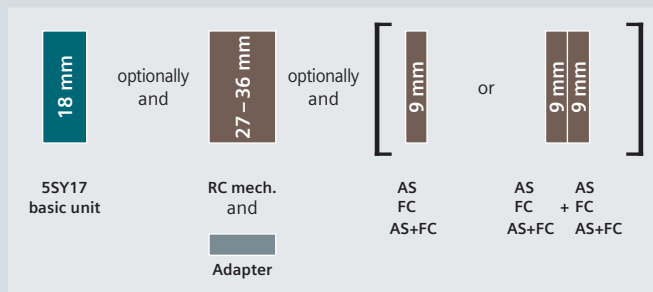


3

1P+AS	230 V AC/60 V DC	230 V AC/60 V DC
Mounting width	1 MW (18 mm)	

Rated current I _n	Characteristic	
	F1 (quick)	F2 (slow)
0.5 A	5SY1705-2	5SY1705-4
1 A	5SY1701-2	5SY1701-4
2 A	5SY1702-2	5SY1702-4
4 A	5SY1704-2	5SY1704-4
6 A	5SY1706-2	5SY1706-4
8 A	5SY1708-2	5SY1708-4
10 A	5SY1710-2	5SY1710-4
16 A	5SY1716-2	5SY1716-4

Mounting concept



- AS Auxiliary switches [See page 3/44](#)
- FC Fault signal contacts [See page 3/45](#)
- AS+FC Auxiliary switches and fault signal contacts [See page 3/46](#)
- RC mech. Remote controlled mechanisms [See page 3/49](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO + 1 NC		5ST3020
2 NO		5ST3021
2 NC		5ST3022

Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO (AS) + 1 CO (FC)		5ST3062
Remote controlled mechanisms (RC mech.)		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapters for remote controlled mechanisms (RC mech.)		Article No.
1 MW		5ST3820-6

5SK9 device protection switches

Electronic



	1P+AS
	24 V DC
Mounting width	6.2 mm

Rated current I_n

1 A	5SK9101-1
2 A	5SK9102-1
3 A	5SK9103-1
4 A	5SK9104-1
6 A	5SK9106-1
8 A	5SK9108-1

Specific accessories

Connecting combs



Variant	Number of poles	Max. load current I_{max}	Article No.
For parallel infeed	2-pole	24 A	8WH9020-6BC10
		32 A	8WH9020-6CC10
For remote signal – group signal	5-pole	24 A	8WH9020-6BF10
		32 A	8WH9020-6CF10
	2-pole	32 A	8WH9020-6CC10

Reducing combs for 10 mm² terminal blocks



Variant	Number of poles	Max. load current I_{max}	Article No.
For bypassing the power supply	2-pole	40 A	8WH9020-0AC10

General accessories, page 14/57 onwards

Overview of the modular system







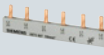

Miniature circuit breakers



5SL3

5SL6

5SL4

			Article No.	5SL3	5SL6	5SL4
	Auxiliary switches (AS)					
	1 NO + 1 NC	Standard	5ST3010	■	■	■
		For low power	5ST3013	■	■	■
		For low power (with diode)	5ST3013-0XX01	■	■	■
	2 NO	Standard	5ST3011	■	■	■
		For low power	5ST3014	■	■	■
2 NC	Standard	5ST3012	■	■	■	
	For low power	5ST3015	■	■	■	
1 CO	Standard	5ST3016	■	■	■	
	Fault signal contacts (FC)					
	1 NO + 1 NC		5ST3020	■	■	■
	2 NO		5ST3021	■	■	■
	2 NC		5ST3022	■	■	■
Auxiliary switches and fault signal contacts (AS+FC)						
1 CO (AS) + 1 CO (FC)		Standard	5ST3062	■	■	■
	Shunt trip (ST)					
	110 ... 415 V AC		5ST3030	-	-	■
	24 ... 48 V AC/DC		5ST3031	-	-	■
	12 V DC new		5ST3031-0XX01	-	-	■
	Undervoltage releases (UR)					
	With integrated auxiliary switch	230 V AC	5ST3040	-	-	■
		110 V DC	5ST3041	-	-	■
		24 V DC	5ST3042	-	-	■
	Without integrated auxiliary switch	230 V AC	5ST3043	-	-	■
		110 V DC	5ST3044	-	-	■
24 V DC		5ST3045	-	-	■	
	Remote controlled mechanisms (RC mech.)					
	Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053	■	■	□
		177 ... 270 V AC	5ST3054	■	■	□
	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055	■	■	□
		177 ... 270 V AC	5ST3056	■	■	□
	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057	■	■	□
		177 ... 270 V AC	5ST3058	■	■	□
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070	■	■	□	
	5SM6 arc fault detection devices					
	Rated current up to 16 A	Standard	5SM6021-2	-	-	□
		For compact devices 1P+N in 1 MW	5SM6011-2	-	-	-
	Rated current up to 40 A	Standard	5SM6024-2	-	-	□
For compact devices 1P+N in 1 MW		5SM6014-2	-	-	-	
	Standard busbars					
	Article No.					
Cannot be cut			5ST36..	■	■	■
Can be cut			5ST37..	■	■	■
	Compact busbars					
	Article No.					
Cannot be cut			5ST36..	□	□	□
Can be cut			5ST37..	□	□	□

■ Suitable for all versions

□ Suitable for some versions

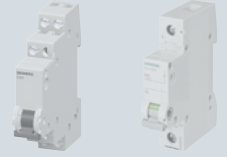
Miniature circuit breakers

Device protection switches

Residual current protective devices

Arc fault detection devices

Switching devices



5SJ6...-KS	5SL30	5SL60	5SY	5SP4	5SJ4..HG..	5SY17	5SV	5SM3	5SM2	5SM2 (100 A)	5SU1	5SU1 (125 A)	5SV1	5SM6	5SV6	5TE8	5TL
-	■	■	■	■	...OHG	■	■	-	■	■	■	■	■	□	■	■	■
-	■	■	■	■	-	■	■	-	■	■	■	■	■	□	■	■	■
-	■	■	■	■	...OHG	■	■	-	■	■	■	■	■	□	■	■	■
-	■	■	■	■	-	■	■	-	■	■	■	■	■	□	■	■	■
-	■	■	■	■	...OHG	■	■	-	■	■	■	■	■	□	■	■	■
-	■	■	■	■	-	■	■	-	■	■	■	■	■	□	■	■	■
-	■	■	■	■	...OHG	■	■	-	■	■	■	■	■	□	■	-	-
-	■	■	■	■	...OHG	■	■	-	■	■	■	■	■	□	■	-	-
-	■	■	■	■	...OHG	■	■	-	■	■	■	■	■	□	■	-	-
-	-	-	■	■	-	■	■	-	■	■	■	■	■	□	■	-	-
-	-	-	■	■	...OHG	-	■	-	■	■	■	■	■	□	-	-	-
-	-	-	■	■	...OHG	-	■	-	■	■	■	■	■	□	-	-	-
-	-	-	■	■	-	-	■	-	■	■	■	■	■	□	-	-	-
-	-	-	■	■	-	-	■	-	■	■	■	■	■	□	-	-	-
-	-	-	■	■	-	-	■	-	■	■	■	■	■	□	-	-	-
-	-	□	□	■	-	■	-	-	■	-	■	-	■	-	-	-	■
-	-	□	□	■	-	■	-	-	■	-	■	-	■	-	-	-	■
-	-	□	□	■	-	■	-	-	■	-	■	-	■	-	-	-	■
-	-	□	□	■	-	■	-	-	■	-	■	-	■	-	-	-	■
-	-	□	□	■	-	■	-	-	■	-	■	-	■	-	-	-	■
-	-	□	□	■	-	■	-	-	■	-	■	-	■	-	-	-	■
-	-	-	□	-	-	-	-	-	-	-	■	-	-	-	-	-	-
-	-	□	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	□	-	-	-	-	-	-	-	■	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	□	-	-	-	-	-	-	-	-	-	-	-	-	-	-
■	■	■	■	■	■	■	■	-	■	■	■	■	■	□	■	□	■
■	■	■	■	■	■	■	■	-	■	■	■	■	■	□	■	□	■
-	■	■	-	-	-	■	■	-	■	-	-	-	■	■	■	-	-
-	■	■	-	-	-	-	■	-	■	-	-	-	■	■	■	-	-

From page 3/18

From page 3/40

From page 4/16

From page 4/52

From page 5/6

Electrical accessories

Auxiliary switches (AS)

- Signals the contact position of the mounted device
- Version for the switching of small currents and voltages according to EN 61131-2 for control of programmable control systems (PLCs).
- Test button enables the testing of control circuits without the need to switch the mounted device



For combining with basic units						Contacts	Version	Mounting width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices	ON/OFF switches				
Auxiliary switches (AS)									
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	5TL1, 5TE8	1 NO + 1 NC	Standard	0.5 MW	5ST3010
							For low power	0.5 MW	5ST3013
							For low power (with diode)	0.5 MW	5ST3013-0XX01
						2 NO	Standard	0.5 MW	5ST3011
							For low power	0.5 MW	5ST3014
						2 NC	Standard	0.5 MW	5ST3012
							For low power	0.5 MW	5ST3015
						1 CO	Standard	0.5 MW	5ST3016
Auxiliary switches (AS) with TEST button									
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	5TL1, 5TE8	1 NO + 1 NC	Standard	0.5 MW	5ST3010-2
							For low power	0.5 MW	5ST3013-2
						2 NO	Standard	0.5 MW	5ST3011-2
							For low power	0.5 MW	5ST3014-2
						2 NC	Standard	0.5 MW	5ST3012-2
							For low power	0.5 MW	5ST3015-2
Auxiliary switches (AS) acc. to UL 489									
5SJ4...-HG	-	-	-	-	-	1 NO + 1 NC	Standard	0.5 MW	5ST3010-OHG
						2 NO	Standard	0.5 MW	5ST3011-OHG
						2 NC	Standard	0.5 MW	5ST3012-OHG

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

	5ST3010, 5ST3010-2 5ST3011, 5ST3011-2 5ST3012, 5ST3012-2	5ST3013, 5ST3014 5ST3015, 5ST3016 5ST3013-0XX01	5ST3013-2 5ST3014-2 5ST3015-2	5ST3010-OHG 5ST3011-OHG 5ST3012-OHG
Standards				
Standards	IEC/EN UL, CSA	IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235	-	UL 489, UL-File E321559, CSA 22.2 No. 5-02
Contacts				
Minimum contact load	50 mA, 24 V	1 mA, 5 V DC	5 mA, 5 V DC	50 mA, 24 V
Maximum contact load	-	100 mA, 30 V DC	30 mA, 30 V DC	-
Contact load acc. to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13 400 V AC, AC-14 24 V DC, DC-13 60 V DC, DC-13 110 V DC, DC-13 220 V DC, DC-13	6 A 2 A 6 A 3 A 1 A 1 A	- - - - - -	6 A 2 A 6 A (3 A) 3 A (1.5 A) 1 A (0.75 A) 1 A (0.5 A)
Contact load acc. to UL	120 V AC 240 V AC 277 V AC 480 V AC 60 V DC 125 V DC	- - - - - -	- - - - - -	6 A 4 A 3 A 1.5 A 3 A 1 A
Service life, on average, with rated load	Actuations	20000	20000	20000 12000
Safety				
Short-circuit protection	Miniature circuit breaker or gG 6 A fuse			
Connections				
Conductor cross-sections	0.5 ... 2.5 mm ² (AWG 22 ... 14)			
Terminals	Max. tightening torque	0.5 Nm (4.5 lb-in)		
Ambient conditions				
Permissible ambient temperature	-25 ... +55 °C			
Permissible storage temperature	-40 ... +75 °C			
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles		
Mounting position	Any			
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²		
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²		

Electrical accessories



Fault signal contacts (FC)

- Signals automatic tripping of the protective switching device in the event of a fault, such as an overload or a short circuit
- If the fault signal contact is activated, the contact position does not change if the protective switching device is tripped manually
- Version with TEST and RESET buttons enable the testing of control circuits without operation of the protective switching device
- Red RESET button in the operating handle indicates automatic tripping of the mounted protective switching device

For combining with basic units					Contacts	Mounting width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices			
Fault signal contacts (FC)							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 NO + 1 NC	0.5 MW	5ST3020
					2 NO	0.5 MW	5ST3021
					2 NC	0.5 MW	5ST3022
Fault signal contacts (FC) with TEST and RESET button							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 NO + 1 NC	0.5 MW	5ST3020-2
					2 NO	0.5 MW	5ST3021-2
					2 NC	0.5 MW	5ST3022-2
Fault signal contacts (FC) acc. to UL 489							
5SJ4...-HG	–	–	–	–	1 NO + 1 NC	0.5 MW	5ST3020-0HG
					2 NO	0.5 MW	5ST3021-0HG
					2 NC	0.5 MW	5ST3022-0HG

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST3020, 5ST3020-2
5ST3021, 5ST3021-2
5ST3022, 5ST3022-2

5ST3020-0HG
5ST3021-0HG
5ST3022-0HG

Standards			
Standards	IEC/EN UL, CSA	IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235	IEC/EN 62019, IEC/EN 60947-5-1 UL 489, UL-File E321559, CSA 22.2 No. 5-02
Contacts			
Minimum contact load	50 mA, 24 V		
Contact load acc. to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A	6 A
	400 V AC, AC-14	2 A	2 A
	24 V DC, DC-13	6 A	6 A (3 A)
	60 V DC, DC-13	3 A	3 A (1.5 A)
	110 V DC, DC-13	1 A	1 A (0.75 A)
	220 V DC, DC-13	1 A	1 A (0.5 A)
Contact load acc. to UL	120 V AC	–	6 A
	240 V AC	–	4 A
	277 V AC	–	3 A
	480 V AC	–	1.5 A
	60 V DC	–	3 A
	125 V DC	–	1 A
Service life, on average, with rated load	Actuations	20000	12000
Safety			
Short-circuit protection	Miniature circuit breaker or gG 6 A fuse		
Connections			
Conductor cross-sections	0.5 ... 2.5 mm ² (AWG 22 ... 14)		
Terminals	Max. tightening torque	0.5 Nm (4.5 lb-in)	
Ambient conditions			
Permissible ambient temperature	–25 ... +55 °C		
Permissible storage temperature	–40 ... +75 °C		
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles	
Mounting position	Any		
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²	
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²	

Electrical accessories



Auxiliary switches and fault signal contacts (AS+FC)

- Combines the function of both switches in a width of only 0.5 MW (9 mm).
- Signals the contact position of the mounted device
- Signals automatic tripping of the protective switching device in the event of a fault, such as an overload, a short circuit or a fault current
- If the fault signal contact is activated, the contact position does not change if the protective switching device is tripped manually

For combining with basic units				Contacts	Mounting width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices		
Auxiliary switches and fault signal contacts (AS+FC)						
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 CO (AS) + 1 CO (FC)	0.5 MW
						5ST3062

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST3062

Standards		
Standards	IEC/EN UL, CSA	IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235
Contacts		
Minimum contact load		50 mA, 24 V
Maximum contact load		–
Contact load acc. to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A
	400 V AC, AC-14	2 A
Contact load acc. to IEC/EN 62019 (acc. to IEC/EN 60947-5-1)	24 V DC, DC-13	3 A (3 A)
	60 V DC, DC-13	3 A (1 A)
	110 V DC, DC-13	0.5 A (0.5 A)
	220 V DC, DC-13	0.5 A (0.3 A)
Service life, on average, with rated load	Actuations	20000
Safety		
Short-circuit protection		Miniature circuit breaker or gG 6 A fuse
Connections		
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.5 Nm (4.5 lb-in)
Ambient conditions		
Permissible ambient temperature		–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²



Shunt trip (ST)

- For remote-controlled tripping of the mounted device

For combining with basic units			Rated voltage U_n	Mounting width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	RCCBs	RCBOs			
Shunt trip (ST)					
5SL4, 5SY, 5SP	5SV	5SU1 ¹⁾	110 ... 415 V AC	1 MW	5ST3030
			24 ... 48 V AC/DC	1 MW	5ST3031
			12 V DC new	1 MW	5ST3031-0XX01
Shunt trip (ST) acc. to UL 489					
5SJ4...-HG	–	–	110 ... 480 V AC	1 MW	5ST3030-OHG
			24 ... 60 V AC/DC	1 MW	5ST3031-OHG

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

		5ST3030	5ST3031	5ST3031-0XX01	5ST3030-OHG	5ST3031-OHG
Standards						
Standards	IEC/EN UL, CSA	EN 60947-1 –	EN 60947-1 –	EN 60947-1 –	IEC/EN 60947-1 UL 489, UL-File E321559, CSA 22.2 No. 5-02	
Supply						
Primary operating range		0.7 ... 1.1 × U_n	0.7 ... 1.1 × U_n	0.7 ... 1.1 × U_n	0.7 ... 1.1 × U_n	0.7 ... 1.1 × U_n
Rated frequency f_n		50 ... 60 Hz	50 ... 60 Hz	–	50 ... 60 Hz	50 ... 60 Hz
Contacts						
Minimum contact load		50 mA, 24 V	50 mA, 24 V	1 mA, 5 V	50 mA, 24 V	50 mA, 24 V
Tripping operations		Max. 2000	Max. 2000	Max. 2000	Max. 2000	Max. 2000
Service life, on average, with rated load	Actuations	20000	20000	20000	12000	12000
Safety						
Short-circuit protection		Miniature circuit breaker B/C 6 A or fuse gG 6 A				
Connections						
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)				
Terminals	Max. tightening torque	0.8 Nm (6.8 lb-in)				
Ambient conditions						
Permissible ambient temperature		–25 ... +55 °C	–25 ... +55 °C	–40 ... +70 °C	–25 ... +55 °C	–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C	–40 ... +75 °C	–40 ... +75 °C	–40 ... +75 °C	–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles	28 cycles	28 cycles	28 cycles	28 cycles
Mounting position		Any	Any	Any	Any	Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²	50 m/s ²	50 m/s ²	50 m/s ²	50 m/s ²
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²	50 m/s ²	50 m/s ²	50 m/s ²	50 m/s ²

Electrical accessories



Undervoltage releases (UR)

- Integrated, e.g. in EMERGENCY-STOP loops
- Ensure that the mounted device trips in the event of an emergency, which, in turn, ensures disconnection of the control circuit according to EN 60204.
- Trip the mounted device if the voltage is interrupted or too low or prevents the mounted device from closing

For combining with basic units			Rated voltage U_n	Mounting width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	RCCBs	RCBOs			
With integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 ¹⁾	230 V AC	1 MW	5ST3040
			110 V DC	1 MW	5ST3041
			24 V DC	1 MW	5ST3042
Without integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 ¹⁾	230 V AC	1 MW	5ST3043
			110 V DC	1 MW	5ST3044
			24 V DC	1 MW	5ST3045

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST304.

Standards		
Standards	IEC/EN	EN 60947-1
Supply		
Primary operating range		0.85 ... 1.1 × U_n
Rated frequency f_n		50/60 Hz
Contacts		
Minimum contact load		50 mA, 24 V
Tripping operations		Max. 2000
Service life, on average, with rated load		20000 actuations
Safety		
Short-circuit protection		Miniature circuit breaker B/C 6 A or fuse gG 6 A
Connections		
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.8 Nm (6.8 lb-in)
Ambient conditions		
Permissible ambient temperature		-25 ... +55 °C
Permissible storage temperature		-40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²
Resistance to vibrations at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²



5ST3 remote controlled mechanisms (RC mech.)

- For locations that are spread out over a wide area or not permanently attended
- Permits direct and immediate access to the installation even if it is remote or in a location that is hard to access
- Permits fast reconnection after a fault
- Version with ARD with automatic restart
- Versions with ARD and Power with integrated auxiliary switches and fault signal contacts

Type of remote operating mechanism	Display	Ambient temperature	Vibration and shock requirements	Rated voltage U_n	Mounting width (1 MW = 18 mm)	Article No.
Basic	–	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	1.5 MW	5ST3053
				177 ... 270 V AC	2 MW	5ST3054
Power	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3055
				177 ... 270 V AC	2 MW	5ST3056
Power with ARD	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3057
				177 ... 270 V AC	2 MW	5ST3058
Power with extended function	LED	–40 °C ... +70 °C	Acc. to DIN EN 61373 / DIN EN 50155 "1B"	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3070

Further technical specifications	5ST3053	5ST3054	5ST3055	5ST3056	5ST3057	5ST3058	5ST3070
Standards							
Standards	EN 50557 (VDE 0640-20)						
Supply							
Rated frequency f_n	50 ... 60 Hz						
Rated power dissipation in standby	≤1 VA						
Contacts							
Service life, on average, with rated load	Actuations	10000	10000	10000	10000	10000	10000
Number of remote switching operations per minute		2	2	2	2	2	2
Number of automatic reclose attempts		–	–	–	3	3	–
Cable length in the control circuit		≤1500 m	≤1500 m	≤1500 m	≤1500 m	≤1500 m	≤1500 m
Sliding selector with locking device		–	■	■	■	■	■
Integrated auxiliary switches		–	–	1W (1CO); 2 A; 250 V	1W (1CO); 2 A; 250 V	1W (1CO); 2 A; 250 V	1W (1CO); 2 A; 250 V
Integrated fault signal contact		–	–	1W (1CO); 2 A; 250 V	1W (1CO); 2 A; 250 V	1W (1CO); 2 A; 250 V	1W (1CO); 2 A; 250 V
Connections							
Conductor cross-sections	0.5 ... 1.5 mm ² (AWG 14 ... 30)						
Terminal tightening torque	0.2 ... 0.25 Nm (2.0 lb-in)						
Ambient conditions							
Permissible storage temperature		–40 ... +55 °C	–40 ... +55 °C	–40 ... +55 °C	–40 ... +55 °C	–40 ... +55 °C	–40 ... +70 °C
Degree of protection		IP20	IP20	IP20	IP20	IP20	IP20
Pollution degree for overvoltage category		3/II	3/III	3/II	3/III	3/III	3/II

Suitable adapters for combination with miniature circuit breakers



Basic units	Mounting width			Adapters
	1–2 MW	3–4 MW	3–6 MW	
5SY4/5/6/7/8	■	–	–	5ST3820-1
	–	■	–	5ST3820-2
5SL3/4/6	■	–	–	5ST3820-6
	–	■	–	5ST3820-7
5SL60 / 5SY17	■	–	–	5ST3820-6
5SP4	■	–	–	5ST3820-1
	–	–	■	5ST3820-2

Electrical accessories



5SM6 arc fault detection devices (AFDD)

- Detects arcing faults
- Offers extremely effective protection against fires started by electrical faults
- Ensures adequate fire protection even in applications without residual current protective device

For combining with basic units			Rated current I_e	Mounting width (1 MW = 18 mm)	Article No.
Width of basic unit	Miniature circuit breakers	RCBOs			
1 MW	5SL60 2-pole (no KL types)	5SV1	Up to 16 A	1 MW	5SM6011-2
			Up to 40 A	1 MW	5SM6014-2
2 MW	5SY ¹⁾ , 5SL4 (1P+N devices only)	5SU1.5	Up to 16 A	1 MW	5SM6021-2
			Up to 40 A	1 MW	5SM6024-2

¹⁾ Not for 5SY5, 5SY8, 5SL60 2-pole

Further technical specifications

5SM6

Standards		
Standards		IEC/EN 62606
Supply		
Rated voltage U_n		230 V
Rated current I_n		Up to 16/40 A
Rated frequency		50 Hz
Power loss		0.6 W
Contacts		
Number of poles		2-pole
Service life	Average number of switching cycles	>10000
Safety		
Touch protection	Acc. to EN 50274 (VDE 0660-514)	Finger and back-of-hand safe
Degree of protection	Acc. to EN 60529 (VDE 0470-1)	IP20, with connected conductors
Overvoltage category		III
Tripping in the event of overvoltage		>275 V
Connections		
Terminal/conductor cross-sections	Solid and stranded	0.75 ... 16 mm ²
	Finely stranded with end sleeve	0.75 ... 10 mm ²
Terminal tightening torque		2.0 ... 2.5 Nm
Mains connection		Bottom
Ambient conditions		
Permissible ambient temperature		-25 ... +40 °C
Permissible storage temperature		-40 ... +75 °C
Resistance to climate at 95% relative air humidity	Acc. to IEC 60068-2-30	28 cycles, 55 °C
Pollution degree		2
CFC and silicone-free		Yes
Mounting position		Any

Suitable busbars, page 3/54 onwards

Suitable busbars and end caps, page 3/66 onwards

Mechanical accessories

Mechanical rotary operating mechanisms complete with handle



- For 5SY, but not for 5SYx0 1P+N in 1 MW
- For 5SP4, 5SL, 5TL1, 5TE2, 5TE8, 5SU1

Versions

Handle black

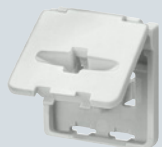
Handle red/yellow

Article No.

5ST3060

5ST3061

Terminal cover



- For miniature circuit breakers, but not for 5SL60..
- For additional covering of the screw openings per pole
- Lockable
- In the case of 5SY, also prevents removal of device from the standard mounting rail

Article No.

5ST3800

Handle locking devices

- To prevent undesired mechanical ON/OFF switching
- Sealable



For miniature circuit breakers

5SP4, 5SY

For padlocks with

Max. 3 mm shackle

Article No.

5ST3801

5SL, 5SV, 5TL1

3 ... 6 mm shackle

5ST3806

Padlocks



- For 5ST3801 and 5ST3806 locking devices and ST3054 ... 58, ST3070 remote controlled mechanisms

Article No.

5ST3802

Locking devices

- Comprising 5ST3801 or 5ST3806 handle locking device and 5ST3802 padlock

For miniature circuit breakers

5SP4 and 5SY

Comprising

5ST3801 handle locking device,
5ST3802 padlock

Article No.

5ST3803

5SL, 5SV, 5TL1

5ST3806 handle locking device,
5ST3802 padlock

5ST3807

Spacers



- Can be placed on either side of the standard mounting rail. Two spacers allow for convenient cable routing

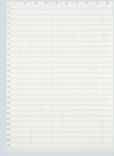
Mounting width

0.5 MW

Article No.

5TG8240

Device labels



- Adhesive
- For modular installation devices, e.g. 5SY, 5SL, 5TL1

Versions

	Article No.
15 mm x 6 mm, white (WIN 098)	8WH8210-0AA35
15 mm x 6 mm, yellow (WIN 099)	8WH8210-0AA36

Terminal covers, gray



- For surface mounting, degree of protection IP40
- Sealable
- Can be used with 35 mm mounting rail

For widths up to

	Article No.
2.5 MW	5SW3004
4.5 MW	5SW3005

Wall enclosures, gray



- For flush mounting, degree of protection IP40
- Can be used with 35 mm mounting rail

For widths up to

	Article No.
2.5 MW	5SW3006
4.5 MW	5SW3007

Molded-plastic enclosures, gray



- For surface mounting, degree of protection IP54
- Sealable
- Can be used with 35 mm mounting rail
- With transparent hinged lid

For widths up to

	Article No.
4.5 MW	5SW1200

Covers



- Can be assembled as mini distribution board
- Suitable for all devices
- Cover parts prepared for rail mounting of conventional label caps

Comprising

	Article No.
End plate	5ST2134
Angled profile	5ST2135
Alternatively flat profile	5ST2136

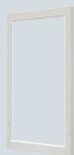
Holders for front panel installation



- Universal use for devices from 1 to 6 MW

Cutout height	Cutout width	Article No.
45 ^{+0.5} mm	23, 41, 59, 77, 95 or 113 mm	7LF9006

Intermediate frames



- For 70 mm devices in 55 mm ALPHA SIMBOX small distribution boards

Versions

	Article No.
1-tier	8GB4561
2-tier	8GB4562
3-tier	8GB4563
4-tier	8GB4564

Standard busbars

5ST36, fixed length, cannot be cut

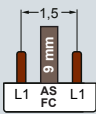
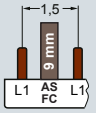
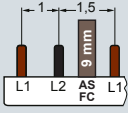
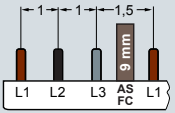
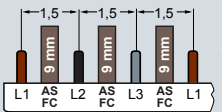
For miniature circuit breakers (MCBs)



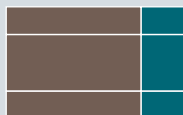
Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section	
				10 mm ²	16 mm ²
Single-phase					
	For 2 MCBs 1P	2 MW	33 mm	5ST3600	5ST3630
	For 6 MCBs 1P	6 MW	105 mm	5ST3601	5ST3631
	For 12 MCBs 1P	12 MW	212 mm	5ST3602	5ST3632
Two-phase					
	For 2 MCBs 2P	4 MW	76 mm	5ST3606	5ST3636
	For 3 MCBs 2P	6 MW	105 mm	5ST3607	5ST3637
	For 6 MCBs 2P	12 MW	210 mm	5ST3608	5ST3638
Three-phase					
	For 2 MCBs 3P	6 MW	102 mm	5ST3613	5ST3643
	For 3 MCBs 3P	9 MW	157.5 mm	5ST3614	5ST3644
	For 4 MCBs 3P	12 MW	210 mm	5ST3615	5ST3645
	Combi pack: 20x 5ST3613 + 10x 5ST3614 + 50x 5ST3615 + 50x 5ST3655			5ST3656	–
	Combi pack: 20x 5ST3643 + 10x 5ST3644 + 50x 5ST3645 + 50x 5ST3655			–	5ST3657
Four-phase					
	For 2 MCBs 4P or 3P+N	8 MW	138 mm/ 140 mm	5ST3621	5ST3651
	For 3 MCBs 4P or 3P+N	12 MW	210 mm	5ST3622	5ST3652
	For 6 MCBs 2P or 1P+N	12 MW	210 mm	5ST3623	5ST3653

For MCBs equipped with auxiliary switch (AS) or fault signal contact (FC)



Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section	
				10 mm ²	16 mm ²
Single-phase					
	For 2 MCBs 1P	2 MW	40 mm		
	For 6 MCBs 1P	6 MW	158 mm		
	For 9 MCBs 1P	9 MW	237 mm		
Two-phase					
	For 2 MCBs 2P	4 MW	76 mm		
	For 3 MCBs 2P	6 MW	121 mm		
	For 5 MCBs 2P	10 MW	210 mm		
Three-phase					
	For 2 MCBs 3P	6 MW	115 mm		
	For 4 MCBs 3P	12 MW	237 mm		
	For 6 MCBs 1P	9 MW	156 mm/ 158 mm		
	For 9 MCBs 1P	12 MW	227 mm		

For MCBs with RCCB



Conductor cross-section		Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section	
10 mm ²	16 mm ²					10 mm ²	16 mm ²
Article No.	Article No.						
5ST3603	5ST3633						
5ST3604	5ST3634						
5ST3605	5ST3635						
Article No.	Article No.						
–	5ST3640						
–	5ST3641						
–	5ST3642						
Article No.	Article No.						
5ST3616	5ST3646	Three-phase 	For 8 MCBs 1P with 1 RCCB 3P+N, N right	12 MW	210 mm	Article No.	Article No.
5ST3617	5ST3647						
5ST3618	5ST3648		For 8 MCBs 1P with 1 RCCB 3P+N, N left	12 MW	192 mm	Article No.	Article No.
5ST3620	5ST3650						

Accessories

Terminals for 5ST36 and 5ST37		Article No.
For conductors up to 25 mm ²	Cable entry on the left	5ST3768-4
	Cable entry in the center	5ST3768-3
	Cable entry on the right	5ST3768-5
For conductors up to 50 mm ²	Cable entry on the left	5ST3760-4
	Cable entry in the center	5ST3760-3
	Cable entry on the right	5ST3760-5

Terminals for infeed at side		Article No.
For conductors up to 25 mm ²	Short	5ST3768
	Short, IP20	5ST3771-2
Touch protection		Article No.
For free connections, yellow (RAL 1004) 5× 1 pin		5ST3655

Standard busbars

5ST37, can be cut

For miniature circuit breakers (MCBs)



Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Color	Conductor cross-section		
						10 mm ²	16 mm ²	
Single-phase, straight						Article No.	Article No.	
	For MCB 1P+N compact	12 MW	216 mm	■	Gray	5ST3762	–	
		56 MW	1016 mm	–	Blue	5ST3687-0	–	
						Gray	5ST3764	–
						Blue	5ST3787-0	–
Single-phase, angled 45°						Article No.	Article No.	
	For MCB 1P+N compact	12 MW	216 mm	■	Blue	5ST3763	–	
		56 MW	1016 mm	–	Blue	5ST3765	–	
Single-phase, angled 90°						Article No.	Article No.	
	For MCBs 1P	12 MW	214 mm	■		5ST3730	5ST3700	
		56 MW	1016 mm	–			5ST3731	5ST3701
Two-phase						Article No.	Article No.	
	For MCBs 2P	12 MW	214 mm	■		5ST3734	5ST3704	
		56 MW	1016 mm	–			5ST3735	5ST3705

For MCBs equipped with auxiliary switch (AS) ...



Pin spacing in MW (1 MW = 18 mm)	Application	Conductor cross-section	
		10 mm ²	16 mm ²
Single-phase, angled 90°			
	For MCBs 1P		
Two-phase			
	For MCBs 2P		

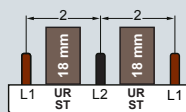
... or fault signal contact (FC)

For MCBs equipped with undervoltage release (UR) / shunt release (ST)



No. of MW	Length	End caps incl.	Conductor cross-section	
			10 mm ²	16 mm ²
			Article No.	Article No.
12 MW	214 mm	■	5ST3732	5ST3702
56 MW	1016 mm	—	5ST3733	5ST3703
			Article No.	Article No.
12 MW	214 mm	■	5ST3736	5ST3706
56 MW	1016 mm	—	5ST3737	5ST3707

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section	
					10 mm ²	16 mm ²
Two-phase						
	For MCBs 1P with UR/ST	56 MW	1016 mm	—	Article No.	Article No.
					5ST3735-2	—



Accessories

Terminals for 5ST36 and 5ST37	Article No.	
For conductors up to 25 mm ²	Cable entry on the left	5ST3768-4
	Cable entry in the center	5ST3768-3
	Cable entry on the right	5ST3768-5
For conductors up to 50 mm ²	Cable entry on the left	5ST3760-4
	Cable entry in the center	5ST3760-3
	Cable entry on the right	5ST3760-5

Terminals for infeed at side	Article No.	
For conductors up to 25 mm ²	Short	5ST3768
	Short, IP20	5ST3771-2
End caps	Article No.	
For single-phase busbars (MCB 1P+N compact)	Gray	5ST3766
	Blue	5ST3767
For two-phase busbars	5ST3750	
Touch protection	Article No.	
For free connections, yellow (RAL 1004) 5 × 1 pin	5ST3655	

Standard busbars

5ST37, can be cut

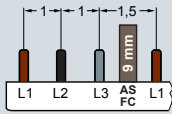
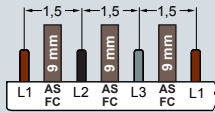
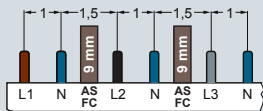
For miniature circuit breakers (MCBs)



Pin spacing in MW (1 MW = 18 mm)	Applica- tion	No. of MW	Length	End caps incl.	Conductor cross-section	
					10 mm ²	16 mm ²
Three-phase						
	For MCBs 3P	12 MW	214 mm	■	5ST3738	5ST3708
		56 MW	1016 mm	-	5ST3740	5ST3710
					Article No.	Article No.
Four-phase						
	For MCBs 4P or 3P+N	12 MW	214 mm	■	5ST3745	5ST3715
		56 MW	1016 mm	-	5ST3746	5ST3716
					Article No.	Article No.
	For RCBOs or MCBs 1P+N	56 MW	1000 mm	-	5ST3770-2	5ST3770-3

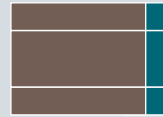
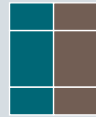
For MCBs equipped with auxiliary switch (AS) ...



Pin spacing in MW (1 MW = 18 mm)	Applica- tion	No. of MW
Three-phase		
	For MCBs 3P	12 MW
		56 MW
Four-phase		
	For MCBs 1P	12 MW
		56 MW
Four-phase		
	For MCBs 1P+N	56 MW

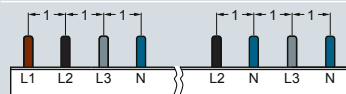
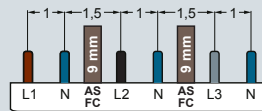
... or fault signal contact (FC)

For MCBs with line-side RCCB or RCCBs equipped with AS/FC devices



Length	End caps incl.	Conductor cross-section	
		10 mm ²	16 mm ²
		Article No.	Article No.
214 mm	■	5ST3741	5ST3711
1016 mm	–	5ST3742	5ST3712
214 mm	■	5ST3743	5ST3713
1016 mm	–	5ST3744	5ST3714
		Article No.	Article No.
1016 mm	–	5ST3746-2	–

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section	Article No.	Article No.
					10 mm ²	16 mm ²	
Four-phase							
	For RCCBs/MCBs	56 MW	1016 mm	–			5ST3746-2
	For 6 MCBs 1P+N with 1 RCCB 3P+N, N right	16 MW	292 mm	■			5ST3770-4 5ST3770-5



Accessories

Terminals for 5ST36 and 5ST37		Article No.
For conductors up to 25 mm ²	Cable entry on the left	5ST3768-4
	Cable entry in the center	5ST3768-3
	Cable entry on the right	5ST3768-5
For conductors up to 50 mm ²	Cable entry on the left	5ST3760-4
	Cable entry in the center	5ST3760-3
	Cable entry on the right	5ST3760-5

End caps	Article No.
For three-phase busbars	5ST3750
For four-phase busbars	5ST3718
Touch protection	Article No.
For free connections, yellow (RAL 1004) 5x 1 pin	5ST3655



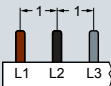
Standard busbars

5ST37 acc. to UL 508, can be cut

For miniature circuit breakers (MCBs)



3

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section	
				18 mm ²	25 mm ²
Single-phase					
	For MCBs 1P or fuse holders 10 x 38 mm/class CC	56 MW	1000 mm	Article No. 5ST3701-0HG	Article No. –
	For MCBs 1P or fuse holders 14 x 51 mm	56 MW	1000 mm	–	Article No. 5ST3701-2HG
Two-phase					
	For MCBs 2P or fuse holders 10 x 38 mm/class CC	56 MW	1000 mm	Article No. 5ST3705-0HG	Article No. –
	For MCBs 2P or fuse holders 14 x 51 mm	56 MW	1000 mm	–	Article No. 5ST3705-2HG
Three-phase					
	For MCBs 3P or fuse holders 10 x 38 mm/class CC	56 MW	1000 mm	Article No. 5ST3710-0HG	Article No. –
	For MCBs 3P or fuse holders 14 x 51 mm	56 MW	1000 mm	–	Article No. 5ST3710-2HG

For MCBs equipped with auxiliary switch (AS) / fault signal contact (FC)



Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section	
				18 mm ²	25 mm ²
Single-phase					
	For MCBs 1P	56 MW	1000 mm	Article No. 5ST3703-0HG	Article No. –
Two-phase					
	For MCBs 2P	56 MW	1000 mm	Article No. 5ST3707-0HG	Article No. –
Three-phase					
	For MCBs 3P	56 MW	1000 mm	Article No. 5ST3712-0HG	Article No. –
	For MCBs 1P	56 MW	1000 mm	Article No. 5ST3714-0HG	Article No. –

Accessories

Terminals according to UL 508		Article No.
For infeed at the device	35 mm ²	5ST3770-0HG
For infeed at the busbar	50 mm ²	5ST3770-1HG
End caps acc. to UL 508		Article No.
For single-phase busbars		5ST3748-0HG
For two- and three-phase busbars		5ST3750-0HG
Touch protection acc. to UL 508		Article No.
For open terminals, yellow 5×1 pin		5ST3655-0HG

Standard busbars

5ST3.. acc. to UL 489 specially for 5SJ4... -HG..

Fixed length, cannot be cut, for miniature circuit breakers (MCBs) ¹⁾



Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 16 mm ²	Article No.
Single-phase					
	For 6 MCBs 1P	6 MW	100 mm	5ST3663-0HG	
	For 12 MCBs 1P	12 MW	205 mm	5ST3663-1HG	
	For 18 MCBs 1P	18 MW	310 mm	5ST3663-2HG	
Two-phase					
	For 3 MCBs 2P	6 MW	100 mm	5ST3664-0HG	
	For 6 MCBs 2P	12 MW	205 mm	5ST3664-1HG	
	For 9 MCBs 2P	18 MW	310 mm	5ST3664-2HG	
Three-phase					
	For 2 MCBs 3P	6 MW	100 mm	5ST3665-0HG	
	For 4 MCBs 3P	12 MW	205 mm	5ST3665-1HG	
	For 6 MCBs 3P	18 MW	310 mm	5ST3665-2HG	

Can be cut, for MCBs



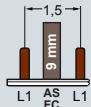
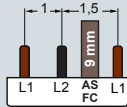
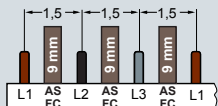
Pin spacing in MW (1 MW = 18 mm)	Application
Single-phase	
	For MCBs 1P
Two-phase	
	For MCBs 2P
Three-phase	
	For MCBs 3P

1) All unassigned pins of the busbars that cannot be cut must be covered with 5ST3666-1HG touch protection covers.

Can be cut, for MCBs equipped with auxiliary switch (AS) / fault signal contact (FC)



No. of MW	Length	Conductor cross-section 18 mm ²	Article No.
56 MW	1016 mm	5ST3701-3HG	
56 MW	1016 mm	5ST3705-3HG	
56 MW	1016 mm	5ST3710-3HG	

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	Conductor cross-section 18 mm ²	Article No.
Single-phase	For MCBs 1P	56 MW	1016 mm	5ST3703-3HG	
	For MCBs 2P	56 MW	1016 mm	5ST3707-3HG	
Two-phase	For MCBs 3P	56 MW	1016 mm	5ST3712-3HG	
	For MCBs 1P	56 MW	1016 mm	5ST3714-3HG	
Three-phase	For MCBs 1P	56 MW	1016 mm	5ST3714-3HG	
					

3

Accessories

Terminals according to UL 489		Article No.
For infeed at the 5SJ4... -HG.. miniature circuit breaker	16 mm ²	5ST3666-0HG
	18 mm ²	5ST3770-3HG
For infeed at the busbar	16 mm ²	5ST3666-2HG
End caps acc. to UL 489		Article No.
For single-, two- and three-phase busbars		5ST3750-3HG
Touch protection acc. to UL 489		Article No.
For open terminals, yellow 3 × 1 pin	For 5ST37...-HG busbars that cannot be cut	5ST3666-1HG
	For 5ST37...-3HG busbars that can be cut	5ST3655-3HG

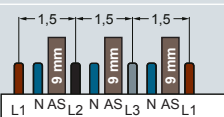
Compact busbars

5ST36, fixed length, cannot be cut

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm ²
Two-phase, for infeed via RCCB					
	For 1× RCCB 1P+N and 5× compact devices equipped with 5SM6 arc fault detection device	12 MW	216 mm	■	Article No. 5ST3685-0
Two-phase					
	For 12× compact devices	12 MW	218 mm	■	Article No. 5ST3674-0
	For 6× compact devices equipped with 5SM6 arc fault detection device	11 MW	200 mm	■	5ST3676-0
Four-phase					
	For 12× compact devices	12 MW	218 mm	■	Article No. 5ST3673-0
	For 6× compact devices equipped with 5SM6 arc fault detection device	11 MW	200 mm	■	5ST3675-0

3

5ST37, can be cut

Pin spacing in MW (1 MW = 18 mm)	Application	No. of MW	Length	End caps incl.	Conductor cross-section 10 mm ²
Two-phase, for infeed via RCCB					
	For 1× RCCB 1P+N and 10× compact devices	12 MW	215 mm	■	Article No. 5ST3784-0
	For 1× RCCB 1P+N (RCCB N-left only) and 10× compact devices	12 MW	215 mm	■	5ST3784-OKL
Two-phase					
	For compact devices	60 MW	1060 mm	–	Article No. 5ST3774-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3776-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3778-0
	For compact devices equipped with 5SM6 arc fault detection device and auxiliary switch	58.5 MW	1036 mm	–	5ST3780-0
Four-phase, for infeed via RCCB					
	For 1× RCCB 3P+N and 8× compact devices	12 MW	216 mm	■	Article No. 5ST3783-0
	For 1× RCCB 3P+N (RCCB N-left only) and 8× compact devices	12 MW	216 mm	■	5ST3783-OKL
Four-phase					
	For compact devices	60 MW	1060 mm	–	Article No. 5ST3773-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3775-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3777-0








Accessories

End caps	Article No.
Two- and three-phase busbars	5ST3788-0
Touch protection	Article No.
For free connections, yellow (RAL 1004)	For pins L1, N 5ST3655
	For pins L2, L3 5ST3655-OHG

Accessories for busbars

General accessories

Terminals

	For conductors	Version	Cable entry	Infeed	Article No.
	Up to 25 mm ²	Short	–	Side	5ST3768
		Short, IP20	–	Side	5ST3771-2
	Up to 25 mm ²	–	Center	–	5ST3768-3
			Left	–	5ST3768-4
			Right	–	5ST3768-5
	Up to 30 mm ²	–	–	Busbar	5ST3770-1HG
	Up to 35 mm ²	–	–	Device	5ST3770-0HG
	Up to 35 mm ²	For 5SJ4... -HG..	–	Miniature circuit breaker	5ST3666-0HG
		For 5ST37...-3HG that can be cut	–	Miniature circuit breaker	5ST3770-3HG
	Up to 50 mm ²	–	Center	–	5ST3760-3
			Left	–	5ST3760-4
			Right	–	5ST3760-5
	Up to 50 mm ²	–	–	Busbar	5ST3666-2HG

3

5ST36	5ST37	5ST37 (acc. to UL 508)	5ST3.. (acc. to UL 489)	5ST3 compact
■	■			
■	■			
	■			
	■			
	■			
		■		
		■		
			■	
			■	
	■			
	■			
	■			
			■	

Accessories for busbars

General accessories

Touch protection



Version	Scope of supply	Version	Article No.
For free connections, yellow (RAL 1004)	5× 1 pin	–	5ST3655
	3× 1 pin	–	5ST3655-0HG
For 10 mm ² conductors	20× 5ST3613 + 10× 5ST3614 + 50× 5ST3615 + 50× 5ST3655	–	5ST3666-1HG
For 16 mm ² conductors	20× 5ST3643 + 10× 5ST3644 + 50× 5ST3645 + 50× 5ST3655	For 5ST337..-3HG	5ST3655-3HG
			5ST3656
			5ST3657

End caps





Version	Color	Article No.
For single-phase busbars	Gray	5ST3748
For two- and three-phase busbars	Gray	5ST3750
For four-phase busbars	Gray	5ST3718
For single-, two- and three-phase busbars	Gray	5ST3750-3HG
–	Gray	5ST3766
–	Blue	5ST3767
For single-phase busbars	Gray	5ST3748-0HG
For two- and three-phase busbars	Gray	5ST3750-0HG
For two- and four-phase compact busbars	Gray	5ST3788-0

5ST36	5ST37	5ST37 (acc. to UL 508)	5ST3.. (acc. to UL 489)	5ST3 compact
■		■	■	■
			■	■
■			■	
■				
	■			
	■			
	■		■	
■				
■				
			■	
			■	
				■

Accessories for busbars

General accessories

Series connectors

	Conductor cross-section	Length of cable	Color	Number of phases	Article No.
	10 mm ²	125 mm	N conductor blue	1	5ST3781-0
			Cable black	1	5ST3791-0
				3	5ST3793-0
		150 mm	N conductor blue	1	5ST3781-1
			Cable black	1	5ST3791-1
				3	5ST3793-1
	16 mm ²	125 mm	N conductor blue	1	5ST3782-0
			Cable black	1	5ST3792-0
				3	5ST3794-0
		150 mm	N conductor blue	1	5ST3782-1
			Cable black	1	5ST3792-1
				3	5ST3794-1
		200 mm	N conductor blue	1	5ST3781-2
			Cable black	1	5ST3791-2
				3	5ST3793-2
			3x cables black and 1x N conductor blue	3 + N	5ST3793-3

3

5ST36	5ST37	5ST37 (acc. to UL 508)	5ST3.. (acc. to UL 489)	5ST3 compact
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			
	■			

Distribution blocks for standard rail mounting

Acc. to IEC

Distribution blocks acc. to IEC



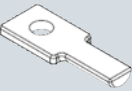


Number of poles	Operational voltage U_e	Rated current I_e	Mounting width	Article No.
4-pole	690 V AC	80 A	5 MW	5ST2501
		125 A	5.5 MW	5ST2502
		160 A	9 MW	5ST2503

Further technical specifications

	5ST2501	5ST2502	5ST2503		
Standards					
Standards	IEC 60947-7-1				
Supply					
Operational voltage AC	690 V	690 V	690 V		
Max. rated current	80 A	125 A	160 A		
Conductor cross-section					
Inputs per pole	Solid/stranded	1 × 2.5 ... 16 mm ²	1 × 6 ... 35 mm ²	1 × 10 ... 50 mm ²	
	Finely stranded with end sleeve	1 × 1.5 ... 10 mm ²	1 × 6 ... 25 mm ²	1 × 10 ... 35 mm ²	
Outputs per pole	Solid/stranded	8 × 1.5 ... 10 mm ²	5 × 1.5 ... 6 mm ² 2 × 4 ... 16 mm ²	8 × 2.5 ... 16 mm ² 3 × 10 ... 35 mm ²	
	Finely stranded with end sleeve	8 × 1.5 ... 10 mm ²	5 × 1.5 ... 6 mm ² (small) 2 × 4 ... 10 mm ² (large)	8 × 1.5 ... 16 mm ² (small) 3 × 10 ... 25 mm ² (large)	
Tightening torque					
Inputs	Screw terminals	13.5 lb-in (1,5 Nm)	13.5 lb-in (1,5 Nm)	3.5 ... 5 lb-in (2 Nm)	
	Tools	PZ2	PZ2	PZ2	
Outputs	Screw terminals	Large	13.5 lb-in (1.5 Nm)	13.5 lb-in (1.5 Nm)	13.5 lb-in (1.5 Nm)
		Small	–	7.2 lb-in (0.8 Nm)	13.5 lb-in (1.5 Nm)
	Tools	Large	PZ1	PZ2	PZ2
		Small	–	PZ1	PZ2
Safety					
Rated peak withstand current I_{pk}	21.6 kA	24 kA	20 kA		
Rated short-time withstand current I_{cw} (1 s)	3 kA	4.2 kA	6.2 kA		
Ambient conditions					
Permissible ambient temperature	–25 ... +70 °C				
Degree of protection	Acc. to EN 60529	IP 20			
Approved cable	Copper				

According to IEC and UL

Distribution blocks acc. to IEC and UL					
	Number of poles	Operational voltage U _e	Rated current I _e	Mounting width	Article No.
	1-pole	600 V AC	80 A	1.5 MW	5ST2504
			125 A	1.5 MW	5ST2505
			160 A	2 MW	5ST2507
			250 A	2.5 MW	5ST2508
			350 A	2.5 MW	5ST2511
Connector for 5ST2505 distribution board					
	<ul style="list-style-type: none"> • Touch protection • 20 mm² • 32 mm 				
	Version	Single-phase			Article No.
					5ST2506
Terminal lug for ring terminal ends					
	Versions				Article No.
	For 5ST2508 distribution block				5ST2510
	For 5ST2511 distribution block				5ST2512

Further technical specifications		5ST2504	5ST2505	5ST2507	5ST2508	5ST2511	
Standards							
Standards		UL 1059 / UL 486E / IEC 60947-7-1 UL File No. E80027 / XCFR2 C22.2 No. 158 -1987 / XCFR8					
Supply							
Operational voltage		UL	600 V AC				
		IEC	1000/1500 V AC/DC				
Max. rated current		UL	80 A	115 A	160 A	230 A	310 A
		IEC	80 A	125 A	160 A	250 A	400 A
Conductor cross-section							
Inputs per pole	Solid/stranded	Large	3× 2.5 ... 25 mm ²	10 ... 35 mm ²	10 ... 70 mm ²	35 ... 120 mm ²	95 ... 185 mm ²
			AWG 3× 14 ... 4	AWG 1× 8 ... 2	AWG 1× 8 ... 2/0	AWG 1× 2 ... 4/0	AWG 1× 3/0 ... 350 MCM
		Small	–	2.5 ... 25 mm ²	–	–	–
	Finely stranded with end sleeve	Large	3× 2.5 ... 16 mm ²	10 ... 35 mm ²	10 ... 50 mm ²	35 ... 95 mm ²	95 ... 150 mm ²
			AWG 3× 14 ... 6	AWG 1× 8 ... 2	AWG 1× 8 ... 1	AWG 1× 2 ... 3/0	AWG 3/0 ... 300 MCM
		Small	–	2.5 ... 25 mm ²	–	–	–
Outputs per pole	Solid/stranded	Top	2.5 ... 6 mm ²	2.5 ... 16 mm ²	2.5 ... 16 mm ²	2.5 ... 10 mm ²	2× 2.5... 35 mm ²
			AWG 4× 14 ... 10	AWG 6× 14 ... 4	AWG 6× 14 ... 4	AWG 4× 16 ... 8	AWG 2× 14 ... 2
		Center	–	–	–	2.5 ... 16 mm ²	5× 2.5 ... 16 mm ²
		–	–	–	–	AWG 5 × 14 ... 6	AWG 5 × 14 ... 6
		Bottom	2.5 ... 6 mm ²	–	–	2× 2.5... 35 mm ²	4× 2.5 ... 10 mm ²
	Finely stranded with end sleeve	Top	2.5 ... 6 mm ²	2.5 ... 16 mm ²	2.5 ... 16 mm ²	2× 2.5... 25 mm ²	2× 2.5... 25 mm ²
			AWG 4× 14 ... 10	AWG 6× 14 ... 6	AWG 6× 14 ... 4	AWG 2× 14 ... 4	AWG 2× 14 ... 4
		Bottom	2.5 ... 6 mm ²	–	–	2× 2.5... 25 mm ²	4× 2.5 ... 25 mm ²
			AWG 4× 14 ... 10	–	–	–	–
			AWG 4× 14 ... 10	–	–	–	AWG 2 × 14 ... 4

Continued on next page

Distribution blocks for standard rail mounting

According to IEC and UL (continued)

Further technical specifications		5ST2504	5ST2505	5ST2507	5ST2508	5ST2511	
Tightening torque							
Inputs	Screw terminals	13.2 ... 26.5 lb-in (1.5 ... 3 Nm)	31 ... 44 lb-in (3.5 ... 5 Nm)	44 ... 53 lb-in (5 ... 6 Nm)	170 ... 186 lb-in (19 ... 21 Nm)	222 lb-in (25 Nm)	
	Tools	PZ2	Allen key 4 mm	Allen key 5 mm	Allen key 6 mm	Allen key 8 mm	
Outputs	Screw terminals	Large	13.2 ... 26.5 lb-in (1.5 ... 3 Nm)	17.7 ... 26.5 lb-in (2 ... 3 Nm)	13.2 ... 26.5 lb-in (1.5 ... 3 Nm)	31 ... 62 lb-in (3.5 ... 7 Nm)	31 ... 62 lb-in (3.5 ... 7 Nm)
		Small	7 ... 13.2 lb-in (0.8 ... 1.5 Nm)	–	–	18 ... 27 lb-in (2 ... 3 Nm)	18 ... 27 lb-in (2 ... 3 Nm)
	Tools	Large	PZ2	PZ2	PZ2	Standard screwdriver	Standard screwdriver
		Small	PZ1	PZ2	PZ2	Standard screwdriver	Standard screwdriver
Safety							
Rated peak withstand current I_{pk}		2.7 kA	30 kA	30 kA	51 kA	51 kA	
Rated short-time withstand current I_{cw} (1 s)		1.9 kA	4.2 kA	11 kA	21 kA	21 kA	
Overcurrent protection class		J					
Short circuit current rating (SCCR)	RMS Sym A	100 kA					
Electrical isolation	Creepage distances	1/2" (12.7 mm)					
	Clearances	3/8" (9.5 mm)					
Ambient conditions							
Permissible ambient temperature		–25 ... +70 °C					
Degree of protection	Acc. to EN 60529	IP20					
Fire class		UL 94V-0					
Approved cable		Copper					

SIKclip wiring system

SIKclip busbar



Length	Article No.
12 MW	5ST2520
24 MW	5ST2521
36 MW	5ST2522

Connecting cables with plug



Length	Conductor cross-section	Color	Article No.
120 mm	6 mm ²	Black	5ST2523
		Blue	5ST2524
	10 mm ²	Black	5ST2525
		Blue	5ST2526
200 mm	6 mm ²	Black	5ST2527
		Blue	5ST2528
	10 mm ²	Black	5ST2530
		Blue	5ST2531

Crimp connector



<ul style="list-style-type: none"> For connection to cables 4/6 mm² 	Article No.
	5ST2532

Mounting brackets



<ul style="list-style-type: none"> For mounting on the rear of the standard mounting rail (pair) 	Article No.
	5ST2533

Further technical specifications

Standards

Test specifications	EN 60947-1, EN 61439-1
---------------------	------------------------

Rated values

Rated operational voltage U_n	400 V AC
Max. rated current I_n	250 A
Max. rated output current I_n (at 40 °C ambient temperature)	63 A
Rated insulation voltage	660 V AC
Test voltage (50 Hz)	2.5 kV

Ambient conditions

Degree of protection	IP20
Connecting cables	40 A (6 mm ²), 63 A (10 mm ²)
Connecting cable type	H07VK
Ambient temperature	-5 ... +60 °C



More safety for humans, plants and assets

The number of electrical consumers in residential homes and commercial buildings has increased dramatically in recent decades.

Modern appliances often have quite different characteristics in terms of current consumption than earlier equipment due, for example, to the use of frequency converters in washing machines, or switched-mode power supply units in TVs, PCs or LED lights.

There are also decentralized power generators like photovoltaic systems or charging devices for electric vehicles.

All of this requires new protection strategies for electrical installations. This also includes appropriate residual current protection devices or residual current circuit breakers that will cut the current immediately and safely in the event of a fault.

Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)

All the information you need	4/2
System overview	4/4
Introduction	4/5
Quick selection guide	4/6
RCCBs	4/6
RC units	4/8
RCBOs	4/10
Arc fault detection devices (AFDD)	4/12
Basic units	4/14
5SV RCCBs, type AC, A and F	4/14
5SV3 RCCBs, type B and B+ (SIQUENCE)	4/26
5SM3 RCCBs, type AC and A	4/30
5SM2 RC units, type AC, A and F	4/32
5SU1 RCBOs, type AC, A and F	4/38
5SV1 RCBOs (1 MW)	4/48
5SM6 arc fault detection devices	4/52
5SV6 arc fault detection devices (1 MW)	4/53
Accessories	4/54
Overview of modular system	4/54
Electrical accessories	4/56
Mechanical accessories	4/62
RCCB protective socket outlets	4/63
Standard busbars	4/64
Compact busbars	4/68

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about residual current protective devices / arc fault detection devices, please visit our websites

www.siemens.com/rccb

www.siemens.com/protection-concept

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technical basic information – SENTRON protection concept ([109767456](#))
- Technology primer – Residual current protective devices ([109482301](#))

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Siemens YouTube channel

Our video range

- Residual current protective devices (general)
bit.ly/2kKQhCj

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Residual current protective devices / arc fault detection devices sie.ag/2m55Y7j

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAX Download Manager at

www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Residual current protective devices / arc fault detection devices ([45303255](https://www.siemens.com/lowvoltage/manuals/45303255))

Training and tutorials

Our training courses can be found at

www.siemens.com/sitrain-lowvoltage

- Protection concept (WT-LVBPC)
- 5SM6 arc fault detection devices (WT-LVBAFDD)

Technical overview of residual current protective devices / arc fault detection devices



The fast way to get you to our online services

This page provides you with comprehensive information and links on residual current protective devices / arc fault detection devices

www.siemens.com/lowvoltage/product-support (109769082)

System overview

Basic devices and accessories

Basic units



5SV3



5SM3



5SM2



5SU1



5SV1



Arc fault detection devices

Electrical accessories



Auxiliary switches (AS)



Fault signal contacts (FC)



Auxiliary switches and fault signal contacts (AS+FC)



Shunt releases (ST)



Undervoltage releases (UR)



Remote controlled (RC) mechanisms

Mechanical accessories



Locking devices



Handle couplers



Touch protection



Wall enclosures



Molded-plastic enclosures

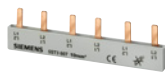


Terminal covers

Busbars and accessories



Compact busbars



Standard busbars



Terminals



Touch protection



End caps

RCCB protective socket outlets



In molded-plastic enclosure



For mounting on device box

Introduction

Residual current protective devices

Selection criteria

Equipment, power, environmental conditions

Design

RCCBs
RCBOs
RC units

Number of pole

1P+N
2P
3P
3P+N
4P

Rated current I_n

0.3 ... 125 A

Types and waveform



Type	AC	A	F	B	B+	6 mA	10 mA	Other
Type AC	■	-	-	-	-	-	-	-
Type A	■	■	■	■	■	-	-	-
Type F	■	■	■	■	■	■	■	-
Type B	■	■	■	■	■	■	■	■
Type B+	■	■	■	■	■	■	■	■

Version

SIGRES	with active condensation protection for use in severe ambient conditions
[G] / [K]	super-resistant, 10 ms short-term delayed devices with increased immunity to false triggering due to transient disruptions
[S]	as an upstream group switch for selective shutdown against downstream RCCBs
500 V	with their creep and air distances designed for power grids up to 500 V alternating voltage
50 ... 400 Hz	meet the triggering conditions up to 400 Hz due to low decrease in sensitivity with increasing frequency

Protection objective, equipment directives
VDE 0100-410,
VDE 0100-530,
VDE 0100-7xx,
VDE 0100-482,
VDS 3501,
Shutdown conditions according to VDE 0100-410

Rated residual current $I_{\Delta n}$ (Protection objective)

Additional protection $I_{\Delta n} \leq 30$ mA
Error protection $I_{\Delta n} > 30$ mA
Fire protection $I_{\Delta n} \leq 300$ mA

Characteristic CB (for residual current operated circuit breakers)

A
B
C
D

RCCBs



5SV

Types		Instantaneous	SIGRES, instantaneous	Short-time delayed [G]
Type AC		■	–	■
Type A		■	■	■
Type B/Type B+		–	–	–
Type F		–	–	–
Surge current withstand capability 8/20 μs				
Type A	kA	>1	>1	>3
Type B/Type B+	kA	–	–	–
Type F	kA	–	–	>3
Minimum operational voltage for test function operation				
30-mA devices	V AC		195	
Non-30-mA devices	V AC		100	
24 V devices	V AC		20	
Terminal conductor cross-sections				
1-wire	Solid/stranded	mm ²	0.75 ... 35	
	Finely stranded with end sleeve	mm ²	0.75 ... 25	
	Finely stranded without end sleeve	mm ²	1 ... 35	
2-wire, same cross-section, same conductor type	Solid/stranded	mm ²	0.75 ... 10	
	Finely stranded with end sleeve	mm ²	0.75 ... 4	
	Finely stranded without end sleeve	mm ²	1 ... 4	
1-wire + busbar (pin thickness 1.5 mm)	Solid/stranded	mm ²	10 ... 25	
	Finely stranded with non-insulated end sleeve	mm ²	6 ... 25	
	Finely stranded with insulated end sleeve	mm ²	6 ... 16	
Terminal tightening torque	Nm		2.5... 3.5	
Poles				
Number of poles			1P+N 3P+N	
Rated voltage U _n	V AC		24 ... 125 230 400 500	
Operating frequency	Hz		50 50 ... 400 50/60	
Standards				
		IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008, ÖVE/ÖNORM E 8601		
Rated residual current I _{Δn}	mA		10, 30, 100, 300, 500, 1000	
Rated current I _n	A		16 ... 80	
Rated breaking capacity I _{cn}	kA		–	
Connection			N right N left	
Service life	Average number of switching cycles		>10000	
Test button Test cycles			half-yearly ¹⁾ SIGRES annually ²⁾	
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors	
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe	
Temperatures	Storage temperature	°C	–40 to +75 °C	
	Ambient temperature	°C	–25 to +45, marked with	
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95% rel. air humidity)	
CFC and silicone-free			■	
Mains connection			top bottom SIGRES on top only	
Overvoltage category Pollution degree			III 2	
More information				
Catalog LV 10			See page 4/14	

¹⁾ Extension to annual test interval under certain conditions

²⁾ Extension to four-yearly test interval under certain conditions




5SV			SIQUENCE 5SV3		5SM3	
Super resistant [K]	Selective [S]	SIGRES, Selective [S]	Super resistant [K]	Selective [S]	Instantaneous	Selective [S]
-	-	-	-	-	■	■
■	■	■	-	-	■	■
-	-	-	■	■	-	-
■	■	-	-	-	-	-
>3	>5	>5	-	-	>1	>5
-	-	-	>3	>5	-	-
>3	-	-	-	-	-	-
	195		195		195	
	100		-		-	
	20		-		-	
	0.75 ... 35		0.75 ... 35		1.5 ... 50 (2 MW) 2.5 ... 50 (4 MW)	
	0.75 ... 25		0.75 ... 25		-	
	1 ... 35		-		-	
	0.75 ... 10		-		-	
	0.75 ... 4		-		-	
	1 ... 4		-		-	
	10 ... 25		-		-	
	6 ... 25		-		-	
	6 ... 16		-		-	
	2.5... 3.5		2.5 ... 3.0		3.0... 3.5	
	1P+N 3P+N		1P+N 3P+N		1P+N 3P+N	
	24 ... 125 230 400 500		230 400		230 400	
	50/60		50/60		50	
	IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008, ÖVE/ÖNORM E 8601		IEC/EN 62423 (VDE 0664-40), IEC/EN 61543 (VDE 0664-30), DIN VDE 0664-400 (Type B+ only)		IEC/EN 61008-1 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)	
	10, 30, 100, 300, 500, 1000		30, 300, 500		30, 100, 300, 500	
	16 ... 80		16 ... 80		100 ... 125	
	-		-		-	
	N right N left		N right		N right	
	>10000		>10000		>10 000	
	half-yearly ¹⁾ SIGRES annually ²⁾		annually ²⁾		half-yearly	
IP20, if the distribution board is installed, with connected conductors						
Finger and back-of-hand safe						
-40 to +75 °C						
-25 to +45, marked with						
28 cycles (55 °C; 95% rel. air humidity)						
	■		■		■	
	top bottom SIGRES on top only		top bottom		top bottom	
	III 2		III 2		III 2	
	See page 4/14		See page 4/26		See page 4/30	

RC units



5SM2 (0.3 ... 63 A)

Types		Instantaneous
Type AC		■
Type A		■
Type F		–
Surge current withstand capability 8/20 μs		
Type A	kA	>1
Type F	kA	–
Minimum operational voltage for test equipment		
30-mA devices	V AC	195
Non-30-mA devices	V AC	100
Terminal conductor cross-sections		
Solid/stranded	mm ²	1.0 ... 25
Terminal tightening torque	Nm	2.5 ... 3.0
Poles		
Number of poles		2P 3P 4P
Rated voltage U _n	V AC	230 400
Operating frequency	Hz	50 50/60
Standards		
IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)		
Rated residual current I _{Δn}	mA	10, 30, 100, 300, 500, 1000
Rated current I _n	A	0.3 ... 63
Service life	Average number of switching cycles	>10000
Test button Test cycles		half-yearly ¹⁾
Degree of protection	Acc. to EN 60529 (VDE 0470-1)	IP20, if the distribution board is installed, with connected conductors
Touch protection	Acc. to EN 50274 (VDE 0660-514)	Finger and back-of-hand safe
Temperatures	Storage temperature	°C -40 to +75 °C
	Ambient temperature	°C -25 to +45, marked with 
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles (55 °C; 95% rel. air humidity)
CFC and silicone-free		■
Mains connection		top bottom
Overvoltage category Pollution degree		III 2
More information		
Catalog LV 10		See page 4/32

¹⁾ Extension to annual test interval under certain conditions



5SM2 (0.3 ... 63 A)

5SM2 (80 ... 100 A)

Super resistant [K]	Selective [S]	Instantaneous	Selective [S]
■	■	■	■
■	■	■	■
■	-	-	-
>3	>5	>1	>5
>3	-	-	-
195		195	
100		100	
1.0 ... 25		6.0 ... 50	
2.5 ... 3.0	2.5 ... 3.0	2.5 ... 3.0	2.5 ... 3.0
2P 3P 4P		2P 4P	
230 400		230 400	
50 50/60		50 50/60	
IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)		IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)	
30	300, 500, 1000	30, 300	300, 1000
0.3 ... 63	0.3 ... 63	80 ... 100	80 ... 100
>10000	>10000	>10000	>10000
half-yearly ¹⁾	half-yearly ¹⁾	half-yearly ¹⁾	half-yearly ¹⁾
IP20, if the distribution board is installed, with connected conductors		IP20, if the distribution board is installed, with connected conductors	
Finger and back-of-hand safe		Finger and back-of-hand safe	
-40 to +75 °C		-40 to +75 °C	
-25 to +45, marked with		-25 to +45, marked with	
28 cycles (55 °C; 95% rel. air humidity)		28 cycles (55 °C; 95% rel. air humidity)	
■		■	
top bottom		top bottom	
III 2		III 2	
See page 4/32		See page 4/32	

RCBOs



5SU1 (up to 40 A)

Types		Instantaneous	Short-time delayed [G]
Type AC		■	■
Type A		■	■
Type F		–	–
Surge current withstand capability 8/20 μs			
Type A	kA	>1	>3
Type F	kA	–	–
Minimum voltage for operation of the test equipment			
30-mA devices	V AC		195
Non-30-mA devices	V AC		100
Terminal conductor cross-sections			
1 conductor at front + busbar at rear	Solid/stranded	mm ²	0.75 ... 35
	Finely stranded with end sleeve	mm ²	0.75 ... 25
	Finely stranded without end sleeve	mm ²	1 ... 25
2 conductors at rear	Solid/stranded	mm ²	0.75 ... 6
	Finely stranded with non-insulated end sleeve	mm ²	0.75 ... 4
	Finely stranded with insulated end sleeve	mm ²	0.75 ... 4
	Finely stranded without end sleeve	mm ²	1 ... 4
Terminal tightening torque	Nm		2.5 ... 3.0
Poles			
Number of poles			1P+N 2P
Rated voltage U _n	V AC		110 230
Operating frequency	Hz		50 50/60
Standards			
		IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30); IEC/EN 62423 (VDE 0664-40)	
Rated residual current I _{Δn}	mA		10, 30, 100, 300
Rated current I _n	A		6 ... 40
Rated breaking capacity I _{cn}	kA		4.5 6 10
Connection			N right N left
Service life	Average number of switching cycles		>10000
Test button Test cycles			half-yearly ¹⁾
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe
Temperatures	Storage temperature	°C	-40 to +75 °C
	Ambient temperature	°C	-25 to +45, marked with
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95% rel. air humidity)
CFC and silicone-free			■
Mains connection			top bottom
Energy limitation class			3
Overvoltage category Pollution degree			III 2

More information

Catalog LV 10

[See page 4/38](#)

¹⁾ Extension to annual test interval under certain conditions



5SU1 (up to 40 A)

5SU1 (125 A)

5SV1

5SU1 (up to 40 A)		5SU1 (125 A)		5SV1
Super resistant [K]	Selective [S]	Instantaneous	Short-time delayed [G]	Instantaneous
-	-	■	■	■
-	■	■	■	■
■	-	-	-	-
-	>5	>1	>3	>1
>3	-	-	-	-
195		195		195
100		100		100
0.75 ... 35		25 ... 50		0.75 ... 16
0.75 ... 25		25 ... 35		0.75 ... 10
1 ... 25		-		0.75 ... 16
0.75 ... 6		-		0.75 ... 4
0.75 ... 4		-		0.75 ... 2.5
0.75 ... 4		-		0.75 ... 1.5
1 ... 4		-		0.75 ... 4
2.5 ... 3.0		3.0... 3.5		1.2... 2.0
1P+N 2P		2P 4P		1P+N
110 230		230 400		230
50 50/60		50 50/60		50 50/60
IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)		IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)		IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)
10, 30, 100, 300		30, 300, 1000		30, 300
6 ... 40		125		2 ... 16
4.5 6 10		10		4.5 6
N right N left		N right N left		N right
>10000		>10000		>10 000
half-yearly ¹⁾		half-yearly ¹⁾		half-yearly ¹⁾
IP20, if the distribution board is installed, with connected conductors				
Finger and back-of-hand safe				
-40 to +75 °C				
-25 to +45, marked with				
28 cycles (55 °C; 95% rel. air humidity)				
■		■		■
top bottom		top bottom		top bottom
3		3		3
III 2		III 2		III 2

See page 4/38

See page 4/38


See page 4/48

Arc fault detection devices (AFDD)



5SM6

5SV6

Poles		5SM6	5SV6
Number of poles		2P	1P+N
Rated voltage U_n	V AC	230	230
Operating frequency	Hz	50	50
Terminal conductor cross-sections			
Solid and stranded	mm ²	0.75 ... 16	0.75 ... 16
Finely stranded with end sleeve	mm ²	0.75 ... 10	0.75 ... 10
Terminal tightening torque	Nm	2.0... 2.5	1.2... 2.0
Standards			
		IEC/EN 62606	IEC/EN 62606
Rated current I_n	A	Up to 16/40 A	6 ... 40
Service life	Average number of switching cycles	>10000	>10000
Mounting position		Any	Any
Degree of protection	Acc. to EN 60529 (VDE 0470-1)	IP20, with connected conductors	
Touch protection	Acc. to EN 50274 (VDE 0660-514)	Finger and back-of-hand safe	
Temperatures	Storage temperature	-40 to +75 °C	
	Ambient temperature	-25 to +45, marked with 	
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles (55 °C; 95% rel. air humidity)	
CFC and silicone-free		■	■
Mains connection		bottom	top bottom
Overvoltage category Pollution degree		III 2	III 2
Tripping in the event of overvoltage	V	>275	>285
More information			
Catalog LV 10		See page 4/52	See page 4/53

5SV RCCBs

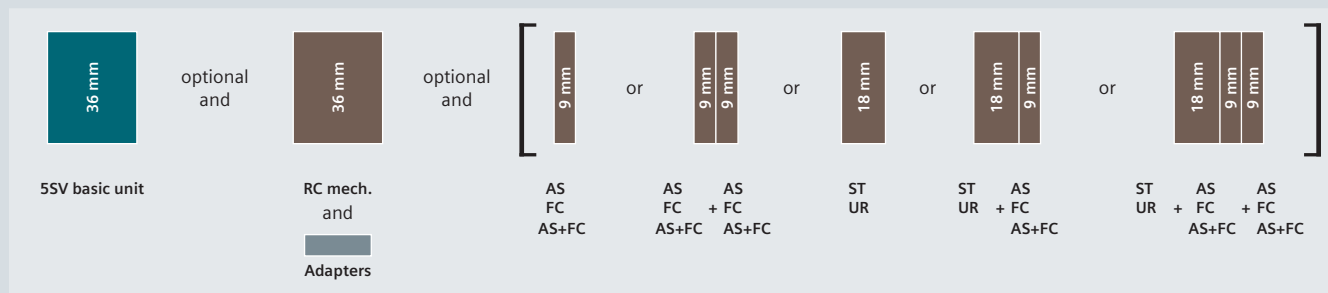
Type AC, 1P+N (2 MW)



$I_{\Delta n}$	I_n	Thermal overload protection ¹⁾	Bulk packaging (36 units)					
Type AC								
10 mA	16 A	–	–	5SV4111-0	5SV4111-OKL	–	–	
30 mA	16 A	–	–	5SV4311-0	5SV4311-OKL	5SV4311-OKK13	–	
	25 A	–	–	5SV4312-0	5SV4312-OKL	5SV4312-OKK13	–	
		–	■	–	5SV4312-0GV01	–	–	–
	40 A	–	–	–	5SV4314-0	5SV4314-OKL	5SV4314-OKK13	5SV4314-OLA01
		–	■	–	5SV4314-0GV01	5SV4314-0GV02	–	–
–		■	–	5SV4314-OLA	–	–	–	
63 A	–	–	–	5SV4316-0	5SV4316-OKL	5SV4316-OKK13	–	
	80 A	–	–	5SV4317-0	5SV4317-OKL	–	–	
	–	–	–	–	–	–	–	
100 mA	25 A	–	–	5SV4412-0	–	–	–	
	40 A	–	–	5SV4414-0	5SV4414-OKL	–	–	
	63 A	–	–	5SV4416-0	5SV4416-OKL	–	–	
	80 A	–	–	5SV4417-0	–	–	–	
300 mA	25 A	–	–	5SV4612-0	5SV4612-OKL	–	–	
	40 A	–	–	5SV4614-0	5SV4614-OKL	–	–	
	63 A	–	–	5SV4616-0	5SV4616-OKL	–	–	
	80 A	–	–	5SV4617-0	5SV4617-OKL	–	–	

¹⁾ Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

Mounting concept



AS	Auxiliary switch	See page 4/56
FC	Fault signal contact	See page 4/57
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt release	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61





Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-6

5SV RCCBs

Type A, 1P+N (2 MW)

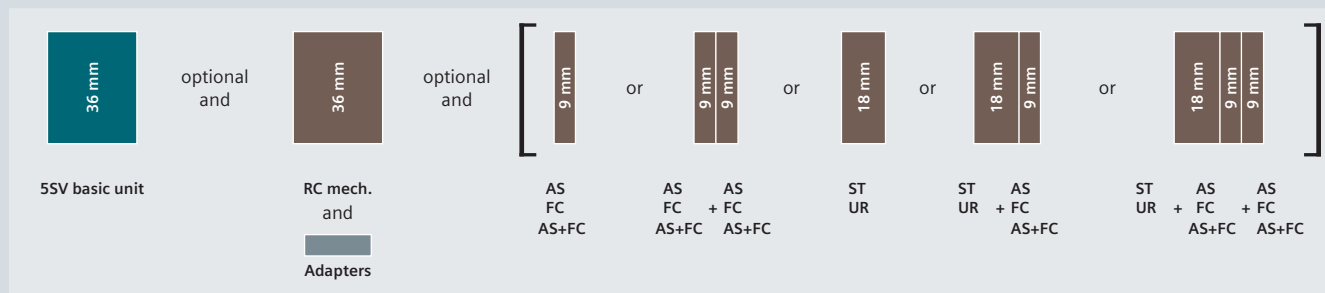
N connection	Instantaneous		Instantaneous (only available in Belgium) ²⁾	
	24 ... 125 V AC	230 V AC	230 V AC	230 V AC
	Right	Right	Left	Right
				

$I_{\Delta n}$	I_n	Thermal overload protection ¹⁾	Bulk packaging (36 units)				
Type A							
10 mA	16 A	–	–	–	5SV3111-6	5SV3111-6KL	–
30 mA	16 A	–	–	–	5SV3311-6KK13	5SV3311-6	5SV3311-6KL
		–	■	–	–	5SV3311-6GV01	–
	25 A	–	–	–	5SV3312-6KK13	5SV3312-6	5SV3312-6KL
		–	■	–	–	5SV3312-6GV01	–
	40 A	–	–	–	5SV3314-6KK13	5SV3314-6	5SV3314-6KL
		–	■	–	–	5SV3314-6GV01	–
	63 A	–	–	–	5SV3314-6LA	–	–
	80 A	–	–	–	5SV3316-6KK13	5SV3316-6	5SV3316-6KL
	80 A	–	–	–	5SV3317-6	5SV3317-6KL	–
100 mA	25 A	–	–	–	5SV3412-6	5SV3412-6KL	5SV3612-6BA
	40 A	–	–	–	5SV3414-6	5SV3414-6KL	5SV3614-6BA
	63 A	–	–	–	5SV3416-6	5SV3416-6KL	5SV3616-6BA
	80 A	–	–	–	5SV3417-6	5SV3417-6KL	–
300 mA	25 A	–	–	–	5SV3612-6	5SV3612-6KL	–
	40 A	–	–	–	5SV3614-6	5SV3614-6KL	–
	63 A	–	–	–	5SV3616-6	5SV3616-6KL	–
	80 A	–	–	–	5SV3617-6	5SV3617-6KL	–

¹⁾ Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

²⁾ These products cannot be used in France according to NF C 15-100. Product complies with the specifications of the Belgian market only. (Simultaneous tripping of the 3 poles and the N conductor.) Available for the export market only.

Mounting concept



AS	Auxiliary switch	See page 4/56
FC	Fault signal contact	See page 4/57
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt release	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

SIGRES, instantaneous	Short-time delayed [G]	Super resistant [K]	Selective [S]	
230 V AC	230 V AC	230 V AC	230 V AC	
Right	Right	Right	Right	Left
				
-	-	-	-	-
5SV3311-6KK12	-	-	-	-
-	-	-	-	-
5SV3312-6KK12	-	5SV3312-6KK01	-	-
-	-	-	-	-
5SV3314-6KK12	-	5SV3314-6KK01	-	-
-	-	-	-	-
-	5SV3314-6LA01	-	-	-
5SV3316-6KK12	-	5SV3316-6KK01	-	-
-	-	5SV3317-6KK01	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	5SV3416-8	-
-	-	-	-	-
-	-	5SV3612-6KK01	5SV3612-8	-
-	-	5SV3614-6KK01	5SV3614-8	5SV3614-8KL
-	-	5SV3616-6KK01	5SV3616-8	5SV3616-8KL
-	-	5SV3617-6KK01	5SV3617-8	-

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-6

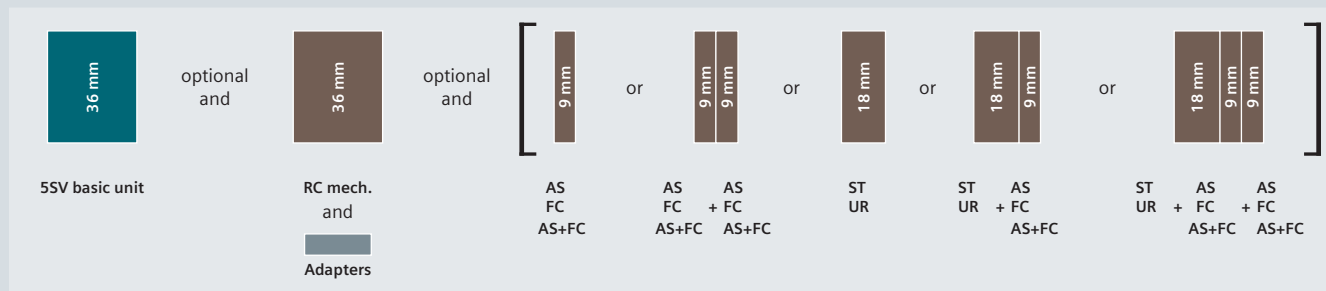
5SV RCCBs

Type F, 1P+N (2 MW)



$I_{\Delta n}$	I_n		
Type F			
30 mA	25 A	5SV3312-3	–
	40 A	5SV3314-3	–
	63 A	5SV3316-3	–
	80 A	5SV3317-3	–
300 mA	25 A	5SV3612-3	–
	40 A	5SV3614-3	5SV3614-7
	63 A	5SV3616-3	–
	80 A	5SV3617-3	5SV3617-7

Mounting concept



AS	Auxiliary switch	See page 4/56
FC	Fault signal contact	See page 4/57
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt release	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

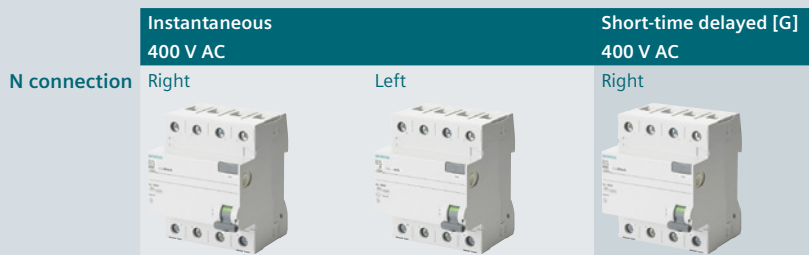
Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-6

5SV RCCBs

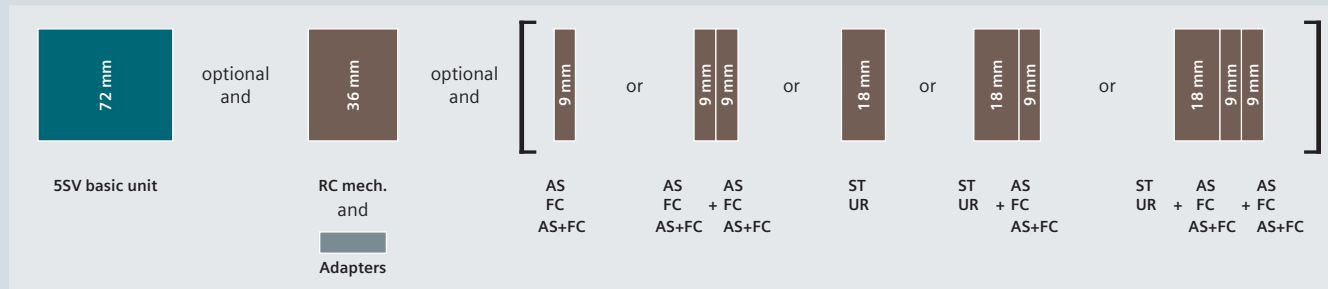
Type AC, 3P+N (4 MW)



$I_{\Delta n}$	I_n	Thermal overload protection ¹⁾	Bulk packaging (18 units)	Instantaneous 400 V AC Right	Instantaneous 400 V AC Left	Short-time delayed [G] 400 V AC Right
Type AC						
30 mA	25 A	–	–	5SV4342-0	5SV4342-OKL	–
		–	■	5SV4342-0GV01	–	–
	40 A	–	–	5SV4344-0	5SV4344-OKL	5SV4344-OLA01
		–	■	5SV4344-0GV01	–	–
	–	■	–	5SV4344-OLA	–	–
	63 A	–	–	5SV4346-0	5SV4346-OKL	5SV4346-OLA01
–		■	5SV4346-OLA	–	–	
100 mA	80 A	–	–	5SV4347-0	5SV4347-OKL	–
	25 A	–	–	5SV4442-0	–	–
		–	■	–	5SV4444-0LA	–
	40 A	–	–	5SV4444-0	–	–
		–	■	–	5SV4446-0	–
300 mA	25 A	–	–	5SV4446-0LA	–	–
		–	■	–	5SV4447-0	–
	40 A	–	–	5SV4642-0	5SV4642-OKL	–
		–	–	5SV4644-0	5SV4644-OKL	–
63 A	–	–	5SV4646-0	5SV4646-OKL	–	
	–	–	5SV4647-0	5SV4647-OKL	–	
500 mA	25 A	–	–	5SV4742-0	–	–
		–	–	5SV4744-0	–	–
	40 A	–	–	5SV4746-0	–	–
		–	–	5SV4747-0	–	–

¹⁾ Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

Mounting concept



AS	Auxiliary switch	See page 4/56
FC	Fault signal contact	See page 4/57
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt release	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
4 MW		5ST3820-6

5SV RCCBs

Type A, 3P+N (4 MW)

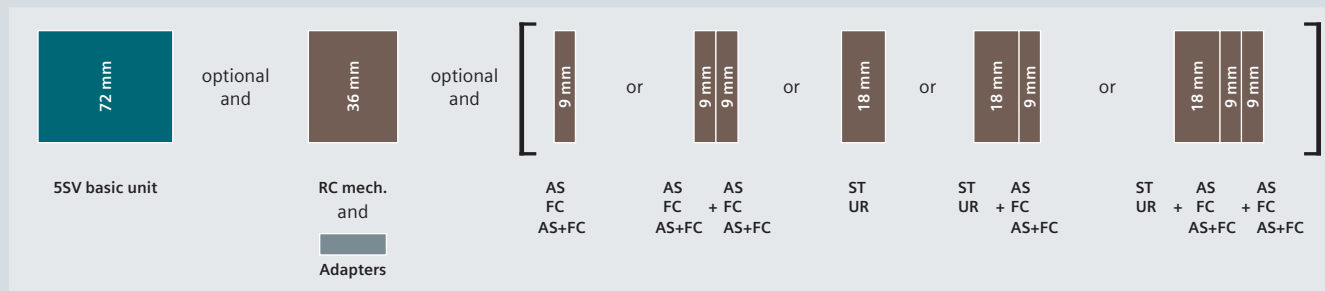


$I_{\Delta n}$	I_n	Thermal overload protection ¹⁾	Bulk packaging (18 units)	Instantaneous			
				400 V AC Right	Left	400 V AC/400 Hz Right	500 V AC Right
Type A 30 mA	25 A	–	–	5SV3342-6	5SV3342-6KL	5SV3342-6KK03	5SV3352-6
		–	■	5SV3342-6GV01	–	–	–
	40 A	–	–	5SV3344-6	5SV3344-6KL	5SV3344-6KK03	5SV3354-6
		–	■	5SV3344-6GV01	5SV3344-6GV02	–	–
	63 A	–	–	5SV3344-6LA	–	–	–
		–	■	5SV3346-6	5SV3346-6KL	–	5SV3356-6
100 mA	25 A	–	–	5SV3346-6GV01	–	–	–
		–	■	5SV3346-6LA	–	–	–
	40 A	–	–	5SV3347-6	5SV3347-6KL	–	5SV3357-6
		–	■	5SV3442-6	–	–	–
	63 A	–	–	5SV3444-6	–	–	–
		–	■	5SV3444-6LA	–	–	–
300 mA	25 A	–	–	5SV3446-6	–	–	–
		–	■	5SV3446-6LA	–	–	–
	40 A	–	–	5SV3447-6	–	–	–
		–	■	5SV3642-6	5SV3642-6KL	–	5SV3652-6
	63 A	–	–	5SV3644-6	5SV3644-6KL	–	5SV3654-6
		–	■	–	–	–	–
500 mA	25 A	–	–	5SV3646-6	5SV3646-6KL	–	5SV3656-6
		–	■	–	–	–	–
	40 A	–	–	5SV3647-6	5SV3647-6KL	–	5SV3657-6
		–	■	5SV3742-6	–	–	–
	63 A	–	–	5SV3744-6	–	–	–
		–	■	5SV3746-6	5SV3746-6KL	–	–
1000 mA	63 A	–	–	5SV3746-6GV01	–	–	–
		–	■	5SV3747-6	–	–	–

¹⁾ Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

²⁾ These products cannot be used in France according to NF C 15-100. Product complies with the specifications of the Belgian market only. (Simultaneous tripping of the 3 poles and the N conductor.) Available for the export market only.

Mounting concept










AS Auxiliary switch
 FC Fault signal contact
 AS+FC Auxiliary switch and fault signal contact

See page 4/56
 See page 4/57
 See page 4/58

ST Shunt release
 UR Undervoltage release
 RC mech. Remote controlled mechanism

See page 4/59
 See page 4/60
 See page 4/61

Instantaneous (only available in Belgium) ²⁾ 400 V AC	SIGRES, instantaneous 400 V AC	Short-time delayed [G] 400 V AC	Super resistant [K] 400 V AC	Selective [S] 400 V AC		SIGRES, Selective [S] 400 V AC
Right	Right	Right	Right	Right	Left	Right
						
5SV3342-6BA	5SV3342-6KK12	–	5SV3342-6KK01	–	–	–
–	–	–	–	–	–	–
5SV3344-6BA	5SV3344-6KK12	5SV3344-6LB01	5SV3344-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3344-6LA01	–	–	–	–
5SV3346-6BA	5SV3346-6KK12	5SV3346-6LB01	5SV3346-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3346-6LA01	–	–	–	–
–	5SV3347-6KK12	5SV3347-6LB01	5SV3347-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3444-6LB01	–	5SV3444-8	–	–
–	–	5SV3444-6LA01	–	5SV3444-8LA	–	–
–	–	5SV3446-6LB01	–	5SV3446-8	–	–
–	–	5SV3446-6LA01	–	5SV3446-8LA	–	–
–	–	–	–	–	–	–
5SV3642-6BA	5SV3642-6KK12	–	5SV3642-6KK01	5SV3642-8	–	–
5SV3644-6BA	5SV3644-6KK12	–	5SV3644-6KK01	5SV3644-8	–	–
–	–	–	–	5SV3644-8LA	–	–
5SV3646-6BA	5SV3646-6KK12	–	5SV3646-6KK01	5SV3646-8	5SV3646-8KL	5SV3646-8KK12
–	–	–	–	5SV3646-8LA	–	–
–	5SV3647-6KK12	–	5SV3647-6KK01	5SV3647-8	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	5SV3846-8	–	–

Accessories

Auxiliary switches (AS)	Article No.
1 NO contact + 1 NC contact	Standard For low power For low power (with diode)
	5ST3010 5ST3013 5ST3013-0XX01
2 NO contacts	Standard For low power
	5ST3011 5ST3014
2 NC contacts	Standard For low power
	5ST3012 5ST3015
1 CO contact	Standard
	5ST3016
Fault signal contacts (FC)	Article No.
1 NO contact + 1 NC contact	5ST3020
2 NO contacts	5ST3021
2 NC contacts	5ST3022
Auxiliary switches and fault signal contacts (AS+FC)	Article No.
1 CO contact (AS) + 1 CO contact (FC)	5ST3062
Shunt releases (ST)	Article No.
110 ... 415 V AC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V DC new	5ST3031-0XX01

Undervoltage releases (UR)	Article No.
With integrated auxiliary switch	230 V AC 110 V DC 24 V DC
	5ST3040 5ST3041 5ST3042
Without integrated auxiliary switch	230 V AC 110 V DC 24 V DC
	5ST3043 5ST3044 5ST3045
Remote controlled (RC) mechanisms	Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC 177 ... 270 V AC
	5ST3055 5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC 177 ... 270 V AC
	5ST3057 5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC
	5ST3070
Adapter for RC mechanism	Article No.
4 MW	5ST3820-6

5SV RCCBs

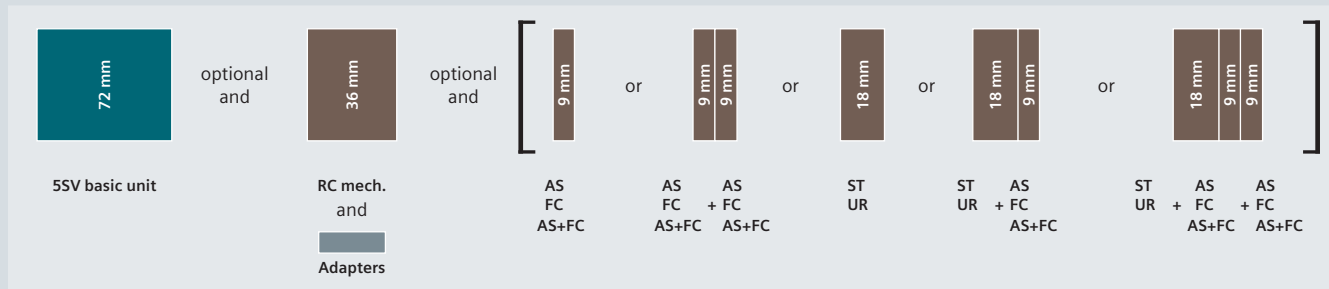
Type F, 3P+N (4 MW)



$I_{\Delta n}$	I_n		
Type F			
30 mA	25 A	5SV3342-3	-
	40 A	5SV3344-3	-
	63 A	5SV3346-3	-
	80 A	5SV3347-3	-
300 mA	25 A	5SV3642-3	-
	40 A	5SV3644-3	5SV3644-7
	63 A	5SV3646-3	-
	80 A	5SV3647-3	5SV3647-7

4

Mounting concept



- AS Auxiliary switch [See page 4/56](#)
- FC Fault signal contact [See page 4/57](#)
- AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)
- ST Shunt release [See page 4/59](#)
- UR Undervoltage release [See page 4/60](#)
- RC mech. Remote controlled mechanism [See page 4/61](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard For low power For low power (with diode)	5ST3010 5ST3013 5ST3013-0XX01
2 NO contacts	Standard For low power	5ST3011 5ST3014
2 NC contacts	Standard For low power	5ST3012 5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
4 MW		5ST3820-6

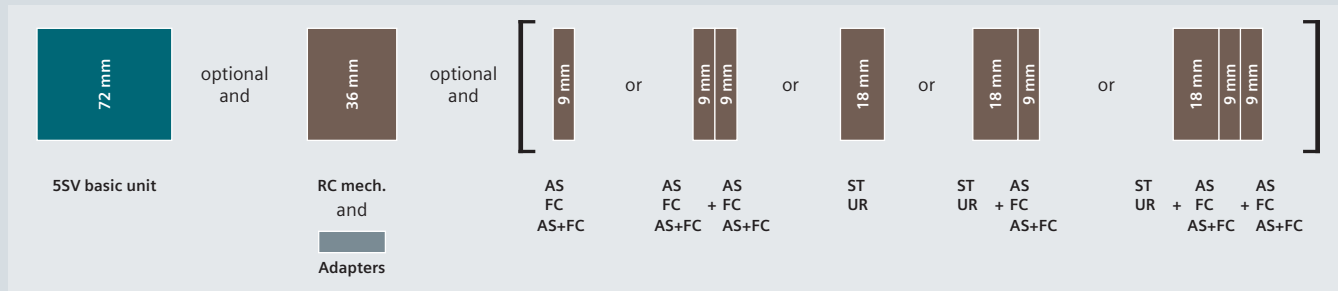
5SV3 RCCBs (SIQUENCE)

Type B, 1P+N (4 MW)



$I_{\Delta n}$	I_n	Bulk packaging (18 units)	
Type B			
30 mA	16 A	–	5SV3321-4
	25 A	–	5SV3322-4
	40 A	–	5SV3324-4
		■	5SV3324-4GV01
	63 A	–	5SV3326-4
300 mA	16 A	–	5SV3621-4
	25 A	–	5SV3622-4
	40 A	–	5SV3624-4
	63 A	–	5SV3626-4

Mounting concept



- AS Auxiliary switch [See page 4/56](#)
- FC Fault signal contact [See page 4/57](#)
- AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)
- ST Shunt release [See page 4/59](#)
- UR Undervoltage release [See page 4/60](#)
- RC mech. Remote controlled mechanism [See page 4/61](#)

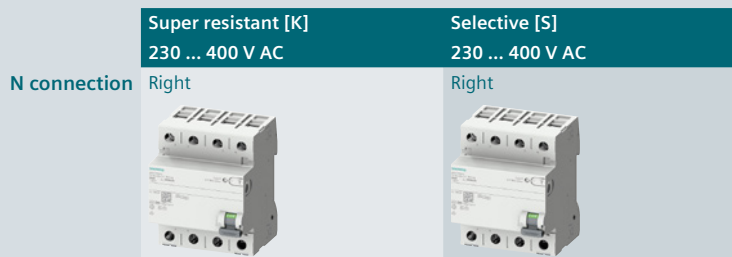
Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
4 MW		5ST3820-6

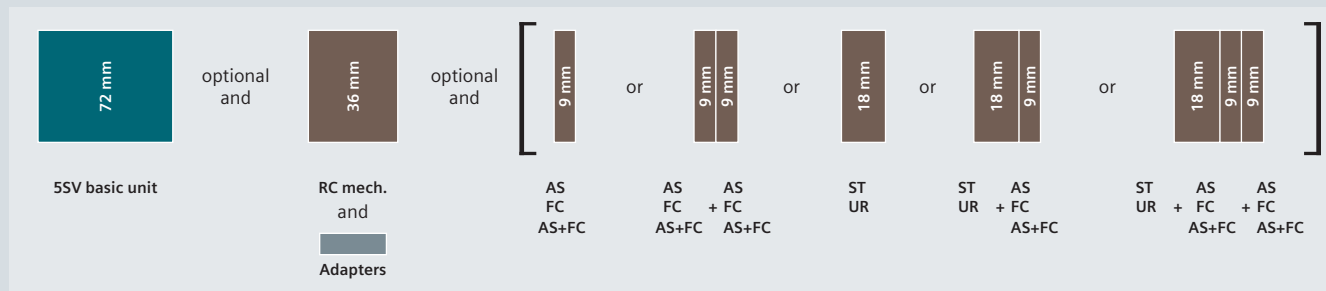
5SV3 RCCBs (SIQUENCE)

Type B and B+, 3P+N (4 MW)



$I_{\Delta n}$	I_n	Bulk packaging (18 units)		
Type B				
30 mA	25 A	–	5SV3342-4	–
		■	5SV3342-4GV01	–
	40 A	–	5SV3344-4	–
		■	5SV3344-4GV01	–
	63 A	–	5SV3346-4	–
		■	5SV3346-4GV01	–
	80 A	–	5SV3347-4	–
300 mA	25 A	–	5SV3642-4	–
		■	5SV3642-4GV01	–
	40 A	–	5SV3644-4	–
		■	5SV3644-4GV01	–
	63 A	–	5SV3646-4	5SV3646-5
		■	5SV3646-4GV01	–
	80 A	–	5SV3647-4	5SV3647-5
500 mA	25 A	–	5SV3742-4	–
	40 A	–	5SV3744-4	–
	63 A	–	5SV3746-4	5SV3746-5
	80 A	–	5SV3747-4	5SV3747-5
	Type B+			
30 mA	25 A	–	5SV3342-4KK14	–
	40 A	–	5SV3344-4KK14	–
	63 A	–	5SV3346-4KK14	–
	80 A	–	5SV3347-4KK14	–
300 mA	25 A	–	5SV3642-4KK14	–
	40 A	–	5SV3644-4KK14	–
	63 A	–	5SV3646-4KK14	5SV3646-5KK14
	80 A	–	5SV3647-4KK14	5SV3647-5KK14

Mounting concept



AS	Auxiliary switch	See page 4/56
FC	Fault signal contact	See page 4/57
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt release	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
4 MW		5ST3820-6

5SM3 RCCBs

Type AC and A, 1P+N (2 MW), high-current



$I_{\Delta n}$	I_n	
Type AC		
30 mA	100 A	5SM3318-0KK
	125 A	5SM3315-0KK
100 mA	100 A	5SM3418-0KK
	125 A	5SM3415-0KK
300 mA	100 A	5SM3618-0KK
	125 A	5SM3615-0KK
Type A		
30 mA	100 A	5SM3318-6KK
	125 A	5SM3315-6KK
100 mA	100 A	5SM3418-6KK
	125 A	5SM3415-6KK
300 mA	100 A	5SM3618-6KK
	125 A	5SM3615-6KK

Type AC and A, 3P+N (4 MW), high-current



$I_{\Delta n}$	I_n		
Type AC			
30 mA	100 A	5SM3348-0	–
	125 A	5SM3345-0	–
100 mA	100 A	5SM3448-0	–
	125 A	5SM3445-0	–
300 mA	100 A	5SM3648-0	5SM3648-2
	125 A	5SM3645-0	–
500 mA	100 A	5SM3748-0	–
	125 A	5SM3745-0	–
Type A			
30 mA	100 A	5SM3348-6	–
	125 A	5SM3345-6	–
100 mA	100 A	5SM3448-6	–
	125 A	5SM3445-6	–
300 mA	100 A	5SM3648-6	5SM3648-8
	125 A	5SM3645-6	5SM3645-8
500 mA	100 A	5SM3748-6	–
	125 A	5SM3745-6	5SM3745-8

5SM2 RC units

Type AC, A and F, 2-pole

For 5SY miniature circuit breakers¹⁾
230 V AC

Version
Mounting width

Instantaneous

Super resistant [K]

Selective [S]

2 MW

2 MW

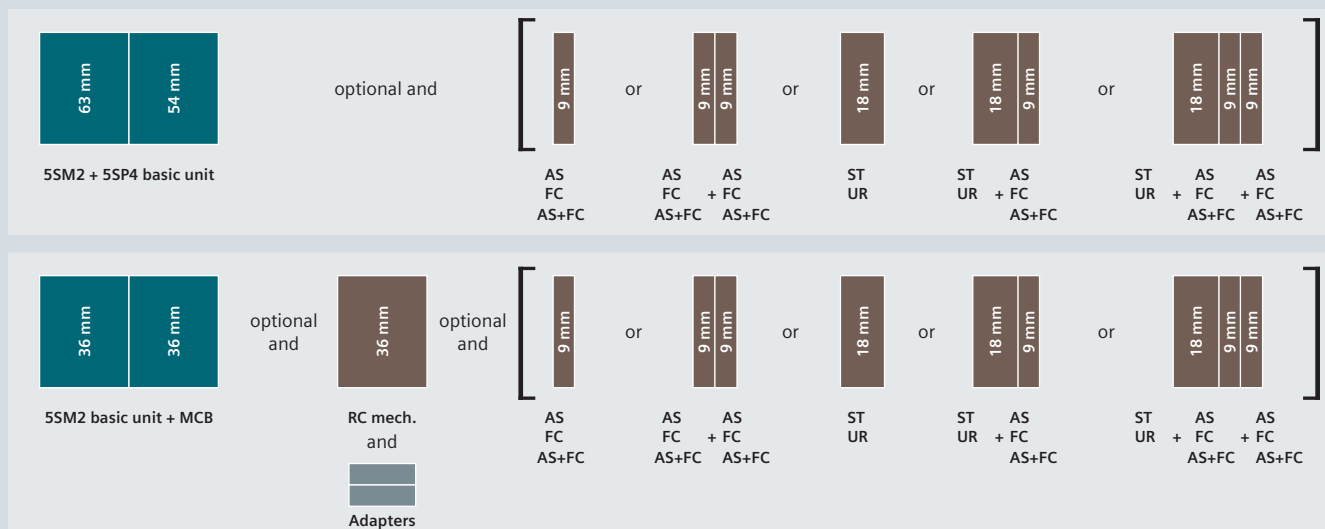
2 MW







$I_{\Delta n}$	I_n			
Type AC				
10 mA	0.3 ... 40 A	5SM2121-0	–	–
30 mA	0.3 ... 40 A	5SM2322-0	–	–
	0.3 ... 63 A	5SM2325-0	–	–
300 mA	80 ... 100 A	–	–	–
	0.3 ... 40 A	5SM2622-0	–	5SM2622-2
	0.3 ... 63 A	5SM2625-0	–	5SM2625-2
500 mA	80 ... 100 A	–	–	–
	0.3 ... 63 A	5SM2725-0	–	–
1000 mA	0.3 ... 63 A	5SM2825-0	–	–
Type A				
10 mA	0.3 ... 16 A	5SM2121-6	–	–
30 mA	0.3 ... 40 A	5SM2322-6	5SM2322-6KK01	–
	0.3 ... 63 A	5SM2325-6	5SM2325-6KK01	–
	80 ... 100 A	–	–	–
100 mA	0.3 ... 63 A	5SM2425-6	–	–
300 mA	0.3 ... 40 A	5SM2622-6	–	5SM2622-8
	0.3 ... 63 A	5SM2625-6	–	5SM2625-8
	80 ... 100 A	–	–	–
500 mA	0.3 ... 63 A	5SM2725-6	–	–
1000 mA	0.3 ... 40 A	–	–	5SM2822-8
	0.3 ... 63 A	–	–	5SM2825-8
	80 ... 100 A	–	–	–
Type F				
30 mA	0.3 ... 40 A	–	5SM2322-3	–
	0.3 ... 63 A	–	5SM2325-3	–

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



MCB Miniature circuit breaker [See page 3/1](#) AS+FC Auxiliary switch and fault signal contact [See page 4/58](#) UR Undervoltage release [See page 4/60](#)
 AS Auxiliary switch [See page 4/56](#) FC Fault signal contact [See page 4/57](#) ST Shunt release [See page 4/59](#) RC mech. Remote controlled mechanism [See page 4/61](#)

For 5SL4 miniature circuit breakers 230 V AC		For 5SP4 miniature circuit breakers (B and C characteristics) 230 V AC	
Instantaneous	Selective [S]	Instantaneous	Selective [S]
2 MW	2 MW	3.5 MW	3.5 MW
			
-	-	-	-
5SM2323-0	-	-	-
5SM2326-0	-	-	-
-	-	5SM2327-0	-
5SM2623-0	5SM2623-2	-	-
5SM2626-0	5SM2626-2	-	-
-	-	5SM2627-0	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
5SM2323-6	-	-	-
5SM2326-6	-	-	-
-	-	5SM2327-6	-
-	-	-	-
5SM2623-6	5SM2623-8	-	-
5SM2626-6	5SM2626-8	-	-
-	-	5SM2627-6	5SM2627-8
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	5SM2827-8
-	-	-	-
-	-	-	-

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
5SM2 with 5SY (2P)		5ST3820-3 + 5ST3820-1
		5ST3820-3 + 5ST3820-6
5SM2 with 5SL (2P)		

5SM2 RC units

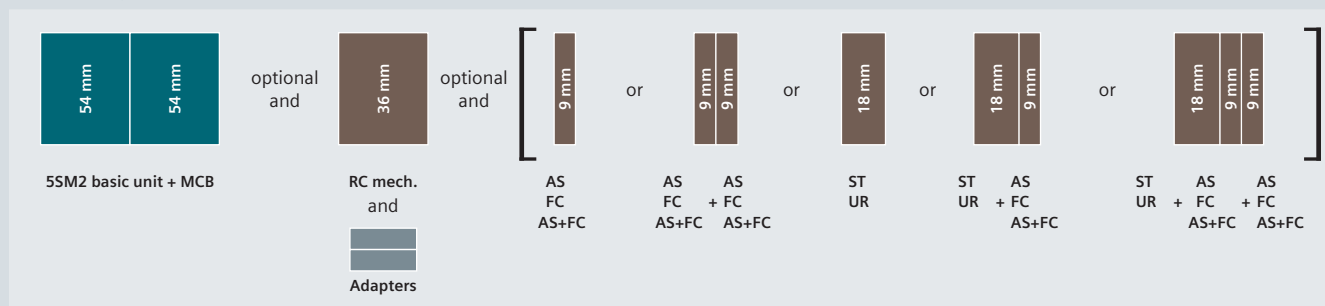
Type AC and A, 3-pole

Version Mounting width	For 5SY miniature circuit breakers ¹⁾ 400 V AC			For 5SL4 miniature circuit breakers 400 V AC	
	Instantaneous 3 MW	Super resistant [K] 3 MW	Selective [S] 3 MW	Instantaneous 3 MW	Selective [S] 3 MW

$I_{\Delta n}$	I_n				
Type AC					
30 mA	0.3 ... 40 A	5SM2332-0	–	–	5SM2333-0
	0.3 ... 63 A	5SM2335-0	–	–	5SM2336-0
300 mA	0.3 ... 40 A	5SM2632-0	–	–	5SM2633-0
	0.3 ... 63 A	5SM2635-0	–	–	5SM2636-0
500 mA	0.3 ... 63 A	5SM2735-0	–	–	–
Type A					
30 mA	0.3 ... 40 A	5SM2332-6	5SM2332-6KK01	–	5SM2333-6
	0.3 ... 63 A	5SM2335-6	5SM2335-6KK01	–	5SM2336-6
100 mA	0.3 ... 63 A	5SM2435-6	–	–	–
300 mA	0.3 ... 40 A	5SM2632-6	–	–	5SM2633-6
	0.3 ... 63 A	5SM2635-6	–	5SM2635-8	5SM2636-6
500 mA	0.3 ... 63 A	5SM2735-6	–	5SM2735-8	–
1000 mA	0.3 ... 40 A	–	–	5SM2832-8	–
	0.3 ... 63 A	–	–	5SM2835-8	–

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



MCB Miniature circuit breaker
AS Auxiliary switch
FC Fault signal contact
AS+FC Auxiliary switch and fault signal contact

[See page 3/1](#)
[See page 4/56](#)
[See page 4/57](#)
[See page 4/58](#)

ST Shunt release [See page 4/59](#)
UR Undervoltage release [See page 4/60](#)
RC mech. Remote controlled mechanism [See page 4/61](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
5SM2 with 5SY (3P)		5ST3820-3 + 5ST3820-2
		5ST3820-3 + 5ST3820-7
5SM2 with 5SL (3P)		

5SM2 RC units

Type AC and A, 4-pole

For 5SY miniature circuit breakers¹⁾
400 V AC

Version
Mounting width

Instantaneous

Super resistant [K]

Selective [S]

3 MW

3 MW

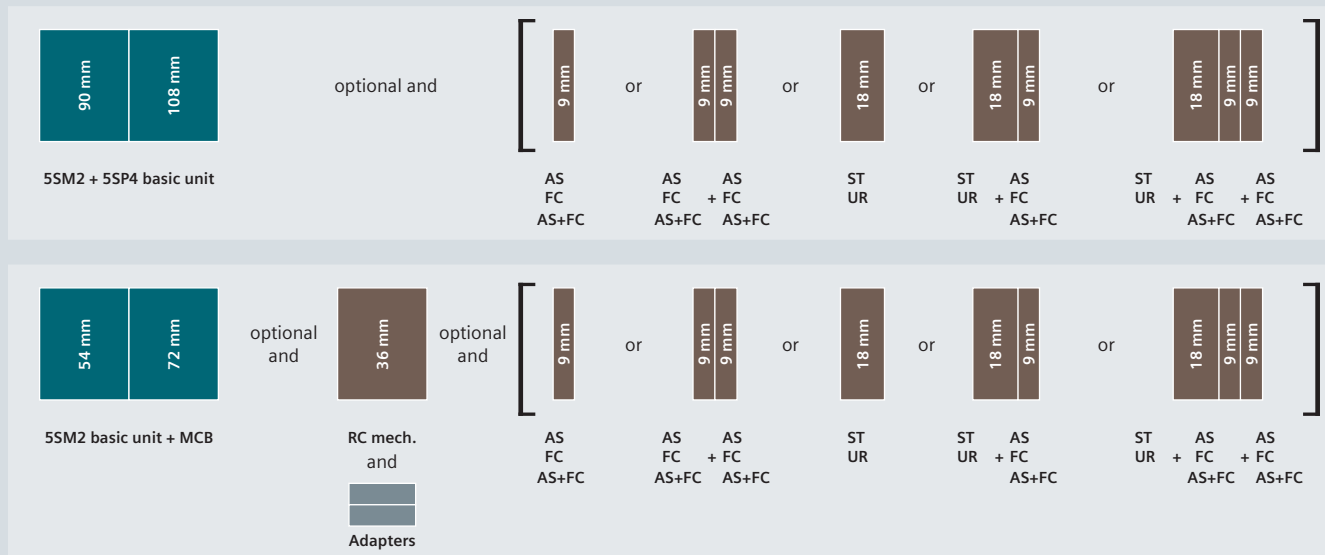
3 MW







$I_{\Delta n}$	I_n			
Type AC				
30 mA	0.3 ... 40 A	5SM2342-0	-	-
	0.3 ... 63 A	5SM2345-0	-	-
	80 ... 100 A	-	-	-
300 mA	0.3 ... 40 A	5SM2642-0	-	-
	0.3 ... 63 A	5SM2645-0	-	5SM2645-2
	80 ... 100 A	-	-	-
500 mA	0.3 ... 63 A	5SM2745-0	-	-
1000 mA	0.3 ... 63 A	-	-	5SM2845-2
Type A				
30 mA	0.3 ... 40 A	5SM2342-6	5SM2342-6KK01	-
	0.3 ... 63 A	5SM2345-6	5SM2345-6KK01	-
	80 ... 100 A	-	-	-
100 mA	0.3 ... 63 A	5SM2445-6	-	-
300 mA	0.3 ... 40 A	5SM2642-6	-	-
	0.3 ... 63 A	5SM2645-6	-	5SM2645-8
	80 ... 100 A	-	-	-
500 mA	0.3 ... 63 A	5SM2745-6	-	5SM2745-8
1000 mA	0.3 ... 40 A	-	-	5SM2842-8
	0.3 ... 63 A	-	-	5SM2845-8
	80 ... 100 A	-	-	-

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



MCB Miniature circuit breaker [See page 3/1](#) AS+FC Auxiliary switch and fault signal contact [See page 4/58](#) UR Undervoltage release [See page 4/60](#)
AS Auxiliary switch [See page 4/56](#) FC Fault signal contact [See page 4/57](#) ST Shunt release [See page 4/59](#) RC mech. Remote controlled mechanism [See page 4/61](#)

For 5SL4 miniature circuit breakers 400 V AC		For 5SP4 miniature circuit breakers (B and C characteristics) 400 V AC	
Instantaneous	Selective [S]	Instantaneous	Selective [S]
3 MW	3 MW	5 MW	5 MW
			
5SM2343-0	-	-	-
5SM2346-0	-	-	-
-	-	5SM2347-0	-
5SM2643-0	-	-	-
5SM2646-0	5SM2646-2	-	-
-	-	5SM2647-0	-
-	-	-	-
-	-	-	-
5SM2343-6	-	-	-
5SM2346-6	-	-	-
-	-	5SM2347-6	-
-	-	-	-
5SM2643-6	-	-	-
5SM2646-6	5SM2646-8	-	-
-	-	5SM2647-6	5SM2647-8
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	5SM2847-8



Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
5SM2 with 5SY (4P)		5ST3820-3 + 5ST3820-2
5SM2 with 5SL (4P)		5ST3820-3 + 5ST3820-7

5SU1 RCBOs

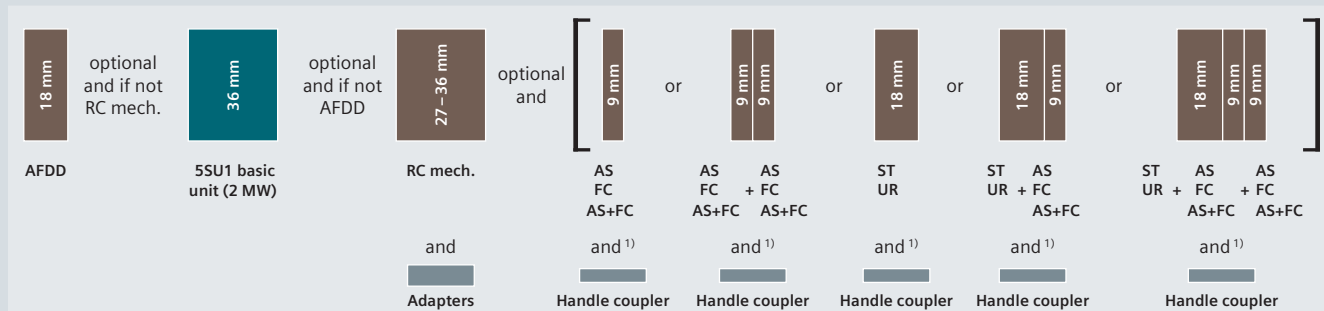
Type AC, 1P+N

Mounting width Short-circuit breaking capacity N connection	Instantaneous 230 V AC		
	2 MW 4.5 kA Right	2 MW 4.5 kA Left	2 MW 6 kA Right
			

4



I _{Δn}	I _n	Bulk packaging (36 units)	Characteristic C		Characteristic B	
			C	C	B	C
30 mA	6 A	–	5SU1353-1KK06	5SU1353-1KL06	5SU1356-0KK06	5SU1356-1KK06
	8 A	–	5SU1353-1KK08	–	–	5SU1356-1KK08
	10 A	–	5SU1353-1KK10	5SU1353-1KL10	5SU1356-0KK10	5SU1356-1KK10
		■	5SU1353-1GV10	–	–	–
	13 A	–	5SU1353-1KK13	5SU1353-1KL13	5SU1356-0KK13	5SU1356-1KK13
	16 A	–	5SU1353-1KK16	5SU1353-1KL16	5SU1356-0KK16	5SU1356-1KK16
		■	5SU1353-1GV16	–	–	5SU1356-1GV16
	20 A	–	5SU1353-1KK20	5SU1353-1KL20	5SU1356-0KK20	5SU1356-1KK20
	25 A	–	5SU1353-1KK25	5SU1353-1KL25	5SU1356-0KK25	5SU1356-1KK25
	32 A	–	5SU1353-1KK32	5SU1353-1KL32	5SU1356-0KK32	5SU1356-1KK32
	40 A	–	5SU1353-1KK40	5SU1353-1KL40	5SU1356-0KK40	5SU1356-1KK40
	100 mA	6 A	–	–	–	–
10 A		–	–	–	–	–
13 A		–	–	–	–	–
16 A		–	–	–	–	–
20 A		–	–	–	–	–
25 A		–	–	–	–	–
32 A		–	–	–	–	–
40 A		–	–	–	–	–
300 mA	6 A	–	5SU1653-1KK06	5SU1653-1KL06	5SU1656-0KK06	5SU1656-1KK06
	10 A	–	5SU1653-1KK10	5SU1653-1KL10	5SU1656-0KK10	5SU1656-1KK10
	13 A	–	5SU1653-1KK13	5SU1653-1KL16	5SU1656-0KK13	5SU1656-1KK13
	16 A	–	5SU1653-1KK16	–	5SU1656-0KK16	5SU1656-1KK16
		■	5SU1653-1GV16	–	–	–
	20 A	–	5SU1653-1KK20	5SU1653-1KL20	5SU1656-0KK20	5SU1656-1KK20
	25 A	–	5SU1653-1KK25	5SU1653-1KL25	5SU1656-0KK25	5SU1656-1KK25
	32 A	–	5SU1653-1KK32	5SU1653-1KL32	5SU1656-0KK32	5SU1656-1KK32
	40 A	–	5SU1653-1KK40	5SU1653-1KL40	5SU1656-0KK40	5SU1656-1KK40

Mounting concept



¹⁾ Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD	Arc fault detection device	See page 4/52	ST	Shunt release	See page 4/59
AS	Auxiliary switch	See page 4/56	UR	Undervoltage release	See page 4/60
FC	Fault signal contact	See page 4/57	RC mech.	Remote controlled mechanism	See page 4/61
AS+FC	Auxiliary switch and fault signal contact	See page 4/58			

Instantaneous 230 V AC		Short-time delayed [G], Super resistant [K] 230 V AC	
2 MW		2 MW	
10 kA		10 kA	
Right		Right	
			
Characteristic		Characteristic	
B	C	B	C
5SU1354-0KK06	5SU1354-1KK06	–	–
–	5SU1354-1KK08	–	–
5SU1354-0KK10	5SU1354-1KK10	5SU1354-0LB10	5SU1354-1LB10
–	–	–	–
5SU1354-0KK13	5SU1354-1KK13	5SU1354-0LB13	5SU1354-1LB13
5SU1354-0KK16	5SU1354-1KK16	5SU1354-0LB16	5SU1354-1LB16
–	–	–	–
5SU1354-0KK20	5SU1354-1KK20	5SU1354-0LB20	5SU1354-1LB20
5SU1354-0KK25	5SU1354-1KK25	5SU1354-0LB25	5SU1354-1LB25
5SU1354-0KK32	5SU1354-1KK32	5SU1354-0LB32	5SU1354-1LB32
5SU1354-0KK40	5SU1354-1KK40	5SU1354-0LB40	5SU1354-1LB40
–	5SU1454-1KK06	–	–
–	5SU1454-1KK10	–	–
–	5SU1454-1KK13	–	–
–	5SU1454-1KK16	–	–
–	5SU1454-1KK20	–	–
–	5SU1454-1KK25	–	–
–	5SU1454-1KK32	–	–
–	5SU1454-1KK40	–	–
5SU1654-0KK06	5SU1654-1KK06	–	–
5SU1654-0KK10	5SU1654-1KK10	–	–
5SU1654-0KK13	5SU1654-1KK13	–	–
5SU1654-0KK16	5SU1654-1KK16	–	–
–	–	–	–
5SU1654-0KK20	5SU1654-1KK20	–	–
5SU1654-0KK25	5SU1654-1KK25	–	–
5SU1654-0KK32	5SU1654-1KK32	–	–
5SU1654-0KK40	5SU1654-1KK40	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01


Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		Article No.
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
Power	177 ... 270 V AC	5ST3056
	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units	I _n up to 16 A	5SM6021-2
	I _n up to 40 A	5SM6024-2

5SU1 RCBOs

Type A, 1P+N

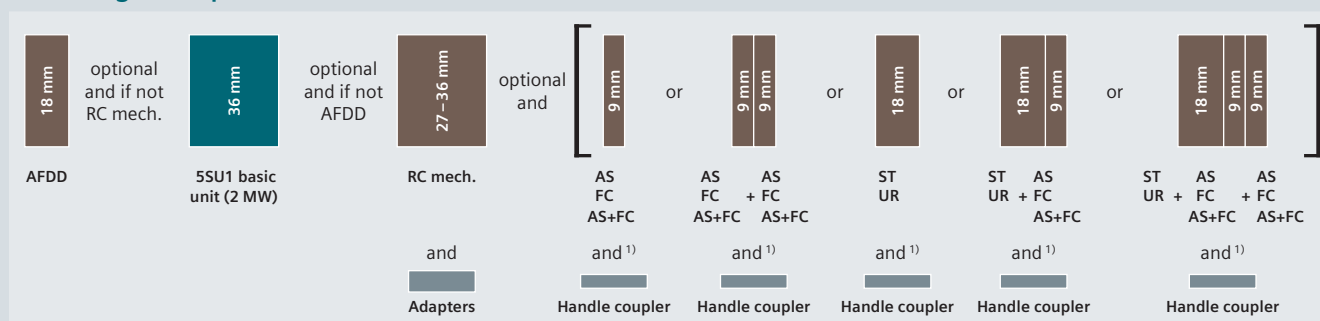
Mounting width	Instantaneous 230 V AC		
	2 MW	2 MW	2 MW
Short-circuit breaking capacity	4.5 kA	4.5 kA	6 kA
N connection	Right	Left	Right





$I_{\Delta n}$	I_n	Bulk packaging (36 units)	Characteristic C		Characteristic B	
			C	C	B	C
Type A						
10 mA	6 A	–	–	–	–	–
	10 A	–	–	–	–	–
	13 A	–	–	–	–	–
	16 A	–	–	–	–	–
30 mA	6 A	–	5SU1353-7KK06	5SU1353-7KL06	5SU1356-6KK06	5SU1356-7KK06
		■	–	–	5SU1356-6GV06	5SU1356-7GV06
	8 A	–	5SU1353-7KK08	–	–	5SU1356-7KK08
	10 A	–	5SU1353-7KK10	5SU1353-7KL10	5SU1356-6KK10	5SU1356-7KK10
		■	–	–	5SU1356-6GV10	5SU1356-7GV10
	13 A	–	5SU1353-7KK13	–	5SU1356-6KK13	5SU1356-7KK13
	16 A	–	5SU1353-7KK16	5SU1353-7KL16	5SU1356-6KK16	5SU1356-7KK16
		■	–	–	5SU1356-6GV16	5SU1356-7GV16
	20 A	–	5SU1353-7KK20	5SU1353-7KL20	5SU1356-6KK20	5SU1356-7KK20
	25 A	–	5SU1353-7KK25	5SU1353-7KL25	5SU1356-6KK25	5SU1356-7KK25
	32 A	–	5SU1353-7KK32	5SU1353-7KL32	5SU1356-6KK32	5SU1356-7KK32
	40 A	–	5SU1353-7KK40	5SU1353-7KL40	5SU1356-6KK40	5SU1356-7KK40
300 mA	6 A	–	5SU1653-7KK06	–	5SU1656-6KK06	5SU1656-7KK06
	10 A	–	5SU1653-7KK10	–	5SU1656-6KK10	5SU1656-7KK10
	13 A	–	5SU1653-7KK13	–	5SU1656-6KK13	5SU1656-7KK13
	16 A	–	5SU1653-7KK16	–	5SU1656-6KK16	5SU1656-7KK16
	20 A	–	5SU1653-7KK20	–	5SU1656-6KK20	5SU1656-7KK20
	25 A	–	5SU1653-7KK25	–	5SU1656-6KK25	5SU1656-7KK25
	32 A	–	5SU1653-7KK32	–	5SU1656-6KK32	5SU1656-7KK32
	40 A	–	5SU1653-7KK40	–	5SU1656-6KK40	5SU1656-7KK40

Mounting concept





¹⁾ Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD Arc fault detection device
AS Auxiliary switch
FC Fault signal contact
AS+FC Auxiliary switch and fault signal contact

[See page 4/52](#)
[See page 4/56](#)
[See page 4/57](#)
[See page 4/58](#)

ST Shunt release
UR Undervoltage release
RC mech. Remote controlled mechanism

[See page 4/59](#)
[See page 4/60](#)
[See page 4/61](#)

Instantaneous 230 V AC		Short-time delayed [G], Super resistant [K] 230 V AC	
2 MW		2 MW	
10 kA		10 kA	
Right		Right	
			
Characteristic B	C	Characteristic B	C
5SU1154-6KK06	5SU1154-7KK06	–	–
5SU1154-6KK10	5SU1154-7KK10	–	–
5SU1154-6KK13	5SU1154-7KK13	–	–
5SU1154-6KK16	5SU1154-7KK16	–	–
5SU1354-6KK06	5SU1354-7KK06	–	–
5SU1354-6GV06	5SU1354-7GV06	–	–
–	5SU1354-7KK08	–	–
5SU1354-6KK10	5SU1354-7KK10	5SU1354-6LB10	5SU1354-7LB10
5SU1354-6GV10	5SU1354-7GV10	–	–
5SU1354-6KK13	5SU1354-7KK13	5SU1354-6LB13	5SU1354-7LB13
5SU1354-6KK16	5SU1354-7KK16	5SU1354-6LB16	5SU1354-7LB16
5SU1354-6GV16	5SU1354-7GV16	–	–
5SU1354-6KK20	5SU1354-7KK20	5SU1354-6LB20	5SU1354-7LB20
5SU1354-6KK25	5SU1354-7KK25	5SU1354-6LB25	5SU1354-7LB25
5SU1354-6KK32	5SU1354-7KK32	5SU1354-6LB32	5SU1354-7LB32
5SU1354-6KK40	5SU1354-7KK40	5SU1354-6LB40	5SU1354-7LB40
5SU1654-6KK06	5SU1654-7KK06	–	–
5SU1654-6KK10	5SU1654-7KK10	–	–
5SU1654-6KK13	5SU1654-7KK13	–	–
5SU1654-6KK16	5SU1654-7KK16	–	–
5SU1654-6KK20	5SU1654-7KK20	–	–
5SU1654-6KK25	5SU1654-7KK25	–	–
5SU1654-6KK32	5SU1654-7KK32	–	–
5SU1654-6KK40	5SU1654-7KK40	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		Article No.
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

5SU1 RCBOs

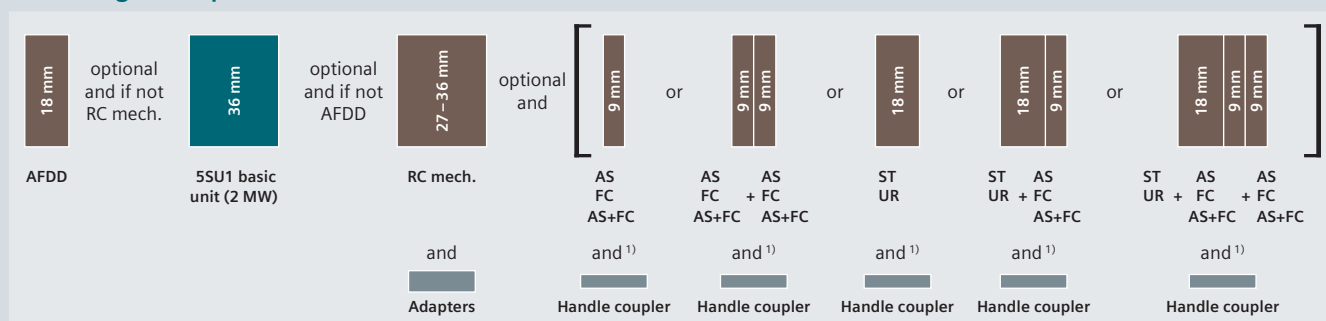
Type F, 1P+N

	Super resistant [K]
	230 V AC
Mounting width	2 MW
Short-circuit breaking capacity	10 kA
N connection	Right



$I_{\Delta n}$	I_n	Characteristic	
		B	C
Type F			
30 mA	6 A	5SU1354-3KK06	5SU1354-4KK06
	10 A	5SU1354-3KK10	5SU1354-4KK10
	13 A	5SU1354-3KK13	5SU1354-4KK13
	16 A	5SU1354-3KK16	5SU1354-4KK16
	20 A	5SU1354-3KK20	5SU1354-4KK20
	25 A	5SU1354-3KK25	5SU1354-4KK25
	32 A	5SU1354-3KK32	5SU1354-4KK32
	40 A	5SU1354-3KK40	5SU1354-4KK40

Mounting concept



¹⁾ Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD Arc fault detection device [See page 4/52](#)
 AS Auxiliary switch [See page 4/56](#)
 FC Fault signal contact [See page 4/57](#)
 AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)

ST Shunt release [See page 4/59](#)
 UR Undervoltage release [See page 4/60](#)
 RC mech. Remote controlled mechanism [See page 4/61](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		Article No.
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

5SU1 RCBOs

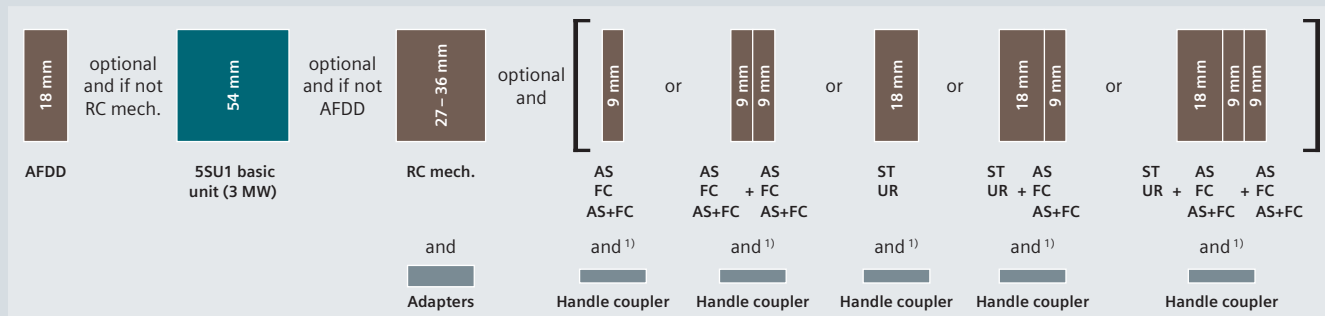
Type AC and A, 2-pole

Mounting width	Instantaneous	
	110 V AC	230 V AC
Short-circuit breaking capacity	3 MW	3 MW
	10 kA	10 kA

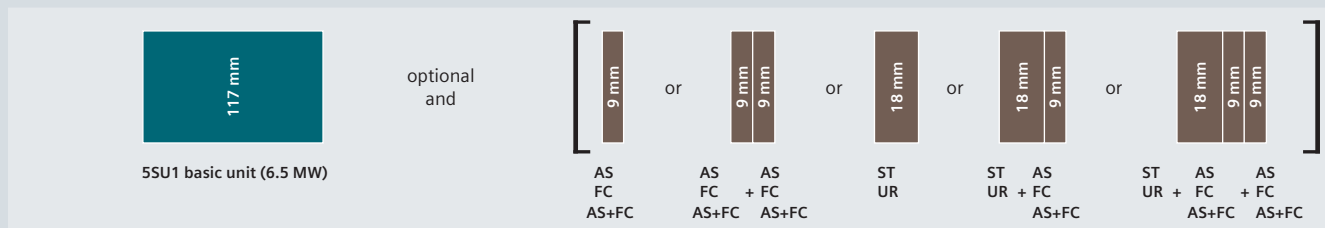


$I_{\Delta n}$	I_n	Characteristic		Characteristic
		B	C	B
Type AC				
30 mA	125 A	-	-	-
300 mA	125 A	-	-	-
Type A				
30 mA	6 A	5SU1324-6KX06	5SU1324-7KX06	5SU1324-6FA06
	10 A	5SU1324-6KX10	5SU1324-7KX10	5SU1324-6FA10
	13 A	5SU1324-6KX13	5SU1324-7KX13	5SU1324-6FA13
	16 A	5SU1324-6KX16	5SU1324-7KX16	5SU1324-6FA16
	20 A	5SU1324-6KX20	5SU1324-7KX20	5SU1324-6FA20
	25 A	5SU1324-6KX25	5SU1324-7KX25	5SU1324-6FA25
	32 A	5SU1324-6KX32	5SU1324-7KX32	5SU1324-6FA32
	40 A	5SU1324-6KX40	5SU1324-7KX40	5SU1324-6FA40
	125 A	-	-	-
	300 mA	125 A	-	-



Mounting concept



¹⁾ Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.



AFDD Arc fault detection device [See page 4/52](#) AS+FC Auxiliary switch and fault signal contact [See page 4/58](#) UR Undervoltage release [See page 4/60](#)
 AS Auxiliary switch [See page 4/56](#) RC mech. Remote controlled mechanism [See page 4/61](#)
 FC Fault signal contact [See page 4/57](#) ST Shunt release [See page 4/59](#)

		Selective [S] 230 V AC		
6.5 MW 10 kA		6.5 MW 10 kA		
				
C	Characteristic B	C	Characteristic B	C
–	5SU1324-0KK82	5SU1324-1KK82	–	–
–	5SU1624-0KK82	5SU1624-1KK82	–	–
5SU1324-7FA06	–	–	–	–
5SU1324-7FA10	–	–	–	–
5SU1324-7FA13	–	–	–	–
5SU1324-7FA16	–	–	–	–
5SU1324-7FA20	–	–	–	–
5SU1324-7FA25	–	–	–	–
5SU1324-7FA32	–	–	–	–
5SU1324-7FA40	–	–	–	–
–	5SU1324-6KK82	5SU1324-7KK82	–	–
–	5SU1624-6KK82	5SU1624-7KK82	5SU1624-6WK82	5SU1624-7WK82

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard For low power For low power (with diode)	5ST3010 5ST3013 5ST3013-0XX01
2 NO contacts	Standard For low power	5ST3011 5ST3014
2 NC contacts	Standard For low power	5ST3012 5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		Article No.
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
Power	177 ... 270 V AC	5ST3056
	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3058
	177 ... 270 V AC	5ST3059
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units (3 MW)	I_n up to 16 A	5SM6021-2
	I_n up to 40 A	5SM6024-2

5SU1 RCBOs

Type AC and A, 4-pole

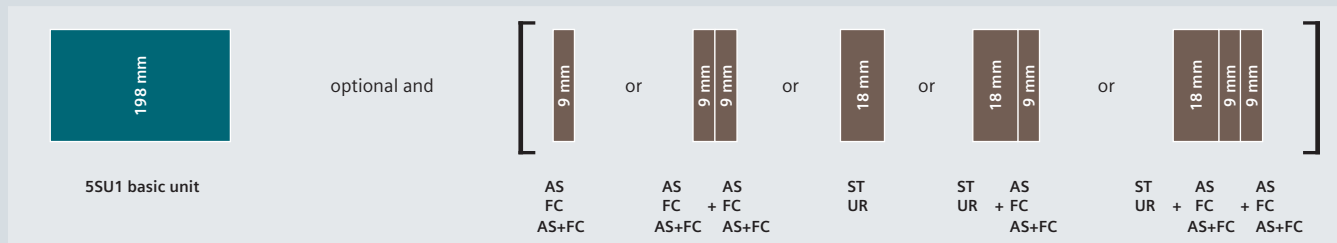
	Instantaneous 400 V AC	Selective [S] 400 V AC
Mounting width	11 MW	11 MW
Short-circuit breaking capacity	10 kA	10 kA



$I_{\Delta n}$	I_n	Characteristic		Characteristic	
		B	C	B	C
Type AC					
30 mA	125 A	5SU1344-0KK82	5SU1344-1KK82	–	–
300 mA	125 A	5SU1644-0KK82	5SU1644-1KK82	–	–
Type A					
30 mA	125 A	5SU1344-6KK82	5SU1344-7KK82	–	–
300 mA	125 A	5SU1644-6KK82	5SU1644-7KK82	5SU1644-6WK82	5SU1644-7WK82
1000 mA	125 A	–	–	5SU1844-6WK82	5SU1844-7WK82

4

Mounting concept



AS Auxiliary switch
 FC Fault signal contact
 AS+FC Auxiliary switch and fault signal contact

[See page 4/56](#)
[See page 4/57](#)
[See page 4/58](#)

ST Shunt release [See page 4/59](#)
 UR Undervoltage release [See page 4/60](#)

Accessories

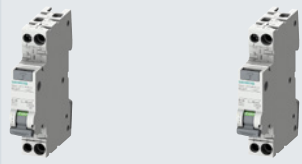
Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022

Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt releases (ST)		Article No.
110 ... 415 V AC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC new		5ST3031-0XX01
Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

5SV1 RCBOs

Type AC, 1P+N

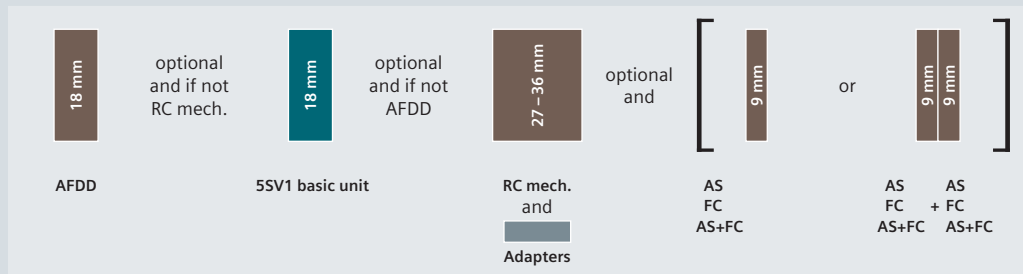
	Instantaneous 230 V AC	
	Mounting width	1 MW
Short-circuit breaking capacity	4.5 kA	6 kA
N connection	Right	Right



4

$I_{\Delta n}$	I_n	Bulk packaging (12 units)	Characteristic		
			C	B	C
Type AC					
30 mA	2 A	–	5SV1313-1KK02	–	5SV1316-1KK02
	4 A	–	5SV1313-1KK04	–	5SV1316-1KK04
	6 A	–	5SV1313-1KK06	5SV1316-0KK06	5SV1316-1KK06
	10 A	–	5SV1313-1KK10	5SV1316-0KK10	5SV1316-1KK10
		■	–	–	5SV1316-1GV10
	13 A	–	5SV1313-1KK13	5SV1316-0KK13	5SV1316-1KK13
	16 A	–	5SV1313-1KK16	5SV1316-0KK16	5SV1316-1KK16
		■	–	–	5SV1316-1GV16

Mounting concept



AFDD Arc fault detection device [See page 4/52](#)
 AS Auxiliary switch [See page 4/56](#)
 FC Fault signal contact [See page 4/57](#)
 AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)
 RC mech. Remote controlled mechanism [See page 4/61](#)



Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
1 MW		5ST3820-6
Arc fault detection devices (AFDD)		Article No.
For 5SV1 basic units	I_n up to 16 A	5SM6011-2

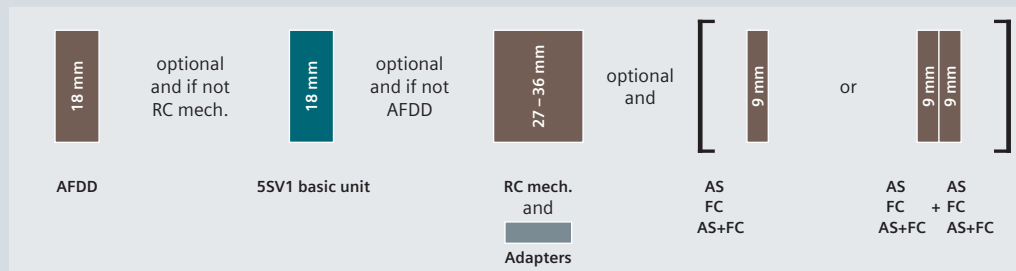
5SV1 RCBOs

Type A, 1P+N

	Instantaneous 230 V AC	
	Mounting width	1 MW
Short-circuit breaking capacity	4.5 kA	6 kA
N connection	Right	Right
		

$I_{\Delta n}$	I_n	Bulk packaging (12 units)	Characteristic		
			C	B	C
Type A					
30 mA	2 A	–	5SV1313-1KK02	–	5SV1316-7KK02
	4 A	–	5SV1313-1KK04	–	5SV1316-7KK04
	6 A	–	5SV1313-1KK06	5SV1316-6KK06	5SV1316-7KK06
		■	–	5SV1316-6GV06	5SV1316-7GV06
	10 A	–	5SV1313-1KK10	5SV1316-6KK10	5SV1316-7KK10
		■	5SV1313-1GV10	5SV1316-6GV10	5SV1316-7GV10
	13 A	–	5SV1313-1KK13	5SV1316-6KK13	5SV1316-7KK13
		■	–	5SV1316-6GV13	5SV1316-7GV13
	16 A	–	5SV1313-1KK16	5SV1316-6KK16	5SV1316-7KK16
		■	5SV1313-1GV16	5SV1316-6GV16	5SV1316-7GV16

Mounting concept



AFDD Arc fault detection device [See page 4/52](#)
 AS Auxiliary switch [See page 4/56](#)
 FC Fault signal contact [See page 4/57](#)

AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)
 RC mech. Remote controlled mechanism [See page 4/61](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
1 MW		5ST3820-6
Arc fault detection devices (AFDD)		Article No.
For 5SV1 basic units	I_n up to 16 A	5SM6011-2

5SM6 arc fault detection devices

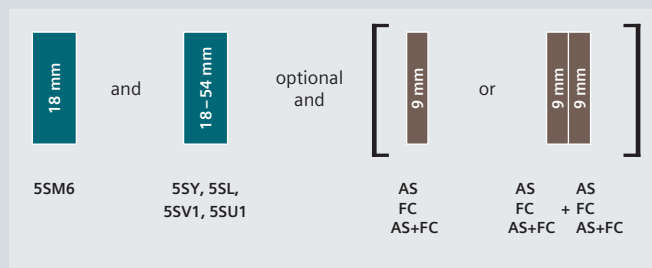
For combination with an MCB or RCBO



For combination with basic units			Rated current I_n	
Width of basic unit	Miniature circuit breakers	RCBO		
1 MW	5SL60 (no KL types)	5SV1	Up to 16 A	5SM6011-2
			Up to 40 A	5SM6014-2
2 MW	5SY ¹⁾ , 5SL4 (only 1+N devices)	5SU1 (2 MW, 3 MW)	Up to 16 A	5SM6021-2
			Up to 40 A	5SM6024-2

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



AS Auxiliary switch [See page 4/56](#)
 FC Fault signal contact [See page 4/57](#)
 AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)

The mounting concept shown is only one example of how devices and accessories can be combined.

[Suitable busbars, page 4/64 onwards](#)
[Suitable terminals and end caps, page 4/64 onwards](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

5SV6 arc fault detection devices

With integrated miniature circuit breaker

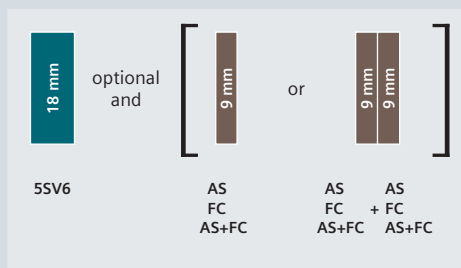
Mounting width 1 MW



Rated current I_n	Bulk packaging (12 units)	Characteristic	
		B	C
6 A	– ■	5SV6016-6KK06 5SV6016-6GV06	5SV6016-7KK06 5SV6016-7GV06
10 A	– ■	5SV6016-6KK10 5SV6016-6GV10	5SV6016-7KK10 5SV6016-7GV10
13 A	– ■	5SV6016-6KK13 5SV6016-6GV13	5SV6016-7KK13 –
16 A	– ■	5SV6016-6KK16 5SV6016-6GV16	5SV6016-7KK16 5SV6016-7GV16
20 A	–	5SV6016-6KK20	5SV6016-7KK20
25 A	– ■	5SV6016-6KK25 5SV6016-6GV25	5SV6016-7KK25 –
32 A	–	5SV6016-6KK32	5SV6016-7KK32
40 A	–	5SV6016-6KK40	5SV6016-7KK40

4

Mounting concept



AS Auxiliary switch [See page 4/56](#)
 FC Fault signal contact [See page 4/57](#)
 AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

Suitable busbars, [page 4/64 onwards](#)
 Suitable terminals and end caps, [page 4/64 onwards](#)

Overview of modular system

Residual current







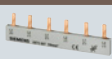



5SV

5SM3

5SM2 + MCB

4

5SM6 arc fault detection devices			Article No.	5SV	5SM3	5SM2 + MCB
	Rated current up to 16 A	Standard	5SM6021-2	–	–	–
		For compact devices 1P+N in 1 MW	5SM6011-2	–	–	–
	Rated current up to 40 A	Standard	5SM6024-2	–	–	–
		For compact devices 1P+N in 1 MW	5SM6014-2	–	–	–
Auxiliary switches (AS)			Article No.			
	1 NO contact + 1 NC contact	Standard	5ST3010	■	–	■
		For low power	5ST3013	■	–	■
		For low power (with diode)	5ST3013-0XX01	■	–	■
	2 NO contacts	Standard	5ST3011	■	–	■
		For low power	5ST3014	■	–	■
	2 NC contacts	Standard	5ST3012	■	–	■
For low power		5ST3015	■	–	■	
1 CO contact	Standard	5ST3016	■	–	■	
Fault signal contacts (FC)			Article No.			
	1 NO contact + 1 NC contact		5ST3020	■	–	■
	2 NO contacts		5ST3021	■	–	■
	2 NC contacts		5ST3022	■	–	■
Auxiliary switches and fault signal contacts (AS+FC)			Article No.			
	1 CO contact (AS) + 1 CO contact (FC)	Standard	5ST3062	■	–	■
Shunt releases (ST)			Article No.			
	110 ... 415 V AC		5ST3030	■	–	■
	24 ... 48 V AC/DC		5ST3031	■	–	■
	12 V DC new		5ST3031-0XX01	■	–	■
Undervoltage releases (UR)			Article No.			
	With integrated auxiliary switch	230 V AC	5ST3040	■	–	■
		110 V DC	5ST3041	■	–	■
		24 V DC	5ST3042	■	–	■
	Without integrated auxiliary switch	230 V AC	5ST3043	■	–	■
		110 V DC	5ST3044	■	–	■
		24 V DC	5ST3045	■	–	■
Remote controlled (RC) mechanisms			Article No.			
	Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053	–	–	–
		177 ... 270 V AC	5ST3054	–	–	–
	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055	■	–	■
		177 ... 270 V AC	5ST3056	■	–	■
	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057	■	–	■
		177 ... 270 V AC	5ST3058	■	–	■
	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070	■	–	■
	Standard busbars			Article No.		
	Cannot be cut		5ST36..	■	–	■
	Can be cut		5ST37..	■	–	■
Compact busbars			Article No.			
	Cannot be cut		5ST36..	■	–	–
	Can be cut		5ST37..	■	–	–

From page 4/14

■ Suitable for all versions

□ Suitable for some versions

Electrical accessories

Auxiliary switches (AS)

- Signals contact point of the mounted device
- Version for the switching of small currents and voltages for the control of programmable control systems (PLCs) according to EN 61131-2
- Test button enables the testing of control circuits without the need to switch the mounted device



For combination with basic units						Contacts	Version	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices	ON/OFF switches				
Auxiliary switches (AS)									
–	–	5SM3 (3P+N, 100/125 A)	–	–	–	1 NO contact + 1 NC contact	Standard	0.5 MW	5SW3330
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	5TL1, 5TE8	1 NO contact + 1 NC contact	Standard	0.5 MW	5ST3010
						For low power (with diode)		0.5 MW	5ST3013
						2 NO contacts	Standard	0.5 MW	5ST3011
						For low power		0.5 MW	5ST3014
						2 NC contacts	Standard	0.5 MW	5ST3012
						For low power		0.5 MW	5ST3015
						1 CO contact	Standard	0.5 MW	5ST3016
Auxiliary switches (AS) with TEST button									
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	5TL1, 5TE8	1 NO contact + 1 NC contact	Standard	0.5 MW	5ST3010-2
						For low power		0.5 MW	5ST3013-2
						2 NO contacts	Standard	0.5 MW	5ST3011-2
						For low power		0.5 MW	5ST3014-2
						2 NC contacts	Standard	0.5 MW	5ST3012-2
						For low power		0.5 MW	5ST3015-2

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

Standards	IEC/EN	IEC/EN 62019, IEC/EN 60947-5-1	5ST3010, 5ST3010-2 5ST3011, 5ST3011-2 5ST3012, 5ST3012-2	5ST3013, 5ST3014 5ST3015, 5ST3016 5ST3013-0XX01	5ST3013-2 5ST3014-2 5ST3015-2
Standards	IEC/EN UL, CSA	IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235			
Contacts					
Minimum contact load		50 mA, 24 V		1 mA, 5 V DC	5 mA, 5 V DC
Maximum contact load		–		100 mA, 30 V DC	30 mA, 30 V DC
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13 400 V AC, AC-14 24 V DC, DC-13 60 V DC, DC-13 110 V DC, DC-13 220 V DC, DC-13	6 A 2 A 6 A 3 A 1 A 1 A	– – – – – –	– – – – – –	– – – – – –
Service life, on average, with rated load		20 000 actuations			
Safety					
Short-circuit protection					Miniature circuit breakers or gG 6 A fuse
Connections					
Conductor cross-sections				0.5 ... 2.5 mm ² (AWG 22 ... 14)	
Terminals	Max. tightening torque			0.5 Nm [4.5 lb-in]	
Environmental conditions					
Permissible ambient temperature				–25 ... +55 °C	
Permissible storage temperature				–40 ... +75 °C	
Resistance to climate	Acc. to IEC 60068-2-30			28 cycles	
Mounting position				Any	
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27			50 m/s ²	
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6			50 m/s ²	

Electrical accessories



Fault signal contacts (FC)

- Signals the automatic tripping of the protective device in the event of a fault, such as an overload or a short circuit
- If the fault signal contact is activated, the contact position does not change if the in-built protective device is tripped manually
- Version with TEST and RESET buttons enables the testing of control circuits without the need to trip the protective device
- Red RESET button in the operating handle indicates automatic shutdown of the mounted protective device

For combination with basic units					Contacts	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBO	Arc fault detection devices			
Fault signal contacts (FC)							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 NO contact + 1 NC contact	0.5 MW	5ST3020
					2 NO contacts	0.5 MW	5ST3021
					2 NC contacts	0.5 MW	5ST3022
Fault signal contacts (FC) with Test and Reset buttons							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 NO contact + 1 NC contact	0.5 MW	5ST3020-2
					2 NO contacts	0.5 MW	5ST3021-2
					2 NC contacts	0.5 MW	5ST3022-2

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST3020, 5ST3020-2
5ST3021, 5ST3021-2
5ST3022, 5ST3022-2

Standards		
Standards	IEC/EN UL, CSA	IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235
Contacts		
Minimum contact load		50 mA, 24 V
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13 400 V AC, AC-14 24 V DC, DC-13 60 V DC, DC-13 110 V DC, DC-13 220 V DC, DC-13	6 A 2 A 6 A 3 A 1 A 1 A
Service life, on average, with rated load		20 000 actuations
Safety		
Short-circuit protection		Miniature circuit breakers or gG 6 A fuse
Connections		
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.5 Nm [4.5 lb-in]
Environmental conditions		
Permissible ambient temperature		-25 ... +55 °C
Permissible storage temperature		-40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²

Electrical accessories



Auxiliary switches and fault signal contacts (AS+FC)

- Combine the properties of both switches in a width of only 0.5 MW (9 mm)
- Signal contact point of the mounted device
- Signal the automatic tripping of the protective device in the event of a fault, such as an overload, short circuit or residual current
- If the fault signal contact is activated, the contact position does not change if the in-built protective device is tripped manually

For combination with basic units				Contacts	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBO	Arc fault detection devices		
Auxiliary switches and fault signal contacts (AS+FC)						
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 CO contact (AS) + 1 CO contact (FC)	0.5 MW 5ST3062

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST3062

Standards		
Standards	IEC/EN UL, CSA	IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235
Contacts		
Minimum contact load		50 mA, 24 V
Maximum contact load		–
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A
	400 V AC, AC-14	2 A
Contact load according to IEC/EN 62019 (acc. to IEC/EN 60947-5-1)	24 V DC, DC-13	3 A (3 A)
	60 V DC, DC-13	3 A (1 A)
	110 V DC, DC-13	0.5 A (0.5 A)
	220 V DC, DC-13	0.5 A (0.3 A)
Service life, on average, with rated load		20 000 actuations
Safety		
Short-circuit protection		Miniature circuit breakers or gG 6 A fuse
Connections		
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.5 Nm [4.5 lb-in]
Environmental conditions		
Permissible ambient temperature		–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²



Shunt releases (ST)

- For remote-controlled tripping of the mounted device

For combination with basic units			Rated voltage U_n	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	RCCBs	RCBO			
Shunt releases (ST)					
5SL4, 5SY, 5SP4	5SV	5SU1 ¹⁾	110 ... 415 V AC	1 MW	5ST3030
			AC/24 ... 48 V DC	1 MW	5ST3031
			12 V DC new	1 MW	5ST3031-0XX01

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

	5ST3030	5ST3031	5ST3031-0XX01
Standards			
Standards	IEC/EN	EN 60947-1	
Supply			
Primary operating range	0.7 ... 1.1 × U_n	0.7 ... 1.1 × U_n	0.7 ... 1.1 × U_n
Rated frequency f_n	50 ... 60 Hz	50 ... 60 Hz	–
Contacts			
Minimum contact load	50 mA, 24 V	50 mA, 24 V	1 mA, 5 V
Tripping operations	Max. 2000	Max. 2000	Max. 2000
Service life, on average, with rated load	Actuations	20000	20000
Safety			
Short-circuit protection	Miniature circuit breakers B/C 6 A or fuse gG 6 A		
Connections			
Conductor cross-sections	0.5 ... 2.5 mm ² (AWG 22 ... 14)		
Terminals	Max. tightening torque	0.8 Nm [6.8 lb-in]	
Environmental conditions			
Permissible ambient temperature	–25 ... +55 °C	–25 ... +55 °C	–40 ... +70 °C
Permissible storage temperature	–40 ... +75 °C	–40 ... +75 °C	–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles	28 cycles
Mounting position	Any		
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²	50 m/s ²
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²	50 m/s ²

Electrical accessories



Undervoltage releases (UR)

- Integrated, for example, in EMERGENCY-OFF loops
- Ensure that the mounted device trips in the event of an emergency, guaranteeing disconnection of the control circuit according to EN 60204.
- Trip the mounted device if the voltage is interrupted or too low, i.e. prevents activation of the mounted device

For combination with basic units			Rated voltage U_n	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	RCCBs	RCBO			
With integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 ¹⁾	230 V AC	1 MW	5ST3040
			110 V DC	1 MW	5ST3041
			24 V DC	1 MW	5ST3042
Without integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 ¹⁾	230 V AC	1 MW	5ST3043
			110 V DC	1 MW	5ST3044
			24 V DC	1 MW	5ST3045

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST304.

Standards		
Standards	IEC/EN	EN 60947-1
Supply		
Primary operating range		0.85 ... 1.1 × U_n
Rated frequency f_n		50/60 Hz
Contacts		
Minimum contact load		50 mA, 24 V
Tripping operations		Max. 2000
Service life, on average, with rated load	Actuations	20000
Safety		
Short-circuit protection		Miniature circuit breakers B/C 6 A or fuse gG 6 A
Connections		
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.8 Nm [6.8 lb-in]
Environmental conditions		
Permissible ambient temperature		-25 ... +55 °C
Permissible storage temperature		-40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²



5ST3 remote controlled (RC) mechanisms

- For operating facilities that are extensive or not continuously staffed
- Allow direct and immediate access to the plant even if it is remote or in a location that is hard to reach
- Permit fast restarts following a fault
- Version with ARD with automatic restart
- Versions with ARD and Power with integrated auxiliary switches and fault signal contacts

Remote controlled type	Display	Ambient temperature	Vibration and shock requirements	Rated voltage U_n	Width (1 MW = 18 mm)	Article No.
Basic	–	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	1.5 MW	5ST3053
				177 ... 270 V AC	2 MW	5ST3054
Power	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3055
				177 ... 270 V AC	2 MW	5ST3056
Power with ARD	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3057
				177 ... 270 V AC	2 MW	5ST3058
Power with extended function	LED	–40 °C ... +70 °C	acc. to EN 61373 / EN 50155 "1B"	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3070

Further technical specifications	5ST3053	5ST3054	5ST3055	5ST3056	5ST3057	5ST3058	5ST3070
Standards	EN 50557 (VDE 0640-20)						
Supply							
Rated frequency f_n	50 ... 60 Hz						
Rated power dissipation on standby	≤1 VA						
Contacts							
Service life, on average, with rated load	Actuations	10000	10000	10000	10000	10000	10000
Number of remote switching operations per minute		2	2	2	2	2	2
Number of automatic reclose attempts		–	–	–	3	3	–
Cable length in the control circuit		≤1500 m	≤1500 m	≤1500 m	≤1500 m	≤1500 m	≤1500 m
Sliding selector with locking device		–	■	■	■	■	■
Integrated auxiliary switches		–	–	1CO; 2 A; 250 V	1CO; 2 A; 250 V	1CO; 2 A; 250 V	1CO; 2 A; 250 V
Integrated fault signal contacts		–	–	1CO; 2 A; 250 V	1CO; 2 A; 250 V	1CO; 2 A; 250 V	1CO; 2 A; 250 V
Connections							
Conductor cross-sections	0.5 ... 1.5 mm ² (AWG 14 ... 30)						
Terminal tightening torque	0.2 ... 0.25 Nm (2.0 lb-in)						
Environmental conditions							
Permissible storage temperature		–40 ... +55 °C	–40 ... +55 °C	–40 ... +55 °C	–40 ... +55 °C	–40 ... +55 °C	–40 ... +70 °C
Degree of protection		IP20	IP20	IP20	IP20	IP20	IP20
Pollution degree for overvoltage category		3/II	3/III	3/II	3/III	3/III	3/II

Suitable adapters for combination with basic units



Basic units	Mounting width							Adapters
	1 MW	2 MW	3 MW	4 MW	2-pole	3-pole	4-pole	
5SU1	–	■	■	–	–	–	–	5ST3820-5
5SV1	■	–	–	–	–	–	–	5ST3820-6
5SV3	–	■	–	■	–	–	–	5ST3820-6
5SM2 with 5SY	–	–	–	–	■	–	–	5ST3820-3 + 5ST3820-1
	–	–	–	–	–	■	■	5ST3820-3 + 5ST3820-2
5SM2 with 5SL	–	–	–	–	■	–	–	5ST3820-3 + 5ST3820-6
	–	–	–	–	–	■	■	5ST3820-3 + 5ST3820-7

Mechanical accessories

Handle couplers for additional components



- Necessary for mounting the additional components auxiliary switches, fault signal contacts, shunt trips and undervoltage releases onto the 5SU1 RCBO
- 1 set = 5 units

Article No.

5ST3805-1

Handle locking devices



- To prevent undesired mechanical ON/OFF switching
- Lockable
- For 5SV RCCBs, 5SV1 RCBOs and 5SL MCBs

Version

For padlock with 3 ... 6 mm shackle

Article No.

5ST3806

Locking device



- Sealable and lockable
- For 5SU1 RCBOs

Version

For padlock with 3 ... 6 mm shackle

Article No.

5ST3801-1

Padlock

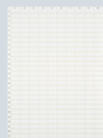


- For 5ST3801 and 5ST3806 locking devices, as well as 5ST3054 ... 58 / 5ST3070 remote operating mechanisms

Article No.

5T3802

Device labels



- For adhesive attachment
- For modular installation devices, such as 5SY, 5SL, 5TL1

Versions

15 mm x 6 mm, white (WIN 098)

15 mm x 6 mm, yellow (WIN 099)

Article No.

8WH8210-0AA35

8WH8210-0AA36

Covers for connection terminals



- For 5SV3 and 5SV4 residual current operated circuit breakers, sealable (2 units in plastic bag)

Mounting width

2 MW

4 MW

Article No.

5SW3010

5SW3008

Terminal covers, gray



- For surface mounting, IP40 degree of protection
- Sealable
- Can be used with 35 mm DIN rail

For width up to

2.5 MW

4.5 MW

Article No.

5SW3004

5SW3005

Wall enclosures, gray



- For flush mounting, IP40 degree of protection
- Can be used with 35 mm DIN rail

For width up to

2.5 MW

4.5 MW

Article No.

5SW3006

5SW3007

Covers



- Can be assembled as mini-distribution board
- Suitable for all devices
- Cover parts prepared for rail mounting of conventional label caps

Comprising:

End plates

Angled profile

Flat profile as alternative

Article No.

5ST2134

5ST2135

5ST2136

RCCB protective socket outlets

acc. to VDE 0664

RCCB protective socket outlets in molded-plastic enclosures


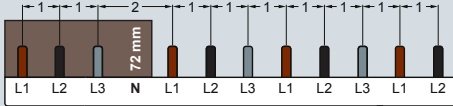
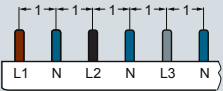


- Equipped with RCCB and flush-mounted SCHUKO® socket outlet
- IP54 degree of protection


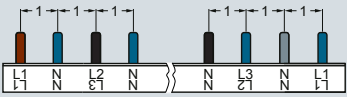

Rated residual current $I_{\Delta n}$	Rated current I_n	Article No.
10 mA	16 A	5SZ9206
30 mA	16 A	5SZ9216

Standard busbars



5ST36, fixed lengths, cannot be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	Conductor cross-section	
				10 mm ²	16 mm ²
Two-phase				Article No.	Article No.
	For 6 MCBs 2P	12 MW	210 mm	5ST3608	5ST3638
Three-phase, for MCBs with RCCB				Article No.	Article No.
	For 8 MCBs 1P with 1 RCCB 3P+N, N right	12 MW	210 mm	5ST3624	5ST3654
Four-phase				Article No.	Article No.
	For 6 MCBs 2P or 1P+N	12 MW	215 mm	5ST3623	5ST3653

5ST37, can be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section	
					10 mm ²	16 mm ²
Two-phase					Article No.	Article No.
	For MCBs 2P	12 MW	214 mm	■	5ST3734	5ST3704
Four-phase, for MCBs with RCCB					Article No.	Article No.
	For MCBs 2P with 1 RCCB 1P+N	56 MW	1000 mm	–	5ST3770-2	5ST3770-3
	For 6 MCBs 1P+N with 1 RCCB 4P N right	16 MW	292 mm	■	5ST3770-4	5ST3770-5

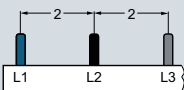
Accessories for busbars 5ST36 and 5ST37

End caps for 5ST37		
	Version	Article No.
	For two-phase and three-phase busbars	5ST3750
	For 4-phase busbars	5ST3718
Terminals up to 35 mm ²		
	Version	Article No.
	For direct infeed at the busbar 5ST2145	5ST2157

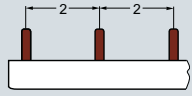
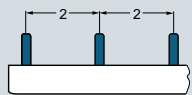
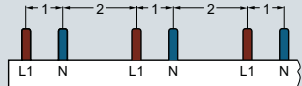
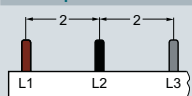
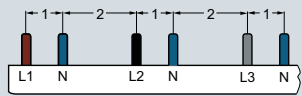
Standard busbars

5ST36 and 5ST37

Fixed lengths, cannot be cut, for devices with add-on 5SM6 arc fault detection devices

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Color	Conductor cross-section 10 mm ²	Article No.
Three-phase							
	For 5SM601	12 MW	210 mm	-	Gray		5ST3615-1

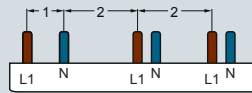
can be cut, for devices with add-on 5SM6 arc fault detection devices

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs
Single-phase, straight		
	For 5SM601.	56 MW
Single-phase, angled 45°		
	For 5SM601.	56 MW
Two-phase		
	For 5SM602. (1P+N)	56 MW
Three-phase		
	For 5SM601.	60 MW
Four-phase		
	For 5SM602.	52 MW

Can be cut, for devices with add-on 5SM6 arc fault detection devices and infeed via RCCB

Length	End caps included	Color	Conductor cross-section 10 mm ²	Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Color	Conductor cross-section 16 mm ²	
1000 mm	–	Gray	5ST3764-1								
		Blue	5ST3765-2								
Article No.											
1000 mm	–	Blue	5ST3765-1								
Article No.											
1000 mm	–	Gray	5ST3735-1								
Article No.											
1050 mm	–	Gray	5ST3740-1								
Article No.											
950 mm	–	Gray	5ST3746-1								

Two-phase



For RCCB 2P N-right and 5 AFDD (5SM601.) + compact device

12 MW

214 mm



Gray

Article No.

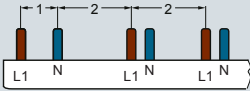
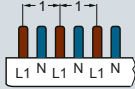
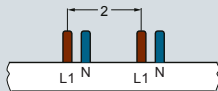
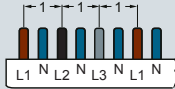
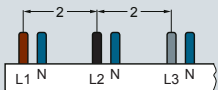
5ST3772

Accessories

Terminals for infeed at side		Article No.
For conductors up to 25 mm ²	short	5ST3768
	short, IP20	5ST3771-2
	long	5ST3771-1
End caps		Article No.
For single-phase busbars	Gray	5ST3766
	Blue	5ST3767
For two- and three-phase busbars		5ST3750
For four-phase busbars		5ST3718
Touch protection		Article No.
For free connections, yellow (RAL 1004) 5 × 1 pin		5ST3655

Compact busbars

5ST36, fixed lengths, cannot be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm ²
Two-phase, for infeed via RCCB					
	For 1 x RCCB 1P+N and 5 x compact devices equipped with 5SM6 arc fault detection device	12 MW	216 mm	■	Article No. 5ST3685-0
Two-phase					
	For 12 compact devices	12 MW	218 mm	■	Article No. 5ST3674-0
	For 6 compact devices equipped with 5SM6 arc fault detection device	12 MW	200 mm	■	5ST3676-0
Four-phase					
	For 12 compact devices	12 MW	218 mm	■	Article No. 5ST3673-0
	For 6 compact devices equipped with 5SM6 arc fault detection device	11 MW	200 mm	■	5ST3675-0

5ST37, can be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm ²
Two-phase, for infeed via RCCB					
	For 1 x RCCB 1P+N and 10 x compact devices	12 MW	215 mm	■	Article No. 5ST3784-0
	For 1 x RCCB 1P+N (RCCB N left only) and 10 x compact devices	12 MW	215 mm	■	5ST3784-0KL
Two-phase					
	For compact devices	60 MW	1060 mm	■	Article No. 5ST3774-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3776-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3778-0

5ST37, can be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm ² Article No.
Two-phase					
	For compact devices equipped with 5SM6 arc fault detection device and auxiliary switch	58.5 MW	1036 mm	–	5ST3780-0
Four-phase, for infeed via RCCB					
	For 1x RCCB 3P+N and 8x compact devices	12 MW	216 mm	■	5ST3783-0
	For 1x RCCB 3P+N (RCCB N left only) and 8x compact devices	12 MW	216 mm	■	5ST3783-0KL
Four-phase					
	For compact devices	60 MW	1060 mm	–	5ST3773-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3775-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3777-0

4

Accessories for 5ST3 compact busbars, versions that can and cannot be cut

Touch protection for 5ST3				
	Version	Color	Article No.	
	For free connections, for pins L1, N	Yellow (RAL1004)	5ST3655	
	For pins L2 / L3	Yellow (RAL1004)	5ST3655-0HG	
End caps for 5ST3				
	Version	Color	Article No.	
	For two-phase and four-phase busbars	Gray	5ST3788-0	
Terminals, short, IP20				
	Version	For conductors	Infeed	Article No.
	Infeed terminal for connection of larger cross section	Up to 25 mm ²	Lateral	5ST3771-2



Electrical switching – on the safe side

Control and automatic functions always employ electrical switching.

Remote control switches for pulse controls, switching relays, or Insta contactors switch electrical loads.

Our low-voltage circuit protection technology offers a wide variety of contact versions and rated currents for the different requirements of these devices.

Safety, convenience and energy savings – these characterize automatic switching.

Switching Devices



All the information you need	5/2
System overview	5/4
Installation switching devices	5/6
5TE8 control switches	5/6
5TE48 pushbuttons	5/8
5TE58 light indicators	5/10
5TE81/82 On/Off switches	5/12
5TL1 On/Off switches	5/14
5TE DC isolator	5/16
5TE busbars	5/18
5TT41 remote control switches	5/20
5TT44 remote control switches	5/24
5TT4 auxiliary switches	5/26
5TT42 switching relays	5/28
5TT50 Insta contactors	5/30
5TT58 Insta contactors	5/32
5TT5 auxiliary switches	5/34
5TT3 soft-starting devices	5/35
Timers	5/36
7LF4 digital time switches	5/36
7LF5 mechanical time switches	5/42
7LF6 timers for buildings new	5/46
5TT3 timers for industrial applications	5/47

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about switching devices, please visit our website

www.siemens.com/switching-devices

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Switching devices sie.ag/2m4eG5M

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Switching devices (45315361)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Technical overview of switching devices



The fast way to get you to our online services

This page provides you with comprehensive information and links on switching devices

www.siemens.com/lowvoltage/product-support (109769083)

System overview

Basic units and accessories

Installation switching devices



5TE8 control switches



5TE48 pushbuttons



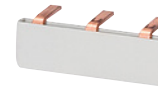
5TE58 light indicators



5TE81/82, 5TL1 On/Off switches, 5TE2



5TE DC isolators



5TE busbars



5TT41, 5TT44 remote control switches



5TT4, 5TT5 auxiliary switches



5TT42 switching relays



5TT50, 5TT58 Insta contactors



5TT3 soft-starting devices

Accessories



Auxiliary switches (AS)



Shunt trips (ST)



Undervoltage releases (UR)



Handle locking devices



LEDs



Caps/covers



Connectors

Timers



7LF4 digital time switches



7LF5 mechanical time switches



7LF6 timers for buildings **new**



5TT3 timers for industrial applications

Accessories



Holders

5TE8 control switches

	Control switches	Two-way switches	Group switches with center position
Rated operational current I_e per conducting path	20 A	20 A	20 A
Rigid conductor cross-section	1 ... 6 mm ²	1 ... 6 mm ²	1 ... 6 mm ²
Flexible conductor cross-section, with end sleeve	1 ... 6 mm ²	1 ... 6 mm ²	1 ... 6 mm ²
			

Contacts	U _e AC	Mounting width	Auxiliary switches cannot be retrofitted	Mounted	Auxiliary switches cannot be retrofitted	Mounted	Auxiliary switches cannot be retrofitted
1 NO	48 V	1 MW	5TE8101-3	–	–	–	–
	230 V	1 MW	5TE8101	–	–	–	–
2 NO	400 V	1 MW	5TE8102	–	–	–	–
3 NO	400 V	1 MW	5TE8103	–	–	–	–
		1.5 MW	–	5TE8108	–	–	–
1 NO + 1 NC	400 V	1 MW	–	–	–	5TE8151	–
2 NO + 2 NC	400 V	1 MW	–	–	5TE8152	–	–
3 NO + 1 NC	400 V	1 MW	–	–	5TE8153	–	–
1 CO	230 V	1 MW	–	–	5TE8161	–	–
2 CO	400 V	1 MW	–	–	5TE8162	–	–
1 toggle switch	230 V	1 MW	–	–	–	–	5TE8141
2 toggle switches	400 V	1 MW	–	–	–	–	5TE8142

Further technical specifications

5TE8

Standards	
Standards	IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1 (VDE 0632-1)
Approvals	IEC/EN 60947-3 (VDE 0660-107), GB14048.3-2008 CCC
Supply	
Rated power dissipation P_v	Per pole 0.7 VA
Contacts	
Minimum contact load	10 V; 300 mA
Rated making/rated breaking capacity	At p.f. = 0.65 60 A / 60 A
Rated short-time withstand current I_{cw} per conducting path at p.f. = 0.7	Up to 0.2 s 650 A
	Up to 0.5 s 400 A
	Up to 1 s 290 A
	Up to 3 s 170 A
Thermal rated current I_{th}	20 A
Electrical/mechanical service life	Actuations 10000 / 25000
Safety	
Clearances	Open contacts 2x >2 mm
	Between the poles >7 mm
Creepage distances	>7 mm
Sealable switch position	Yes
Separate handle locking device	Yes
Rated short-circuit making capacity I_{cm}	10 kA
Rated impulse withstand voltage U_{imp}	>5 kV
Connections	
Terminals	± Screw (Pozidriv) PZ 1
	Max. tightening torque 0.8 ... 1.0 Nm
Environmental conditions	
Permissible ambient temperature	–5 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015 45 °C

Accessories

Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

Contacts	Version	Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

Article No.
5ST3801

Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

Article No.
5TG8240

Set of mixed caps






- For manual changing of the luminous plates for the control switches

Article No.
5TG8068

5TE48 pushbuttons

With/without LED

	Pushbuttons without maintained-contact function	Pushbuttons with maintained-contact function	Control pushbuttons with maintained-contact function or momentary-contact function
	Without LED	Without LED	With LED
Rated operational current I_e per conducting path	20 A	20 A	20 A
Rigid/flexible conductor cross-section	1 ... 6 mm ²	1 ... 6 mm ²	1 ... 6 mm ²
Max. cable length	Standard	Standard	Standard
			




Contacts	U _e AC	Mounting width						
1 NO	230 V	1 MW	–	–	–	–	1 × red	5TE4821
			–	–	–	–	–	–
2x 1 NO	400 V	1 MW	1 × green, 1 × blue	5TE4804	–	–	–	–
2 NO	400 V	1 MW	–	–	1 × gray	5TE4811	1 × red	5TE4823
1 NO + 1 NC	400 V	1 MW	1 × gray	5TE4800	1 × gray	5TE4810	–	–
			1 × red	5TE4805	–	–	1 × red	5TE4820
			1 × green	5TE4806	–	–	–	–
			1 × yellow	5TE4807	–	–	–	–
			1 × blue	5TE4808	–	–	–	–
2x (1 NO + 1 NC)	400 V	1 MW	–	–	–	–	–	–
2 NO + 2 NC	400 V	1 MW	1 × gray	5TE4801-2	1 × gray	5TE4811-2	–	–
3 NO + 1 NC	400 V	1 MW	1 × gray	5TE4802	1 × gray	5TE4812-1	–	–
3 NO + N	400 V	1 MW	–	–	1 × gray	5TE4812	–	–
2 NC	400 V	1 MW	–	–	–	–	1 × red	5TE4824
4 NC	400 V	1 MW	–	–	1 × gray	5TE4813	–	–
2 CO	400 V	1 MW	–	–	1 × gray	5TE4814	–	–

Further technical specifications

5TE48


Standards		
Standards		IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1 (VDE 0632-1)
Approvals		IEC/EN 60947-3 (VDE 0660-107)
Supply		
Rated power dissipation P_v	Per pole	0.6 VA
Contacts		
Minimum contact load		10 V; 300 mA
Rated making/rated breaking capacity	At p.f. = 0.65	60 A / 60 A
Rated short-time withstand current I_{cw} per conducting path at p.f. = 0.7	Up to 0.2 s	650 A
	Up to 0.5 s	400 A
	Up to 1 s	290 A
	Up to 3 s	170 A
Thermal rated current I_{th}		20 A
Mechanical service life	Actuations	25000
Safety		
Clearances	Open contacts	2 × >2 mm
	Between the poles	>7 mm
Creepage distances		>7 mm
Rated impulse withstand voltage U_{imp}		>5 kV
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
	Max. tightening torque	0.8 ... 1.0 Nm
Environmental conditions		
Permissible ambient temperature		–5 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C

Double pushbuttons with maintained-contact function and/or momentary-contact function

With LED		Without LED		With LED	
20 A		20 A		20 A	
1 ... 6 mm ²		1 ... 6 mm ²		1 ... 6 mm ²	
150 m		Standard		Standard	
					
1× red	5TE4822	–	–	–	–
1× blue new	5TE4822-1	–	–	–	–
–	–	–	–	1× green, 1× red	5TE4840
–	–	–	–	–	–
–	–	–	–	–	–
–	–	1× green, 1× red	5TE4830	1× green, 1× red	5TE4841
–	–	–	–	–	–
–	–	–	–	–	–
–	–	1× green, 1× red	5TE4831	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	–	–	–	–	–

Accessories

LEDs for manual replacement


	I _e	U _e	Color	Article No.
	0.4 A	12 ... 60 V AC/DC	White	5TG8056-0
			Red	5TG8056-1
			Yellow	5TG8056-2
			Green	5TG8056-3
	115 V AC/DC		White	5TG8057-0
			Red	5TG8057-1
			Yellow	5TG8057-2
			Green	5TG8057-3
	230 V AC		White	5TG8058-0
			Red	5TG8058-1
			Yellow	5TG8058-2
			Green	5TG8058-3
			Blue	5TG8058-4

Cap sets

- For manual changing of colored caps with or without lamps
- 1 set = 5 units

Color	Article No.
 Red, transparent	5TG8061
 Green, transparent	5TG8062
 Yellow, transparent	5TG8063
 Blue, transparent	5TG8064
 Black, non-transparent	5TG8065
 White, transparent	5TG8066
 Gray, non-transparent	5TG8060

Sets of mixed caps

	For manual changing of colored caps with or without lamps	
Color	Article No.	
10× each of red/green + 5× each of yellow/blue/white	5TG8067	
1× each of red/green/yellow	5TG8070	

Color coding according to IEC 60073

Color	Safety of people/ environment	Process state	System state
Red	Danger	Emergency	Faulty
Green	Safety	Normal	Normal
Yellow	Warning/Caution	Abnormal	Abnormal
Blue	Stipulation		
Black, white, gray	No special significance assigned		

5TE58 light indicators

With LED

5TE58 light indicators

Rigid conductor cross-section	1.5 ... 6 mm ²	1.5 ... 6 mm ²
Flexible conductor cross-section, with end sleeve	1 ... 6 mm ²	1 ... 6 mm ²
Max. cable length	Standard	250 m



U _e AC	Mounting width				
230 V	1 MW	1× red	5TE5800	1× red	5TE5804
		1× green, 1× red	5TE5801		–
		3× green	5TE5802		–
		1× red, 1× yellow, 1× green	5TE5803		–
12 ... 60 V new	1 MW	1× red	5TE5810		–
		1× green	5TE5810-1		–
		1× green, 1× red	5TE5811		–
		3× green	5TE5812		–
		1× red, 1× yellow, 1× green	5TE5812-1		–

Further technical specifications

5TE58

Standards

Standards	DIN VDE 0710-1-11
-----------	-------------------

Supply

Rated power dissipation P _v	LED	0.4 VA
--	-----	--------

Safety

Clearances	Between the terminals	>7 mm
------------	-----------------------	-------

Connections

Terminals	± Screw (Poqidriv)	PZ 1
	Max. tightening torque	1.2 Nm

Environmental conditions

Permissible ambient temperature		–5 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C

Accessories

LEDs for manual replacement



I_e	U_e	Color	Article No.
0.4 A	12 ... 60 V AC/DC	White	5TG8056-0
		Red	5TG8056-1
		Yellow	5TG8056-2
		Green	5TG8056-3
	115 V AC/DC	Blue	5TG8056-4
		White	5TG8057-0
		Red	5TG8057-1
		Yellow	5TG8057-2
	230 V AC	Green	5TG8057-3
		Blue	5TG8057-4
		White	5TG8058-0
		Red	5TG8058-1
	Yellow	5TG8058-2	
	Green	5TG8058-3	
	Blue	5TG8058-4	

Cap sets

- For manual changing of colored caps
- 1 set = 5 units

Version	Article No.
Red, transparent	5TG8061
Green, transparent	5TG8062
Yellow, transparent	5TG8063
Blue, transparent	5TG8064
White, transparent	5TG8066

Sets of mixed caps

- For manual changing of colored caps

Color	Article No.
10× each of red/green + 5× each of yellow/blue/white	5TG8067
1× each of red/green/yellow	5TG8070

Color coding according to IEC 60073

Color	Safety of people/ environment	Process state	System state
Red	Danger	Emergency	Faulty
Green	Safety	Normal	Normal
Yellow	Warning/Caution	Abnormal	Abnormal
Blue	Stipulation		
Black, white, gray	No special significance assigned		

5TE81/82 On/Off switches

	5TE81 On/Off switches	5TE82 On/Off switches
Rated operational current I_e per conducting path	20 A	32 A
Rigid conductor cross-section	1.5 ... 6 mm ²	1.5 ... 6 mm ²
Flexible conductor cross-section, with end sleeve	1 ... 6 mm ²	1 ... 6 mm ²
		

Contacts	U_e AC	Mounting width	Auxiliary switches			Auxiliary switches		
			Can be retrofitted	Cannot be retrofitted	Mounted	Can be retrofitted	Cannot be retrofitted	Mounted
1 NO	230 V	1 MW	5TE8111	–	–	5TE8211	–	–
2 NO	400 V	1 MW	5TE8112	–	–	5TE8212	–	–
3 NO	400 V	1 MW	5TE8113	–	–	5TE8213	–	–
3 NO + N	400 V	1 MW	–	5TE8114	–	–	5TE8214	–
		1.5 MW	–	–	5TE8118	–	–	5TE8218

Further technical specifications

	5TE81	5TE82
Standards		
Standards	IEC/EN 60947-3 (VDE 0660-107), IEC/EN 60669-1	IEC/EN 60947-3 (VDE 0660-107)
Approvals	IEC/EN 60947-3 (VDE 0660-107)	IEC/EN 60947-3 (VDE 0660-107)
Supply		
Rated power dissipation P_v	Per pole	0.7 VA
Contacts		
Minimum contact load	10 V; 300 mA	10 V; 300 mA
Rated making/rated breaking capacity	At p.f. = 0.65	60 A / 60 A
Rated short-time withstand current $I_{c,w}$ per conducting path at p.f. = 0.7	Up to 0.2 s	650 A
	Up to 0.5 s	400 A
	Up to 1 s	290 A
	Up to 3 s	170 A
Thermal rated current I_{th}	20 A	32 A
Electrical/mechanical service life	Actuations	10000 / 25000
Safety		
Clearances	Open contacts	2× >2 mm
	Between the poles	>7 mm
Creepage distances		>7 mm
Rated short-circuit making capacity I_{cm}		10 kA
Rated impulse withstand voltage U_{imp}		>5 kV
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
	Max. tightening torque	1.2 Nm
Environmental conditions		
Permissible ambient temperature		–5 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C

Accessories

Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

Contacts	Version	Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

Article No.
5ST3801

Terminal cover



- For covering screw openings
- Sealable

Article No.
5ST3800

Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

Article No.
5TG8240

5TL1 On/Off switches



	Rated operational current I_e per conducting path				
	32 A	40 A	63 A	80 A	100 A
Rigid conductor cross-section	1 ... 35 mm ²	1 ... 35 mm ²	1 ... 35 mm ²	2.5 ... 50 mm ²	2.5 ... 50 mm ²
Flexible conductor cross-section, with end sleeve	1 ... 25 mm ²	1 ... 25 mm ²	1 ... 25 mm ²	2.5 ... 50 mm ²	2.5 ... 50 mm ²



Contacts	Rated operational voltage U_e AC	Mounting width	Gray handle	Gray handle	Gray handle	Red handle	Gray handle	Gray handle
1 NO	230 V	1 MW	5TL1132-0	5TL1140-0	5TL1163-0	5TL1163-1	5TL1180-0	5TL1191-0
2 NO	400 V	2 MW	5TL1232-0	5TL1240-0	5TL1263-0	5TL1263-1	5TL1280-0	5TL1291-0
3 NO	400 V	3 MW	5TL1332-0	5TL1340-0	5TL1363-0	5TL1363-1	5TL1380-0	5TL1391-0
4 NO	400 V	4 MW	5TL1432-0	5TL1440-0	5TL1463-0	–	5TL1480-0	5TL1491-0
3 NO + N	400 V	4 MW	5TL1632-0	5TL1640-0	5TL1663-0	5TL1663-1	5TL1680-0	5TL1691-0

Further technical specifications

		5TL1.32	5TL1.40	5TL1.63	5TL1.80	5TL1.91	5TL1.92
Standards							
Standards		IEC/EN 60947-3 (VDE 0660-107)					
Approvals		EN 60669-1					
Supply							
Rated power dissipation P_v	Per pole, max.	0.7 VA	0.9 VA	2.2 VA	3.5 VA	5.5 VA	8.6 VA
Contacts							
Minimum contact load		24 V; 300 mA	24 V; 300 mA	24 V; 300 mA	24 V; 300 mA	24 V; 300 mA	24 V; 300 mA
Rated making/rated breaking capacity AC-22A	At p.f. = 0.65	96 A / 96 A	120 A / 120 A	196 A / 196 A	240 A / 240 A	300 A / 300 A	375 A / 375 A
Rated short-time withstand current I_{cw} per conducting path at p.f. = 0.7 ¹⁾	Up to 0.2 s	760 A	950 A	1500 A	2700 A	3400 A	3400 A
	Up to 0.5 s	500 A	630 A	1000 A	1650 A	2100 A	2100 A
	Up to 1 s	400 A	500 A	800 A	1350 A	1700 A	1700 A
	Up to 3 s	280 A	350 A	560 A	800 A	1000 A	1000 A
Thermal rated current I_{th}		32 A	40 A	63 A	80 A	100 A	125 A
Electrical/mechanical service life	Switching cycles	10000 / 20000	10000	5000	2000	2000	2000
Rated power for the switching of resistive load including moderate overload AC-21	1-pole	5 kW	6.5 kW	10 kW	13 kW	16 kW	16 kW
	2-pole	9 kW	11 kW	18 kW	22 kW	28 kW	28 kW
	3-/4-pole	15 kW	15 kW	30 kW	39 kW	48 kW	48 kW
Safety							
Creepage distances		>7 mm					
Clearances	Open contacts	>7 mm					
	Between the poles	>7 mm					
Rated short-circuit making capacity I_{cm} (in conjunction with fuse of the same rated operational current EN 60269 gL/gG)		10 kA					
Rated impulse withstand voltage U_{imp}		>5 kV					
Connections							
Terminals	± Screw (Pozidriv)	PZ 2					
	Max. tightening torque	3.5 Nm					
Environmental conditions							
Permissible ambient temperature		–5 ... +40 °C					
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C					

125 A	
	2.5 ... 50 mm ²
	2.5 ... 50 mm ²
	
Red handle	Gray handle
5TL1191-1	5TL1192-0
5TL1291-1	5TL1292-0
5TL1391-1	5TL1392-0
–	5TL1492-0
5TL1691-1	5TL1692-0

Accessories

Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

Contacts	Version	Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Handle locking device



- To prevent undesired mechanical On/Off switching
- Sealable
- For padlock with max. 3 mm shackle

Article No.
5ST3806

Terminal cover



- For covering screw openings
- Sealable

Article No.
5ST3800

Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

Article No.
5TG8240

Phase connectors



- For easy wiring in various circuit versions and bus mountings
- As a support terminal for conductors from 2.5 to 50 mm²

Number of poles	I _e	U _e AC	Mounting width	Article No.
1-pole	125 A	230 V	1 MW	5TL1192-4

N conductor connectors



- For easy wiring in various circuit versions and bus mountings
- As a support terminal for N conductors from 2.5 to 50 mm² with blue color marking

Number of poles	I _e	U _e AC	Mounting width	Article No.
1-pole	125 A	230 V	1 MW	5TL1192-3

5TE DC isolator

Can be used as switch disconnectors according to EN 60947-3

Rated operational current I_e
63 A

Rigid conductor cross-section 0.75 ... 35 mm²
Flexible conductor cross-section, with end sleeve 0.75 ... 25 mm²



Contacts	Max. operational voltage U_{max} DC	Mounting width	Auxiliary switches can be retrofitted
4 NO	1000 V	4 MW	5TE2515-1

Further technical specifications

Standards		
Standards	IEC/EN 60947-3; IEC/EN 60669-1; GB14048.3-2008 CCC	
Supply		
Rated operational voltage U_e	For 4 poles in series	880 V DC
Rated power dissipation P_v	Per pole, max.	4.4 W
Contacts		
Minimum contact load	24 V; 300 mA	
Rated short-time withstand current I_{cw}	1000 V DC, 4-pole	760 A
Electrical/mechanical service life	Actuations	5000 / 10000
Safety		
Rated short-circuit making capacity I_{cm}	1000 V DC, 4-pole	500 A
Rated impulse withstand voltage U_{imp}	>5 kV	
Overvoltage category	At $U = 440 \dots 880$ V	II
	At $U = 1000$ V	I
Utilization category	DC-21B	
Connections		
Terminals	± Screw (Pozidriv)	PZ 2
	Max. tightening torque	2.5 ... 3 Nm
Environmental conditions		
Permissible ambient temperature	-25 ... +40 °C	
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	45 °C

Accessories

Auxiliary switches (AS)



- For right-hand-side retrofitting with factory-fitted brackets

Contacts	Version	Article No.
1 NO + 1 NC	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO	Standard	5ST3011
	For low power	5ST3014
2 NC	Standard	5ST3012
	For low power	5ST3015
1 CO	Standard	5ST3016

Shunt trips (ST)



Rated operational voltage U_n	Article No.
110 ... 415 V AC	5ST3030
24 ... 48 V AC/DC	5ST3031
12 V AC/DC	5ST3031-0XX01

Undervoltage releases (UR)



Version	Rated operational voltage U_n	Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

5TE busbars

For modular installation devices

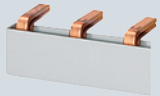
Single-phase busbar



- For all 5TE8 switches, 20 A and 32 A
- For the cutting of unused terminal lugs and to ensure insulation clearances if one device terminal is to be supplied separately despite being mounted on the bus
- Infeed to unit terminal with conductor cross-section of 6 mm² up to 32 A
- Can be mounted from either top or bottom, in the front or rear terminal area
- An end cap is not required on single-phase busbars

Length	Division	Article No.
210 mm	12 MW version with 1 MW modular clearance	5TE9100

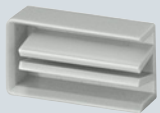
Two-phase busbar



- For all 5TE8 switches, 20 A and 32 A
- Infeed to unit terminal with conductor cross-section of 6 mm² Up to 32 A
- Can be mounted from either top or bottom, in the front and/or rear terminal area, thus allowing realization of a 4-conductor connection using 2 two-phase busbars
- Both copper conductors of the two-phase busbar are insulated together

Length	Division	Article No.
220 mm	12 MW version each with 1 MW modular clearance, phases offset by 0.5 MW	5TE9101

End caps for two-phase busbars



- End caps for 5TE9101 two-phase busbars to maintain insulation clearances when the bar is being cut
- 1 set = 10 units

Article No.
5TE9102

5TT41 remote control switches

Rated current 16 A

Rated operational current I_e
16 A

Rigid conductor cross-section
Flexible conductor cross-section, with end sleeve

1 ... 6 mm²

1 ... 6 mm²





Contacts	U_e	U_c AC	U_c DC	Mounting width		Auxiliary switches can be retrofitted
				1 MW	2 MW	
1 NO	250 V	230 V	–	■	–	5TT4101-0
		115 V	–	■	–	5TT4101-1
		24 V	–	■	–	5TT4101-2
		12 V	–	■	–	5TT4101-3
		8 V	–	■	–	5TT4101-4
		–	110 V	■	–	5TT4111-1
		–	24 V	■	–	5TT4111-2
		–	12 V	■	–	5TT4111-3
		1 NO + 1 NC	250 V	230 V	–	■
115 V	–			■	–	5TT4105-1
24 V	–			■	–	5TT4105-2
12 V	–			■	–	5TT4105-3
8 V	–			■	–	5TT4105-4
–	110 V			■	–	5TT4115-1
–	24 V			■	–	5TT4115-2
–	12 V			■	–	5TT4115-3
2 NO	400 V			230 V	–	■
		115 V	–	■	–	5TT4102-1
		24 V	–	■	–	5TT4102-2
		12 V	–	■	–	5TT4102-3
		8 V	–	■	–	5TT4102-4
		–	110 V	■	–	5TT4112-1
		–	24 V	■	–	5TT4112-2
		–	12 V	■	–	5TT4112-3
		3 NO	400 V	230 V	–	–
24 V	–			–	■	5TT4103-2
4 NO	400 V	230 V	–	–	■	5TT4104-0
		24 V	–	–	■	5TT4104-2
		–	110 V	–	■	5TT4114-1
			24 V	–	■	5TT4114-2

Further technical specifications



		5TT4101	5TT4111	5TT4103
		5TT4102	5TT4112	5TT4104
		5TT4105	5TT4115	5TT4114
Standards				
Standards		IEC 60669-1, IEC 60669-2, IEC 60669-3, EN 60669 (VDE 0632), EN 60669-2-2, EN 60669-2-2/A1		
Approvals		VDE		
Supply				
Rated operational current I_e	At p.f. = 0.6 ... 1 (AC-15)	16 A	16 A	
Primary operating range		0.8 ... 1.1 × U_c	0.8 ... 1.1 × U_c	
Rated frequency f_c		50 Hz	50 Hz	
Rated power dissipation P_v	Magnet coil, only pulse	4.5 W / 7 VA	9 W / 13 VA	
	Per pole, max.	1.2 W	1.2 W	
Contacts				
Contact gap		>1.2 mm		
Minimum contact load		10 V; 100 mA		
Electrical service life at I_e/U_e , p.f. = 0.6, incandescent lamp load 600 W	Switching cycles	50000		
Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles)	At AC-5b (230 V)	1200 W		
Glow lamp load at 230 V		5 mA		
	With 1 5TT4920 compensator	25 mA		
	With 2 5TT4920 compensators	45 mA		
Minimum pulse duration		50 ms		
Safety				
Different phases between magnet coil and contact		Permissible		
Clearances	Between magnet coil and contact	>6 mm		
Creepage distances	Between magnet coil and contact	>6 mm		
Rated impulse withstand voltage U_{imp}		4 kV		
Function				
Manual operation		Yes		
Switching position indication		Yes		
Connections				
Terminals	± Screw (Pozidriv)	PZ 1		
	Max. tightening torque	0.8 ... 1 Nm		
Environmental conditions				
Permissible ambient temperature		-10 ... +40 °C		
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	35 °C		
Degree of protection	Acc. to EN 60529	IP20, with connected conductors		



Accessories

Auxiliary switches						
	• One device per remote control switch can be retrofitted					
	Contacts	Version	I_e	U_e	Mounting width	Article No.
	1 CO	Standard	5 A	250 V AC	0.5 MW	5TT4900
		For low power	0.1 A	30 V AC/DC	0.5 MW	5TT4901
Compensator						
	• For increasing the glow lamp load by 20 mA					
	U_e	Mounting width	Article No.			
250 V AC	1 MW	5TT4920				

5TT41 remote control switches

For special applications, rated current 16 A

				Remote control switches with central On/Off switching	Remote control switches with central and group On/Off switching
Rigid conductor cross-section				1 ... 6 mm ²	1 ... 6 mm ²
Flexible conductor cross-section, with end sleeve				1 ... 6 mm ²	1 ... 6 mm ²
					
Contacts	U _e	U _c AC	Mounting width	Auxiliary switches cannot be retrofitted	Auxiliary switches cannot be retrofitted
1 NO	250 V	230 V	1.5 MW	5TT4121-0	5TT4151-0
		24 V	1.5 MW	5TT4121-2	5TT4151-2
2 NO	400 V	230 V	1.5 MW	5TT4122-0	5TT4152-0
		24 V	1.5 MW	5TT4122-2	5TT4152-2
3 NO	400 V	230 V	2.5 MW	5TT4123-0	–
1 NO + 1 NC	250 V	115 V	1.5 MW	5TT4125-0	–

				Series remote control switch contact sequence 1 – 2 – 1+2 – 0	Shutter/blind remote control switch contact sequence 1 – 0 – 2 – 0
Rigid conductor cross-section				1 ... 6 mm ²	1 ... 6 mm ²
Flexible conductor cross-section, with end sleeve				1 ... 6 mm ²	1 ... 6 mm ²
					
Contacts	U _e	U _c AC	Mounting width	Auxiliary switches cannot be retrofitted	Auxiliary switches cannot be retrofitted
2 NO	250 V	230 V	1 MW	5TT4132-0	5TT4142-0
		24 V	1 MW	–	5TT4142-2
		12 V	1 MW	5TT4132-3	5TT4142-3

Further technical specifications

	5TT412 5TT415	5TT413 5TT414
Standards		
Standards	IEC 60669-1, IEC 60669-2, IEC 60669-3, EN 60669 (VDE 0632), EN 60669-2-2, EN 60669-2-2/A1	
Approvals	VDE	
Supply		
Rated operational current I_c	At p.f. = 0.6 ... 1 (AC-15)	16 A
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency f_c		50 Hz
Rated power dissipation P_v	Magnet coil, only pulse	4.5 W / 7 VA
	Per pole, max.	1.2 W
Contacts		
Contact gap		>1.2 mm
Minimum contact load		10 V; 100 mA
Electrical service life at I_c/U_e , p.f. = 0.6, incandescent lamp load 600 W	Switching cycles	50000
Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles)	At AC-5b (230 V)	1200 W
Glow lamp load at 230 V		5 mA
	With 1 5TT4920 compensator	25 mA
	With 2 5TT4920 compensators	45 mA
Minimum pulse duration		50 ms
Safety		
Different phases between magnet coil and contact		Permissible
Clearances	Between magnet coil and contact	>6 mm
Creepage distances	Between magnet coil and contact	>6 mm
Rated impulse withstand voltage U_{imp}		4 kV
Function		
Manual operation	Yes	Yes
Switching position indication	Yes	–
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
	Max. tightening torque	0.8 ... 1 Nm
Environmental conditions		
Permissible ambient temperature		–10 ... +40 °C
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	35 °C
Degree of protection	Acc. to EN 60529	IP20, with connected conductors

Accessories

Auxiliary switches



- One device per remote control switch can be retrofitted

Contacts	Version	I_e	U_e	Mounting width	Article No.
1 CO	Standard	5 A	250 V AC	0.5 MW	5TT4900
	For low power	0.1 A	30 V AC/DC	0.5 MW	5TT4901

Compensator




- For increasing the glow lamp load by 20 mA

U_e	Mounting width	Article No.
250 V AC	1 MW	5TT4920

5TT44 remote control switches

Rated current 20 A – 63 A

	Rated operational current I_e				
	20 A	25 A	32 A	40 A	63 A
Rigid conductor cross-section	1 ... 10 mm ²	1 ... 10 mm ²	1 ... 10 mm ²	2.5 ... 25 mm ²	2.5 ... 25 mm ²
Flexible conductor cross-section, with end sleeve	1 ... 10 mm ²	1 ... 10 mm ²	1 ... 10 mm ²	2.5 ... 25 mm ²	2.5 ... 25 mm ²






Contacts	U_e	U_c AC	U_c DC	Mounting width					
For AC applications – auxiliary switches can be retrofitted									
1 NO + 1 NC	440 V	230 V	–	1 MW	5TT4405-0	5TT4425-0	5TT4455-0	–	–
				2 MW	–	–	–	5TT4465-0	5TT4475-0
		24 V	–	1 MW	5TT4405-2	5TT4425-2	5TT4455-2	–	–
				2 MW	–	–	–	5TT4465-2	5TT4475-2
1 CO	250 V	230 V	–	1 MW	5TT4407-0	–	–	–	–
				1 MW	5TT4407-2	–	–	–	–
2 NO	440 V	230 V	–	1 MW	5TT4402-0	5TT4422-0	5TT4452-0	–	–
				2 MW	–	–	–	5TT4462-0	5TT4472-0
				1 MW	5TT4402-2	5TT4422-2	5TT4452-2	–	–
				2 MW	–	–	–	5TT4462-2	5TT4472-2
2 CO	440 V	230 V	–	2 MW	–	5TT4428-0	5TT4458-0	5TT4468-0	5TT4478-0
				2 MW	–	5TT4428-2	5TT4458-2	5TT4468-2	5TT4478-2
4 NO	440 V	230 V	–	2 MW	–	5TT4424-0	5TT4454-0	–	–
				4 MW	–	–	–	5TT4464-0	5TT4474-0
				2 MW	–	5TT4424-2	5TT4454-2	–	–
				4 MW	–	–	–	5TT4464-2	5TT4474-2
2 NO + 2 NC	440 V	230 V	–	2 MW	–	5TT4426-0	5TT4456-0	–	–
				4 MW	–	–	–	5TT4466-0	5TT4476-0
				2 MW	–	5TT4426-2	5TT4456-2	–	–
				4 MW	–	–	–	5TT4466-2	5TT4476-2
For DC applications									
1 NO	250 V	–	24 V	1 MW	5TT4411-5	5TT4431-5	5TT4451-5	–	–
2 NO	440 V	–	24 V	1 MW	5TT4412-5	5TT4432-5	5TT4452-5	–	–
1 NO + 1 NC	440 V	–	24 V	1 MW	5TT4415-5	5TT4435-5	5TT4455-5	–	–
1 CO	250 V	–	24 V	1 MW	5TT4417-5	5TT4437-5	5TT4457-5	–	–

Further technical specifications

		5TT440	5TT442	5TT445	5TT446	5TT447
Standards						
Standards		IEC 60669-2-2	IEC 60669-2-2	IEC 60669-2-2	IEC/EN 60947-4-1	IEC/EN 60947-4-1
Approvals		CE	CE	CE	CE	CE
Supply						
Rated operational current I_e	At p.f. = 0.6 ... 1 (AC-15)	20 A	25 A	32 A	40 A	63 A
Rated frequency f_c		50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated power dissipation P_v	Magnet coil, "On" pulse	13 W / 18 VA	13 W / 18 VA	13 W / 18 VA	12 W / 26 VA	12 W / 26 VA
	Per pole, max.	1.5 W	2 W	3 W	3 W	3.5 W
Rated operational power (AC-3)	1-phase, at 230 V	0.5 kW	0.75 kW	1.1 kW	2.2 kW	4 kW
	3-phase, at 230 V	1.5 kW	2.2 kW	3 kW	5.5 kW	11 kW
	3-phase, at 400 V	3 kW	4 kW	5.5 kW	11 kW	18.5 kW
Contacts						
Contact gap		>3 mm	>3 mm	>3 mm	>3 mm	>3 mm
Minimum contact load AC		10 V; 100 mA	10 V; 100 mA	10 V; 100 mA	10 V; 100 mA	10 V; 100 mA
Electrical service life at I_e/U_e , p. f. = 0.6, incandescent lamp load 600 W	Switching cycles	50000	50000	50000	50000	50000
Incandescent lamp load (switching of incandescent lamps for 15000 switching cycles)	At AC-5b (230 V)	4400 W	5500 W	7000 W	8800 W	13800 W
Max. switching speed	In switching cycles per hour	600 h ⁻¹	450 h ⁻¹	450 h ⁻¹	360 h ⁻¹	360 h ⁻¹
Safety						
Different phases between magnet coil and contact		Permissible				
Rated impulse withstand voltage U_{imp}		3 kV				
Function						
Manual operation		Yes				
Switching position indication		Yes				
Connections						
Terminals	± Screw (Pozidriv)	Coil: PZ 1, contact: PZ 2				
	Max. tightening torque	Coil: 0.6 Nm, contact: 1.2 Nm			Coil: 0.6 Nm, contact: 2 Nm	
Coil conductor cross-sections		1 ... 4 mm ²				
Environmental conditions						
Permissible ambient temperature	For operation/for storage	-25 ... +55 °C / -30 ... +80 °C				
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	55 °C				
Degree of protection	Acc. to EN 60529	IP20				
Mounting position		Any (not upside down)				

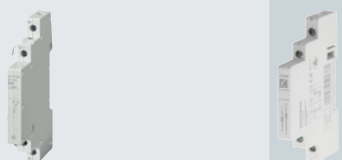
Accessories

Auxiliary switch					
	Contacts	U_e	I_e	Mounting width	Article No.
	1 NO + 1 NC	250 V AC	16 A	0.5 MW	5TT4930
Auxiliary switches, central with diode					
	• For central function (no auxiliary switch)				
	U_e	Mounting width	Article No.		
	250 V AC	0.5 MW	5TT4931		
Auxiliary switches, group with several diodes					
	• For group function (no auxiliary switch)				
	U_e	Mounting width	Article No.		
	250 V AC	0.5 MW	5TT4932		

5TT4 auxiliary switches

For 5TT4 remote control switches

	Auxiliary switches for 5TT41	Auxiliary switches for 5TT44
Rigid conductor cross-section	0.5 ... 2.5 mm ²	1 ... 4 mm ²
Flexible conductor cross-section, with end sleeve	0.5 ... 2.5 mm ²	1 ... 4 mm ²



Contacts	Version	I _e	U _e	Mounting width		
Auxiliary switches						
1 NO + 1 NC	Standard	16 A	250 V AC	0.5 MW	–	5TT4930
1 CO	Standard	5 A	250 V AC	0.5 MW	5TT4900	–
	For low power	0.1 A	30 V AC/DC	0.5 MW	5TT4901	–
Auxiliary switches, central with diode for central function (no auxiliary switch)						
			250 V AC	0.5 MW	–	5TT4931
Auxiliary switches, group with several diodes for group function (no auxiliary switch)						
			250 V AC	0.5 MW	–	5TT4932

Further technical specifications		Auxiliary switches for 5TT41		Auxiliary switches for 5TT44		
		5TT4900	5TT4901	5TT4930	5TT4931	5TT4932
Standards						
Standards		EN 60947-1 (VDE 0660 Part 100) EN 60947-5-1 (VDE 0660 Part 200)		IEC/EN 60947-5-1		
Approvals		–		CE, EAC		
Supply						
Rated operational current I _e	At p.f. = 0.6 ... 1 (AC-15)	16 A		4 A	–	–
Rated frequency f _c		–		50/60 Hz		
Rated power dissipation P _v	Per pole, max.	–		0.3 W		
Contacts						
Contact gap		<1.2 mm		>3 mm	>3 mm	>3 mm
Minimum contact load		5 V; 1 mA		12 V; 5 mA	12 V; 5 mA	12 V; 5 mA
Electrical service life at I _e /U _e , p.f. = 0.6, incandescent lamp load 600 W	Switching cycles	–		100000	–	–
Safety						
Clearances	Between magnet coil and contact	>6 mm		–		
Creepage distances	Between magnet coil and contact	>6 mm		–		
Rated impulse withstand voltage U _{imp}		1 kV		1 kV		
Pushbutton malfunction protected against continuous voltage, safe due to design		Yes		–		
Function						
Manual operation		–		No		
Switching position indication		–		No		
Connections						
Terminals	± Screw (Pozidriv)	PZ 1		PZ 1		
	Max. tightening torque	0.5 Nm		0.8 Nm		
Environmental conditions						
Permissible ambient temperature	For operation/for storage	–10 ... +40 °C / –10 ... +40 °C		–25 ... +70 °C / –30 ... +80 °C		
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	35 °C		55 °C		
Degree of protection	Acc. to EN 60529	IP20, with connected conductors		IP20		
Mounting position		Any		Any (not upside down)		

Accessories

Compensator



- For increasing the glow lamp load by 20 mA

U_e	Mounting width	Article No.
250 V AC	1 MW	5TT4920

5TT42 switching relays

Rated current 16 A

Rated operational current I_e

16 A

Rigid conductor cross-section

1 ... 6 mm²

Flexible conductor cross-section, with end sleeve

1 ... 6 mm²



Contacts	U_e	U_c AC	U_c DC	Mounting width	
1 NO	250 V	230 V	–	1 MW	5TT4201-0
		115 V	–	1 MW	5TT4201-1
		24 V	–	1 MW	5TT4201-2
		12 V	–	1 MW	5TT4201-3
		8 V	–	1 MW	5TT4201-4
2 NO	400 V	230 V	–	1 MW	5TT4202-0
		115 V	–	1 MW	5TT4202-1
		24 V	–	1 MW	5TT4202-2
		12 V	–	1 MW	5TT4202-3
		8 V	–	1 MW	5TT4202-4
4 NO	400 V	230 V	–	1 MW	5TT4204-0
		115 V	–	1 MW	5TT4204-1
		24 V	–	1 MW	5TT4204-2
		12 V	–	1 MW	5TT4204-3
		8 V	–	1 MW	5TT4204-4
1 NO + 1 NC	400 V	230 V	–	1 MW	5TT4205-0
		115 V	–	1 MW	5TT4205-1
		24 V	–	1 MW	5TT4205-2
		12 V	–	1 MW	5TT4205-3
		8 V	–	1 MW	5TT4205-4
1 CO	250 V	230 V	–	1 MW	5TT4206-0
		115 V	–	1 MW	5TT4206-1
		24 V	–	1 MW	5TT4206-2
		12 V	–	1 MW	5TT4206-3
		8 V	–	1 MW	5TT4206-4
2 CO	400 V	230 V	–	1 MW	5TT4207-0
		115 V	–	1 MW	5TT4207-1
		24 V	–	1 MW	5TT4207-2
		12 V	–	1 MW	5TT4207-3
		8 V	–	1 MW	5TT4207-4
		–	110 V	1 MW	5TT4217-1
		–	30 V	1 MW	5TT4217-6
		–	24 V	1 MW	5TT4217-2
		–	12 V	1 MW	5TT4217-3

Further technical specifications

5TT4201-, 5TT4202-, 5TT4204-, 5TT4205-, 5TT4206-, 5TT4207-, 5TT4217-

Standards								
Standards		EN 60947-5-1, EN 60669-2-2						
Approvals		VDE, CCC						
Supply								
Rated operational current I_e	At p.f. = 0.6 ... 1	16 A	16 A	16 A	16 A	16 A	16 A	16 A
Primary operating range		0.8...1.1×U _c	0.8...1.1×U _c	0.8...1.1×U _c	0.8...1.1×U _c	0.8...1.1×U _c	0.8...1.1×U _c	0.8...1.1×U _c
Rated frequency f_c		50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Rated power dissipation P_v	Magnet coil	2.4 W	2.4 W	4.8 W	2.4 W	2.4 W	2.4 W	1.7 W
		3.0 VA	3.0 VA	6.0 VA	3.0 VA	3.0 VA	3.0 VA	1.7 VA
	Per pole, max.	1.0 W	1.0 W	1.0 W	1.0 W	1.0 W	1.0 W	1.0 W
Contacts								
Contact gap		>1.2 mm						
Minimum contact load		10 V AC; 100 mA						
Electrical service life at I_e/U_e , p.f. = 0.6, incandescent lamp load 600 W	Switching cycles	50000						
Safety								
Different phases between magnet coil and contact		Permissible						
Safe separation		>6 mm						
Rated impulse withstand voltage U_{imp}		4 kV						
Function								
Manual operation		Yes						
Connections								
Terminals	± Screw (Pozidriv)	PZ 1						
	Max. tightening torque	0.8 ... 1 Nm						
Environmental conditions								
Permissible ambient temperature		-10 ... +40 °C						
Resistance to climate at 95% relative humidity	Acc. to DIN 50015	35 °C						
Degree of protection	Acc. to EN 60529	IP20, with connected conductors						

Accessories

Spacer



- Contour for modular devices with a mounting depth of 70 mm
- Can be snapped onto either side of the busbar for convenient cable routing
- Spacer is recommended for better heat dissipation

Article No.

5TG8240

5TT50 Insta contactors

AC/DC technology

	Rated operational current I_e			
	20 A	25 A	40 A	63 A
Main connection conductor cross-section, solid	1.0 ... 10 mm ²	1.5 ... 25 mm ²	1.5 ... 25 mm ²	1.5 ... 25 mm ²
Main connection conductor cross-section, stranded with end sleeve	1.0 ... 6 mm ²	1.5 ... 16 mm ²	1.5 ... 16 mm ²	1.5 ... 16 mm ²
Main connection conductor cross-section, AWG	16 ... 8	16 ... 4	16 ... 4	16 ... 4



Contacts	U_e	U_c AC	U_c DC	Mounting width				
Insta contactors with manual switch								
2 NO	230 V	230 V	220 V	1 MW	5TT5000-0	–	–	–
		24 V	24 V	1 MW	5TT5000-2	–	–	–
4 NO	400 V	230 V	220 V	2 MW	–	5TT5030-0	–	–
				3 MW	–	–	5TT5040-0	5TT5050-0
		115 V	110 V	2 MW	–	5TT5030-1	–	–
		24 V	24 V	2 MW	–	5TT5030-2	–	–
2 NC	230 V	230 V	220 V	1 MW	5TT5002-0	–	–	–
				24 V	24 V	1 MW	5TT5002-2	–
4 NC	400 V	230 V	220 V	2 MW	–	5TT5033-0	–	–
				3 MW	–	–	5TT5043-0	–
		24 V	24 V	2 MW	–	5TT5033-2	–	–
		3 MW	–	–	5TT5043-2	–	–	
1 NO + 1 NC	230 V	230 V	220 V	1 MW	5TT5001-0	–	–	–
		24 V	24 V	1 MW	5TT5001-2	–	–	–
2 NO + 2 NC	400 V	230 V	220 V	2 MW	–	5TT5032-0	–	–
				3 MW	–	–	5TT5042-0	5TT5052-0
		24 V	24 V	2 MW	–	5TT5032-2	–	–
		3 MW	–	–	5TT5042-2	5TT5052-2		
3 NO + 1 NC	400 V	230 V	220 V	2 MW	–	5TT5031-0	–	–
				3 MW	–	–	5TT5041-0	5TT5051-0
		24 V	24 V	2 MW	–	5TT5031-2	–	–
		3 MW	–	–	5TT5041-2	5TT5051-2		
Insta contactors with O//Automatic								
2 NO	230 V	230 V	220 V	1 MW	5TT5000-6	–	–	–
		24 V	24 V	1 MW	5TT5000-8	–	–	–
4 NO	400 V	230 V	220 V	2 MW	–	5TT5030-6	–	–
		24 V	24 V	2 MW	–	5TT5030-8	–	–
1 NO + 1 NC	230 V	230 V	220 V	1 MW	5TT5001-6	–	–	–
		24 V	24 V	1 MW	5TT5001-8	–	–	–
3 NO + 1 NC	400 V	230 V	220 V	2 MW	–	5TT5031-6	–	–
		24 V	24 V	2 MW	–	5TT5031-8	–	–

5


Further technical specifications


		5TT500	5TT503	5TT504	5TT505
Standards					
Standards		EN 60947-4-1; EN 60947-5-1; EN 61095			
Approvals		UL 508; UL File No. E303328			
Supply					
Rated operational current I_e	AC-1/AC-7a, NO contacts / NC contacts	20 A / 20 A	25 A / 25 A	40 A / 40 A	63 A / 63 A
	AC-3/AC-7b, NO contacts / NC contacts	9 A / 6 A	8.5 A / 8.5 A	22 A / 22 A	30 A / 30 A
Primary operating range		0.85 ... 1.1 × U_c	0.85 ... 1.1 × U_c	0.85 ... 1.1 × U_c	0.85 ... 1.1 × U_c
Rated frequency f_c at AC		50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated power dissipation P_v	Pick-up power (without manual switch or with manual switch in "I" position)	2.1 VA / 2.1 W	2.6 VA / 2.6 W	5 VA / 5 W	5 VA / 5 W
	Pick-up power (with manual switch in "AUTO" position)	2.1 VA / 4.1 W	2.6 VA / 2.6 W	5 VA / 5 W	5 VA / 5 W
	Holding power	2.1 VA / 2.1 W	2.6 VA / 2.6 W	5 VA / 5 W	5 VA / 5 W
	Per contact AC-1/AC-7a	1.7 VA	2.2 VA	4 VA	8 VA
Contacts					
Contact gap (NO contacts)	Min.	3.6 mm	3.6 mm	3.6 mm	3.6 mm
Minimum switching capacity	(= minimum contact load)	≥17 V; 50 mA	≥17 V; 50 mA	≥17 V; 50 mA	≥17 V; 50 mA
Electrical service life at I_e and load	AC-1/AC-7a switching cycles	200000	200000	100000	100000
	AC-3/AC-7b switching cycles	300000	500000	500000	150000
Mechanical service life	Switching cycles	3 million	3 million	3 million	3 million
Switching of resistive loads AC-1 at rated operational power P_s	Single-phase (NO contacts)	4 kW (230 V)	5.4 kW (400 V)	8.7 kW (400 V)	13.3 kW (400 V)
	Three-phase (NO contacts)	–	16 kW (400 V)	26 kW (400 V)	40 kW (400 V)
Switching of three-phase asynchronous motors AC-3 at rated operational power P_s	Single-phase (NO contacts)	1.3 kW / 0.75 kW	1.3 kW / 1.3 kW	3.7 kW / 3.7 kW	5/5 kW
	Three-phase (NO contacts)	–	4 kW	11 kW	15 kW
Maximum switching frequency at load	AC-1/AC-7a / AC-3/AC-7b	600 h ⁻¹	600 h ⁻¹	600 h ⁻¹	600 h ⁻¹
Safety					
Rated impulse withstand voltage U_{imp}		≤4 kV	≤4 kV	≤4 kV	≤4 kV
Short-circuit protection, according to coordination type 1	Back-up fuse characteristic gL/gG	20 A	25 A	63 A	80 A
Overload withstand capability at 10 s	Per conducting path (NO contacts only)	72 A	68 A	176 A	240 A
Function					
Switching times	Closing (NO contacts)	15 ms ... 45 ms	15 ms ... 45 ms	15 ms ... 20 ms	15 ms ... 20 ms
	Opening (NO contacts)	20 ms ... 50 ms	20 ms ... 70 ms	35 ms ... 45 ms	35 ms ... 45 ms
Connections					
Coil/main connection terminals	± Screw (Pozidriv)	PZ 1 / PZ 1	PZ 1 / PZ 2	PZ 1 / PZ 2	PZ 1 / PZ 2
Coil connection conductor cross-section	Solid	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²
	Stranded, with end sleeve	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²
	AWG cables	16 ... 10	16 ... 10	16 ... 10	16 ... 10
Main connection conductor cross-section	Solid	1.0 ... 10 mm ²	1.5 ... 25 mm ²	1.5 ... 25 mm ²	1.5 ... 25 mm ²
	Stranded, with end sleeve	1.0 ... 6 mm ²	1.5 ... 16 mm ²	1.5 ... 16 mm ²	1.5 ... 16 mm ²
	AWG cables	16 ... 8	16 ... 4	16 ... 4	16 ... 4
Tightening torque	Coil connection	0.6 Nm / 8 lbs/in.	0.6 Nm / 8 lbs/in.	0.6 Nm / 8 lbs/in.	0.6 Nm / 8 lbs/in.
	Main connection	1.2 Nm / 9 lbs/in.	3.5 Nm / 20 lbs/in.	3.5 Nm / 20 lbs/in.	3.5 Nm / 20 lbs/in.
Environmental conditions					
Permissible ambient temperature	For operation ¹⁾ / For storage	–15 ... +55 °C / –50 ... +80 °C			
Degree of protection	Acc. to EN 60529	IP 20, with connected conductors			
Characteristics according to UL 508					
Rated operational current I_n		20 A	25 A	40 A	63 A
UL 508 General Use 240 V/480 V	FLA	20 A	25 A	40 A	63 A
UL 508 AC discharge lamps		20 A	25 A	30 A	40 A
UL 508 motor load	Power 240 V / 480 V	1 hp / –	3 hp / 5 hp	7.5 hp / 15 hp	10 hp / 20 hp
UL 508 short-circuit at 480 V	K5 fuses	20 A	25 A	60 A	70 A

¹⁾ Contactors can be operated at ambient temperatures of between –25 °C and +70 °C, but only under special conditions.

For more information, please contact Siemens Support. For questions concerning heat dissipation, please refer to the instructions in the Configuration Manual "Switching Devices".

Accessories

Auxiliary switches			
	• For right-hand-side retrofitting		
	• Max. one auxiliary switch per Insta contactor		
	Contacts	Mounting width	Article No.
	2 NO	0.5 MW	5TT5910-0
1 NO + 1 NC	0.5 MW	5TT5910-1	

Sealable terminal covers			
	For Insta contactor	Mounting width	Article No.
	20 A	1 MW	5TT5910-5
	25 A	2 MW	5TT5910-6
40 A and 63 A	3 MW	5TT5910-7	

5TT58 Insta contactors

AC technology

	Rated operational current I_e			
	20 A	25 A	40 A	63 A
Main connection conductor cross-section, rigid	1.0 ... 10 mm ²	1.0 ... 10 mm ²	1 ... 25 mm ²	1 ... 25 mm ²
Main connection conductor cross-section, flexible with end sleeve	1.0 ... 6 mm ²	1.0 ... 6 mm ²	1 ... 16 mm ²	1 ... 16 mm ²




Contacts	U_e	U_c AC		Mounting width					
Insta contactors without manual switch									
2 NO	230 V	230 V	1 MW	5TT5800-0	–	–	–		
		24 V	1 MW	5TT5800-2	–	–	–		
4 NO	400 V	230 V	Standard	2 MW	–	5TT5830-0	–		
				3 MW	–	5TT5840-0	5TT5850-0		
				2 MW	–	5TT5820-0	–		
		Capacitive loads up to 150 µF	115 V	2 MW	–	5TT5830-1	–	–	
			24 V	2 MW	–	5TT5830-2	–	–	
				3 MW	–	5TT5840-2	5TT5850-2		
2 NC	230 V	230 V	1 MW	5TT5802-0	–	–	–		
		24 V	1 MW	5TT5802-2	–	–	–		
4 NC	400 V	230 V	2 MW	–	5TT5833-0	–	–		
			3 MW	–	5TT5843-0	5TT5853-0			
			2 MW	–	5TT5833-2	–			
		24 V	3 MW	–	5TT5843-2	5TT5853-2			
			1 NO + 1 NC	230 V	230 V	1 MW	5TT5801-0	–	–
					24 V	1 MW	5TT5801-2	–	–
2 NO + 2 NC	400 V	230 V	2 MW	–	5TT5832-0	–	–		
			3 MW	–	5TT5842-0	5TT5852-0			
			2 MW	–	5TT5832-2	–			
		24 V	3 MW	–	5TT5842-2	5TT5852-2			
			3 NO + 1 NC	400 V	230 V	2 MW	–	5TT5831-0	–
						3 MW	–	5TT5841-0	5TT5851-0
2 MW	–	5TT5831-1				–			
24 V	2 MW	–	5TT5831-2	–					
	3 MW	–	5TT5841-2	5TT5851-2					
	Insta contactors with manual switch O/I/Automatic								
2 NO	230 V	230 V	1 MW	5TT5800-6	–	–	–		
		24 V	1 MW	5TT5800-8	–	–	–		
4 NO	400 V	230 V	2 MW	–	5TT5830-6	–	–		
			3 MW	–	5TT5840-6	5TT5850-6			
		24 V	2 MW	–	5TT5830-8	–	–		
			3 MW	–	5TT5840-8	–			
1 NO + 1 NC	230 V	230 V	1 MW	5TT5801-6	–	–	–		
		24 V	1 MW	5TT5801-8	–	–	–		
3 NO + 1 NC	400 V	230 V	2 MW	–	5TT5831-6	–	–		
			3 MW	–	5TT5841-6	–			
			2 MW	–	5TT5831-8	–			
		24 V	3 MW	–	5TT5841-8	–			


Further technical specifications

		5TT580.	5TT582. 5TT583.	5TT584.	5TT585.
Standards					
Standards		IEC 60947-4-1, IEC 60947-5-1, IEC 61095; EN 60947-4-1, EN 60947-5-1, EN 61095, VDE 0660			
Supply					
Number of poles		2	4	4	4
Rated operational current I_e		20 A	25 A	40 A	63 A
Primary operating range		0.85 ... 1.1 × U_c	0.85 ... 1.1 × U_c	0.85 ... 1.1 × U_c	0.85 ... 1.1 × U_c
Rated frequency f_c at AC		50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated power dissipation P_v	Pick-up power (without manual switch or manual switch in "I" position)	6 VA / 3.8 W	10 VA / 5 W	15.4 VA / 4.6 W	15.4 VA / 4.6 W
	Pick-up power (with manual switch in "AUTO" position)	12 VA / 10 W	33 VA / 25 W	62 VA / 50 W	62 VA / 50 W
	Holding power	2.8 VA / 1.2 W	5.5 VA / 1.6 W	7.7 VA / 3 W	7.7 VA / 3 W
	Per contact AC-1/AC-7a	1.7 VA	2.2 VA	4 VA	8 VA
Contacts					
Contact gap	Minimum	3.6 mm	3.6 mm	3.4 mm	3.4 mm
Minimum switching capacity	(= minimum contact load)	≥17 V; 50 mA	≥17 V; 50 mA	≥17 V; 50 mA	≥17 V; 50 mA
Electrical service life at I_e and load	AC-1/AC-7a switching cycles	200000	200000	100000	100000
	AC-3/AC-7b switching cycles	300000	500000	150000	150000
Mechanical service life	Switching cycles	3 million	3 million	3 million	3 million
Switching of resistive loads AC-1/AC-7a for rated operational power P_s	Single-phase (230 V) (NO contacts)	4 kW	5.4 kW	8.7 kW	13.3 kW
	Three-phase (400 V) (NO contacts)	–	16 kW	26 kW	40 kW
Switching of three-phase asynchronous motors AC-3/AC-7b for rated operational power P_s	Single-phase (230 V) (NO contacts)	1.3 kW ¹⁾	1.3 kW	3.7 kW	5 kW
	Three-phase (400 V) (NO contacts)	–	4 kW	11 kW	15 kW
Maximum switching frequency at load		600 h ⁻¹	600 h ⁻¹	600 h ⁻¹	600 h ⁻¹
Safety					
Rated insulation voltage U_i		440 V	440 V	500 V	500 V
Rated impulse withstand voltage U_{imp}		4 kV	4 kV	4 kV	4 kV
Short-circuit protection, according to coordination type 1	Back-up fuse characteristic gL/gG	20 A	25 A	63 A	80 A
Overload withstand capability at 10 s	Per conducting path (NO contacts only)	72 A	68 A	176 A	240 A
Function					
Switching times	Closing (NO contacts)	15 ms ... 25 ms	10 ms ... 20 ms	15 ms ... 20 ms	15 ms ... 20 ms
	Opening (NO contacts)	20 ms	20 ms	10 ms	10 ms
	Closing (NC contacts)	20 ms ... 30 ms	20 ms ... 30 ms	5 ms ... 10 ms	5 ms ... 10 ms
	Opening (NC contacts)	10 ms	10 ms	10 ms ... 15 ms	10 ms ... 15 ms
Connections					
Coil connection terminals	± Screw (Pozidriv)	PZ 1	PZ 1	PZ 1	PZ 1
Main connection terminals	± Screw (Pozidriv)	PZ 1	PZ 1	PZ 2	PZ 2
Coil connection conductor cross-section	Rigid	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²
	Flexible, with end sleeve	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²	1.0 ... 2.5 mm ²
Main connection conductor cross-section	Rigid	1.0 ... 10 mm ²	1.0 ... 10 mm ²	1 ... 25 mm ²	1 ... 25 mm ²
	Flexible, with end sleeve	1.0 ... 6 mm ²	1.0 ... 6 mm ²	1 ... 16 mm ²	1 ... 16 mm ²
Tightening torque	Coil connection	0.6 Nm	0.6 Nm	0.6 Nm	0.6 Nm
	Main connection	1.2 Nm	1.2 Nm	3.5 Nm	3.5 Nm
Environmental conditions					
Permissible ambient temperature	For operation/for storage	–5 ... +55 °C / –30 ... +80 °C			
Degree of protection	Acc. to EN 60529	IP 20, with connected conductors			

¹⁾ For NO contacts only.

Accessories

Auxiliary switches			
	<ul style="list-style-type: none"> For right-hand-side retrofitting Max. one auxiliary switch per Insta contactor 		
	Contacts	Mounting width	Article No.
	2 NO	0.5 MW	5TT5910-0
	1 NO + 1 NC	0.5 MW	5TT5910-1

Sealable terminal covers			
	For Insta contactor	Mounting width	Article No.
	20 A	1 MW	5TT5910-5
	25 A	2 MW	5TT5910-6
40 A and 63 A	3 MW	5TT5910-7	

5TT5 auxiliary switches

For 5TT5 Insta contactor

Rigid conductor cross-section 1 ... 2.5 mm²
Flexible conductor cross-section, with end sleeve 1 ... 2.5 mm²



Contacts	U _e AC	Mounting width	
2 NO	230 V / 400 V	0.5 MW	5TT5910-0
1 NO + 1 NC	230 V / 400 V	0.5 MW	5TT5910-1

5

Further technical specifications

5TT5910

Standards		
Standards		IEC 60947-5-1
Approvals		CCC
Supply		
Number of poles		2
Rated operational current I _e	230 V	6 A
	400 V	4 A
Rated frequency f _c at AC		50/60 Hz
Contacts		
Contact gap	Minimum	4 mm
Minimum switching capacity	(= minimum contact load)	≥12 V; 5 mA
Mechanical service life	Switching cycles	3 million
Maximum switching frequency at load		600 h ⁻¹
Safety		
Rated insulation voltage U _i		500 V
Rated impulse withstand voltage U _{imp}		4 kV
Short-circuit protection, according to coordination type 1	Back-up fuse characteristic gL/gG	6 A
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-section	Rigid	1 ... 2.5 mm ²
	Flexible, with end sleeve	1 ... 2.5 mm ²
Tightening torque		0.8 Nm
Environmental conditions		
Permissible ambient temperature	For operation/for storage	-5 ... +55 °C / -30 ... +80 °C
Degree of protection	Acc. to EN 60529	IP 20, with connected conductors

5TT3 soft-starting devices

For two-phase motor control

Rigid conductor cross-section Max. 2 × 2.5 mm²
Flexible conductor cross-section, with end sleeve Min. 1 × 0.5 mm²



Version	U _e AC	Mounting width	
Three-phase	400 V	6 MW	5TT3440

Further technical specifications

5TT3440

Standards		
Standards		EN 60947-4-2 (VDE 0660-117)
Supply		
Line/motor voltage		400 V AC
Primary operating range		0.8 ... 1.1 × U _c
Rated frequency f _c at AC		50/60 Hz
Rated power		3.5 VA
Rated power dissipation P _v at rated operational current	Coil/drive	3.5 VA
	Per contact	4.6 VA
Rated output of motor at 400 V	Max.	5500 VA
	Min.	300 VA
Startup voltage		30 ... 70%
Starting ramp		0.1 ... 10 s
Safety		
Quick-acting semiconductor fuse		35 A
Function		
Switching frequency 3 × I _N , T _{AN} = 10 s, v _u = 20%	Switching cycles (up to 3 kW)	36 h ⁻¹
	Switching cycles (from 3 ... 5.5 kW)	20 h ⁻¹
Recovery time		100 ms
Connections		
Conductor cross-section	Rigid	Max. 2 × 2.5 mm ²
	Flexible, with end sleeve	Min. 1 × 0.5 mm ²
Environmental conditions		
Permissible ambient temperature		-20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/60/4

7LF4 digital time switches

Mini



- Weekly program
- 28 programs
- Automatic daylight-saving adjustment

Contacts	U_c	Channels	Mounting width	
1 NO	230 V AC	1	1 MW	7LF4501-5

Further technical specifications

Mini

Standards		
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7
Supply		
Primary operating range		0.85 ... 1.1 × U_c
Frequency range		50/60 Hz
Rated power dissipation P_v		0.9 VA
Channels		
Rated operational voltage U_e		250 V AC
Rated operational current I_e		At p.f. = 1 16 A
		At p.f. = 0.6 10 A
Contacts		
Minimum contact load		12 V / 100 mA
Electrical switching cycles		At p.f. = 1 6000 (20 A)
Mechanical switching cycles		>5 million
Incandescent lamp load		5 A
Energy-saving lamp load		300 W
Fluorescent lamp load		Parallel p.f. correction 70 μF 60 VA
		Uncorrected 2500 VA
Safety		
Different phases between operating mechanism and contact		Permissible
Rated impulse withstand voltage U_{imp}		4 kV
Electrostatic discharge		Acc. to IEC 61000-4-2 >8.0 kV
EMC: Burst		Acc. to IEC 61000-4-4 >4.4 kV
EMC: Surge		Acc. to IEC 61000-4-5 >2.0 kV
Overvoltage category		Acc. to EN 61010-1 III
Function		
Clock errors per day		Typical ±1 s/day
Power reserve storage		Battery 3 years
Make and break cycles		1 min
Minimum switching sequences		1 min
Control input		Terminal S –
Programs ¹⁾		28
Battery type		Li primary cell
Connections		
Terminals		± Screw (Pozidriv) PZ 1
Conductor cross-sections of main current path		Rigid 1.5 ... 4 mm ² Flexible, with end sleeve Max. 2.5 mm ²
Environmental conditions		
Permissible ambient temperature		For operation/ for storage –10 ... +55 °C / –20 ... +60 °C
Resistance to climate		Acc. to EN 60068-1 10/055/21
Degree of protection		Acc. to EN 60529 IP20, with connected conductors
Safety class		Acc. to EN 61140 II

¹⁾ A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.

Top



- Weekly program
- 28 programs
- Text-assisted programming concept
 - Language: English
- Manual daylight-saving adjustment

Contacts	U_c	Channels	Mounting width	
1 CO	230 V AC	1	2 MW	7LF4511-0
2 CO	230 V AC	2	2 MW	7LF4512-0

Further technical specifications

Top

Standards		
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7
Supply		
Primary operating range		0.85 ... 1.1 × U_c
Frequency range		50/60 Hz
Rated power dissipation P_v		2 VA
Channels		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	At p.f. = 1	16 A
	At p.f. = 0.6	10 A
Contacts		
Minimum contact load		12 V / 100 mA
Electrical switching cycles	At p.f. = 1	100000
Mechanical switching cycles		10 million
Incandescent lamp load		8 A
Energy-saving lamp load		60 VA
Fluorescent lamp load	Parallel p.f. correction 70 μF	60 VA
	Uncorrected	2300 VA
Safety		
Different phases between operating mechanism and contact		Permissible ²⁾
Rated impulse withstand voltage U_{imp}		4 kV
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV
Overvoltage category	Acc. to EN 61010-1	III
Function		
Clock errors per day	Typical	±1.5 s/day
Power reserve storage	Battery	3 years
Make and break cycles		1 min
Minimum switching sequences		1 min
Control input	Terminal S	No
Programs ¹⁾		28 (14 per channel)
Program memory	Captive	No
Battery type		Li primary cell
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm ²
	Flexible, with end sleeve	Max. 2.5 mm ²
Environmental conditions		
Permissible ambient temperature	For operation/ for storage	–20 ... +55 °C / –20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/055/21
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

¹⁾ A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.

²⁾ The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

7LF4 digital time switches

Profi



- Weekly program
- Vacation program
- Random program
- Expert mode
- Cycle function
- Text-assisted programming concept
 - 15 languages
- Simple program creation on a PC using the supplied software, with 7LF4941-0 USB adapter
- Automatic daylight-saving adjustment
- Operating hours counter, counting range: 65535 h
- Accurate to the second hh:mm:ss
- Synchronization 50/60 Hz

Contacts	U_c	Channels	Mounting width	
1 CO	230 V AC	1	2 MW	7LF4521-0
	24 V AC/DC	1	2 MW	7LF4521-2
2 CO	230 V AC	2	2 MW	7LF4522-0
	24 V AC/DC	2	2 MW	7LF4522-2

Further technical specifications

Profi

Standards		
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7
Approvals		UL File No. E301698
Supply		
Primary operating range	U_c 230 V	0.85 ... 1.1 × U_c
	U_c 24 V	0.9 ... 1.1 × U_c
Frequency range	U_c 230 V	50/60 Hz
	U_c 24 V	50/60 Hz
Rated power dissipation P_v	U_c 230 V	2 VA
	U_c 24 V	2 VA
Channels		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	At p.f. = 1	16 A
	At p.f. = 0.6	10 A
Contacts		
Minimum contact load		12 V / 100 mA
Electrical switching cycles	At p.f. = 1	100000
Mechanical switching cycles		10 million
Incandescent lamp load		8 A
Energy-saving lamp load		1000 W
Fluorescent lamp load	Parallel p.f. correction 70 μF	600 VA
	Uncorrected	2000 VA
Safety		
Different phases between operating mechanism and contact		Permissible ²⁾
Rated impulse withstand voltage U_{imp}		4 kV
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV
Overvoltage category	Acc. to EN 61010-1	III
Function		
Clock errors per day	Typical	±0.1 s/day
Power reserve storage	Battery	5 years
Make and break cycles		1 s
Minimum switching sequences		1 s
Control input	Terminal S	No
Programs ¹⁾		28
Program memory	Captive	Yes
Battery type		Li primary cell
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm ²
	Flexible, with end sleeve	Max. 2.5 mm ²
Environmental conditions		
Permissible ambient temperature	For operation/for storage	-20 ... +55 °C / -20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/055/21
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

¹⁾ A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.

²⁾ The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

Astro



- Weekly program
- Vacation program
- Random program
- Expert mode
- Astro function
- Text-assisted programming concept
 - 15 languages
- Simple program creation on a PC using the supplied software, with 7LF4941-0 USB adapter
- Automatic daylight-saving adjustment
- Operating hours counter, counting range: 65535 h
- Accurate to the second hh:mm:ss
- Synchronization 50/60 Hz
- Input disable via PIN code
- Daylight-saving correction
- 1 h test

Contacts	U_c	Channels	Mounting width	
1 CO	230 V AC	1	2 MW	7LF4531-0
2 CO	230 V AC	2	2 MW	7LF4531-2

Further technical specifications

Astro




Standards		
Standards		EN 60730-1, -2-7; VDE 0631-1, -2-7
Approvals		UL File No. E301698
Supply		
Primary operating range		0.85 ... 1.1 × U_c
Frequency range		50/60 Hz
Rated power dissipation P_v		2 VA
Channels		
Rated operational voltage U_e		250 V AC
Rated operational current I_e	At p.f. = 1	16 A
	At p.f. = 0.6	10 A
Contacts		
Minimum contact load		12 V / 100 mA
Electrical switching cycles	At p.f. = 1	100000
Mechanical switching cycles		10 million
Incandescent lamp load		8 A
Energy-saving lamp load		1000 W
Fluorescent lamp load	Parallel p.f. correction 70 μF	600 VA
	Uncorrected	2000 VA
Safety		
Different phases between operating mechanism and contact		Permissible ²⁾
Rated impulse withstand voltage U_{imp}		4 kV
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV
Oversvoltage category	Acc. to EN 61010-1	III
Function		
Clock errors per day	Typical	±0.1 s/day
Power reserve storage	Battery	5 years
Make and break cycles		1 s
Minimum switching sequences		1 s
Control input	Terminal S	Yes (with 1K clock)
Programs ¹⁾		56 (2 × 28)
Program memory	Captive	Yes
Battery type		Li primary cell
Connections		
Terminals	± Screw (Pozidriv)	PZ 1
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm ²
	Flexible, with end sleeve	Max. 2.5 mm ²
Environmental conditions		
Permissible ambient temperature	For operation/ for storage	–20 ... +55 °C / –20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/055/21
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

¹⁾ A program consists of an ON time, an OFF time and assigned ON and OFF days or day blocks.

²⁾ The combination of line voltage (230 V) and SELV is not permissible in conjunction with a 2-channel time switch. This requirement is, however, admissible in the case of 1-channel time switch.

7LF4 digital time switches

Accessories

		Mini	Top	Profi	Astro
Data keys					
 <ul style="list-style-type: none"> • For Profi and Astro digital time switches • Programming at the PC (7LF4941-0 USB adapter and software required) • Read-in of programs to the time switch • Writing of programs from the time switch • Transfer of programs <ul style="list-style-type: none"> – From PC to time switch and vice versa – From time switch to time switch 					
	Article No.				
	7LF4941-1	–	–	■	■
USB adapter and software					
 <ul style="list-style-type: none"> • For Profi and Astro digital time switches • For the reading and writing of data keys at the PC • Including programming software • Including 7LF4941-1 data key for Profi and Astro • Compatible with 7LF4940-1 data key (predecessor model) and 7LF4940-2 data key • Can be connected via USB interface • System requirements: <ul style="list-style-type: none"> – Windows 7, Windows Vista, Windows 2000, Windows ME, Windows XP or Windows 98 Second Edition – USB connection – 40 MB free disk space 					
	Article No.				
	7LF4941-0	–	–	■	■
Holders for front panel installation					
 <ul style="list-style-type: none"> • Universal application for devices from 1 MW ... 6 MW • Cutout dimensions: <ul style="list-style-type: none"> – Height 45^{+0.5} mm – Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm 					
	Article No.				
	7LF9006	■	■	■	■

7LF5 mechanical time switches

Time switches without power reserve

For standard mounting rail



For wall mounting
(surface mounting)



Contacts	Mounting width			
With day disk				
1 NO	1 MW	7LF5300-1	–	–
1 CO	3 MW	–	7LF5300-5	–
	–	–	–	7LF5301-0
With week disk				
1 CO	3 MW	–	7LF5300-6	–

Further technical specifications		7LF5300-1	7LF5300-5	7LF5300-6	7LF5301-0
Standards					
Standards		EN 60730-1, -2-7, UL 917, UL 917, CSA C22.2 No. 14 and 177			
Approvals		VDE, UL file: E301698			
Supply					
Rated control supply voltage U_c		230 V AC			
Primary operating range	U_c 230 V AC	0.85 ... 1.1 × U_c			
Rated frequency		50 Hz			
Frequency range		50 Hz			
Rated power dissipation P_v		1 VA			
Channels					
Rated operational voltage U_e		250 V AC			
Rated operational current I_e	At p.f. = 1	16 A			
	At p.f. = 0.6	4 A			
Contacts					
Minimum contact load		4 V / 1 mA			
Electrical switching cycles	At p.f. = 1	100000			
Mechanical switching cycles		20 million			
Incandescent lamp load		5 A			
Fluorescent lamp load	Parallel p.f. correction 70 μF	60 VA			
	Uncorrected	1400 VA			
Safety					
Different phases between operating mechanism and contact		Permissible			
Electrical isolation, creepage distances and clearances	Operating mechanism	8 mm			
	Contact	6 mm			
Rated impulse withstand voltage U_{imp}		4 kV			
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV			
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV			
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV			
Overvoltage category	Acc. to EN 61010-1	III			
Function					
Switching accuracy		±5 min	±5 min	±30 min	±5 min
Clock errors		System-synchronized	System-synchronized	System-synchronized	System-synchronized
Make and break cycles		15 min	15 min	120 min	10 min
Minimum switching sequences		30 min	30 min	240 min	30 min
Connections					
Terminals	± Screw (Pozidriv)	PZ 1			
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm ²			
	Flexible, with end sleeve	Max. 2.5 mm ²			
	Flexible, without end sleeve	Max. 4 mm ²			
Environmental conditions					
Permissible ambient temperature	For operation/for storage	-10 ... +55 °C / -10 ... +60 °C			
Resistance to climate	Acc. to EN 60068-1	10/055/21			
Degree of protection	Acc. to EN 60529	IP20, with connected conductors			
Safety class	Acc. to EN 61140	II			

Accessories

Holders for front panel installation







- Universal application for devices from 1 MW ... 6 MW
- Cutout dimensions:
 - Height 45^{+0.5} mm
 - Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm

Article No.

7LF9006

7LF5 mechanical time switches

Time switches with power reserve

	For standard mounting rail			For wall mounting (surface mounting)	
Time buffering in the event of a power failure	–	–	■	–	–
Automatic daylight-saving adjustment	–	–	■	–	–
Automatic time setting for Central European time zone during commissioning	–	–	■	–	–
					
Contacts	Mounting width				
With day disk					
1 NO	1 MW	7LF5301-1	–	–	–
1 CO	3 MW	–	7LF5301-6	7LF5301-4	–
	–	–	–	–	7LF5305-0
With week disk					
1 CO	3 MW	–	7LF5301-7	7LF5301-5	–

Further technical specifications

	7LF5301-1	7LF5301-4	7LF5301-5	7LF5301-6	7LF5301-7	7LF5305-0
Standards						
Standards	EN 60730-1, -2-7, UL 917, UL 917, CSA C22.2 No. 14 and 177					
Approvals	VDE, UL file: E301698					
Supply						
Rated control supply voltage U_c	230 V AC	230 V AC	230 V AC	230 V AC	230 V AC	230 V AC
Primary operating range	$0.85 \dots 1.1 \times U_c$	$0.85 \dots 1.1 \times U_c$	$0.85 \dots 1.1 \times U_c$	$0.85 \dots 1.1 \times U_c$	$0.85 \dots 1.1 \times U_c$	$0.85 \dots 1.1 \times U_c$
Rated frequency	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Frequency range	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Rated power dissipation P_v	1 VA	0.2 VA	0.2 VA	1 VA	1 VA	1 VA
Channels						
Rated operational voltage U_e	250 V AC					
Rated operational current I_e	At p.f. = 1	16 A				
	At p.f. = 0.6	4 A				
Contacts						
Minimum contact load	4 V / 1 mA					
Electrical switching cycles	At p.f. = 1	100000				
Mechanical switching cycles	20 million					
Incandescent lamp load	5 A					
Fluorescent lamp load	Parallel p.f. correction 70 μ F	60 VA				
	Uncorrected	1400 VA				
Safety						
Different phases between operating mechanism and contact	Permissible					
Electrical isolation, creepage distances and clearances	Operating mechanism	8 mm				
	Contact	6 mm				
Rated impulse withstand voltage U_{imp}	4 kV					
Electrostatic discharge	Acc. to IEC 61000-4-2	>8.0 kV				
EMC: Burst	Acc. to IEC 61000-4-4	>4.4 kV				
EMC: Surge	Acc. to IEC 61000-4-5	>2.0 kV				
Overvoltage category	Acc. to EN 61010-1	III				
Function						
Switching accuracy	± 5 min	± 5 min	± 30 min	± 5 min	± 30 min	± 5 min
Clock errors	± 2.5 s/day	± 0.2 s/day	± 60 s/day	± 2.5 s/day	± 2.5 s/day	± 2.5 s/day
Power reserve storage	100 h	6 years	6 years	100 h	100 h	100 h
Make and break cycles	15 min	15 min	120 min	15 min	120 min	15 min
Minimum switching sequences	30 min	30 min	240 min	30 min	240 min	30 min
Battery type	NiMH cell	Li primary cell	Li primary cell	NiMH cell	NiMH cell	NiMH cell
Minimum loading time	48 h	–	–	48 h	48 h	48 h
Service life of battery	At 20 °C	6 years	10 years	10 years	6 years	6 years
	At 40 °C	5 years	5 years	5 years	5 years	5 years
Connections						
Terminals	\pm Screw (Pozidriv)	PZ 1				
Conductor cross-sections of main current path	Rigid	1.5 ... 4 mm ²				
	Flexible, with end sleeve	Max. 2.5 mm ²				
	Flexible, without end sleeve	Max. 4 mm ²				
Environmental conditions						
Permissible ambient temperature	Storage/operation	–10 ... +60 °C / –10 ... +55 °C				
Resistance to climate	Acc. to EN 60068-1	10/055/21				
Degree of protection	Acc. to EN 60529	IP20, with connected conductors				
Safety class	Acc. to EN 61140	II				

Accessories

Holders for front panel installation





- Universal application for devices from 1 MW ... 6 MW
- Cutout dimensions:
 - Height 45^{+0.5} mm
 - Width 23 mm, 41 mm, 59 mm, 77 mm, 95 mm or 113 mm

Article No.

7LF9006

7LF6 timers for buildings **new**



	Standard stairwell lighting timers	Multi stairwell lighting timers
3-wire circuit	■	■
4-wire circuit	■	■
Zero crossing circuit	■	■
Operation	Resettable	Resettable
		
Contacts	Warning of impending switch-off	Mounting width
1 NO	– Flickering	1 MW 1 MW
		7LF6310 –
		– 7LF6311

Further technical specifications

	7LF6310	7LF6311
Supply		
Rated operational current I_e	At p.f. = 1	16 A
Rated operational voltage U_e		250 V AC
Rated control supply voltage U_c		230 V AC
Frequency range		50/60 Hz
Rated power dissipation P_v		1 W
Rated impulse withstand voltage		4 kV
Contacts		
Channels	1	1
Max. glow lamp load	25 mA	50 mA
Separate multi-voltage input	–	8 ... 230 V AC/DC
Switching capacity	Inductive p.f. = 0.6	2000 VA
Incandescent lamp load	Max.	3680 W
Fluorescent lamp load	Series p.f. correction	2000 VA
	Parallel p.f. correction at 70 μ F	1000 W
Compact fluorescent lamp load		1000 W
LED		1000 W
Electronic transformers		2000 VA
Conventional transformers		2000 VA
Function		
Setting range	0.5 ... 10 min	0.5 ... 12 min
Manual switches	Yes	Yes
Programs	–	7 ¹⁾
Environmental conditions		
Permissible ambient temperature	For operation	–20 ... +55 °C
	For storage	–20 ... +60 °C
Degree of protection	Installed	IP30
Pollution degree		2

¹⁾ 7 functions, can be selected using selector switch on the device

5TT3 timers for industrial applications

	Multifunction timers	Delay timers
Programmable for:	<ul style="list-style-type: none"> • Response delay • Passing make contact function • Pulse generator, delayed • Clock generator, starting with impulse • OFF-delay • Pulse converter • Passing break contact function • Response delay/OFF-delay 	–
		
Contacts	Mounting width	
1 CO	1 MW	
	5TT3185	5TT3181

Further technical specifications

		5TT3185	5TT3181
Standards			
Standards		EN 60255; DIN VDE 0435-110	
Supply			
Rated operational current I_c		4 A	8 A
Rated operational voltage U_c		250 V AC	250 V AC
Rated control supply voltage U_c		12 ... 240 V AC 12 ... 240 V DC	220 ... 240 V AC –
Primary operating range	U_c 230 V AC, 50/60 Hz	0.8 ... 1.1 × U_c	0.8 ... 1.1 × U_c
Rated frequency f_n		45 ... 400 Hz	50/60 Hz
Rated power dissipation P_v		Approx. 1.5 VA	Approx. 5 VA
Contacts			
Contact gap		µm contact	µm contact
Minimum contact load		10 V / 300 mA	10 V / 300 mA
Electrical service life	Switching cycles	1.5×10^5	–
	At AC-15	–	1.5×10^5
Safety			
Rated impulse withstand voltage U_{imp}	Input / output	>4 kV	
Function			
Setting range		1 s ... 300 h	1 s ... 300 h
Recovery time		15 ... 80 ms	Approx. 40 ms
Connections			
Terminals	± Screw (Pozidriv)	PZ 2	
Conductor cross-sections of main current path	Rigid	Max. 2 × 2.5 mm ²	
	Flexible, with end sleeve	Min. 2 × 1.5 mm ²	
Environmental conditions			
Permissible ambient temperature		–40 ... +60 °C	
Resistance to climate	Acc. to EN 60068-1	40/60/4	



Overvoltage protection devices

The more than one million lightning strikes in Germany every year pose a considerable risk for buildings and systems that can be damaged due to the unhindered effect of lightning currents, overvoltage and power surges. In many cases however, it is not apparent that such damage has been caused by lightning currents, overvoltage and power surges.

Overvoltage results in considerable damage to electrical and electronic equipment. Even brief transients in power supply lines or between electrical lines and other conductive parts (e.g. grounded metallic parts, ground) are sufficient to cause such damage. The damage patterns of destroyed lines, circuit boards or switchgear demonstrate this. Such damage can be prevented employing suitable overvoltage protection means.

Reliably protected by Siemens lightning and surge arresters!

Overvoltage Protection Devices



All the information you need	6/2
System overview	6/4
Basic units	6/6
5SD74 lightning arresters, type 1	6/6
5SD74 combination surge arresters, type 1 + type 2	6/8
5SD74 combination surge arresters, type 1 / type 2	6/10
5SD74 surge arresters, type 2	6/12
5SD74 surge arresters, type 3	6/16

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about overvoltage protection devices, please visit our website

www.siemens.com/overvoltage-protection

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technology primer – Overvoltage protection devices ([109756965](#))

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Overvoltage protection devices sie.ag/2kTfyTV

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Configuration manual Overvoltage protection devices (45315289)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services. You can find your local contacts at
www.siemens.com/lowvoltage/contact

You can find further information on services at
www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at
www.siemens.com/sitrain-lowvoltage

- Protection concept (WT-LVBPC)

Technical overview of overvoltage protection devices



The fast way to get you to our online services

This page provides you with comprehensive information and links on overvoltage protection devices
www.siemens.com/lowvoltage/product-support (109769084)

System overview

Basic units



Lightning arresters, type 1



Combination surge arresters, type 1 + type 2



Combination surge arresters, type 1 / type 2



Surge arresters, type 2 (standard design)



Surge arresters, type 3

Replacement plugs



N-PE



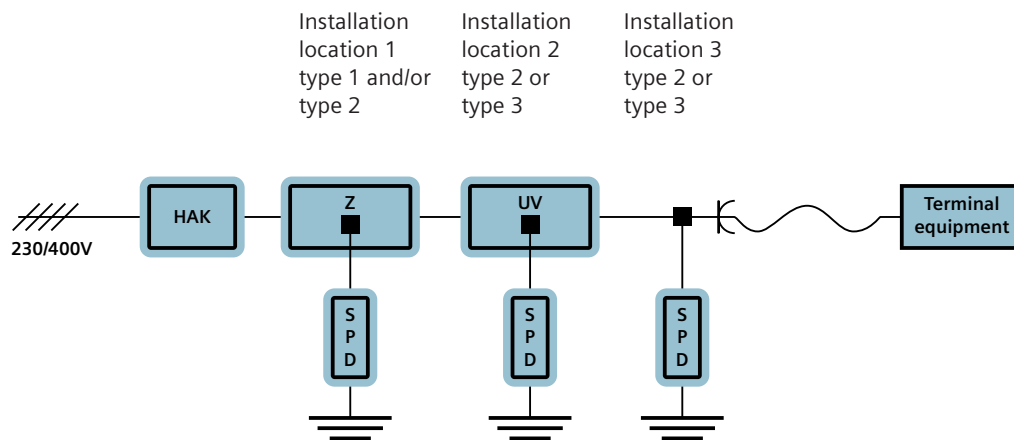
L-N, L-PEN (type 1)



L-PEN



Installation locations for surge protection devices (SPDs)







HAK: Main terminal box

Z/HV: In or close to the central meter system / main distribution board

UV: Subdistribution board

Installation location 1 must be as close as possible to the supply point for the electrical system, so that the downstream installations are protected. The SPDs at installation locations 2 and 3 shall not be used without SPDs at installation location 1, and they must be coordinated with these SPDs (i.e. SPDs all from the same manufacturer).

5SD74 lightning arresters, type 1

	For TN-C and IT systems	For TN-C systems	For TN-S and TT systems	
Protection paths	L-PE	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE
Rated voltage U_n	690 V AC	240/415 V AC	240 V AC	240/415 V AC
Maximum continuous voltage U_c	800 V AC	350 V AC	350 V AC	350 V AC
				

Circuit	Mounting width				
With remote signaling					
1 + 0	— ¹⁾	5SD7411-2	—	—	—
1 + 1	4 MW	—	—	5SD7412-1	—
3 + 0	6 MW	—	5SD7413-1	—	—
3 + 1	8 MW	—	—	—	5SD7414-1

¹⁾ No modular installation device.

Further technical specifications

		5SD7411-2	5SD7412-1	5SD7413-1	5SD7414-1
Standards					
Standards		IEC 61643-11, EN 61643-11	IEC 61643-11, EN 61643-11	IEC 61643-11, EN 61643-11	IEC 61643-11, EN 61643-11
Approvals		—	KEMA, UL/cUL	KEMA, UL/cUL	KEMA, UL/cUL
Voltage					
Protection level U_p	L-N and L-PEN	≤4.50 kV	≤1.50 kV	≤1.50 kV	≤1.50 kV
	L-PE	—	≤2.50 kV	—	≤2.50 kV
	N-PE	—	≤1.50 kV	—	≤1.50 kV
Current					
Lightning impulse current I_{imp} (10/350 μs)	L-N and L-PEN, 1P/3P	35 kA	25 kA	25/75 kA	25/75 kA
	N-PE	—	100 kA	—	100 kA
Rated discharge surge current I_n (8/20 μs)	L-N and L-PEN, 1P/3P	35 kA	25 kA	25/75 kA	25/75 kA
	N-PE	—	100 kA	—	100 kA
Follow current discharge capacity I_{fi} (AC)	L-N and L-PEN for 264/350 V	—	50/25 kA	50/25 kA	50/25 kA
	N-PE	—	100 A	—	100 A
Function					
Response time t_A	L-N and L-PEN	≤100 ns	≤100 ns	≤100 ns	≤100 ns
	L-N and N-PE	—	≤100 ns	—	≤100 ns
Connections					
Conductor cross-section	Finely stranded	16 ... 50 mm ²	2.5 ... 25 mm ²	2.5 ... 25 mm ²	2.5 ... 25 mm ²
	Solid	16 ... 50 mm ²	2.5 ... 35 mm ²	2.5 ... 35 mm ²	2.5 ... 35 mm ²
Protection devices					
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	400 A	315 A	315 A	315 A
	For V wiring (gL/gG)	125 A	125 A	125 A	125 A
Short-circuit withstand current	With max. back-up fuse	50 kA	50 kA	50 kA	50 kA
Environmental conditions					
Degree of protection		IP20, with connected conductors			
Temperature range		-40 ... +80 °C			

Accessories




Replacement plugs



Protection paths	Basic units	Article No.
N-PE	5SD7412-1 and 5SD7414-1	5SD7418-0
L-N and L-PEN	For 5SD7412-1, 5SD7413-1 and 5SD7414-1	5SD7418-1

5SD74 combination surge arresters, type 1 + type 2

	For TN-C systems	For TN-S and TT systems	
Protection paths	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE
Rated voltage U_n	240/415 V AC	240 V AC	240 V AC
Maximum continuous voltage U_c	350 V AC	350 V AC	350 V AC

Circuit	Mounting width		
With remote signaling			
1 + 1	4 MW	–	5SD7442-1
3 + 0	6 MW	5SD7443-1	–
3 + 1	8 MW	–	5SD7444-1

Further technical specifications

		5SD7442-1	5SD7443-1	5SD7444-1
Standards				
Standards		IEC 61643-11; EN 61643-11		
Approvals		KEMA, UL/cUL		
Voltage				
Protection level U_p	L-N and L-PEN	≤1.50 kV	≤1.50 kV	≤1.50 kV
	L-PE	≤2.20 kV	–	≤2.20 kV
	N-PE	≤1.50 kV	–	≤1.50 kV
Current				
Lightning impulse current I_{imp} (10/350 μs)	L-N and L-PEN	25 kA	25 kA	25 kA
	N-PE	100 kA	–	100 kA
Rated discharge surge current I_n (8/20 μs)	L-N and L-PEN	25 kA	25 kA	25 kA
	N-PE	100 kA	–	100 kA
Follow current discharge capacity I_{fi} (AC)	L-N and L-PEN	25 kA	25 kA	25 kA
	N-PE	100 A	–	100 A
Function				
Response time t_A	L-N and L-PEN	≤25 ns	≤25 ns	≤25 ns
	L-N and N-PE	≤100 ns	–	≤100 ns
Connections				
Conductor cross-section	Finely stranded	2.5 ... 25 mm ²		
	Solid	2.5 ... 35 mm ²		
Protection devices				
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	315 A		
	For V wiring (gL/gG)	125 A		
Short-circuit withstand current	With max. back-up fuse	25 kA		
Environmental conditions				
Degree of protection		IP20, with connected conductors		
Temperature range		–40 ... +80 °C		
Display				
Visual function/fault indication		Yes		






Accessories

Replacement plugs



Protection paths	Type	Basic units	Article No.
N-PE	–	5SD7442-1 and 5SD7444-1	5SD7418-0
L-N and L-PEN	1	5SD7442-1, 5SD7443-1 and 5SD7444-1	5SD7448-1
	2	5SD7442-1, 5SD7443-1 and 5SD7444-1	5SD7428-1

5SD74 combination surge arresters, type 1 / type 2

	For TN-C and IT systems	For TN-C systems	For TN-S and TT systems	For photovoltaic systems	
Protection paths	L-PE	L-PEN	L-N, L-PE and N-PE	L-N, L-PE and N-PE	(L+) – (L–)
Rated voltage U_n	690 V AC	240/415 V AC	240 V AC	240/415 V AC	–
Maximum continuous voltage U_c	800 V AC	335 V AC	335 V AC	335 V AC	1000 V DC
					

Circuit	Mounting width	Plug-in			
With remote signaling					
1 + 0	– ¹⁾	5SD7411-2	–	–	–
3 + 0	3 MW	–	5SD7413-3	–	–
3 + 1	4 MW	–	–	5SD7414-3	–
Without remote signaling					
1 + 1	2 MW	–	–	5SD7412-2	–
3 + 0	3 MW	–	5SD7413-2	–	5SD7483-6
3 + 1	4 MW	–	–	5SD7414-2	–

¹⁾ No modular installation device.

Further technical specifications		5SD7411-2	5SD7412-2	5SD7413-2 5SD7413-3	5SD7414-2 5SD7414-3	5SD7483-6
Standards						
Standards		IEC 61643-11	IEC 61643-11	IEC 61643-11	IEC 61643-11	EN 50539
Approvals		–	KEMA	KEMA	KEMA	KEMA
Voltage						
Protection level U_p	L-N and L-PEN	≤4.50 kV	≤1.20 kV	≤1.20 kV	≤1.20 kV	≤3.50 kV
	L-PE	–	–	–	≤2.0 kV	–
	N-PE	–	≤1.70 kV	–	≤1.70 kV	–
Current						
Lightning impulse current I_{imp} (10/350 μs)	L-N and L-PEN	35 kA	12.5 kA	12.5 kA	12.5 kA	≤5 kA
	N-PE	–	50 kA	–	50 kA	–
Rated discharge surge current I_n (8/20 μs)	L-N and L-PEN	35 kA	12.5 kA	12.5 kA	12.5 kA	15 kA
	N-PE	–	50 kA	–	–	–
Max. discharge surge current I_{max} (8/20 μs)	L-N	100 kA	12.5 kA	50 kA	50 kA	40 kA
	N-PE	–	50 kA	–	50 kA	–
Function						
Response time t_A	L-N and L-PEN	<100 ns	≤25 ns	≤25 ns	≤25 ns	≤25 ns
	L-N and N-PE	–	≤100 ns	–	≤100 ns	≤25 ns
Connections						
Conductor cross-section	Finely stranded	16 ... 50 mm ²	1.5 ... 25 mm ²	1.5 ... 25 mm ²	1.5 ... 25 mm ²	1.5 ... 25 mm ²
	Solid	16 ... 50 mm ²	1.5 ... 35 mm ²	1.5 ... 35 mm ²	1.5 ... 35 mm ²	1.5 ... 35 mm ²
Protection devices						
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	400 A	160 A	160 A	160 A	–
	For V wiring (gL/gG)	125 A	80 A	80 A	80 A	–
Short-circuit withstand current	With max. back-up fuse	50 kA	25 kA	25 kA	25 kA	–
Environmental conditions						
Degree of protection		IP20, with connected conductors				
Temperature range		–40 ... +80 °C				

Accessories

Replacement plugs



Protection paths	Type	Basic units	Article No.
N-PE	–	5SD7412-2, 5SD7412-3, 5SD7414-2 and 5SD7414-3	5SD7418-2
L-N and L-PEN	1	5SD7412-2, 5SD7412-3, 5SD7413-2, 5SD7413-3, 5SD7414-2 and 5SD7414-3	5SD7418-3
L-PE (PV)	2	5SD7483-6	5SD7498-3

5SD74 surge arresters, type 2

Standard design

	For TN and TT systems		For TN-C and IT systems	For TN-C systems	For IT systems		For TN-S and TT systems
Protection paths	N-PE	L-PEN and L-N	L-PEN and L-N	L-PEN	L-PEN and L-PE	L-PEN and L-PE	L-N, L-PE and N-PE
Rated voltage U_n	240/415 V AC	240/415 V AC	400/690 V AC	240/415 V AC	400/690 V AC	554/960 V AC	240/415 V AC
Maximum continuous voltage U_c	260 V AC	350 V AC	800 V AC	350 V AC	580 V AC	760 V AC	350 V AC (L-N, L-PE) 260 V AC (N-PE)



Circuit	Mounting width							
With remote signaling								
1 + 0	1 MW	–	5SD7461-1	–	–	–	–	–
	2 MW	–	–	5SD7481-1	–	–	–	–
3 + 0	3 MW	–	–	–	5SD7463-1	5SD7473-1	5SD7483-5	–
3 + 1	4 MW	–	–	–	–	–	–	5SD7464-1
Without remote signaling								
1 + 0	1 MW	5SD7481-0	5SD7461-0	–	–	–	–	–
3 + 0	3 MW	–	–	–	5SD7463-0	–	–	–
3 + 1	4 MW	–	–	–	–	–	–	5SD7464-0

Further technical specifications

		5SD7481-0	5SD7461-0 5SD7461-1	5SD7481-1	5SD7463-0 5SD7463-1	5SD7464-0 5SD7464-1	5SD7473-1	5SD7483-5
Standards								
Standards		IEC 61643-11; EN 61643-11	IEC 61643-11; EN 61643-11	IEC 61643-11; EN 61643-11	IEC 61643-11; EN 61643-11	IEC 61643-11; EN 61643-11	IEC 61643-11; EN 61643-11	IEC 61643-11; EN 61643-11
Approvals		KEMA	KEMA	KEMA	KEMA	KEMA	–	KEMA, UL/cUL
Voltage								
Protection level U_p	L-N and L-PEN	–	≤1.50 kV	≤5 kV	≤1.50 kV	≤1.60 kV	≤2.50 kV	≤2.90 kV
	L-PE	–	–	–	–	≤1.90 kV	–	–
	N-PE	≤1.50 kV	–	–	–	≤1.50 kV	–	–
Current								
Rated discharge surge current I_n (8/20 μs)	L-N and L-PEN	–	20 kA	15 kA	20 kA	20 kA	15 kA	15 kA
	N-PE	20 kA	–	–	–	20 kA	–	–
Max. discharge surge current I_{max} (8/20 μs)	L-N	–	40 kA	30 kA	40 kA	40 kA	30 kA	30 kA
	N-PE	40 kA	–	–	–	40 kA	–	–
Function								
Response time t_A	L-N and L-PEN	–	≤25 ns	≤100 ns	≤25 ns	≤25 ns	≤25 ns	≤25 ns
	L-N and N-PE	≤100 ns	–	–	–	≤100 ns	–	–
Connections								
Conductor cross-section	Finely stranded	1.5 ... 25 mm ²						
	Solid	1.5 ... 35 mm ²						
Protection devices								
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	–	125 A	100 A	125 A	125 A	125 A	100 A
	For V wiring (gL/gG)	–	–	80 A	80 A	80 A	80 A	80 A
Short-circuit withstand current	With max. back-up fuse	25 kA	25 kA	25 kA	25 kA	25 kA	25 kA	25 kA
Environmental conditions								
Degree of protection		IP20, with connected conductors						
Temperature range		–40 ... +80 °C						

Accessories

Replacement plugs



Protection paths	Basic units	Article No.
N-PE	5SD7481-0, 5SD7464-0 and 5SD7464-1	5SD7488-0
L-N and L-PEN	5SD7461-0, 5SD7461-1, 5SD7463-0, 5SD7463-1, 5SD7464-0 and 5SD7464-1	5SD7468-1
L-PEN	5SD7481-1 and 5SD7483-5	5SD7488-2
	5SD7481-1	5SD7488-4

5SD74 surge arresters, type 2

Narrow design

For TN-S and TT systems

Protection paths	L-N and N-PE	L-N and N-PE
Rated voltage U_n	240 V AC	240/415 V AC
Rated arrester voltage U_C ; L-N, N-PE, L-(PE)N	350 V AC	350 V AC
Rated arrester voltage U_C ; N-PE	264 V AC	264 V AC



Circuit	Mounting width	Rated discharge surge current I_n (8/20 μ s)			
		L-N or L-(PE)N	N-PE		
With remote signaling					
1 + 1	24 mm (1 1/3 MW)	20 kA	20 kA	5SD7422-1	–
3 + 1	48 mm (2 2/3 MW)	20 kA	20 kA	–	5SD7424-1
		20 kA	40 kA	–	–
Without remote signaling					
1 + 1	24 mm (1 1/3 MW)	20 kA	20 kA	5SD7422-0	–
3 + 1	48 mm (2 2/3 MW)	20 kA	20 kA	–	5SD7424-0
		20 kA	40 kA	–	–

Further technical specifications

5SD7422-0
5SD7422-1

5SD7424-0
5SD7424-1

Standards		5SD7422-0 5SD7422-1	5SD7424-0 5SD7424-1
Standards		IEC 61643-11, EN 61643-11	IEC 61643-11, EN 61643-11
Approvals		KEMA/UL/cUL	KEMA/UL/cUL
Voltage			
Protection level U_p	L-N and L-PE	≤ 1.50 kV	≤ 1.50 kV
	L-PE	≤ 1.90 kV	≤ 1.90 kV
	N-PE	≤ 1.50 kV	≤ 1.50 kV
Current			
Rated discharge surge current I_n (8/20 μ s)	L-N and L-PE	20 kA	20 kA
	N-PE	20 kA	20 kA
Max. discharge surge current I_{max} (8/20 μ s)	L-N	40 kA	40 kA
	N-PE	40 kA	40 kA
Function			
Response time t_A	L-N and L-PE	≤ 25 ns	
	L-N and N-PE	≤ 100 ns	
Connections			
Conductor cross-section	Finely stranded	1.5 ... 25 mm ²	
	Solid	1.5 ... 35 mm ²	
Protection devices			
Max. back-up fuse acc. to IEC 61643-1	For stub wiring (gL/gG)	315 A	
	For V wiring (gL/gG)	63 A	
Short-circuit withstand current	With max. back-up fuse	25 kA	
Environmental conditions			
Degree of protection		IP20, with connected conductors	
Temperature range		–40 ... +80 °C	




Accessories

Replacement plugs



Protection paths	Basic units	Article No.
N-PE	5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1	5SD7428-0
L-N and L-PEN	5SD7422-0, 5SD7422-1, 5SD7424-0 and 5SD7424-1	5SD7428-1

5SD74 surge arresters, type 3

	For TN-S and TT systems		
Protection paths	L-N, L-PE, N-PE, (L+) – (L-) and (L+/L-) – PE	L-N, L-PE, N-PE, (L+) – (L-) and (L+/L-) – PE	L-N, L-PE, N-PE, (L+) – (L-) and (L+/L-) – PE
Rated voltage U_n	24 V AC	120 V AC	230 V AC
Rated arrester voltage U_c	34 V AC	150 V AC	264 V AC
			

Circuit	Mounting width			
With remote signaling				
1 + 0	1 MW	5SD7432-4	5SD7432-2	5SD7432-1

6

Further technical specifications

		5SD7432-4	5SD7432-2	5SD7432-1
Standards				
Standards		IEC 61643-11; EN 61643-11	IEC 61643-11; EN 61643-11	IEC 61643-11; EN 61643-11
Approvals		KEMA/UL/cUL	KEMA/UL/cUL	KEMA/UL/cUL
Voltage				
Protection level U_p	L-N, L-PE and N-PE	$\leq 250 / \leq 650$ V	$\leq 850 / \leq 950$ V	$\leq 1350 / \leq 1500$ V
Current				
Rated load current I_L (at 30 °C)		26 A	26 A	26 A
Rated discharge surge current I_n (8/20 μ s)		1 kA	3 kA	3 kA
Combined surge $U_{open collector}$		2 kV	6 kV	6 kV
Function				
Response time t_A		≤ 100 ns		
Connections				
Conductor cross-section	Finely stranded	0.2 ... 2.5 mm ²		
	Solid	0.2 ... 4 mm ²		
Protection devices				
Required back-up fuse, max.	(gG/B/C)	25 A		
Environmental conditions				
Degree of protection		IP20, with connected conductors		
Temperature range		-40 ... +80 °C		
Display				
Visual function/fault indication		Yes		

Mandatory basic protection in electrical installations

Overcurrents in electrical installations occur as a result of excessive load or short-circuits and can cause serious accidents, fires and financial damage. Appropriate protection devices have therefore been mandatory ever since electricity was first harnessed to power equipment. As a pioneer in fuse systems, we offer you the complete range of devices for the protection of cables as well as electrical devices and installations in the event of overloads and short-circuits.

Fuses are capable of safely switching off circuits as soon as an overload or short-circuit occurs. This prevents damage to electrical equipment or extended power failures. Specific variants of fuse systems are used for different applications.

Among other things, our fuses are used for protecting cables and lines, switching devices and semiconductors as well as in photovoltaics and wind power.



Fuse Systems



All the information you need	712
System overview	714
Overview of fuse systems	716
Fuse holders and bases	718
Overview	718
MINIZED fuse switch disconnectors	7112
MINIZED switch disconnectors	7113
NEOZED bus-mounting switch disconnectors	7114
NEOZED fuse bases	7116
DIAZED fuse bases	7118
Bus-mounting bases for 8US busbar systems	7120
Photovoltaic cumulative fuse bases	7121
LV HRC fuse bases	7122
Cylindrical fuse holders	7124
SITOR fuse bases and holders	7125
Photovoltaic cylindrical fuse holders	7126
Class J fuse holders	7127
Class CC fuse holders	7128
Fuse links	7130
Overview of fuse links	7130
NEOZED fuse links	7132
DIAZED fuse links	7133
SILIZED fuse links	7134
Photovoltaic cumulative fuses	7135
LV HRC fuse links	7136
Cylindrical fuse links	7141
SITOR LV HRC semiconductor fuses	7142
SITOR cylindrical semiconductor fuses	7159
Photovoltaic cylindrical fuse links	7164
Class CC fuse links	7165
Accessories	7166
Busbars	7166
LV HRC signal detectors, electronic fuse monitoring	7170

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about fuse systems, please visit our website

www.siemens.com/lowvoltage/fuse-systems

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technology primer – Fuse systems (109482303)

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Siemens YouTube channel

Our video range

- Siemens fuse systems
bit.ly/2kWaePz

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Fuse systems sie.ag/2kW3pnU

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

Configurators

Exactly the right SITOR semiconductor fuse for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your SITOR semiconductor fuse at

www.siemens.com/lowvoltage/sitor-configurator

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services. You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Fuse systems (45314810)
- Planning manual – Planning with SIVACON 8PS (109478425)

Technical overview of fuse systems



The fast way to get you to our online services

This page provides you with comprehensive information and links on fuse systems

www.siemens.com/lowvoltage/product-support (109769085)

System overview

Fuse holders and bases

IEC fuse holders and bases



MINIZED



NEOZED



DIAZED



Bus-mounting bases for busbars



Photovoltaic cumulative fuses

IEC/UL fuse holders and bases



LV HRC fuses



Cylindrical fuses



SITOR LV HRC fuses



SITOR cylindrical fuses



Photovoltaic cylindrical fuses

UL fuse holders and bases



Class CC



Class J

Accessories for fuse holders and bases



Covers



Screw caps



Adapter sleeves



Isolating blades



LV HRC signal detectors

Busbars and accessories



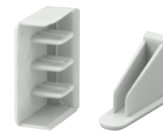
can be cut



Terminals



Touch protection



End caps

Fuse links

IEC fuse links



NEOZED



DIAZED



LV HRC



Cylindrical fuses



SILIZED



Photovoltaic cumulative fuses



Photovoltaic phase fuses

IEC/UL fuse links



SITOR LV HRC fuses



SITOR cylindrical fuses

UL fuse links



Class CC

Overview of fuse systems according to IEC

Fuse links



Standard	IEC	IEC
Rated current I_n	2 ... 100 A	2 ... 100 A
Voltage U_n (AC)	400 V	500 ... 750 V
Voltage U_n (DC)	250 V	500 ... 750 V
Design /application	NEOZED/SILIZED	DIAZED/SILIZED

Selection according to protection task

Cables and lines, general (gG)	■	■
Motor protection (aM)	-	-
Power semiconductor (aR, gR, gS)	■	■
Photovoltaic protection (gPV)	-	-
Battery protection (aR, gR, gBAT)	-	-

Type	5SE	5SA, 5SB, 5SC, 5SD
More information	See page 7/32 See page 7/34	See page 7/33 See page 7/34

Fuse holders and bases

For protection tasks

Overview, see page 7/8

Fuse bases



Floor fixation	Standard mounting rail	Busbar	Type	Standard	More information		
-	■	■	5SG	IEC	See page 7/12	■	-
-	■	■	5SF	IEC	See page 7/18	-	■
■	-	-	3NH	IEC/UL	See page 7/22	-	-
■	-	-	3NH7	IEC	See page 7/22	-	-
-	■	■	3NW7	IEC/UL	See page 7/24	-	-
-	■	-	3NC..	IEC/UL	See page 7/25	-	-
-	■	-	3NW7...-4	IEC	See page 7/26	-	-

For protection and switching tasks

Overview, see page 8/62, 8/96

Fuse switch disconnectors



Floor fixation	Standard mounting rail	Busbar	Type	Standard	More information		
■	■	■	3NP1	IEC/UL	See page 8/62	-	-
■	-	■	3NP5	IEC/UL	See page 8/74	-	-
-	■	■	5SG7	IEC	See page 8/90	■	-
-	-	■	3NJ4	IEC	See page 8/78	-	-

Switch disconnecter with fuse



■	■	-	3KF LV HRC	IEC	See page 8/96	-	-
■	■	-	3KF SITOP	IEC/UL	See page 8/96	-	-
-	-	■	3NJ62	IEC	See page 8/112	-	-

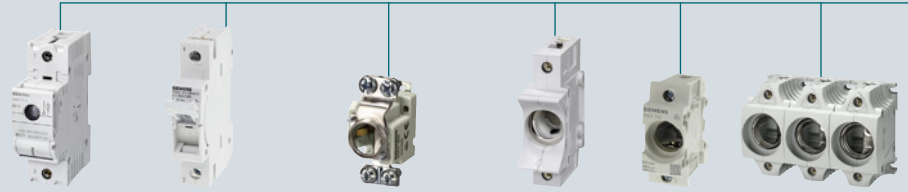
Overview, see page 7/30



IEC	IEC	IEC/UL	IEC/UL	IEC	UL
2 ... 1250 A	0.5 ... 100 A	2 ... 2400 A	1 ... 125 A	2 ... 630 A	0.5 ... 30 A
400 ... 690 V	400 ... 690 V	500 ... 2500 V	600 ... 1500 V	–	600 V
250 ... 400 V	–	440 ... 3000 V	250 ... 1000 V	1000 ... 1500 V	150 ... 300 V
LV HRC	Cylindrical	SITOR LV HRC	SITOR cylindrical	Photovoltaic	Class CC
■	■	–	–	–	■
■	■	–	–	–	■
–	–	■	■	–	–
–	■	–	–	■	–
–	–	■	■	–	–
3NA, 3ND See page 7/36	3NW6, 3NW8 See page 7/41	3NE, 3NC See page 7/42	3NC10 See page 7/59	3NE..., 3NW... See page 7/35 See page 7/64	3NW1, 3NW2, 3NW3 See page 7/65
–	–	–	–	–	–
–	–	–	–	–	–
■	–	■	–	–	–
–	–	–	–	■	–
–	■	–	–	–	■
–	–	–	■	–	–
–	–	–	–	■	–
■	–	■	–	–	–
■	–	■	–	–	–
–	–	–	–	–	–
■	–	–	–	–	–
–	–	(■)	–	–	–
■	–	■	–	–	–
–	–	–	–	–	–
■	–	–	–	–	–

Overview of fuse holders, bases and D0 fuse switching devices

IEC



	MINIZED switch disconnectors	MINIZED fuse switch disconnectors	NEOZED fuse bases			NEOZED comfort bases	NEOZED fuse bases	DIAZED fuse bases
--	-------------------------------------	--	--------------------------	--	--	-----------------------------	--------------------------	--------------------------

Basic data

Size	D02	D01	D01	D02	D03	D01, D02	D01, D02	NDz, DII, DIII
Variant	5SG71	5SG76	5SG15 5SG55	5SG16 5SG56	5SG18	5SG1301 5SG1701 5SG5301 5SG5701	5SG1302 5SG1702 5SG5302 5SG5702	5SF

Standards

Standards	DIN VDE 0638; EN 60947-3 (VDE 0660-107) EC/EN 60947-3	DIN VDE 0638; EN 60947-3 (VDE 0660-107) EC/EN 60947-3	IEC 60269-3; DIN VDE 0636-3			IEC 60269-3; DIN VDE 0636-3	IEC 60269-3; DIN VDE 0636-3	IEC 60269-3; DIN VDE 0635; DIN VDE 0636-3; CEE 16
Approvals	–	–	–	–	–	–	–	–
Approvals	–	–	–	–	–	–	–	–

Technical specifications AC

Rated voltage	U_n	V AC	230/400, 240/415	230/400, 240/415	400	400	400	–	–	500, 690, 750
	U_n acc. to UL	V AC	–	–	–	–	–	–	–	–
Rated insulation voltage		V AC	500	690	–	–	–	–	–	–
Short-circuit strength		kA AC	50	50	50	50	50	50	50	50
Rated current	I_n	A	63	16	16	63	100	16/63	16/63	2 ... 100
	I_n acc. to UL/CSA	A	–	–	–	–	–	–	–	–
Rated impulse withstand voltage		kV AC	6	6	–	–	–	–	–	–
Utilization category	Acc. to VDE 0638	A	AC-22	AC-22	–	–	–	–	–	–
	Acc. to EN 60947-3	A	AC-22 B, AC-23 B (35A)	AC-22 A	–	–	–	–	–	–

Technical specifications DC

Rated voltage	U_n	V DC	65 (1P), 130 (2P)	48 (1P), 110 (2P)	250	250	250	–	–	500, 600, 750
	U_n acc. to UL	V DC	–	–	–	–	–	–	–	–
Short-circuit strength		kA DC	–	–	8	8	8	8	8	–
Utilization category	Acc. to EN 60947-3	A	DC-22 B	–	–	–	–	–	–	–

Further technical specifications

Overvoltage category			IV	IV	–	–	–	–	–	III; II (DIAZED fuse bases made of molded plastic for use at 690 V AC / 600 V DC)
Max. power dissipation of fuse links (conductor cross-section used)		W	–	–	–	–	–	–	–	–
Pollution degree			–	–	–	–	–	–	–	–

¹⁾ Extended rated voltage up to 1000 V (except LV HRC bus-mounting bases).

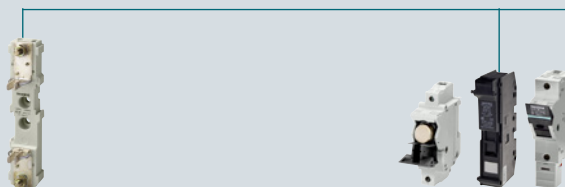
IEC



Cylindrical fuse holders		LV HRC fuse bases, LV HRC bus-mounting bases						Fuse bases for photovoltaic cumulative fuses						NEOZED bus-mounting bases for 5SG 60 mm compact busbar systems	NEOZED SR60 bus-mounting bases	DIAZED SR60 bus-mounting bases		
8×32 mm	22×58 mm	000/00	0	1	2	3	4	1	1L	2L	3L	1XL	2XL	D02	D02	DII	DII	
3NW73..	3NW72..	–	–	–	–	–	–	3NH7...-4						5SG6208	5SG6202 5SG6206 5SG6207	5SF6014 5SF6015 5SF6020	5SF6214 5SF6215 5SF6220	
IEC 60269-1, -2, -3; NF C 60-200, NF C 63-210, -211; NBN C 63269-2-1; CEI 32-4, -12; UL 4248-1 UL File No. E171267		IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2, UL 4248-1 (only downstream from the branch protection)						IEC 60269, IEC 60269-2, IEC 60947						IEC 60269-3, DIN VDE 0636-3	IEC 60269-3, DIN VDE 0636-3	IEC 60269-3, DIN VDE 0636-3	IEC 60269-3, DIN VDE 0636-3	
–	–	KEMA; UL File No. E171267-IZLT2						–	–	–	–	–	–	–	–	–	–	–
400	690	690 ¹⁾	690 ¹⁾	690 ¹⁾	690 ¹⁾	690 ¹⁾	690	–	–	–	–	–	–	400	400	500	690	
–	700	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
20	100	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
20	100	160	160	250	400	630	1250	160	250	400	630	250	400	63	63	25	63	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	250	440	440	440	440	440	1000	1000	1000	1000	1500	1500	250	250	–	600	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	25	25	25	25	25	25	–	–	–	–	–	–	8	8	8	8	
–	–	–	–	–	–	–	–	DC-20B (switching without load)						–	–	–	–	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
–	–	12	25	32	45	60	90	40	90	110	130	90	110	–	–	–	–	
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

Overview of fuse holders, bases and D0 fuse switching devices

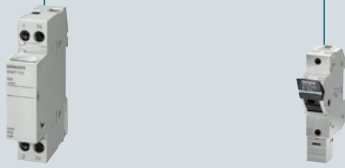
IEC / UL



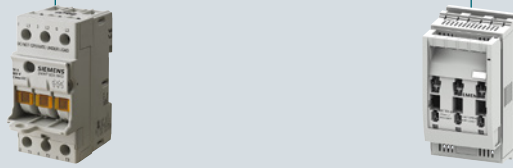
			LV HRC fuse bases, LV HRC bus-mounting bases						Cylindrical fuse holders		
Basic data											
Size			000/00	0	1	2	3	4	10 × 38 mm	14 × 51 mm	22 × 58 mm
Variant			–	–	–	–	–	–	3NC10	3NC14	3NC22
Standards											
Standards			IEC 60269-1, -2; EN 60269-1; DIN VDE 0636-2, UL 4248-1 (only downstream from the branch protection)						UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3	UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3	UL 4248-1; CSA C22.2; IEC 60269-2, IEC 60947-3
Approvals			KEMA, UL File No. E171267-IZLT2						UL 4248-1; UL File No. E171267; CSA C22.2 No. 39-M		
Approvals			–						®	®	®
Technical specifications AC											
Rated voltage	U_n	V AC	690 ¹⁾	690 ¹⁾	690 ¹⁾	690 ¹⁾	690 ¹⁾	690	690	690	690
	U_n acc. to UL	V AC	–	–	–	–	–	–	600	600	600
Rated insulation voltage		V AC	–	–	–	–	–	–	–	–	–
Short-circuit strength		kA AC	–	–	–	–	–	–	50	50 (100 at 400 V)	50 (100 at 500 V)
Rated current	I_n	A	160	160	250	400	630	1250	32	50	100
	I_n acc. to UL/CSA	A	–	–	–	–	–	–	30	50 (UL), 40 (CSA)	80
Rated impulse withstand voltage		kV AC	–	–	–	–	–	–	6	6	6
Utilization category	Acc. to VDE 0638	A	–	–	–	–	–	–	–	–	–
	Acc. to EN 60947-3	A	–	–	–	–	–	–	AC-22B (400 V)	AC-22B (400 V)	AC-20B (690 V)
Technical specifications DC											
Rated voltage	U_n	V DC	250	440	440	440	440	440	800		
	U_n acc. to UL	V DC	–	–	–	–	–	–	–	–	–
Short-circuit strength		kA DC	25	25	25	25	25	25	–	–	–
Utilization category	Acc. to EN 60947-3	A	–	–	–	–	–	–	–	–	–
Further technical specifications											
Overvoltage category			–	–	–	–	–	–	–	–	–
Max. power dissipation of fuse links (conductor cross-section used)		W	12	25	32	45	60	90	3 (6 mm ²), 4.3 (10 mm ²)	5 (10 mm ²), 6.5 (25 mm ²)	9.5 (35 mm ²), 11 (50 mm ²)
Pollution degree			–	–	–	–	–	–	2	2	2

¹⁾ Extended rated voltage up to 1000 V (except LV HRC bus-mounting bases).

IEC / UL



UL



Cylindrical fuse holders		Photovoltaic cylindrical fuse holders		Class CC fuse holders	Class J fuse holders				
10 x 38 mm	14 x 51 mm	10 x 38 mm	10 x 85 mm	–	–				
3NW70.. 3NW703.-1	3NW71..	3NW70..-4	3NW76..-4	3NW75.3-0HG 3NW753.-1HG	3NW75.3-3HG, 3NW75.3-5HG, 3NW75.3-6HG, 3NW75.3-7HG, 3NW75.3-8HG, 3NW7431-6HG, 3NW7431-7HG, 3NW7431-8HG				
IEC 60269-1, -2, -3; NF C 60-200, NF C 63-210, -211; NBN C 63269-2-1; CEI 32-4, -12; UL 4248-1 UL File No. E171267		IEC 60269, IEC 60269-2, IEC 60947, UL 4248-1, -18	IEC 60269, IEC 60269-2, IEC 60947, UL 4248-1, -18	UL 4248-1; CSA C22.2	UL 4248-1 Ed.1, UL 4248-8 Ed.1				
UL File No. E171267		UL File No. E469670, CCC (variants without signal detector)	UL File No. E355487	UL 4248-1; UL File No. E171267; CSA C22.2	UL File No. E171267; CSA File No. 233322; Class No. 6225-01				
UL, CE	UL	–	–	–	UL, CE	UL, CE	cULus	cULus	UL, CE Busbar device: cULus
690	690	–	–	–	–	–	–	–	–
600	700	–	–	600	600	600	600	600	600
–	–	–	–	–	–	–	–	–	–
100	100	–	–	200	200	200	200	200	200
32	50	30	32	30	30	60	100	200	400
–	–	–	–	–	–	–	–	–	–
–	–	6	–	6	No information as the devices are only tested and certified to UL/CSA and not to IEC				
–	–	–	–	–	–				
AC-20B (switching without load)		–	–	AC-20B (switching without load)	AC-20B (switching without load)				
–	–	1000	1500	300	–	–	–	–	–
–	–	–	–	–	600	600	600	600	600
–	–	–	–	–	–	–	–	–	–
AC-20B (switching without load)		–	–	DC-20B (switching without load)	DC-20B (switching without load)				
–	–	II	–	II	No information as the devices are only tested and certified to UL/CSA and not to IEC				
–	–	4	6	3 (6 mm ²), 4.3 (10 mm ²)	–				
–	–	2	–	2	No information as the devices are only tested and certified to UL/CSA and not to IEC				

MINIZED fuse switch disconnectors



Size	Rated current	1P	1P+N	2P	3P	3P+N
D01	2 ... 6 A	5SG7611-0KK06	–	–	5SG7631-0KK06	–
	10 A	5SG7611-0KK10	–	–	5SG7631-0KK10	–
	16 A	5SG7611-0KK16	5SG7651-0KK16	5SG7621-0KK16	5SG7631-0KK16	5SG7661-0KK16




7

MINIZED switch disconnectors

Size	Rated current	Number of poles				
		1P	1P+N	2P	3P	3P+N
D02	25 A	–	–	–	5SG7133-8BA25 ¹⁾	–
	35 A	–	–	–	5SG7133-8BA35 ¹⁾	–
	50 A	–	–	–	5SG7133-8BA50 ¹⁾	–
	63 A	5SG7113	5SG7153	5SG7123	5SG7133	5SG7163




¹⁾ Versions for Austria only, with permanently fitted adapter sleeves and incl. fuse link

Accessories

Reducers		
	Use For D01 fuse links in MINIZED D02 switch disconnectors	Article No. 5SH5527
Auxiliary switches (AS)		
	Version	Article No.
	1 NO contact + 1 NC contact	5ST3010
	2 NO contacts	5ST3011
	2 NC contacts	5ST3012
Auxiliary switches (AS) with TEST button		
	Version	Article No.
	1 NO contact + 1 NC contact	5ST3010-2
	2 NO contacts	5ST3011-2
	2 NC contacts	5ST3012-2

NEOZED bus-mounting switch disconnectors

For 8US 60 mm busbar systems

Mounting width	Size D02		
	1.5 MW	1.5 MW	1.5 MW
			

For flat copper profiles	Rated current I _e		Rated voltage U _e			Standard	Without LED signal detector		With LED signal detector
	IEC	UL 508	IEC AC	IEC DC	UL 508				
Box terminals 5 mm and 10 mm	63 A	–	400 V AC	–	–	IEC	5SG7234-1 ²⁾	–	5SG7234-2 ²⁾
			400 V AC	110 V DC	–	IEC	–	5SG7230 ¹⁾	–

¹⁾ In the case of permanent load over 35 A, we recommend the use of lateral module 5SH5526. Please observe EN 60439-1, Table 1.
²⁾ In the case of permanent load over 35 A, we recommend the use of lateral module 5SH5533. Please observe EN 60439-1, Table 1.

Suitable accessories

Auxiliary switches



- For signaling the switching state for bus-mounting switch disconnectors

Contacts	Mounting width	Article No.	Article No.	Article No.
1 CO contact	0.5 MW	–	5SH5525	–

Lateral modules



- For greater heat dissipation for loads from 35 A

Mounting width	Article No.	Article No.	Article No.
0.5 MW	5SH5533	5SH5526	5SH5533

Reducers








- Use
For NEOZED D01 fuse links in SR60 bus-mounting switch disconnectors

Use	Article No.	Article No.	Article No.
For NEOZED D01 fuse links in SR60 bus-mounting switch disconnectors	5SH5527	5SH5527	5SH5527

Busbar systems, [see page 13/1](#)

NEOZED fuse bases


Number of poles	Comfort bases made of molded plastic		Fuse bases made of molded plastic			
	1P	3P	Without LED signal detector	3P	With LED signal detector	
						
Size	Rated current					
D01	16 A	5SG1301	5SG5301	5SG1302	5SG5302	5SG1302-1
D02	63 A	5SG1701	5SG5701	5SG1702	5SG5702	5SG1702-1
D03	100 A	–	–	–	–	–








Accessories

NEOZED screw caps

	Material	Version	Fuse size	Article No.
	Molded plastic	With inspection hole	D01	5SH4116
			D02	5SH4163
	Ceramic	Without inspection hole, sealable	D01	5SH4316
			D02	5SH4363
		Without inspection hole	D03	5SH4100
			With inspection hole	D01
D02	5SH4362			

NEOZED adapter sleeves

	Fuse size	Rated current	Color	Article No.
	D01	2 A	Pink	5SH5002
		4 A	Brown	5SH5004
		6 A	Green	5SH5006
		10/13 A	Red	5SH5010
		D01 fuse links in D02 base and MINIZED D02 switch disconnectors	2 A	Pink
	4 A	Brown	5SH5404	
	6 A	Green	5SH5406	
	10/13 A	Red	5SH5410	
	16 A	Gray	5SH5416	
D02		20 A	Blue	5SH5020
		25 A	Yellow	5SH5025
		32 A	Violet	5SH5032
		35/40 A	Black	5SH5035
		50 A	White	5SH5050
		80 A	Silver	5SH5080
D03		80 A	Silver	5SH5080

Fuse bases made of ceramic							
With clamp-type terminal			With saddle terminal		With screw head contact		
3P	1P	3P	1P	3P	1P	3P	
							
5SG5302-1	5SG1553	5SG5553	–	–	–	–	
5SG5702-1	–	–	5SG1653	5SG5653	5SG1693	5SG5693	
–	–	–	–	–	5SG1812	–	

NEOZED covers



Fuse size
D03

Article No.
5SH5233

NEOZED adapter sleeve fitters



Article No.
5SH5100





NEOZED retaining springs



Use
For D01 fuse links in D02 screw caps, 2 ... 16 A




Article No.
5SH5400

DIAZED fuse bases

Number of poles	Fuse bases made of molded plastic With box terminal		Fuse bases made of ceramic	
	1P	3P	With clamp-type terminal 1P	With saddle terminal 1P
				
Size	Rated current	U _n AC/DC 500/500 V	U _n AC/DC 500/500 V	U _n AC/DC 500/500 V
DII	25 A	5SF1060	5SF5068	5SF1005
DIII	63 A	5SF1260 ¹⁾	5SF5268 ¹⁾	–
				5SF1205 ¹⁾

¹⁾ Can also be used for 690 V AC / 600 V DC.

Accessories

DIAZED screw caps						
	Material	Version	Fuse size	Rated voltage AC / DC	Article No.	
	Molded plastic	With inspection hole	NDz	500/500 V	5SH1112	
			DII	500/500 V	5SH1221	
			DIII	500/500 V	5SH1231	
	Ceramic	Without inspection hole	DII	500/500 V	5SH112	
			DIII	500/500 V	5SH113	
		With inspection hole, sealable	DII	500/500 V	5SH122	
			DIII	500/500 V	5SH123	
		Extended version	DIII	690/600 V	5SH1170	
	With fine thread	DIII	750/750 V	5SH1161		
	DIAZED screw adapters					
		• Also for 5SF230 up to 750 V				
		Fuse size	Rated current	Article No.		
	DII	2 A	5SH310			
		4 A	5SH311			
		6 A	5SH312			
		10 A	5SH313			
		16 A	5SH314			
		20 A	5SH315			
		25 A	5SH316			
	DIII	32 A	5SH327			
		35 A	5SH317			
		50 A	5SH318			
		63 A	5SH320			
					5SH320	

With screw head contact

1P


 U_n AC/DC
750/750 V

5SF4230

DIAZED adapter sleeves for screw caps



Use

For DII fuse links in DIII base

Article No.

5SH302

DIAZED adapter sleeve fitters



Use

For DII/DIII screw adapters

Article No.

5SH3703

DIAZED cover rings



Fuse size

Material

Article No.

DII

Molded plastic

5SH3401

DIII

Molded plastic

5SH3411

DIAZED caps



Fuse size

Material

Article No.

DII

Molded plastic

5SH202


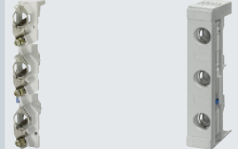
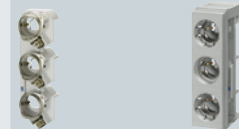
DIII

Molded plastic

5SH222

Bus-mounting bases



For 8US busbar systems

				Compact busbar systems		60 mm busbar systems		
				NEOZED design		NEOZED design		DIAZED design
				3P		3P		3P
								
Size	I _n	Mounting width	U _n AC/DC	With touch protection	Standard	With touch protection	Standard	With touch protection
D02	63 A	1.5 MW	500/500 V	–	3NW7122	5SG6206	–	–
		2 MW		5SG6208	–	5SG6207	–	–
DII	25 A		500/500 V	–	–	–	5SF6015	5SF6020
DIII	63 A		500/500 V ¹⁾	–	–	–	5SF6215	5SF6220

¹⁾ Can also be used for 690 V AC / 600 V DC.

7

Accessories

Covers for standard version for 60 mm busbar systems					
	Design	Fuse size	Version	Mounting width (1 MW = 18 mm)	Article No.
	NEOZED	D02	Standard	1.5 MW	5SH5241
			Extra wide	2 MW	5SH5242
			Double width	3 MW	5SH5243
	DIAZED	DII			5SH2042
			DIII		5SH2242

Busbar systems, [see page 13/1](#)

Photovoltaic cumulative fuse bases



Size	Rated current	Rated voltage DC			
1	250 A	1000 V	3NH3230	–	–
1L	250 A	1000 V	–	3NH7260-4	3NH7262-4KK01
2L	400 A	1000 V	–	3NH7360-4	3NH7360-4KK01
3L	630 A	1000/1500 V	–	3NH7460-4	–
1XL	250 A	1500 V	–	3NH7261-4	–
2XL	400 A	1500 V	–	3NH7361-4	–

Accessories

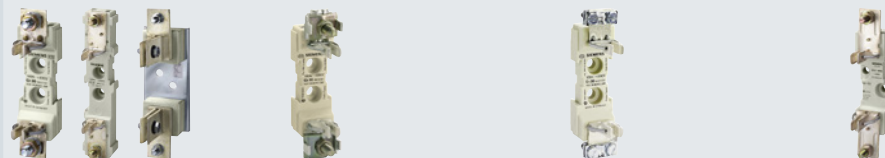
Terminal covers for PV fuse bases with swiveling mechanism



Fuse link size	Article No.
1, 1L, 1XL	3NX3121
2L, 2XL	3NX3122
3L	3NX3123

LV HRC fuse bases

Number of poles **1P**



Size	Rated current	Flat terminals	Plug-in terminal	Saddle-type terminal	Double busbar terminal
000/00	160 A	3NH3030	3NH3031	3NH3032	–
0 ¹⁾	160 A	3NH3120	–	–	–
1	250 A	3NH3230	–	–	3NH3220
2	400 A	3NH3330	–	–	3NH3320
3	630 A	3NH3430	–	–	3NH3420
4	1250 A	3NH3530	–	–	–
4a	1250 A	–	–	–	–

¹⁾ No longer to be used for new installations!

7

Accessories

LV HRC protective covers for LV HRC fuse bases



- As touch protection for contact pieces

Size	Article No.
000/00	3NX3105
0	3NX3114
1	3NX3106
2	3NX3107
3	3NX3108

LV HRC partitions for LV HRC fuse bases







- As intermediate phase and end barrier

Size	Type	Article No.
000/00	3NH30/3NH40	3NX2023
0	3NH31	3NX2030
1	3NH32	3NX2024
2	3NH33	3NX2025
3	3NH34	3NX2026

LV HRC protective covers



Size	Use	Article No.
000/00	1P and 3P	3NX3115
	When using fuse links with non-insulated grip lugs	3NX3116

3P		Molded plastic	With swivel device
			
Flat terminals	Saddle-type terminal	Flat terminals	Flat terminals
3NH4030	3NH4032	3NH3051	–
–	–	–	–
3NH4230	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	3NH7520

Covers for LV HRC fuse bases



- Red color
- With inscription "Isolating point"
- Observe width 60 mm of the blank insert when using for size 1

Size	Article No.
000/00	3NX1003
1, 2, 3	3NX1004

Fuse pullers for LV HRC fuse links









Size	Version	Article No.
000 ... 3	Without sleeve	3NX1013
	With sleeve	3NX1014

Isolating blades for LV HRC fuse bases and fuse switch disconnectors



Version	Contacts	Size	Article No.
With insulated grip lugs	Silver-plated	000/00	3NG1002
		0	3NG1102
		1	3NG1202
		2	3NG1302
		3	3NG1402
With non-insulated grip lugs	Tin-coated	4	3NG1503
	Nickel-plated	4a	3NG1505

Cylindrical fuse holders

		1P		1P+N	2P	3P	3P+N	
Number of poles								
Size	Rated current	Standard	Bus-mounting fuse holders	Standard	Standard	Standard	Compact	Standard
Without LED signal detector								
8 mm × 32 mm	20 A	3NW7313	–	3NW7353	3NW7323	3NW7333	–	3NW7363
10 mm × 38 mm	30 A	–	3NW7431	–	–	–	–	–
	32 A	3NW7013	–	3NW7053	3NW7023	3NW7033	3NW7033-1	3NW7063
14 mm × 51 mm	50 A	3NW7111	–	3NW7151	3NW7121	3NW7131	–	3NW7161
22 mm × 58 mm	100 A	3NW7211	–	3NW7251	3NW7221	3NW7231	–	3NW7261
With LED signal detector								
8 mm × 32 mm	20 A	3NW7314	–	3NW7354	3NW7324	3NW7334	–	3NW7364
10 mm × 38 mm	32 A	3NW7014	–	3NW7054	3NW7024	3NW7034	3NW7034-1	3NW7064
14 mm × 51 mm	50 A	3NW7112	–	3NW7152	3NW7122	3NW7132	–	3NW7162
22 mm × 58 mm	100 A	3NW7212	–	3NW7252	3NW7222	3NW7232	–	3NW7262

Accessories

Auxiliary switches for cylindrical fuse holders, standard



- For retrofitting using the factory-fitted brackets

Display	Fuse link size	Article No.
Disconnection of fuse link, for striker fuse links	14 mm × 51 mm	3NW7901
	22 mm × 58 mm	3NW7902
Switching state of fuse holder	8 mm × 32 mm and 10 mm × 38 mm	3NW7903

Auxiliary switches for cylindrical fuse holders, compact



Rated operational current I_n /AC-12	Rated operational voltage U_n	Contacts	Article No.
5 A	Max. 250 V	1 NO contact + 1 NC contact	3NW7903-1

Busbars for cylindrical fuse holders, compact



Number of poles	I_n	Pin spacing	Length	Article No.
2 × 3P	63 A	15 mm	45 mm	5ST2601
3 × 3P	63 A	15 mm	90 mm	5ST2602
4 × 3P	63 A	15 mm	135 mm	5ST2603
5 × 3P	63 A	15 mm	180 mm	5ST2604

Terminals for cylindrical fuse holders, compact



Version	Article No.
For conductor cross-sections 2.5 mm ² ... 35 mm ²	5ST2600

Busbar systems, [see page 13/1](#)

SITOR fuse bases and holders

For SITOR fuses with bolt-on links or blade contacts



Rated current	Rated voltage AC/DC	For fuse series	Mounting dimensions		
50 A	690 V	3NC18	75 mm	3NH5723	–
315 A	690 V	3NE87, 3NC26	80 mm	3NH5023	–
400 A	690 V	3NE80...3MK	80 mm	3NH5323	–
630 A	1800 V	3NE53, 3NE56	170 mm	–	3NH5473
1250 A	1250 V	3NC24, 3NC33...-1U, 3NC34...-1U, 3NC84, 3NE1...-3, NE32, 3NE33	110 mm	–	3NH5463
1600 A	690 V	3NE82...3MK	80 mm	–	3NH5423

7

For cylindrical fuses

Number of poles	Cylindrical fuse holders, can be used as fuse switch disconnectors						Cylindrical fuse bases		
	1P	2P	3P	1P	2P	3P	1P	2P	3P
Size	Rated voltage AC / DC	Signaling switch							
10 mm × 38 mm	600/– V	–	–	–	–	3NC1038-1	3NC1038-2	3NC1038-3	
	690/800 V	3NC1091	–	3NC1092	3NC1093	–	–	–	
14 mm × 51 mm	690/800 V	3NC1491	3NC1491-5	3NC1492	3NC1493	–	–	–	
22 mm × 58 mm	690/800 V	3NC2291	3NC2291-5	3NC2292	3NC2293	–	–	–	
22 mm × 127 mm	1500/1000 V	3NC2391-0MK	–	3NC2392-0MK	3NC2393-0MK	–	–	–	

Accessories

Fuse tongs








For sizes

10 mm × 38 mm
14 mm × 51 mm
22 mm × 58 mm








Article No.

3NC1000

Photovoltaic cylindrical fuse holders







Number of poles	Without signal detector			With signal detector	
	1P	1P	2P	1P	2P
					
Size	Rated current	U _n DC 1000 V	U _n DC 1500 V	U _n DC 1000 V	U _n DC 1000 V
10 mm × 38 mm	30 A	3NW7013-4	–	3NW7023-4	3NW7014-4
10 mm × 85 mm	32 A	–	3NW7613-4	–	–

Class J fuse holders

Number of poles	For mounting on DIN mounting rail			For screwing onto mounting plate	Bus-mounting fuse holders for 8US 60 mm busbar systems				
	1P	2P	3P	3P	3P	3P	3P		
									
Rated current	Rated voltage								
30 A	600 V		3NW7511-3HG	3NW7521-3HG	3NW7531-3HG	–	–	–	
60 A	600 V		3NW7511-5HG	3NW7521-5HG	3NW7531-5HG	–	–	–	
100 A	600 V		–	–	–	3NW7531-6HG	3NW7431-6HG	–	
200 A	600 V		–	–	–	3NW7531-7HG	–	3NW7431-7HG	
400 A	600 V		–	–	–	3NW7531-8HG	–	–	3NW7431-8HG

Busbar systems, [see page 13/1](#)

Class CC fuse holders

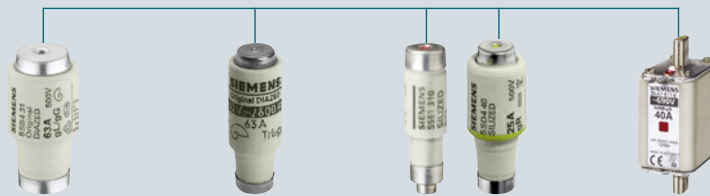
		Standard			Compact		Bus-mounting fuse holders for 8US 60 mm busbar systems
Number of poles		1P	2P	3P	3P		1P
							
Rated current	Rated voltage				Signal detector without	with	
30 A	600 V	3NW7513-0HG	3NW7523-0HG	3NW7533-0HG	3NW7533-1HG	3NW7534-1HG	3NW7431-0HG

Busbar systems, [see page 13/1](#)

7

Overview of fuse links

IEC



NEOZED fuse links

DIAZED fuse links

SILIZED fuse links

LV HRC fuse links

Basic data

Design	NEOZED	DIAZED	NEOZED, DIAZED	LV HRC
Size	D01, D02, D03	NDz, DII, DIII	D01, D02, DII, DIII, DIV	000/00, 0, 1, 2, 3, 4, 4a
Operational class	gG	gG	gR	gG, aM
Rated current	A	2 ... 100	10 ... 100	2 ... 1250
Standards				
Standard	IEC 60269-3 DIN VDE 0636-3	IEC 60269-3 DIN VDE 0635 DIN VDE 0636-3 CEE 16	IEC 60269-3 / -4 DIN VDE 0636-3 EN 60269-4 (VDE 0636-4)	IEC 60269-1 / -2 EN 60269-1 DIN VDE 0636
Approvals	-	-	-	CSA 22.2

Technical specifications AC

Rated voltage AC	V	400	500 ... 750	400 ... 500	400 ... 690 600 (CSA)
Rated breaking capacity AC	kA	50	50	50	120

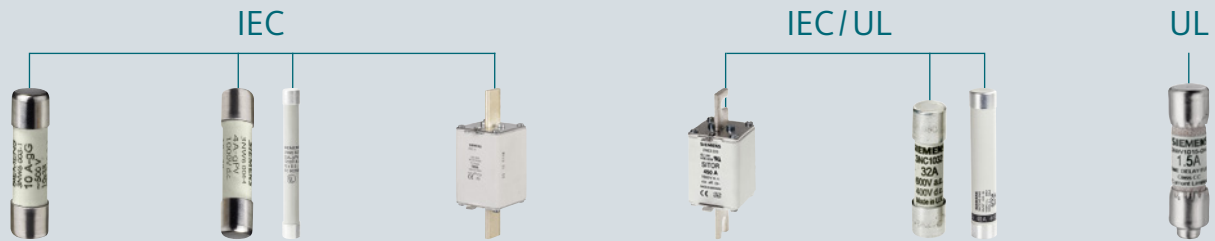
Technical specifications DC

Rated voltage DC	V	250	500 ... 750	250 ... 500	250 ... 440
Rated breaking capacity DC	kA	8	8	8	25

Further information

Catalog LV 10		See page 7/33	See page 7/33	See page 7/34	Page 7/36
---------------	--	-------------------------------	-------------------------------	-------------------------------	---------------------------

7



Cylindrical fuse links	Photovoltaic cylindrical fuse links	Photovoltaic cumulative fuse links	SITOR LV HRC semiconductor fuse links	SITOR cylindrical semiconductor fuse links	Class CC fuse links
Cylindrical 8 × 32 mm, 10 × 38 mm, 14 × 51 mm, 22 × 58 mm	Cylindrical 10 × 38 mm, 10 × 85 mm	LV HRC 1, 1L, 2L, 3L, 1XL, 2XL	LV HRC 000, 00, 1, 2, 3	Cylindrical 10 × 38 mm, 14 × 51 mm, 22 × 58 mm	Cylindrical –
gG, aM	gPV	gPV	gS, gR, aR	gS, gR, aR	–
0.5 ... 100	2 ... 20	63 ... 630	6 ... 2400	1 ... 125	0.6 ... 30
IEC 60269-1/-2 NF C 60-200 NF C 63-210/-211 NBN C 63269-2 CEI 32-4/-12 UL 4248-1; CSA	IEC 60269-6	IEC 60269-6	IEC 60269-4	IEC 60269-2	–
–	–	–	UL 4248-1 UL 4248-13	UL 4248-1 UL 4248-13	UL 4248-1 CSA C22.2
400 ... 690 400 ... 600 (UL/CSA)	–	–	500 ... 2500	690 ... 1500 600 ... 1500 (UL/CSA)	600
20 ... 120	–	–	100 ... 150	100	200
–	1000 ... 1500	1000 ... 1500	400 ... 1500	250 ... 1000	150 ... 300
–	30	30	–	–	–
Page 7/41	Page 7/64	Page 7/35	Page 7/42	Page 7/59	Page 7/65

NEOZED fuse links







Operational class gG



I_n	Identification color	Contacts	Size D01 U_n AC/DC 400/250 V	Size D02 U_n AC/DC 400/250 V	Size D03 U_n AC/DC 400/250 V
2 A	Pink		5SE2302	–	–
4 A	Brown		5SE2304	–	–
6 A	Green		5SE2306	–	–
10 A	Red		5SE2310	–	–
13 A	Black		5SE2013-2A	–	–
16 A	Gray		5SE2316	–	–
20 A	Blue	Tin-coated	–	5SE2320	–
25 A	Yellow	Tin-coated	–	5SE2325	–
32 A	Violet	Tin-coated	–	5SE2332	–
35 A	Black	Tin-coated	–	5SE2335	–
40 A	Black	Silver-plated	–	5SE2340	–
50 A	White	Silver-plated	–	5SE2350	–
63 A	Copper	Silver-plated	–	5SE2363	–
80 A	Blue		–	–	5SE2280
100 A	Red		–	–	5SE2300

7

DIAZED fuse links

		Size DII E27	Size DIII ¹⁾ E33			Size DIV R 1¼"	Size TNDz E16
Operational class		gG	gG		quick	gG	slow
							
I _n	Identification color	U _n AC/DC 500/440 V	U _n AC/DC 500/440 V	690/600 V	750/750 V	U _n AC/DC 500/400 V	U _n AC/DC 500/440 V
2 A	Pink	5SB211	–	5SD8002	5SD601	–	5SA211
4 A	Brown	5SB221	–	5SD8004	5SD602	–	5SA221
6 A	Green	5SB231	–	5SD8006	5SD603	–	5SA231
10 A	Red	5SB251	–	5SD8010	5SD604	–	5SA251
16 A	Gray	5SB2611	–	5SD8016	5SD605	–	5SA2611
20 A	Blue	5SB2711	–	5SD8020	5SD606	–	5SA2711
25 A	Yellow	5SB2811	–	5SD8025	5SD607	–	5SA2811
32 A	Violet	–	5SB4011	–	–	–	–
35 A	Black	–	5SB4111	5SD8035	5SD608	–	–
50 A	White	–	5SB4211	5SD8050	5SD610	–	–
63 A	Copper	–	5SB4311	5SD8063	5SD611	–	–
80 A	Silver	–	–	–	–	5SC211	–
100 A	Red	–	–	–	–	5SC221	–

¹⁾ For 2 A ... 25 A use screw adaptor DII

SILIZED fuse links

Operational class gR



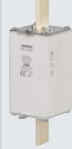
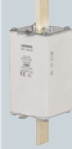




I_n	Operating value I^2t	Power loss P_v	NEOZED design		DIAZED design		
			U_n AC/DC 400/250 V	U_n AC/DC 400/250 V	U_n AC/DC 500/500 V	U_n AC/DC 500/500 V	U_n AC/DC 500/500 V
10 A	73 A ² s	6.9 W	5SE1310	–	–	–	–
16 A	60 A ² s	12.1 W	–	–	5SD420	–	–
	120 A ² s	6.2 W	5SE1316	–	–	–	–
20 A	139 A ² s	12.3 W	–	–	5SD430	–	–
	190 A ² s	8.1 W	–	5SE1320	–	–	–
25 A	205 A ² s	12.5 W	–	–	5SD440	–	–
	215 A ² s	8.2 W	–	5SE1325	–	–	–
30 A	310 A ² s	13.5 W	–	–	5SD480	–	–
35 A	470 A ² s	16.7 W	–	5SE1335	–	–	–
	539 A ² s	14.8 W	–	–	–	5SD450	–
50 A	1250 A ² s	18.5 W	–	–	–	5SD460	–
	1960 A ² s	12.0 W	–	5SE1350	–	–	–
63 A	1890 A ² s	28 W	–	–	–	5SD470	–
	4230 A ² s	15.5 W	–	5SE1363	–	–	–
80 A	4200 A ² s	34.3 W	–	–	–	–	5SD510
100 A	8450 A ² s	41.5 W	–	–	–	–	5SD520

7

Photovoltaic cumulative fuses

Operational class gPV

		Size 1	Size 1L	Size 2L	Size 3L	Size 1XL	Size 2XL
							
I_n DC	Power loss P_v	U_n DC 1000 V	U_n DC 1000 V	U_n DC 1000 V	U_n DC 1000 V	U_n DC 1500 V	U_n DC 1500 V
63 A	19 W	3NE1218-4	–	–	–	–	–
	20 W	–	–	–	–	3NE1218-5E	–
80 A	20 W	3NE1220-4	–	–	–	–	–
	25 W	–	–	–	–	3NE1220-5E	–
100 A	24 W	3NE1221-4	–	–	–	–	–
	30 W	–	–	–	–	3NE1221-5E	–
125 A	26 W	3NE1222-4	–	–	–	–	–
	29 W	–	–	–	–	3NE1222-5E	–
160 A	32 W	3NE1224-4	–	–	–	–	–
	34 W	–	–	–	–	3NE1224-5E	–
200 A	41 W	–	–	–	–	3NE1225-5E	–
	51 W	–	3NE1225-4D	–	–	–	–
250 A	53 W	–	–	–	–	–	3NE1327-5E
	54 W	–	3NE1227-4D	–	–	–	–
315 A	63 W	–	–	–	–	–	3NE1330-5E
	73 W	–	–	3NE1330-4D	–	–	–
400 A	82 W	–	–	3NE1332-4D	–	–	–
500 A	100 W	–	–	–	3NE1434-4E	–	–
630 A	110 W	–	–	–	3NE1436-4E	–	–




LV HRC fuse links

Operational class gG, with combination alarm








I _n	Size 000 21 mm			Size 00 30 mm			Size 1 30 mm		
	U _n AC/DC 400/- V	500/250 V	690 ¹⁾ /250 V	U _n AC/DC 400/- V	500/250 V	690 ¹⁾ /250 V	U _n AC/DC 400/- V	500/440 V	690 ¹⁾ /440 V
Insulated grip lugs									
2 A	-	3NA6802	3NA6802-6	-	-	-	-	-	-
4 A	-	3NA6804	3NA6804-6	-	-	-	-	-	-
6 A	-	3NA6801	3NA6801-6	-	-	-	-	-	-
10 A	3NA6803-4	3NA6803	3NA6803-6	-	-	-	-	-	-
16 A	3NA6805-4	3NA6805	3NA6805-6	-	-	-	-	3NA6105	-
20 A	3NA6807-4	3NA6807	3NA6807-6	-	-	-	-	3NA6107	-
25 A	3NA6810-4	3NA6810	3NA6810-6	-	-	-	-	3NA6110	-
32 A	3NA6812-4	3NA6812	3NA6812-6	-	-	-	-	-	-
35 A	3NA6814-4	3NA6814	3NA6814-6	-	-	-	3NA6114-4	3NA6114	-
40 A	3NA6817-4	3NA6817	3NA6817-6KJ	-	-	3NA6817-6	3NA6117-4	3NA6117	-
50 A	3NA6820-4	3NA6820	3NA6820-6KJ	-	-	3NA6820-6	3NA6120-4	3NA6120	3NA6120-6
63 A	3NA6822-4	3NA6822	-	-	-	3NA6822-6	3NA6122-4	3NA6122	3NA6122-6
80 A	3NA6824-4	3NA6824	-	3NA6824-4KK	3NA6824-7	3NA6824-6	3NA6124-4	3NA6124	3NA6124-6
100 A	3NA6830-4	3NA6830	-	3NA6830-4KK	3NA6830-7	3NA6830-6	3NA6130-4	3NA6130	3NA6130-6
125 A	-	-	-	3NA6832-4	3NA6832	-	3NA6132-4	3NA6132	3NA6132-6
160 A	-	-	-	3NA6836-4	3NA6836	-	3NA6136-4	3NA6136	3NA6136-6
200 A	-	-	-	-	-	-	-	-	-
224 A	-	-	-	-	-	-	-	-	-
250 A	-	-	-	-	-	-	-	-	-
300 A	-	-	-	-	-	-	-	-	-
315 A	-	-	-	-	-	-	-	-	-
355 A	-	-	-	-	-	-	-	-	-
400 A	-	-	-	-	-	-	-	-	-
Non-insulated grip lugs									
2 A	-	3NA7802	3NA7802-6	-	-	-	-	-	-
4 A	-	3NA7804	3NA7804-6	-	-	-	-	-	-
6 A	-	3NA7801	3NA7801-6	-	-	-	-	-	-
10 A	-	3NA7803	3NA7803-6	-	-	-	-	-	-
16 A	-	3NA7805	3NA7805-6	-	-	-	-	3NA7105	-
20 A	-	3NA7807	3NA7807-6	-	-	-	-	3NA7107	-
25 A	-	3NA7810	3NA7810-6	-	-	-	-	3NA7110	-
32 A	-	3NA7812	3NA7812-6	-	-	-	-	-	-
35 A	-	3NA7814	3NA7814-6	-	-	-	-	3NA7114	-
40 A	-	3NA7817	3NA7817-6KJ	-	-	3NA7817-6	-	3NA7117	-
50 A	-	3NA7820	3NA7820-6KJ	-	-	3NA7820-6	-	3NA7120	3NA7120-6
63 A	-	3NA7822	-	-	-	3NA7822-6	-	3NA7122	3NA7122-6
80 A	-	3NA7824	-	-	3NA7824-7	3NA7824-6	-	3NA7124	3NA7124-6
100 A	-	3NA7830	-	-	3NA7830-7	3NA7830-6	-	3NA7130	3NA7130-6
125 A	-	-	-	-	3NA7832	-	-	3NA7132	3NA7132-6
160 A	-	-	-	-	3NA7836	-	-	3NA7136	3NA7136-6
200 A	-	-	-	-	-	-	-	-	-
224 A	-	-	-	-	-	-	-	-	-
250 A	-	-	-	-	-	-	-	-	-
300 A	-	-	-	-	-	-	-	-	-
315 A	-	-	-	-	-	-	-	-	-
355 A	-	-	-	-	-	-	-	-	-
400 A	-	-	-	-	-	-	-	-	-

¹⁾ Manufacturer's confirmation for 690 V +10% rated voltage available on request.






Size 1 47.2 mm			Size 2 47.2 mm			Size 2 57.8 mm		
								
U _n AC/DC 400/- V	500/440 V	690 ¹⁾ /440 V	U _n AC/DC 400/- V	500/440 V	690 ¹⁾ /440 V	U _n AC/DC 400/- V	500/440 V	690 ¹⁾ /440 V
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	3NA6214	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	3NA6220-4	3NA6220	-	-	-	-
-	-	-	3NA6222-4	3NA6222	-	-	-	-
-	-	-	3NA6224-4	3NA6224	3NA6224-6	-	-	-
-	-	-	3NA6230-4	3NA6230	3NA6230-6	-	-	-
-	-	-	3NA6232-4	3NA6232	3NA6232-6	-	-	-
-	-	-	3NA6236-4	3NA6236	3NA6236-6	-	-	-
3NA6140-4	3NA6140	3NA6140-6	3NA6240-4	3NA6240	3NA6240-6	-	-	-
3NA6142-4	3NA6142	-	3NA6242-4	3NA6242	-	-	-	3NA6242-6
3NA6144-4	3NA6144	-	3NA6244-4	3NA6244	-	-	-	3NA6244-6
-	-	-	-	-	-	3NA6250-4	3NA6250	3NA6250-6
-	-	-	-	-	-	3NA6252-4	3NA6252	3NA6252-6
-	-	-	-	-	-	3NA6254-4	3NA6254	-
-	-	-	-	-	-	3NA6260-4	3NA6260	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	3NA7214	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	3NA7220	-	-	-	-
-	-	-	-	3NA7222	-	-	-	-
-	-	-	-	3NA7224	3NA7224-6	-	-	-
-	-	-	-	3NA7230	3NA7230-6	-	-	-
-	-	-	-	3NA7232	3NA7232-6	-	-	-
-	-	-	-	3NA7236	3NA7236-6	-	-	-
-	3NA7140	3NA7140-6	-	3NA7240	3NA7240-6	-	-	-
-	3NA7142	-	-	3NA7242	-	-	-	3NA7242-6
-	3NA7144	-	-	3NA7244	-	-	-	3NA7244-6
-	-	-	-	-	-	-	-	3NA7250-6
-	-	-	-	-	-	-	3NA7252	3NA7252-6
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	3NA7260	-

LV HRC fuse links

Operational class gG, with front indicator









	Size 000			Size 00		Size 0	Size 1			
Mounting width	21 mm			30 mm		30 mm	30 mm		47.2 mm	
										
I_n	U_n AC/DC			U_n AC/DC		U_n AC/DC	U_n AC/DC		U_n AC/DC	
	400/250 V 500/250 V 690 ¹⁾ /250 V			500/250 V 690 ¹⁾ /250 V		500/440 V	500/440 V 690 ¹⁾ /440 V		500/440 V 690 ¹⁾ /440 V	
Non-insulated grip lugs										
2 A	–	3NA3802	3NA3802-6	–	–	–	–	–	–	–
4 A	–	3NA3804	3NA3804-6	–	–	–	–	–	–	–
6 A	–	3NA3801	3NA3801-6	–	–	3NA3001	–	–	–	–
10 A	–	3NA3803	3NA3803-6	–	–	3NA3003	–	–	–	–
16 A	–	3NA3805	3NA3805-6	–	–	3NA3005	3NA3105	–	–	–
20 A	–	3NA3807	3NA3807-6	–	–	3NA3007	3NA3107	–	–	–
25 A	–	3NA3810	3NA3810-6	–	–	3NA3010	3NA3110	–	–	–
32 A	–	3NA3812	3NA3812-6	–	–	3NA3012	–	–	–	–
35 A	–	3NA3814	3NA3814-6	3NA3814-7	–	3NA3014	3NA3114	–	–	–
40 A	–	3NA3817	3NA3817-6KJ	–	3NA3817-6	3NA3017	3NA3117	–	–	–
50 A	–	3NA3820	3NA3820-6KJ	3NA3820-7	3NA3820-6	3NA3020	3NA3120	3NA3120-6	–	–
63 A	–	3NA3822	–	3NA3822-7	3NA3822-6	3NA3022	3NA3122	3NA3122-6	–	–
80 A	–	3NA3824	–	3NA3824-7	3NA3824-6	3NA3024	3NA3124	3NA3124-6	–	–
100 A	–	3NA3830	–	3NA3830-7	3NA3830-6	3NA3030	3NA3130	3NA3130-6	–	–
125 A	3NA3832-8	–	–	3NA3832	–	3NA3032	3NA3132	3NA3132-6	–	–
160 A	3NA3836-8	–	–	3NA3836	–	3NA3036	3NA3136	3NA3136-6	–	–
200 A	–	–	–	–	–	–	–	–	3NA3140	3NA3140-6
224 A	–	–	–	–	–	–	–	–	3NA3142	–
250 A	–	–	–	–	–	–	–	–	3NA3144	3NA3144-6
300 A	–	–	–	–	–	–	–	–	–	–
315 A	–	–	–	–	–	–	–	–	–	–
355 A	–	–	–	–	–	–	–	–	–	–
400 A	–	–	–	–	–	–	–	–	–	–
425 A	–	–	–	–	–	–	–	–	–	–
500 A	–	–	–	–	–	–	–	–	–	–
630 A	–	–	–	–	–	–	–	–	–	–
800 A	–	–	–	–	–	–	–	–	–	–
1000 A	–	–	–	–	–	–	–	–	–	–
1250 A	–	–	–	–	–	–	–	–	–	–

¹⁾ Manufacturer's confirmation for 690 V +10% rated voltage available on request.

Size 2		Size 3		Size 3		Size 4 (IEC design)		Size 4a	
47.2 mm		57.8 mm		57.8 mm		71.2 mm		101.8 mm	
									
U_n AC/DC		U_n AC/DC		U_n AC/DC		U_n AC/DC		U_n AC/DC	
500/440 V	690 ¹⁾ /440 V	500/440 V	690 ¹⁾ /440 V	500/440 V	690 ¹⁾ /440 V	500/440 V	690 ¹⁾ /440 V	500/440 V	500/440 V
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
3NA3214	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
3NA3220	-	-	-	-	-	-	-	-	-
3NA3222	-	-	-	-	-	-	-	-	-
3NA3224	3NA3224-6	-	-	-	-	-	-	-	-
3NA3230	3NA3230-6	-	-	-	-	-	-	-	-
3NA3232	3NA3232-6	-	-	-	-	-	-	-	-
3NA3236	3NA3236-6	-	-	-	-	-	-	-	-
3NA3240	3NA3240-6	-	-	3NA3340	-	-	-	-	-
3NA3242	-	-	3NA3242-6	3NA3342	-	-	-	-	-
3NA3244	-	-	3NA3244-6	3NA3344	3NA3344-6	-	-	-	-
-	-	3NA3250	3NA3250-6	3NA3350	-	-	-	-	-
-	-	3NA3252	3NA3252-6	3NA3352	3NA3352-6	-	-	-	-
-	-	3NA3254	-	3NA3354	-	-	3NA3354-6	-	-
-	-	3NA3260	-	3NA3360	-	-	3NA3360-6	-	-
-	-	-	-	-	-	3NA3362	3NA3362-6	-	-
-	-	-	-	-	-	3NA3365	3NA3365-6	-	3NA3665
-	-	-	-	-	-	3NA3372	-	3NA3472	3NA3672
-	-	-	-	-	-	-	-	3NA3475	3NA3675
-	-	-	-	-	-	-	-	3NA3480	3NA3680
-	-	-	-	-	-	-	-	3NA3482	3NA3682

LV HRC fuse links



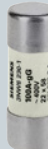
Operational class aM, with front indicator

	Size 000	Size 00	Size 1	Size 2	Size 2	Size 3	Size 3	
Mounting width	21 mm	30 mm	30 mm	47.2 mm	47.2 mm	57.8 mm	57.8 mm	71.2 mm
								
I_n	U_n AC/DC 500/- V	U_n AC/DC 500/- V	U_n AC/DC 690/- V	U_n AC/DC 690/- V	U_n AC/DC 690/- V	U_n AC/DC 690/- V	U_n AC/DC 690/- V	U_n AC/DC 690/- V
Non-insulated grip lugs								
6 A	3ND1801	-	-	-	-	-	-	-
10 A	3ND1803	-	-	-	-	-	-	-
16 A	3ND1805	-	-	-	-	-	-	-
20 A	3ND1807	-	-	-	-	-	-	-
25 A	3ND1810	-	-	-	-	-	-	-
32 A	3ND1812	-	-	-	-	-	-	-
35 A	3ND1814	-	-	-	-	-	-	-
40 A	3ND1817	-	-	-	-	-	-	-
50 A	3ND1820	-	-	-	-	-	-	-
63 A	3ND1822	-	3ND2122	-	-	-	-	-
80 A	3ND1824	-	3ND2124	-	-	-	-	-
100 A	3ND1830-8	3ND1830	3ND2130	-	-	-	-	-
125 A	-	3ND1832	-	3ND2132	3ND2232	-	-	-
160 A	-	3ND1836	-	3ND2136	3ND2236	-	-	-
200 A	-	-	-	3ND2140	3ND2240	-	-	-
250 A	-	-	-	3ND2144	3ND2244	-	-	-
315 A	-	-	-	-	-	3ND2252	3ND2352	-
355 A	-	-	-	-	-	3ND2254	3ND2354	-
400 A	-	-	-	-	-	3ND2260	3ND2360	-
500 A	-	-	-	-	-	-	-	3ND1365
630 A	-	-	-	-	-	-	-	3ND1372

7



Cylindrical fuse links

Operational class gG

	Size 8 × 32 mm		Size 10 × 38 mm		Size 14 × 51 mm		Size 22 × 58 mm	
								
I_n	U_n AC 400 V		U_n AC 400 V	500 V	U_n AC 500 V	690 V	U_n AC 500 V	690 V
0.5 A	–		–	3NW6000-1	–	–	–	–
1 A	–		–	3NW6011-1	–	–	–	–
2 A	3NW6302-1		–	3NW6002-1	–	–	–	–
4 A	3NW6304-1		–	3NW6004-1	–	3NW6104-1	–	–
6 A	3NW6301-1		–	3NW6001-1	–	3NW6101-1	–	–
8 A	–		–	3NW6008-1	–	3NW6108-1	–	–
10 A	3NW6303-1		–	3NW6003-1	–	3NW6103-1	–	–
12 A	–		–	3NW6006-1	–	3NW6106-1	–	–
16 A	3NW6305-1		–	3NW6005-1	–	3NW6105-1	–	3NW6205-1
20 A	3NW6307-1		–	3NW6007-1	–	3NW6107-1	–	3NW6207-1
25 A	–		–	3NW6010-1	–	3NW6110-1	–	3NW6210-1
32 A	–		3NW6012-1	–	–	3NW6112-1	–	3NW6212-1
40 A	–		–	–	3NW6117-1	–	–	3NW6217-1
50 A	–		–	–	3NW6120-1	–	–	3NW6220-1
63 A	–		–	–	–	–	3NW6222-1	–
80 A	–		–	–	–	–	3NW6224-1	–
100 A	–		–	–	–	–	3NW6230-1	–

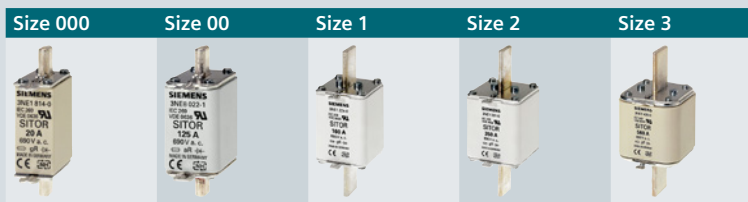
7

Operational class aM

	Size 10 × 38 mm		Size 14 × 51 mm			Size 22 × 58 mm	
							
I_n	U_n AC 400 V	500 V	U_n AC 400 V	500 V	690 V	U_n AC 500 V	690 V
0.5 A	–	3NW8000-1	–	–	–	–	–
1 A	–	3NW8011-1	–	–	–	–	–
2 A	–	3NW8002-1	–	–	3NW8102-1	–	–
4 A	–	3NW8004-1	–	–	3NW8104-1	–	–
6 A	–	3NW8001-1	–	–	3NW8101-1	–	–
8 A	–	3NW8008-1	–	–	3NW8108-1	–	–
10 A	–	3NW8003-1	–	–	3NW8103-1	–	–
12 A	–	3NW8006-1	–	–	3NW8106-1	–	–
16 A	–	3NW8005-1	–	3NW8105-1	–	–	3NW8205-1
20 A	3NW8007-1	–	–	3NW8107-1	–	–	3NW8207-1
25 A	3NW8010-1	–	–	3NW8110-1	–	–	3NW8210-1
32 A	3NW8012-1	–	–	3NW8112-1	–	–	3NW8212-1
40 A	–	–	–	3NW8117-1	–	–	3NW8217-1
50 A	–	–	3NW8120-1	–	–	–	3NW8220-1
63 A	–	–	–	–	–	3NW8222-1	–
80 A	–	–	–	–	–	3NW8224-1	–
100 A	–	–	–	–	–	3NW8230-1	–

SITOR LV HRC semiconductor fuses

Operational class gS, with blade contacts without slots



I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 690/- V ¹⁾	U_n AC/DC 690/- V ¹⁾	U_n AC/DC 690/- V ¹⁾	U_n AC/DC 690/- V ¹⁾	U_n AC/DC 690/- V ¹⁾
16 A	200 A ² s	4 W	1.0	3NE1813-0	-	-	-	-
20 A	430 A ² s	5 W	1.0	3NE1814-0	-	-	-	-
25 A	780 A ² s	5 W	1.0	3NE1815-0	-	-	-	-
35 A	1700 A ² s	3.5 W	1.0	3NE1803-0	-	-	-	-
40 A	3000 A ² s	3 W	1.0	3NE1802-0	-	-	-	-
50 A	4400 A ² s	6 W	1.0	3NE1817-0	-	-	-	-
63 A	9000 A ² s	7 W	1.0	3NE1818-0	-	-	-	-
80 A	18000 A ² s	8 W	1.0	3NE1820-0	-	-	-	-
100 A	33000 A ² s	10 W	1.0	-	3NE1021-0	-	-	-
125 A	63000 A ² s	11 W	1.0	-	3NE1022-0	-	-	-
160 A	60000 A ² s	24 W	1.0	-	-	3NE1224-0	-	-
200 A	100000 A ² s	27 W	1.0	-	-	3NE1225-0	-	-
250 A	200000 A ² s	30 W	1.0	-	-	3NE1227-0	-	-
315 A	310000 A ² s	38 W	1.0	-	-	3NE1230-0	-	-
350 A	430000 A ² s	42 W	1.0	-	-	-	3NE1331-0	-
400 A	590000 A ² s	45 W	1.0	-	-	-	3NE1332-0	-
450 A	750000 A ² s	53 W	1.0	-	-	-	3NE1333-0	-
500 A	950000 A ² s	56 W	1.0	-	-	-	3NE1334-0	-
560 A	1700000 A ² s	50 W	1.0	-	-	-	-	3NE1435-0
630 A	2350000 A ² s	55 W	1.0	-	-	-	-	3NE1436-0
710 A	3400000 A ² s	58 W	1.0	-	-	-	-	3NE1437-0
800 A	5000000 A ² s	58 W	1.0	-	-	-	-	3NE1438-0

¹⁾ For the max. DC voltage, see the Configuration Manual "Fuse Systems", chapter "Configuration", "Use with direct current"

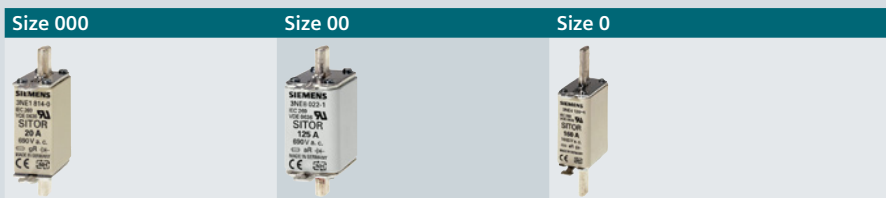
7

Operational class gR, with bolt-on links

				Size 000	Size 00
Screw fixing, mounting dimension				M8, 80 mm	M10, 80 mm
					
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 690/700 V	U_n AC/DC 690/440 V
20 A	83 A ² s	7 W	0.9	3NE8714-1	–
25 A	140 A ² s	9 W	0.9	3NE8715-1	–
32 A	285 A ² s	10 W	0.9	3NE8701-1	–
40 A	490 A ² s	12 W	0.9	3NE8702-1	–
50 A	815 A ² s	15 W	0.9	3NE8717-1	–
80 A	3200 A ² s	23 W	On req.	–	3NE8020-3MK
100 A	5200 A ² s	29 W	On req.	–	3NE8021-3MK
Further information					
Catalog LV 10				For further currents for operational class aR, see page 7/48	For further currents for operational class aR, see page 7/48

SITOR LV HRC semiconductor fuses

Operational class gR, with blade contacts without slots



I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 690/400 V	U_n AC/DC 690 V ¹⁾	U_n AC/DC 1000 V ¹⁾
6 A	37 A ² s	2.7 W	On req.	3NE8810-0MK	–	–
10 A	50 A ² s	4.5 W	On req.	3NE8812-0MK	–	–
16 A	73 A ² s	6.7 W	On req.	3NE8813-0MK	–	–
20 A	90 A ² s	8 W	On req.	3NE8814-0MK	–	–
25 A	150 A ² s	8.1 W	On req.	3NE8815-0MK	–	–
	180 A ² s	7 W	0.95	–	3NE8015-1	–
32 A	280 A ² s	12 W	0.9	–	–	3NE4101
	350 A ² s	10.5 W	On req.	3NE8801-0MK	–	–
35 A	400 A ² s	9 W	0.95	–	3NE8003-1	–
40 A	480 A ² s	12 W	On req.	3NE8802-0MK	–	–
	500 A ² s	13 W	0.9	–	–	3NE4102
50 A	700 A ² s	14 W	0.90	–	3NE8017-1	–
	800 A ² s	16 W	0.9	–	–	3NE4117
	1050 A ² s	14.5 W	On req.	3NE8817-0MK	–	–
63 A	1400 A ² s	16 W	0.95	–	3NE8018-1	–
	1960 A ² s	23 W	On req.	3NE8818-0MK	–	–
80 A	5800 A ² s	10.5 W	1.0	–	3NE1020-2	–
100 A	11000 A ² s	12 W	1.0	–	3NE1021-2	–
125 A	23000 A ² s	13.5 W	1.0	–	3NE1022-2	–
160 A	18600 A ² s	32 W	1.0	–	–	–
200 A	51800 A ² s	35 W	1.0	–	–	–
250 A	80900 A ² s	37 W	1.0	–	–	–
315 A	168000 A ² s	40 W	1.0	–	–	–
350 A	177000 A ² s	43 W	1.0	–	–	–
400 A	224000 A ² s	50 W	1.0	–	–	–
450 A	276500 A ² s	58 W	1.0	–	–	–
500 A	398000 A ² s	64 W	1.0	–	–	–
560 A	890000 A ² s	60 W	1.0	–	–	–
630 A	1390000 A ² s	60 W	1.0	–	–	–
670 A	1640000 A ² s	64 W	1.0	–	–	–
710 A	1818000 A ² s	72 W	1.0	–	–	–
	2460000 A ² s	65 W	1.0	–	–	–
800 A	2475000 A ² s	84 W	1.0	–	–	–
	3350000 A ² s	72 W	1.0	–	–	–
850 A	3640000 A ² s	76 W	1.0	–	–	–

Further information

Catalog LV 10

For further currents
for operational class aR,
see page 7/49

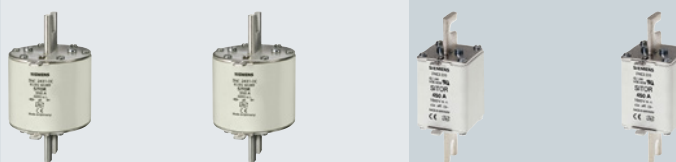
For further currents
for operational class aR,
see page 7/49

¹⁾ For the max. DC voltage, see the Configuration Manual „Fuse Systems“, chapter “Configuration”, “Use with direct current”

SITOR LV HRC semiconductor fuses

Operational class gR, with slotted blade contacts

Screw fixing, mounting dimension (lateral) **With 2 oblong slots Size 3 M10, 110 mm** **With oblong and transverse slots Size 1 M10, 110 mm**



I _n	Operating value I ² t	Power loss P _v	Varying load factor WL	With 2 oblong slots Size 3		With oblong and transverse slots Size 1	
				U _n AC/DC 500 V ¹⁾	690 V ¹⁾	U _n AC/DC 690 V ¹⁾	1000/600 V
32 A	4500 A ² s	9 W	On req.	–	–	–	3NE3201-OMK
40 A	900 A ² s	26 W	On req.	–	–	–	–
	6000 A ² s	13 W	On req.	–	–	–	3NE3202-OMK
50 A	1800 A ² s	27 W	On req.	–	–	–	–
	8000 A ² s	18 W	On req.	–	–	–	3NE3217-OMK
63 A	3100 A ² s	34 W	On req.	–	–	–	–
	9000 A ² s	25 W	On req.	–	–	–	3NE3218-OMK
150 A	17600 A ² s	40 W	0.85	–	3NC8423-0C	–	–
	33000 A ² s	35 W	0.85	3NC2423-0C	–	–	–
160 A	18600 A ² s	32 W	1.0	–	–	3NE1224-3	–
	38400 A ² s	55 W	0.85	–	3NC8425-0C	–	–
200 A	51800 A ² s	35 W	1.0	–	–	3NE1225-3	–
	64000 A ² s	40 W	0.85	3NC2425-0C	–	–	–
	70400 A ² s	72 W	0.85	–	3NC8427-0C	–	–
250 A	80900 A ² s	37 W	1.0	–	–	3NE1227-3	–
	99000 A ² s	50 W	0.85	3NC2427-0C	–	–	–
	132000 A ² s	65 W	0.85	3NC2428-0C	–	–	–
315 A	168000 A ² s	40 W	1.0	–	–	3NE1230-3	–
350 A	176000 A ² s	95 W	0.85	–	3NC8431-0C	–	–
	177000 A ² s	43 W	1.0	–	–	–	–
	249000 A ² s	60 W	0.85	3NC2431-0C	–	–	–
400 A	224000 A ² s	50 W	1.0	–	–	–	–
450 A	276500 A ² s	58 W	1.0	–	–	–	–
500 A	398000 A ² s	64 W	1.0	–	–	–	–
	448000 A ² s	130 W	0.85	–	3NC8434-0C	–	–
560 A	890000 A ² s	60 W	1.0	–	–	–	–
630 A	1390000 A ² s	60 W	1.0	–	–	–	–
670 A	1640000 A ² s	64 W	1.0	–	–	–	–
710 A	1818000 A ² s	72 W	1.0	–	–	–	–
800 A	2475000 A ² s	84 W	1.0	–	–	–	–
850 A	3640000 A ² s	76 W	1.0	–	–	–	–
1000 A	1400000 A ² s	138 W	1.0	–	–	–	–
1100 A	3000000 A ² s	110 W	1.0	–	–	–	–
1250 A	4100000 A ² s	104 W	1.0	–	–	–	–
1350 A	4800000 A ² s	126 W	1.0	–	–	–	–
1400 A	5200000 A ² s	127 W	1.0	–	–	–	–
1600 A	6900000 A ² s	152 W	1.0	–	–	–	–
1700 A	6400000 A ² s	179 W	1.0	–	–	–	–
1700 A	10000000 A ² s	143 W	1.0	–	–	–	–
1900 A	8200000 A ² s	196 W	1.0	–	–	–	–

Further information

Catalog LV 10

For further currents for operational class aR, see page 7/52



¹⁾ For the max. DC voltage, see the Configuration Manual „Fuse Systems“, chapter “Configuration”, “Use with direct current”

²⁾ Minimum clearance 90 mm

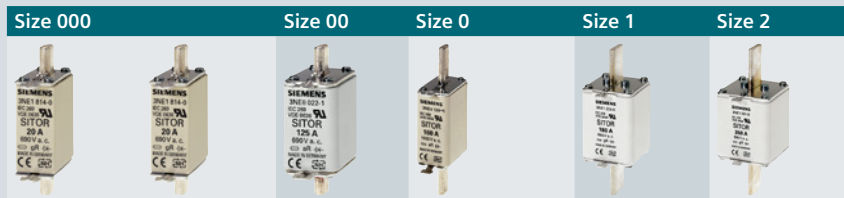
Size 2		Size 3		Size 3		Size 2 × 3		Size 3 × 3			
M10, 110 (90) mm		M10, 170 mm		M10, 110 mm		M12, 110 mm		M12, 110 mm ²⁾			
											
U _n AC/DC 690 V ¹⁾		U _n AC/DC 1500/1000 V		U _n AC/DC 500 V ¹⁾		U _n AC/DC 690 V ¹⁾		U _n AC/DC 690 V ¹⁾		U _n AC/DC 690 V ¹⁾	
-	-	-	-	-	-	-	-	-	-	-	-
-	3NE5302-0MK06	-	-	-	-	-	-	-	-	-	-
-	3NE5317-0MK06	-	-	-	-	-	-	-	-	-	-
-	3NE5318-0MK06	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	3NC8423-3C	-	-	-	-	-	-
-	-	-	3NC2423-3C	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	3NC8425-3C	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	3NC2425-3C	-	-	-	-	-	-	-	-
-	-	-	-	-	3NC8427-3C	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	3NC2427-3C	-	-	-	-	-	-	-	-
-	-	-	3NC2428-3C	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	3NC8431-3C	-	-	-	-	-	-
3NE1331-3	-	-	-	-	-	-	-	-	-	-	-
-	-	-	3NC2431-3C	-	-	-	-	-	-	-	-
3NE1332-3	-	-	-	-	-	-	-	-	-	-	-
3NE1333-3	-	-	-	-	-	-	-	-	-	-	-
3NE1334-3	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	3NC8434-3C	-	-	-	-	-	-
-	-	-	-	-	-	3NE1435-3	-	-	-	-	-
-	-	-	-	-	-	3NE1436-3	-	-	-	-	-
-	-	-	-	-	-	3NE1447-3	-	-	-	-	-
-	-	-	-	-	-	3NE1437-3	-	-	-	-	-
-	-	-	-	-	-	3NE1438-3	-	-	-	-	-
-	-	-	-	-	-	3NE1448-3	-	-	-	-	-
-	-	-	-	-	-	-	3NB3350-1KK26	-	-	-	-
-	-	-	-	-	-	-	3NB3351-1KK26	-	-	-	-
-	-	-	-	-	-	-	3NB3352-1KK26	-	-	-	-
-	-	-	-	-	-	-	3NB3354-1KK26	-	-	-	-
-	-	-	-	-	-	-	3NB3355-1KK26	-	-	-	-
-	-	-	-	-	-	-	3NB3357-1KK26	-	-	-	-
-	-	-	-	-	-	-	-	3NB3358-1KK27	-	-	-
-	-	-	-	-	-	-	3NB3358-1KK26	-	-	-	-
-	-	-	-	-	-	-	-	3NB3362-1KK27	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	For further currents for operational class aR, see page 7/52	-	For further currents for operational class aR, see page 7/52	-	For further currents for operational class aR, see page 7/52	-	-	-	-

SITOR LV HRC semiconductor fuses

Operational class aR, with bolt-on links

Screw fixing, mounting dimension				Size 000	
				M8, 80 mm	M10, 80 mm
					
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 690/700 V	U_n AC/DC 690/440 V
63 A	1550 A ² s	16 W	0.95	3NE8718-1	–
80 A	2700 A ² s	18 W	0.9	3NE8720-1	–
100 A	4950 A ² s	19 W	0.95	3NE8721-1	–
125 A	9100 A ² s	23 W	0.95	3NE8722-1	–
160 A	17000 A ² s	31 W	0.9	3NE8724-1	–
200 A	30000 A ² s	36 W	0.9	3NE8725-1	–
250 A	55000 A ² s	42 W	0.9	3NE8727-1	–
315 A	85500 A ² s	54 W	0.85	3NE8731-1	–
350 A	135000 A ² s	58.8 W	On req.	–	3NE8031-3MK
400 A	170000 A ² s	74.5 W	On req.	–	3NE8032-3MK
Further information					
Catalog LV 10				For further currents for operational class gR, see page 7/43	For further currents for operational class gR, see page 7/43

Operational class aR, with blade contacts without slots






I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	Size 000		Size 00		Size 0		Size 1		Size 2	
				U_n AC/DC 500/440 V	690/440 V	U_n AC/DC 690 V ¹⁾	690 V ¹⁾	U_n AC/DC 1000 V ¹⁾	1000 V ¹⁾	U_n AC/DC 690/440 V	690/440 V	U_n AC/DC 690/440 V	690/440 V
63 A	1500 A ² s	20 W	0.9	–	–	–	–	3NE4118	–	–	–	–	–
80 A	2200 A ² s	23.3 W	On req.	–	3NE8820-OMK	–	–	–	–	–	–	–	–
	2400 A ² s	19 W	0.95	–	–	3NE8020-1	–	–	–	–	–	–	–
	3000 A ² s	22 W	0.9	–	–	–	–	3NE4120	–	–	–	–	–
100 A	3650 A ² s	27 W	On req.	–	3NE8821-OMK	–	–	–	–	–	–	–	–
	4200 A ² s	22 W	0.95	–	–	3NE8021-1	–	–	–	–	–	–	–
	6000 A ² s	24 W	0.9	–	–	–	–	3NE4121	–	–	–	–	–
	6050 A ² s	25.5 W	On req.	–	–	–	–	–	3NE8221-OMK	–	–	–	–
125 A	6500 A ² s	28 W	0.95	–	–	3NE8022-1	–	–	–	–	–	–	–
	7800 A ² s	30 W	On req.	–	3NE8822-OMK	–	–	–	–	–	–	–	–
	8900 A ² s	28.5 W	On req.	–	–	–	–	–	3NE8222-OMK	–	–	–	–
	14000 A ² s	30 W	0.9	–	–	–	–	3NE4122	–	–	–	–	–
160 A	13000 A ² s	38 W	0.95	–	–	3NE8024-1	–	–	–	–	–	–	–
	14000 A ² s	34 W	On req.	3NE8824-OMK	–	–	–	–	–	–	–	–	–
	16200 A ² s	37 W	On req.	–	–	–	–	–	3NE8224-OMK	–	–	–	–
	29000 A ² s	35 W	0.9	–	–	–	–	3NE4124	–	–	–	–	–
200 A	26000 A ² s	49 W	On req.	–	–	–	–	–	3NE8225-OMK	–	–	–	
250 A	59000 A ² s	52 W	On req.	–	–	–	–	–	3NE8227-OMK	–	–	–	
315 A	120000 A ² s	68 W	On req.	–	–	–	–	–	3NE8230-OMK	–	–	–	
350 A	83500 A ² s	68.6 W	On req.	–	–	–	–	–	–	–	–	3NE8331-OMK	
400 A	136000 A ² s	72.8 W	On req.	–	–	–	–	–	–	–	–	3NE8332-OMK	
450 A	207000 A ² s	80.1 W	On req.	–	–	–	–	–	–	–	–	3NE8333-OMK	
500 A	318000 A ² s	77.5 W	On req.	–	–	–	–	–	–	–	–	3NE8334-OMK	
550 A	399000 A ² s	86.4 W	On req.	–	–	–	–	–	–	–	–	3NE8335-OMK	
630 A	740000 A ² s	90.7 W	On req.	–	–	–	–	–	–	–	–	3NE8336-OMK	
Further information													
Catalog LV 10				For further currents for operational class gR, see page 7/44		–		For further currents for operational class gR, see page 7/44		–		–	

¹⁾ For the max. DC voltage, see the Configuration Manual „Fuse Systems“, chapter “Configuration”, “Use with direct current”

SITOR LV HRC semiconductor fuses

Operational class aR, with slotted blade contacts

Screw fixing, mounting dimension	With 2 oblong slots	With oblong and transverse slots	
	Size 3	Size 1	Size 1
	M10, 110 mm	M8, 80 mm	M10, 110 mm
			

I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC 500 V ¹⁾	U_n AC/DC 690/440 V	U_n AC/DC 1000/- V ¹⁾	1000/600 V
80 A	3900 A ² s	42 W	On req.	–	–	–	–
100 A	3200 A ² s	25 W	On req.	–	3NE8221-3MK	–	–
	4800 A ² s	28 W	0.95	–	–	3NE3221	–
	8700 A ² s	45 W	On req.	–	–	–	–
125 A	6000 A ² s	28 W	On req.	–	3NE8222-3MK	–	–
	7200 A ² s	36 W	0.95	–	–	3NE3222	–
	11800 A ² s	59 W	On req.	–	–	–	–
160 A	10500 A ² s	35 W	On req.	–	3NE8224-3MK	–	–
	13000 A ² s	42 W	1.0	–	–	3NE3224	–
	37000 A ² s	54 W	On req.	–	–	–	–
200 A	17500 A ² s	42 W	On req.	–	3NE8225-3MK	–	–
	30000 A ² s	42 W	1.0	–	–	3NE3225	–
	70000 A ² s	56 W	On req.	–	–	–	–
250 A	28500 A ² s	53.5 W	On req.	–	3NE8227-3MK	–	–
	29700 A ² s	105 W	0.85	–	–	–	–
	48000 A ² s	50 W	1.0	–	–	3NE3227	–
	165000 A ² s	59 W	On req.	–	–	–	–
315 A	53500 A ² s	61 W	On req.	–	3NE8230-3MK	–	–
	60700 A ² s	120 W	0.85	–	–	–	–
	80000 A ² s	60 W	0.95	–	–	3NE3230-0B	–
	250000 A ² s	76 W	On req.	–	–	–	–
	300000 A ² s	245 W	On req.	–	–	–	–
350 A	66000 A ² s	69 W	On req.	–	3NE8231-3MK	–	–
	100000 A ² s	75 W	0.95	–	–	3NE3231	–
400 A	110000 A ² s	70.5 W	On req.	–	3NE8232-3MK	–	–
	135000 A ² s	80 W	1.0	–	–	–	–
	85 W	0.9	–	–	–	3NE3232-0B	–
	390000 A ² s	50 W	0.85	3NC2432-0C	–	–	–
450 A	470000 A ² s	89 W	On req.	–	–	–	–
	175000 A ² s	90 W	1.0	–	–	–	–
	95 W	0.9	–	–	–	3NE3233	–
	180000 A ² s	71 W	On req.	–	3NE8233-3MK	–	–
500 A	191000 A ² s	140 W	0.85	–	–	–	–
	215000 A ² s	84 W	On req.	–	3NE8234-3MK	–	–
	260000 A ² s	90 W	1.0	–	–	–	–
	276000 A ² s	155 W	0.85	–	–	–	–
	500000 A ² s	105 W	On req.	–	–	–	3NE3234-0MK08
550 A	800000 A ² s	109 W	On req.	–	–	–	–
	290000 A ² s	87 W	On req.	–	3NE8235-3MK	–	–
	700000 A ² s	110 W	On req.	–	–	–	3NE3235-0MK08
560 A	360000 A ² s	95 W	1.0	–	–	–	–
630 A	440000 A ² s	96 W	On req.	–	3NE8236-3MK	–	–
	600000 A ² s	100 W	1.0	–	–	–	–
	850000 A ² s	127 W	On req.	–	–	–	3NE3236-0MK08
	1100000 A ² s	163 W	On req.	–	–	–	–
710 A	800000 A ² s	105 W	1.0	–	–	–	–
	923000 A ² s	155 W	0.95	–	–	–	–
800 A	850000 A ² s	130 W	0.95	–	–	–	–
900 A	920000 A ² s	165 W	0.95	–	–	–	–

Further information

Catalog LV 10

For further currents for operational class gR, see page 7/46

¹⁾ For the max. DC voltage, see the Configuration Manual „Fuse Systems“, chapter “Configuration”, “Use with direct current”

Size 2

M10, 110 mm



M10, 170 mm



M10, 190 mm



M12, 260 mm



U _n AC/DC 690/- V ¹⁾	800/- V ¹⁾	800 V ¹⁾	900/- V ¹⁾	1000/- V ¹⁾	U _n AC/DC 1500/1000 V	U _n AC/DC 1500/1000 V	U _n AC/DC -/3000 V
-	-	-	-	-	3NE5320-0MK06	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	3NE5321-0MK06	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	3NE5322-0MK06	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	3NE5324-0MK06	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	3NE5325-0MK06	-	-
-	-	-	-	-	-	-	-
-	-	3NE4327-0B	-	-	-	-	-
-	-	-	-	-	3NE5327-0MK06	-	-
-	-	-	-	-	-	-	-
-	-	3NE4330-0B	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	3NE5330-0MK06	-	-
-	-	-	-	-	-	-	3NE9330-0MK07
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	3NE3332-0B	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	3NE5332-0MK06	-	-
-	-	-	-	3NE3333	-	-	-
-	-	-	-	-	-	-	-
-	-	3NE4333-0B	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	3NE3334-0B	-	-	-
-	-	3NE4334-0B	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	3NE5334-0MK06	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	3NE3335	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	3NE3336	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	3NE5336-0MK06	3NE5336-0MK66	-
-	-	-	3NE3337-8	-	-	-	-
-	-	3NE4337	-	-	-	-	-
-	3NE3338-8	-	-	-	-	-	-
3NE3340-8	-	-	-	-	-	-	-
-	-	-	-	-	For further currents for operational class gR, see page 7/46	-	-

SITOR LV HRC semiconductor fuses

Operational class aR, with slotted blade contacts

With oblong and transverse slots

Size 3

Screw fixing, mounting dimension

M10, 110 mm

M10, 130 mm

M10, 170 mm

M10, 210 mm



I _n	Operating value I ² t	Power loss P _v	Varying load factor WL	U _n AC/DC 500 V ¹⁾		U _n AC/DC 1000 V ¹⁾	U _n AC/DC 1500 V ¹⁾	U _n AC/DC 1500 V ¹⁾	U _n AC/DC 2000 V ¹⁾
					600 V ¹⁾				
100 A	13500 A ² s	25 W	1.0	–	–	3NE3421-OC	–	–	–
125 A	34500 A ² s	78 W	1.0	–	–	–	–	–	–
160 A	54000 A ² s	56 W	1.0	–	–	–	–	3NE5424-OC	–
200 A	138000 A ² s	75 W	1.0	–	–	–	–	–	3NE7425-OU
224 A	54000 A ² s	85 W	1.0	–	–	3NE3626-OC	–	–	–
	138000 A ² s	80 W	1.0	–	–	–	–	3NE5426-OC	–
250 A	84000 A ² s	130 W	1.0	–	–	–	3NE5627-OC	–	–
	218000 A ² s	110 W	1.0	–	–	–	–	–	3NE7427-OU
315 A	72500 A ² s	80 W	0.95	–	–	–	–	–	–
	218000 A ² s	80 W	1.0	–	–	3NE3430-OC	–	–	–
	311000 A ² s	115 W	1.0	–	–	–	–	3NE5430-OC	–
350 A	428000 A ² s	135 W	1.0	–	–	–	–	3NE5431-OC	–
	555000 A ² s	120 W	1.0	–	–	–	–	–	3NE7431-OU
400 A	163000 A ² s	95 W	0.95	–	–	–	–	–	–
	364000 A ² s	110 W	1.0	–	–	3NE3432-OC	–	–	–
	390000 A ² s	50 W	0.85	3NC2432-3C	–	–	–	–	–
	620000 A ² s	205 W	1.0	–	–	–	–	–	–
	870000 A ² s	150 W	1.0	–	–	–	–	–	3NE7432-OU
450 A	488000 A ² s	110 W	1.0	–	–	3NE3635-OC	–	–	–
	590000 A ² s	160 W	1.0	–	–	–	3NE5633-OC	–	–
	870000 A ² s	145 W	0.95	–	–	–	–	3NE5433-OC	–
	960000 A ² s	160 W	1.0	–	–	–	–	–	3NE7633-OU
500 A	290000 A ² s	115 W	0.90	–	–	–	–	–	–
	870000 A ² s	95 W	1.0	–	–	3NE3434-OC	–	–	–
	1270000 A ² s	235 W	1.0	–	–	–	–	–	–
525 A	1120000 A ² s	210 W	1.0	–	–	–	–	–	
600 A	1950000 A ² s	145 W	1.0	–	–	–	3NE5643-OC	–	
630 A	244000 A ² s	120 W	0.85	–	–	–	–	–	–
	418000 A ² s	145 W	0.85	–	–	–	–	–	–
	650000 A ² s	120 W	0.95	–	–	–	–	–	–
	1280000 A ² s	132 W	1.0	–	–	3NE3636-OC	–	–	–
	1950000 A ² s	220 W	1.0	–	–	–	–	–	3NE7636-OU
	2800000 A ² s	275 W	1.0	–	–	–	–	–	–
710 A	346000 A ² s	130 W	0.85	–	–	–	–	–	–
	569000 A ² s	150 W	0.85	–	–	–	–	–	–
	1950000 A ² s	145 W	1.0	–	–	3NE3637-OC	–	–	–
	3110000 A ² s	275 W	1.0	–	–	–	–	–	–
800 A	498000 A ² s	135 W	0.9	–	–	–	–	–	–
	819000 A ² s	155 W	0.85	–	–	–	–	–	–
	985000 A ² s	145 W	0.90	–	–	–	–	–	–
900 A	677000 A ² s	145 W	0.9	–	–	–	–	–	–
	1160000 A ² s	165 W	0.9	–	–	–	–	–	–
1000 A	975000 A ² s	155 W	0.95	–	–	–	–	–	–
	1670000 A ² s	170 W	0.9	–	–	–	–	–	–
	2480000 A ² s	140 W	0.85	–	3NC8444-3C	–	–	–	–
1100 A	1382000 A ² s	165 W	0.95	–	–	–	–	–	–
	1910000 A ² s	185 W	0.9	–	–	–	–	–	–
1250 A	1990000 A ² s	175 W	0.95	–	–	–	–	–	–
	2600000 A ² s	210 W	0.9	–	–	–	–	–	–
1400 A	2100000 A ² s	200 W	0.95	–	–	–	–	–	
1600 A	2860000 A ² s	240 W	0.9	–	–	–	–	–	

Further information

Catalog LV 10

For further currents for operational class gR, see page 7/46

For further currents for operational class gR, see page 7/46

¹⁾ For the max. DC voltage, see the Configuration Manual „Fuse Systems“, chapter “Configuration”, “Use with direct current”

M12, 80 mm		M12, 110 mm				M12, 140 mm	M12, 210 mm		M12, 260 mm
U _n AC/DC 500 V ¹⁾ 690 V ¹⁾		U _n AC/DC 800 V ¹⁾ 1000 V ¹⁾ 1100 V ¹⁾ 1250 V ¹⁾				U _n AC/DC 1000 V ¹⁾	U _n AC/DC 1500 V ¹⁾	2000 V ¹⁾	U _n AC/DC 2500 V ¹⁾
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	3NE9622-1C
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	3NC3430-1U	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	3NC3432-1U	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	3NE9632-1C
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	3NE5433-1C	-	-
-	-	-	-	-	-	-	-	3NE7633-1U	-
-	-	-	-	-	-	3NC3434-1U	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	3NE9634-1C
-	-	-	-	-	-	-	-	3NE7648-1U	-
-	-	-	-	-	-	-	-	-	-
-	3NC3236-1U	-	-	-	-	-	-	-	-
-	-	-	3NC3336-1U	-	-	-	-	-	-
-	-	-	-	-	3NC3436-1U	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	3NE7636-1U	-
-	-	-	-	-	-	-	-	-	3NE9636-1C
-	3NC3237-1U	-	-	-	-	-	-	-	-
-	-	-	3NC3337-1U	-	-	-	-	-	-
-	-	-	-	-	-	3NE3637-1C	-	-	-
-	-	-	-	-	-	-	-	3NE7637-1U	-
-	3NC3238-1U	-	-	-	-	-	-	-	-
-	-	-	3NC3338-1U	-	-	-	-	-	-
-	-	-	-	3NC3438-1U	-	-	-	-	-
-	3NC3240-1U	-	-	-	-	-	-	-	-
-	-	-	3NC3340-1U	-	-	-	-	-	-
-	3NC3241-1U	-	-	-	-	-	-	-	-
-	-	-	3NC3341-1U	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	3NC3242-1U	-	-	-	-	-	-	-	-
-	-	3NC3342-1U	-	-	-	-	-	-	-
-	3NC3243-1U	-	-	-	-	-	-	-	-
-	-	3NC3343-1U	-	-	-	-	-	-	-
3NC3244-1U	-	-	-	-	-	-	-	-	-
3NC3245-1U	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

7

SITOR LV HRC semiconductor fuses

Operational class aR, with female thread at both ends

Screw fixing, flange dimension **Size 3**
M10, 109 mm M12, 52 mm



I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC/DC	
				1000/- V	500/- V 690/- V
315 A	72500 A ² s	80 W	0.95	–	–
400 A	163000 A ² s	95 W	0.95	–	–
450 A	488000 A ² s	110 W	1.0	3NE3635-6	–
500 A	290000 A ² s	115 W	0.90	–	–
630 A	244000 A ² s	125 W	0.9	–	–
	418000 A ² s	130 W	0.90	–	3NC3236-6U
	650000 A ² s	120 W	0.95	–	–
710 A	346000 A ² s	130 W	0.9	–	–
	569000 A ² s	140 W	0.90	–	3NC3237-6U
800 A	498000 A ² s	135 W	0.95	–	–
	819000 A ² s	150 W	0.90	–	3NC3238-6U
	985000 A ² s	145 W	0.95	–	–
900 A	677000 A ² s	140 W	0.95	–	–
	1160000 A ² s	160 W	0.95	–	3NC3240-6U
1000 A	975000 A ² s	145 W	1.0	–	–
	1670000 A ² s	165 W	0.95	–	3NC3241-6U
1100 A	1382000 A ² s	150 W	1.0	–	–
	1910000 A ² s	175 W	0.95	–	3NC3242-6U
1250 A	1990000 A ² s	155 W	1.0	–	–
	2600000 A ² s	185 W	0.95	–	3NC3243-6U
1400 A	2100000 A ² s	175 W	1.0	–	3NC3244-6U
1600 A	2860000 A ² s	195 W	0.95	–	3NC3245-6U

M12, 73 mm





M12, 73 mm



U _n AC/DC 800/- V		U _n AC/DC 1100/- V	
	1000/- V		1250/- V
-	-	-	3NC3430-6U
-	-	-	3NC3432-6U
-	-	-	-
-	-	-	3NC3434-6U
-	-	-	-
-	3NC3336-6U	-	-
-	-	-	3NC3436-6U
-	-	-	-
-	3NC3337-6U	-	-
-	-	-	-
-	3NC3338-6U	-	-
-	-	3NC3438-6U	-
-	-	-	-
-	3NC3340-6U	-	-
-	-	-	-
-	3NC3341-6U	-	-
-	-	-	-
3NC3342-6U	-	-	-
-	-	-	-
3NC3343-6U	-	-	-
-	-	-	-
-	-	-	-

SITOR LV HRC semiconductor fuses

Operational class gR, special designs

				Without installation bracket	With installation bracket
				M10, 89 mm	For SITOR 6QG11 thyristor sets
Screw fixing, flange dimension					
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC 600 V	U_n AC 1000 V
50 A	1100 A ² s	20 W	0.85	–	3NE4117-5
850 A	2480000 A ² s	85 W	1.0	3NE9440-6	–

7

Operational class aR, special designs

				Without installation bracket			
				For screwing onto water-cooled busbars			
Flange dimension				83 mm			
							
I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n AC 600 V	900 V	U_n AC 800 V	1000 V
100 A	7400 A ² s	35 W	0.85	–	–	–	–
170 A	60500 A ² s	43 W	0.85	–	–	–	–
200 A	44000 A ² s	50 W	0.85	–	–	–	–
250 A	29700 A ² s	105 W	0.85	–	–	–	–
	635000 A ² s	25 W	0.9	–	–	–	–
315 A	60700 A ² s	120 W	0.85	–	–	–	–
350 A	260000 A ² s	80 W	0.9	–	–	3NC5531	–
	1430000 A ² s	32 W	0.9	–	–	–	–
450 A	191000 A ² s	140 W	0.85	–	–	–	–
	395000 A ² s	90 W	0.85	–	–	–	–
500 A	276000 A ² s	155 W	0.85	–	–	–	–
600 A	888000 A ² s	150 W	0.9	–	–	–	3NC5840
630 A	888000 A ² s	145 W	0.9	–	–	3NC5841	–
710 A	620000 A ² s	150 W	0.9	–	3NE6437-7	–	–
	923000 A ² s	155 W	0.95	–	–	–	–
800 A	1728000 A ² s	170 W	0.9	–	–	–	3NC5838
900 A	1920000 A ² s	170 W	0.9	–	–	–	–
1250 A	2480000 A ² s	210 W	0.9	3NE9450-7	–	–	–

For air-cooled rectifiers in electrolysis systems		For mounting directly in the railway supply rectifier		With installation bracket	
89 mm				For SITOR 6QG10 thyristor sets	
				For SITOR 6QG11 thyristor sets	
U _n AC	U _n AC	U _n AC	U _n AC	U _n AC	U _n AC
600 V	900 V	680 V	800 V	1000 V	1000 V
–	–	–	–	–	3NE4121-5
–	–	–	–	–	3NE4146-5
–	–	–	–	3NE3525-5	–
–	–	–	3NE4327-6B	–	–
–	–	3NC7327-2	–	–	–
–	–	–	3NE4330-6B	–	–
–	–	–	–	–	–
–	–	3NC7331-2	–	–	–
–	–	–	3NE4333-6B	–	–
–	–	–	–	3NE3535-5	–
–	–	–	3NE4334-6B	–	–
–	–	–	–	–	–
–	–	–	–	–	–
–	3NE6437	–	–	–	–
–	–	–	3NE4337-6	–	–
–	–	–	–	–	–
–	3NE6444	–	–	–	–
3NE9450	–	–	–	–	–

SITOR LV HRC semiconductor fuses

DC fuses, operational class gR, with slotted blade contacts

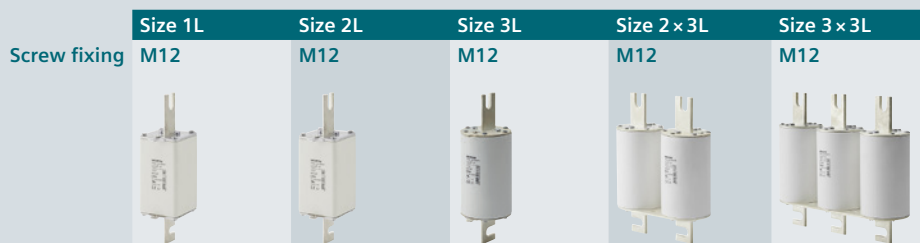


I_n	Operating value I^2t	Power loss P_v	Varying load factor WL	U_n DC 900 V
400 A	180000 A ² s ¹⁾	75 W	–	3NB1234-3KK20

¹⁾ I^2t at U_{vsl} 1400 V is 240000 A²s

7

DC fuses, operational class aR, with slotted blade contacts



I_n	Operating value I^2t at U_{vsl} 1500 V ²⁾	Power loss P_v	Varying load factor WL	Size 1L	Size 2L	Size 3L	Size 2 × 3L	Size 3 × 3L
				M12	M12	M12	M12	M12
				U_n DC 1250 V	U_n DC 1250 V	U_n DC 1250 V	U_n DC 1250 V	U_n DC 1250 V
200 A	39000 A ² s	50 W	–	3NB1126-4KK11	–	–	–	–
250 A	80500 A ² s	51 W	–	3NB1128-4KK11	–	–	–	–
315 A	129000 A ² s	63 W	–	–	3NB1231-4KK11	–	–	–
400 A	290000 A ² s	68 W	–	–	3NB1234-4KK11	–	–	–
500 A	600000 A ² s	89 W	–	–	–	3NB1337-4KK11	–	–
800 A	1910000 A ² s	135 W	–	–	–	3NB1345-4KK11	–	–
800 A	1150000 A ² s	160 W	–	–	–	–	3NB2345-4KK16	–
1000 A	2250000 A ² s	195 W	–	–	–	–	3NB2350-4KK16	–
1400 A	5100000 A ² s	250 W	–	–	–	–	3NB2355-4KK16	–
1600 A	7450000 A ² s	275 W	–	–	–	–	3NB2357-4KK16	–
2100 A	11950000 A ² s	365 W	–	–	–	–	–	3NB2364-4KK17
2400 A	18100000 A ² s	445 W	–	–	–	–	–	3NB2366-4KK17

²⁾ I^2t at U_n 1250 V is reduced by the factor $k=0.79$.

SITOR cylindrical semiconductor fuses

Cylindrical fuses, operational class gS

Size 22 × 127 mm



I_n	Operating value I^2t	Power loss P_v	U_n AC/DC 1500/1000 V
1 A	2 A ² s	2 W	3NC2301-0MK
2 A	4.4 A ² s	2.5 W	3NC2302-0MK
4 A	55 A ² s	5.3 W	3NC2304-0MK
6 A	150 A ² s	6.4 W	3NC2306-0MK
10 A	540 A ² s	3.1 W	3NC2310-0MK
16 A	1120 A ² s	4.7 W	3NC2316-0MK
20 A	2850 A ² s	5.4 W	3NC2320-0MK
25 A	3300 A ² s	6.9 W	3NC2325-0MK
32 A	9050 A ² s	6.7 W	3NC2332-0MK

Further information

Catalog LV 10

For further currents
for operational class gR, see page 7/60
Operational class aR, see page 7/62

7

SITOR semiconductor fuses

Cylindrical fuses, operational class gR

Size 10 × 38 mm



Size 14 × 51 mm







I_n	Operating value I^2t	Power loss P_v	U_n AC/DC		U_n AC/DC			
			690/440 V	690/250 V	690/700 V ¹⁾	690/600 V	690/440 V	690/250 V
6 A	3.5 A ² s	3.1 W	–	–	3NC1406-0MK	–	–	–
	6.5 A ² s	2.5 W	3NC1006-0MK	–	–	–	–	–
10 A	15 A ² s	4.6 W	–	–	3NC1410-0MK	–	–	–
	17 A ² s	4.3 W	–	–	–	–	–	–
	18 A ² s	3.3 W	3NC1010-0MK	–	–	–	–	–
12 A	35 A ² s	4 W	3NC1012-0MK	–	–	–	–	–
16 A	32 A ² s	6.7 W	–	–	–	3NC1416-0MK	–	–
	45 A ² s	6 W	3NC1016-0MK	–	–	–	–	–
	52 A ² s	4.4 W	–	–	–	–	–	–
20 A	68 A ² s	7.4 W	–	–	–	3NC1420-0MK	–	–
	90 A ² s	6.5 W	–	–	–	–	–	–
	110 A ² s	7.8 W	–	3NC1020-0MK	–	–	–	–
25 A	108 A ² s	8.4 W	–	–	–	3NC1425-0MK	–	–
	120 A ² s	9.5 W	–	–	–	–	–	–
	140 A ² s	8.7 W	–	3NC1025-0MK	–	–	–	–
	160 A ² s	8.5 W	–	–	–	–	–	–
	180 A ² s	8.1 W	–	–	–	–	–	–
32 A	175 A ² s	12.3 W	–	–	–	3NC1432-0MK	–	–
	220 A ² s	12.3 W	–	–	–	–	–	–
	400 A ² s	8.9 W	–	–	–	–	–	–
	420 A ² s	9 W	–	–	–	–	–	–
	450 A ² s	12 W	–	3NC1032-0MK	–	–	–	–
40 A	400 A ² s	14.8 W	–	–	–	–	–	–
	470 A ² s	11.7 W	–	–	–	–	3NC1440-0MK	–
	600 A ² s	11 W	–	–	–	–	–	–
	700 A ² s	12.5 W	–	–	–	–	–	–
	18500 A ² s	9.4 W	–	–	–	–	–	–
50 A	830 A ² s	16.3 W	–	–	–	–	–	3NC1450-0MK
	980 A ² s	17.5 W	–	–	–	–	–	–
	1250 A ² s	13.8 W	–	–	–	–	–	–
	1250 A ² s	15.2 W	–	–	–	–	–	–
63 A	2050 A ² s	18.8 W	–	–	–	–	–	–
	2400 A ² s	17.5 W	–	–	–	–	–	–
80 A	4400 A ² s	23 W	–	–	–	–	–	–
100 A	11500 A ² s	28.7 W	–	–	–	–	–	–

Further information

Catalog LV 10

¹⁾ DC voltage according to UL

Size 22 × 58 mm				Size 22 × 127 mm	With M8 bolt-on links Size 18 × 88 mm	Size 26 × 103 mm
						
U _n AC/DC 690/700 V ¹⁾				U _n AC/DC 1500/1000 V	U _n AC/DC 690/440 V	U _n AC/DC 690/440 V
	690/600 V	690/440 V	690/250 V			
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	3NC1810-0MK	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	3NC1816-0MK	-
-	-	-	-	-	-	-
-	-	-	-	-	3NC1820-0MK	-
-	-	-	-	-	-	-
-	-	-	-	-	-	3NC2625-0MK
-	-	-	-	-	-	-
-	-	-	-	-	3NC1825-0MK	-
3NC2225-0MK	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	3NC2632-0MK
-	-	-	-	-	3NC1832-0MK	-
-	3NC2232-0MK	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	3NC2640-0MK
-	-	-	-	-	-	-
-	-	-	-	-	3NC1840-0MK	-
-	-	3NC2240-0MK	-	-	-	-
-	-	-	-	3NC2340-0MK	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	3NC2650-0MK
-	-	-	-	-	3NC1850-0MK	-
-	-	-	3NC2250-0MK	-	-	-
-	-	-	-	-	-	3NC2663-0MK
-	-	-	3NC2263-0MK	-	-	-
-	-	-	3NC2280-0MK	-	-	-
-	-	-	3NC2200-0MK	-	-	-
-	-	-	-	For further currents for operational class gG, see page 7/59 Operational class aR, see page 7/62	-	-

7

SITOR semiconductor fuses

Cylindrical fuses, operational class aR

Size 10 × 38 mm¹⁾

Size 14 × 51 mm

Standard



With striking pin



I _n	Operating value I ² t	Power loss P _v	U _n AC/DC 600/700 V ²⁾		U _n AC/DC 660/- V			U _n AC/DC 690/600 V ¹⁾
			600/- V	600/- V	660/- V	690/700 V ²⁾	690/250 V	690/600 V ¹⁾
1 A	1.2 A ² s	5 W	-	-	3NC1401	-	-	-
2 A	10 A ² s	3 W	-	-	3NC1402	-	-	-
3 A	8 A ² s	1.2 W	3NC1003	-	-	-	-	-
	15 A ² s	2.5 W	-	-	3NC1403	-	-	-
4 A	25 A ² s	3 W	-	-	3NC1404	-	-	-
5 A	11 A ² s	1.5 W	-	-	-	3NC1405	-	-
6 A	11 A ² s	1.5 W	-	-	-	3NC1406	-	-
	20 A ² s	1.5 W	3NC1006	-	-	-	-	-
8 A	30 A ² s	2 W	3NC1008	-	-	-	-	-
10 A	22 A ² s	4 W	-	-	-	3NC1410	-	-
	32 A ² s	4 W	-	-	-	-	-	3NC1410-5
	60 A ² s	2.5 W	3NC1010	-	-	-	-	-
12 A	110 A ² s	3 W	3NC1012	-	-	-	-	-
15 A	63 A ² s	5.5 W	-	-	-	-	-	3NC1415-5
	70 A ² s	5.5 W	-	-	-	3NC1415	-	-
16 A	150 A ² s	3.5 W	3NC1016	-	-	-	-	-
20 A	100 A ² s	6 W	-	-	-	3NC1420	-	-
	200 A ² s	4.8 W	3NC1020	-	-	-	-	-
	220 A ² s	4.6 W	-	-	-	-	-	-
	234 A ² s	6 W	-	-	-	-	-	3NC1420-5
	240 A ² s	5 W	-	-	-	-	-	-
25 A	250 A ² s	6 W	3NC1025	-	-	-	-	-
	300 A ² s	5.6 W	-	-	-	-	-	-
	320 A ² s	7 W	-	-	-	3NC1425	-	-
	350 A ² s	6 W	-	-	-	-	-	-
	378 A ² s	7 W	-	-	-	-	-	3NC1425-5
30 A	400 A ² s	9 W	-	-	-	3NC1430	-	-
	466 A ² s	9 W	-	-	-	-	-	3NC1430-5
32 A	450 A ² s	7 W	-	-	-	-	-	-
	500 A ² s	7.5 W	-	3NC1032	-	-	-	-
	500 A ² s	8 W	-	-	-	-	-	-
40 A	600 A ² s	7.6 W	-	-	-	3NC1432	-	3NC1432-5
	700 A ² s	8.5 W	-	-	-	-	-	-
	750 A ² s	8 W	-	-	-	3NC1440	-	3NC1440-5
50 A	800 A ² s	9 W	-	-	-	-	-	-
	1350 A ² s	9.5 W	-	-	-	-	-	-
	1500 A ² s	9.5 W	-	-	-	-	-	-
	1800 A ² s	9 W	-	-	-	3NC1450	-	3NC1450-5
63 A	26000 A ² s	11.6 W	-	-	-	-	-	-
	2100 A ² s	16.7 W	-	-	-	-	3NC1463-0MK	-
	2600 A ² s	11 W	-	-	-	-	-	-
80 A	3000 A ² s	11 W	-	-	-	-	-	-
	3500 A ² s	22.5 W	-	-	-	-	-	-
	5500 A ² s	13.5 W	-	-	-	-	-	-
100 A	6000 A ² s	13.5 W	-	-	-	-	-	-
	5400 A ² s	31.5 W	-	-	-	-	-	-
	8000 A ² s	16 W	-	-	-	-	-	-
125 A	8500 A ² s	16 W	-	-	-	-	-	-
	11800 A ² s	39 W	-	-	-	-	-	-
	29000 A ² s	35.3 W	-	-	-	-	-	-

Further information

Catalog LV 10

¹⁾ Observe DC voltage acc. to UL, time constant and minimum breaking current MBC

²⁾ CCC approval

Photovoltaic cylindrical fuse links

Operational class gPV

Size 10 × 38 mm



Size 10 × 85 mm



I _n DC	Power loss P _v	Power loss P _v at 70% ¹⁾	U _n DC	U _n DC	1500 V
			1000 V	1200 V	
2 A	1.4 W	0.6 W	3NW6002-4	–	–
	2.7 W	1.1 W	–	–	3NW6604-4
4 A	1.6 W	0.7 W	3NW6004-4	–	–
	3.0 W	1.2 W	–	–	3NW6601-4
6 A	1.7 W	0.7 W	3NW6001-4	–	–
	3.6 W	1.5 W	–	–	3NW6608-4
8 A	1.9 W	0.8 W	3NW6008-4	–	–
	3.7 W	1.6 W	–	–	3NW6603-4
10 A	2.3 W	1.0 W	3NW6003-4	–	–
	3.3 W	1.4 W	–	–	3NW6606-4
12 A	2.7 W	1.1 W	3NW6006-4	–	–
	3.7 W	1.6 W	–	–	3NW6605-4
16 A	3.2 W	1.3 W	3NW6005-4	–	–
	4.0 W	1.7 W	–	3NW6607-4	–
20 A	3.4 W	1.4 W	3NW6007-4	–	–

¹⁾ Tested in fuse holders 3NW7013-4 and 3NW7613-4.

Class CC fuse links

Acc. to UL




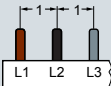
		Characteristic: Slow	Characteristic: Slow, current-limiting	Characteristic: Quick
				
I_n	I_n ¹⁾			
0.6 A	6/10 A	3NW1006-OHG	–	–
0.8 A	8/10 A	3NW1008-OHG	–	–
1 A	–	3NW1010-OHG	3NW3010-OHG	3NW2010-OHG
1.5 A	1 ½ A	3NW1015-OHG	–	–
2 A	–	3NW1020-OHG	3NW3020-OHG	3NW2020-OHG
2.5 A	–	3NW1025-OHG	–	–
3 A	–	3NW1030-OHG	3NW3030-OHG	3NW2030-OHG
4 A	–	3NW1040-OHG	3NW3040-OHG	3NW2040-OHG
5 A	–	3NW1050-OHG	3NW3050-OHG	3NW2050-OHG
6 A	–	3NW1060-OHG	3NW3060-OHG	3NW2060-OHG
7.5 A	–	3NW1075-OHG	–	–
8 A	–	3NW1080-OHG	3NW3080-OHG	3NW2080-OHG
10 A	–	3NW1100-OHG	3NW3100-OHG	3NW2100-OHG
12 A	–	–	3NW3120-OHG	3NW2120-OHG
15 A	–	3NW1150-OHG	3NW3150-OHG	3NW2150-OHG
20 A	–	3NW1200-OHG	3NW3200-OHG	3NW2200-OHG
25 A	–	3NW1250-OHG	3NW3250-OHG	3NW2250-OHG
30 A	–	3NW1300-OHG	3NW3300-OHG	3NW2300-OHG

¹⁾ American English wording

Busbars

According to IEC and UL, can be cut



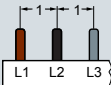
Pin spacing 1 MW

Pin spacing in MW (1 MW = 18 mm)	Application	Length	Version	Conductor cross-section	Article No.
Single-phase					
	For MINIZED D01 fuse switch disconnectors	220 mm	With end caps	16 mm ²	5ST2186
		1000 mm	Without end caps	16 mm ²	5ST2190
Single-phase, angled					
	For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm For SITOR cylindrical fuse holders 10 × 38 mm For Class CC fuse holders	214 mm	With end caps	16 mm ²	5ST3700
		1016 mm	Without end caps	16 mm ²	5ST3701
Two-phase					
	For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm For SITOR cylindrical fuse holders 10 × 38 mm For Class CC fuse holders	214 mm	With end caps	16 mm ²	5ST3704
		1016 mm	Without end caps	16 mm ²	5ST3705
	For MINIZED D01 fuse switch disconnectors	220 mm	With end caps	16 mm ²	5ST2187
		1000 mm	Without end caps	16 mm ²	5ST2191
Three-phase					
	For cylindrical fuse holders 8 × 32 mm and 10 × 38 mm For SITOR cylindrical fuse holders 10 × 38 mm For Class CC fuse holders	214 mm	With end caps	16 mm ²	5ST3708
		1016 mm	Without end caps	16 mm ²	5ST3710
	For MINIZED D01 fuse switch disconnectors	220 mm	With end caps	16 mm ²	5ST2188
		1000 mm	Without end caps	16 mm ²	5ST2192

7



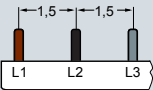
According to UL 508, can be cut

Pin spacing 1 MW

Pin spacing in MW (1 MW = 18 mm)	Application	Length	Version	Conductor cross-section	Article No.
Single-phase					
	For Class CC fuse holders 10 × 38 mm (3NC1091, 3NW7513-0HG)	1000 mm	Without end caps	18 mm ²	5ST3701-0HG
Two-phase					
	For Class CC fuse holders 10 × 38 mm (3NC1092, 3NW7523-0HG)	1000 mm	Without end caps	18 mm ²	5ST3705-0HG
Three-phase					
	For Class CC fuse holders 10 × 38 mm (3NC1093, 3NW7533-0HG)	1000 mm	Without end caps	18 mm ²	5ST3710-0HG

According to IEC and UL, can be cut



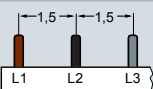
Pin spacing 1.5 MW

Pin spacing in MW (1 MW = 18 mm)	Application	Length	Version	Conductor cross-section	Article No.
Single-phase					
	For NEOZED D01 / D02 fuse bases made of molded plastic 5SG1.30, 5SG1.31, 5SG5.30	1000 mm	Without end caps, non-insulated	36 mm ²	5SH5322
	For NEOZED D01 / D02 fuse bases made of ceramic with clamp-type terminals and screw head contacts		Without end caps	24 mm ²	5SH5517
Single-phase, angled					
	For MINIZED D02 switch disconnectors 5SG71.3 For NEOZED D01 / D02 fuse bases made of molded plastic 5SG1301, 5SG1701, 5SG5301, 5SG5701, 5SG1302, 5SG1702, 5SG5302, 5SG5702 For NEOZED D01 / D02 fuse bases made of ceramic with saddle terminals For cylindrical fuse holders 14 × 51 mm For SITOR cylindrical fuse holders 14 × 51 mm	1016 mm	Without end caps	16 mm ²	5ST3703
Three-phase					
	For MINIZED D02 switch disconnectors 5SG71.3 For NEOZED D01 / D02 fuse bases made of molded plastic 5SG1301, 5SG1701, 5SG5301, 5SG5701, 5SG1302, 5SG1702, 5SG5302, 5SG5702 For NEOZED D01 / D02 fuse bases made of ceramic with saddle terminals For cylindrical fuse holders 14 × 51 mm For SITOR cylindrical fuse holders 14 × 51 mm	1016 mm	Without end caps	16 mm ²	5ST3714
	For NEOZED D01 / D02 fuse bases made of molded plastic 5SG1.30, 5SG1.31, 5SG5.30 For NEOZED D01 / D02 fuse bases made of ceramic with clamp-type terminals and screw head contacts	1000 mm	Without end caps	16 mm ²	5SH5320

7

According to UL 508, can be cut

Pin spacing 1.5 MW

Pin spacing in MW (1 MW = 18 mm)	Application	Length	Version	Conductor cross-section	Article No.
1-phase					
	For fuse holders 14 × 51 mm (3NC1491, 3NW7111)	1000 mm	Without end caps	18 mm ²	5ST3703-0HG
				25 mm ²	5ST3701-2HG
Two-phase					
	For fuse holders 14 × 51 mm (3NC1492, 3NW7121)	1000 mm	Without end caps	25 mm ²	5ST3705-2HG
3-phase					
	For fuse holders 14 × 51 mm (3NC1493, 3NW7131)	1000 mm	Without end caps	18 mm ²	5ST3714-0HG
				25 mm ²	5ST3710-2HG

Busbars

Accessories

For busbars according to IEC

Terminals			
  	<ul style="list-style-type: none"> For NEOZED D01/D02 fuse bases made of ceramic For DIAZED DII/DIII fuse bases made of ceramic 		
	Terminal version	Conductor cross-section	Article No.
	Terminal version S	2 ... 25 mm ²	5SH5327
	Terminal versions B and K	6 ... 25 mm ²	5SH5328
	For the infeed of fork-type or pin busbars	6 ... 35 mm ²	5ST2157
Bus-mounting terminal			
	<ul style="list-style-type: none"> For DIAZED EZR bus-mounting bases Non-insulated 		
	Conductor cross-section	Article No.	
	1.5 ... 16 mm ²	8JH4122	
10 ... 35 mm ²	8JH4124		
Touch protection			
	<ul style="list-style-type: none"> For free connections, yellow (RAL 1004) 5 × 1 pin 		
			Article No.
			5ST3655
End caps			
  	Version	For bar type	Article No.
	For single-phase busbars	5ST2190	5ST2196
		5ST37 and 5SH55	5ST3748
	For two-phase and three-phase busbars	5ST2191 and 5ST2192	5ST2197
		5ST37 and 5SH5320	5ST3750

For busbars according to UL 508

Terminals according to UL 508



Version	Infeed	Article No.
For busbars 35 mm ²	Device	5ST3770-0HG
For busbars 30 mm ²	Busbar	5ST3770-1HG

Busbar touch protection according to UL 508



- For free connections, yellow (RAL 1004) 5 × 1 pin

Article No.
5ST3655-0HG

End caps for 5ST37. ...HG



Version	Article No.
For single-phase busbars	5ST3748-0HG
For two- and three-phase busbars	5ST3750-0HG

LV HRC signal detectors, electronic fuse monitoring

LV HRC signal detectors



- Only for SIEMENS LV HRC fuse links 3NA3, 3NA7, 3ND with non-insulated grip lugs
- Rated voltage of up to 690 V AC / 600 V DC
- Contact: Microswitches 250 V AC, 6 A
- Connection: Flat termination 2.3 mm

Fuse size	Article No.
000 ... 4	3NX1021

Signal detector links



- Rated voltage of up to 690 V AC / 600 V DC

Fuse size	Response value	Application	Article No.
000 ... 4	>9 V / 2.5 A	For standard applications	3NX1022
	>2 V / 7 A	Only for meshed networks	3NX1023

Signal detector tops



- Only for SIEMENS LV HRC fuse links 3NA3, 3NA7, 3ND with non-insulated grip lugs
- Rated voltage of up to 690 V AC / 600 V DC
- Contact: Microswitch 230 V AC, 5 A, 1 CO
- Connection: Flat termination 2.3 mm

Fuse size	Article No.
000, 00, 1, 2	3NX1024

Electronic fuse monitor



- For all low-voltage fuse systems
- For monitoring all types and versions of melting fuses that cannot be equipped with a fault signal contact
- Can be used in asymmetric systems afflicted with harmonics and regenerative feedback motors
- Signal also for disconnected loads

U _e AC	I _n	U _c	Article No.
230 V	4 A	3 AC 380 ... 415 V	5TT3170

Electronic fuse monitoring for remote display of tripped fuses



- Remote display by auxiliary contact (1 CO)
- Local detection by integrated LED
- For all sizes
- For 3KF LV HRC and 3KF SITOR

U _e AC	I _n	U _c	Article No.
230 V	1.5 A	3 AC 690 V	3KF9010-1AA00

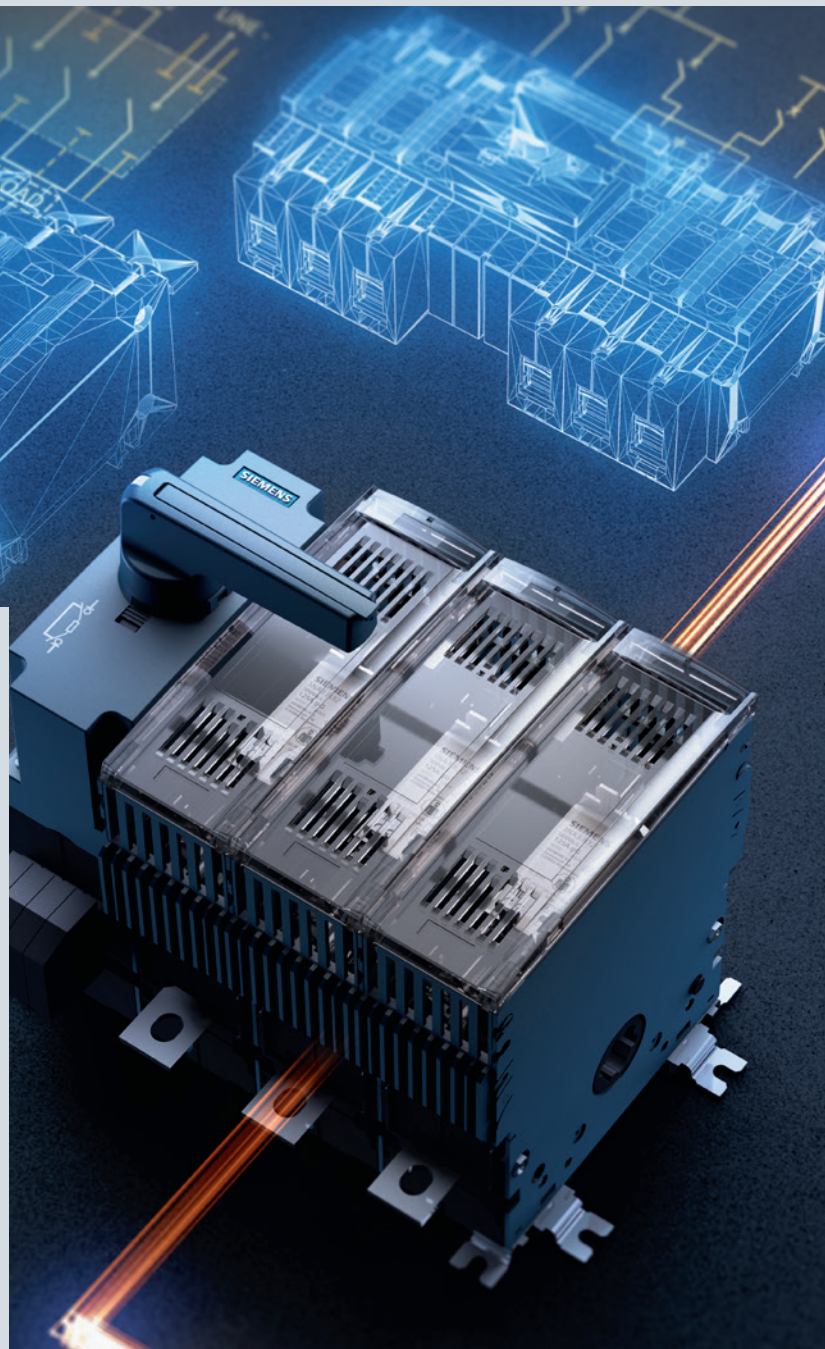
End-to-end safety for user and systems

Assembly or maintenance: work on electrical installations and devices must be made sufficiently safe to prevent accidents or harm. The safety of the operating personnel is paramount.

To ensure this, it is necessary to be able to disconnect the installation safely from the power supply. Siemens switch disconnectors permit permanent switch-on and switch-off under a load and thus protect the user from electric shock. They also prevent unauthorized switching on of machines.

The devices are simply mounted and quickly commissioned. Additional functions can be retrofitted at any time – thanks to the modular design of the devices and a comprehensive range of accessories.

Convenient ordering processes and fast delivery optimize stock management and reduce the time and money expended. You can also make use of our CAX data for automated, simplified planning and configuring.



Switch Disconnectors



All the information you need	8/2
Quick selection guide	8/4
Fuseless switch disconnectors	8/6
Quick selection guide	8/6
3LD3 main control and EMERGENCY-STOP switches	8/8
3LD2 main control and EMERGENCY-STOP switches	8/18
3KD switch disconnectors	8/44
5TE1 switch disconnectors	8/58
Fuse switch disconnectors	8/60
Quick selection guide	8/60
3NP1 fuse switch disconnectors	8/62
3NP5 fuse switch disconnectors	8/74
3NJ4 fuse switch disconnectors	8/78
5SG76 fuse switch disconnectors	8/90
Switch disconnectors with fuse	8/92
Quick selection guide	8/92
3KF LV HRC and 3KF SITOR switch disconnectors	8/96
3KF LV HRC switch disconnectors	8/104
3KF SITOR switch disconnectors	8/106
Accessories for 3KF LV HRC and 3KF SITOR switch disconnectors	8/107
3NJ62 switch disconnectors	8/112
5SG switch disconnectors with fuse	8/124

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about switch disconnectors, please visit our website
www.siemens.com/switching-devices

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information
www.siemens.com/lowvoltage/product-support

- Technical basic information – Switch disconnectors and transfer switching equipment (**109763354**)

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products
www.siemens.com/conversion-tool

Configurators

Exactly the right switch disconnecter for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your 3NJ62 switch disconnecter at
www.siemens.com/lowvoltage/3nj62-configurator

Choose the right SITOR semiconductor fuse for your application
www.siemens.com/lowvoltage/sitor-configurator

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Switching devices
sie.ag/2mryctm

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

You will find order support for the electrical wholesale trade carrying fast-selling items in the Siemens Industry Online Support at
www.siemens.com/lowvoltage/catalogs

- Order support – 3KD switch disconnectors – End-to-end safety for user and systems (**109750228**)
- Order support – 3LD2 main control and EMERGENCY-STOP-switching equipment – End-to-end safety for user and systems (**109755626**)
- Order support – 3NP1 fuse switch disconnectors – End-to-end safety for user and systems (**109755624**)
- Order support – 3KF switch disconnectors with fuses – End-to-end safety for user and systems (**109750229**)
- Order support – 3NJ6 switch disconnectors with fuses – End-to-end safety for user and systems (**109755619**)

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Switch disconnectors ([109769744](#))
- Configuration manual Fuse systems ([45314810](#))
- Configuration manual Transfer switching equipment and load transfer switches ([109769745](#))
- Configuration manual Busbar systems ([109769746](#))
- System manual SENTRON 3NJ62 In-Line Plug-In switch disconnectors with fuses ([31753460](#))
- Equipment manual 3KD switch disconnectors ([109758120](#))
- System manual SENTRON 3NP1 fuse switch disconnectors ([33515690](#))

Technical overview of switch disconnectors



The fast way to get you to our online services

This page provides you with comprehensive information and links on switch disconnectors

www.siemens.com/lowvoltage/product-support ([109764946](#))

Quick selection guide

Load switching devices for all applications



Fuseless switch disconnectors ³⁾

Functional switching ¹⁾



		Type	3LD3	3LD2	3KD	3VA	5TE
		Rated current I_n	16 ... 63 A	16 ... 250 A	16 ... 1600 A	63 ... 630 A	100 ... 200 A
		Short-circuit current max.	6 kA	50 kA	100 kA	110 kA ⁵⁾	33 kA
Selection acc. to utilization category	AC max.		AC-3	AC-3	AC-23A	AC-23A	AC-23A
	DC max.		–	DC-22A	DC-23A	DC-23A (up to 250 A)	DC-23A
		Suitable fuses	–	–	–	–	–
Types of mounting	Floor mounting		■	■	■	■	–
	Mounting on a standard mounting rail		■	■	■ (up to 200 A)	■ (up to 160 A)	■
	Front mounting (e.g. in panel door)		■	■	–	–	–
	Mounting on busbar systems (spacing of the busbars)		–	–	–	■	–
	Draw-out technology		–	–	–	■	–
Methods of operation	Manual from the front		■	■	■	■	■
	Manual from the side		–	–	■	■	–
	Remote-controllable		–	–	–	■	–
Number of poles	1-pole		–	–	–	–	–
	2-pole		–	–	–	–	■
	3-pole		■	■	■	■	■
	4-pole		■	■	■	■	■
	6-pole		–	■	■	–	–
Switching function	All poles		■	■	■	■	■
	Individual poles switchable		–	–	–	–	–

More information

See page 8/6

¹⁾ According to DIN VDE 0100-200, functional switching is an operation intended to switch on or off or vary the supply of electric energy to an electrical installation or parts of it for normal operating purposes.

²⁾ Devices for occasional switching usually have a substantially lower electrical endurance and are switched no more than 1× per minute in the tests.

³⁾ Pure switching without protection function

⁴⁾ The suitable fuses protect persons, motors, installations and generators against short circuit and overload

⁵⁾ With a line-side fuse for 415 V



Fuse switch disconnectors ⁴⁾

Occasional switching ²⁾



3NP1	3NP5	3NJ4	5SG76
160 ... 630 A	160 ... 630 A	160 ... 1600 A	16 A
120 kA	100 kA	120 kA	50 kA
AC-23B	AC-23B	AC-23B	AC-22A
DC-23B	DC-23B	-	-

IEC LV HRC	IEC LV HRC	IEC LV HRC	Neozed
■	■	-	-
■	-	-	■
-	-	-	-
40/60 mm	40/60 mm	60/100/185 mm	-
-	-	-	-
■	■	■	■
-	-	-	-
-	-	-	-
■	-	-	■
■	-	-	■
■	■	■	■
■	-	-	■
-	-	-	-
■	■	■	■
-	-	■	-

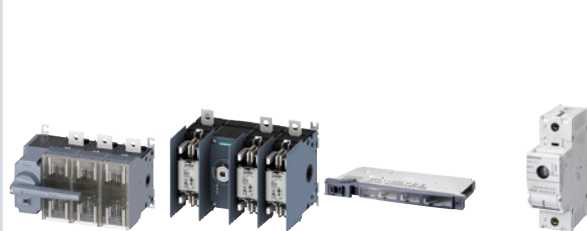
See page 8/60



Switch disconnectors with fuse ⁴⁾

Functional switching ¹⁾

Occasional switching ²⁾



3KF LV HRC	3KF SITOR	3NJ62	5SG71/72
32 ... 800 A	32 ... 800 A	63 ... 630 A	63 A
100 kA	100 kA	100 kA	50 kA
AC-23A	AC-23A	AC-23B	AC-23A
DC-23A	DC-23A	DC-23B	DC-22B

IEC LV HRC	IEC LV HRC, optimized for semiconductor protection	IEC LV HRC/BS	Neozed
■	■	-	-
■	■	-	■
-	-	-	-
-	-	185 mm	60 mm
-	-	■	-
■	■	■	■
■	■	-	-
-	-	■	-
-	-	-	■
-	-	■	■
■	■	■	■
■	■	■	■
-	-	-	-
■	■	■	■
-	-	-	-

See page 8/92

Fuseless switch disconnectors

Quick selection guide



3LD3



3LD2



Type

	3LD 30	3LD 31	3LD 32	3LD 33	3LD 34	3LD 20	3LD 21	3LD 22	3LD 25	3LD 27	3LD 28	3LD 23	3LD 24
--	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

General technical specifications acc. to IEC 60947-3

General technical specifications

Rated uninterrupted current I_u	A	16	25	32	40	63	16	25	32	63	100	125	160	250		
Rated operational voltage U_e	At 50/60 Hz AC	V					690					690				
	At DC – 2 conducting paths in series	V					–					–				
	At DC – 3 conducting paths in series	V					–					–				
	At DC – 4 conducting paths in series	V					–					–				

Operating and short-circuit behavior

Rated operational current I_e ¹⁾		A	16	25	32	40	63	16	25	32	63	100	125	160	250
	At AC-21A AC-21B at 400 V	A	16	25	32	40	63	16	25	32	63	100	125	160	250
	At AC-21A AC-21B at 690 V	A	16	25	32	40	63	16	25	32	63	100	125	160	250
	At AC-22A AC-22B at 400 V	A	16	20	22	36	43	16	25	32	63	100	125	140	230
	At AC-22A AC-22B at 690 V	A	9	11	13	17	22	16	25	32	63	100	125	140	230
	At AC-23A AC-23B at 400 V	A	16	20	22	36	43	16	20	22	43	70	80	132	224
	At AC-23A AC-23B at 690 V	A	9	11	13	17	22	9	11	13	22	34	39	47	58
	At DC-21A DC-21B at 110 V	A	–	–	–	–	–	–	–	–	–	–	–	–	–
	At DC-21A DC-21B at 220 V	A	–	–	–	–	–	–	–	–	–	–	–	–	–
	At DC-21A DC-21B at 440 V	A	–	–	–	–	–	–	–	–	–	–	–	–	–
	At DC-22A DC-22B at 220 V	A	–	–	–	–	–	–	–	–	–	–	–	–	–
	At DC-22A DC-22B at 440 V	A	–	–	–	–	–	–	–	–	–	–	–	–	–
	At DC-23A DC-23B at 220 V	A	–	–	–	–	–	–	–	–	–	–	–	–	–
	At DC-23A DC-23B at 440 V	A	–	–	–	–	–	–	–	–	–	–	–	–	–
Motor switching capacity	At AC-23A AC-23B at 400 V	kW	7.5	9.5	11.5	18.5	22	7.5	9.5	11.5	22	37	45	75	132
	At AC-23A AC-23B at 690 V	kW	7.5	9	11.5	15	18.5	7.5	9.5	11.5	18.5	30	37	45	55
	At AC-3 at 400 V	kW	5.5	7.5	9.5	11.5	18.5	5.5	7.5	9.5	18.5	30	37	50	110
	At AC-3 at 690 V	kW	5.5	7.5	9.5	11.5	15	5.5	7.5	9.5	15	22	30	37	45
Rated short-time withstand current I_{cw}	At 690 V AC (t=1 s)	kA	0.5	0.5	0.5	1	1	0.34	0.64	0.64	1.26	2	2	4	4
Rated conditional short-circuit current with upstream fuse	At 400/500 V AC	kA	6	6	6	6	6	50	50	50	50	50	25	50	50
	At 690 V AC	kA	6	6	6	6	6	50	50	50	50	50	25	50	50

Degree of protection

Maximum achievable IP degree of protection (with a rotary operating mechanism)

IP65

IP65

General technical specifications acc. to UL

General technical specifications

Certification according to UL standard		UL 508						UL 508						
I_n acc. to UL 508	A	16	25	32	40	63	16	25	32	63	100	125	160	250
U_e acc. to UL 508	V AC	600						600						

Operating and short-circuit behavior

Operational power, three-phase	At 480 V	hp	7.5	10	20	20	25	7.5	10	20	40	60	75	75	100			
	At 600 V	hp	10	15	20	20	30	10	15	20	50	75	100	50	75			
Short circuit current rating (SCCR)	At 480 V at 600 V	kA	5 5				5 5				5 5				10 10 10 10 10 10 10 10			
Fuse type			RK5						RK5									

More information

Catalog LV 10 10/2019

See page 8/8

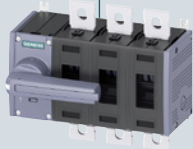
See page 8/18

Catalog LV 10 04/2019

See pages 7/6 ... 7/20

See pages 7/21 ... 7/45

3KD



5TE



3KD 16	3KD 22	3KD 26	3KD 28	3KD 30	3KD 32	3KD 34	3KD 36..-N	3KD 36..-P	3KD 38	3KD 40	3KD 42	3KD 44	3KD 46	3KD 48	3KD 50	3KD 52	3KD 54	5TE 1.1	5TE 1.2	5TE 1.3	5TE 1.4
16	32	63	80	100	125	160	200	200	250	315	400	500	630	800	1000	1250	1600	100	125	160	200
690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690	690
220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220	110	110	110	110
440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	440	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	220	220	220	220
16	32	63	80	100	125	160	200	200	250	315	400	500	630	800	1000	1250	1600	100	100	160	200
16	32	63	80	100	125	160	200	200	250	315	400	500	630	800	1000	1250	1600	100	100	160	200
16	32	63	80	100	125	160	200	200	250	315	400	500	630	800	1000	1250	1600	-	-	-	-
16	32	63	80	100	125	160	200	200	250	315	400	500	630	800	1000	1250	1600	-	-	-	-
16	32	63	80	100	125	160	160	200	250	315	400	500	630	800	1000	1250	1600	80	80	125	125
16	32	63	80	100	125	125	125	200	250	315	315	500	630	800	1000	1250	1600	40	40	63	80
16	32	63	80	100	125	160	160	200	250	315	400	500	630	800	1000	1250	1600	100	100	160	160
16	32	63	80	100	125	160	160	200	250	315	400	500	630	800	1000	1250	1600	100	100	160	160
16	32	63	80	100	125	160	160	200	250	315	400	500	630	800	1000	1250	1600	100	100	160	160
16	32	63	80	100	125	160	160	200	250	315	400	500	630	800	-	-	-	-	-	-	-
16	32	63	80	100	125	160	160	200	250	315	400	500	630	800	-	-	-	-	-	-	-
16	32	63	80	100	125	160	160	200	250	315	400	500	630	800	-	-	-	-	-	-	-
16	32	63	80	100	125	160	160	200	250	315	400	500	630	800	-	-	-	100	100	160	160
7.5	15	30	45	55	55	90	90	110	132	160	200	250	355	400	560	710	900	44	44	69	88
11	30	55	75	90	110	110	110	185	220	315	315	500	630	800	1000	1000	1000	36	36	60	76
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	3	4	4	4	4	4	13	13	13	13	30	30	30	50	50	50	2.5	2.5	3	3
100	100	100	100	100	100	100	50	100	100	65	65	100	100	100	100	80	80	50	50	50	50
100	100	100	65	65	65	65	50	65	65	35	35	65	65	50	-	-	-	33	33	33	33
IP65																		No info.			
-																		UL 508			
-																		-	80	100	125
-																		480			
-																		-	20	15	15
-																		-	-	-	-
-																		-	50	50	50
-																		-	J	J	J
See page 8/44																		See page 8/58			
See pages 7/46 ... 7/81																		See pages 7/82 ... 7/86			

3LD3 main control and EMERGENCY-STOP switches

System overview

Basic units for front mounting



3P rotary operating mechanisms



3P knob-operated mechanisms



3P+N rotary operating mechanisms



3P+N knob-operated mechanisms

Basic units for floor mounting



3P rotary operating mechanisms



3P knob-operated mechanisms



3P+N rotary operating mechanisms



3P+N knob-operated mechanisms

Basic units for installation in distribution boards



3P knob-operated mechanisms



3P basic switches without knob-operated mechanism



3P+N knob-operated mechanisms



3P+N basic switches without knob-operated mechanism

Additional poles and auxiliary switches



N switching contacts



N/PE terminals



Auxiliary switches

Operating mechanisms



Rotary operating mechanisms for front or floor mounting (center hole)



Knob-operated mechanisms for front or floor mounting (center hole)



Door-coupling rotary operating mechanisms



Door-coupling knob-operated mechanisms

Other accessories

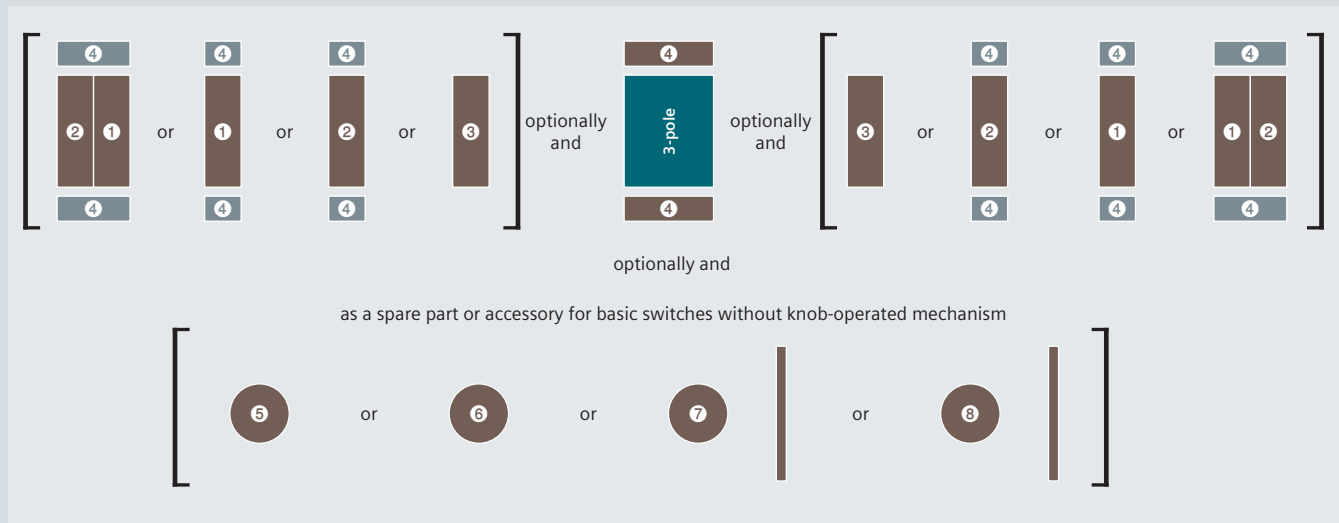


Terminal covers, 1 and 3-pole



Inscription labels

Mounting concept and accessories



Legend

- 1 N switching contact ¹⁾
- 2 N/PE terminal
- 3 Auxiliary switch
- 4 Terminal cover
- 5 Rotary operating mechanism, center-hole mounting
- 6 Knob-operated mechanism, center-hole mounting
- 7 Door-coupling rotary operating mechanism, center-hole mounting
- 8 Door-coupling knob-operated mechanism, center-hole mounting

¹⁾ The N switching contact 1 first has to be mounted on the basic unit



Mounting types

Front mounting



The switches for front mounting are mounted on the inside of the panel door via the operating mechanism. The switches are mounted via the 22.5 mm diameter center hole.

You will find further information under:



Floor mounting



The switches for floor mounting are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch. The overall depth can be adapted to individual requirements by adjusting the switch shaft length.

Distribution board mounting



The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. They have cap and mounting dimensions acc. to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers. The selector switches can be locked in their OFF position with no more than one padlock with a hasp thickness of 4 to 6 mm.

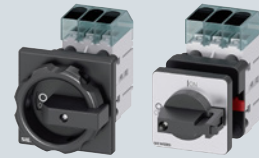
Basic switches without knob-operated mechanism



For the basic switch variant without knob-operated mechanism, the appropriate door-coupling rotary operating mechanism can be ordered separately.

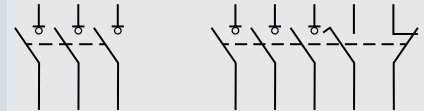
3LD3 main control and EMERGENCY-STOP switches

Front mounting, 6 kA_{rms}



Operating mechanisms, black

Number of poles 3P



Uninterrupted current I _u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Rotary operating mechanisms				
16 A	7.5 kW	5.5 kW	3LD3054-0TK51	3LD3054-1TK51
25 A	9 kW	7.5 kW	3LD3154-0TK51	3LD3154-1TK51
32 A	11.5 kW	9.5 kW	3LD3254-0TK51	3LD3254-1TK51
40 A	18.5 kW	11.5 kW	3LD3354-0TK51	3LD3354-1TK51
63 A	22 kW	18.5 kW	3LD3454-0TK51	3LD3454-1TK51
Knob-operated mechanisms				
16 A	7.5 kW	5.5 kW	3LD3050-0TK11	3LD3050-1TK11
25 A	9 kW	7.5 kW	3LD3150-0TK11	3LD3150-1TK11
32 A	11.5 kW	9.5 kW	3LD3250-0TK11	3LD3250-1TK11
40 A	18.5 kW	11.5 kW	3LD3350-0TK11	3LD3350-1TK11
63 A	22 kW	18.5 kW	3LD3450-0TK11	3LD3450-1TK11

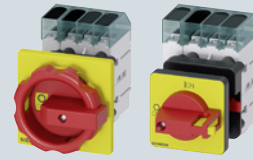
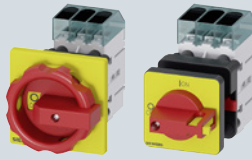
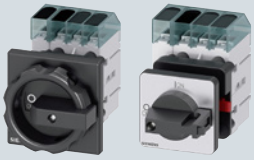
Scope of supply:

- Including terminal covers for the infeed side

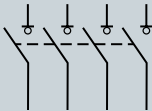
Accessories

3LD30 (16 A) 3LD31 (25 A) 3LD32 (32 A) 3LD33 (40 A) 3LD34 (63 A)

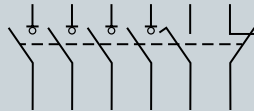
Additional poles		3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)		
	Variant							
	Switching contact for N conductor (4th contact)	Leading switch-on, lagging switch-off	3LD9340-0B	■	■	■	■	■
	N terminal	Through-type	3LD9340-2B	■	■	■	■	■
PE terminal	Through-type	3LD9340-3B	■	■	■	■	■	
Auxiliary switches								
	Contacts							
	1 NO + 1 NC	3LD9340-6B	■	■	■	■	■	
Rotary operating mechanisms								
	Color							
	Black	3LD9344-4C	■	■	■	■	■	
	Red/yellow	3LD9344-5C	■	■	■	■	■	
Knob-operated mechanisms								
	Color							
	Black	3LD9343-6C	■	■	■	■	■	
	Red/yellow	3LD9343-7C	■	■	■	■	■	



3P+N



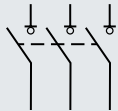
Without auxiliary switch



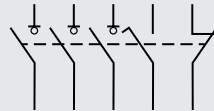
1 NO + 1 NC

Operating mechanisms, red/yellow

3P

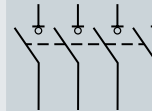


Without auxiliary switch

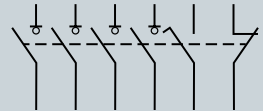


1 NO + 1 NC

3P+N



Without auxiliary switch



1 NO + 1 NC

3LD3054-OTL51
3LD3154-OTL51
3LD3254-OTL51
3LD3354-OTL51
3LD3454-OTL51

3LD3054-1TL51
3LD3154-1TL51
3LD3254-1TL51
3LD3354-1TL51
3LD3454-1TL51

3LD3054-OTK53
3LD3154-OTK53
3LD3254-OTK53
3LD3354-OTK53
3LD3454-OTK53

3LD3054-1TK53
3LD3154-1TK53
3LD3254-1TK53
3LD3354-1TK53
3LD3454-1TK53

3LD3054-OTL53
3LD3154-OTL53
3LD3254-OTL53
3LD3354-OTL53
3LD3454-OTL53

3LD3054-1TL53
3LD3154-1TL53
3LD3254-1TL53
3LD3354-1TL53
3LD3454-1TL53

3LD3050-OTL11
3LD3150-OTL11
3LD3250-OTL11
3LD3350-OTL11
3LD3450-OTL11

3LD3050-1TL11
3LD3150-1TL11
3LD3250-1TL11
3LD3350-1TL11
3LD3450-1TL11

3LD3050-OTK13
3LD3150-OTK13
3LD3250-OTK13
3LD3350-OTK13
3LD3450-OTK13

3LD3050-1TK13
3LD3150-1TK13
3LD3250-1TK13
3LD3350-1TK13
3LD3450-1TK13

3LD3050-OTL13
3LD3150-OTL13
3LD3250-OTL13
3LD3350-OTL13
3LD3450-OTL13

3LD3050-1TL13
3LD3150-1TL13
3LD3250-1TL13
3LD3350-1TL13
3LD3450-1TL13

8

3LD30 (16 A) 3LD31 (25 A) 3LD32 (32 A) 3LD33 (40 A) 3LD34 (63 A)

Terminal covers

- Pack of 4 units

Version

Article No.

For N switching contacts, N terminals or PE terminals

3LD9341-2A

3LD30 (16 A) 3LD31 (25 A) 3LD32 (32 A) 3LD33 (40 A) 3LD34 (63 A)

For 3-pole 3LD3 switch disconnectors

3LD9341-0A

3LD30 (16 A) 3LD31 (25 A) 3LD32 (32 A) 3LD33 (40 A) 3LD34 (63 A)

Inscription labels

- Pack of 10 units

Inscription

Article No.

German / English (Hauptschalter / Main Switch)

3LD9346-1A

3LD30 (16 A) 3LD31 (25 A) 3LD32 (32 A) 3LD33 (40 A) 3LD34 (63 A)

French / Spanish (Interrupteur Principal / Interruptor Principal)

3LD9346-2A

3LD30 (16 A) 3LD31 (25 A) 3LD32 (32 A) 3LD33 (40 A) 3LD34 (63 A)

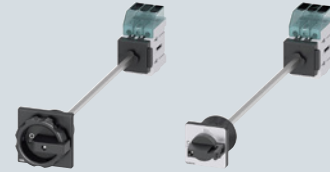
Without inscription

3LD9346-3A

3LD30 (16 A) 3LD31 (25 A) 3LD32 (32 A) 3LD33 (40 A) 3LD34 (63 A)

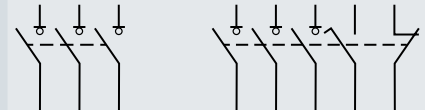
3LD3 main control and EMERGENCY-STOP switches

Floor mounting, 6 kA_{rms}



Operating mechanisms, black

Number of poles 3P



Uninterrupted current I _n At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Rotary operating mechanisms				
16 A	7.5 kW	5.5 kW	3LD3048-0TK51	3LD3048-1TK51
25 A	9 kW	7.5 kW	3LD3148-0TK51	3LD3148-1TK51
32 A	11.5 kW	9.5 kW	3LD3248-0TK51	3LD3248-1TK51
40 A	18.5 kW	11.5 kW	3LD3348-0TK51	3LD3348-1TK51
63 A	22 kW	18.5 kW	3LD3448-0TK51	3LD3448-1TK51
Knob-operated mechanisms				
16 A	7.5 kW	5.5 kW	3LD3040-0TK11	3LD3040-1TK11
25 A	9 kW	7.5 kW	3LD3140-0TK11	3LD3140-1TK11
32 A	11.5 kW	9.5 kW	3LD3240-0TK11	3LD3240-1TK11
40 A	18.5 kW	11.5 kW	3LD3340-0TK11	3LD3340-1TK11
63 A	22 kW	18.5 kW	3LD3440-0TK11	3LD3440-1TK11

Scope of supply:

- Including terminal covers for the infeed side

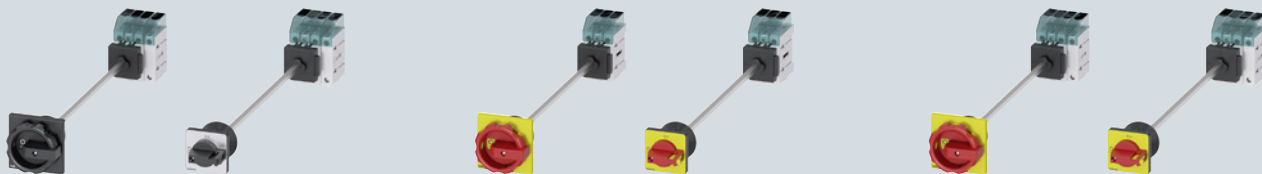
Mounting:

- Using screws or snap-on mounting on 35 mm mounting rails

Accessories

3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
-----------------	-----------------	-----------------	-----------------	-----------------

Additional poles					3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
	Variant	Contacts	Article No.						
	Switching contact for N conductor (4th contact)	Leading switch-on, lagging switch-off	3LD9340-0C	■	■	■	■	■	■
	N terminal	Through-type	3LD9340-2C	■	■	■	■	■	■
	PE terminal	Through-type	3LD9340-3C	■	■	■	■	■	■
Auxiliary switches									
		Contacts	Article No.						
		1 NO + 1 NC	3LD9340-6C	■	■	■	■	■	■
Rotary operating mechanisms									
	Version	Color	Article No.						
	Incl. funnel	Black	3LD9344-2C	■	■	■	■	■	■
		Red/yellow	3LD9344-3C	■	■	■	■	■	■
Knob-operated mechanisms									
	Version	Color	Article No.						
	Incl. funnel	Black	3LD9343-4C	■	■	■	■	■	■
		Red/yellow	3LD9343-5C	■	■	■	■	■	■



Operating mechanisms, red/yellow					
3P+N		3P		3P+N	
Without auxiliary switch	1 NO + 1 NC	Without auxiliary switch	1 NO + 1 NC	Without auxiliary switch	1 NO + 1 NC
3LD3048-OTL51	3LD3048-1TL51	3LD3048-OTK53	3LD3048-1TK53	3LD3048-OTL53	3LD3048-1TL53
3LD3148-OTL51	3LD3148-1TL51	3LD3148-OTK53	3LD3148-1TK53	3LD3148-OTL53	3LD3148-1TL53
3LD3248-OTL51	3LD3248-1TL51	3LD3248-OTK53	3LD3248-1TK53	3LD3248-OTL53	3LD3248-1TL53
3LD3348-OTL51	3LD3348-1TL51	3LD3348-OTK53	3LD3348-1TK53	3LD3348-OTL53	3LD3348-1TL53
3LD3448-OTL51	3LD3448-1TL51	3LD3448-OTK53	3LD3448-1TK53	3LD3448-OTL53	3LD3448-1TL53
3LD3040-OTL11	3LD3040-1TL11	3LD3040-OTK13	3LD3040-1TK13	3LD3040-OTL13	3LD3040-1TL13
3LD3140-OTL11	3LD3140-1TL11	3LD3140-OTK13	3LD3140-1TK13	3LD3140-OTL13	3LD3140-1TL13
3LD3240-OTL11	3LD3240-1TL11	3LD3240-OTK13	3LD3240-1TK13	3LD3240-OTL13	3LD3240-1TL13
3LD3340-OTL11	3LD3340-1TL11	3LD3340-OTK13	3LD3340-1TK13	3LD3340-OTL13	3LD3340-1TL13
3LD3440-OTL11	3LD3440-1TL11	3LD3440-OTK13	3LD3440-1TK13	3LD3440-OTL13	3LD3440-1TL13

		3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Door-coupling rotary operating mechanisms						
	Variant					
	Rotary operating mechanisms 66 × 66 mm					
	Color					
	Black	■	■	■	■	■
Red/yellow	■	■	■	■	■	
	Article No.					
	3LD9344-2CA	■	■	■	■	■
	3LD9344-3CA	■	■	■	■	■
	Color					
Black	■	■	■	■	■	
Red/yellow	■	■	■	■	■	
Terminal covers						
	• Pack of 4 units					
	Version					
	For N switching contacts, N terminals or PE terminals					
	3LD9341-2A	■	■	■	■	■
For 3LD3 3-pole switch disconnectors						
3LD9341-0A	■	■	■	■	■	
Inscription labels						
	• Pack of 10 units					
	Inscription					
	German / English (Hauptschalter / Main Switch)					
	3LD9346-1A	■	■	■	■	■
	French / Spanish (Interrupteur Principal / Interruptor Principal)					
3LD9346-2A	■	■	■	■	■	
Without inscription						
3LD9346-3A	■	■	■	■	■	

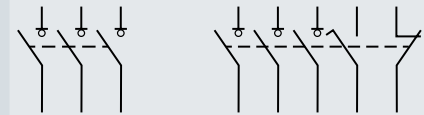
3LD3 main control and EMERGENCY-STOP switches

Installation in distribution boards, 6kA_{rms}



Operating mechanisms, black

Number of poles 3P



Uninterrupted current I _n At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Basic switch with masking plate and selector knob, standard rail mounting				
16 A	7.5 kW	5.5 kW	3LD3030-0TK11	3LD3030-1TK11
25 A	9 kW	7.5 kW	3LD3130-0TK11	3LD3130-1TK11
32 A	11.5 kW	9.5 kW	3LD3230-0TK11	3LD3230-1TK11
40 A	18.5 kW	11.5 kW	3LD3330-0TK11	3LD3330-1TK11
63 A	22 kW	18.5 kW	3LD3430-0TK11	3LD3430-1TK11
Basic switches without knob-operated mechanism				
16 A	7.5 kW	5.5 kW	3LD3010-0TK05	3LD3010-1TK05
25 A	9 kW	7.5 kW	3LD3110-0TK05	3LD3110-1TK05
32 A	11.5 kW	9.5 kW	3LD3210-0TK05	3LD3210-1TK05
40 A	18.5 kW	11.5 kW	3LD3310-0TK05	3LD3310-1TK05
63 A	22 kW	18.5 kW	3LD3410-0TK05	3LD3410-1TK05

Scope of supply:

- Basic switches without direct operating mechanism, incl. terminal covers for the infeed side

Mounting:

- Using screws or snap-on mounting on 35 mm mounting rails

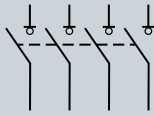
Accessories for switches for installation in distribution boards and basic switches without knob-operated mechanism

		3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)		
Additional poles								
	Variant							
	Switching contact for N conductor (4th contact)	Leading switch-on, lagging switch-off	3LD9340-0C	■	■	■	■	■
	N terminal	Through-type	3LD9340-2C	■	■	■	■	■
	PE terminal	Through-type	3LD9340-3C	■	■	■	■	■
Auxiliary switches								
	Contacts							
	1 NO + 1 NC	3LD9340-6C	■	■	■	■	■	
Terminal covers								
	Version							
	For N switching contacts, N terminals or PE terminals	3LD9341-2A	■	■	■	■	■	
	For 3LD3 3-pole switch disconnectors	3LD9341-0A	■	■	■	■	■	

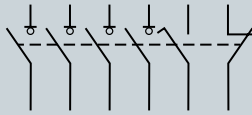


Operating mechanisms, red/yellow

3P+N

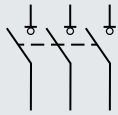


Without auxiliary switch

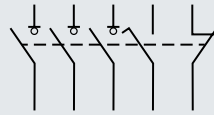


1 NO + 1 NC

3P

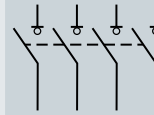


Without auxiliary switch

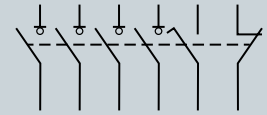


1 NO + 1 NC

3P+N



Without auxiliary switch



1 NO + 1 NC

3LD3030-OTL11	3LD3030-1TL11	3LD3030-OTK13	3LD3030-1TK13	3LD3030-OTL13	3LD3030-1TL13
3LD3130-OTL11	3LD3130-1TL11	3LD3130-OTK13	3LD3130-1TK13	3LD3130-OTL13	3LD3130-1TL13
3LD3230-OTL11	3LD3230-1TL11	3LD3230-OTK13	3LD3230-1TK13	3LD3230-OTL13	3LD3230-1TL13
3LD3330-OTL11	3LD3330-1TL11	3LD3330-OTK13	3LD3330-1TK13	3LD3330-OTL13	3LD3330-1TL13
3LD3430-OTL11	3LD3430-1TL11	3LD3430-OTK13	3LD3430-1TK13	3LD3430-OTL13	3LD3430-1TL13

3LD3010-OTL05	3LD3010-1TL05	–	–	–	–
3LD3110-OTL05	3LD3110-1TL05	–	–	–	–
3LD3210-OTL05	3LD3210-1TL05	–	–	–	–
3LD3310-OTL05	3LD3310-1TL05	–	–	–	–
3LD3410-OTL05	3LD3410-1TL05	–	–	–	–

Accessories for basic switches without operating mechanism

3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
-----------------	-----------------	-----------------	-----------------	-----------------

Rotary operating mechanisms



Version	Color	Article No.	3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Incl. funnel	Black	3LD9344-2C	■	■	■	■	■
	Red/yellow	3LD9344-3C	■	■	■	■	■

Knob-operated mechanisms



Version	Color	Article No.	3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Incl. funnel	Black	3LD9343-4C	■	■	■	■	■
	Red/yellow	3LD9343-5C	■	■	■	■	■

Door-coupling rotary operating mechanisms



Variant	Color	Article No.	3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Rotary operating mechanisms 66 × 66 mm	Black	3LD9344-2CA	■	■	■	■	■
	Red/yellow	3LD9344-3CA	■	■	■	■	■
Knob-operated mechanisms 48 × 48 mm	Black	3LD9343-4CA	■	■	■	■	■
	Red/yellow	3LD9343-5CA	■	■	■	■	■








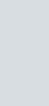
Inscription labels



Inscription	Article No.	3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
• Pack of 10 units						
German / English (Hauptschalter / Main Switch)	3LD9346-1A	■	■	■	■	■
French / Spanish (Interrupteur Principal / Interruptor Principal)	3LD9346-2A	■	■	■	■	■
Without inscription	3LD9346-3A	■	■	■	■	■

3LD3 main control and EMERGENCY-STOP switches

Accessories

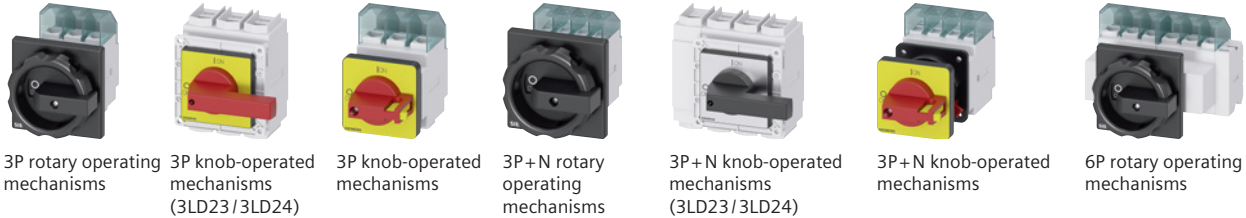
				3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Switching contacts for N conductor (4th contact)								
	Version For front mounting	Contacts Leading switch-on, lagging switch-off	Article No. 3LD9340-0B	■	■	■	■	■
	For floor mounting, installation in distribution boards and basic switches without knob-operated mechanism	Leading switch-on, lagging switch-off	3LD9340-0C	■	■	■	■	■
N terminals								
	Version For front mounting	Contacts Through-type	Article No. 3LD9340-2B	■	■	■	■	■
	For floor mounting, installation in distribution boards and basic switches without knob-operated mechanism	Through-type	3LD9340-2C	■	■	■	■	■
PE terminals								
	Version For front mounting	Contacts Through-type	Article No. 3LD9340-3B	■	■	■	■	■
	For floor mounting, installation in distribution boards and basic switches without knob-operated mechanism	Through-type	3LD9340-3C	■	■	■	■	■
Auxiliary switches								
	Version For front mounting	Contacts 1 NO + 1 NC	Article No. 3LD9340-6B	■	■	■	■	■
	For floor mounting, installation in distribution boards and basic switches without knob-operated mechanism	1 NO + 1 NC	3LD9340-6C	■	■	■	■	■

					3LD30 (16 A)	3LD31 (25 A)	3LD32 (32 A)	3LD33 (40 A)	3LD34 (63 A)
Rotary operating mechanisms									
	Version		Color	Article No.					
	For front mounting, without funnel		Black	3LD9344-4C	■	■	■	■	■
			Red/yellow	3LD9344-5C	■	■	■	■	■
	For floor mounting and basic switches without knob-operated mechanism, with funnel		Black	3LD9344-2C	■	■	■	■	■
			Red/yellow	3LD9344-3C	■	■	■	■	■
Knob-operated mechanisms									
	Version		Color	Article No.					
	For front mounting, without funnel		Black	3LD9343-6C	■	■	■	■	■
			Red/yellow	3LD9343-7C	■	■	■	■	■
	For floor mounting and basic switches without knob-operated mechanism, with funnel		Black	3LD9343-4C	■	■	■	■	■
			Red/yellow	3LD9343-5C	■	■	■	■	■
Door-coupling rotary operating mechanisms									
	Version	Variants	Color	Article No.					
	For floor mounting and basic switches without knob-operated mechanism	Rotary operating mechanisms 66 × 66 mm	Black	3LD9344-2CA	■	■	■	■	■
			Red/yellow	3LD9344-3CA	■	■	■	■	■
		Knob-operated mechanisms 48 × 48 mm	Black	3LD9343-4CA	■	■	■	■	■
			Red/yellow	3LD9343-5CA	■	■	■	■	■
Terminal covers									
		<ul style="list-style-type: none"> For front mounting, floor mounting, installation in distribution boards and basic switches without knob-operated mechanism Pack of 4 units 							
	Number of poles			Article No.					
	1-pole			3LD9341-2A	■	■	■	■	■
	3-pole			3LD9341-0A	■	■	■	■	■
Inscription labels									
		<ul style="list-style-type: none"> Pack of 10 units Not for installation in distribution boards 							
	Inscription			Article No.					
	German / English (Hauptschalter / Main Switch)			3LD9346-1A	■	■	■	■	■
	French / Spanish (Interrupteur Principal / Interruptor Principal)			3LD9346-2A	■	■	■	■	■
	Without inscription			3LD9346-3A	■	■	■	■	■

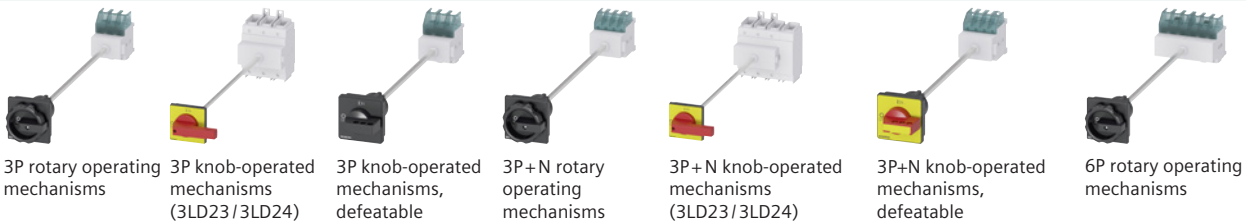
3LD2 main control and EMERGENCY-STOP switches

System overview

Basic units for front mounting



Basic units for floor mounting



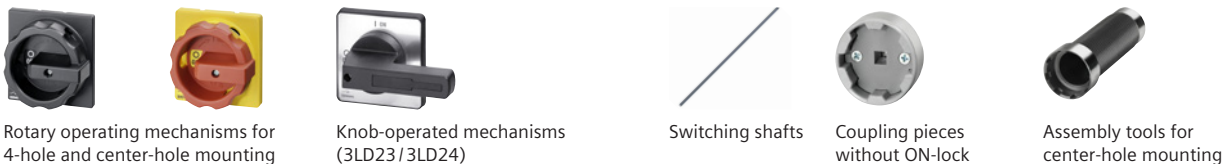
Basic units for installation in distribution boards/enclosures, DC



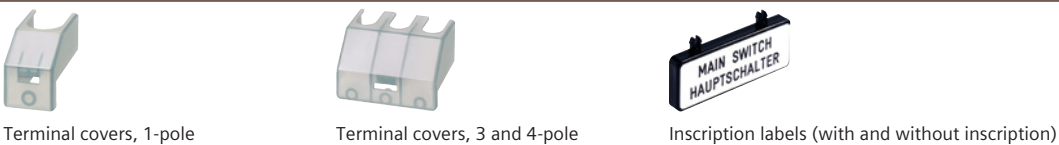
Additional poles and auxiliary switches



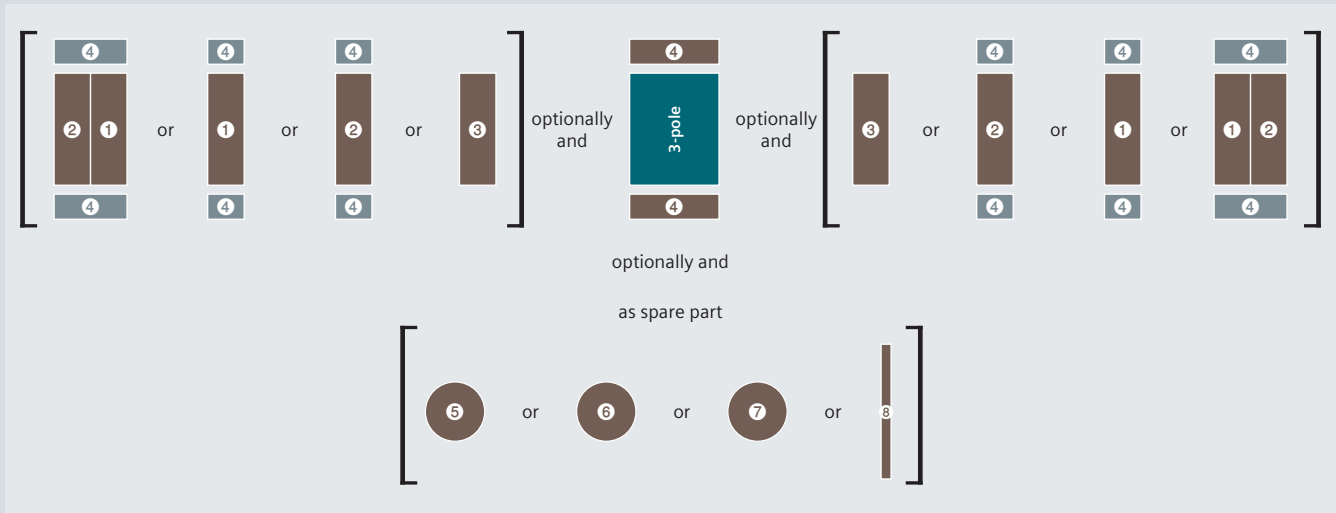
Operating mechanisms



Other accessories



Mounting concept and accessories



Legend

- 1 N switching contact ¹⁾
- 2 N/PE terminal
- 3 Auxiliary switch
- 4 Terminal cover
- 5 Rotary operating mechanism, center-hole mounting
- 6 Rotary operating mechanism, four-hole mounting
- 7 Knob-operated mechanism, four-hole mounting
- 8 Switching shaft (300 or 600)

¹⁾ The N switching contact 1 first has to be mounted on the basic unit



Mounting types

Front mounting



The switches for front mounting are mounted on the inside of the panel door via the operating mechanism. In addition to the 4-hole fastening of the handle, up to 63 A (3LD25) fastening with the 22.5 mm diameter center hole can also be chosen.

You will find further information under:



Floor mounting



The switches for floor mounting up to 125 A (3LD28) are snapped onto 35 mm standard mounting rails according to EN 60715 or screw-mounted on mounting panels. The switches for 160 and 250 A (3LD23/3LD24) are exclusively screwed onto mounting panels. The actuators are connected to the lower section of the switch through a door coupling, which can be released in its zero position, and a 300 mm long switch shaft. When the control cabinet door is open, the switch can be protected against inadvertent operation by removing the switch shaft from the lower section of the switch. The overall depth can be adapted to individual requirements by adjusting the switch shaft length.

Distribution board mounting



The switches for distribution board mounting are suited for operation in distribution boards and for switching inside control cabinets or distributors. Up to 125 A (3LD28), they have cap and mounting dimensions acc. to DIN 43880 and can be fitted under the same cover together with miniature circuit breakers.

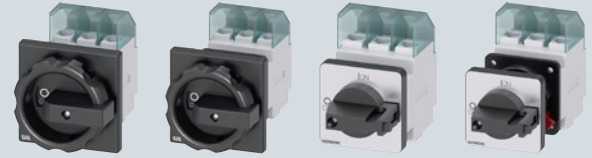
Molded-plastic enclosures



For surface mounting of individual main control and EMERGENCY-STOP switches, molded plastic-enclosed switches with degree of protection IP65 are used. The molded-plastic enclosures each contain an N and/or a PE terminal.

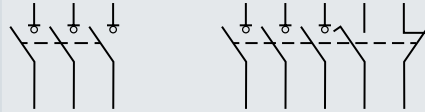
3LD2 main control switches

Front mounting, 25 ... 50 kA_{rms}



Operating mechanisms, black

Number of poles 3P

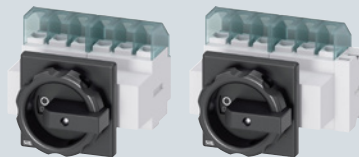
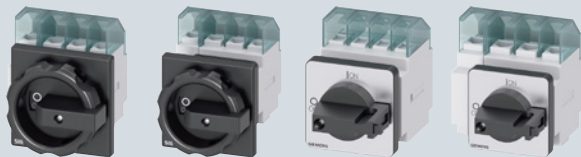


Uninterrupted current I _n At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Rotary operating mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2003-OTK51	3LD2003-1TP51
25 A	9.5 kW	7.5 kW	3LD2103-OTK51	3LD2103-1TP51
32 A	11.5 kW	9.5 kW	3LD2203-OTK51	3LD2203-1TP51
63 A	22 kW	18.5 kW	3LD2504-OTK51	3LD2504-1TP51
100 A	37 kW	30 kW	3LD2704-OTK51	3LD2704-1TP51
125 A	45 kW	37 kW	3LD2804-OTK51	3LD2804-1TP51
160 A	75 kW	50 kW	3LD2305-OTK11	3LD2305-OTK11 + 3LD9200-5B
250 A	132 kW	110 kW	3LD2405-OTK11	3LD2405-OTK11 + 3LD9200-5B
Rotary operating mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2054-OTK51	3LD2054-1TP51
25 A	9.5 kW	7.5 kW	3LD2154-OTK51	3LD2154-1TP51
32 A	11.5 kW	9.5 kW	3LD2254-OTK51	3LD2254-OTK51 + 3LD9200-5B
63 A	22 kW	18.5 kW	3LD2555-OTK51	3LD2555-OTK51 + 3LD9200-5B
Knob-operated mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2022-OTK11	3LD2022-OTK11 + 3LD9200-5B
25 A	9.5 kW	7.5 kW	3LD2122-OTK11	3LD2122-OTK11 + 3LD9200-5B
32 A	11.5 kW	9.5 kW	3LD2222-OTK11	3LD2222-OTK11 + 3LD9200-5B
Knob-operated mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2050-OTK11	3LD2050-OTK11 + 3LD9200-5B
25 A	9.5 kW	7.5 kW	3LD2150-OTK11	3LD2150-OTK11 + 3LD9200-5B
32 A	11.5 kW	9.5 kW	3LD2250-OTK11	3LD2250-OTK11 + 3LD9200-5B

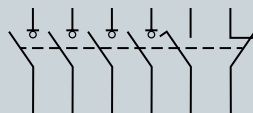
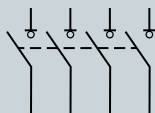
Scope of supply:

- Including terminal covers for the infeed side

Accessories, see page 8/24

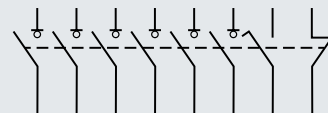
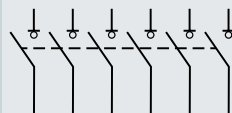


3P+N

Without
auxiliary switch

1 NO + 1 NC

6P

Without
auxiliary switch

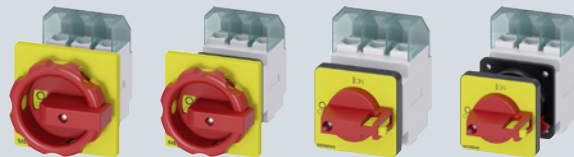
1 NO + 1 NC

3LD2003-1TL51	3LD2003-2EP51	
3LD2103-1TL51	3LD2103-2EP51	
3LD2203-1TL51	3LD2203-1TL51	+ 3LD9200-5B
3LD2504-1TL51	3LD2504-1TP51	+ 3LD9250-0BA
3LD2704-0TK51 + 3LD9280-0B	3LD2704-0TK51 + 3LD9280-0B	+ 3LD9200-5B
3LD2804-0TK51 + 3LD9280-0B	3LD2804-0TK51 + 3LD9280-0B	+ 3LD9200-5B
3LD2305-1TL11	3LD2305-1TL11	+ 3LD9200-5B
3LD2405-1TL11	3LD2405-1TL11	+ 3LD9200-5B
3LD2054-1TL51	3LD2054-2EP51	
3LD2154-1TL51	3LD2154-2EP51	
3LD2254-1TL51	3LD2254-1TL51	+ 3LD9200-5B
3LD2555-0TK51 + 3LD9250-0BA	3LD2555-0TK51 + 3LD9250-0BA	+ 3LD9200-5B
3LD2022-1TL11	3LD2022-1TL11	+ 3LD9200-5B
3LD2122-1TL11	3LD2122-1TL11	+ 3LD9200-5B
3LD2222-0TK11 + 3LD9220-0B	3LD2222-0TK11 + 3LD9220-0B	+ 3LD9200-5B
3LD2050-1TL11	3LD2050-1TL11	+ 3LD9200-5B
3LD2150-0TK11 + 3LD9220-0B	3LD2150-0TK11 + 3LD9220-0B	+ 3LD9200-5B
3LD2250-0TK11 + 3LD9220-0B	3LD2250-0TK11 + 3LD9220-0B	+ 3LD9200-5B

–	–
3LD2103-3VK51	3LD2103-4VP51
3LD2203-3VK51	3LD2203-3VK51 + 3LD9200-5B
3LD2504-3VK51	3LD2504-3VK51 + 3LD9200-5B
–	–
–	–
3LD2305-3VK11	3LD2305-3VK11 + 3LD9200-5B
3LD2405-3VK11	3LD2405-3VK11 + 3LD9200-5B

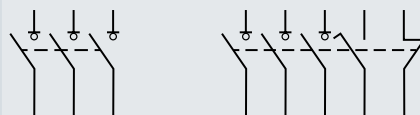
3LD2 EMERGENCY-STOP switches

Front mounting, 25 ... 50 kA_{rms}



Operating mechanisms, red/yellow

Number of poles 3P

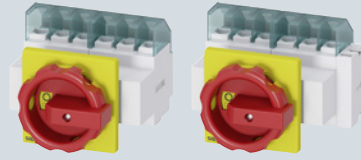
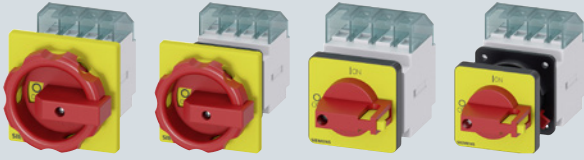


Uninterrupted current I _u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Rotary operating mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2003-OTK53	3LD2003-1TP53
25 A	9.5 kW	7.5 kW	3LD2103-OTK53	3LD2103-1TP53
32 A	11.5 kW	9.5 kW	3LD2203-OTK53	3LD2203-1TP53
63 A	22 kW	18.5 kW	3LD2504-OTK53	3LD2504-1TP53
100 A	37 kW	30 kW	3LD2704-OTK53	3LD2704-1TP53
125 A	45 kW	37 kW	3LD2804-OTK53	3LD2804-1TP53
160 A	75 kW	50 kW	3LD2305-OTK13	3LD2305-OTK13 + 3LD9200-5B
250 A	132 kW	110 kW	3LD2405-OTK13	3LD2405-OTK13 + 3LD9200-5B
Rotary operating mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2054-OTK53	3LD2054-1TP53
25 A	9.5 kW	7.5 kW	3LD2154-OTK53	3LD2154-1TP53
32 A	11.5 kW	9.5 kW	3LD2254-OTK53	3LD2254-OTK53 + 3LD9200-5B
63 A	22 kW	18.5 kW	3LD2555-OTK53	3LD2555-OTK53 + 3LD9200-5B
Knob-operated mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2022-OTK13	3LD2022-OTK13 + 3LD9200-5B
25 A	9.5 kW	7.5 kW	3LD2122-OTK13	3LD2122-OTK13 + 3LD9200-5B
32 A	11.5 kW	9.5 kW	3LD2222-OTK13	3LD2222-OTK13 + 3LD9200-5B
Knob-operated mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2050-OTK13	3LD2050-OTK13 + 3LD9200-5B
25 A	9.5 kW	7.5 kW	3LD2150-OTK13	3LD2150-OTK13 + 3LD9200-5B
32 A	11.5 kW	9.5 kW	3LD2250-OTK13	3LD2250-OTK13 + 3LD9200-5B

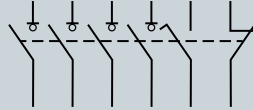
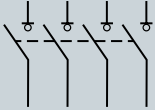
Scope of supply:

- Including terminal covers for the infeed side

Accessories, see page 8/24

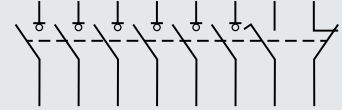
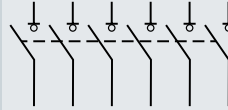


3+N

Without
auxiliary switch

1 NO + 1 NC

6P






Without
auxiliary switch


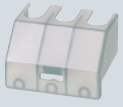
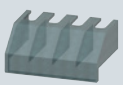


1 NO + 1 NC

3LD2003-1TL53	3LD2003-2EP53	–	–
3LD2103-1TL53	3LD2103-2EP53	3LD2103-3VK53	3LD2103-4VP53
3LD2203-1TL53	3LD2203-1TL53 + 3LD9200-5B	3LD2203-3VK53	3LD2203-3VK53 + 3LD9200-5B
3LD2504-1TL53	3LD2504-1TP53 + 3LD9250-0BA	3LD2504-3VK53	3LD2504-3VK53 + 3LD9200-5B
3LD2704-0TK53 + 3LD9280-0B	3LD2704-0TK53 + 3LD9280-0B + 3LD9200-5B	–	–
3LD2804-0TK53 + 3LD9280-0B	3LD2804-0TK53 + 3LD9280-0B + 3LD9200-5B	–	–
3LD2305-1TL13	3LD2305-1TL13 + 3LD9200-5B	3LD2305-3VK13	3LD2305-3VK13 + 3LD9200-5B
3LD2405-1TL13	3LD2405-1TL13 + 3LD9200-5B	3LD2405-3VK13	3LD2405-3VK13 + 3LD9200-5B
3LD2054-1TL53	3LD2054-2EP53	–	–
3LD2154-1TL53	3LD2154-2EP53	–	–
3LD2254-1TL53	3LD2254-1TL53 + 3LD9200-5B	–	–
3LD2555-0TK53 + 3LD9250-0BA	3LD2555-0TK53 + 3LD9250-0BA + 3LD9200-5B	–	–
3LD2022-1TL13	3LD2022-1TL13 + 3LD9200-5B	–	–
3LD2122-1TL13	3LD2122-1TL13 + 3LD9200-5B	–	–
3LD2222-0TK13 + 3LD9220-0B	3LD2222-0TK13 + 3LD9220-0B + 3LD9200-5B	–	–
3LD2050-1TL13	3LD2050-1TL13 + 3LD9200-5B	–	–
3LD2150-0TK13 + 3LD9220-0B	3LD2150-0TK13 + 3LD9220-0B + 3LD9200-5B	–	–
3LD2250-0TK13 + 3LD9220-0B	3LD2250-0TK13 + 3LD9220-0B + 3LD9200-5B	–	–

3LD3 main control and EMERGENCY-STOP switches

Accessories for front mounting

		3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)	
Switching contacts for N conductor (4th contact)										
	Contacts	Article No.								
	Leading switch-on, lagging switch-off	3LD9220-0B	■	■						
		3LD9250-0BA			■					
		3LD9280-0B				■	■			
		3LD9240-0B						■	■	
N/PE terminals										
	Contacts	Article No.								
	Through-type	3LD9200-2B	■							
		3LD9220-2B		■	■					
		3LD9250-2BA				■				
		3LD9280-2B					■	■		
	3LD9240-2B							■	■	
Auxiliary switches										
	<ul style="list-style-type: none"> For mounting on the left and/or right Lagging switch-on, leading switch-off 									
	Contacts	Article No.								
	1 NO + 1 NC	Standard	3LD9200-5B	■	■	■	■	■	■	■
	Gold-plated	3LD9200-5BF	■	■	■	■	■	■	■	
Rotary operating mechanisms										
	<ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks 									
	Version	Mounting	Article No.							
	For main control switches	Center-hole mounting	3LD9224-1D	■	■	■				
		Four-hole mounting	3LD9284-1D				■			
	For EMERGENCY-STOP switches	Center-hole mounting	3LD9224-1B	■	■	■				
		Four-hole mounting	3LD9284-1B				■	■	■	
	For main control switches	Center-hole mounting	3LD9224-3D	■	■	■				
		Four-hole mounting	3LD9284-3D				■			
	For EMERGENCY-STOP switches	Center-hole mounting	3LD9224-3B	■	■	■				
		Four-hole mounting	3LD9284-3B				■	■	■	
Knob-operated mechanisms										
	<ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks 									
	Version	Mounting	Article No.							
	For main control switches	Four-hole mounting	3LD9243-1B						■	■
For EMERGENCY-STOP switches	Four-hole mounting	3LD9243-3B						■	■	

		3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Terminal covers									
• Pack of 4 units									
Number of poles		Article No.							
	1-pole	3LD9201-2A	■						
		3LD9221-2A		■	■				
		3LD9251-2A				■			
		3LD9281-2A					■	■	
		3LD9241-2A							■
	3-pole	3LD9221-0A		■	■				
		3LD9251-0A				■			
	4-pole	3LD9201-1A	■						
Inscription labels									
• Pack of 10 units									
Inscription		Article No.							
	German / English (Hauptschalter / Main Switch)	3LD9286-1A	■	■	■	■	■	■	
	Without inscription	3LD9286-4A	■	■	■	■	■	■	
Assembly tools									
• For center-hole mounting with nut • Pack of 5 units									
Version		Article No.							
	For main control switches and EMERGENCY-STOP switches	3LD9256-0A	■	■	■	■			

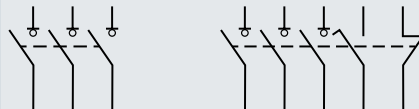
3LD2 main control switches

Floor mounting, 25 ... 50 kA_{rms}



Operating mechanisms, black

Number of poles 3P



Uninterrupted current I _u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Door-coupling rotary operating mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2013-OTK51	3LD2013-OTK51 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2113-OTK51	3LD2113-OTK51 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2213-OTK51	3LD2213-OTK51 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2514-OTK51	3LD2514-OTK51 + 3LD9200-5C
100 A	37 kW	30 kW	3LD2714-OTK51	3LD2714-OTK51 + 3LD9200-5C
125 A	45 kW	37 kW	3LD2814-OTK51	3LD2814-OTK51 + 3LD9200-5C
160 A	75 kW	50 kW	3LD2318-OTK11	3LD2318-OTK11 + 3LD9200-5C
250 A	132 kW	110 kW	3LD2418-OTK11	3LD2418-OTK11 + 3LD9200-5C
Door-coupling rotary operating mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2044-OTK51	3LD2044-OTK51 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2144-OTK51	3LD2144-OTK51 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2244-OTK51	3LD2244-OTK51 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2545-OTK51	3LD2545-OTK51 + 3LD9200-5C
Defeatable door-coupling knob-operated mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2017-OTK11	3LD2017-OTK11 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2217-OTK11	3LD2217-OTK11 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2517-OTK11	3LD2517-OTK11 + 3LD9200-5C

Scope of supply:

- Including terminal covers for the infeed side
- Up to 125 A with integrated tolerance compensation

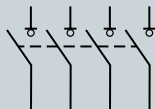
Mounting:

- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails

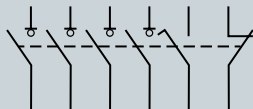
Accessories, see page 8/30



3P+N

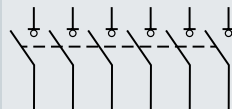


Without auxiliary switch

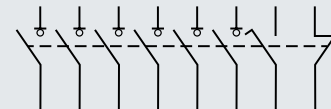


1 NO + 1 NC

6P



Without auxiliary switch



1 NO + 1 NC

3LD2013-1TL51	3LD2013-1TL51	+ 3LD9200-5C	-	-
3LD2113-1TL51	3LD2113-1TL51	+ 3LD9200-5C	3LD2113-3VK51	3LD2113-4VP51
3LD2213-1TL51	3LD2213-1TL51	+ 3LD9200-5C	-	-
3LD2514-1TL51	3LD2514-1TL51	+ 3LD9200-5C	-	-
3LD2714-0TK51 + 3LD9280-0C	3LD2714-0TK51 + 3LD9280-0C	+ 3LD9200-5C	-	-
3LD2814-0TK51 + 3LD9280-0C	3LD2814-0TK51 + 3LD9280-0C	+ 3LD9200-5C	-	-
3LD2318-1TL11	3LD2318-1TL11	+ 3LD9200-5C	3LD2318-3VK11	3LD2318-3VK11 + 3LD9200-5C
3LD2418-1TL11	3LD2418-1TL11	+ 3LD9200-5C	3LD2418-3VK11	3LD2418-3VK11 + 3LD9200-5C
3LD2044-1TL51	3LD2044-1TL51	+ 3LD9200-5C	-	-
3LD2144-1TL51	3LD2144-1TL51	+ 3LD9200-5C	-	-
3LD2244-1TL51	3LD2244-1TL51	+ 3LD9200-5C	-	-
3LD2545-0TK51 + 3LD9250-0CA	3LD2545-0TK51 + 3LD9250-0CA	+ 3LD9200-5C	-	-
3LD2017-1TL11	3LD2017-1TL11 + 3LD9200-5C		-	-
3LD2217-1TL11	3LD2217-1TL11 + 3LD9200-5C		-	-
3LD2517-1TL11	3LD2517-1TL11 + 3LD9200-5C		-	-

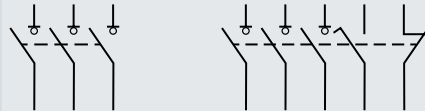
3LD2 EMERGENCY-STOP switches

Floor mounting, 25 ... 50 kA_{rms}



Operating mechanisms, red/yellow

Number of poles 3P



Uninterrupted current I _u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Door-coupling rotary operating mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2013-OTK53	3LD2013-OTK53 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2113-OTK53	3LD2113-OTK53 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2213-OTK53	3LD2213-OTK53 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2514-OTK53	3LD2514-OTK53 + 3LD9200-5C
100 A	37 kW	30 kW	3LD2714-OTK53	3LD2714-OTK53 + 3LD9200-5C
125 A	45 kW	37 kW	3LD2814-OTK53	3LD2814-OTK53 + 3LD9200-5C
160 A	75 kW	50 kW	3LD2318-OTK13	3LD2318-OTK13 + 3LD9200-5C
250 A	132 kW	110 kW	3LD2418-OTK13	3LD2418-OTK13 + 3LD9200-5C
Door-coupling rotary operating mechanism, center-hole mounting Ø 22.5 mm				
16 A	7.5 kW	5.5 kW	3LD2044-OTK53	3LD2044-OTK53 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2144-OTK53	3LD2144-OTK53 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2244-OTK53	3LD2244-OTK53 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2545-OTK53	3LD2545-OTK53 + 3LD9200-5C
Defeatable door-coupling knob-operated mechanism, four-hole mounting				
16 A	7.5 kW	5.5 kW	3LD2017-OTK13	3LD2017-OTK13 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2217-OTK13	3LD2217-OTK13 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2517-OTK13	3LD2517-1TL13 + 3LD9200-5C

Scope of supply:

- Including terminal covers for the infeed side
- Up to 125 A with integrated tolerance compensation

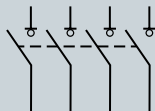
Mounting:

- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails

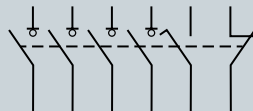
Accessories, see page 8/30



3P+N

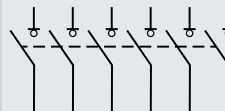


Without
auxiliary switch

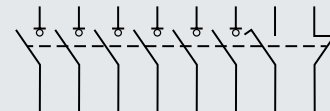


1 NO + 1 NC

6P



Without
auxiliary switch



1 NO + 1 NC

3LD2013-1TL53	3LD2013-1TL53	+ 3LD9200-5C	–	–
3LD2113-1TL53	3LD2113-1TL53	+ 3LD9200-5C	3LD2113-3VK53	3LD2113-4VP53
3LD2213-1TL53	3LD2213-1TL53	+ 3LD9200-5C	–	–
3LD2514-1TL53	3LD2514-1TL53	+ 3LD9200-5C	–	–
3LD2714-0TK53 + 3LD9280-0C	3LD2714-0TK53 + 3LD9280-0C	+ 3LD9200-5C	–	–
3LD2814-0TK53 + 3LD9280-0C	3LD2814-0TK53 + 3LD9280-0C	+ 3LD9200-5C	–	–
3LD2318-1TL13	3LD2318-1TL13	+ 3LD9200-5C	3LD2318-3VK13	3LD2318-3VK13 + 3LD9200-5C
3LD2418-1TL13	3LD2418-1TL13	+ 3LD9200-5C	3LD2418-3VK13	3LD2418-3VK13 + 3LD9200-5C
3LD2044-1TL53	3LD2044-1TL53	+ 3LD9200-5C	–	–
3LD2144-1TL53	3LD2144-1TL53	+ 3LD9200-5C	–	–
3LD2244-1TL53	3LD2244-1TL53	+ 3LD9200-5C	–	–
3LD2545-0TK53 + 3LD9250-0CA	3LD2545-0TK53 + 3LD9250-0CA	+ 3LD9200-5C	–	–
3LD2017-1TL13	3LD2017-1TL13 + 3LD9200-5C		–	–
3LD2217-1TL13	3LD2217-0TK13 + 3LD9200-5C		–	–
3LD2517-1TL13	3LD2517-1TL13 + 3LD9200-5C		–	–

3LD2 main control and EMERGENCY-STOP switches

Accessories for floor mounting

3LD20 (16 A) 3LD21 (25 A) 3LD22 (32 A) 3LD25 (63 A) 3LD27 (100 A) 3LD28 (125 A) 3LD23 (160 A) 3LD24 (250 A)

Switching contacts for N conductor (4th contact)



Contacts	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
	3LD9250-0CA				■				
	3LD9280-0C					■	■		
	3LD9240-0C							■	■

N/PE terminals



Contacts	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Through-type	3LD9200-2C	■							
	3LD9220-2C		■	■					
	3LD9250-2CA				■				
	3LD9280-2C					■	■		
	3LD9240-2C							■	■

Auxiliary switches



- For mounting on the left and/or right
- Lagging switch-on, leading switch-off

Contacts	Contact surface	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■	■	■
	Gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
2 NO	Standard	3LD9200-6C	■	■	■	■	■	■	■	■

Rotary operating mechanisms

- Lockable in 0 position with up to 3 padlocks



Version	Mounting	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
For main control switches	Center-hole mounting	3LD9224-1D	■	■	■					
		3LD9284-1D				■				
	Four-hole mounting	3LD9224-1B	■	■	■					
		3LD9284-1B				■	■	■		



For EMERGENCY-STOP switches	Center-hole mounting	3LD9224-3D	■	■	■					
		3LD9284-3D				■				
	Four-hole mounting	3LD9224-3B	■	■	■					
		3LD9284-3B				■	■	■		

Knob-operated mechanisms



- Lockable in 0 position with up to 3 padlocks




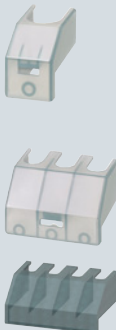


Version	Mounting	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
For main control switches	Four-hole mounting	3LD9243-1B							■	■
For EMERGENCY-STOP switches	Four-hole mounting	3LD9243-3B							■	■

8UC7.. door-coupling rotary operating mechanisms



- To achieve defeatability from 3LD27 (100 A) to 3LD24 (250 A)

Type	Version	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
8UC71	Standard	8UC7110-1BB					■	■		
	EMERGENCY-STOP	8UC7120-3BB					■	■		
8UC72	Standard	8UC7210-1BB							■	■
	EMERGENCY-STOP	8UC7220-3BB							■	■

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)	
Coupling drivers												
	Version	Article No.										
	For 8UC71 door-coupling rotary operating mechanisms	8UC6011						■	■			
	For 8UC72 door-coupling rotary operating mechanisms	8UC6012								■	■	
Switching shafts												
	Cross-section	Length	Article No.									
	6 × 6 mm	300 mm	3LD9205-0C	■	■	■	■	■	■			
		600 mm	3LD9205-2C	■	■	■	■	■	■			
	8 × 8 mm	300 mm	3LD9245-0C							■	■	
600 mm		3LD9245-2C							■	■		
Coupling pieces												
	• Without ON-lock											
		Article No.										
		3LD9242-4F								■	■	
Terminal covers												
	• Pack of 4 units											
	Number of poles	Article No.										
	1-pole	3LD9201-2A		■								
		3LD9221-2A			■	■						
		3LD9251-2A					■					
		3LD9281-2A						■	■			
		3LD9241-2A									■	■
	3-pole	3LD9221-0A			■	■						
		3LD9251-0A					■					
	4-pole	3LD9201-1A		■								
Inscription labels												
	• Pack of 10 units											
	Inscription	Article No.										
	German / English (Hauptschalter / Main Switch)	3LD9286-1A		■	■	■	■	■	■			
Without inscription	3LD9286-4A		■	■	■	■	■	■				
Assembly tools												
	• For center-hole mounting with nut											
	• Pack of 5 units											
	Version	Article No.										
	For main control switches and EMERGENCY-STOP switches	3LD9256-0A		■	■	■	■					

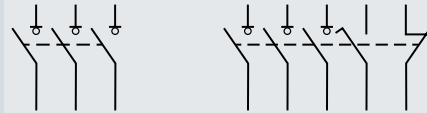
3LD2 main control switches

Installation in distribution boards, 25 ... 50 kA_{rms}



Operating mechanisms, black

Number of poles 3P



Uninterrupted current I _n At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Knob-operated mechanisms with masking plate				
16 A	7.5 kW	5.5 kW	3LD2030-0TK11	3LD2030-0TK11 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2130-0TK11	3LD2130-0TK11 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2230-0TK11	3LD2230-0TK11 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2530-0TK11	3LD2530-0TK11 + 3LD9200-5C
100 A	37 kW	30 kW	3LD2730-0TK11	3LD2730-0TK11 + 3LD9200-5C
125 A	45 kW	37 kW	3LD2830-0TK11	3LD2830-0TK11 + 3LD9200-5C
160 A	75 kW	50 kW	3LD2330-0TK11	3LD2330-0TK11 + 3LD9200-5C
250 A	132 kW	110 kW	3LD2430-0TK11	3LD2430-0TK11 + 3LD9200-5C

Scope of supply:

- 3LD23/3LD24 including terminal covers for the infeed side

Mounting:

- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails
- Up to 125 A cap and mounting dimensions acc. to DIN 43880

Accessories

3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
-----------------	-----------------	-----------------	-----------------	------------------	------------------	------------------	------------------

Switching contacts for N conductor (4th contact)

Contacts	Article No.								
		3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
	3LD9250-0CA				■				
	3LD9280-0C					■	■		
	3LD9240-0C							■	■

N/PE terminals

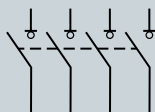
Contacts	Article No.								
		3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
Through-type	3LD9200-2C	■							
	3LD9220-2C		■	■					
	3LD9250-2CA				■				
	3LD9280-2C					■	■		
	3LD9240-2C							■	■

Auxiliary switches

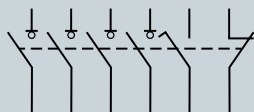
Contacts	Contact surface	Article No.								
			3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■	■	■
	Gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
2 NO	Standard	3LD9200-6C	■	■	■	■	■	■	■	



3P+N


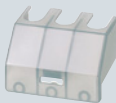
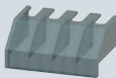


Without auxiliary switch



1 NO + 1 NC

3LD2030-1TL11	3LD2030-1TL11	+ 3LD9200-5C
3LD2130-0TK11 + 3LD9220-0C	3LD2130-0TK11 + 3LD9220-0C	+ 3LD9200-5C
3LD2230-0TK11 + 3LD9220-0C	3LD2230-0TK11 + 3LD9220-0C	+ 3LD9200-5C
3LD2530-0TK11 + 3LD9250-OCA	3LD2530-0TK11 + 3LD9250-OCA	+ 3LD9200-5C
3LD2730-0TK11 + 3LD9280-0C	3LD2730-0TK11 + 3LD9280-0C	+ 3LD9200-5C
3LD2830-0TK11 + 3LD9280-0C	3LD2830-0TK11 + 3LD9280-0C	+ 3LD9200-5C
3LD2330-0TK11 + 3LD9240-0C	3LD2330-0TK11 + 3LD9240-0C	+ 3LD9200-5C
3LD2430-0TK11 + 3LD9240-0C	3LD2430-0TK11 + 3LD9240-0C	+ 3LD9200-5C

		3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Terminal covers									
• Pack of 4 units									
Number of poles		Article No.							
	1-pole	3LD9201-2A	■						
		3LD9221-2A		■	■				
		3LD9251-2A				■			
		3LD9281-2A					■	■	
		3LD9241-2A							■ ■
	3-pole	3LD9221-0A		■ ■					
		3LD9251-0A			■				
	4-pole	3LD9201-1A	■						

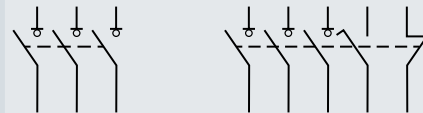
3LD2 EMERGENCY-STOP switches

Installation in distribution boards, 25 ... 50 kA_{rms}



Operating mechanisms, red/yellow

Number of poles 3P



Uninterrupted current I _n At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC
Knob-operated mechanisms with masking plate				
16 A	7.5 kW	5.5 kW	3LD2030-0TK13	3LD2030-0TK13 + 3LD9200-5C
25 A	9.5 kW	7.5 kW	3LD2130-0TK13	3LD2130-0TK13 + 3LD9200-5C
32 A	11.5 kW	9.5 kW	3LD2230-0TK13	3LD2230-0TK13 + 3LD9200-5C
63 A	22 kW	18.5 kW	3LD2530-0TK13	3LD2530-0TK13 + 3LD9200-5C
100 A	37 kW	30 kW	3LD2730-0TK13	3LD2730-0TK13 + 3LD9200-5C
125 A	45 kW	37 kW	3LD2830-0TK13	3LD2830-0TK13 + 3LD9200-5C
160 A	75 kW	50 kW	3LD2330-0TK13	3LD2330-0TK13 + 3LD9200-5C
250 A	132 kW	110 kW	3LD2430-0TK13	3LD2430-0TK13 + 3LD9200-5C

Scope of supply:

- 3LD23/3LD24 including terminal covers for the infeed side

Mounting:

- Up to 125 A using screws or snap-on mounting on 35 mm mounting rails
- Up to 125 A cap and mounting dimensions acc. to DIN 43880

Accessories

3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
-----------------	-----------------	-----------------	-----------------	------------------	------------------	------------------	------------------

Switching contacts for N conductor (4th contact)

Contacts	Article No.								
		3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
	3LD9250-0CA				■				
	3LD9280-0C					■	■		
	3LD9240-0C							■	■

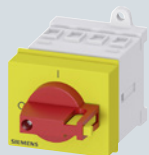
N/PE terminals

Contacts	Article No.								
		3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
Through-type	3LD9200-2C	■							
	3LD9220-2C		■	■					
	3LD9250-2CA				■				
	3LD9280-2C					■	■		
	3LD9240-2C							■	■

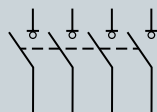
Auxiliary switches

Contacts	Contact surface	Article No.								
			3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■	■	■
	Gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
2 NO	Standard	3LD9200-6C	■	■	■	■	■	■	■	

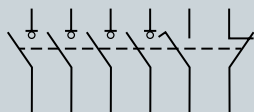
8



3+N



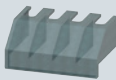


Without auxiliary switch



1 NO + 1 NC

3LD2030-1TL13	3LD2030-1TL13	+ 3LD9200-5C
3LD2130-OTK13 + 3LD9220-0C	3LD2130-OTK13 + 3LD9220-0C	+ 3LD9200-5C
3LD2230-OTK13 + 3LD9220-0C	3LD2230-OTK13 + 3LD9220-0C	+ 3LD9200-5C
3LD2530-OTK13 + 3LD9250-OCA	3LD2530-OTK13 + 3LD9250-OCA	+ 3LD9200-5C
3LD2730-OTK13 + 3LD9280-0C	3LD2730-OTK13 + 3LD9280-0C	+ 3LD9200-5C
3LD2830-OTK13 + 3LD9280-0C	3LD2830-OTK13 + 3LD9280-0C	+ 3LD9200-5C
3LD2330-OTK13 + 3LD9240-0C	3LD2330-OTK13 + 3LD9240-0C	+ 3LD9200-5C
3LD2430-OTK13 + 3LD9240-0C	3LD2430-OTK13 + 3LD9240-0C	+ 3LD9200-5C

		3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Terminal covers									
• Pack of 4 units									
Number of poles		Article No.							
	1-pole	3LD9201-2A	■						
		3LD9221-2A		■	■				
		3LD9251-2A				■			
		3LD9281-2A					■	■	
		3LD9241-2A							■ ■
	3-pole	3LD9221-0A		■ ■					
		3LD9251-0A				■			
	4-pole	3LD9201-1A	■						

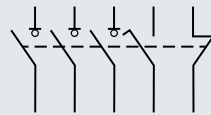
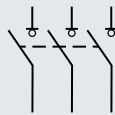
3LD2 main control switches

Molded-plastic enclosure, 25 ... 50 kA_{rms}

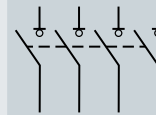


Operating mechanisms, black

Number of poles 3P



3P+N




Uninterrupted current I _u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch	1 NO + 1 NC	Without auxiliary switch
Knob-operated mechanisms with masking plate			Base terminal	Base terminal	Base terminal
16 A	7.5 kW	5.5 kW	PE+N 3LD2064-0TB51	N 3LD2064-1GP51	PE 3LD2064-1TC51
25 A	9.5 kW	7.5 kW	PE+N 3LD2164-0TB51	N 3LD2164-1GP51	PE 3LD2164-1TC51
32 A	11.5 kW	9.5 kW	PE+N 3LD2264-0TB51	N 3LD2264-1GP51	PE 3LD2264-1TC51
63 A	22 kW	18.5 kW	PE+N 3LD2565-0TB51	N 3LD2565-1GP51	PE 3LD2565-1TC51
100 A	37 kW	30 kW	PE+N 3LD2766-0TB51	N 3LD2766-1GP51	PE+N 3LD2766-0TB51 + 3LD9280-0C
125 A	45 kW	37 kW	PE+N 3LD2866-0TB51	N 3LD2866-1GP51	PE+N 3LD2866-0TB51 + 3LD9280-0C


Accessories

3LD20 (16 A) 3LD21 (25 A) 3LD22 (32 A) 3LD25 (63 A) 3LD27 (100 A) 3LD28 (125 A) 3LD23 (160 A) 3LD24 (250 A)


Switching contacts for N conductor (4th contact)

Contacts	Article No.	3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
 Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
	3LD9250-OCA				■				
	3LD9280-0C					■	■		
	3LD9240-0C							■	■


N/PE terminals

Contacts	Article No.	3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
 Through-type	3LD9200-2C	■							
	3LD9220-2C		■	■					
	3LD9250-2CA				■				
	3LD9280-2C					■	■		
	3LD9240-2C							■	■

Auxiliary switches

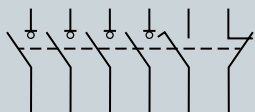
 <ul style="list-style-type: none"> For mounting on the left and/or right Lagging switch-on, leading switch-off 	Contacts	Contact surface	Article No.	3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
	1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■	■	■
		Gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
	2 NO	Standard	3LD9200-6C	■	■	■	■	■	■	■	■

Rotary operating mechanisms

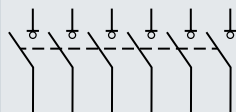
 <ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks 	Version	Mounting	Article No.	3LD20	3LD21	3LD22	3LD25	3LD27	3LD28	3LD23	3LD24
	For main control switches	Center-hole mounting	3LD9224-1D	■	■	■					
			3LD9284-1D				■	■	■		



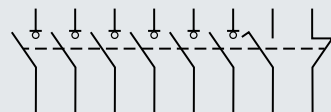
6P



1 NO + 1 NC



Without auxiliary switch



1 NO + 1 NC

Base terminal

PE	3LD2064-1TC51	+ 3LD9200-5C
PE	3LD2164-1TC51	+ 3LD9200-5C
PE	3LD2264-1TC51	+ 3LD9200-5C
PE	3LD2565-1TC51	+ 3LD9200-5C
N	3LD2766-1GP51 + 3LD9280-0C	
N	3LD2866-1GP51 + 3LD9280-0C	

Base terminal

	–
PE+N	3LD2165-3VB51
PE+N	3LD2265-3VB51
PE+N	3LD2566-3VB51
	–
	–

Base terminal

	–
N	3LD2165-4VD51
N	3LD2265-4VD51
PE+N	3LD2566-4VD51
	–
	–

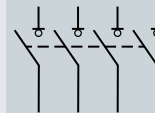
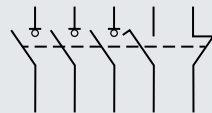
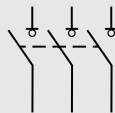
3LD2 EMERGENCY-STOP switches

Molded-plastic enclosure, 25 ... 50 kA_{rms}



Operating mechanisms, red/yellow

Number of poles 3P



Uninterrupted current I _u At AC-21A, 380 ... 440 V	Operational power P At AC-23A, 380 ... 440 V	Operational power P At AC-3A, 380 ... 440 V	Without auxiliary switch		1 NO + 1 NC		Without auxiliary switch	
			Base terminal	3LD2064-0TB53	Base terminal	3LD2064-1GP53	Base terminal	3LD2064-1TC53
16 A	7.5 kW	5.5 kW	PE+N	3LD2064-0TB53	N	3LD2064-1GP53	PE	3LD2064-1TC53
25 A	9.5 kW	7.5 kW	PE+N	3LD2164-0TB53	N	3LD2164-1GP53	PE	3LD2164-1TC53
32 A	11.5 kW	9.5 kW	PE+N	3LD2264-0TB53	N	3LD2264-1GP53	PE	3LD2264-1TC53
63 A	22 kW	18.5 kW	PE+N	3LD2565-0TB53	N	3LD2565-1GP53	PE	3LD2565-1TC53
100 A	37 kW	30 kW	PE+N	3LD2766-0TB53	N	3LD2766-1GP53	PE+N	3LD2766-0TB53 + 3LD9280-0C
125 A	45 kW	37 kW	PE+N	3LD2866-0TB53	N	3LD2866-1GP53	PE+N	3LD2866-0TB53 + 3LD9280-0C

Accessories

3LD20 (16 A) 3LD21 (25 A) 3LD22 (32 A) 3LD25 (63 A) 3LD27 (100 A) 3LD28 (125 A) 3LD23 (160 A) 3LD24 (250 A)

Switching contacts for N conductor (4th contact)



Contacts	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
	3LD9250-0CA				■				
	3LD9280-0C					■	■		
	3LD9240-0C							■	■

N/PE terminals



Contacts	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Through-type	3LD9200-2C	■							
	3LD9220-2C		■	■					
	3LD9250-2CA				■				
	3LD9280-2C					■	■		
	3LD9240-2C							■	■

Auxiliary switches



<ul style="list-style-type: none"> For mounting on the left and/or right Lagging switch-on, leading switch-off 										
Contacts	Contact surface	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
1 NO + 1 NC	Standard	3LD9200-5C	■	■	■	■	■	■	■	■
	Gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
2 NO	Standard	3LD9200-6C	■	■	■	■	■	■	■	

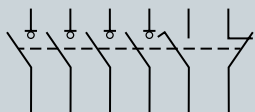
Rotary operating mechanisms



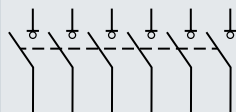
<ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks 										
Version	Mounting	Article No.	3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
For EMERGENCY-STOP switches	Center-hole mounting	3LD9224-3D	■	■	■					
		3LD9284-3D				■	■	■		



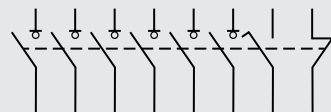
6P



1 NO + 1 NC



Without auxiliary switch



1 NO + 1 NC

Base terminal

PE	3LD2064-1TC53	+ 3LD9200-5C
PE	3LD2164-1TC53	+ 3LD9200-5C
PE	3LD2264-1TC53	+ 3LD9200-5C
PE	3LD2565-1TC53	+ 3LD9200-5C
N	3LD2766-1GP53 + 3LD9280-0C	
N	3LD2866-1GP53 + 3LD9280-0C	

Base terminal

	–
PE+N	3LD2165-3VB53
PE+N	3LD2265-3VB53
PE+N	3LD2566-3VB53
	–
	–

Base terminal

	–
N	3LD2165-4VD53
N	3LD2265-4VD53
PE+N	3LD2566-4VD53
	–
	–

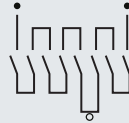
3LD2 main control switches

DC isolators, 50 kA_{rms}



Operating mechanisms, black

Number of poles 8P

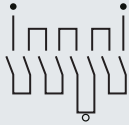
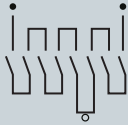


Mains voltage	Rated current I_e At DC-21A, 800 V DC	Rated current I_e At DC-22A, 800 V DC	Without auxiliary switch
Knob-operated mechanisms			
800 V DC	32 A	16 A	3LD2230-8VQ11-0AF6

3LD2 main control and EMERGENCY-STOP switches

DC isolators in a molded-plastic enclosure, 50 kA_{rms}





		Operating mechanisms, black		Operating mechanisms, red/yellow	
Number of poles		8P		8P	
					
Mains voltage	Rated current I _e At DC-21A, 800 V DC	Rated current I _e At DC-22A, 800 V DC	Without auxiliary switch		
Rotary operating mechanisms					
800 V DC	32 A	16 A	3LD2265-8VQ51-0AF6	3LD2265-8VQ53-0AF6	



3LD2 main control and EMERGENCY-STOP switches

Accessories



Additional poles

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Switching contacts for N conductor (4th contact)											
	Version	Contacts	Article No.								
	For front mounting	Leading switch-on, lagging switch-off	3LD9220-0B		■	■					
			3LD9250-0BA				■				
			3LD9280-0B					■	■		
	For floor mounting, installation in distribution boards and molded-plastic enclosure	Leading switch-on, lagging switch-off	3LD9220-0C		■	■					
			3LD9250-0CA				■				
			3LD9280-0C					■	■		
			3LD9240-0C							■	■



N/PE terminals

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
	Version	Contacts	Article No.								
	For front mounting	Through-type	3LD9200-2B	■							
			3LD9220-2B		■	■					
			3LD9250-2BA				■				
			3LD9280-2B					■	■		
	For floor mounting, installation in distribution boards and molded-plastic enclosure	Through-type	3LD9200-2C	■							
			3LD9220-2C		■	■					
			3LD9250-2CA				■				
			3LD9280-2C					■	■		
			3LD9240-2C							■	■




Auxiliary switches

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
	For front mounting	1 NO + 1 NC, standard	3LD9200-5B	■	■	■	■	■	■	■	■
		1 NO + 1 NC, gold-plated	3LD9200-5BF	■	■	■	■	■	■	■	■
	For floor mounting, installation in distribution boards and molded-plastic enclosure	1 NO + 1 NC, standard	3LD9200-5C	■	■	■	■	■	■	■	■
		1 NO + 1 NC, gold-plated	3LD9200-5CF	■	■	■	■	■	■	■	■
		2 NO, standard	3LD9200-6C	■	■	■	■	■	■	■	■

Operating mechanisms




				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)
Rotary operating mechanisms											
	For main control switches	Center-hole mounting	3LD9224-1D	■	■	■					
		Four-hole mounting	3LD9284-1D				■	■	■		
	For EMERGENCY-STOP switches	Center-hole mounting	3LD9224-3D	■	■	■					
			3LD9284-3D				■	■	■		
		Four-hole mounting	3LD9224-3B	■	■	■					
			3LD9284-3B				■	■	■		

Operating mechanisms

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)	
Knob-operated mechanisms												
	<ul style="list-style-type: none"> Lockable in 0 position with up to 3 padlocks Including seal 											
	Switch	Mounting	Article No.									
	For main control switches	Four-hole mounting	3LD9243-1B								■	■
	For EMERGENCY-STOP switches	Four-hole mounting	3LD9243-3B								■	■
Switching shafts												
	Version	Cross-section	Length	Article No.								
	For floor mounting	6 × 6 mm	300 mm	3LD9205-0C	■	■	■	■	■	■		
			600 mm	3LD9205-2C	■	■	■	■	■	■		
		8 × 8 mm	300 mm	3LD9245-0C							■	■
			600 mm	3LD9245-2C							■	■
Coupling pieces												
	<ul style="list-style-type: none"> Without ON-lock 											
	Version			Article No.								
	For floor mounting			3LD9242-4F							■	■

8

Other accessories

				3LD20 (16 A)	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD28 (125 A)	3LD23 (160 A)	3LD24 (250 A)	
Terminal covers												
	<ul style="list-style-type: none"> Pack of 4 units 											
	Number of poles			Article No.								
	1-pole			3LD9201-2A	■							
				3LD9221-2A		■	■					
				3LD9251-2A				■				
				3LD9281-2A					■	■		
				3LD9241-2A							■	■
	3-pole			3LD9221-0A		■	■					
				3LD9251-0A				■				
	4-pole			3LD9201-1A	■							
Inscription labels												
	<ul style="list-style-type: none"> Pack of 10 units 											
	Inscription			Article No.								
	German / English (Hauptschalter / Main Switch)			3LD9286-1A	■	■	■	■	■	■		
Without inscription			3LD9286-4A	■	■	■	■	■	■			
Assembly tools												
	<ul style="list-style-type: none"> For center-hole mounting with nut Pack of 5 units 											
	Switch			Article No.								
	For main control switches and EMERGENCY-STOP switches			3LD9256-0A	■	■	■	■				

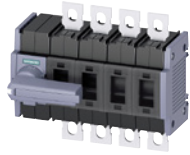
3KD switch disconnectors

System overview

Complete assemblies with direct operating mechanisms



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole

Basic units



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole



Lateral operating mechanisms, 3-pole



Lateral operating mechanisms, 4-pole



Front-mounted devices, 6-pole for DC applications

8

Additional poles and auxiliary switch modules



4th contact elements



N terminals



N/PE terminals



Auxiliary switch modules

Operating mechanisms



Direct operating mechanisms



Door-coupling rotary operating mechanisms



Handles for door-coupling rotary operating mechanisms



Other accessories for door-coupling rotary operating mechanisms

Other accessories and spare parts



Auxiliary switches



Terminal covers



Phase barriers



Blocking pin test function



Mounting elements

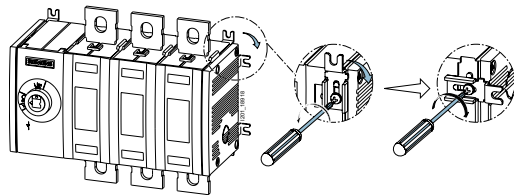


Accessories for DC applications



Types of mounting

Floor mounting

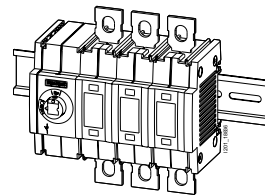


All 3KD switch disconnectors are designed for floor mounting. To ensure that the switch can be flexibly adapted to the relevant installation conditions, the mounting bracket can be rotated through 90° with size 3 or larger.

You will find further information under:



Standard mounting rail

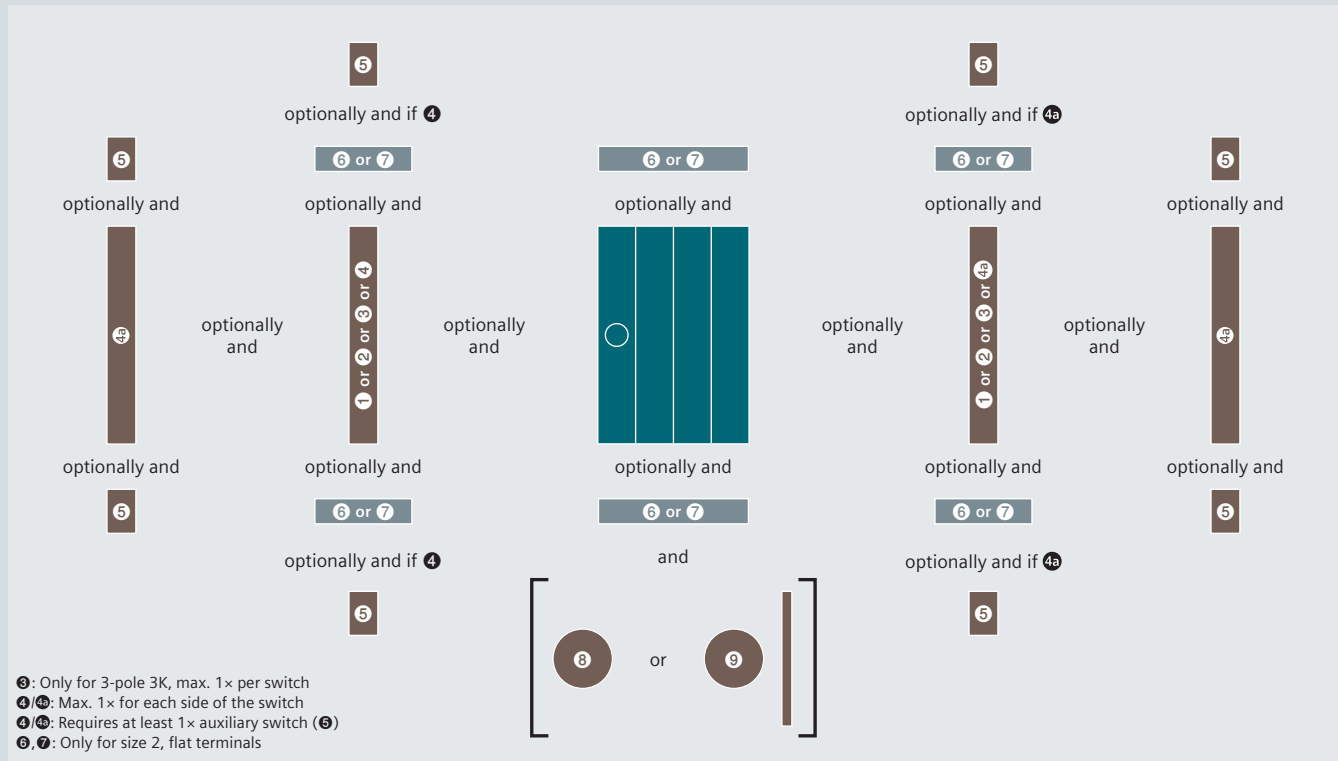


Sizes 1 and 2 can be snapped onto a standard mounting rail (TH35 according to EN 60715) as an alternative mounting method.

3KD switch disconnectors

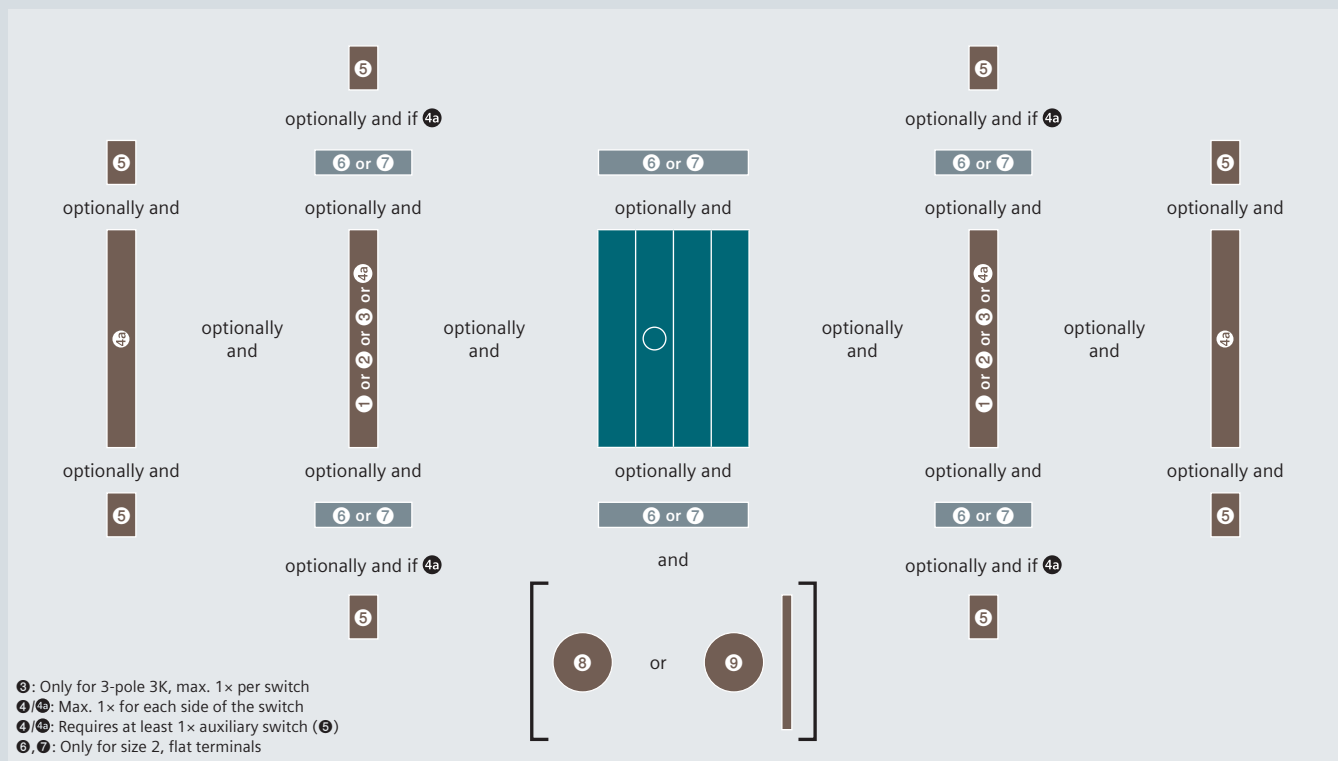
Mounting concept and accessories

Front operating mechanism left, sizes 1 and 2, 3/4-pole

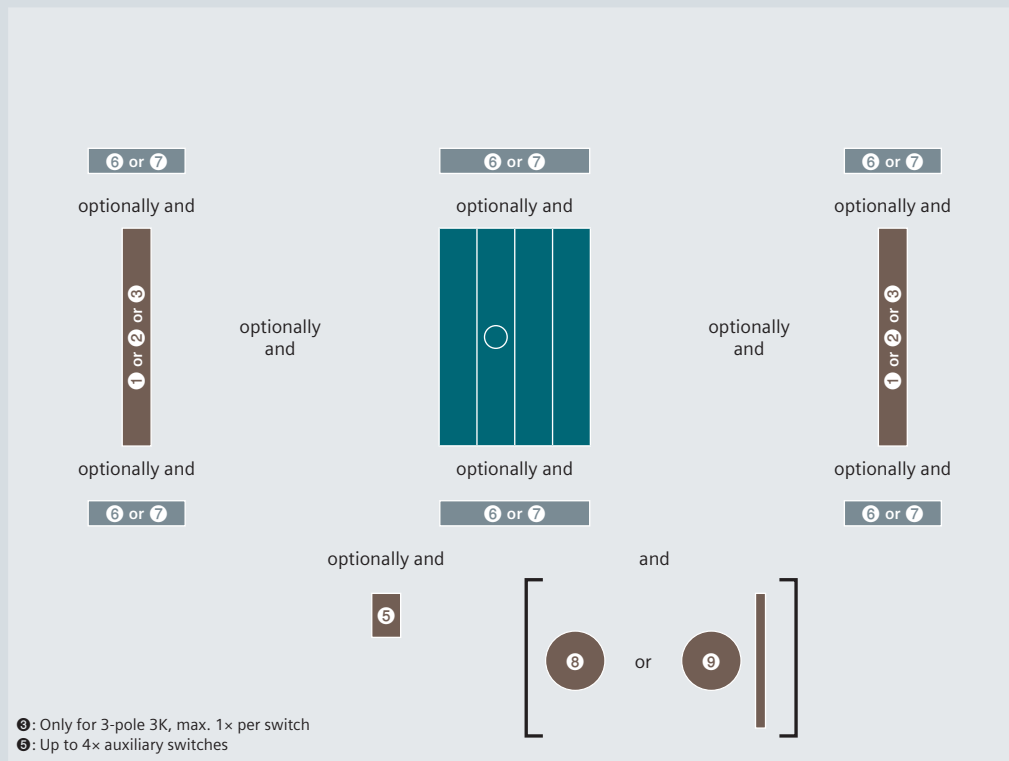


8

Front operating mechanism center, size 1 and 2, 3/4-pole



Front operating mechanism center or left, sizes 3 to 5, 3/4-pole



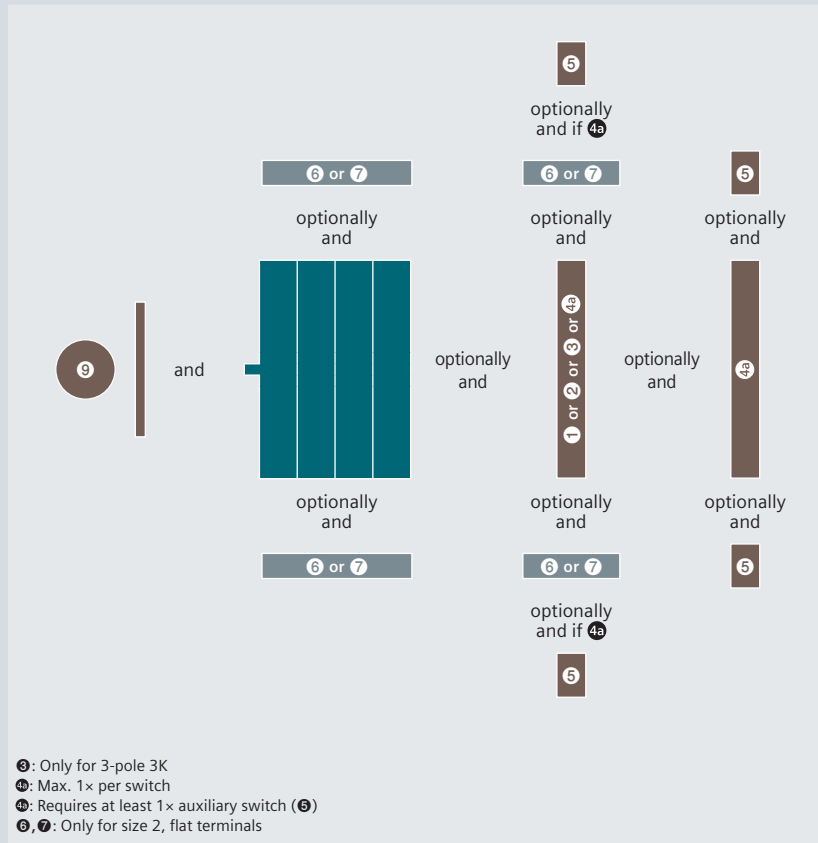
Legend

- ① Neutral conductor terminal
- ② N/PE terminal
- ③ 4th contact element
- ④ Auxiliary switch module, version with test function and version with leading NO contact and test function
- ④a Auxiliary switch module for auxiliary switches, standard version
- ⑤ Auxiliary switch
- ⑥ Phase barrier
- ⑦ Terminal cover
- ⑧ Direct operating mechanism
- ⑨ Door-coupling rotary operating mechanism

3KD switch disconnectors

Mounting concept and accessories

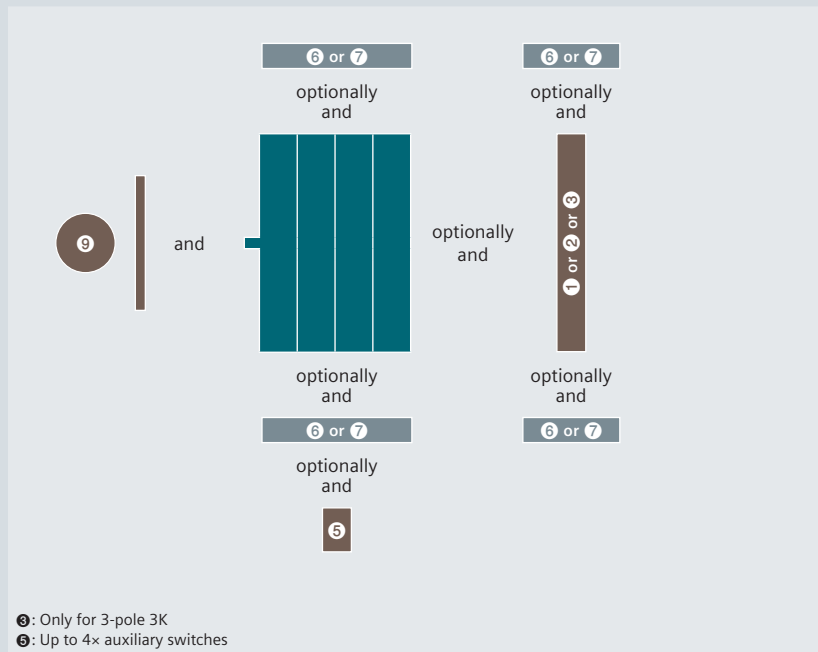
Lateral operating mechanism left, sizes 1 and 2, 3/4-pole



Legend

- ① Neutral conductor terminal
- ② N/PE terminal
- ③ 4th contact element
- ④a Auxiliary switch module for auxiliary switches, standard version
- ⑤ Auxiliary switch
- ⑥ Phase barrier
- ⑦ Terminal cover
- ⑨ Door-coupling rotary operating mechanism

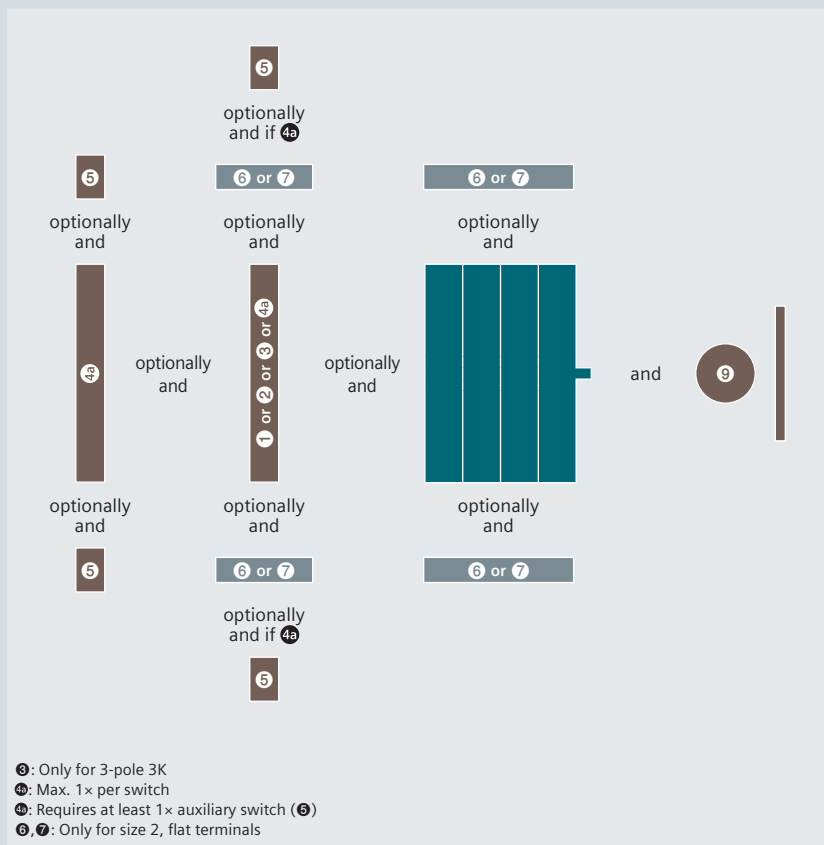
Lateral operating mechanism left, sizes 3 to 5, 3/4-pole



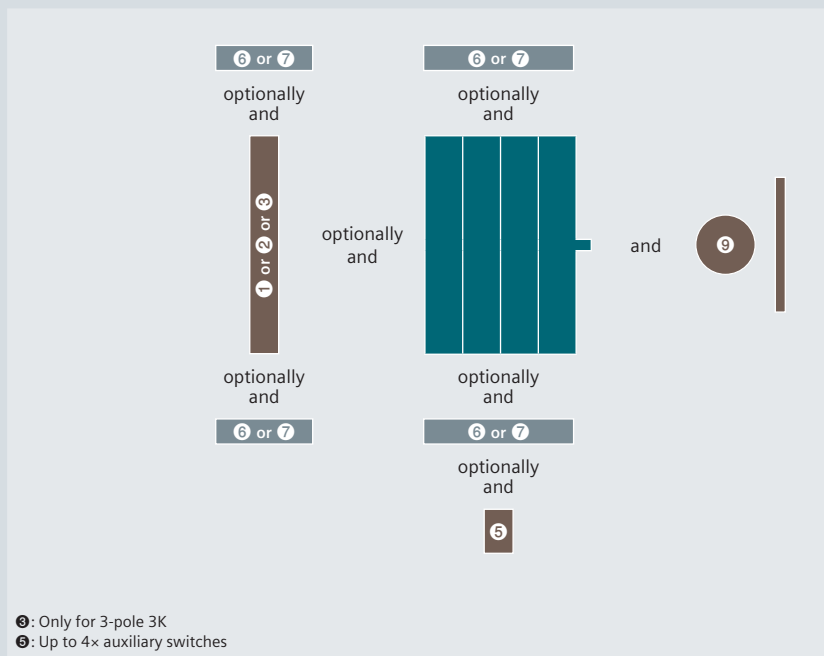
Legend

- ① Neutral conductor terminal
- ② N/PE terminal
- ③ 4th contact element
- ⑤ Auxiliary switch
- ⑥ Phase barrier
- ⑦ Terminal cover
- ⑨ Door-coupling rotary operating mechanism

Lateral operating mechanism right, sizes 1 and 2, 3/4-pole



Lateral operating mechanism right, sizes 3 to 5, 3/4-pole



3KD switch disconnectors



Number of poles	Complete assemblies with direct operating mechanisms		Basic units without handle			
	Front operating mechanism Left	Front operating mechanism Left	Front operating mechanism Left	Center	Center	
	3P	4P	3P	4P	3P	
Size	Uninterrupted current I_u					
Box terminals						
1	16 A	3KD1632-2ME10-0	3KD1642-2ME10-0	3KD1630-2ME10-0	3KD1640-2ME10-0	3KD1630-2ME20-0
	32 A	3KD2232-2ME10-0	3KD2242-2ME10-0	3KD2230-2ME10-0	3KD2240-2ME10-0	3KD2230-2ME20-0
	63 A	3KD2632-2ME10-0	3KD2642-2ME10-0	3KD2630-2ME10-0	3KD2640-2ME10-0	3KD2630-2ME20-0
2	80 A	3KD2832-2NE10-0	3KD2842-2NE10-0	3KD2830-2NE10-0	3KD2840-2NE10-0	3KD2830-2NE20-0
	100 A	3KD3032-2NE10-0	3KD3042-2NE10-0	3KD3030-2NE10-0	3KD3040-2NE10-0	3KD3030-2NE20-0
	125 A	3KD3232-2NE10-0	3KD3242-2NE10-0	3KD3230-2NE10-0	3KD3240-2NE10-0	3KD3230-2NE20-0
	160 A	3KD3432-2NE10-0	3KD3442-2NE10-0	3KD3430-2NE10-0	3KD3440-2NE10-0	3KD3430-2NE20-0
Flat terminals						
2	80 A	3KD2832-0NE10-0	3KD2842-0NE10-0	3KD2830-0NE10-0	3KD2840-0NE10-0	3KD2830-0NE20-0
	100 A	3KD3032-0NE10-0	3KD3042-0NE10-0	3KD3030-0NE10-0	3KD3040-0NE10-0	3KD3030-0NE20-0
	125 A	3KD3232-0NE10-0	3KD3242-0NE10-0	3KD3230-0NE10-0	3KD3240-0NE10-0	3KD3230-0NE20-0
	160 A	3KD3432-0NE10-0	3KD3442-0NE10-0	3KD3430-0NE10-0	3KD3440-0NE10-0	3KD3430-0NE20-0
	200 A	3KD3632-0NE10-0	3KD3642-0NE10-0	3KD3630-0NE10-0	3KD3640-0NE10-0	3KD3630-0NE20-0
3	200 A	3KD3632-0PE10-0	3KD3642-0PE10-0	3KD3630-0PE10-0	3KD3640-0PE10-0	3KD3630-0PE20-0
	250 A	3KD3832-0PE10-0	3KD3842-0PE10-0	3KD3830-0PE10-0	3KD3840-0PE10-0	3KD3830-0PE20-0
	315 A	3KD4032-0PE10-0	3KD4042-0PE10-0	3KD4030-0PE10-0	3KD4040-0PE10-0	3KD4030-0PE20-0
	400 A	3KD4232-0PE10-0	3KD4242-0PE10-0	3KD4230-0PE10-0	3KD4240-0PE10-0	3KD4230-0PE20-0
4	500 A	3KD4432-0QE10-0	3KD4442-0QE10-0	3KD4430-0QE10-0	3KD4440-0QE10-0	3KD4430-0QE20-0
	630 A	3KD4632-0QE10-0	3KD4642-0QE10-0	3KD4630-0QE10-0	3KD4640-0QE10-0	3KD4630-0QE20-0
	800 A	3KD4832-0QE10-0	3KD4842-0QE10-0	3KD4830-0QE10-0	3KD4840-0QE10-0	3KD4830-0QE20-0
5	1000 A	3KD5032-0RE10-0	3KD5042-0RE10-0	3KD5030-0RE10-0	3KD5040-0RE10-0	3KD5030-0RE20-0
	1250 A	3KD5232-0RE10-0	3KD5242-0RE10-0	3KD5230-0RE10-0	3KD5240-0RE10-0	3KD5230-0RE20-0
	1600 A	3KD5432-0RE10-0	3KD5442-0RE10-0	3KD5430-0RE10-0	3KD5440-0RE10-0	3KD5430-0RE20-0

Scope of supply:

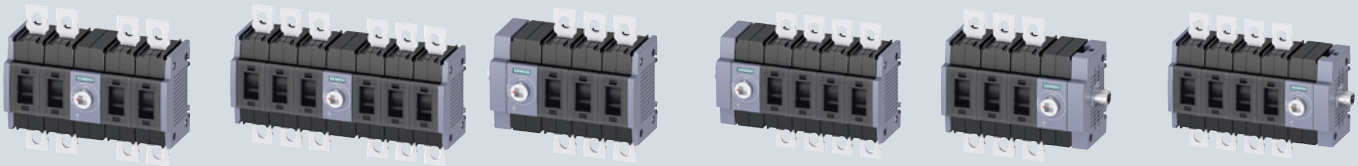
- Incl. phase barriers for size 2 with flat terminals
- Terminal covers must be ordered separately for switch disconnectors with flat terminals and direct operating mechanisms.

Note:

- The complete assemblies with a direct operating mechanism are not suitable for conversion to door-coupling rotary operating mechanisms; the basic units are to be used for this purpose.
- The basic units without handles are suitable for use with door-coupling rotary operating mechanisms or with direct operating mechanisms.
- The switch disconnectors with lateral operating mechanism are suitable for door-coupling rotary operating mechanisms.
- For 3KD switch disconnectors and lateral operating mechanism (left or right), only 8UD door-coupling rotary operating mechanisms without the test function can be used.
- If door-coupling rotary operating mechanisms without "Test" are used on 3KD switch disconnectors, the test function must be mechanically blocked on the switch. The blocking pin required for this is included in the scope of supply of the 3KD switch disconnector.

Mounting:

- The switch disconnectors are designed for floor mounting; sizes 1 and 2 can optionally be mounted on standard mounting rails.



Lateral operating mechanism

Left

Right

4P

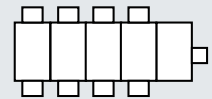
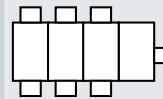
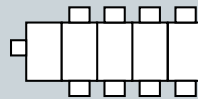
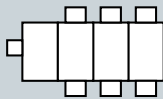
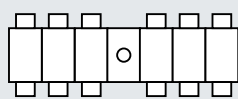
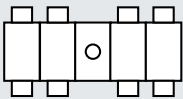
6P for DC applications

3P

4P

3P

4P



3KD1640-2ME20-0

3KD1660-2ME20-0

3KD1634-2ME10-0

3KD1644-2ME10-0

3KD1634-2ME40-0

3KD1644-2ME40-0

3KD2240-2ME20-0

3KD2260-2ME20-0

3KD2234-2ME10-0

3KD2244-2ME10-0

3KD2234-2ME40-0

3KD2244-2ME40-0

3KD2640-2ME20-0

3KD2660-2ME20-0

3KD2634-2ME10-0

3KD2644-2ME10-0

3KD2634-2ME40-0

3KD2644-2ME40-0

3KD2840-2NE20-0

3KD2860-2NE20-0

3KD2834-2NE10-0

3KD2844-2NE10-0

3KD2834-2NE40-0

3KD2844-2NE40-0

3KD3040-2NE20-0

3KD3060-2NE20-0

3KD3034-2NE10-0

3KD3044-2NE10-0

3KD3034-2NE40-0

3KD3044-2NE40-0

3KD3240-2NE20-0

3KD3260-2NE20-0

3KD3234-2NE10-0

3KD3244-2NE10-0

3KD3234-2NE40-0

3KD3244-2NE40-0

3KD3440-2NE20-0

3KD3460-2NE20-0

3KD3434-2NE10-0

3KD3444-2NE10-0

3KD3434-2NE40-0

3KD3444-2NE40-0

3KD2840-0NE20-0

3KD2860-0NE20-0

3KD2834-0NE10-0

3KD2844-0NE10-0

3KD2834-0NE40-0

3KD2844-0NE40-0

3KD3040-0NE20-0

3KD3060-0NE20-0

3KD3034-0NE10-0

3KD3044-0NE10-0

3KD3034-0NE40-0

3KD3044-0NE40-0

3KD3240-0NE20-0

3KD3260-0NE20-0

3KD3234-0NE10-0

3KD3244-0NE10-0

3KD3234-0NE40-0

3KD3244-0NE40-0

3KD3440-0NE20-0

3KD3460-0NE20-0

3KD3434-0NE10-0

3KD3444-0NE10-0

3KD3434-0NE40-0

3KD3444-0NE40-0

3KD3640-0NE20-0

-

3KD3634-0NE10-0

3KD3644-0NE10-0

3KD3634-0NE40-0

3KD3644-0NE40-0

3KD3640-0PE20-0

3KD3660-0PE20-0

3KD3634-0PE10-0

3KD3644-0PE10-0

3KD3634-0PE40-0

3KD3644-0PE40-0

3KD3840-0PE20-0

3KD3860-0PE20-0

3KD3834-0PE10-0

3KD3844-0PE10-0

3KD3834-0PE40-0

3KD3844-0PE40-0

3KD4040-0PE20-0

3KD4060-0PE20-0

3KD4034-0PE10-0

3KD4044-0PE10-0

3KD4034-0PE40-0

3KD4044-0PE40-0

3KD4240-0PE20-0

3KD4260-0PE20-0

3KD4234-0PE10-0

3KD4244-0PE10-0

3KD4234-0PE40-0

3KD4244-0PE40-0

3KD4440-0QE20-0

3KD4460-0QE20-0

3KD4434-0QE10-0

3KD4444-0QE10-0

3KD4434-0QE40-0

3KD4444-0QE40-0

3KD4640-0QE20-0

3KD4660-0QE20-0

3KD4634-0QE10-0

3KD4644-0QE10-0

3KD4634-0QE40-0

3KD4644-0QE40-0

3KD4840-0QE20-0

3KD4860-0QE20-0

3KD4834-0QE10-0

3KD4844-0QE10-0

3KD4834-0QE40-0

3KD4844-0QE40-0

3KD5040-0RE20-0

3KD5060-0RE20-0

3KD5034-0RE10-0

3KD5044-0RE10-0

3KD5034-0RE40-0

3KD5044-0RE40-0

3KD5240-0RE20-0

3KD5260-0RE20-0

3KD5234-0RE10-0

3KD5244-0RE10-0

3KD5234-0RE40-0

3KD5244-0RE40-0

3KD5440-0RE20-0

3KD5460-0RE20-0

3KD5434-0RE10-0

3KD5444-0RE10-0

3KD5434-0RE40-0

3KD5444-0RE40-0








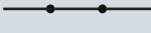




3KD switch disconnectors

Accessories

Additional poles

Note:

- Additional poles (4th contact element, N or N/PE terminal) must always be mounted directly adjacent to the switch disconnector on the left or right. Accordingly, an auxiliary switch module must not be mounted between the basic unit and an additional pole on sizes 1 and 2.
- For installation, it is important to note that only a 3-pole 3KD switch disconnector may be retrofitted with an additional switching pole with contact system (4th contact element).

		Size 1	Size 2	Size 3	Size 4	Size 5
4th contact elements (switching pole)						
<ul style="list-style-type: none"> For upgrading a 3-pole to a 4-pole switch disconnector Identical to the factory-fitted poles 						
Connection		Article No.				
 Box terminals 	3KD9105-2	■				
	3KD9205-2		■			
 Flat terminals 	3KD9205-0		■			
	3KD9305-0			■		
	3KD9405-0				■	
	3KD9505-0					■
N terminals (neutral conductor terminal) with removable jumper						
<ul style="list-style-type: none"> A jumper can be removed in order to interrupt the electrical connection between the terminals 						
Connection		Article No.				
 Box terminals 	3KD9106-2	■				
	3KD9206-2		■			
 Flat terminals 	3KD9206-0		■			
	3KD9306-0			■		
	3KD9406-0				■	
	3KD9506-0					■
N/PE terminals with permanent jumper						
<ul style="list-style-type: none"> A permanent electrical connection between the terminals that cannot be broken 						
Connection		Article No.				
 Box terminals 	3KD9106-8	■				
	3KD9206-8		■			
 Flat terminals 	3KD9206-7		■			
	3KD9306-7			■		
	3KD9406-7				■	
	3KD9506-7					■

Operating mechanisms

Size 1 Size 2 Size 3 Size 4 Size 5

Direct operating mechanisms, standard version

- Can be locked with up to 3 padlocks
- Requires additional mounting depth in locked state



Labeling	Color	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Test-O-I	Gray	3KD9101-1	■				
		3KD9201-1		■			
		3KD9301-1			■		
		3KD9401-1				■	
		3KD9501-1					■
	Red/yellow	3KD9101-2	■				
		3KD9201-2		■			
		3KD9301-2			■		
		3KD9401-2				■	
		3KD9501-2					■

Direct operating mechanisms, flat version

- Suitable for distribution boards
- Can be locked with 1 padlock
- No additional mounting depth in locked state



Labeling	Color	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Test-O-I	Gray	3KD9101-0	■				
		3KD9201-0		■			
	Red/yellow	3KD9101-8	■				
		3KD9201-8		■			

Door-coupling rotary operating mechanisms, complete

- Scope of supply:
 - Handle with masking plate
 - Coupling driver with tolerance compensation (rotary operator with test function)
 - Shaft 300 mm
- Can be locked with up to 3 padlocks



Labeling	Color	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Test-O-I	Gray	8UD1171-2AF21	■	■			
		8UD1141-2AF21			■		
		8UD1151-3AF21				■	
		8UD1161-4AF21					■
		8UD1171-2AF25	■	■			
	Red/yellow	8UD1141-2AF25			■		
		8UD1151-3AF25				■	
		8UD1161-4AF25					■

Note:







- For 3KD switch disconnectors and lateral operating mechanism (left or right), only 8UD door-coupling rotary operating mechanisms without the test function can be used.
- If door-coupling rotary operating mechanisms without "Test" are used on 3KD switch disconnectors, the test function must be mechanically blocked on the switch using a blocking pin.

3KD switch disconnectors

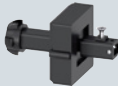


Accessories

Accessories for door-coupling rotary operating mechanisms





Size 1 Size 2 Size 3 Size 4 Size 5

Handles					Size 1	Size 2	Size 3	Size 4	Size 5		
<ul style="list-style-type: none"> Supplied with a masking frame, but without an extension shaft or coupling driver Can be locked with up to 3 padlocks 											
Labeling											
   	O-I	Without	Gray	8UD1771-2AD01	■	■					
				8UD1841-2AD01			■				
				8UD1851-3AD01						■	
			8UD1861-4AD01							■	
			Red/yellow	8UD1771-2AD05	■	■					
				8UD1841-2AD05			■				
	8UD1851-3AD05							■			
	With	Gray	8UD1861-4AD05						■		
			8UD1771-2CD01	■	■						
			8UD1841-2CD01			■					
			8UD1851-3CD01						■		
			Red/yellow	8UD1861-4CD01							■
				8UD1771-2CD05	■	■					
	8UD1841-2CD05				■						
	Test-O-I	Without	Gray	8UD1851-3CD05					■		
				8UD1861-4CD05						■	
				8UD1771-2AF01	■	■					
			Red/yellow	8UD1841-2AF01			■				
8UD1851-3AF01									■		
8UD1861-4AF01										■	
With		Gray	8UD1771-2AF05	■	■						
			8UD1841-2AF05			■					
			8UD1851-3AF05						■		
			Red/yellow	8UD1861-4AF05							■
				8UD1771-2CF01	■	■					
				8UD1841-2CF01			■				
Shaft jack for 8UD1 handle	For shaft 600 mm	Gray	8UD1851-3CF01					■			
			8UD1861-4CF01						■		
			8UD1771-2CF05	■	■						
		Red/yellow	8UD1841-2CF05			■					
			8UD1851-3CF05						■		
			8UD1861-4CF05							■	
Extension shafts											
 <ul style="list-style-type: none"> A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1 and 2 	Length				Article No.						
	300 mm	8UC6032	■	■	■						
		8UC6033						■			
		8UC6034							■		
	600 mm	8UC6082	■	■	■						
		8UC6083						■			
		8UC6084							■		
									■		
Shaft jack for 8UD1 handle											
	Version				Article No.						
	For shaft 600 mm				8UD1900-OFA00	■	■				

Accessories for door-coupling rotary operating mechanisms

		Size 1	Size 2	Size 3	Size 4	Size 5
Coupling drivers						
	Version	Article No.				
	With tolerance compensation	8UD1900-2GA00	■	■		
		8UD1900-6GA00			■	
		8UD1900-3GA00				■
		8UD1900-4GA00				■
	Without tolerance compensation	8UD1900-2HA00	■	■		
		8UD1900-6HA00			■	
		8UD1900-3HA00				■
		8UD1900-4HA00				■
	Shaft couplings					
	Article No.					
		8UC6022	■	■	■	
		8UC6023				■
		8UC6024				■

Other accessories and spare parts



		Size 1	Size 2	Size 3	Size 4	Size 5			
Auxiliary switch modules									
	<ul style="list-style-type: none"> Auxiliary switch modules are supplied without auxiliary switches. A maximum of 2 auxiliary switches can be installed per auxiliary module The 3KD9103-6 and 3KD9103-7 auxiliary switch modules can only be used with 3KD directly on the operating mechanism if the operating mechanism is on the front or on the left 								
	Variant	Article No.							
	Standard version	3KD9103-5	■	■					
	With test function	3KD9103-6	■	■					
With leading NO contact and test function	3KD9103-7	■	■						
Auxiliary switches									
  	<ul style="list-style-type: none"> Auxiliary switches for sizes 3 to 5 have screw terminals and are mounted on the operating mechanism module of the 3KD. Auxiliary switches with spring-type terminals from the 3SU1 range can also be used. All auxiliary switches for sizes 3 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see Operating Instructions). 								
	Variant	Contacts	Contact surface	Article No.					
	With connecting cables	1 CO	Standard	3KD9103-1	■	■			
			Solid-state compatible	3KD9103-3	■	■			
	Without connecting cables	1 CO	Standard	3KD9103-2	■	■			
			Solid-state compatible	3KD9103-4	■	■			
		1 NO	Standard	3SU1400-1AA10-1BA0			■	■	■
			Gold-plated	3SU1400-1AA10-1LA0			■	■	■
		1 NC	Standard	3SU1400-1AA10-1CA0			■	■	■
			Gold-plated	3SU1400-1AA10-1MA0			■	■	■
		1 NO + 1 NC	Standard	3SU1400-1AA10-1FA0			■	■	■
			Gold-plated	3SU1400-1AA10-1QA0			■	■	■
		2 NO	Standard	3SU1400-1AA10-1DA0			■	■	■
			Gold-plated	3SU1400-1AA10-1NA0			■	■	■
	2 NC	Standard	3SU1400-1AA10-1EA0			■	■	■	
Gold-plated		3SU1400-1AA10-1PA0			■	■	■		

3KD switch disconnectors

Other accessories and spare parts

					Size 1	Size 2	Size 3	Size 4	Size 5
Phase barriers									
	<ul style="list-style-type: none"> For 3KD with flat terminals For 3KD size 2 with flat terminals, phase barriers are already contained in the scope of supply. 								
Version	Scope of supply			Article No.					
For 3-pole devices	6 units			3KD9108-6		■			
				3KD9308-6			■		
				3KD9408-6				■	
				3KD9508-6					■
For 4-pole devices	8 units			3KD9108-8		■			
				3KD9308-8			■		
				3KD9408-8				■	
				3KD9508-8					■
Terminal covers									
	<ul style="list-style-type: none"> For 3KD with flat terminals 								
Version	Scope of supply	Variant	Article No.						
For 3-pole devices	6 units	Standard length	3KD9204-6			■			
			3KD9304-6				■		
			3KD9404-6					■	
			3KD9504-6						■
		Short version	3KD9204-7			■			
			3KD9304-7				■		
			3KD9404-7					■	
For 4-pole devices	8 units	Standard length	3KD9204-8			■			
			3KD9304-8				■		
			3KD9404-8					■	
			3KD9504-8						■
		Short version	3KD9204-5			■			
			3KD9304-5				■		
			3KD9404-5					■	
Spare part for terminal covers									
	Scope of supply	Variant	Article No.						
	1 unit	Standard length	3KD9504-1						■
		Short version	3KD9204-1			■			
			3KD9304-1				■		
			3KD9404-1					■	
Blocking pin test function									
	<ul style="list-style-type: none"> Enables permanent deactivation of the test function for auxiliary switches It is installed in the operating mechanism module of the 3KD switch disconnector 								
	Scope of supply			Article No.					
	10 units			3KF9112-1AA00	■	■			
				3KF9412-1AA00			■	■	
				3KF9512-1AA00					■
Mounting brackets									
	<ul style="list-style-type: none"> Spare part, included in the scope of supply of the 3KD 								
	Scope of supply			Article No.					
	4 units			3KD9120-1	■	■			
				3KF9212-0AA00			■		
				3KF9412-0AA00				■	
				3KF9512-0AA00					■
Slide for mounting on a standard mounting rail									
	<ul style="list-style-type: none"> Spare part, included in the scope of supply of the 3KD 								
	Scope of supply			Article No.					
	5 units			3KF9112-0BA00	■	■			

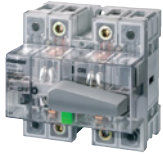
Accessories for DC applications

		Size 1	Size 2	Size 3	Size 4	Size 5	
Connecting bridges							
 <ul style="list-style-type: none"> • Suitable for connecting two poles • For 3KD switch disconnectors with 400 A, 800 A, 1250 A and 1600 A, two units are required. 	Connection	Article No.					
	Box terminals	3KD9118-1	■				
		3KD9218-1		■			
	Flat terminals	3KD9218-0		■			
		3KD9318-0			■		
		3KD9418-0				■	
		3KD9518-0					■
Terminal covers for connecting bridges							
 <ul style="list-style-type: none"> • For 3KD with flat terminals 	Connection	Article No.					
		3KD9204-0		■			
		3KD9304-0			■		
		3KD9404-0				■	
		3KD9504-0					■

5TE1 switch disconnectors

System overview

Switch disconnectors



Transparent



Red/yellow

Accessories



Auxiliary switches



Cage terminals



Terminal covers

5TE1 switch disconnectors

18 ... 33 kA_{rms}



	Switch disconnectors, transparent				Switch disconnectors, red/yellow			
	Number of poles	2P	3P	3P+N	4P	3P	4P	
Mounting width	Rated operational current I_e	Rated operational voltage U_e						
5 MW	100 A	690 V	5TE1210	5TE1310	5TE1610	5TE1410	5TE1315	5TE1415
	125 A	690 V	5TE1220	5TE1320	5TE1620	5TE1420	5TE1325	5TE1425
8 MW	160 A	690 V	5TE1230	5TE1330	5TE1630	5TE1430	5TE1335	5TE1435
	200 A	690 V	5TE1240	5TE1340	5TE1640	5TE1440	5TE1345	5TE1445

Accessories

Auxiliary switches



- Can be mounted optionally left or right or on both sides (2 units)

Contact load	Contacts	I _e	U _e	Article No.
Min. 24 V, 50 mA	1 CO	6 A	230 V	5TE9005
	2 CO	6 A	230 V	5TE9006

Rotary operating mechanisms with extension shafts



- For mounting on hinged doors or enclosure lids, lockable

Degree of protection	Color	Shaft length	Article No.
IP65	Black knob	200 mm	5TE9010
		400 mm	5TE9011
	Red knob	200 mm	5TE9012
		400 mm	5TE9013

Conversion kit, 4-pole



- For connection of busbars or cables with cable lugs
- For busbars max. 15 mm wide including terminal cover

Version	Article No.
For 100 A and 125 A switch disconnectors	5TE9015

Cage terminals



- Terminal diameter 14.5 mm for 35-mm² cables
- Hexagon socket-head screw 5 mm

Version	Number of poles	Scope of supply	Article No.
For 160 A and 200 A switch disconnectors	3-pole	1 set = 3 units	5TE9003
	4-pole	1 set = 4 units	5TE9004

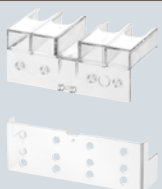
Locking units



- For up to three padlocks with max. diam. 8 mm

Article No.
5TE9014

Terminal covers, sealable



Version	Article No.
For 100 A and 125 A switch disconnectors	5TE9000

For 160 A and 200 A switch disconnectors	5TE9001
--	---------

Fuse switch disconnectors

Quick selection guide



3NP1



Size

000

00

1

2

3

General technical details acc. to IEC 60947-3

Basic data

Parameter	Unit	000	00	1	2	3
Rated uninterrupted current I_u	A	160 ²⁾	160	250	400	630
For fuse links acc. to IEC 60269-2	Size	000	00 and 000	1 and 0	2 and 1	3 and 2
Rated operational voltage U_e	At 50/60 Hz AC	690				
	At DC (3 conducting paths in series)	440				
	At DC (2 conducting paths in series)	240				
	At DC	–				
	For utilization category AC-20B or DC-20B	690 ¹⁾				

Operating and short-circuit behavior

Parameter	Unit	000	00	1	2	3	
Rated operational current I_e	At AC-21B, 400 V AC	A	160 ²⁾	160	250	400	630
	At AC-22B, 400 V AC	A	160 ²⁾	160	250	400	630
	At AC-23B, 400 V AC	A	160 ²⁾	160	250	400	630
	At AC-21B, 500 V AC	A	160 ²⁾	160	250	400	630
	At AC-22B, 500 V AC	A	125 ²⁾	160	250	400	630
	At AC-23B, 500 V AC	A	40	63	200	315	500
	At AC-21B, 690 V AC	A	160 ²⁾	160	250	400	630
	At AC-22B, 690 V AC	A	50	125	250	400	500
	At AC-23B, 690 V AC	A	25	35	100	125	200
	At DC-21B (2 conducting paths in series), 240 V DC	A	160 ²⁾	160	250	400	630
	At DC-22B (2 conducting paths in series), 240 V DC	A	100	160	250	400	630
	At DC-23B (2 conducting paths in series), 240 V DC	A	80	100	200	250	400
	At DC-21B (3 conducting paths in series), 440 V DC	A	100	160	250	400	630
At DC-22B (3 conducting paths in series), 440 V DC	A	50	125	200	315	500	
At DC-23B (3 conducting paths in series), 440 V DC	A	25	63	100	160	250	
Rated conditional short-circuit current with fuses (by fast switch on)	Rated current at 400 V/500 V/690 V	kA	80/80/80	80/80/80	80/80/50	80/80/50	50/50/50
	Permissible let-through current of the fuses, peak value	kA	10	15	25	40	50
Short-circuit strength with fuses (with closed disconnector)	Rated current at 500 V/690 V	kA	120/100	120/100	120/100	100/100	100/100
	Permissible let-through I^2t value of the fuses	kA ² s	223	223	780	2150	5400
	Permissible let-through current of the fuses, peak value	kA	15	23	32	40	60
Rated making capacity	With isolating blades at 500 V AC	kA	2	6	17	17	17
Rated short-time withstand current I_{cw}		kA	–	–	–	–	–
Rated insulation voltage U_i		V	690 ¹⁾	690 ¹⁾	690 ¹⁾	690 ¹⁾	690 ¹⁾
Rated impulse withstand voltage U_{imp}		kV	8	8	8	8	8
Power loss per pole of the switch at I_{th} (without fuses)		W	5	5	8	14	30
Maximum power loss of the usable fuses (per fuse)		W	7.5 ³⁾	12	23	34	48
Mechanical endurance, operating cycles			2000	2000	1600	1000	1000

Degree of protection

Protection	000	00	1	2	3
Without masking plate or terminal cover – switch closed / open	IP30/IP20	IP30/IP20	IP30/IP20	IP30/IP20	IP30/IP20
With masking plate or terminal cover – switch closed / open	IP40/IP20	IP40/IP20	IP40/IP20	IP40/IP20	IP40/IP20

Certifications and approvals

VDE, CCC, LR, US

The technical specifications apply to the standard types stated below.
For the complete specifications for all versions, see the Online Support

3NP1: 3-pole and 4-pole devices without fuse monitoring

3NP5: Devices without fuse monitoring

3NJ4/5: Disconnectors for cable and line protection without fuse monitoring, not for transformer protection

¹⁾ Applies to degree of pollution 3
(for degree of pollution 2, use up to U_i 1000 V possible)

²⁾ Only with use of the infeed terminal, otherwise up to 100 A

³⁾ Max. 9 W for operation up to 160 A

3NP5



3NJ4/3NJ5



5SG76



3NP5				3NJ4/3NJ5				5SG76	
00	1	2	3	00	1	2	3	4a	D01
160	250	400	630	160	250	400	630	1250	16
00	1 and 0	2 and 1	3 and 2	00 and 000	1 and 0	2 and 1	3 and 2	4a	D01
	690					690			400, 415
	440					-			-
	220					-			110
	-					-			48
	690					-			-
160	250	400	630	160	250	400	630	1250	16
160	250	400	630	160	250	400	630	1250	16
160	250	400	630	-	250	400	-	-	-
160	250	400	630	160	250	400	630	1250	-
160	250	400	630	160	250	400	630	1250	-
160	250	400	630	-	-	-	-	-	-
160	250	400	630	100	250	400	630	1250	-
160	250	400	630	100	250	-	-	-	-
100	160	315	400	-	-	-	-	-	-
160	250	400	630	-	-	-	-	-	-
160	250	400	630	-	-	-	-	-	-
160	250	400	630	-	-	-	-	-	-
160	250	400	630	-	-	-	-	-	-
160	250	400	630	-	-	-	-	-	-
160	250	400	630	-	-	-	-	-	-
50/50/-	50/50/-	50/50/-	50/50/-	-	-	-	-	-	50/-/-
15	25	40	50	-	-	-	-	-	-
100/-	100/-	50/-	50/-	80	120	120	120	80	-
223	780	2150	5400	-	-	-	-	-	-
23	32	40	60	-	-	-	-	-	-
6	17	17	17	-	-	-	-	-	-
-	-	-	-	-	14.5	14.5	14.5	35	-
690 ¹⁾	690 ¹⁾	690 ¹⁾	690 ¹⁾	800	1000	1000	1000	1000	400
6	6	6	6	8	12	12	12	12	2.5
7.8	7.5	15	39	18	23	54	115	190	-
12	23	34	48	12	32	45	48	110	2.5
1600	1600	1600	1600	1400	1400	800	800	500	-
IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP00/IP00	IP20/IP20
IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP30/IP10	IP10/IP00	IP20/IP20
CCC									

3NP1 fuse switch disconnectors

System overview

Basic units

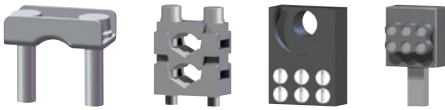


1, 3, 4-pole for floor mounting



3 and 4-pole mounting on busbar systems

Connection parts



Terminals for retrofitting to 3NP1



Auxiliary conductor connections



Three-phase busbars

Assembly kits



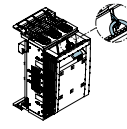
Standard rail mounting



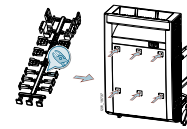
Mechanical connection



1/4-pole busbar mounting



Locking function

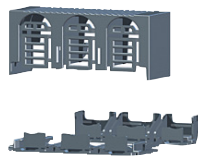


Protection against power theft

Masking frames and covers



Masking frames and supports



Cable connection covers



Reach-around protection for busbar

Other accessories



Auxiliary switches



Isolating blades



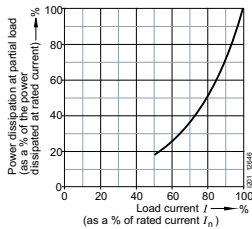
Fuse carriers with and without fuse monitoring

General information



Suitable fuses

You will find further information under:



The 3NP1 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection and motor protection. Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the fuse switch disconnector is not exceeded. For use of Siemens SITOR semiconductor fuses, ready-made derating tables are available in the linked document.

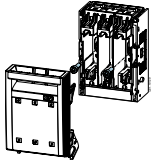


Types of mounting

You will find further information under:

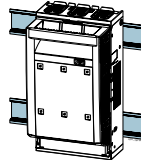


Floor mounting



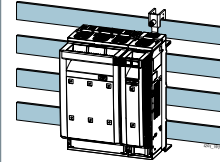
All sizes of the 3NP1 fuse switch disconnectors are available in floor mounting versions.

Standard mounting rail



Sizes 000, 00 and 1 can also be snapped onto a standard mounting rail (TH 35 according to EN 60715) using an accessory.

Busbar



3NP1 fuse switch disconnectors are available for mounting on Siemens and Rittal busbar systems.

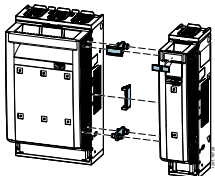


Accessories

You will find further information under:

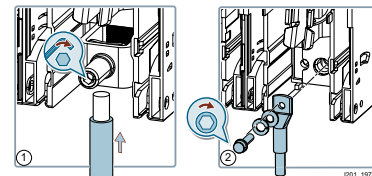


Number of poles



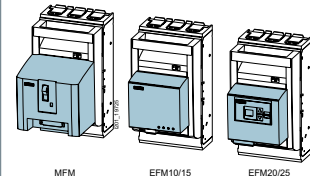
3NP1 fuse switch disconnectors are available in 1, 3 and 4-pole device versions. The connection kits can be used to fabricate 2-pole types and application-specific 4-pole versions.

Electrical connection



3NP1 fuse switch disconnectors are available with a number of different terminal types. Further terminal types can be retrofitted as accessories.

Fuse monitoring



All common 3NP1 versions with factory-fitted fuse monitoring are available and can be selected according to application-specific requirements.

3NP1 fuse switch disconnectors

Flat terminals

NH00



NH1



NH2



NH3



Fuse monitoring	Number of poles	$I_u = 160 \text{ A}$	$I_u = 250 \text{ A}$	$I_u = 400 \text{ A}$	$I_u = 630 \text{ A}$
Floor mounting					
Without	1-pole	3NP1131-1CA10	3NP1141-1DA10	3NP1151-1DA10	3NP1161-1DA10
	3-pole	3NP1133-1CA10	3NP1143-1DA10	3NP1153-1DA10	3NP1163-1DA10
	4-pole	3NP1134-1CA10	3NP1144-1DA10	3NP1154-1DA10	3NP1164-1DA10
MFM	3-pole	3NP1133-1CA11	3NP1143-1DA11	3NP1153-1DA11	3NP1163-1DA11
EFM10	3-pole	3NP1133-1CA12	3NP1143-1DA12	3NP1153-1DA12	3NP1163-1DA12
EFM15	1-pole	3NP1131-1CA14	3NP1141-1DA14	3NP1151-1DA14	3NP1161-1DA14
	3-pole	3NP1133-1CA14	3NP1143-1DA14	3NP1153-1DA14	3NP1163-1DA14
EFM20	3-pole	3NP1133-1CA13	3NP1143-1DA13	3NP1153-1DA13	3NP1163-1DA13
Mounting on 60 mm busbar systems with reach-around protection for Siemens 8US					
Without FM	3-pole	3NP1133-1BC10	3NP1143-1BC10	3NP1153-1BC10	3NP1163-1BC10
	4-pole	3NP1134-1BC10	3NP1144-1BC10	3NP1154-1BC10	3NP1164-1BC10
MFM	3-pole	3NP1133-1BC11	3NP1143-1BC11	3NP1153-1BC11	3NP1163-1BC11
EFM10	3-pole	3NP1133-1BC12	3NP1143-1BC12	3NP1153-1BC12	3NP1163-1BC12
EFM15	3-pole	3NP1133-1BC14	3NP1143-1BC14	3NP1153-1BC14	3NP1163-1BC14
EFM20	3-pole	3NP1133-1BC13	3NP1143-1BC13	3NP1153-1BC13	3NP1163-1BC13
Mounting on 60 mm busbar systems with reach-around protection for Rittal					
Without FM	3-pole	3NP1133-1JC10	3NP1143-1JC10	3NP1153-1JC10	3NP1163-1JC10
MFM	3-pole	3NP1133-1JC11	3NP1143-1JC11	3NP1153-1JC11	3NP1163-1JC11
EFM10	3-pole	3NP1133-1JC12	3NP1143-1JC12	3NP1153-1JC12	3NP1163-1JC12
EFM20	3-pole	3NP1133-1JC13	3NP1143-1JC13	3NP1153-1JC13	3NP1163-1JC13
Mounting on 40 mm busbar systems with reach-around protection for Siemens 8US					
Without FM	3-pole	3NP1133-1BB10	–	–	–
MFM	3-pole	3NP1133-1BB11	–	–	–
EFM10	3-pole	3NP1133-1BB12	–	–	–
EFM20	3-pole	3NP1133-1BB13	–	–	–
Mounting on 40 mm busbar systems with reach-around protection for Rittal					
Without FM	3-pole	3NP1133-1JB10	–	–	–
MFM	3-pole	3NP1133-1JB11	–	–	–
EFM10	3-pole	3NP1133-1JB12	–	–	–
EFM20	3-pole	3NP1133-1JB13	–	–	–

Notes:

- On the 3NP1 with fuse monitoring, the permissible operating voltage is limited by the fuse monitoring
- Permissible operational voltage with fuse monitoring:
 - MFM AC max. 690 V (L – L) / max. 440 V (L+ – L–)
 - EFM10 230 ... 690 V AC (L – L)
 - EFM15 3-pole 190 ... 690 V AC (L – L)
 - EFM15 1-pole 24 ... 240 V AC (L – N) / 24 ... 250 V DC (L+ – L–)
 - EFM20 230 ... 690 V AC (L – L)
- Additional variants are available as accessories:
 - EFM15 with further operating voltage ranges
 - EFM25 – DC version of the EFM20
- Devices for busbar mounting with reach-around protection
 - For Siemens 8US, mounting is possible on the Wöhner Classic and Rittal RiLine systems without a floor pan
 - For Rittal, mounting is possible on the RiLine60 system with a floor pan

Box terminals

NH000

NH00

NH1

NH2

NH3

 $I_u = 100 \text{ A}$ $I_u = 160 \text{ A}$ $I_u = 250 \text{ A}$ $I_u = 400 \text{ A}$ $I_u = 630 \text{ A}$

3NP1121-1CA20	3NP1131-1CA20	3NP1141-1DA20	3NP1151-1DA20	3NP1161-1DA20
3NP1123-1CA20	3NP1133-1CA20	3NP1143-1DA20	3NP1153-1DA20	3NP1163-1DA20
3NP1124-1CA20	3NP1134-1CA20	3NP1144-1DA20	3NP1154-1DA20	3NP1164-1DA20
–	3NP1133-1CA21	3NP1143-1DA21	3NP1153-1DA21	3NP1163-1DA21
3NP1123-1CA22	3NP1133-1CA22	3NP1143-1DA22	3NP1153-1DA22	3NP1163-1DA22
3NP1121-1CA24	3NP1131-1CA24	3NP1141-1DA24	3NP1151-1DA24	3NP1161-1DA24
3NP1123-1CA24	3NP1133-1CA24	3NP1143-1DA24	3NP1153-1DA24	3NP1163-1DA24
3NP1123-1CA23	3NP1133-1CA23	3NP1143-1DA23	3NP1153-1DA23	3NP1163-1DA23
3NP1123-1BC20	3NP1133-1BC20	3NP1143-1BC20	3NP1153-1BC20	3NP1163-1BC20
3NP1124-1BC20	3NP1134-1BC20	3NP1144-1BC20	3NP1154-1BC20	3NP1164-1BC20
–	3NP1133-1BC21	3NP1143-1BC21	3NP1153-1BC21	3NP1163-1BC21
3NP1123-1BC22	3NP1133-1BC22	3NP1143-1BC22	3NP1153-1BC22	3NP1163-1BC22
3NP1123-1BC24	3NP1133-1BC24	3NP1143-1BC24	3NP1153-1BC24	3NP1163-1BC24
3NP1123-1BC23	3NP1133-1BC23	3NP1143-1BC23	3NP1153-1BC23	3NP1163-1BC23
3NP1123-1JC20	3NP1133-1JC20	3NP1143-1JC20	3NP1153-1JC20	3NP1163-1JC20
–	3NP1133-1JC21	3NP1143-1JC21	3NP1153-1JC21	3NP1163-1JC21
3NP1123-1JC22	3NP1133-1JC22	3NP1143-1JC22	3NP1153-1JC22	3NP1163-1JC22
3NP1123-1JC23	3NP1133-1JC23	3NP1143-1JC23	3NP1153-1JC23	3NP1163-1JC23
3NP1123-1BB20	3NP1133-1BB20	–	–	–
–	3NP1133-1BB21	–	–	–
3NP1123-1BB22	3NP1133-1BB22	–	–	–
3NP1123-1BB23	3NP1133-1BB23	–	–	–
3NP1123-1JB20	3NP1133-1JB20	–	–	–
–	3NP1133-1JB21	–	–	–
3NP1123-1JB22	3NP1133-1JB22	–	–	–
3NP1123-1JB23	3NP1133-1JB23	–	–	–

3NP1 fuse switch disconnectors

Accessories

Connection parts

1-pole 3-pole NH000 NH00 NH1 NH2 NH3

Terminals for 3NP1 with flat terminals

- Contain enough parts to retrofit one side of a 3NP1 accordingly (three terminals for 3-pole 3NP1, one terminal for 1-pole unit)
- If the incoming cable and cable outlet are retrofitted, two packages must be ordered
- Connection module for busbar mounting if a masking frame is to be supported on the 32 mm cover plane (installation of the terminals under the masking frame)



Variant	Conductor cross-section	Article No.	Article No.	NH000	NH00	NH1	NH2	NH3
Saddle terminals	1.5 ... 70 mm ²	3NP1931-1BA00	3NP1933-1BA00		■			
	70 ... 120 mm ²	3NP1941-1BA00	3NP1943-1BA00			■		
	120 ... 240 mm ²	3NP1951-1BA00	3NP1953-1BA00				■	
	150 ... 300 mm ²	3NP1961-1BA00	3NP1963-1BA00					■
Prism terminals, single	35 ... 95 mm ²	3NP1931-1BB10	3NP1933-1BB10		■			
	70 ... 150 mm ²	3NP1941-1BB10	3NP1943-1BB10			■		
	120 ... 240 mm ²	3NP1951-1BB10	3NP1953-1BB10				■	
	150 ... 300 mm ²	3NP1961-1BB10	3NP1963-1BB10					■
Prism terminals, double	2x 35 ... 70 mm ²	3NP1941-1BB20	3NP1943-1BB20			■		
	2x 70 ... 120 mm ²	3NP1951-1BB20	3NP1953-1BB20				■	
	2x 150 ... 185 mm ²	3NP1961-1BB20	3NP1963-1BB20					■
Three-tier terminal	3x 1.5 ... 16 mm ²	3NP1931-1BE10	3NP1933-1BE10		■			
Connection module	3x 6 ... 70 mm ²	3NP1931-1BC00	3NP1933-1BC00		■			






Terminals for 3NP1 with box terminals

- Contain enough parts to retrofit one side of a 3NP1 accordingly (three terminals for 3-pole 3NP1, one terminal for 1-pole unit)
- If the incoming cable and cable outlet are retrofitted, two packages must be ordered



Variant	Conductor cross-section	Article No.	Article No.	NH000	NH00	NH1	NH2	NH3
Three-tier terminal	3x 1.5 ... 16 mm ²	3NP1921-1BE20	3NP1923-1BE20	■	■			
Feeder terminal	16 ... 95 mm ²	3NP1921-1BD00	3NP1923-1BD00	■				

Connection parts

	3-pole	NH000	NH00	NH1	NH2	NH3	
Auxiliary conductor connections							
<ul style="list-style-type: none"> With the auxiliary conductor connections, small loads can be directly connected to the terminals of the 3NP1 Connection via flat tab sleeves 6.3 × 0.8 mm, max. 5 A load Contains 3 auxiliary conductor connections 							
Connection		Article No.					
	With flat terminals	3NP1933-1BG10	■				
		3NP1943-1BG10		■			
		3NP1943-1BG10				■	
		3NP1943-1BG10					■
	With box terminals	3NP1923-1BG40	■				
		3NP1933-1BG40		■			
		3NP1943-1BG40			■		
		3NP1953-1BG40				■	
		3NP1953-1BG40					■
	With retrofitted prism and saddle terminals	3NP1933-1BG30		■			
		3NP1943-1BG30			■		
		3NP1953-1BG30				■	
		3NP1953-1BG30					■
Three-phase busbar system							
<ul style="list-style-type: none"> With the three-phase busbars, up to 4 3NP1 NH000 for floor mounting can be interconnected on the infeed side. Power is fed in at the feeder terminals. With the connection bar, two blocks of bridged 3NP1 can be connected. Using the cover cap, the connection tags of the busbar are covered on unused feeders to ensure they are safe to touch. The maximum current-carrying capacity of the interconnected 3NP1 is 225 A for the three-phase busbar system. 							
Version		Scope of supply	Article No.				
	For 2 × 3NP1	1 pack = 5 units	3NP1923-1BF20	■			
	For 3 × 3NP1	1 pack = 5 units	3NP1923-1BF30	■			
	For 4 × 3NP1	1 pack = 3 units	3NP1923-1BF40	■			
Connection bars		1 pack = 3 units	3NP1923-1BF50	■			
Covering caps		1 pack = 20 units	3NP1923-1BF10	■			
							

3NP1 fuse switch disconnectors

Accessories

Assembly kits

NH000 NH00 NH1 NH2 NH3

Retrofitting of locking function



- Not required for the 1-pole 3NP1 – the function is integrated into the switch

Scope of supply

1 pack = 10 units

Article No.

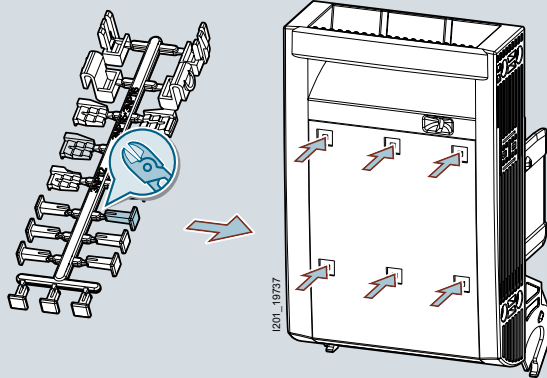
3NP1900-1HA00

■	■	■	■	■
---	---	---	---	---

Protection against power theft



- Closes the holes on the front of the 3NP1 (holes for voltage testing) and secures the front window such that power theft is not possible without visible damage to the 3NP1 (when the 3NP1 is locked or sealed)



Scope of supply

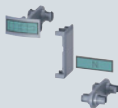
1 pack = 5 units

Article No.

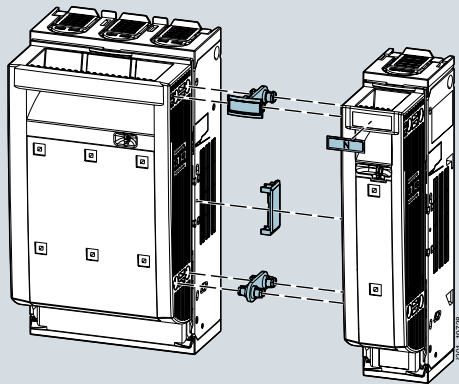
3NP1900-1EF00

■	■	■	■	■
---	---	---	---	---

Mechanical connection of 1-pole and 3-pole 3NP1 devices



- For 3NP1 with floor mounting, to create 2 or 4-pole 3NP1



Expansion of a 3-pole switch size NH00 to form a 4-pole switch

Article No.


3NP1921-1EC00


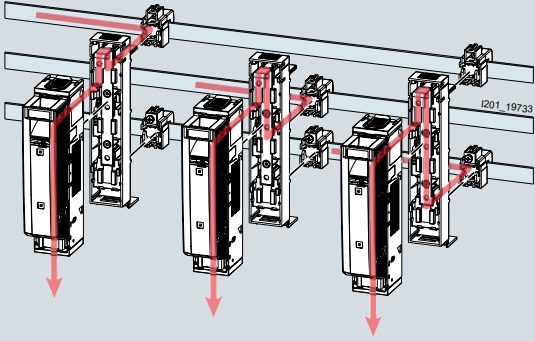
3NP1931-1EC00

3NP1941-1EC00


■				
	■			
		■	■	■

Assembly kits

		NH000	NH00	NH1	NH2	NH3
4-pole connecting kit for mounting on a 8US 60-mm busbar						
 <ul style="list-style-type: none"> Connects a 3-pole 3NP1 for busbar mounting 60 mm 8US to a 1-pole 3NP1 for floor mounting The 1-pole 3NP1 switches the neutral conductor of a 3+N system in this combination The neutral conductor busbar of the busbar system is above the three-phase busbars 	Connection	Article No.				
	With flat terminals	3NP1934-1ED20	■			
	With box terminals	3NP1924-1ED10	■			
		3NP1934-1ED10		■		
	With flat terminals or box terminals	3NP1944-1ED00			■	
	3NP1954-1ED00				■	

1-pole connecting kit for mounting on a 8US 60-mm busbar						
 <ul style="list-style-type: none"> Permits adaptation of a 1-pole 3NP1 for floor mounting to a 3-pole busbar system The feeding busbar (L1, L2 or L3) can be chosen freely. If two such 3NP1 are combined by mechanical connection using the assembly kit, 2-pole 3NP1 for busbar mounting can also be assembled. 	Connection	Article No.				
	With box terminals	3NP1921-1EE10	■			
		3NP1931-1EE10		■		



Assembly kits

		1/2-pole	3-pole	4-pole	NH000	NH00	NH1	NH2	NH3
Assembly kits for mounting on standard mounting rail									
 <ul style="list-style-type: none"> Mounting on a standard mounting rail is achieved for size NH000 by mounting on a mounting rail, and for sizes NH00 and NH1 between two mounting rails that are 125 or 150 mm apart (distance can be chosen when the assembly kit is mounted) 	Article No.	Article No.	Article No.						
	3NP1921-1EA00	3NP1923-1EA00	3NP1924-1EA00	■					
	3NP1931-1EB00	3NP1933-1EB00	3NP1933-1EB00		■				
	3NP1943-1EB00	3NP1943-1EB00	3NP1943-1EB00				■		



3NP1 fuse switch disconnectors

Accessories





Masking frames and covers

	1-pole	3-pole	NH000	NH00	NH1	NH2	NH3	
Masking frames								
<ul style="list-style-type: none"> The masking frame supports (pack of 2 units) are mounted on the side of the 3NP1 and prevent the supported masking frame from sagging. 								
	Version	Outer dimensions (H×W)	Article No.	Article No.				
	Masking frames	215 × 130 mm	–	3NP1923-1DA00	■			
		215 × 130 mm	–	3NP1933-1DA00		■		
		375 × 220 mm	–	3NP1943-1DA00			■	
		375 × 245 mm	–	3NP1953-1DA00				■
		375 × 290 mm	–	3NP1963-1DA00				■
Masking frame supports			3NP1923-1CF00	3NP1923-1CF00	■			
			3NP1933-1CF00	3NP1933-1CF00		■		
			3NP1943-1CF00	3NP1943-1CF00			■	

Cable connection covers

	1-pole	3-pole	NH000	NH00	NH1	NH2	NH3	
<ul style="list-style-type: none"> Extend the terminal covers integrated in the 3NP1 – they are required, for example, when long, uninsulated cable lugs are used In the version with rear reach-around protection, the underside is also covered. 								
	Version	Article No.	Article No.					
	Without rear reach-around protection		3NP1921-1CB00	3NP1923-1CB00 ¹⁾	■			
			3NP1931-1CB00	3NP1933-1CB00 ²⁾		■		
			3NP1941-1CB00	3NP1943-1CB00			■	
			3NP1951-1CB00	3NP1953-1CB00				■
			3NP1961-1CB00	3NP1963-1CB00				■
	With rear reach-around protection		–	3NP1933-1CC00 ¹⁾		■		
			3NP1931-1CD00	3NP1933-1CD00 ³⁾		■		
			3NP1941-1CD00	3NP1943-1CD00			■	
			3NP1951-1CD00	3NP1953-1CD00				■
			3NP1961-1CD00	3NP1963-1CD00				■

Reach-around protection for busbar mounting



	1-pole	3-pole	NH000	NH00	NH1	NH2	NH3	
<ul style="list-style-type: none"> Covers the busbar for devices for busbar mounting Contained in the scope of supply of the corresponding 3NP1 (spare part) Because the reach-around protection can be replaced, it can also be used to convert an existing 3NP1 for a different busbar system 								
	Version	Article No.	Article No.					
	For Siemens 8US busbar system		–	3NP1923-1CA10	■			
			–	3NP1933-1CA10		■		
			3NP1941-1CA10	–			■	■
			–	3NP1943-1CA10			■	
			–	3NP1953-1CA10				■
			–	3NP1963-1CA10				■
	For Siemens 8US busbar system compact		–	3NP1923-1CA30	■			
	For Rittal busbar system		–	3NP1923-1CA20	■			
			–	3NP1933-1CA20		■		
			–	3NP1943-1CA20			■	
			–	3NP1953-1CA20				■
			–	3NP1963-1CA20				■

¹⁾ Only for 3NP1 for mounting on busbar systems

²⁾ Only for 3NP1 with flat terminals

³⁾ Only for 3NP1 with flat terminals for floor mounting

Other accessories

		NH000	NH00	NH1	NH2	NH3
Auxiliary switches						
<ul style="list-style-type: none"> In each 3NP1, up to 2 auxiliary switches can be mounted From size NH00, it is possible to choose whether the auxiliary switch will switch simultaneously with the fuses or leading on switch-on. (Only leading possible for size NH000) 						
	Contacts	Article No.				
	1 CO	3NP1920-1FA00	■			
		3NP1930-1FA00		■		
		3NP1940-1FA00			■	■
		3NP1920-1FB00	■			
		3NP1930-1FB00		■		
	1 CO, solid-state compatible	3NP1940-1FB00		■	■	■
Isolating blades						
<ul style="list-style-type: none"> Are used if only the isolating function of a 3NP1 is required and not protection with fuses or in the neutral conductor of a 4-pole 3NP1. The isolating blade, which is leading on switch-on and lagging on switch-off, is used in the neutral conductor of a 4-pole 3NP1 if shifting of the neutral point of the 3+N system has to be avoided during switching. 						
	Version	Article No.				
	Switching simultaneously with fuses	3NG1002	■	■		
		3NG1202			■	
		3NG1302				■
		3NG1402				■
	Leading switch-on, lagging switch-off	3NP1924-1MA20	■			
		3NP1934-1MA20		■		
		3NP1944-1MA20			■	
		3NP1954-1MA20				■
		3NP1964-1MA20				■

3NP1 fuse switch disconnectors

Other accessories

Fuse carriers

- Included in the scope of supply of the 3NP1 (spare parts)
- For retrofitting fuse monitoring on an existing 3NP1 (by replacing the grip)

Version	Article No.	Article No.	NH000	NH00	NH1	NH2	NH3
Standard – without fuse monitoring	3NP1921-1GA00	3NP1923-1GA00	■				
	3NP1931-1GA00	3NP1933-1GA00		■			
	3NP1941-1GA00	3NP1943-1GA00			■		
	3NP1951-1GA00	3NP1953-1GA00				■	
	3NP1961-1GA00	3NP1963-1GA00					■
MFM 24 ... 690 V AC (L - L)/24 ... 240 V DC (L+ - L-)	–	3NP1933-1GB10		■			
	–	3NP1943-1GB10			■		
	–	3NP1953-1GB10				■	
	–	3NP1963-1GB10					■
EFM10 230 ... 690 V AC (L - L)	–	3NP1923-1GB20	■				
	–	3NP1933-1GB20		■			
	–	3NP1943-1GB20			■		
	–	3NP1953-1GB20				■	
	–	3NP1963-1GB20					■
EFM15 24 ... 240 V AC (L - N) / 24 ... 250 V DC (L+ - L-)	3NP1921-1GB43	–	■				
	3NP1931-1GB43	–		■			
	3NP1941-1GB43	–			■		
	3NP1951-1GB43	–				■	
	3NP1961-1GB43	–					■
EFM15 110 ... 690 V AC (L - N)	3NP1921-1GB41	–	■				
	3NP1931-1GB41	–		■			
	3NP1941-1GB41	–			■		
	3NP1951-1GB41	–				■	
	3NP1961-1GB41	–					■
EFM15 190 ... 690 V AC (L - L)	–	3NP1923-1GB42	■				
	–	3NP1933-1GB42		■			
	–	3NP1943-1GB42			■		
	–	3NP1953-1GB42				■	
	–	3NP1963-1GB42					■
EFM15 120 ... 440 V DC (L+ - L-)	3NP1921-1GB44	–	■				
	3NP1931-1GB44	–		■			
	3NP1941-1GB44	–			■		
	3NP1951-1GB44	–				■	
	3NP1961-1GB44	–					■
EFM15 220 ... 440 V DC (L+ - L-)	–	3NP1923-1GB45	■				
	–	3NP1933-1GB45		■			
	–	3NP1943-1GB45			■		
	–	3NP1953-1GB45				■	
	–	3NP1963-1GB45					■

Other accessories

Fuse carriers

- Included in the scope of supply of the 3NP1 (spare parts)
- For retrofitting fuse monitoring on an existing 3NP1 (by replacing the grip)



Version	Article No.	Article No.	NH000	NH00	NH1	NH2	NH3
EFM20 230 ... 690 V AC (L - L)	–	3NP1923-1GB30	■				
	–	3NP1933-1GB30		■			
	–	3NP1943-1GB30			■		
	–	3NP1953-1GB30				■	
	–	3NP1963-1GB30					■
	EFM25 220 ... 440 V DC (L+ - L-)	–	3NP1923-1GB50	■			
–		3NP1933-1GB50		■			
–		3NP1943-1GB50			■		
–		3NP1953-1GB50				■	
–		3NP1963-1GB50					■

3NP5 fuse switch disconnectors

System overview

Basic units



Floor mounting



For 40 mm busbar system

Connection parts



Clamp terminals



Busbar adapters for 60 mm systems

Masking frames and covers

Molded-plastic
masking frames

Cable connection covers

Other accessories



Auxiliary switches



Arc chutes

Assembly kits for
flush mounting

Fuse carriers

General information



System description

You will find further information under:



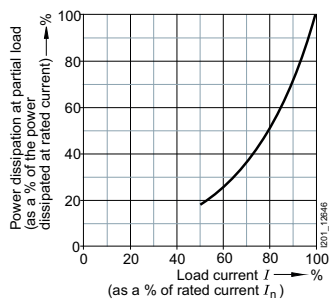
The 3NP5 fuse switch disconnector is an extremely robust device for extreme operating conditions. The fuse carrier has a pretensioned spring that prevents accidental, slow closure. All 3NP5 are designed for mounting on a mounting plate. Size NH00 is also available in versions for 40 mm busbar systems. All sizes can also be mounted using adapters on 60 mm busbar systems.

8



Suitable fuses

You will find further information under:



The 3NP5 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection and motor protection. Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the fuse switch disconnector is not exceeded. For use of Siemens SITOR semiconductor fuses, ready-made derating tables are available in the linked document.

3NP5 fuse switch disconnectors



Types of mounting	Auxiliary switches	$I_u = 160\text{ A}$	$I_u = 250\text{ A}$	$I_u = 400\text{ A}$	$I_u = 630\text{ A}$
Without fuse monitoring					
Floor mounting	Without	3NP5060-0CA00	3NP5260-0CA00	3NP5360-0CA00	3NP5460-0CA00
	1 NO + 1 NC	3NP5060-0CA10	3NP5260-0CA10	3NP5360-0CA10	3NP5460-0CA10
Mounting on 40 mm busbar systems	Without	3NP5065-1CF00	–	–	–
	1 NO + 1 NC	3NP5065-1CF10	–	–	–
Electromechanical fuse monitoring with 1 NO + 1 NC as a signaling contact					
Floor mounting	1 NO + 1 NC	3NP5060-0EA86	3NP5260-0EA86	3NP5360-0EA86	3NP5460-0EA86
Mounting on 40 mm busbar systems	1 NO + 1 NC	3NP5065-1EF86	–	–	–
Electromechanical fuse monitoring with 2 NO as a signaling contact					
Floor mounting	1 NO + 1 NC	3NP5060-0EA26	3NP5260-0EA26	3NP5360-0EA26	3NP5460-0EA26
Mounting on 40 mm busbar systems	1 NO + 1 NC	3NP5065-1EF26	–	–	–
Electronic fuse monitoring with 1 NO + 1 NC as a signaling contact					
Floor mounting	1 NO + 1 NC	3NP5060-0HA13	3NP5260-0HA13	3NP5360-0HA13	3NP5460-0HA13
Mounting on 40 mm busbar systems	1 NO + 1 NC	3NP5065-1HF13	–	–	–

Accessories

				NH00	NH1	NH 2	NH3
Clamp terminals							
	Version	Scope of supply	Article No.				
	For retrofitting to 3NP5 with flat terminals	3 units	3NY1903	■			
			3NY1907		■		
Busbar adapters							
	• For 60 mm busbar system		Article No.				
	Version	For adaptation of a 3NP5, for floor mounting on a 60-mm busbar system	8US1291-4SB00	■			
			8US1210-4AG00		■	■	■
Covers for cable lug connections							
	Version	Scope of supply	Article No.				
	Can be screwed onto the free end of the screw	6 units	3NY1241		■		
			3NY1245			■	■
Covers for 3NP5, with auxiliary switch mounted							
	• With punched cutouts for auxiliary switches		Article No.				
	Color	Version	Dimensions	Article No.			
	Gray	Flat	215 × 135 mm	3NY1115	■		
	Black	Flat, with additional bending edges	290 × 135 mm	3NY1116	■		
Covers for 3NP5, without auxiliary switches mounted							
	• With prepunched cutouts for retrofitting an auxiliary switch		Article No.				
	Color	Version	Dimensions	Article No.			
	Gray	Flat	215 × 135 mm	3NY1105	■		
	Black	Flat	290 × 135 mm	3NY1106	■		
		Angled	265 × 135 mm	3NY1107	■		
	Flat, with additional bending edges	290 × 135 mm	3NY1108	■			

Accessories

			NH00	NH1	NH 2	NH3
Auxiliary switches						
	Version	Article No.				
	1 NO + 1 NC, including mounting kit	3NY3033	■			
		3NY3034		■	■	■
Arc chutes						
	<ul style="list-style-type: none"> Spare part for arc chutes installed in the factory, one unit per switch is required for NH00, three units for NH1 to NH3 					
		Article No.				
		3NY4031	■			
		3NY4011		■		
		3NY4012			■	■
Assembly kits for flush mounting in front panel						
	Version	Article No.				
	Assembly kit with cover and mounting accessories	3NY1208	■			
		3NY1210		■		
		3NY1211			■	
		3NY1212				■
	Covers (spare part for assembly kit)	3NY1102		■		
		3NY1103			■	
		3NY1104				■
Fuse carriers						
	Version	Article No.				
	Without fuse monitoring	3NY1074	■			
		3NY1371		■		
		3NY1372			■	
		3NY1373				■
	With electromechanical fuse monitoring by circuit breakers, signaling contact 1 NO + 1 NC, without connecting cable	3NY1420	■			
		3NY1421		■		
		3NY1422			■	
		3NY1423				■
	With electromechanical fuse monitoring, signaling contact 1 NO + 1 NC, without connecting cable	3NY1513-0	■			
		3NY1513-2		■		
		3NY1513-3			■	
		3NY1513-4				■
	Connectors and connecting cables					
	Version	Length	Article No.			
	For electromechanical fuse monitoring	1 m	3NY1910	■	■	■
		3 m	3NY1911	■	■	■
	For electronic fuse monitoring	3 m	3NY1915	■	■	■

3NJ4 fuse switch disconnectors

System overview

1-pole switchable



Standard



For integratable current transformers

3-pole switchable



Standard



For integratable current transformers



With electronic fuse monitoring

Accessories



Covers



Adapters on busbar systems



Mounting and assembly elements



Busbar connection assembly kits



Fuses



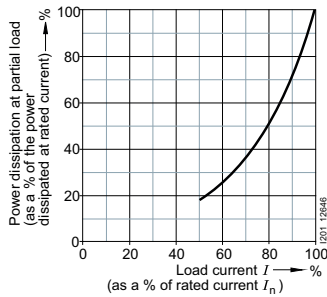
Current transformers

General information



Suitable fuses

You will find further information under:



The 3NJ4 fuse switch disconnector is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection and motor protection.

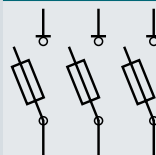
Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the fuse switch disconnector is not exceeded.

For use of Siemens SITOR semiconductor fuses, ready-made derating tables are available in the linked document.

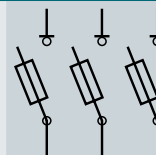
3NJ4 fuse switch disconnectors



1-pole switchable



3-pole switchable



Connection	Size of fuse	Rated operational current I_e		
Standard				
Flat terminals	NH00/NH000	160 A	3NJ4101-3BF01	3NJ4103-3BF01
Box terminals	NH00/NH000	160 A	–	3NJ4103-3BR02
Screw terminals	NH00/NH000	160 A	–	3NJ4103-3BF02
	NH1	250 A	3NJ4121-3BF01	3NJ4123-3BF01
	NH2	400 A	3NJ4131-3BF01	3NJ4133-3BF01
	NH3	630 A	3NJ4141-3BF01	3NJ4143-3BF01
Stud terminals	NH1	250 A	–	3NJ4123-3BJ01
	NH2	400 A	–	3NJ4133-3BJ01
	NH3	630 A	–	3NJ4143-3BJ01
	NH4a	1250 A	3NJ5643-0BB00	–
Direct connection V terminals	NH1	250 A	–	3NJ4123-3BT01
	NH2	400 A	–	3NJ4133-3BT01
	NH3	630 A	–	3NJ4143-3BT01
For integratable current transformers				
Screw terminals	NH00/NH000	160 A	–	3NJ4103-3BF12
	NH1	250 A	3NJ4121-3BF11	3NJ4123-3BF11
	NH2	400 A	3NJ4131-3BF11	3NJ4133-3BF11
	NH3	630 A	3NJ4141-3BF11	3NJ4143-3BF11
With electronic fuse monitoring devices EFM				
Flat terminals	NH00/NH000	160 A	–	3NJ4103-3CF02
	NH1	250 A	–	3NJ4123-3CF01
	NH2/NH1	400 A	–	3NJ4133-3CF01
	NH3/NH2	630 A	–	3NJ4143-3CF01
For integratable current transformers, with EFM electronic fuse monitoring				
Flat terminals	NH00/NH000	160 A	–	3NJ4103-3CF12
	NH1	250 A	–	3NJ4123-3CF11
	NH2/NH1	400 A	–	3NJ4133-3CF11
	NH3/NH2	630 A	–	3NJ4143-3CF11
For secondary-side fusing of transformers and incoming block				
Flat terminals	NH3	1000 A	–	3NJ4153-3BF01
		1250 A	–	3NJ4183-3BF01
		1600 A	–	3NJ4163-3BF01
		2000 A	–	3NJ4173-3BF01

3NJ4 fuse switch disconnectors

Accessories

Covers



- Additional touch protection when using cable lugs and as spacer

Size	Busbar center-to-center spacing	Version	Article No.
NH00	100 mm	Top and bottom	3NJ4912-1DA02
	185 mm	100 mm for bottom	3NJ4912-1FA01
		132 mm for top	3NJ4912-1FA00
NH1 ... NH3	Connection from the top		3NJ4912-1AA01
NH3	For double in-line disconnectors		3NJ4912-1EA00

Blanking covers



Version	Length	Width	Busbar center-to-center spacing	Article No.
For switchboard cutout	299 mm	50 mm	100 mm only	3NJ4912-2CA00
	633 mm	50 mm		3NJ4912-2AA00
	633 mm	100 mm		3NJ4912-2BA00

Lateral masking frame supports



- 3 clips with T profile

Size	Article No.
NH00 ... NH3	3NJ4912-2DA00

Fixing clips



Scope of supply	Article No.
1 set = 4 units, including fixing accessories	3NJ4918-0AA00

Unequipped section covers



Busbar center-to-center spacing	Width	Article No.
185 mm	50 mm	3NJ4912-3AA00
	100 mm	3NJ4912-3BA01
100 mm	50 mm	3NJ4912-3CA00

Adapters for screw fixing on busbar systems



- Adapters for screw fixing on busbar systems with 185 mm busbar center-to-center spacing
- For mounting 2 fuse switch disconnectors

Version	Fuse switch disconnectors	Article No.
Adaptation to sizes 1 ... 3	From 100 mm to 185 mm	3NJ4918-0DA02
	From 185 mm to 185 mm	3NJ5930-3BB
Adaptation to sizes 1 ... 3, with busbar terminal	From 100 mm to 185 mm	3NJ4918-0DB02

Adapters for screw fixing on busbar systems



- For fitting one fuse switch disconnector (= 3 separate brackets)

Version	Article No.
Adaptation of 100 mm to busbar system with 60 mm busbar center-to-center spacing	3NJ4918-0EA00

Fixing screws

- For fitting 3NJ4103 switch disconnectors with integratable current transformers onto adapters

Scope of supply	Article No.
1 set = 3 units	3NJ4918-0DC02

¹⁾ Touch protection only suitable for 3NJ4103-3BF02

²⁾ Touch protection only suitable for 3NJ4101-3BF01 and 3NJ4103-3BF01

3NJ4101	3NJ4103	3NJ412	3NJ413	3NJ414	3NJ415	3NJ416	3NJ417	3NJ418
	■ 1)							
■ 2)	■ 2)							
■ 2)	■ 2)							
		■	■	■	■	■	■	■
				■	■	■	■	■
■	■							
■	■	■	■	■	■	■	■	■
		■	■	■				
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
■	■							
	■							
	■							

3NJ4 fuse switch disconnectors

Accessories

Busbar supports



- For screwing on the busbars

Version
For 100 and 185 mm busbar center-to-center spacing

Article No.
3NJ5974-0AB

Grounding kit



Version
With connecting cable 25 mm²

Article No.
3NJ4910-1AA00

Busbar terminals



- Not for devices with transformer installation

Version
For each fuse switch disconnector, 3 units are required
For more rapid mounting of the switch disconnectors onto the busbars (1 set = 3 units)

Article No.
3NJ4911-3AA00
3NJ4911-3BA01

Saddle terminals



- 1 set = 3 units

Connection
Cu 1.5 ... 70 mm²

Article No.
3NJ4911-4AA00

Prism terminal assembly kits



- 1 set = 3 units

Connection
Al/Cu 10 ... 70 mm²

Article No.
3NJ4911-1AA00

Box terminal assembly kits



- For connection to version with flat connector
- 1 set = 3 units

Connection
Al/Cu 95 ... 240 mm²

Article No.
3NJ4911-2BQ00

Auxiliary switch mounting kits

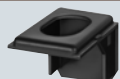


- For 3-pole switchable switch disconnectors only

Version For NH00 ... NH3 with connecting cables
Contacts 1 CO

Article No.
3NJ4913-1AA01

Mounting hook



- 1 per in-line disconnector required

Article No.
3NJ4918-1AA00

Distance compensation



Version
For NH00
For fuse switch disconnectors, with integratable current transformers if no current transformer is built in

Article No.
3NJ4915-1BA00
3NJ4915-2BA00

Terminal strips



Article No.
3NJ4915-1CA00

3NJ4101	3NJ4103	3NJ412	3NJ413	3NJ414	3NJ415	3NJ416	3NJ417	3NJ418
■	■	■	■	■	■	■	■	■
		■	■	■	■	■	■	■
■	■	■	■	■				
	■							
■	■							
	■							
■	■							
		■	■	■				
■	■	■	■	■	■	■	■	■
		■	■	■				
	■	■	■	■				
	■							

3NJ4 fuse switch disconnectors

Accessories

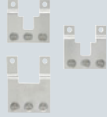
Busbar connection assembly kits for NH1, NH2 and NH3



- With flat terminals

Screws	Conductor cross-section	Article No.
M12	2× 240 mm ²	3NJ4911-5AA00
	2× 300 mm ² /3× 120 mm ²	3NJ4911-5BA00
M16	1× 400 mm ²	3NJ4911-5CA00

Busbar connection assembly kits for NH3



Version	Conductor cross-section	Article No.
For NH3 as double in-line disconnectors	3× 300 mm ² /4× 185 mm ²	3NJ4911-6AA00
	4× 240 mm ²	3NJ4911-6BA00

Mechanical coupling of operating handles	3NJ4911-6CA00
--	---------------

Fuses NH3



- Minimum order quantity 3 units

Version	Article No.
For protection of transformers, 630 kVA, 909 A	3NJ4914-8AA00

Isolating blades NH3

Rated current I _e	Article No.
1250 A	3NJ4914-8BA00

Current transformers .../1 A



Rated current I _e	Accuracy class	Rated power P _n	Article No.
100/1 A	0.5	1.5 VA	3NJ4915-1EA10
	1	2.0 VA	3NJ4915-1EA20
	0.5 calibrated	2.5 VA	3NJ4915-1FA10
150/1 A	0.5	2.5 VA	3NJ4915-1FA10
	0.5 calibrated	2.5 VA	3NJ4915-1FA11
	1	3.0 VA	3NJ4915-1FA20
75/1 A	1	1.5 VA	3NJ4915-2DA20
100/1 A	0.5	1.5 VA	3NJ4915-2EA10
	1	2.0 VA	3NJ4915-2EA20
150/1 A	1	2.5 VA	3NJ4915-2FA20
250/1 A	0.5	2.5 VA	3NJ4915-2GA10
	0.5 calibrated	2.5 VA	3NJ4915-2GA11
	1	5.0 VA	3NJ4915-2GA20
400/1 A	0.5	2.5 VA	3NJ4915-2HA10
	0.5 calibrated	2.5 VA	3NJ4915-2HA11
	1	5.0 VA	3NJ4915-2HA20
500/1 A	0.5	2.5 VA	3NJ4915-2JA10
	1	5.0 VA	3NJ4915-2JA20
600/1 A	0.5	2.5 VA	3NJ4915-2KA10
	0.5 calibrated	2.5 VA	3NJ4915-2KA11
	1	5.0 VA	3NJ4915-2KA20



3NJ4101	3NJ4103	3NJ412	3NJ413	3NJ414	3NJ415	3NJ416	3NJ417	3NJ418
		■	■	■				
		■	■	■				
		■	■	■				
			■	■				
			■	■				
			■	■				
								■
					■	■	■	■
	■							
	■							
	■							
	■							
	■							
	■							
	■							
	■							
	■							
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				
	■	■	■	■				

3NJ4 fuse switch disconnectors

Accessories

Current transformers .../5 A



Rated current I_n	Accuracy class	Rated power P_n	Article No.
100/5 A	0.5	1.0 VA	3NJ4915-1EB10
	1	1.5 VA	3NJ4915-1EB20
150/5 A	0.5	1.5 VA	3NJ4915-1FB10
	0.5 calibrated	1.5 VA	3NJ4915-1FB11
	1	2.5 VA	3NJ4915-1FB20
75/5 A	1	1.5 VA	3NJ4915-2DB20
100/5 A	0.5	1.0 VA	3NJ4915-2EB10
	1	2.0 VA	3NJ4915-2EB20
150/5 A	0.5	1.5 VA	3NJ4915-2FB10
	1	2.5 VA	3NJ4915-2FB20
250/5 A	0.5	2.5 VA	3NJ4915-2GB10
	0.5 calibrated	2.5 VA	3NJ4915-2GB11
	1	3.75 VA	3NJ4915-2GB20
400/5 A	0.5	2.5 VA	3NJ4915-2HB10
	0.5 calibrated	2.5 VA	3NJ4915-2HB11
	1	5.0 VA	3NJ4915-2HB20
500/5 A	0.5	2.5 VA	3NJ4915-2JB10
	1	5.0 VA	3NJ4915-2JB20
600/5 A	0.5	2.5 VA	3NJ4915-2KB10
	0.5 calibrated	2.5 VA	3NJ4915-2KB11
	1	5.0 VA	3NJ4915-2KB20

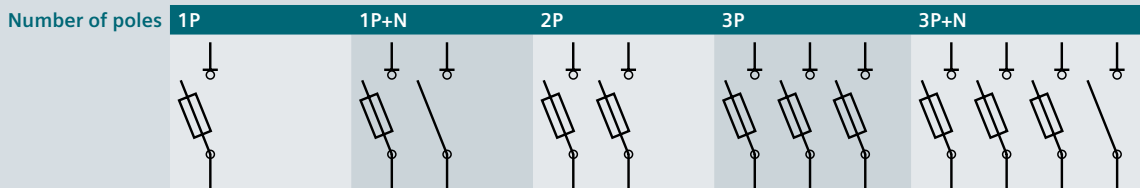
3NJ4101	3NJ4103	3NJ412	3NJ413	3NJ414	3NJ415	3NJ416	3NJ417	3NJ418
	■							
	■							
	■							
	■							
	■							
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				
		■	■	■				

5SG76 fuse switch disconnectors

System overview

MINIZED fuse switch disconnectors





Size of fuse	Rated current I_n	Mounting width 1 MW	Mounting width 2 MW	Mounting width 2 MW	Mounting width 3 MW	Mounting width 4 MW
MINIZED fuse switch disconnectors						
D01	6 A ¹⁾	5SG7611-0KK06	–	–	5SG7631-0KK06	–
	10 A	5SG7611-0KK10	–	–	5SG7631-0KK10	–
	16 A	5SG7611-0KK16	5SG7651-0KK16	5SG7621-0KK16	5SG7631-0KK16	5SG7661-0KK16

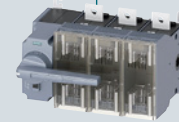
¹⁾ For 2 A, 4 A, 6 A fuses

Switch disconnectors with fuse

Quick selection guide



3KF LV HRC



Size		1	1	1	2	2	3	4	5	5	
General technical specifications acc. to IEC 60947-3											
Basic data											
Rated uninterrupted current I_u	A	32	63	80	125	160	250	400	630	800	
For fuse links acc. to IEC 60269-2		000 and 00					0 and 1	1 and 2	2 and 3		
Rated operational voltage U_e	At 50/60 Hz AC	V AC					690				
	At DC - 2 conducting paths in series	V DC					220				
	At DC - 3 conducting paths in series	V DC					440				
	At DC	V DC					-				
Operating and short-circuit behavior											
Rated operational current I_e ¹⁾	At AC-21A AC-21B at 400 V	A	32	63	80	125	160	250	400	630	800
	At AC-21A AC-21B at 500 V	A	-	-	-	-	-	-	-	-	-
	At AC-21A AC-21B at 690 V	A	32	63	80	125	160	250	400	630	800
	At AC-22A AC-22B at 400 V	A	32	63	80	125	160	250	400	630	800
	At AC-22A AC-22B at 500 V	A	-	-	-	-	-	-	-	-	-
	At AC-22A AC-22B at 690 V	A	32	63	80	125	160	250	400	630	800
	At AC-23A AC-23B at 400 V	A	32	63	80	125	160	250	400	630	800
	At AC-23A AC-23B at 500 V	A	-	-	-	-	-	-	-	-	-
	At AC-23A AC-23B at 690 V	A	32	63	80	125	160	250	400	630	800
	At DC-21A DC-21B at 48 V	A	-	-	-	-	-	-	-	-	-
	At DC-21A DC-21B at 110 V	A	-	-	-	-	-	-	-	-	-
	At DC-21A DC-21B at 220 V	A	32	63	80	125	160	250	400	630	800
	At DC-21A DC-21B at 400 V	A	-	-	-	-	-	-	-	-	-
	At DC-21A DC-21B at 440 V	A	32	63	80	125	160	250	400	630	800
	At DC-22A DC-22B at 48 V	A	-	-	-	-	-	-	-	-	-
	At DC-22A DC-22B at 110 V	A	-	-	-	-	-	-	-	-	-
	At DC-22A DC-22B at 220 V	A	32	63	80	125	160	250	400	630	800
	At DC-22A DC-22B at 400 V	A	-	-	-	-	-	-	-	-	-
	At DC-22A DC-22B at 440 V	A	32	63	80	125	160	250	400	630	800
	At DC-23A DC-23B at 48 V	A	-	-	-	-	-	-	-	-	-
At DC-23A DC-23B at 110 V	A	-	-	-	-	-	-	-	-	-	
At DC-23A DC-23B at 220 V	A	32	63	80	125	160	250	400	630	800	
At DC-23A DC-23B at 400 V	A	-	-	-	-	-	-	-	-	-	
At DC-23A DC-23B at 440 V	A	32	63	80	125	160	250	400	630	800	
Motor switching capacity ²⁾	At AC-23A at 400 V	kW	15	30	37	55	90	132	220	355	400
	At AC-23A at 500 V	kW	18.5	37	55	75	110	160	280	400	560
	At AC-23A at 690 V	kW	30	55	75	110	132	250	400	630	800
Rated conditional short-circuit current with upstream fuse ³⁾	At 400/500 V AC	kA	100	100	100	100	100	100	100	100	100
	At 690 V AC	kA	100	100	100	100	100	100	100	80	80
Let-through current I_c of usable fuses, max. ³⁾	At 400/500 V AC	kA	11.8	11.8	11.8	18	18	33.7	37.1	77.4	77.4
	At 690 V AC	kA	11.5	11.5	11.5	25.5	25.5	37.7	47	65	65
Let-through current I^2t value of usable fuses, max. ³⁾	At 400/500 V AC	kA ² s	34	34	34	223	223	1500	2150	10400	10400
	At 690 V AC	kA ² s	55	55	55	360	360	940	2600	7000	7000
Maximum power loss of the usable fuses (per fuse)	W	6.5	7.5	8.5	11	12	25.5	34	48	60	
Degree of protection											
Maximum IP degree of protection (with a rotary operating mechanism)							IP65			IP65	
Maximum IP degree of protection							-			-	

¹⁾ Values valid even at +10% line voltage tolerance in case of AC

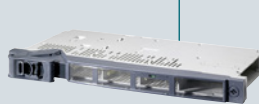
²⁾ Values are provided as a guide only and may vary depending on the make of motor

³⁾ Valid for combination of 3KF and fuse type 3NA/3ND, characteristic gG/aM

3KF SITOP



3NJ62



5SG7



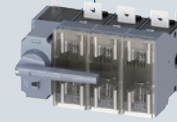
									00				1			3			5SG71.	5SG7230	5SG7234.
1	1	1	2	2	3	4	5	5	00	00	00	00	1	2	3	3	5SG71.	5SG7230	5SG7234.		
32	63	80	125	160	250	400	630	800	-	-	-	-	-	-	-	-	63	63	63		
000 and 00					0 and 1	1 and 2	2 and 3	000 and 00				1	1 and 2	2 and 3	D02	D02	D02				
690					500 ... 690				690		230 ... 690		400, 415	400	400						
220					230 ... 440				230 ... 440				130	110	-						
440					-				-		-		-	-	-						
-					-				-		-		65	-	-						
32	63	80	125	160	250	400	630	800	-	-	-	-	-	-	-	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
32	63	80	125	160	250	400	630	800	-	-	-	-	-	-	-	-	-	-	-		
32	63	80	125	160	250	400	630	800	-	-	-	160	-	-	-	630	- 63	-	- 63		
32	63	80	125	160	250	400	630	800	-	-	-	-	250	400	500	-	- 63	-	- 63		
32	63	80	125	160	250	400	630	800	-	-	-	160	-	-	-	630	-	63 -	-		
32	63	80	125	160	250	400	630	800	63	100	125	-	250	400	500	-	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 63	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 63	-		
32	63	80	125	160	250	400	630	800	-	-	-	-	-	-	-	-	-	- 63	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 63	-		
32	63	80	125	160	250	400	630	800	-	-	-	-	250	400	-	630	-	- 63	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 63	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 63	-		
32	63	80	125	160	250	400	630	800	-	-	-	160	250	400	-	630	-	-	-		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
32	63	80	125	160	250	400	630	800	-	-	-	-	-	-	-	-	-	-	-		
15	30	37	55	90	132	220	355	400	-	-	-	-	-	-	-	-	-	-	-		
18.5	37	55	75	110	160	280	400	560	-	-	-	-	-	-	-	-	-	-	-		
30	55	75	110	132	250	400	630	800	-	-	-	-	-	-	-	-	-	-	-		
100	100	100	100	100	100	100	100	100	-							50/-	50/-	50/-			
100	100	100	100	100	100	100	80	80	60 ... 100 kA _{eff}							-	-	-			
11.8	11.8	11.8	18	18	33.7	37.1	77.4	77.4	-							-	-	-			
11.5	11.5	11.5	25.5	25.5	37.7	47	65	65	-							-	-	-			
34	34	34	223	223	1500	2150	10400	10400	-							-	-	-			
55	55	55	360	360	940	2600	7000	7000	-							-	-	-			
7	8	12	20	26	36	55	68	85	-							5.5	5.5	5.5			
IP65									IP41							-	-	-			
-									-							IP20	-	-			

Switch disconnectors with fuse

Quick selection guide (continued)



3KF LV HRC



Size		1	1	1	2	2	3	4	5	5
General technical specifications acc. to UL										
Basic data										
Certification according to UL standard		-	-	-	-	-	-	-	-	-
I_n acc. to UL 508	A	-	-	-	-	-	-	-	-	-
U_g acc. to UL 508		-	-	-	-	-	-	-	-	-
Operating and short-circuit behavior										
Operational power, three-phase	At 240 V	kA	-	-	-	-	-	-	-	-
	At 480 V	kA	-	-	-	-	-	-	-	-
	At 600 V	kA	-	-	-	-	-	-	-	-
Short circuit current rating (SCCR)		-	-	-	-	-	-	-	-	-
Fuse type		-	-	-	-	-	-	-	-	-

More information

Catalog LV 10

Technical specifications

[See page 8/96](#)

Configuration in Simaris

3KF SITOR



3NJ62



5SG7



1	1	1	2	2	3	4	5	5	00	00	00	00	1	2	3	3	5SG71.	5SG7230	5SG7234.				
									UL 508	-	-	-	-	-	-	-	-	-	-				
32	56	56	125	125	500	320	530	530	-	-	-	-	-	-	-	-	-	-	-				
									600	-	-	-	-	-	-	-	-	-	-				
10	15	15	25	30	60	100	125	150	-	-	-	-	-	-	-	-	-	-	-				
25	30	40	60	75	150	250	300	300	-	-	-	-	-	-	-	-	-	-	-				
30	40	40	50	50	1255	250	300	350	-	-	-	-	-	-	-	-	-	-	-				
100	100	100	100	100	100	100	100	100	-	-	-	-	-	-	-	-	-	-	-				
K-1, RK1, CC, J, T	K-1, RK1, CC, J, T	K-1, RK1, CC, J, T	K-1, RK1, J, T	K-1, RK1, J, T	K-1, RK1, J, T	K-1, RK1, CC, J, T	K-1, RK1, J, T	K-1, RK1, J, T	-	-	-	-	-	-	-	-	-	-	-				
									See page 8/96							See page 8/112							See page 8/124
									Configuration in Simaris							Configuration in Simaris							Configuration in Simaris

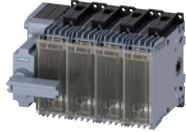
3KF LV HRC and 3KF SITOR switch disconnectors

System overview

Complete assemblies with direct operating mechanisms



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole

Basic units



Front operating mechanisms, 3-pole



Front operating mechanisms, 4-pole



Lateral operating mechanisms, 3-pole



Lateral operating mechanisms, 4-pole



3KF SITOR

Additional poles



4th contact elements



N terminals



N/PE terminals



Auxiliary switch modules

Operating mechanisms



Direct operating mechanisms



Door-coupling rotary operating mechanisms



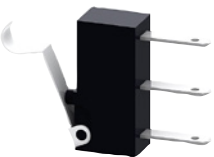
Handles for door-coupling rotary operating mechanisms



Other accessories for door-coupling rotary operating mechanisms



Other accessories and spare parts



Auxiliary switches



Fuse monitoring



Terminal covers



Mounting elements



Fuse covers

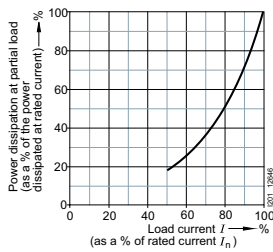
3KF LV HRC and 3KF SITOR switch disconnectors

General information



Suitable fuses

You will find further information under:



The 3KF switch disconnector with fuses is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2. These include fuses for cable and line protection and motor protection. Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the switch disconnector with fuses is not exceeded. For use of Siemens semiconductor fuses (SITOR), ready-made derating tables are available in the linked document.

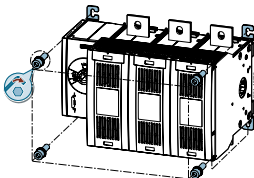


Types of mounting

You will find further information under:

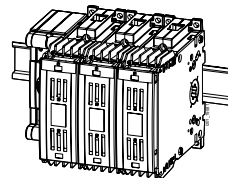


Floor mounting



All 3KF switch disconnectors with fuses are designed for floor mounting.

Standard mounting rail



Size 1 can be snapped onto a standard mounting rail (TH35 according to EN 60715) as an alternative mounting method.

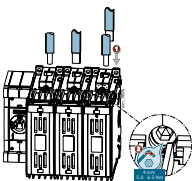


Electrical connection

You will find further information under:

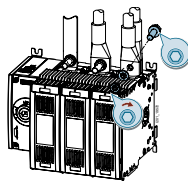


Box terminals



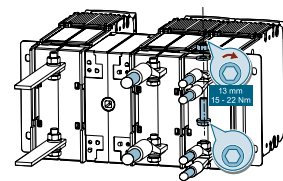
The box terminals for size 1 (32 A ... 80 A) are designed to allow the rapid connection of stripped conductors.

Flat terminals



Sizes 2 ... 5 are available with flat terminals, for the connection of cable lugs or busbar systems.

Flat terminals at rear



Sizes 1 and 2 (32 A, 63 A and 125 A) are available with rear flat terminals, for the connection of cable lugs or busbar systems.

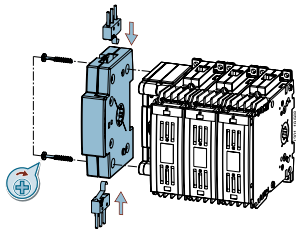


Auxiliary switch modules and auxiliary switches



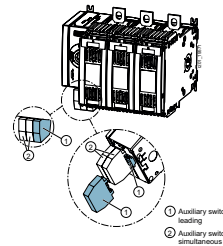
You will find further information under:

Size 1



The auxiliary switches used for size 1 are microswitches (changeover contacts), which can be snapped into an auxiliary switch module. This auxiliary switch module is mounted on the side of the switch disconnector with fuses in the same way as an additional pole. A maximum of two microswitches can be installed in each auxiliary switch module.

Sizes 2 ... 5



For sizes 2 ... 5, the auxiliary switches are directly attached to the operating mechanism module. The auxiliary switch with the leading switch function is always installed in the right-hand mounting location. The other locations are provided for simultaneously switching with the main contacts. Auxiliary switches with spring-type terminals from the 3SU1 range can also be used.



Differentiation 3KF SITOR and derating tables for SITOR fuses



You will find further information under:

Size 1



3KF SITOR is a variation of the proven switch disconnector with 3KF LV HRC fuses and provides optimized heat dissipation and permits the use of fuses with substantially higher power losses. All 3KF SITOR types are approved according to UL508.

Sizes 2 ... 5

SITOR semiconductor fuse data

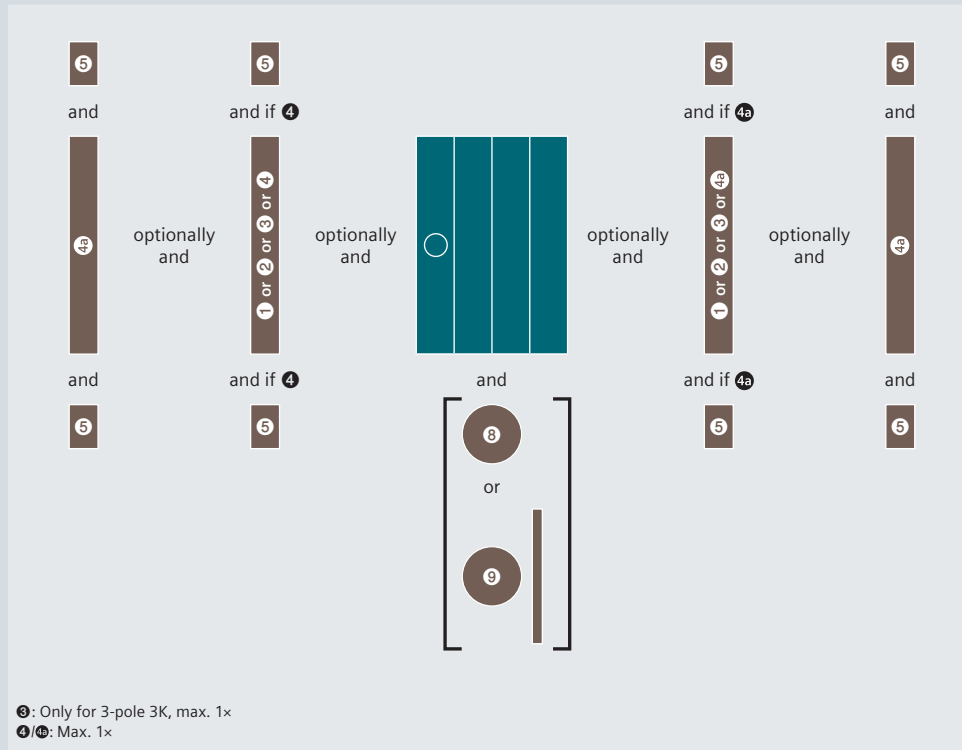
Type	Rated current I _n	Rated voltage U _n	Rated open-circuit voltage U _{oc}	Power loss P _{max}	Permissible load currents of fuse when installed in			
					Type 2NF 01 010			
					IEC	UL	UL	UL
					2.5 A	5 A	10 A	15 A
3KF1800-0	20	600	600	0.08	32.0	64.0	96.0	128.0
3KF1800-1	25	600	600	0.15	32.0	64.0	96.0	128.0
3KF1800-2	30	600	600	0.25	32.0	64.0	96.0	128.0
3KF1800-3	35	600	600	0.40	32.0	64.0	96.0	128.0
3KF1800-4	40	600	600	0.60	32.0	64.0	96.0	128.0
3KF1800-5	45	600	600	0.80	32.0	64.0	96.0	128.0
3KF1800-6	50	600	600	1.00	32.0	64.0	96.0	128.0
3KF1800-7	60	600	600	1.50	32.0	64.0	96.0	128.0
3KF1800-8	70	600	600	2.00	32.0	64.0	96.0	128.0
3KF1800-9	80	600	600	2.50	32.0	64.0	96.0	128.0
3KF1800-10	90	600	600	3.00	32.0	64.0	96.0	128.0
3KF1800-11	100	600	600	3.50	32.0	64.0	96.0	128.0
3KF1800-12	125	600	600	5.00	32.0	64.0	96.0	128.0
3KF1800-13	150	600	600	7.00	32.0	64.0	96.0	128.0
3KF1800-14	175	600	600	10.00	32.0	64.0	96.0	128.0
3KF1800-15	200	600	600	14.00	32.0	64.0	96.0	128.0
3KF1800-16	250	600	600	25.00	32.0	64.0	96.0	128.0
3KF1800-17	300	600	600	35.00	32.0	64.0	96.0	128.0
3KF1800-18	350	600	600	45.00	32.0	64.0	96.0	128.0
3KF1800-19	400	600	600	55.00	32.0	64.0	96.0	128.0
3KF1800-20	450	600	600	65.00	32.0	64.0	96.0	128.0
3KF1800-21	500	600	600	75.00	32.0	64.0	96.0	128.0
3KF1800-22	600	600	600	110.00	32.0	64.0	96.0	128.0
3KF1800-23	700	600	600	150.00	32.0	64.0	96.0	128.0
3KF1800-24	800	600	600	200.00	32.0	64.0	96.0	128.0
3KF1800-25	900	600	600	250.00	32.0	64.0	96.0	128.0
3KF1800-26	1000	600	600	300.00	32.0	64.0	96.0	128.0

Siemens provides you with pretested load currents of the SITOR semiconductor fuses for installation in the 3KF SITOR. The derating tables are provided both for IEC constraints and for UL constraints and are intended to help you with selection. The permissible load faults for the 3KF LV HRC were calculated from the test results of the 3KF SITOR.

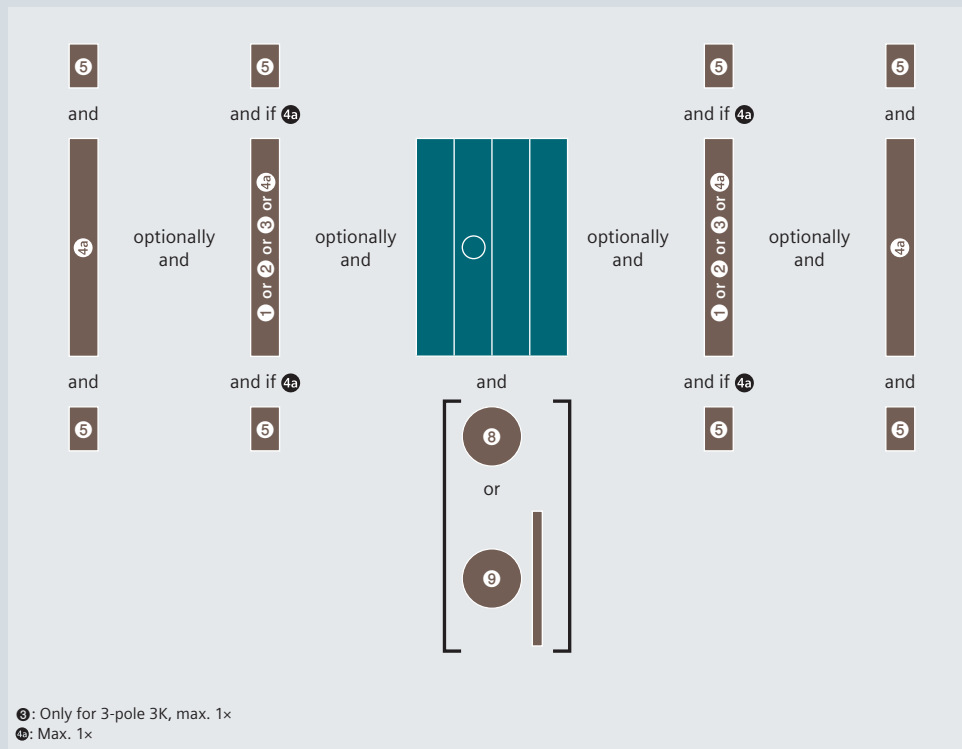
3KF LV HRC and 3KF SITOR switch disconnectors

Mounting concept and accessories 3KF

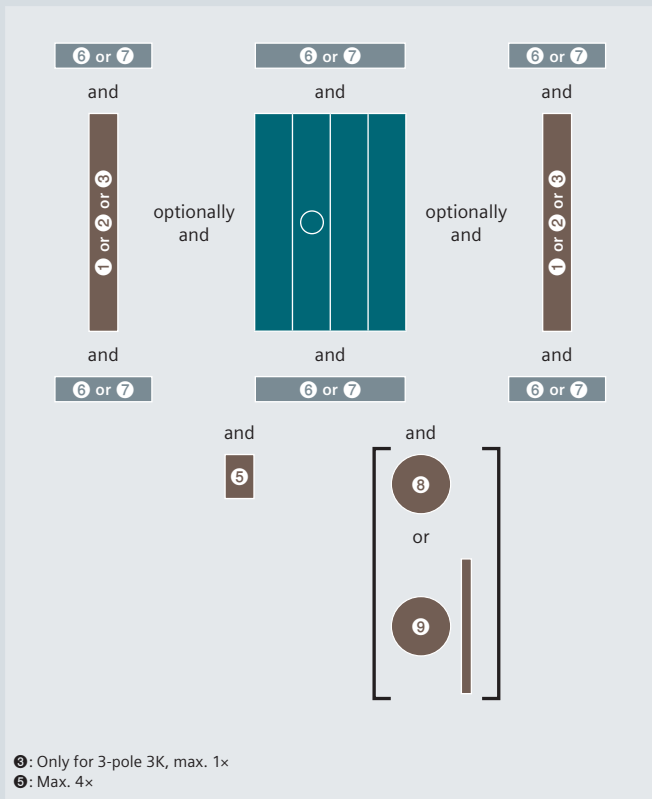
Front operating mechanism left, size 1, 3/4-pole



Front operating mechanism right, size 1, 3/4-pole



Front operating mechanism center or left, sizes 2 to 5, 3/4-pole

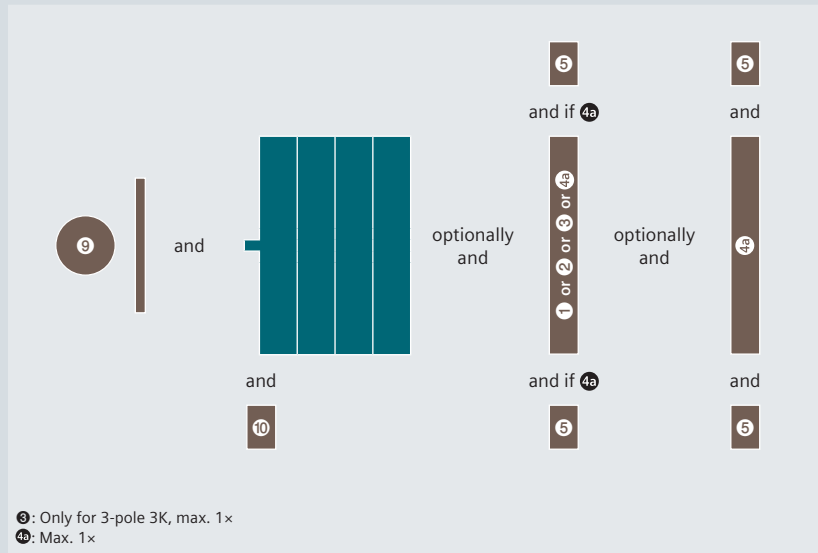


- Legend**
- ❶ Neutral conductor terminal
 - ❷ N/PE terminal
 - ❸ 4th contact element
 - ❹ Auxiliary switch
 - ❺ Phase barrier
 - ❻ Terminal cover
 - ❼ Direct operating mechanism
 - ❽ Door-coupling rotary operating mechanism

3KF LV HRC and 3KF SITOR switch disconnectors

Mounting concept and accessories 3KF

Lateral operating mechanism left, size 1, 3/4-pole

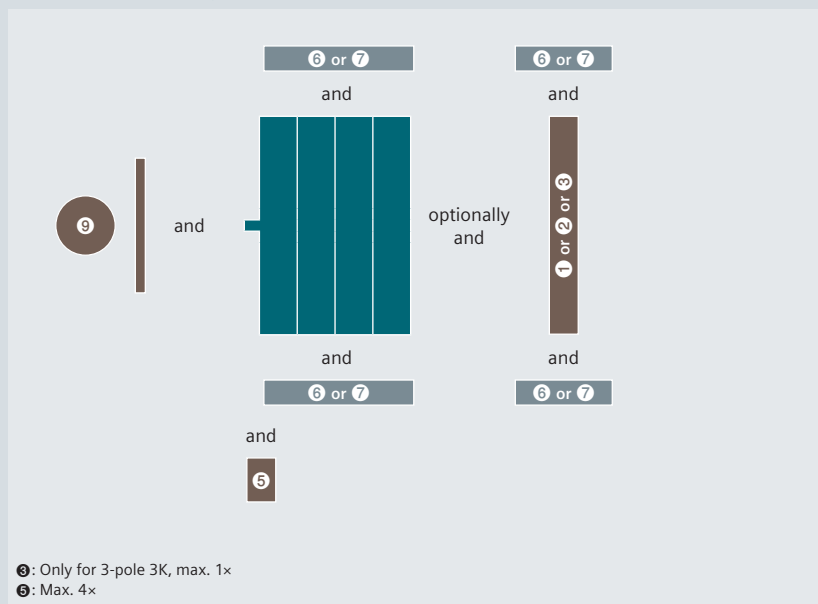


Legend

- ① Neutral conductor terminal
- ② N/PE terminal
- ③ 4th contact element
- ④_a Auxiliary switch module for auxiliary switches
- ⑤ Auxiliary switch
- ⑨ Door-coupling rotary operating mechanism
- ⑩ Lateral auxiliary switch module

8

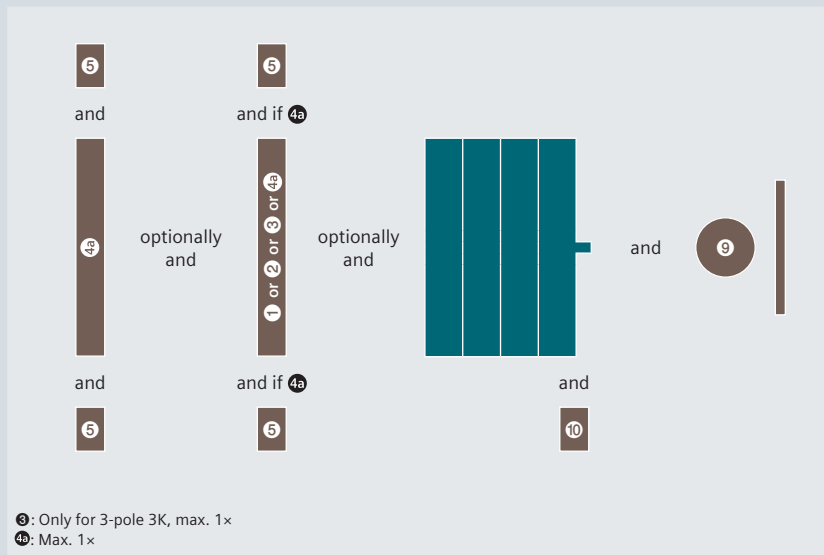
Lateral operating mechanism left, sizes 2 to 5, 3/4-pole



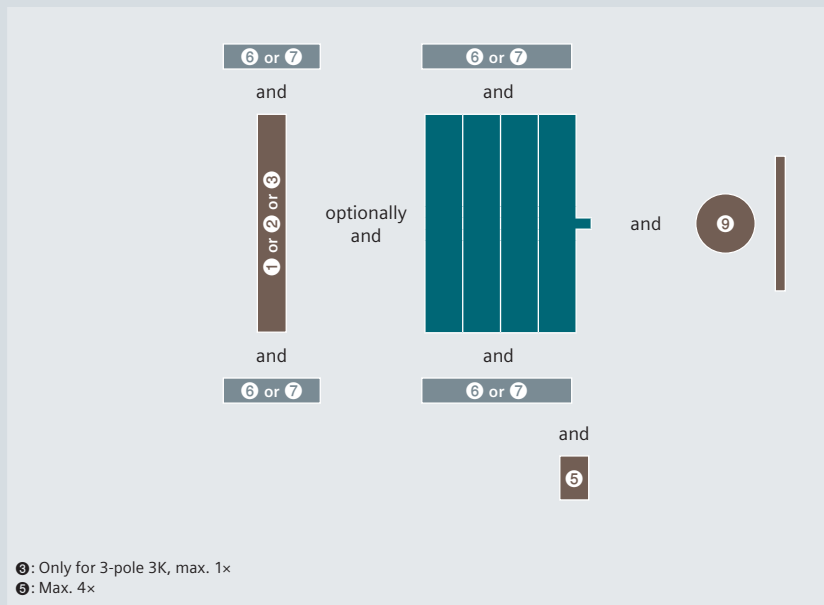
Legend

- ① Neutral conductor terminal
- ② N/PE terminal
- ③ 4th contact element
- ⑤ Auxiliary switch
- ⑥ Phase barrier
- ⑦ Terminal cover
- ⑨ Door-coupling rotary operating mechanism

Lateral operating mechanism right, size 1, 3/4-pole



Lateral operating mechanism right, sizes 2 to 5, 3/4-pole



3KF LV HRC switch disconnector



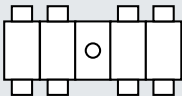
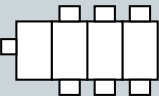
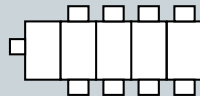
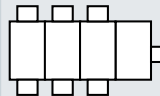
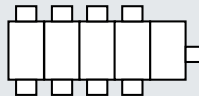
	Complete assemblies with direct operating mechanisms, front operating mechanisms Left		Basic units without handle, front operating mechanisms Left		Front operating mechanism Center
Number of poles	3P	4P	3P	4P	3P

Size	Uninterrupted current I_u					
Box terminals						
1	32 A	3KF1303-2LB11	3KF1403-2LB11	3KF1303-0LB11	3KF1403-0LB11	3KF1303-0MB11
	63 A	3KF1306-2LB11	3KF1406-2LB11	3KF1306-0LB11	3KF1406-0LB11	3KF1306-0MB11
	80 A	3KF1308-2LB11	3KF1408-2LB11	3KF1308-0LB11	3KF1408-0LB11	3KF1308-0MB11
Flat terminals at rear						
1	32 A	–	–	–	–	3KF1303-0MR11
	63 A	–	–	–	–	3KF1306-0MR11
2	125 A	–	–	–	–	3KF2312-0MR11
Flat terminals						
2	125 A	3KF2312-2LF11	3KF2412-2LF11	3KF2312-0LF11	3KF2412-0LF11	3KF2312-0MF11
	160 A	3KF2316-2LF11	3KF2416-2LF11	3KF2316-0LF11	3KF2416-0LF11	3KF2316-0MF11
3	250 A	3KF3325-2LF11	3KF3425-2LF11	3KF3325-0LF11	3KF3425-0LF11	3KF3325-0MF11
4	400 A	3KF4340-2LF11	3KF4440-2LF11	3KF4340-0LF11	3KF4440-0LF11	3KF4340-0MF11
5	630 A	3KF5363-2LF11	3KF5463-2LF11	3KF5363-0LF11	3KF5463-0LF11	3KF5363-0MF11
	800 A	3KF5380-2LF11	3KF5480-2LF11	3KF5380-0LF11	3KF5480-0LF11	3KF5380-0MF11

Note:

- NH00 and NH000: For 3KF sizes 1 and 2
- NH1 and NH0: For 3KF size 3
- NH2 and NH1: For 3KF size 4
- NH3 and NH2: For 3KF size 5
- For 3KF with lateral operating mechanism (left or right), only door-coupling rotary operating mechanisms without "Test" can be used.



		Lateral operating mechanism Left		Lateral operating mechanism Right	
4P	3P	4P	3P	4P	
					
3KF1403-0MB11	3KF1303-4LB11	3KF1403-4LB11	3KF1303-4RB11	3KF1403-4RB11	
3KF1406-0MB11	3KF1306-4LB11	3KF1406-4LB11	3KF1306-4RB11	3KF1406-4RB11	
3KF1408-0MB11	3KF1308-4LB11	3KF1408-4LB11	3KF1308-4RB11	3KF1408-4RB11	
-	-	-	-	-	
-	-	-	-	-	
-	-	-	-	-	
3KF2412-0MF11	3KF2312-4LF11	3KF2412-4LF11	3KF2312-4RF11	3KF2412-4RF11	
3KF2416-0MF11	3KF2316-4LF11	3KF2416-4LF11	3KF2316-4RF11	3KF2416-4RF11	
3KF3425-0MF11	3KF3325-4LF11	3KF3425-4LF11	3KF3325-4RF11	3KF3425-4RF11	
3KF4440-0MF11	3KF4340-4LF11	3KF4440-4LF11	3KF4340-4RF11	3KF4440-4RF11	
3KF5463-0MF11	3KF5363-4LF11	3KF5463-4LF11	3KF5363-4RF11	3KF5463-4RF11	
3KF5480-0MF11	3KF5380-4LF11	3KF5480-4LF11	3KF5380-4RF11	3KF5480-4RF11	

3KF SITOR switch disconnectors



Basic units without handle

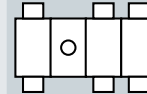
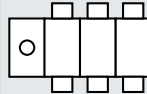
Front operating mechanism
Left

Front operating mechanism
Center

Number of poles

3P

3P



Size	Uninterrupted current I_u		
Box terminals			
1	32 A	3KF1303-0LB51	–
	63 A	3KF1306-0LB51	–
	80 A	3KF1308-0LB51	–
Flat terminals			
2	125 A	–	3KF2312-0MF51
	160 A	–	3KF2316-0MF51
3	250 A	–	3KF3325-0MF51
4	400 A	–	3KF4340-0MF51
5	630 A	–	3KF5363-0MF51
	800 A	–	3KF5380-0MF51

Note:

- Use of standard LV HRC fuses gG, gL, aM in 3KF SITOR is possible without restriction

Accessories

For 3KF LV HRC and 3KF SITOR switch disconnectors

Additional poles


Note:

- Additional poles (4th contact element, N or N/PE terminal) must always be mounted directly adjacent to the switch disconnector on the left or right. Accordingly, an auxiliary switch module must not be mounted between the basic unit and an additional pole on size 1.
- For installation, it is important to note that only a 3-pole 3KF switch disconnector may be retrofitted with an additional switching pole with contact system (4th contact element).

			Size 1	Size 2	Size 3	Size 4	Size 5
4th contact element (switching pole) for 3KF LV HRC							
	Connection	Article No.					
	Box terminals	3KF9105-2AA00	■				
	Flat terminals at rear	3KF9105-1AA00	■				
		3KF9205-1AA00		■			
	Flat terminals	3KF9205-0AA00		■			
		3KF9305-0AA00			■		
		3KF9405-0AA00				■	
	3KF9505-0AA00					■	
4th contact element (switching pole) for 3KF SITOR							
	Connection	Article No.					
	Box terminals	3KF9105-2BA00	■				
	Flat terminals	3KF9205-0BA00		■			
		3KF9305-0BA00			■		
		3KF9405-0BA00				■	
		3KF9505-0BA00					■
Neutral conductor terminals with removable jumper, for 3KF LV HRC and 3KF SITOR							
	Connection	Article No.					
	Box terminals	3KF9106-2AA00	■				
	Flat terminals at rear	3KF9106-1AA00	■				
		3KF9206-1AA00		■			
	Flat terminals	3KF9206-0AA00		■			
		3KF9306-0AA00			■		
		3KF9406-0AA00				■	
	3KF9506-0AA00					■	
N/PE terminals with permanent jumper, for 3KF LV HRC and 3KF SITOR							
	Connection	Article No.					
	Box terminals	3KF9106-8AA00	■				
	Flat terminals at rear	3KF9106-6AA00	■				
		3KF9206-6AA00		■			
	Flat terminals	3KF9206-7AA00		■			
		3KF9306-7AA00			■		
		3KF9406-7AA00				■	
	3KF9506-7AA00					■	

8

Operating mechanisms

			Size 1	Size 2	Size 3	Size 4	Size 5
Direct operating mechanisms, for 3KF LV HRC							
	Version	Color					
	Can be locked with up to 3 padlocks	Gray	■				
				■			
					■		
						■	
							■
		Red/yellow	■				
				■			
					■		
						■	
							■

Accessories

For 3KF LV HRC and 3KF SITOR switch disconnectors

Operating mechanisms

Size 1 Size 2 Size 3 Size 4 Size 5

Door-coupling rotary operating mechanisms, for 3KF LV HRC and 3KF SITOR



- Scope of supply:
 - Handle with masking plate
 - Coupling driver with tolerance compensation
 - Shaft 300 mm
- Can be locked with up to 3 padlocks

Labeling	Color	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
Labeling Test-O-I	Gray	8UD1171-2AF21	■				
		8UD1141-2AF21		■			
		8UD1141-3AF21			■		
		8UD1151-3AF21				■	
		8UD1161-4AF21					■
	Red/yellow	8UD1171-2AF25	■				
		8UD1141-2AF25		■			
		8UD1141-3AF25			■		
		8UD1151-3AF25				■	
		8UD1161-4AF25					■


Handles, for 3KF LV HRC and 3KF SITOR

- With masking plate
- Can be locked with up to 3 padlocks





Labeling	Lighting	Color	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5	
O-I	Without	Gray	8UD1771-2AD01	■					
			8UD1841-2AD01		■	■			
			8UD1851-3AD01				■		
			8UD1861-4AD01					■	
		Red/yellow	8UD1771-2AD05	■					
			8UD1841-2AD05		■	■			
			8UD1851-3AD05				■		
			8UD1861-4AD05					■	
	With	Gray	8UD1771-2CD01	■					
			8UD1841-2CD01		■	■			
			8UD1851-3CD01				■		
			8UD1861-4CD01					■	
		Red/yellow	8UD1771-2CD05	■					
			8UD1841-2CD05		■	■			
			8UD1851-3CD05				■		
			8UD1861-4CD05					■	
Test-O-I	Without	Gray	8UD1771-2AF01	■					
			8UD1841-2AF01		■	■			
			8UD1851-3AF01				■		
			8UD1861-4AF01					■	
		Red/yellow	8UD1771-2AF05	■					
			8UD1841-2AF05		■	■			
			8UD1851-3AF05				■		
			8UD1861-4AF05					■	
	With	Gray	8UD1771-2CF01	■					
			8UD1841-2CF01		■	■			
			8UD1851-3CF01				■		
			8UD1861-4CF01					■	
		Red/yellow	8UD1771-2CF05	■					
			8UD1841-2CF05		■	■			
			8UD1851-3CF05				■		
			8UD1861-4CF05					■	

Operating mechanisms

		Size 1	Size 2	Size 3	Size 4	Size 5	
Extension shaft, for 3KF LV HRC and 3KF SITOR							
	<ul style="list-style-type: none"> A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1 and 2 						
	Length	Article No.					
	300 mm	8UC6032	■	■			
		8UC6033			■	■	
		8UC6034					■
	600 mm	8UC6082	■	■			
	8UC6083			■	■		
	8UC6084					■	
Shaft jack for 8UD1 handle, for 3KF LV HRC and 3KF SITOR							
	Version	Article No.					
	For shaft 600 mm	8UD1900-0FA00	■	■			
Coupling drivers, for 3KF LV HRC and 3KF SITOR							
	Version	Article No.					
	With tolerance compensation	8UD1900-2GA00	■				
		8UD1900-6GA00		■			
		8UD1900-3GA00			■	■	
		8UD1900-4GA00					■
	Without tolerance compensation	8UD1900-2HA00	■				
		8UD1900-6HA00		■			
		8UD1900-3HA00			■	■	
		8UD1900-4HA00					■
Shaft couplings, for 3KF LV HRC and 3KF SITOR							
	Shaft size	Article No.					
	8 × 8 mm	8UC6022	■	■	■		
	10 × 10 mm	8UC6023				■	
	12 × 12 mm	8UC6024					■

8

Other accessories and spare parts

		Size 1	Size 2	Size 3	Size 4	Size 5	
Auxiliary switch modules, for 3KF LV HRC and 3KF SITOR							
	<ul style="list-style-type: none"> Auxiliary switch modules are supplied without auxiliary switches The 3KF9112-0AB00 mounting bracket is additionally required for mounting the auxiliary switch modules with the rear terminal The 3KD9103-6 and 3KD9103-7 auxiliary switch modules and those with a leading NO contact can only be used with 3KF if they have the operating mechanism on the front or on the left 						
	Variant	Article No.					
	Standard version	3KD9103-5	■	■			
	With test function	3KD9103-6	■	■			
	With leading NO contact and test function	3KD9103-7	■	■			
Mounting brackets for auxiliary switch modules, for 3KF size 1 with rear terminals							
	<ul style="list-style-type: none"> For mounting auxiliary switch modules on 3KF switch disconnectors with rear terminal 						
		Article No.					
	3KF9112-0AB00	■					

Accessories

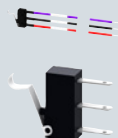
For 3KF LV HRC and 3KF SITOR switch disconnectors

Other accessories and spare parts

Size 1 Size 2 Size 3 Size 4 Size 5

Auxiliary switches, for 3KF LV HRC and 3KF SITOR

- Auxiliary switches for sizes 2 to 5 have screw terminals and are mounted on the operating mechanism module of the 3KF. Auxiliary switches with spring-type terminals from the 3SU1 range can also be used.
- All auxiliary switches for sizes 2 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see Operating Instructions).



Variant	Contacts	Contact surface	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
With connecting cables	1 CO	Standard	3KD9103-1	■				
		Solid-state compatible	3KD9103-3	■				
Without connecting cables	1 CO	Standard	3KD9103-2	■				
		Solid-state compatible	3KD9103-4	■				
	1 NO	Standard	3SU1400-1AA10-1BA0		■	■	■	■
		Gold-plated	3SU1400-1AA10-1LA0		■	■	■	■
1 NC	Standard	3SU1400-1AA10-1CA0		■	■	■	■	
	Gold-plated	3SU1400-1AA10-1MA0		■	■	■	■	
1 NO + 1 NC	Standard	3SU1400-1AA10-1FA0		■	■	■	■	
		Gold-plated	3SU1400-1AA10-1QA0		■	■	■	■
2 NO	Standard	3SU1400-1AA10-1DA0		■	■	■	■	
		Gold-plated	3SU1400-1AA10-1NA0		■	■	■	■
2 NC	Standard	3SU1400-1AA10-1EA0		■	■	■	■	
		Gold-plated	3SU1400-1AA10-1PA0		■	■	■	■

Electronic fuse monitoring, for 3KF LV HRC and 3KF SITOR



Version	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
For remote display of tripped fuses	3KF9010-1AA00	■	■	■	■	■

Phase barriers, for 3KF LV HRC and 3KF SITOR




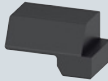






Version	Scope of supply	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
For 3-pole devices	6 units	3KD9308-6		■			
		3KD9408-6			■	■	
		3KD9508-6					■
For 4-pole devices	8 units	3KD9308-8		■			
		3KD9408-8			■	■	
		3KD9508-8					■

Terminal covers, for 3KF LV HRC



Version	Scope of supply	Variant	Article No.	Size 1	Size 2	Size 3	Size 4	Size 5
For 3-pole devices	6 units	Standard length	3KD9304-6		■			
			3KF9304-6			■		
			3KD9404-6				■	
		Short version	3KD9504-6					■
			3KD9304-7		■			
			3KF9304-7			■		
For 4-pole devices	8 units	Standard length	3KD9404-7				■	
			3KD9304-8		■			
			3KF9304-8			■		
		Short version	3KD9404-8				■	
			3KD9504-8					■
			3KD9304-5		■			
Short version	3KF9304-5	3KD9404-5			■			
		3KD9404-5				■		

Other accessories and spare parts

				Size 1	Size 2	Size 3	Size 4	Size 5
Spare part for terminal covers, for 3KF LV HRC								
	Scope of supply	Variant	Article No.					
	1 unit	Standard length	3KD9504-1					■
		Short version	3KD9304-1		■			
			3KF9304-1			■		
			3KD9404-1				■	
Blocking pin test function, for 3KF LV HRC and 3KF SITOR								
	<ul style="list-style-type: none"> Enables permanent deactivation of the test function for auxiliary switches It is installed in the operating mechanism module of the 3KF switch disconnector 							
	Scope of supply	Article No.						
	10 units	3KF9112-1AA00		■				
		3KF9412-1AA00			■		■	
		3KF9512-1AA00						■
Mounting brackets, for 3KF LV HRC								
	<ul style="list-style-type: none"> The 3KF9112-0AB00 mounting bracket is needed if an auxiliary switch module is mounted on a 3KF1 with rear terminals 							
	Connection	Article No.						
	Box terminals, flat terminals	3KF9112-0AA00		■				
		3KF9212-0AA00			■			
	Flat terminals at rear	3KF9212-0AB00		■	■			
Mounting brackets, for 3KF SITOR								
	Connection	Article No.						
	Box terminals, flat terminals	3KF9112-0AA10		■				
		3KF9212-0AA10			■			
Mounting brackets, for 3KF LV HRC and 3KF SITOR								
	Connection	Article No.						
	Flat terminals	3KF9412-0AA00				■	■	
		3KF9512-0AA00						■
Phase barriers, for 3KF LV HRC and 3KF SITOR								
	Version	Scope of supply	Article No.					
	For mounting on standard mounting rail	5 units	3KF9112-0BA00		■			
Fuse covers, for 3KF LV HRC								
	Connection	Article No.						
	Box terminals, flat terminals	3KF9112-0CA00		■				
		3KF9212-0CA00			■			
		3KF9312-0CA00				■		
		3KF9412-0CA00					■	
		3KF9512-0CA00						■
	Flat terminals at rear	3KF9212-0CB00			■			
				NH000	NH00	NH1	NH2	NH3
LV HRC isolating blades, for 3KF LV HRC and 3KF SITOR								
	Version	Article No.						
	With insulated grip lugs	3NG1002		■	■			
		3NG1202				■		
		3NG1302					■	
		3NG1402						■

3NJ62 switch disconnectors

System overview

Fuse links



For LV HRC fuses



For BS fuses

Accessories



Connection terminals and covers



Auxiliary switches



Current transformers



Ammeters



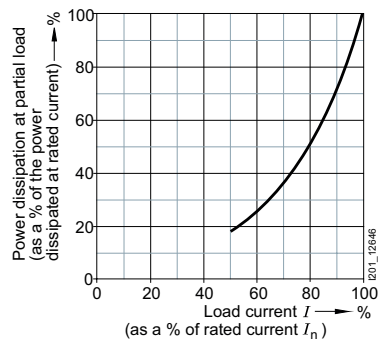
Guide rails

General information



Suitable fuses

You will find further information under:



The 3NJ62 switch disconnector with fuses is suitable for all fuses with LV HRC design in sizes 000 to 3 that comply with IEC 60269-2, including fuses for cable and line protection and motor protection.

Fuses for semiconductor protection (Siemens trademark SITOR) can also be used. However, some of these fuses have substantially higher power losses than fuses according to IEC 60269-2. This means that the load current has to be reduced until the value that is permissible in the switch disconnector with fuses is not exceeded.

For use of Siemens semiconductor fuses (SITOR), ready-made derating tables are available in the linked document.

3NJ62 switch disconnectors

Configuration

For complete and verified configuration of your switch disconnector with fuses, use our online configurator at www.siemens.com/lowvoltage/3nj62-configurator

			6	7	8	9	10	11	12	13	14	15	16
			3NJ62		-	A		0					
Size and type of fuse	LV HRC fuse	00 160 A	0										
		1 250 A	1										
		2 400 A	2										
		3 630 A	3										
	BS 88 fuse	A3 63 A	4										
		A3 100 A	5										
		00T 160 A	6										
		B2 250 A	7										
		B4 400 A	8										
	3T 630 A	9											
Number of poles	2-pole		2										
	3-pole		3										
	4-pole		4										
Breaking capacity	Standard breaking capacity S	Manually operated	1										
		Motorized operating mechanism	2										
	High breaking capacity H	Manually operated	3										
		Motorized operating mechanism	4										
Electronic fuse monitoring	Without						A						
	AC version	EFM10					B						
	AC version with line monitoring	EFM20					C						
	DC version	EFM25					E						
Auxiliary switches	Without								0				
	1 NC								1				
	1 NO								2				
	1 NO + 1 NC								3				

			6	7	8	9	10	11	12	13	14	15	16
					-								
			3NJ62										
Type of ammeter	Without												0
	Moving iron												1
	Bi-metal												2
Wiring version of the current transformer	Without												A
	1 current transformer to multi-function plug												B
	3 current transformers to multi-function plug												C
	1 current transformer to 1 ammeter												D
	1 current transformer to 1 ammeter and multi-function plug												E
	3 current transformers to 1 ammeter and multi-function plug												F
Current transformer primary current	Without												A
	50 A												B
	100 A												D
	150 A												E
	200 A												F
	250 A												G
	300 A												H
	400 A												J
	500 A												K
	600 A												L
Current transformer secondary current	Without	Without accuracy class											0
	1 A	Accuracy class 1											1
	1 A	Accuracy class 0.5											2
	1 A	Accuracy class 0.5 calibrated											3
	5 A	Accuracy class 1											4
	5 A	Accuracy class 0.5											5
	5 A	Accuracy class 0.5 calibrated											6

3NJ62 switch disconnectors

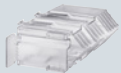
Accessories

Terminals



Variant	Version	Article No.
For 2/3-pole devices		3NJ6923-1BA00
		3NJ6933-1BA00
		3NJ6943-1CA00
For 4-pole devices		3NJ6924-1BA00
		3NJ6934-1BA00
		3NJ6944-1CA00

Terminal covers



Variant	Version	Article No.
For 2/3-pole devices		3NJ6923-1DA00
		3NJ6933-1DA01
		3NJ6943-1DA00
As an internal terminal cover		3NJ6933-1DB00
For 4-pole devices		3NJ6904-1DA00

Contact extensions



Number of poles	Version	Article No.
3-pole		3NJ6923-1EB00
		3NJ6933-1EB00
		3NJ6943-1EB00
4-pole	With line monitoring for AC networks	3NJ6924-1EB00
		3NJ6934-1EB00
		3NJ6944-1EB00

Electronic fuse monitoring and line monitoring devices



Variant	Version	Article No.
EFM 10		3NJ6920-3FB00
		3NJ6930-3FB00
		3NJ6940-3FB00
EFM 20	With line monitoring for AC networks	3NJ6920-3FC00
		3NJ6930-3FC00
		3NJ6940-3FC00
EFM 25		3NJ6920-3FE00
		3NJ6930-3FE00
		3NJ6940-3FE00

Auxiliary switches



Contacts	Version	Article No.
1 NO contact (1 NO)	With cover	3NJ6920-2BB00
		3NJ6930-2BB00
		3NJ6940-2BB00
1 NC contact (1 NC)	Without cover	3NJ6900-2BC00
	With cover	3NJ6920-2CB00
		3NJ6930-2CB00
	3NJ6940-2CB00	
	Without cover	3NJ6900-2CC00

	NH00	NH1	NH2	NH3	BS A3	BS 00T	BS B2	BS B4	BS 3T
	■				■	■			
		■				■			
			■	■			■	■	
	■				■	■			
		■				■			
			■	■			■	■	
	■				■	■			
		■				■			
			■	■			■	■	
		■				■			
	■	■	■	■	■	■	■	■	■
			■	■			■	■	
	■				■	■			
		■				■			
			■	■			■	■	
	■				■	■			
		■				■			
			■	■			■	■	
	■	■	■	■	■	■	■	■	■
			■	■			■	■	
	■				■	■			
		■				■			
			■	■			■	■	
	■	■	■	■	■	■	■	■	■
			■	■			■	■	
	■				■	■			
		■				■			
			■	■			■	■	
	■	■	■	■	■	■	■	■	■
			■	■			■	■	

3NJ62 switch disconnectors

Accessories

Current transformers for main devices and contact extensions



Rated current I_e	Class	Apparent power consumption	Feed-through opening diameter	Article No.
50 A/1 A	1	1 VA	Ø 21 mm	3NJ6920-3BB11
50 A/5 A	1	1 VA	Ø 21 mm	3NJ6920-3BB21
100 A/1 A	1	2.5 VA	Ø 21 mm	3NJ6920-3BD11
	0.5	1.5 VA	Ø 21 mm	3NJ6920-3BD12
	0.5 calibrated	1.5 VA	Ø 14 mm	3NJ6920-3BD13
100 A/5 A	1	2.5 VA	Ø 21 mm	3NJ6920-3BD21
	0.5	1.5 VA	Ø 21 mm	3NJ6920-3BD22
	0.5 calibrated	1.5 VA	Ø 14 mm	3NJ6920-3BD23
150 A/1 A	1	2.5 VA	Ø 21 mm	3NJ6920-3BE11
	0.5	1.5 VA	Ø 21 mm	3NJ6920-3BE12
	0.5 calibrated	1.5 VA	Ø 14 mm	3NJ6920-3BE13
150 A/5 A	1	2.5 VA	Ø 21 mm	3NJ6920-3BE21
	0.5	1.5 VA	Ø 21 mm	3NJ6920-3BE22
	0.5 calibrated	1.5 VA	Ø 14 mm	3NJ6920-3BE23
200 A/1 A	1	2.5 VA	Ø 21 mm	3NJ6930-3BF11
	0.5	5 VA	Ø 21 mm	3NJ6930-3BF12
200 A/5 A	1	2.5 VA	Ø 21 mm	3NJ6930-3BF21
	0.5	5 VA	Ø 21 mm	3NJ6930-3BF22
250 A/1 A	1	5 VA	Ø 21 mm	3NJ6930-3BG11
	0.5	5 VA	Ø 21 mm	3NJ6930-3BG12
250 A/5 A	1	2.5 VA	Ø 21 mm	3NJ6930-3BG21
	0.5	2.5 VA	Ø 21 mm	3NJ6930-3BG22
300 A/1 A	1	5 VA	–	3NJ6940-3BH11
	0.5	5 VA	–	3NJ6940-3BH12
	0.5 calibrated	5 VA	–	3NJ6940-3BH13
300 A/5 A	1	5 VA	–	3NJ6940-3BH21
	0.5	5 VA	–	3NJ6940-3BH22
	0.5 calibrated	5 VA	–	3NJ6940-3BH23
400 A/1 A	1	5 VA	–	3NJ6940-3BJ11
	0.5	5 VA	–	3NJ6940-3BJ12
	0.5 calibrated	5 VA	–	3NJ6940-3BJ13
400 A/5 A	1	5 VA	–	3NJ6940-3BJ21
	0.5	5 VA	–	3NJ6940-3BJ22
	0.5 calibrated	5 VA	–	3NJ6940-3BJ23
500 A/1 A	1	5 VA	–	3NJ6940-3BK11
	0.5	5 VA	–	3NJ6940-3BK12
	0.5 calibrated	5 VA	–	3NJ6940-3BK13
500 A/5 A	1	5 VA	–	3NJ6940-3BK21
	0.5	5 VA	–	3NJ6940-3BK22
	0.5 calibrated	5 VA	–	3NJ6940-3BK23
600 A/1 A	1	5 VA	–	3NJ6940-3BL11
	0.5	5 VA	–	3NJ6940-3BL12
	0.5 calibrated	5 VA	–	3NJ6940-3BL13
600 A/5 A	1	5 VA	–	3NJ6940-3BL21
	0.5	5 VA	–	3NJ6940-3BL22
	0.5 calibrated	5 VA	–	3NJ6940-3BL23

3NJ62 switch disconnectors

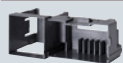
Accessories

Current transformer busbars



Variant	Version	Article No.
For current transformers with feed-through opening diameter 21 mm	For 1 current transformer	3NJ6920-3DB00
	For 3 current transformers	3NJ6930-3DB00
	For 4 current transformers	3NJ6920-3DC00 3NJ6930-3DC00 3NJ6920-3DD00 3NJ6930-3DD00
For current transformers with feed-through opening diameter 14 mm	For 1 current transformer	3NJ6920-3DE00
	For 3 current transformers	3NJ6920-3DF00
	For 4 current transformers	3NJ6920-3DG00

Holders



Version	Article No.
For ammeters	3NJ6900-4GA00

Ammeters



Variant	Version	Rated current I_e	Article No.
Moving-iron measuring instruments	For measurements on transformer x/1 A with double overload	50 A/1 A	3NJ6900-4HB11
		100 A/1 A	3NJ6900-4HD11
		150 A/1 A	3NJ6900-4HE11
		200 A/1 A	3NJ6900-4HF11
		250 A/1 A	3NJ6900-4HG11
		300 A/1 A	3NJ6900-4HH11
		400 A/1 A	3NJ6900-4HJ11
		500 A/1 A	3NJ6900-4HK11
		600 A/1 A	3NJ6900-4HL11
	For measurements on transformer x/5 A with double overload	50 A/5 A	3NJ6900-4HB21
		100 A/5 A	3NJ6900-4HD21
		150 A/5 A	3NJ6900-4HE21
		200 A/5 A	3NJ6900-4HF21
		250 A/5 A	3NJ6900-4HG21
		300 A/5 A	3NJ6900-4HH21
		400 A/5 A	3NJ6900-4HJ21
		500 A/5 A	3NJ6900-4HK21
		600 A/5 A	3NJ6900-4HL21
Bi-metal measuring instruments	For measurements on transformer x/1 A with 1.2-times overload	50 A/1 A	3NJ6900-4HB12
		100 A/1 A	3NJ6900-4HD12
		150 A/1 A	3NJ6900-4HE12
		200 A/1 A	3NJ6900-4HF12
		250 A/1 A	3NJ6900-4HG12
		300 A/1 A	3NJ6900-4HH12
		400 A/1 A	3NJ6900-4HJ12
		500 A/1 A	3NJ6900-4HK12
		600 A/1 A	3NJ6900-4HL12
	For measurements on transformer x/5 A with 1.2-times overload	50 A/5 A	3NJ6900-4HB22
		100 A/5 A	3NJ6900-4HD22
		150 A/5 A	3NJ6900-4HE22
		200 A/5 A	3NJ6900-4HF22
		250 A/5 A	3NJ6900-4HG22
		300 A/5 A	3NJ6900-4HH22
		400 A/5 A	3NJ6900-4HJ22
		500 A/5 A	3NJ6900-4HK22
		600 A/5 A	3NJ6900-4HL22

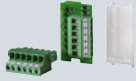


NH00	NH1	NH2	NH3	BS A3	BS 00T	BS B2	BS B4	BS 3T
■				■	■			
	■					■		
■				■	■			
	■					■		
■				■	■			
	■					■		
■				■	■			
■				■	■			
■				■	■			
■	■		■			■		
■	■			■	■	■		
■	■			■	■	■		
■	■			■	■	■		
	■					■		
		■	■				■	■
		■	■				■	■
		■	■				■	■
		■	■				■	■
		■	■				■	■
■	■			■	■	■		
■	■			■	■	■		
■	■			■	■	■		
	■					■		
		■	■				■	■
		■	■				■	■
		■	■				■	■
		■	■				■	■
		■	■				■	■
■	■			■	■	■		
■	■			■	■	■		
■	■			■	■	■		
	■					■		
		■	■				■	■
		■	■				■	■
		■	■				■	■
		■	■				■	■

3NJ62 switch disconnectors

Accessories

Multi-function plugs



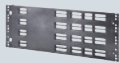
Version	Dimensions	Article No.
With fixing screws	6 × 2.5 mm ²	3NJ6920-3EB01
	8 × 2.5 mm ²	3NJ6920-3ED01
		3NJ6940-3EC00
Without fixing screws	8 × 2.5 mm ²	3NJ6940-3ED00
	10 × 1.5 mm ² and 8 × 2.5 mm ²	3NJ6920-3EE01
	12 × 1.5 mm ² and 8 × 2.5 mm ²	3NJ6940-3EF00

Front panels



Purpose	Version	Article No.
3NJ6203-1AA... and 3NJ6203-3AA... with/without EFM	With LV HRC fuse	3NJ6923-4BB00
	With BS 88 fuse	3NJ6923-4BC00
3NJ6213-1AA... and 3NJ6213-3AA... with/without EFM	With LV HRC fuse	3NJ6933-4BB00
	With BS 88 fuse	3NJ6933-4BC00
3NJ6223-1AA... and 3NJ6223-3AA... with/without EFM	With LV HRC fuse	3NJ6943-4BB00
	With BS 88 fuse	3NJ6943-4BC00
3NJ6233-1AA... and 3NJ6233-3AA... with/without EFM	With LV HRC fuse	3NJ6953-4BB00
	With BS 88 fuse	3NJ6953-4BC00

Busbar covers



Article No.
3NJ6916-4EA00

Blanking covers



Article No.
3NJ6900-4CB00

Connection modules



Article No.
3NJ6915-3BA00

Guide rails



Overall depth	Article No.
200 mm	3NJ6900-4FB00
400 mm	3NJ6900-4FC00

LV HRC fuse puller tongs

Version	Article No.
For NH00	XPT:8PT9624
For NH1, NH2, NH3	XPT:8PT9625

Locking devices for padlocks

Article No.
3NJ6900-4LL

	NH00	NH1	NH2	NH3	BS A3	BS 00T	BS B2	BS B4	BS 3T
	■	■			■	■	■		
	■	■			■	■	■		
			■	■				■	■
			■	■				■	■
	■	■			■	■	■		
			■	■				■	■
			■	■				■	■
			■	■				■	■
			■	■				■	■
			■	■				■	■
					■	■			
					■	■			
		■					■		
		■					■		
			■	■				■	■
			■	■				■	■
			■	■				■	■
			■	■				■	■
			■	■				■	■
	■	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■	■
	■	■	■	■	■	■	■	■	■

5SG switch disconnectors with fuse

System overview

MINIZED switch disconnectors with fuses



1P



3P

NEOZED SR60 bus-mounting switch disconnectors



3P



3P, with terminals

Accessories



Auxiliary switches



Lateral modules



Reducers



		Number of poles					
		1P	1P+N	2P	3P	3P+N	
Size of fuse	Rated current I_n	Mounting width 1.5 MW	Mounting width 3 MW	Mounting width 3 MW	Mounting width 1.5 MW	Mounting width 4.5 MW	Mounting width 6 MW
MINIZED switch disconnectors with fuses^{1) 3)}							
D02	63 A	5SG7113	5SG7153	5SG7123	–	5SG7133	5SG7163
MINIZED switch disconnectors with fuses – version for Austria only^{2) 3)}							
D02	25 A	–	–	–	–	5SG7133-8BA25	–
	35 A	–	–	–	–	5SG7133-8BA35	–
	50 A	–	–	–	–	5SG7133-8BA50	–
NEOZED SR60 bus-mounting switch disconnectors							
D02	63 A	–	–	–	5SG7230	–	–
NEOZED SR60 bus-mounting switch disconnectors, without LED signal detector							
D02	63 A	–	–	–	5SG7234-1	–	–
NEOZED SR60 bus-mounting switch disconnectors, with LED signal detector							
D02	63 A	–	–	–	5SG7234-2	–	–

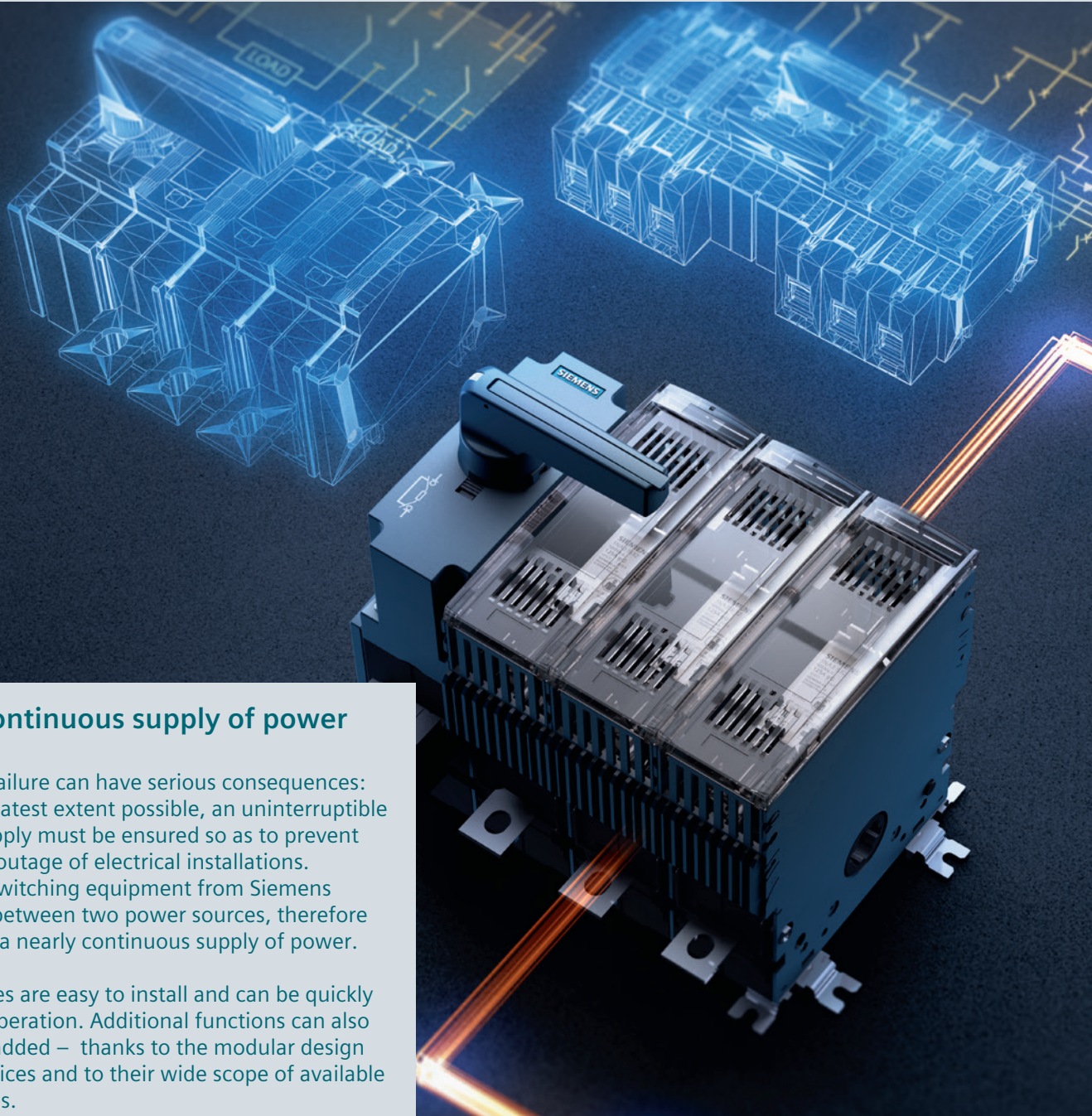
¹⁾ Using draw-out technology with touch protection according to BGV A3, adapter sleeves not included in the scope of delivery

²⁾ With permanently fitted adapter sleeves, incl. fuse link

³⁾ Do not use fuse links with nickel-plated contact caps

Accessories

Auxiliary switches					
	Version	Variant	Mounting width	Contacts	Article No.
	For MINIZED D02 switch disconnectors	Standard	0.5 MW	1 NO + 1 NC	5ST3010
				2 NO	5ST3011
				2 NC	5ST3012
		With test button	0.5 MW	1 NO + 1 NC	5ST3010-2
				2 NO	5ST3011-2
				2 NC	5ST3012-2
	For NEOZED SR60 bus-mounting switch disconnectors	Standard	0.5 MW	1 CO	5SH5525
Lateral modules					
	Version	Variant	Mounting width	Article No.	
	For NEOZED SR60 bus-mounting switch disconnectors	5SG7230	0.5 MW	5SH5526	
		5SG7234-1 and -2	0.5 MW	5SH5533	
Reducers					
	Version				Article No.
	For D01 fuse links				5SH5527



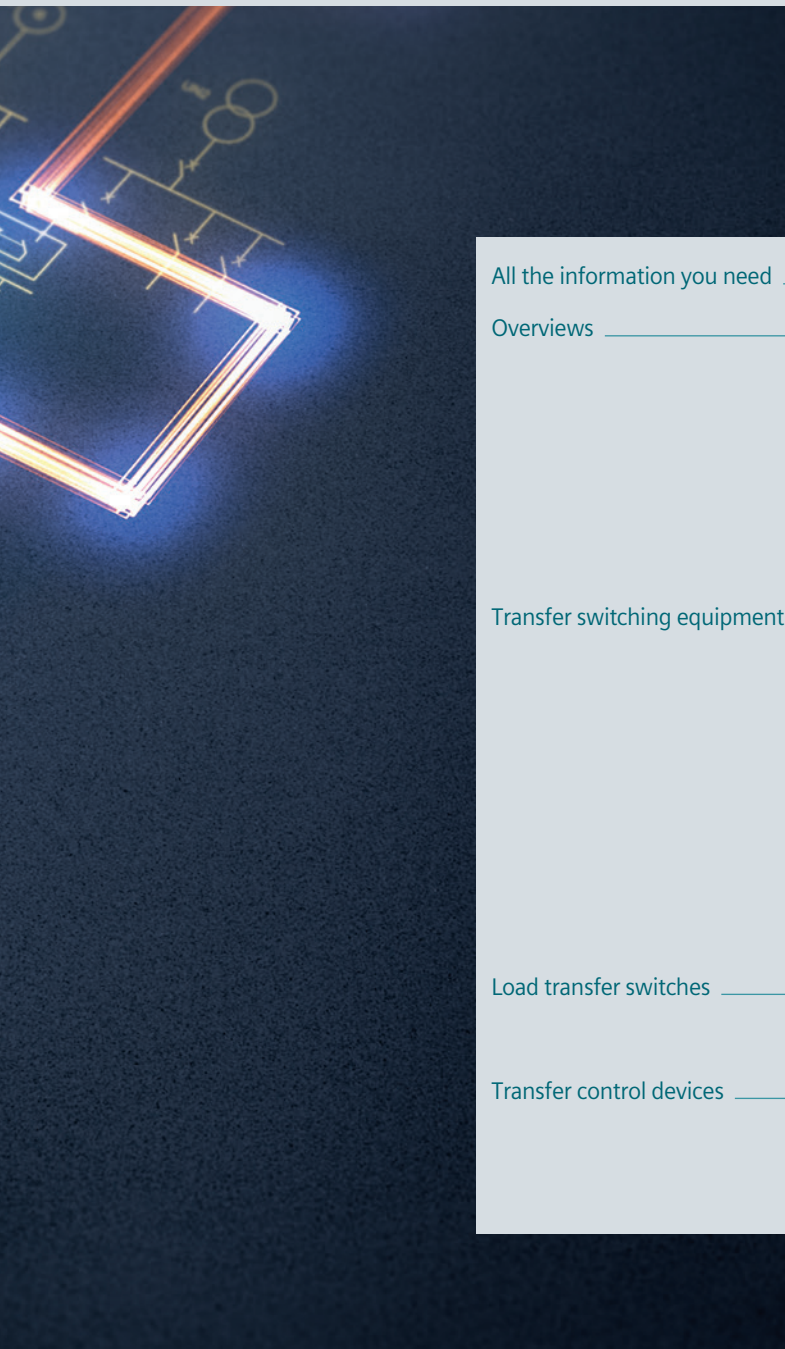
For a continuous supply of power

A power failure can have serious consequences: To the greatest extent possible, an uninterruptible power supply must be ensured so as to prevent failure or outage of electrical installations. Transfer switching equipment from Siemens switches between two power sources, therefore providing a nearly continuous supply of power.

The devices are easy to install and can be quickly put into operation. Additional functions can also be easily added – thanks to the modular design of the devices and to their wide scope of available accessories.

Convenient ordering processes and fast delivery optimize stock keeping and save you time and money. You can also use our CAx data for automated and streamlined planning and configuration.

Transfer Switching Equipment and Load Transfer Switches



All the information you need	9/2
Overviews	9/4
Quick selection guide for applications	9/4
System overview	9/5
Quick selection guide for transfer switching equipment and load transfer switches	9/6
Mounting concept	9/8
Transfer switching equipment	9/10
Remote transfer switching equipment (RTSE)	9/10
Automatic transfer switching equipment (ATSE)	9/11
Accessories for remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)	9/12
Manual transfer switching equipment (MTSE)	9/18
Accessories for manual transfer switching equipment (MTSE)	9/20
Load transfer switches	9/24
3LD2 load transfer switches	9/24
Transfer control devices	9/26
Transfer control devices	9/26
Accessories for transfer control devices	9/28

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about transfer switching equipment and load transfer switches, please visit our website www.siemens.com/switching-devices

Contact persons in your region

We are there when you need us

You can find your local contacts at www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information www.siemens.com/lowvoltage/product-support

- Technical basic information – Switch disconnectors and transfer switching equipment ([109763354](#))

The relevant tender specifications can be found at www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Switch disconnectors and transfer switching equipment sie.ag/2mmMw6g

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No. www.siemens.com/product?Article No.

Order supports are available in Siemens Industry Online Support at www.siemens.com/lowvoltage/catalogs

- Order support – 3KC automatic transfer switching equipment (ATSE) – End-to-end safety for user and systems ([109755620](#))
- Order support – 3KC remotely operated transfer switching equipment (RTSE) – End-to-end safety for user and systems ([109755627](#))
- Order support – 3KC manual transfer switching equipment (MTSE) – End-to-end safety for user and systems ([109750227](#))

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Transfer switching equipment and load transfer switches ([109769745](#))
- Equipment manual 3KC3 and 3KC6 transfer switching equipment ([109754954](#))
- Equipment manual 3KC0 manual transfer switching equipment ([109763232](#))
- Equipment manual 3KC4 and 3KC8 transfer switching equipment ([109738725](#))
- Equipment manual 3KC ATC3100 transfer control device ([100341671](#))
- Equipment manual 3KC ATC6300 transfer control device ([109755149](#))
- Equipment manual 3KC ATC6500 transfer control device ([109758018](#))

Technical overview of transfer switching equipment and load transfer switches



The fast way to get you to our online services

This page provides you with comprehensive information and links on transfer switching equipment and load transfer switches

www.siemens.com/lowvoltage/product-support ([109764946](#))

Quick selection guide for applications

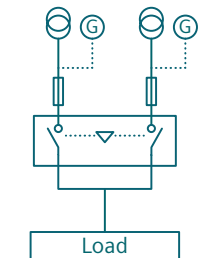
Switching with switch disconnectors (without protection function)



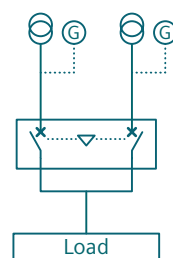
Transfer types	Load transfer	AC	■	■	■	-	-
		DC	■	-	■	-	-
	Transfer control	AC	■	■	■	■	■
Method of operation	Manual (MTSE)		■	■	■	■	■
	Remote (RTSE)		-	■	■	-	■
	Automatic (ATSE)		-	With ATC6300	With ATC6300	■	■
Transfer control	Network/network	AC	■	■	■	■	■
	Network/generator	AC	■	■	■	-	■
	Generator/generator	AC	■	■	■	-	-
Rated operating current			16 ... 1600 A	40 ... 160 A	250 ... 3200 A	40 ... 160 A	250 ... 3200 A
Number of poles			3 and 4	4	3 and 4	4	3 and 4
Communication			-	With ATC6300	With ATC6300	-	-
Automatic load shedding			-	-	-	-	-

¹⁾ Manual load transfer switch, not an MTSE

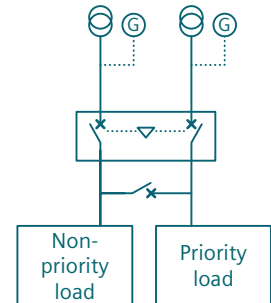
Transfer control



With switch disconnectors

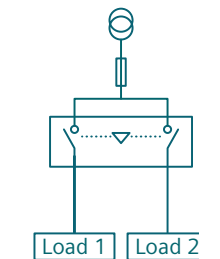


With circuit breakers



With circuit breakers and automatic load shedding

Load transfer



With switch disconnectors

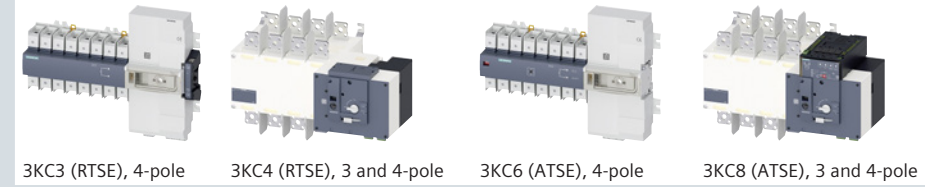
System overview

Switching with circuit breakers (with protection function)

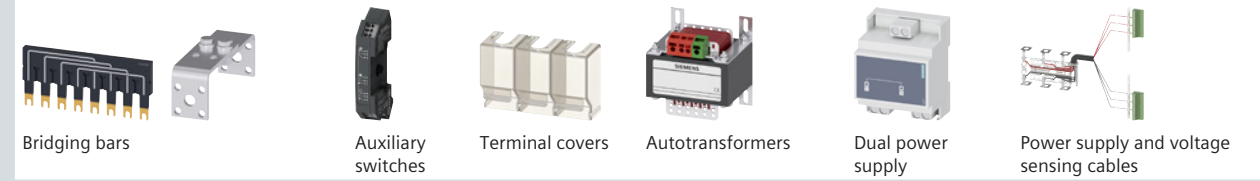


3LD2	3KC ATC3100 (+ 3VA/3WL)	3KC ATC6300 (+ 3VA/3WL)	3KC ATC6500 (+ 3VA/3WL)
n	-	-	-
-	-	-	-
1)	■	■	■
-	■	■	■
-	■	■	■
-	■	■	■
-	■	■	■
25 ... 250 A	3VA: 16 ... 630 A, 3WL: 630 ... 6300 A	3VA: 16 ... 630 A, 3WL: 630 ... 6300 A	3VA: 16 ... 1600 A, 3WL: 630 ... 6300 A
3 and 4	3 and 4	3 and 4	3 and 4
-	-	■	■
-	-	-	■

Remote (RTSE) and automatic (ATSE) transfer switching equipment



Accessories, RTSE and ATSE



Manual transfer switching equipment (MTSE)



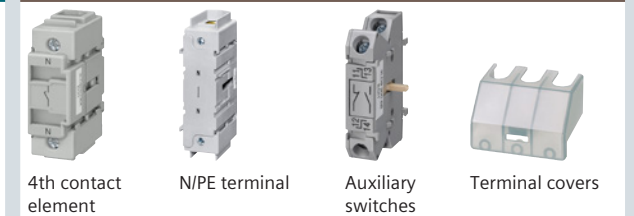
Accessories, MTSE



3LD2 load transfer switches



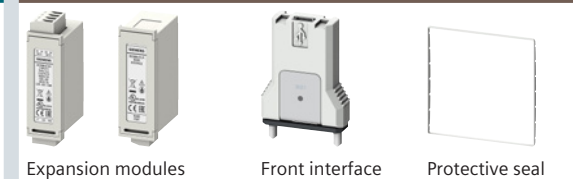
Accessories



Transfer control devices

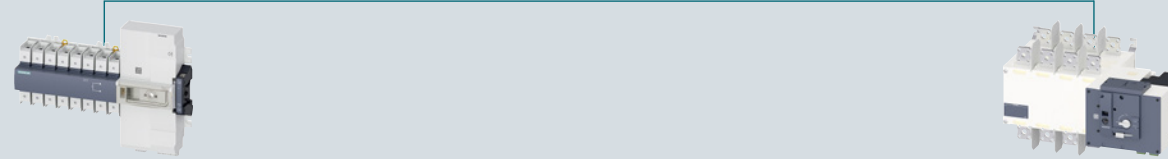


Accessories



Quick selection guide for transfer switching equipment and load transfer switches

Remote transfer switching equipment (RTSE), automatic transfer switching equipment (ATSE)



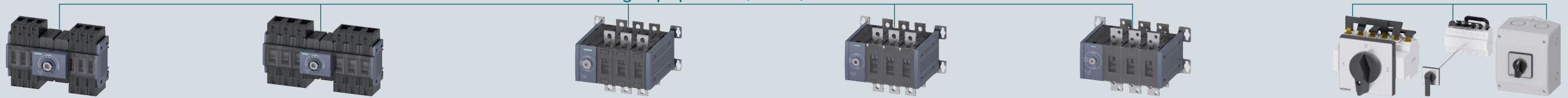
		3KC3424	3KC3426	3KC3428	3KC3430	3KC3432	3KC3434	3KC4.38	3KC4.42	3KC4.46	3KC4.48	3KC4.50	3KC4.52	3KC4.54	3KC4.56	3KC4.58	3KC4.60	
		3KC6424	3KC6426	3KC6428	3KC6430	3KC6432	3KC6434	3KC8.38	3KC8.42	3KC8.46	3KC8.48	3KC8.50	3KC8.52	3KC8.54	3KC8.56	3KC8.58	3KC8.60	
Rated uninterrupted current I _n		40 A	63 A	80 A	100 A	125 A	160 A	250 A	400 A	630 A	800 A	1000 A	1250 A	1600 A	2000 A	2500 A	3200 A	
Connection		Box terminal						Flat terminal										
Switch positions		I–O–II						I–O–II										
Number of poles		4						3 and 4										
Size		–						–										
General technical details																		
Operating voltage at 50/60 Hz AC in acc. to IEC 60947-6-1	V	415						415										
Operating voltage at 50/60 Hz AC in acc. to IEC 60947-3 (load transfer switch)	V	415						690										
Impulse withstand voltage (U _{imp}) for main circuit	kV	6						12										
Impulse withstand voltage (U _{imp}) for control circuit (RTSE / ATSE)	kV	4 (RTSE) / 2.5 (ATSE)						4										
Operational current in acc. to IEC 60947-6-1	AC-31 A/B, at 415 V	A	40	63	80	100	100/125	100/160	–/250	–/400	–/630	–/800	–/1000	–/1250	–/1600	–/2000	–/2500	–/3200
	AC-32 A/B, at 415 V	A	40	63	80	100	100/125	100/160	–/200	–/400	–/500	–/800	–/1000	–/1250	–/1600	–/2000	–/2000	–/2000
	AC-33 B, at 415 V	A	40	63	80	100	125	125	200	200	400	800	800	1000	1000	1250	1250	1250
Operational current in acc. to IEC 60947-3 (load transfer switch)	AC-21 A/B, at 415 V	A	40	63	80	100	125	125/160	250	400	630	800	1000	1250	1600	–/2000	–/2500	–/3200
	AC-21 A/B, at 690 V	A	40	63	80	100	125	125	200	200	500	800	1000	1250	1600	–/2000	–/2000	–/2000
	AC-22 A/B, at 415 V	A	40	63	80	100	125	125/160	250	400	630	800	1000	1250	1600	–/2000	–/2500	–/3200
	AC-22 A/B, at 690 V	A	40	63	80	80	100/125	100/125	160	160	400	630	800	1000	1000	–	–	–
	AC-23 A/B, at 415 V	A	40	63	80	100	125	125/160	200	400	500/630	800	1000	1250	1250	–/1600	–/1600	–/1600
Operational power in acc. to IEC 60947-3 (load transfer switch)	AC-23 A/B, at 415 V ¹⁾	kW	22	37	45	55	60	75	110	220	335	450	700	800	900	–	–	–
	AC-23 A/B, at 690 V ²⁾	kW	37	55	55	75	75	75	110	110	400	400	630	800	800	–	–	–
	AC-3 motor load switch at 380 ... 440 V	kW				–												
AC-3 motor load switch at 660 ... 690 V	kW				–													
Short-circuit behavior																		
Short-circuit current ratings in acc. to IEC 60947-6-1	Conditional short-circuit current with gG fuse (415 V)	kA	50	50	50	50	50	40	50	50	50	50	50	100	100	–	–	–
Short-circuit current ratings in acc. to IEC 60947-3 (load transfer switch)	Conditional short-circuit current with gG fuse (415 V)	kA	50	50	50	50	50	40										
	Conditional short-circuit current with gG fuse (690 V)	kA				–			50	50	50	50	50	100	100	–	–	–
Transfer switching properties (in acc. to IEC 60947-6-1)																		
Switching time I–O and II–O	s	0.045						0.5	0.5	0.6	1.4	1.4	1.4	1.4	1.6	1.6	1.6	
Switch-off time I–O–II and II–O–I	s	0.15						0.4	0.4	0.4	1.4	1.4	1.4	1.5	1.2	1.2	1.2	
Transfer time I–O–II and II–O–I without/with network monitoring	s	0.18/1.4						0.9/1.0	0.9/1.0	1.0/1.1	2.8/3.1	2.8/3.1	2.8/3.1	2.9/3.3	2.8/2.8	2.8/2.8	2.8/2.8	
Degree of protection																		
IP maximum degree of protection		IP20						IP20										
Standards UL/CSA, in acc. to UL508																		
Rated operational voltage U _e AC	V	–						–										
Rated uninterrupted current I _n	A	–						–										
Maximum rated power (AC-3), three-phase, 40 ... 60 Hz	480 V	hp	–						–									
	600 V	hp	–						–									
More information																		
Catalog LV 10		From page 9/11						From page 9/11										

¹⁾ For 3LD2 at 380 ... 440 V

²⁾ For 3LD2 at 660 ... 690 V

Manual transfer switching equipment (MTSE)

3LD2 load transfer switches



3KC0.16	3KC0.22	3KC0.26	3KC0.28	3KC0.30	3KC0.32	3KC0.34	3KC0.36	3KC0.38	3KC0.40	3KC0.42	3KC0.44	3KC0.46	3KC0.48	3KC0.50	3KC0.52	3KC0.54	3LD21	3LD22	3LD25	3LD27	3LD23	3LD24
16 A	32 A	63 A	80 A	100 A	125 A	160 A	200 A	250 A	315 A	400 A	500 A	630 A	800 A	1000 A	1250 A	1600 A	25 A	32 A	63 A	100 A	160 A	250 A
Box terminal			Box terminal				Flat terminal				Flat terminal				Box terminal				Box terminal			
I-O-II			I-O-II				I-O-II				I-O-II				I-O-II				I-O-II			
3 and 4			3 and 4				3 and 4				3 and 4				3 and 4				3 and 4			
1			2				3				4				5				-			
415			415				415				415				415				-			
690			690				690				690				690				690			
8			8				12				12				12				6			
-			-				-				-				-				-			
-/16	-/32	-/63	-/80	-/100	-/125	-/160	-/200	-/250	-/315	-/400	-/500	-/630	-/800	-/1000	-/1250	-/1600	-	-	-	-	-	-
-/16	-/32	-/63	-/80	-/100	-/125	-/160	-/200	-/250	-/315	-/350	-/500	-/630	-/800	-/1000	-/1250	-/1250	-	-	-	-	-	-
16	32	63	80	100	125	160	200	250	315	315	500	500	500	800	800	800	-	-	-	-	-	-
16/16	32/32	63/63	80/80	100/100	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630	800/800	1000/1000	1250/1250	1600/1600	25	32	63	100	160	250
16/16	32/32	63/63	80/80	100/100	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630	800/800	1000/1000	1250/1250	1600/1600	25	32	63	100	160	250
16/16	32/32	63/63	80/80	100/100	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630	800/800	1000/1000	1250/1250	1600/1600	25	32	63	100	140	230
16/16	32/32	63/63	80/80	100/100	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630	800/800	1000/1000	1250/1250	1600/1600	25	32	63	100	140	230
16/16	32/32	63/63	80/80	100/100	125/125	160/160	200/200	250/250	315/315	400/400	500/500	630/630	670/670	800/800	800/800	800/800	20	22	43	70	132	224
16/16	32/32	63/63	80/80	100/100	125/125	160/160	200/200	250/250	315/315	315/315	500/500	500/500	500/500	800/800	800/800	800/800	11.5	13.5	22	34	47	58
7.5/7.5	15/15	30/30	37/37	55/55	55/55	90/90	110/110	132/132	160/160	220/220	280/280	355/355	355/355	400/400	400/400	400/400	9.5	11.5	22	37	75	132
11/11	30/30	55/55	75/75	90/90	110/110	110/110	185/185	220/220	280/280	355/355	500/500	500/500	500/500	800/800	800/800	800/800	9.5	11.5	18.5	30	45	55
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	9.5	18.5	30	50	110
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	9.5	15	22	37	45
100	-	-	-	100	-	-	100	100	65	65	100	100	65	100	80	80	-	-	-	-	-	-
100	-	-	-	100	-	-	100	100	65	65	100	100	65	100	80	80	50	50	50	50	50	50
100	-	-	-	65	-	-	65	65	35	35	65	65	50	-	-	-	50	50	50	50	50	50
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IP20	-	-	-	IP20	-	-	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP20	IP65					
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600	600	600	600	600	600
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	30	60	100	160	250
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	20 (15) ³⁾	40	60	75	100
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15	30 (20) ³⁾	50	75	75	75

From page 9/18

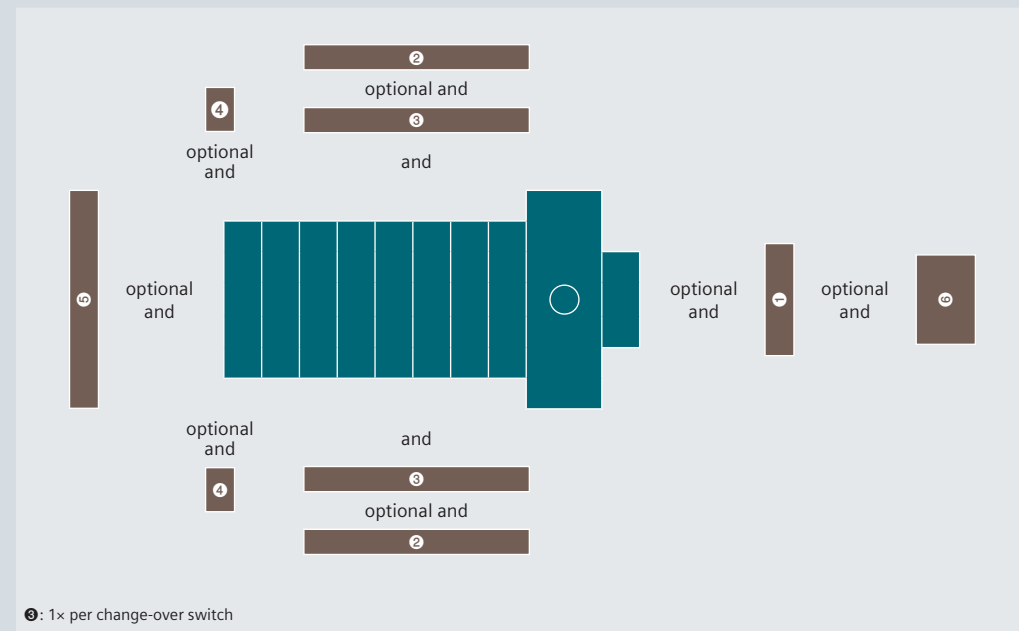
From page 9/24

³⁾ Values in brackets apply to devices in molded-plastic enclosure.

Mounting concept

Mounting concept and accessories

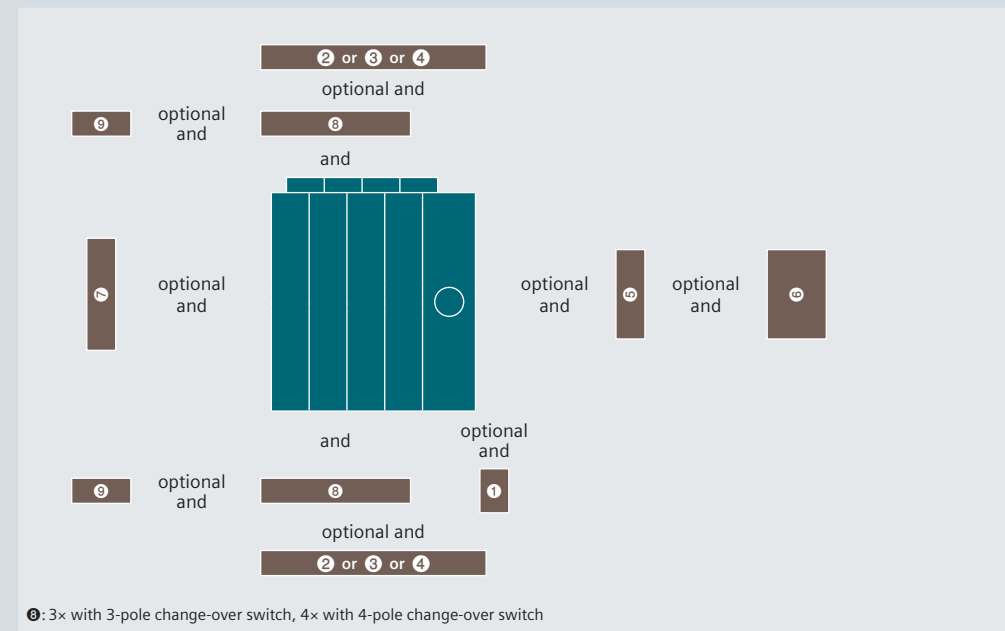
3KC3 (RTSE) 4-pole



Legend

- ① Auxiliary switches
- ② Terminal covers
- ③ Bridging bar
- ④ Aux. conductor terminal
- ⑤ Autotransformers
- ⑥ Dual power supply

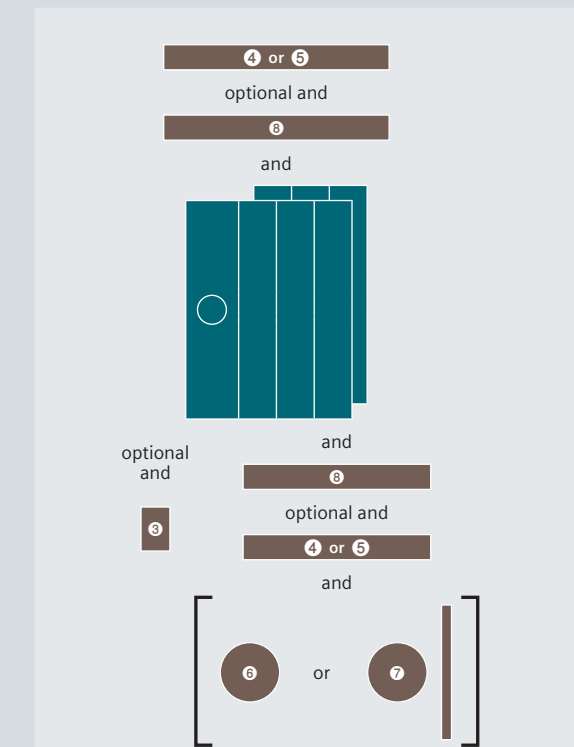
3KC4 (RTSE) 3-pole or 4-pole



Legend

- ① Auxiliary switches
- ② Phase barriers
- ③ Terminal covers
- ④ Terminal plates
- ⑤ Autotransformers
- ⑥ Dual power supply
- ⑦ Spacers
- ⑧ Bridging bar
- ⑨ Copper bar connection kit

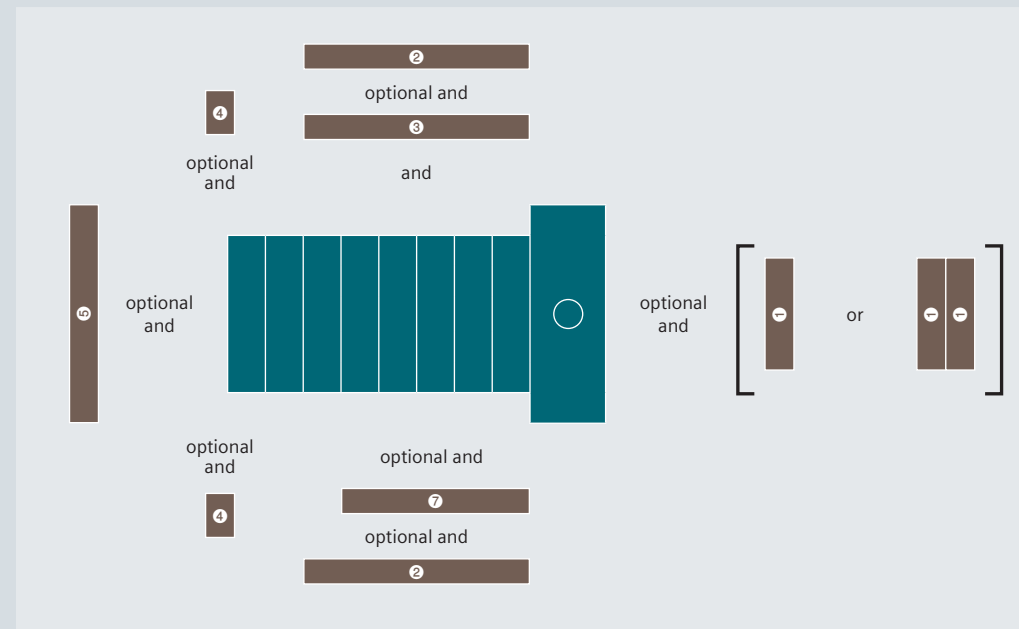
3KC0 (MTSE) front operating mechanism on left, 3-pole or 4-pole, sizes 3 to 5



Legend

- ① Auxiliary switches
- ② Phase barrier
- ③ Side plate cover and terminal cover
- ④ Direct operating mechanism
- ⑤ Door-coupling rotary operating mechanism
- ⑥ Bridging bar

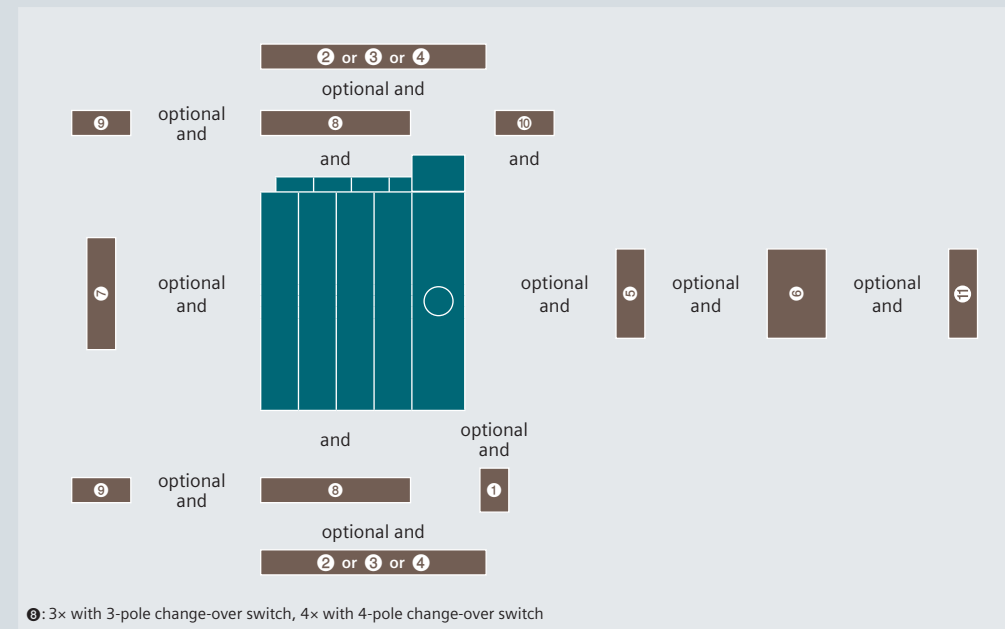
3KC6 (ATSE), 4-pole



Legend

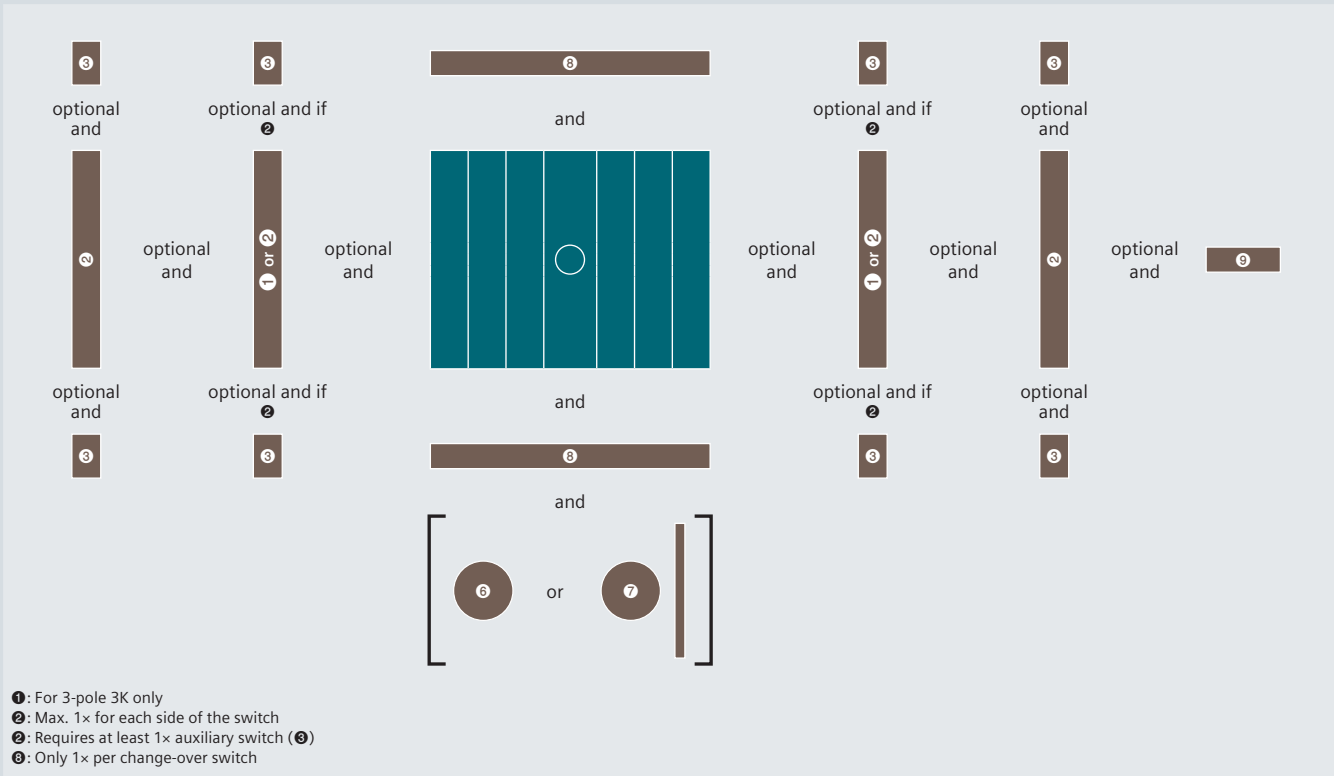
- ① Auxiliary switches
- ② Terminal covers
- ③ Bridging bar
- ④ Aux. conductor terminal
- ⑤ Autotransformers
- ⑥ Dual power supply
- ⑦ Sealable cover

3KC8 (ATSE) 3-pole or 4-pole



Legend

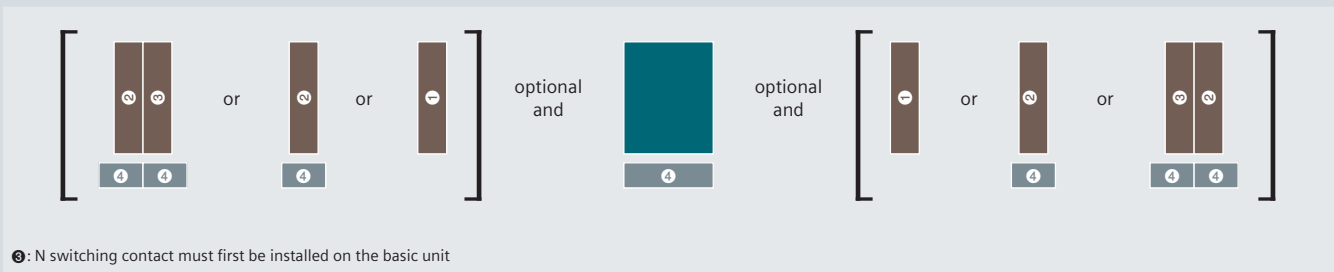
- ① Auxiliary switches
- ② Phase barriers
- ③ Terminal covers
- ④ Terminal plates
- ⑤ Autotransformers
- ⑥ Dual power supply
- ⑦ Spacers
- ⑧ Bridging bar
- ⑨ Copper bar connection kit
- ⑩ Power supply cables
- ⑪ External display



Legend

- ① 4th contact element
- ② Auxiliary switch module, standard version
- ③ Auxiliary switches
- ④ Direct operating mechanism
- ⑤ Door-coupling rotary operating mechanism
- ⑥ Bridging bar
- ⑦ Assembly kit for floor mounting

3LD2 load transfer switch mounting concept

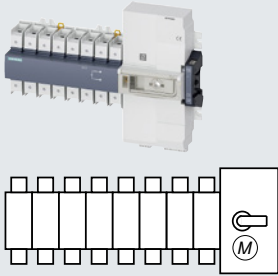
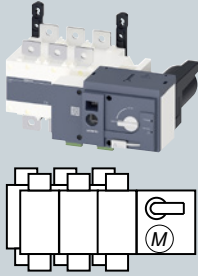
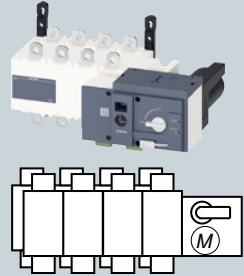


Legend

- ① Auxiliary switches
- ② N/PE terminal
- ③ N switching contacts
- ④ Terminal covers

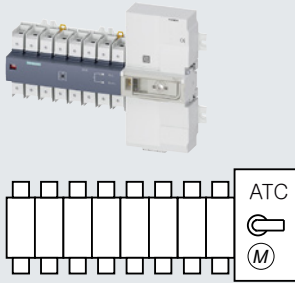
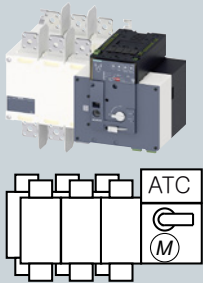
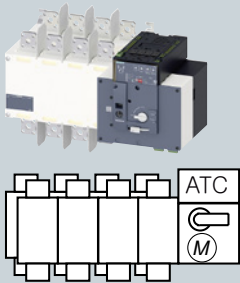
Remote transfer switching equipment (RTSE)

40 to 3200 A

	Box terminal 3KC3 (RTSE)	Flat terminal 3KC4 (RTSE)	
Version	With motorized operating mechanism and additional handle	With motorized operating mechanism and additional handle	
Operating mechanism	Operating mechanism on right	Operating mechanism on right	
Mounting	Floor and DIN rail mounting	Floor mounting	
Bridging bars	Additionally required for connection side	Additionally required for connection side	
Scope of supply	Including 3KC9603 auxiliary switches		
			
Rated uninterrupted current I_u	4-pole	3-pole	4-pole
Box terminal			
40 A	3KC3424-2AA22-0AA3	–	–
63 A	3KC3426-2AA22-0AA3	–	–
80 A	3KC3428-2AA22-0AA3	–	–
100 A	3KC3430-2AA22-0AA3	–	–
125 A	3KC3432-2AA22-0AA3	–	–
160 A	3KC3434-2AA22-0AA3	–	–
Flat terminal			
250 A	–	3KC4338-0CA21-0AA3	3KC4438-0CA21-0AA3
400 A	–	3KC4342-0DA21-0AA3	3KC4442-0DA21-0AA3
630 A	–	3KC4346-0EA21-0AA3	3KC4446-0EA21-0AA3
800 A	–	3KC4348-0FA21-0AA3	3KC4448-0FA21-0AA3
1000 A	–	3KC4350-0FA21-0AA3	3KC4450-0FA21-0AA3
1250 A	–	3KC4352-0GA21-0AA3	3KC4452-0GA21-0AA3
1600 A	–	3KC4354-0HA21-0AA3	3KC4454-0HA21-0AA3
2000 A	–	3KC4356-0JA21-0AA3	3KC4456-0JA21-0AA3
2500 A	–	3KC4358-0JA21-0AA3	3KC4458-0JA21-0AA3
3200 A	–	3KC4360-0JA21-0AA3	3KC4460-0JA21-0AA3

Automatic transfer switching equipment (ATSE)

40 to 3200 A

	Box terminal 3KC6 (ATSE)	Flat terminal 3KC8 (ATSE)	
Version	With motorized operating mechanism, integrated controller and additional handle	With motorized operating mechanism, integrated controller and additional handle	
Operating mechanism	Operating mechanism on right	Operating mechanism on right	
Mounting	Floor and DIN rail mounting	Floor mounting	
Bridging bars	Additionally required for connection side	Additionally required for connection side	
Scope of supply	Wired ready for operation (including power supply)	Without power supply and voltage sensing cables	
			
Rated uninterrupted current I_u	4-pole	3-pole	4-pole
Box terminal			
40 A	3KC6424-2TA20-0TA3	–	–
63 A	3KC6426-2TA20-0TA3	–	–
80 A	3KC6428-2TA20-0TA3	–	–
100 A	3KC6430-2TA20-0TA3	–	–
125 A	3KC6432-2TA20-0TA3	–	–
160 A	3KC6434-2TA20-0TA3	–	–
Flat terminal			
250 A	–	3KC8338-0CA22-0GA3	3KC8438-0CA22-0GA3
400 A	–	3KC8342-0DA22-0GA3	3KC8442-0DA22-0GA3
630 A	–	3KC8346-0EA22-0GA3	3KC8446-0EA22-0GA3
800 A	–	3KC8348-0FA22-0GA3	3KC8448-0FA22-0GA3
1000 A	–	3KC8350-0FA22-0GA3	3KC8450-0FA22-0GA3
1250 A	–	3KC8352-0GA22-0GA3	3KC8452-0GA22-0GA3
1600 A	–	3KC8354-0HA22-0GA3	3KC8454-0HA22-0GA3
2000 A	–	3KC8356-0JA22-0GA3	3KC8456-0JA22-0GA3
2500 A	–	3KC8358-0JA22-0GA3	3KC8458-0JA22-0GA3
3200 A	–	3KC8360-0JA22-0GA3	3KC8460-0JA22-0GA3

Accessories

For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

				RTSE	ATSE	
Bridging bar						
	<ul style="list-style-type: none"> For load-side connection For 3KC4/3KC8 3-pole transfer switches 3 units, For 3KC4/3KC8 4-pole transfer switches 4 units are required 					
	Version	Number of poles	Scope of supply	Article No.		
	For 40 ... 125 A	4-pole	1 unit	3KC9618-2	■	■
	For 160 A	4-pole	1 unit	3KC9618-3	■	■
	For 250 A	1-pole	1 unit	3KC9818-2	■	■
	For 400 A	1-pole	1 unit	3KC9818-3	■	■
	For 630 A	1-pole	1 unit	3KC9818-4	■	■
	For 800 ... 1000 A	1-pole	1 unit	3KC9818-5	■	■
	For 1250 A	1-pole	1 unit	3KC9818-6	■	■
	For 1600 A	1-pole	1 unit	3KC9818-7	■	■
For 2000 ... 3200 A	1-pole	1 unit	3KC9818-8	■	■	
Auxiliary conductor terminal						
	Version	Scope of supply	Article No.			
	For 40 ... 160 A	2 units	3KC9622-2	■	■	
Auxiliary switches for 40 ... 160 A						
	<ul style="list-style-type: none"> For 250 V AC/5 A or for 24 V/2 A DC 1 change-over contact for each position O, I, II Max. 2 auxiliary switches can be installed per transfer switching equipment unit 					
	Version	Contact configuration	Article No.			
	For 40 ... 160 A	With separate contacts	3KC9603-1	■	■	
	With linked common contacts	3KC9603-2	■	■		
Auxiliary switches for 250 ... 1600 A						
	<ul style="list-style-type: none"> One auxiliary switch contains 2 leading changeover contacts, one changeover contact for position I and one changeover contact for position II (incl. bolt set) Max. two auxiliary switches can be installed per transfer switching equipment unit For 2000 ... 3200 A transfer switching equipment the auxiliary switch is included in the basic unit 250 V AC / 12 A (AC-13), 24 V DC / 14 A (DC-13) 					
	Version	Article No.				
	For 250 ... 630 A	3KC9803-1	■	■		
	For 800 ... 1600 A	3KC9803-2	■	■		
	For 2000 ... 2500 A (included in the basic unit)	–	■	■		

					RTSE	ATSE
Terminal covers						
	Version	Number of poles	Scope of supply	Article No.		
	For 40 ... 160 A	4-pole	2 units (1 unit covers 4 poles)	3KC9604-2	■	■
		For 250 ... 400 A	3-pole	3 units (1 unit covers 1 pole)	3KC9804-1	■
		4-pole	4 units (1 unit covers 1 pole)	3KC9804-2	■	■
	For 630 A	3-pole	3 units (1 unit covers 1 pole)	3KC9804-3	■	■
		4-pole	4 units (1 unit covers 1 pole)	3KC9804-4	■	■
Sealable cover						
	Version		Scope of supply	Article No.		
 	For 3KC6 (ATSE) 40 ... 160 A		Incl. bolt set and sealing ribbons	3KC9721-1	–	■
	For 3KC8 (ATSE) 250 ... 3200 A		Incl. bolt set and sealing ribbons	3KC9821-0	–	■
Sealing ribbon						
	• Also as spare part for sealable cover					
	Version		Scope of supply	Article No.		
	For 40 ... 3200 A		10 units	3KC9621-2	–	■
Autotransformers						
	Version		Technical data	Article No.		
 	For 40 ... 160 A		400 V AC / 230 V; 400 VA	3KC9624-1	■	■
	For 250 ... 3200 A, 3-pole		400 V AC / 230 V; 200 VA	3KC9824-1	■	■

Accessories

For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

Power supply and voltage sensing cables for ATSE						RTSE	ATSE
Application	Infeed	Switches	Version	Article No.			
 <p>For 250 ... 630 A</p>	From below, with power supply	3-pole	For 250 A	3KC9833-1	–	■	
			For 400 A	3KC9833-2	–	■	
			For 630 A	3KC9833-3	–	■	
			For 800 ... 1000 A	3KC9833-4	–	■	
			For 1250 A	3KC9833-5	–	■	
			For 1600 A	3KC9833-6	–	■	
			For 2000 ... 3200 A	3KC9833-7	–	■	
 <p>For 800 ... 3200 A</p>	From above, with power supply	3-pole	For 250 A	3KC9834-1	–	■	
			For 400 A	3KC9834-2	–	■	
			For 630 A	3KC9834-3	–	■	
			For 800 ... 1000 A	3KC9834-4	–	■	
			For 1250 A	3KC9834-5	–	■	
			For 1600 A	3KC9834-6	–	■	
			For 2000 ... 3200 A	3KC9834-7	–	■	
 <p>For 250 ... 630 A</p>	From below, without power supply	3-pole	For 250 A	3KC9822-1	–	■	
			For 400 A	3KC9822-2	–	■	
			For 630 A	3KC9822-3	–	■	
			For 800 ... 1000 A	3KC9822-4	–	■	
			For 1250 A	3KC9822-5	–	■	
			For 1600 A	3KC9822-6	–	■	
			For 2000 ... 3200 A	3KC9822-7	–	■	
 <p>For 800 ... 3200 A</p>	From above, without power supply	3-pole	For 250 A	3KC9832-1	–	■	
			For 400 A	3KC9832-2	–	■	
			For 630 A	3KC9832-3	–	■	
			For 800 ... 1000 A	3KC9832-4	–	■	
			For 1250 A	3KC9832-5	–	■	
			For 1600 A	3KC9832-6	–	■	
			For 2000 ... 3200 A	3KC9832-7	–	■	
 <p>For 250 ... 630 A</p>	From below, with power supply	4-pole	For 250 A	3KC9830-1	–	■	
			For 400 A	3KC9830-2	–	■	
			For 630 A	3KC9830-3	–	■	
			For 800 ... 1000 A	3KC9830-4	–	■	
			For 1250 A	3KC9830-5	–	■	
			For 1600 A	3KC9830-6	–	■	
			For 2000 ... 3200 A	3KC9830-7	–	■	
 <p>For 800 ... 3200 A</p>	From above, with power supply	4-pole	For 250 A	3KC9831-1	–	■	
			For 400 A	3KC9831-2	–	■	
			For 630 A	3KC9831-3	–	■	
			For 800 ... 1000 A	3KC9831-4	–	■	
			For 1250 A	3KC9831-5	–	■	
			For 1600 A	3KC9831-6	–	■	
			For 2000 ... 3200 A	3KC9831-7	–	■	

RTSE ATSE

Dual power supply



Version	Technical data	Article No.	RTSE	ATSE
For 3KC3 and 3KC4 (RTSE) 40 ... 3200 A	240 V AC, 3 A	3KC9625-1	■	–

External display



- For installing in the control cabinet door

Version	Article No.	RTSE	ATSE
For 3KC8 (ATSE) 250 ... 3200 A	3KC9823-0	–	■

Connection cable



- 3 m RJ45 cable for external display

Version	Article No.	RTSE	ATSE
For 250 ... 3200 A	3KC9823-2	–	■

Phase barrier



- For 800 ... 3200 A transfer switching equipment included in the scope of supply of the basic unit

Version	Number of poles	Scope of supply	Article No.	RTSE	ATSE
For 250 ... 400 A	3-pole	2 units	3KC9808-1	■	■
	4-pole	3 units	3KC9808-6	■	■
For 630 A	3-pole	2 units	3KC9808-2	■	■
	4-pole	3 units	3KC9808-7	■	■

Cover frame for ATSE



- For a clean and safe door cut-out
- To enable access to the front of the 3KC8 transfer switching equipment (electronic module and operation of the motorized operating mechanism)

Version	Article No.	RTSE	ATSE
250 ... 630 A	3KC9820-4	–	■
800 ... 3200 A	3KC9820-5	–	■

Spacers



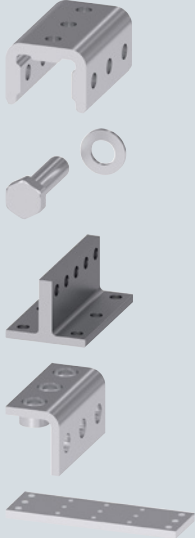
- Increase the space between the mounting rail and the cabinet rear panel or the mounting frame

Version	Scope of supply	Article No.	RTSE	ATSE
For 250 ... 630 A	2 units	3KC9820-3	■	■

9

Accessories

For remote transfer switching equipment (RTSE) and automatic transfer switching equipment (ATSE)

					RTSE	ATSE
Copper bar connection kit						
Version	Designation	Scope of supply	Article No.			
	For 2000 ... 2500A	C-bracket, part A	1 unit	3KC9811-0	■	■
	For 2000 ... 3200 A	Bolt set, part B	1 unit	3KC9811-1	■	■
				3KC9811-2	■	■
		T-bracket, part C	1 unit	3KC9811-3	■	■
		L-bracket, part D	2 units	3KC9811-4	■	■
	Bridging bars, part E	1 unit	3KC9818-8	■	■	

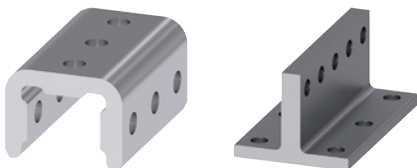
Terminal plates						
<ul style="list-style-type: none"> For protecting the front side at the upper and lower connecting terminals 						
Version	Number of poles	Article No.				
For 250 ... 400 A	3-pole	3KC9827-1	■	■		
	4-pole	3KC9828-1	■	■		
For 630 A	3-pole	3KC9827-2	■	■		
	4-pole	3KC9828-2	■	■		
For 800 ... 1250 A	3-pole	3KC9827-3	■	■		
	4-pole	3KC9828-3	■	■		
For 1600 A	3-pole	3KC9827-4	■	■		
	4-pole	3KC9828-4	■	■		
For 2000 ... 3200 A	3-pole	3KC9827-5	■	■		
	4-pole	3KC9828-5	■	■		

			RTSE	ATSE
Motorized operating mechanism as spare part				
	Version	Article No.		
	For 250 ... 400 A	3KC9826-1	■	■
	For 630 A	3KC9826-2	■	■
	For 800 ... 1250 A	3KC9826-3	■	■
	For 1600 A	3KC9826-4	■	■
	For 2000 ... 3200 A	3KC9826-5	■	■
Controller (electronic module) as spare part				
	Version	Article No.		
	For 250 ... 3200 A	3KC9826-0	–	■



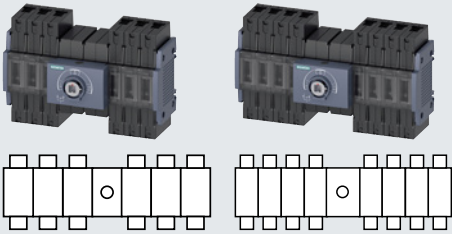
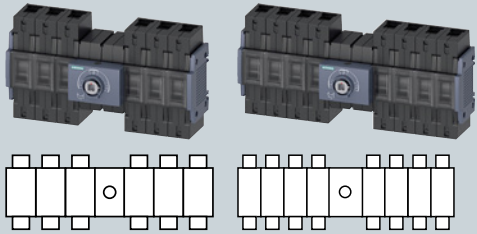
Copper bar connection kit

You will find further information at:


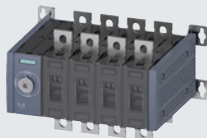
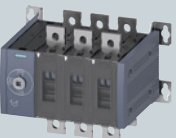
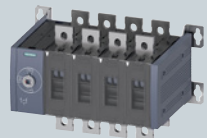
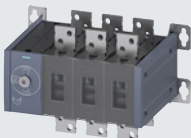
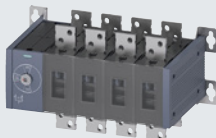
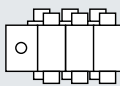
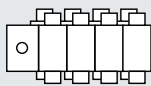
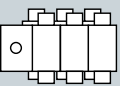
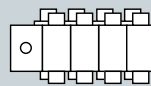
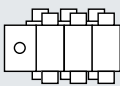
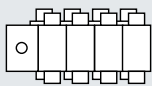


Manual transfer switching equipment (MTSE)

16 to 1600 A




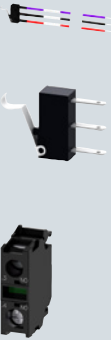
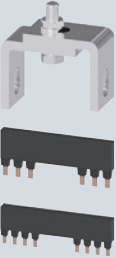
	Box terminal		Size 2	
	Size 1			
Version	Basic unit without handle		Basic unit without handle	
Operating mechanism	Front operating mechanism		Front operating mechanism	
Mounting	Standard mounting rail and floor mounting ¹⁾		Standard mounting rail and floor mounting ¹⁾	
Bridging bars	Additionally required for connection side		Additionally required for connection side	
				
Rated uninterrupted current I_u	3-pole	4-pole	3-pole	4-pole
Box terminal				
16 A	3KC0316-2ME00-0AA0	3KC0416-2ME00-0AA0	–	–
32 A	3KC0322-2ME00-0AA0	3KC0422-2ME00-0AA0	–	–
63 A	3KC0326-2ME00-0AA0	3KC0426-2ME00-0AA0	–	–
80 A	–	–	3KC0328-2NE00-0AA0	3KC0428-2NE00-0AA0
100 A	–	–	3KC0330-2NE00-0AA0	3KC0430-2NE00-0AA0
125 A	–	–	3KC0332-2NE00-0AA0	3KC0432-2NE00-0AA0
160 A	–	–	3KC0334-2NE00-0AA0	3KC0434-2NE00-0AA0
Flat terminal				
200 A	–	–	–	–
250 A	–	–	–	–
315 A	–	–	–	–
400 A	–	–	–	–
500 A	–	–	–	–
630 A	–	–	–	–
800 A	–	–	–	–
1000 A	–	–	–	–
1250 A	–	–	–	–
1600 A	–	–	–	–

¹⁾ An assembly kit is required for floor mounting

Flat terminal					
Size 3		Size 4		Size 5	
Basic unit without handle		Basic unit without handle		Basic unit without handle	
Front operating mechanism		Front operating mechanism		Front operating mechanism	
Floor mounting		Floor mounting		Floor mounting	
Additionally required for connection side		Additionally required for connection side		Additionally required for connection side	
					
					
3-pole	4-pole	3-pole	4-pole	3-pole	4-pole
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-
3KC0336-OPE00-0AA0	3KC0436-OPE00-0AA0	-	-	-	-
3KC0338-OPE00-0AA0	3KC0438-OPE00-0AA0	-	-	-	-
3KC0340-OPE00-0AA0	3KC0440-OPE00-0AA0	-	-	-	-
3KC0342-OPE00-0AA0	3KC0442-OPE00-0AA0	-	-	-	-
-	-	3KC0344-OQE00-0AA0	3KC0444-OQE00-0AA0	-	-
-	-	3KC0346-OQE00-0AA0	3KC0446-OQE00-0AA0	-	-
-	-	3KC0348-OQE00-0AA0	3KC0448-OQE00-0AA0	-	-
-	-	-	-	3KC0350-ORE00-0AA0	3KC0450-ORE00-0AA0
-	-	-	-	3KC0352-ORE00-0AA0	3KC0452-ORE00-0AA0
-	-	-	-	3KC0354-ORE00-0AA0	3KC0454-ORE00-0AA0

Accessories



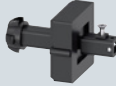
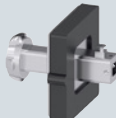




For manual transfer switching equipment (MTSE)





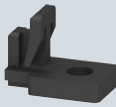

				Size 1	Size 2	Size 3	Size 4	Size 5	
Box terminal (4th contact element, switching pole)									
	Connection		Article No.						
	N —  N		3KD9105-2	■					
			3KD9205-2		■				
Auxiliary switch module									
	<ul style="list-style-type: none"> Delivery does not include auxiliary switch A maximum of 2 auxiliary switches can be installed per auxiliary switch module. The auxiliary switches indicate the switch position of the respective switching equipment (I or II) to which the auxiliary switch module is connected. 								
	Variant		Article No.						
Standard version		3KD9103-5		■	■				
Auxiliary switches									
<ul style="list-style-type: none"> Auxiliary switches for sizes 3 to 5 have a screw terminal and are mounted on the 3K operating mechanism module. Auxiliary switches with spring-type terminals from the 3SU1 program can also be used. All auxiliary switches for sizes 3 to 5 can be used as leading auxiliary switches, depending on the mounting position of the auxiliary switch (see operating instructions). 									
	Variant		Contacts	Contact surface	Article No.				
	With connecting cables		1 CO contact	Standard	3KD9103-1	■	■		
				Solid-state compatible	3KD9103-3	■	■		
	Without connecting cables		1 CO contact	Standard	3KD9103-2	■	■		
				Solid-state compatible	3KD9103-4	■	■		
			1 NO contact	Standard	3SU1400-1AA10-1BA0			■	■
				Gold-plated	3SU1400-1AA10-1LA0			■	■
			1 NC contact	Standard	3SU1400-1AA10-1CA0			■	■
				Gold-plated	3SU1400-1AA10-1MA0			■	■
			1 NO contact + 1 NC contact	Standard	3SU1400-1AA10-1FA0			■	■
				Gold-plated	3SU1400-1AA10-1QA0			■	■
			2 NO contacts	Standard	3SU1400-1AA10-1DA0			■	■
				Gold-plated	3SU1400-1AA10-1NA0			■	■
			2 NC contacts	Standard	3SU1400-1AA10-1EA0			■	■
				Gold-plated	3SU1400-1AA10-1PA0			■	■
Bridging bars for sizes 1 and 2									
<ul style="list-style-type: none"> For load-side connection For 3-pole transfer switches (sizes 3 to 5) 3 units, for 4-pole transfer switches (sizes 3 to 5) 4 units are required 									
	Number of poles			Article No.					
	1-pole	1 unit		3KC9318-0			■		
				3KC9418-0				■	
				3KC9518-0					■
	3-pole	1 unit		3KC9118-1	■				
				3KC9218-1		■			
	4-pole	1 unit		3KC9118-2	■				
				3KC9218-2		■			

					Size 1	Size 2	Size 3	Size 4	Size 5	
Direct operating mechanism standard version										
<ul style="list-style-type: none"> • Can be locked with up to max. 3 padlocks • Requires additional mounting depth in locked state 										
	Color	Article No.								
	Gray	3KC9201-3	3KC9301-1	3KC9401-1	3KC9501-1	■	■	■		
	Red/yellow	3KC9301-2	3KC9401-2	3KC9501-2			■	■	■	
	Flat direct operating mechanism for distribution boards									
	<ul style="list-style-type: none"> • Can be locked with one padlock • No additional mounting depth in locked state 									
		Color	Article No.							
Gray		3KC9101-4				■				
Door-coupling rotary operating mechanism, 8UD1 series										
<ul style="list-style-type: none"> • Handle with masking plate • Coupling driver with tolerance compensation • Shaft 300 mm • Can be locked with up to max. 3 padlocks • Labeling I–O–II 										
	Color	Handle length	Shaft	Article No.						
	Gray	55 mm	8 × 8 mm	8UD1131-2AE21	■	■				
		100 mm	8 × 8 mm	8UD1141-2AE21			■			
		140 mm	10 × 10 mm	8UD1151-3AE21				■		
		200 mm	12 × 12 mm	8UD1161-4AE21					■	
Handles for door-coupling rotary operating mechanisms, 8UD1 series										
<ul style="list-style-type: none"> • Without extension shaft and coupling driver • With masking plate • Can be locked with up to max. 3 padlocks • Labeling I–O–II 										
	Color	Handle length	Shaft	Article No.						
	Gray	55 mm	8 × 8 mm	8UD1731-2AE01	■	■				
		100 mm	8 × 8 mm	8UD1841-2AE01			■			
		140 mm	10 × 10 mm	8UD1851-3AE01				■		
		200 mm	12 × 12 mm	8UD1861-4AE01					■	
	Red/yellow	55 mm	8 × 8 mm	8UD1731-2AE05	■	■				
		100 mm	8 × 8 mm	8UD1841-2AE05			■			
		140 mm	10 × 10 mm	8UD1851-3AE05				■		
		200 mm	12 × 12 mm	8UD1861-4AE05					■	

Accessories

For manual transfer switching equipment (MTSE)

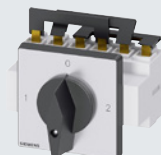
				Size 1	Size 2	Size 3	Size 4	Size 5
Extension shaft for door-coupling rotary operating mechanism, 8UD1 series								
	<ul style="list-style-type: none"> A shaft jack is required for the 8UD1 handle when the 600 mm long shaft is used and for sizes 1/2. 							
Length	Cross-section	Article No.						
300 mm	8 × 8 mm	8UC6032	■	■	■			
	10 × 10 mm	8UC6033				■		
	12 × 12 mm	8UC6034					■	
600 mm	8 × 8 mm	8UC6082	■	■	■			
	10 × 10 mm	8UC6083				■		
	12 × 12 mm	8UC6084					■	
Shaft jack for handle 8UD1 for shaft, 600 mm								
	Shaft	Article No.						
	8 × 8 mm	8UD1900-0FA00	■	■				
Coupling drivers								
	Variant	Shaft	Article No.					
	With tolerance compensation	8 × 8 mm	8UD1900-2GA00	■	■			
		8 × 8 mm	8UD1900-6GA00			■		
		10 × 10 mm	8UD1900-3GA00				■	
		12 × 12 mm	8UD1900-4GA00					■
	Without tolerance compensation	8 × 8 mm	8UD1900-2HA00	■	■			
		8 × 8 mm	8UD1900-6HA00			■		
		10 × 10 mm	8UD1900-3HA00				■	
		12 × 12 mm	8UD1900-4HA00					■
								
								
Adapter								
	<ul style="list-style-type: none"> Non-interchangeability features (rivet and lug) 							
	Shaft	Article No.						
	8 × 8 mm	8UC6022	■	■				
	8 × 8 mm	8UC6022			■			
	10 × 10 mm	8UC6023				■		
	12 × 12 mm	8UC6024					■	
Phase barriers								
	<ul style="list-style-type: none"> For manual transfer switching equipment (MTSE) with flat terminals One pack (6 or 8 units) is required for the infeed side and the load side 							
	Number of poles, switch	Scope of supply	Article No.					
	3-pole	6 units	3KD9308-6			■		
		6 units	3KD9408-6				■	
		6 units	3KD9508-6					■
	4-pole	8 units	3KD9308-8			■		
		8 units	3KD9408-8				■	
		8 units	3KD9508-8					■

				Size 1	Size 2	Size 3	Size 4	Size 5	
Terminal covers									
<ul style="list-style-type: none"> For manual transfer switching equipment (MTSE) with flat terminals One pack (6 or 8 units) is required for the infeed side and the load side Additional side plates for terminal covers are required for the terminal side, where bridging bars are used (normally the lead side) 									
	Length	Number of poles, switch	Scope of supply	Article No.					
	Standard length	3-pole	6 units	3KD9304-6			■		
				3KD9404-6				■	
				3KD9504-6					■
	4-pole	8 units	8 units	3KD9304-8			■		
				3KD9404-8				■	
				3KD9504-8					■
	Short version	3-pole	6 units	3KD9304-7			■		
				3KD9404-7				■	
				3KD9304-5				■	
	4-pole	8 units	8 units	3KD9304-5			■		
				3KD9404-5			■		
Terminal covers as spare parts									
	Length		Scope of supply	Article No.					
	Standard length		1 unit	3KD9504-1				■	
	Short version		1 unit	3KD9304-1			■		
				3KD9404-1				■	
Side plates									
	<ul style="list-style-type: none"> For lateral touch protection on the terminal side, where bridging bars are used (normally the load side) Suitable for terminal covers in standard length 								
	Length		Scope of supply	Article No.					
	Standard length		2 units	3KC9304-0			■		
				3KC9404-0				■	
		3KC9504-0						■	
Assembly kit for floor mounting									
	<ul style="list-style-type: none"> For floor mounting of sizes 1 and 2 Contains 4 mounting brackets and 2 mounting plates for 3-pole and 4-pole devices 								
				Article No.					
				3KC9120-1		■	■		
Mounting bracket as spare part									
	<ul style="list-style-type: none"> Spare part, included in the scope of supply of the assembly kit for 3-pole and 4-pole devices 								
	Scope of supply			Article No.					
	4 units			3KD9120-1		■	■		
Slide for mounting on DIN rail as spare part									
	<ul style="list-style-type: none"> Spare part included in the scope of supply for the 3KCO slide for DIN rail mounting 								
	Scope of supply			Article No.					
	5 units			3KF9112-0BA00		■	■		

3LD2 load transfer switches

Up to 250 A



	Front mounting
	Direct operating mechanism (knob-operated mechanism)
Actuator color	Black
Locking device	3LD23 and 3LD24 lockable with up to 3 padlocks with a hasp thickness of 4 to 6 mm (all other versions non-lockable)
Mounting	Four-hole mounting
Bridging bars	Pre-assembled





Rated uninterrupted current I_u (AC-21A, 380 ... 440 V)	Rated operational power (50/60 Hz, 380 ... 440 V)			
	at AC-23A	at AC-3	3P	3P+N
25 A	9.5 kW	7.5 kW	3LD2123-7UK01	–
32 A	11.5 kW	9.5 kW	3LD2223-7UK01	–
63 A	22.0 kW	18.5 kW	3LD2524-7UK01	–
100 A	37.0 kW	30.0 kW	3LD2724-7UK01	–
160 A	75 kW	50 kW	3LD2305-7UK01	3LD2305-7UL01
250 A	132 kW	110 kW	3LD2405-7UK01	3LD2405-7UL01

9

Accessories

	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD23 (160 A)	3LD24 (250 A)
4th contact (N conductor)						
						
<ul style="list-style-type: none"> Leading switch-on, lagging switch-off Bridging bars for the switchable N pole are not included in the scope of supply 						
Load transfer switch design	Article No.					
Front mounting	3LD9220-0B	3LD9250-0BA	3LD9280-0B	3LD9240-0B	3LD9220-0C	3LD9240-0C
Floor mounting	3LD9220-0C	3LD9250-0CA ¹⁾	3LD9280-0C ¹⁾			
Molded-plastic enclosures						
N or PE terminals						
						
<ul style="list-style-type: none"> Through-type 						
Load transfer switch design	Article No.					
Front mounting	3LD9220-2B	3LD9250-2BA	3LD9280-2B	3LD9240-2B	3LD9220-2C	3LD9240-2C
Floor mounting						

¹⁾ Can only be used as a spare part, as no additional poles can be installed in the enclosure.

Floor mounting Door-coupling rotary operating mechanism (knob-operated mechanism)		Molded-plastic enclosures Direct operating mechanism (knob-operated mechanism)
Black		Black
Lockable in OR position with up to 3 padlocks with a hasp thickness of 4 to 6 mm		3LD21 and 3LD22 lockable in OR position with up to 3 padlocks with a hasp thickness of 4 to 6 mm (all other versions non-lockable)
Four-hole mounting		Metric screw connection
Pre-assembled		Pre-assembled
		
3P	3P+N	3P + N and PE base terminal
-	-	3LD2165-7UB01
-	-	3LD2265-7UB01
-	-	3LD2566-7UB01
-	-	3LD2766-7UB01
3LD2318-7UK01	3LD2318-7UL01	-
3LD2418-7UK01	3LD2418-7UL01	-

	3LD21 (25 A)	3LD22 (32 A)	3LD25 (63 A)	3LD27 (100 A)	3LD23 (160 A)	3LD24 (250 A)
--	-----------------	-----------------	-----------------	------------------	------------------	------------------

Auxiliary switches

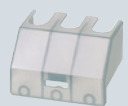


- For mounting on the left and/or right, lagging switch-on, leading switch-off
- For 3-pole load transfer switches only
- Indicate the switch position of the respective load transfer switch (I or II) to which the auxiliary switch module is connected

Load transfer switch design	Contacts	Type of contact	Article No.	3LD21	3LD22	3LD25	3LD27	3LD23	3LD24
Front mounting	1 NO +	Standard	3LD9200-5B	■	■	■	■	■	■
	1 NC	Gold-plated	3LD9200-5BF	■	■	■	■	■	■
Floor mounting and molded-plastic enclosure	1 NO +	Standard	3LD9200-5C	■	■	■	■	■	■
	1 NC	Gold-plated	3LD9200-5CF	■	■	■	■	■	■
	2 NO	Standard	3LD9200-6C	■	■	■	■	■	■

Terminal covers as additional touch protection

- For mounting on load side only



Number of poles	Scope of supply	Article No.	3LD21	3LD22	3LD25	3LD27	3LD23	3LD24
1-pole	4 units	3LD9221-2A	■	■				
		3LD9251-2A			■			
		3LD9281-2A				■		
		3LD9241-2A					■	■
3-pole	4 units	3LD9221-0A	■	■				
		3LD9251-0A			■			

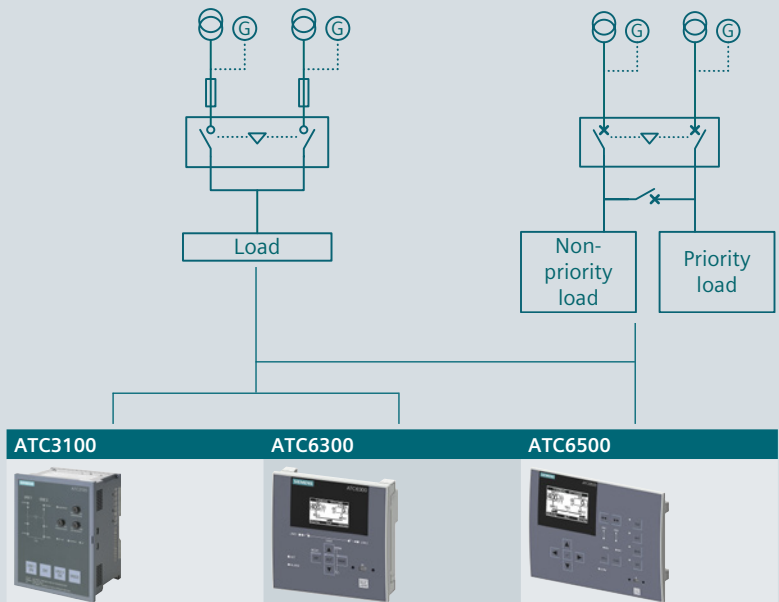
Shaft coupling



- No ON-lock

Load transfer switch design	Article No.	3LD21	3LD22	3LD25	3LD27	3LD23	3LD24
Floor mounting	3LD9242-4F					■	■

Transfer control devices



Version	Controllable switching devices	Interfaces	ATC3100	ATC6300	ATC6500
For fast parameterization without software	2	–	3KC9000-8EL10	–	–
For programming with user-friendly software, with programmable inputs and outputs	2	Optional communications interface and LCD display	–	3KC9000-8TL40	–
	3	Integrated RS485 interface and LCD display	–	–	3KC9000-8TL50

9

Further technical specifications

		ATC3100	ATC6300	ATC6500
Application				
Transfer between		Network/network, network/generator	Network/network, network/generator, generator/generator	Network/network, network/generator, generator/generator
Controllable switching devices		2	2	3
In-phase transition		–	–	Yes
Implementation of transfer with		3VA, 3VL, 3VT, 3WL, 3WT	3WL FSI-III, 3WT, 3KC3, 3KC4, 3VA, 3VL	3WL FSI-III, 3WL10, 3WT, 3VA
Measuring inputs				
Max. rated voltage U_n	Phase-phase	400 V AC	480 V AC	600 V AC
	Phase-neutral conductor	230 V AC	277 V AC	346 V AC
Measuring range	Phase-phase	–	50 ... 576 V AC	50 ... 720 V AC
	Phase-neutral conductor	161 ... 264 V AC	50 ... 333 V AC	30 ... 415 V AC
Frequency range		50/60 Hz	45 ... 65 Hz	45 ... 65 Hz
Relative error of measurement method		±5%	±0.25%	±0.25%
Communication				
Integrated RS485 interface (Modbus RTU)		–	–	Yes
Optional RS485 interface (Modbus RTU)		–	Yes	Ready-integrated
Optional Ethernet interface (Modbus TCP)		–	Yes	Yes
Power supply				
Auxiliary power supply	Rated voltage U_n AC	220 ... 240 V	100 ... 240 V	100 ... 240 V
	Rated voltage U_n DC	–	110 ... 250 V	110 ... 250 V
	Frequency range	50/60 Hz	45 ... 65 Hz	45 ... 65 Hz
Battery power supply	Rated voltage U_n DC	12/24 V	12/24 V	12/24/48 V
Digital inputs				
Number of inputs		5	6	8
Freely programmable		–	All	All
Relay outputs				
Number of outputs		9	7	7
Freely programmable		–	All	All
Contact configuration		6× 1 NO, 8 A, 250 V AC 3× 1 NO, 16 A, 250 V AC	6× 1 NO, 8 A, 250 V AC (AC-1) 1× 1 CO, 8 A, 250 V AC (AC-1)	2× 1 NO, 12 A, 250 V AC (AC-1) 2× 1 NO, 8 A, 250 V AC (AC-1) 3× 1 CO, 8 A, 250 V AC (AC-1)
Real time clock and event log				
ATC component		No	Yes	Yes
Operating time without voltage		–	300 s	14 days
Max. number of events that can be stored		–	100	250
Connections				
Terminal type		Removable/plug-in	Removable/plug-in	Removable/plug-in
Cable cross-section IEC		0.5 ... 2.5 mm ²	0.2 ... 2.5 mm ²	0.2 ... 2.5 mm ²
Enclosures				
Version		Door installation, standard rail mounting, floor mounting	Door installation	Door installation
Degree of protection		IP41 on the front, IP20 on the rear side	IP40 on the front, IP20 on the rear side	IP40 on the front, IP20 on the rear side

Accessories for transfer control devices

3KC ATC3100 transfer switching equipment

Connecting cable for 3KC ATC3100

- Measurement and control cable for connection of 3KC ATC3100 to 3VL or 3WL

Cable length	Article No.
1.8 m	3KC9000-8EL62

For 3KC ATC6300 and 3KC ATC6500 transfer switching equipment

Expansion modules with digital inputs and outputs



ATC6 expansion module	Features	Article No.
4DI	<ul style="list-style-type: none"> 4 digital inputs Including insulated 24 V DC/1 W power supply for digital inputs and sensors 	3KC9000-8TL60
4DO, SSR	<ul style="list-style-type: none"> 4 solid-state-compatible digital outputs 4 NO contacts at the solid-state-compatible output max. 55 mA at 30 V AC or 40 V DC 	3KC9000-8TL61
2DI/2DO, SSR	<ul style="list-style-type: none"> 2 digital inputs and 2 solid-state compatible digital outputs Including insulated 24 V DC/1 W power supply for digital inputs and sensors 2 NO contacts at the solid-state-compatible output max. 55 mA at 30 V AC or 40 V DC 	3KC9000-8TL62
2DO, relay	<ul style="list-style-type: none"> 2 relay outputs 2 CO contacts at relay output, 5 A, 250 V AC (AC-1) 	3KC9000-8TL63
2DI/2DO, relay	<ul style="list-style-type: none"> 2 digital inputs and 2 relay outputs 2 NO contacts at relay output, 5 A, 250 V AC (AC-1) 	3KC9000-8TL64

Expansion modules with communication interfaces

- Note: The 3KC ATC6500 transfer switching equipment comes with an integrated RS485 interface



ATC6 expansion module	Features	Article No.
RS485	<ul style="list-style-type: none"> RS485 interface 	3KC9000-8TL74
Ethernet	<ul style="list-style-type: none"> Ethernet interface 	3KC9000-8TL75

Front interface

- For parameterization on the front using software



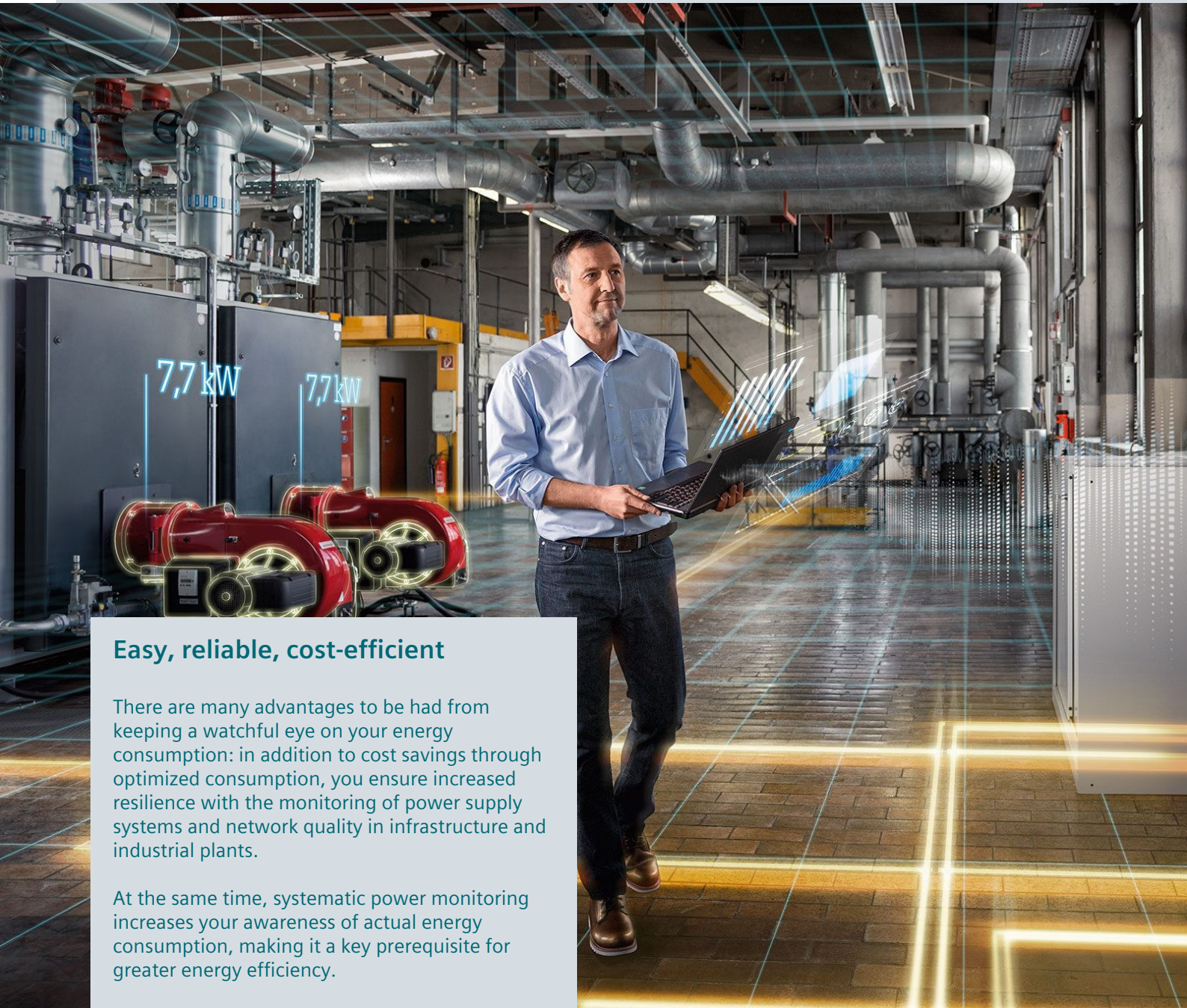
ATC6 front interface	Features	Article No.
USB	<ul style="list-style-type: none"> Mini-USB cable, 1.8 m 	3KC9000-8TL73

Protective seal

- For front IP65 protection



Suitable for	Version	Article No.
3KC ATC6300	144 × 144 mm	3KC9000-8TL67
3KC ATC6500	240 × 180 mm	3KC9000-8TL68



Easy, reliable, cost-efficient

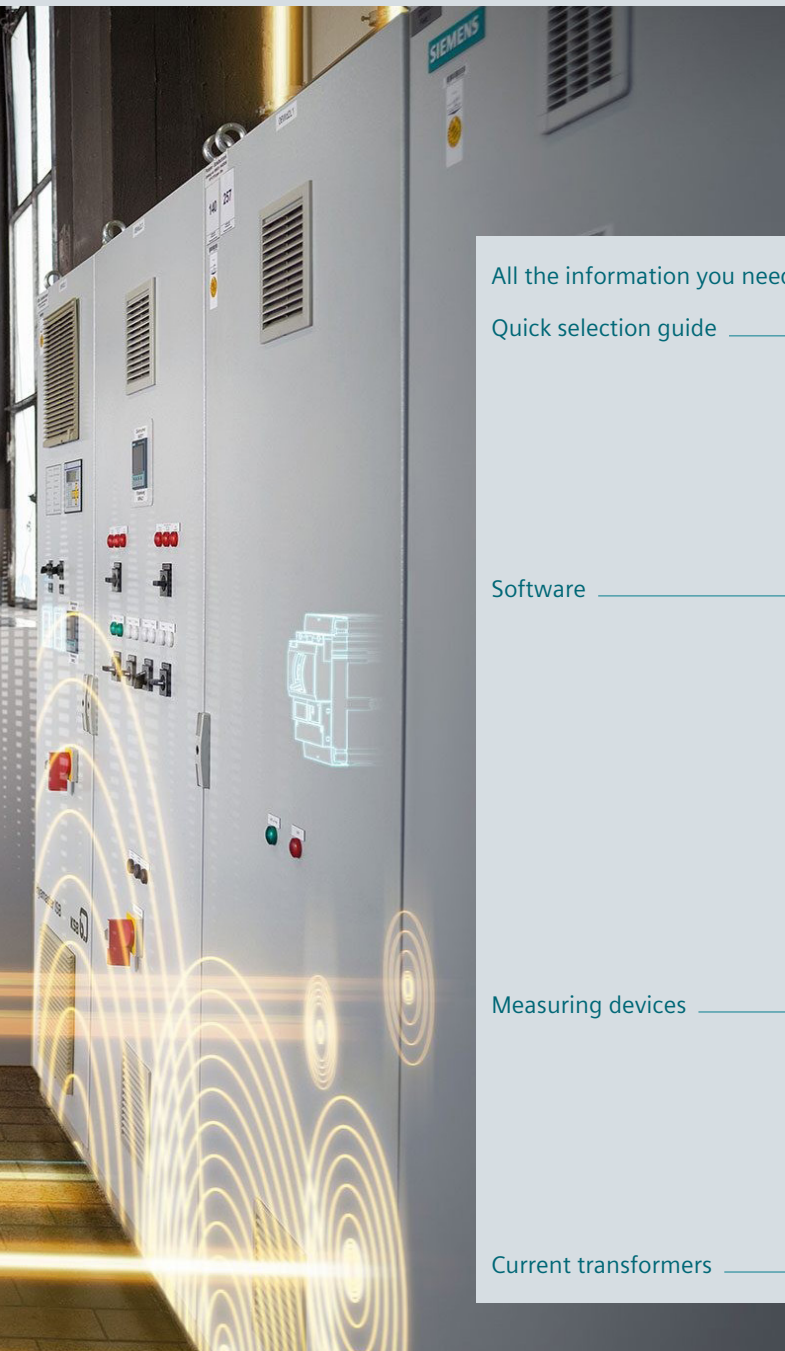
There are many advantages to be had from keeping a watchful eye on your energy consumption: in addition to cost savings through optimized consumption, you ensure increased resilience with the monitoring of power supply systems and network quality in infrastructure and industrial plants.

At the same time, systematic power monitoring increases your awareness of actual energy consumption, making it a key prerequisite for greater energy efficiency.

Integration into open IoT operating systems such as MindSphere results in even greater optimization potential.

What is more, with a power monitoring system you lay the foundation for regular energy audits and a corporate energy management system according to ISO 50001 and ISO 50003.

Measuring Devices, Power Monitoring and Digitalization Solutions



All the information you need	10/2
Quick selection guide	10/4
Power monitoring	10/4
Hardware components	10/6
Accessories	10/8
Software	10/10
Software	10/12
powerconfig	10/12
powermanager V3	10/13
powermanager V4 new	10/14
7KN Powercenter new	10/15
SIMATIC Energy Suite	10/16
SIMATIC Modbus/TCP SENTRON PAC	10/16
PAC/3WL/3VA SIMATIC PCS 7 library	10/17
Measuring devices	10/18
7KM PAC measuring devices	10/18
7KT PAC measuring devices	10/22
SEM3 multichannel current measuring system	10/24
Time and pulse counters	10/26
Current transformers	10/28

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information on measuring devices, power monitoring and digitalization solutions please visit our websites

www.siemens.com/powermonitoring

www.siemens.com/lowvoltage/digitalization

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technical basic information – SENTRON power monitoring and digital solutions ([109769851](#))
- Brochure – Reliable, sustainable, and efficient – TÜV-certified power monitoring system in accordance with ISO 50001 ([109744679](#))
- Brochure – SENTRON portfolio for power monitoring ([109744725](#))

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Siemens YouTube channel

Our video range

- Power monitoring (general) bit.ly/2IZ9QqC

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Measuring devices and power monitoring sie.ag/2kTH9Lz
- Digitalization solutions sie.ag/2olliNi
- Library for SIMATIC sie.ag/2kpbwcs
- powermanager / powerconfig sie.ag/2kTJjuF

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Configuration software

powerconfig

The combined commissioning and service tool for communication-capable measuring devices and circuit breakers from the SENTRON family.
www.siemens.com/powerconfig

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information
www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at
www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at
www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services. You can find your local contacts at
www.siemens.com/lowvoltage/contact

You can find further information on services at
www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at
www.siemens.com/lowvoltage/manuals

- Configuration manual Measuring devices and power monitoring (45315973)
- Equipment manual 7KT PAC1600 energy meter (109759827)
- Equipment manual 7KT PAC1600 multimeter (109760293)
- System manual 7KT multichannel current measuring system (109483442)
- Equipment manual PAC2200 measuring device (109746835)
- Equipment manual SENTRON PAC3200 power monitoring device (26504150)
- Equipment manual PAC3200T measuring device (109746833)
- System manual SENTRON PAC4200 power monitoring devices (34261595)
- Equipment manual PAC3100 measuring device (37881976)
- Equipment manual SENTRON PAC5100/5200 7KM5212/5412 (109477872)
- Equipment manual 7KM PAC3120 and 7KM PAC3220 (109767307)
- Communication manual SENTRON PAC5100/5200 7KM5212/5412 (109477870)
- System manual – 3VA communication IEC/UL (98746267)
- SEM3™ – Embedded Micro Metering Module™ (109748928)

Training and tutorials

Our training courses can be found at
www.siemens.com/sitrain-lowvoltage

- Power monitoring with SENTRON (WT-LVAEM)
- Energy management – Basic training (LV-EMSENTB)
- Energy management – Training for experts (LV-EMSENTE)
- Communication with SENTRON components (LV-COM)

Technical overview of measuring devices, power monitoring and digitalization solutions



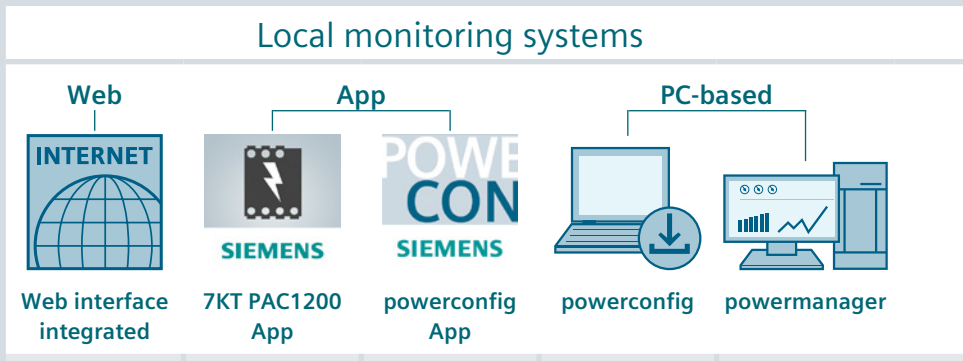
The fast way to get you to our online services

This page provides you with comprehensive information and links on measuring devices, power monitoring and digitalization solutions

www.siemens.com/lowvoltage/product-support (109764480)

Power monitoring

Software



Functions for power monitoring

Configuring / commissioning / parameterizing	-	-	■	■	-
Displaying current data	■	■	■	■	■
Displaying / evaluating current / historical values	■	■	■	■	■
Prepared reports	-	-	-	-	■
Customized reporting	-	-	-	-	■
Data analysis in the cloud	-	-	-	-	■

Additionally for energy management

Switching loads on and off	-	-	-	-	□
----------------------------	---	---	---	---	---

IoT data platform

7KN Powercenter 3000	■	-	-	■	■
----------------------	---	---	---	---	---

10

Measuring devices and circuit breakers

Measuring devices for industrial applications



- 7KM PAC2200
- 7KM PAC3200T
- 7KM PAC3100
- 7KM PAC3120
- 7KM PAC3200
- 7KM PAC3220
- 7KM PAC4200
- 7KM PAC5100
- 7KM PAC5200

7KM PAC2200	■	-	-	■	■
7KM PAC3200T	■	-	-	■	■
7KM PAC3100	-	-	-	■	■
7KM PAC3120	-	-	-	■	■
7KM PAC3200	-	-	■	■	■
7KM PAC3220	■	-	■	■	■
7KM PAC4200	■	-	■	■	■
7KM PAC5100	■	-	-	■	■
7KM PAC5200	■	-	-	■	■

Measuring devices for buildings and infrastructure



- 7KT PAC1200
- 7KT PAC1600
- SEM3

7KT PAC1200	■	■	-	■	■
7KT PAC1600	-	-	-	■	■
SEM3	■	-	-	■	■

Circuit breakers



- 3WL
- 3WL10 / 3VA2
- 3VA ETU8

3WL	-	-	■	■	■
3WL10 / 3VA2	-	-	-	■	■
3VA ETU8	-	-	■	■	■

■ Function available □ Available with limited functionality - Function not available

7KN Powercenter 3000	Cloud MindSphere (Powercenter)	World of SIMATIC	
		TIA Portal	
		SIMATIC TIA Portal integrated	SIMATIC TIA Portal capable
-	-	■	-
■	■	■	■
■	■	□	□
-	■	□	-
-	-	-	-
-	-	-	-
-	-	■	■
■	■	-	-
■	-	-	-
■	-	-	-
■	-	-	-
■	-	■	■
■	-	■	■
■	-	■	■
-	-	-	-
-	-	-	-
■	-	-	-
-	-	-	-
■	-	■	-
-	-	-	■
■	-	■	■

Hardware components

Industry

7KM
PAC22007KM
PAC3200T7KM
PAC31007KM PAC3120
new7KM
PAC32007KM PAC3220
new

	7KM PAC2200	7KM PAC3200T	7KM PAC3100	7KM PAC3120 new	7KM PAC3200	7KM PAC3220 new
Installation type						
Front mounting Standard mounting rail Screw mounting	- ■ -	- ■ -	■ - -	■ - -	■ - -	■ - -
Withdrawable Fixed-mounted	- -	- -	- -	- -	- -	- -
Measuring connection						
Direct measurement	■	-	-	-	-	-
Transformer measurement	■	■	■	■	■	■
Multichannel measuring system	-	-	-	-	-	-
Suitable transformers						
Window-type current transformers	■	■	■	■	■	■
Folding transformer	■	■	■	■	■	■
Integrated transformer	-	-	-	-	-	-
Commissioning						
MID version	■	-	-	-	-	-
Max. input voltage L-L/L-N	480 V/277 V	480 V/277 V	480 V/276 V	690 V/400 V	690 V/400 V ¹⁾	690 V/400 V
Transformer connection version	x/1 A or x/5 A	x/1 A or x/5 A	x/5 A	x/1 A or x/5 A	x/1 A or x/5 A	x/1 A or x/5 A
Direct connection version	65 A	-	-	-	-	-
DC power supply unit with extra-low voltage version	-	-	-	22 ... 65 V DC	22 ... 65 V DC	22 ... 65 V DC
Single-phase counter version	■	-	-	-	-	-
Electrically isolated voltage inputs	-	-	-	-	-	-
Version without display (for web interface)	-	■	-	-	-	-
Evaluation						
Measured quantities						
Average value of measured values	■	■	-	■	-	■
Voltage, current, frequency	■	■	■	■	■	■
Power, power factor	■	■	■	■	■	■
Energy measurement						
Daily energy storage	60 days	60 days	-	60 days	-	60 days
Apparent Active Reactive energy cos φ	■ ■ ■ -	■ ■ ■ -	- ■ ■ -	■ ■ ■ -	■ ■ ■ -	■ ■ ■ -
Distortion factor THD (voltage, current)	-	■	-	■	■ (THD indication)	■
Harmonics (voltage, current)	-	-	-	-	-	-
Phase angle/phase chart	-	-	-	-	-	-
Load profile recording	-	-	-	-	-	-
Flicker acc. to IEC 61000-4-15	-	-	-	-	-	-
Monitoring functions						
Operating hours counter	■	■	-	■	■	■
Limit monitoring	-	■	-	■	■	■
Logic functions	-	■	-	■	■	■
Event log	-	-	-	-	-	-
Gateway function	-	-	-	-	-	-
Reporting acc. to EN 50160	-	-	-	-	-	-
Integrated fault recorder	-	-	-	-	-	-
Integrated communication interfaces						
Digital inputs/digital outputs	1/1	1/1	2/2	2/2	1/1	2/2
S0-Interface	■	■	■	■	■	■
M-Bus	■	-	-	-	-	-
RS485 (Modbus RTU)	■	-	■	■	-	-
Ethernet with Modbus TCP	■	■	-	-	■	■
BACnet	-	-	-	-	-	-
More information						
Catalog LV 10	See page 10/18	See page 10/18	See page 10/18	See page 10/18	See page 10/18	See page 10/18

¹⁾ For devices with AC/DC wide-voltage power supply unit

Industry

Buildings and infrastructure

Circuit breakers



**7KM
PAC4200**

**7KM
PAC5100**

**7KM
PAC5200**

**7KT
PAC1200**

**7KT
PAC1600**

SEM3

3WL

**3WL10 /
3VA27**

3VA ETU8

■ - -	■ ■ -	■ ■ -	- ■ -	- ■ -	- - ■	- - -	- - -	- - -
- -	- -	- -	- -	- -	- -	■ ■	■ ■	- ■
-	-	-	■	■	-	-	-	-
■	■	■	■	■	-	-	-	-
-	-	-	■	-	■	■	■	■
-	-	-	-	■	-	-	-	-
690 V/400 V ¹⁾ x/1 A or x/5 A	690 V/400 V x/1 A or x/5 A	690 V/400 V x/1 A or x/5 A	400 V/230 V x/5 A	400 V/230 V x/5 A	480 V/277 V 50...1200 A/0.1 A	690 V/400 V integrated	690 V/400 V integrated	690 V/400 V integrated
-	-	-	40/63 A	63/80 A	-	-	-	-
22 ... 65 V DC	-	-	-	-	-	24 V DC	24 V DC	24 V DC
-	-	-	■	■	■	-	-	-
-	■	■	-	-	-	-	-	-
-	■	■	■	■	■	-	-	-
■	-	-	-	-	-	■	-	-
■	■	■	■	■	■	■	■	■
■	■	■	■	■	■	■	■	■
-	-	-	-	-	-	-	-	-
■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	- ■ ■ -	■ ■ ■ -	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■	■ ■ ■ ■
■	■	■	-	-	-	■	-	-
2nd to 64th	2nd to 40th	2nd to 40th	-	-	-	2nd to 29th	-	-
■	■	■	-	-	-	■	■	■
■	-	■	-	-	-	■	■	■
-	-	■	-	-	-	-	-	-
■	-	-	-	■	-	■	-	■
■	■	■	-	■	-	■	■	■
■	■	■	-	-	■	-	-	-
> 4000 events	■	■	-	-	-	■	■	■
■	-	-	-	-	-	-	-	-
■	-	-	-	-	-	-	-	-
2/2	0/2	0/2	-	1/1	2/1	■	■	■
■	-	-	-	■	-	-	■	■
-	-	-	-	■	-	-	-	-
-	-	-	-	■	-	■	■	■
■	■	■	■	-	■	■	■	■
-	-	-	-	-	■	-	-	-

See page 10/18

See page 10/18

See page 10/18

See page 10/22

See page 10/22

See page 10/24

See page 1/4

See page 1/4
See page 2/12

See page 2/12

Accessories

Communication modules



7KM Switched Ethernet
PROFINET / Modbus TCP

7KM PROFIBUS DP

7KM RS485
Modbus RTU

Industry

	7KM PAC2200	-	-	-
	7KM PAC3200T	-	-	-
	7KM PAC3100	-	-	-
	7KM PAC3120 new	-	-	-
	7KM PAC3200	■	■	■
	7KM PAC3220 new	■	■	■
	7KM PAC4200	■	■	■
	7KM PAC5100	-	-	-
	7KM PAC5200	-	-	-

Buildings and infrastructure

	7KT PAC1200	-	-	-
	7KT PAC1600	-	-	-
	SEM3	-	-	-

Circuit breakers

	3WL	-	-	-
	3WL10 / 3VA27	-	-	-
	3VA ETU8	■	■	■

Expansion modules



Current transformers



7KM PAC
4DI/2DO

7KM PAC
I(N), I(Diff), analog

4NC
Current transformers

7KT
Current transformers

7KM PAC 4DI/2DO	7KM PAC I(N), I(Diff), analog	4NC Current transformers	7KT Current transformers
-	-	■	■
-	-	■	■
-	-	■	■
-	-	■	■
-	■	■	■
■	■	■	■
■	■	■	■
-	-	■	■
-	-	■	■
-	-	■	■
-	-	■	■
-	-	■	■
-	-	■	■
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

Software

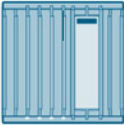

Local monitoring systems



Operating environment

	Web interface integrated	7KT PAC1200 App	powerconfig App	powerconfig	powermanager
Free use	■	■	■	■	Trial license for up to 10 devices, max. 60 days
System requirements	Browser	Android, iOS	Android	win x64	win x64
Download	– (pre-installed)	play.google.com itunes.apple.com	play.google.com	http://support.automation.siemens.com/WW/view/en/63452759	Trial license: http://support.automation.siemens.com/WW/view/en/64850998
Suitable according to ISO 50001	–	–	–	–	■ (TÜV)
Connection of non-Siemens devices	–	–	–	–	■
Local operation without cloud	■	■	■	■	■
Can be connected to the cloud	–	–	–	–	■

■ Function available □ Available with limited functionality – Function not available

	Cloud
 <p>7KN Powercenter 3000</p>	 <p>MindSphere (Powercenter)</p>
-	Subscription
-	Browser
-	-
■	■
■	■
■	-
■	■

powerconfig

PC-based software for commissioning and maintenance

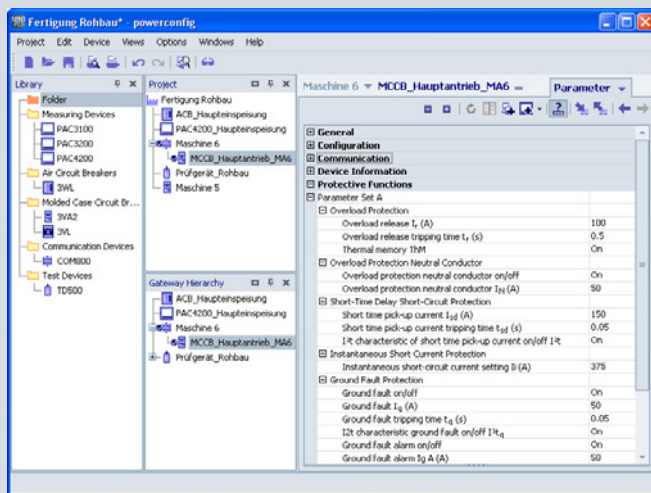
powerconfig is available free of charge at

www.siemens.com/powerconfig

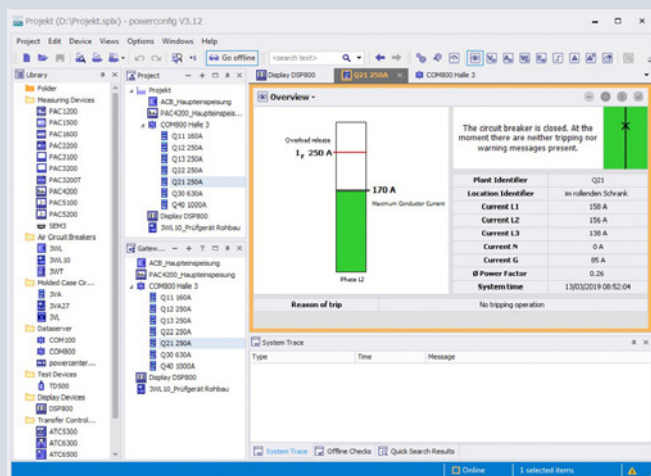
You can find more information on the Internet at

www.siemens.com/sentron

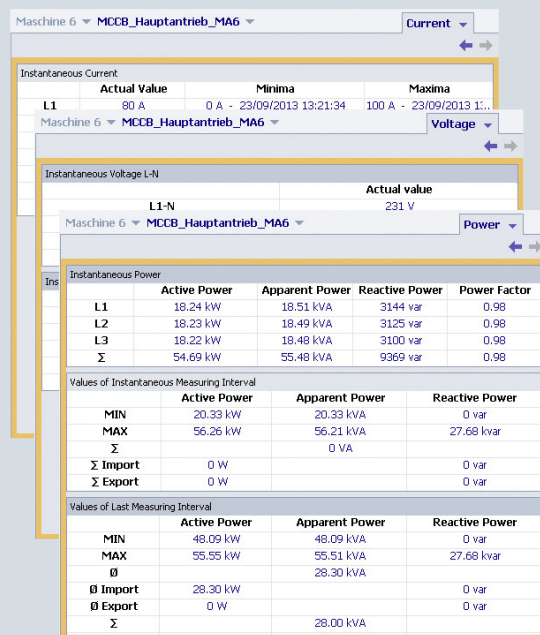
- PC-based software tool for the efficient commissioning and diagnostics of communication-capable SENTRON components
- Supports all PAC measuring devices incl. expansion modules, 3WL/3VA circuit breakers and further communication-capable components, e.g. ATC6300
- Service functions:
 - Firmware updates
 - Switching of language packs for 7KM PAC measuring devices
- General range of functions:
 - Facilitates the parameterization of the devices
 - Saving and printing of device settings
 - Monitoring, saving and printing of instantaneous measured quantities
 - Execution of specific device functions, such as resetting of devices and setting of energy counters
- Additional functional scope with 7KM PAC4200 and 3VA:
 - Readout of data stored in the device (events, load profile history, daily energy counters)
 - Saving in csv format



Setting of parameter values



Display of the circuit breaker state



Display of actual measured quantities

powermanager V3

PC-based power monitoring software

New in powermanager 3.5

- Optimized devices – support for:
 - PAC1600
 - PAC4200 with firmware V2.1
 - SEM3 – support Modbus RTU
- Extension of the scope of service:
 - Integrated MindSphere interface – tuned to SENTRON MindApps
 - OPC UA Server support (fee-based option)

Version	Description	Article No.
powermanager V3.5		
Basic Package	Full product license for up to 10 devices, installation for client/server, web access	3ZS2711-0CC30-0YA0
Trial license	Full product license limited to 60 days for up to 10 devices, incl. "Expert" and "Web" option packs Available free of charge at https://support.industry.siemens.com/cs/ww/en/view/64850998	
V3.x device expansions		
Device Pack (20)	Device expansion license for up to 20 devices	3ZS2711-0CC30-0YD0
Device Pack (50)	Device expansion license for up to 50 devices	3ZS2712-0CC30-0YD0
Device Pack (100)	Device expansion license for up to 100 devices	3ZS2713-0CC30-0YD0
Device Pack (200)	Device expansion license for up to 200 devices	3ZS2714-0CC30-0YD0
Device Pack (500)	Device expansion license for up to 500 devices	3ZS2715-0CC30-0YD0
Device Pack (1000)	Device expansion license for up to 1000 devices	3ZS2716-0CC30-0YD0
Option packs		
"Expert" option pack	Option for creating/presenting any number of freely configured images	3ZS2710-2CC20-0YH0
"Client (5)" option pack	Expansion for up to 5 clients	3ZS2710-3CC00-0YD0
"Distributed Systems (2)" option pack	Option for the connection of 2 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-1CC00-0YH0
"Distributed Systems (5)" option pack	Option for the connection of 5 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-2CC00-0YH0
"Distributed Systems (10)" option pack	Option for the connection of 10 autonomous powermanager systems for the exchange of measured values and alarms	3ZS2718-3CC00-0YH0
Update powermanager V2.0 to V3.0		
Update license	From V2.0 Lean to V3.x (10)	3ZS2711-0CC30-0YE0
Update license	From V2.0 Standard to V3.x (50)	3ZS2712-0CC30-0YE0
Update license	From V2.0 Maximum to V3.x (100)	3ZS2713-0CC30-0YE0
Update license	From V2.0 Maximum to V3.x (200)	3ZS2714-0CC30-0YE0
System packages		
System 1	Package comprising 1× powermanager Basic Package 1× PAC4200 (+ RS485 module) and 1× PAC3100	3ZS2812-5CC20-0AY0
System 3	Package comprising 1× powermanager Basic Package 3× PAC 3200	3ZS2813-2CC20-0YA0
System 4	Package comprising 1× powermanager Basic Package 1× PAC4200 4× PAC1600 1× RS485 module	3ZS2812-7CC20-0YA0
System 5	Package comprising 1× powermanager Basic Package 5× PAC2200 Modbus TCP	3ZS2812-8CC20-0YA0

powermanager V4 **new**

PC-based power monitoring software

SENTRON powermanager V4.1

SENTRON powermanager V4.1 is based on a new platform with advanced graphical capabilities and a standard SQL database. The workflows for setting up the system, creating devices, graphically displaying the device data and processing it in reports have been fundamentally revised. The same devices as in V3.5 are supported, with the exception of the obsolete PAC1500 and SICAM P850/855.

The migration of existing powermanager V3.x projects will be supported as of a future powermanager version.

You can find more information on the Internet at www.siemens.com/powermanager

You can find training courses on the Internet at www.siemens.com/sittrain-lowvoltage

Version	Description	Article No.
powermanager V4.1		
Extended Package	Full product license for up to 10 devices, installation for client/server, web access	7KN2710-2CE40-0YCO
Trial license	powermanager V4.1 Full product license limited to 60 days for up to 10 devices, incl. "Graphics Editor" option pack Available free of charge at https://support.industry.siemens.com	
Device expansions		
Device Pack (20)	Device expansion license for up to 20 devices	7KN2711-1CE40-0YCO
Device Pack (50)	Device expansion license for up to 50 devices	7KN2711-2CE40-0YCO
Device Pack (100)	Device expansion license for up to 100 devices	7KN2711-3CE40-0YCO
Device Pack (200)	Device expansion license for up to 200 devices	7KN2711-4CE40-0YCO
Device Pack (500)	Device expansion license for up to 500 devices	7KN2711-5CE40-0YCO
Device Pack (1000)	Device expansion license for up to 1000 devices	7KN2711-6CE40-0YCO
Option packs		
"Graphics Editor" option pack	Option for creating/presenting any number of freely configured images	7KN2712-0CE40-0YCO
"Client (2)" option pack	Expansion for up to 2 clients	7KN2712-1CE40-0YCO
"Client (5)" option pack	Expansion for up to 5 clients	7KN2712-2CE40-0YCO
"OPC UA/DA Server" option pack	Option for using OPC UA/DA Server	7KN2712-3CE40-0YCO
"powermanager Server" option pack	Additionally, powermanager server license for distributed systems without devices, web, etc.	7KN2712-4CE40-0YCO
Upgrade powermanager V3.x to V4.x		
Upgrade license	From powermanager V3.x to V4.x	7KN2713-2CE40-0YCO
System packages		
System 1	Package comprising 1× powermanager Extended 1× PAC4200 1× PAC3120 1× RS485 modules	7KN2715-1CE40-0YCO
System 3	Package comprising 1× powermanager Extended 3× PAC3220	7KN2715-3CE40-0YCO
System 4	Package comprising 1× powermanager Extended 1× PAC4200 4× PAC1600 1× RS485 module	7KN2715-4CE40-0YCO
System 5	Package comprising 1× powermanager Extended 5× PAC2200 Modbus TCP	7KN2715-5CE40-0YCO

7KN Powercenter **new**

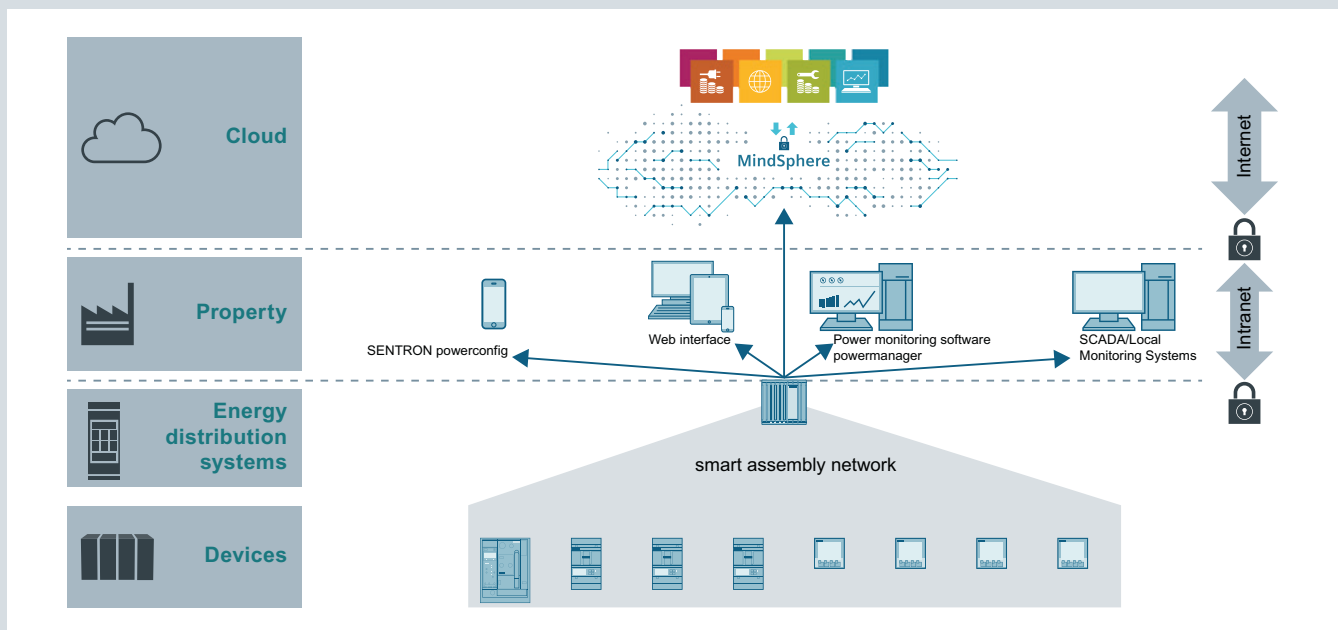
Edge/IoT-based data acquisition and visualization for low-voltage power distribution

7KN Powercenter 3000

- Offers a range of interfaces for the digitalization of low-voltage power distribution
 - One web interface for a clear overview of all connected devices
 - Low-voltage power distribution data interface to MindSphere, the IoT operating system from Siemens
 - Communication interface via Modbus TCP for diverse applications, e.g. powermanager
- Provision of the 15 min energy values for the connected devices as a basis for energy management according to ISO 50001
- Flexible IT security features for protection against unauthorized access
- Easy commissioning using powerconfig
- Compact design, 24 V DC supply

You can find more information on the Internet at www.siemens.com/powermonitoring

Mounting	Interfaces	Protocols	Article No.
Standard rail mounting	2× Ethernet	Modbus TCP, http, MindSphere	7KN1310-0MC00-0AA8



Application areas 7KN Powercenter 3000

SIMATIC Energy Suite

for integrated energy management

Highlights

- Simple and intuitive configuration instead of programming
- Automatic generation of the PLC energy program
- Convenient integration of measuring components from the Siemens portfolio and from other manufacturers
- Integrated into the TIA Portal and the automation system
- Archiving in WinCC Professional or PLC
- Seamless interfacing to Energy Manager PRO and Energy
- Analytics

Additional information on the SIMATIC Energy Suite:

www.siemens.com/energysuite

SIMATIC Modbus/TCP SENTRON PAC

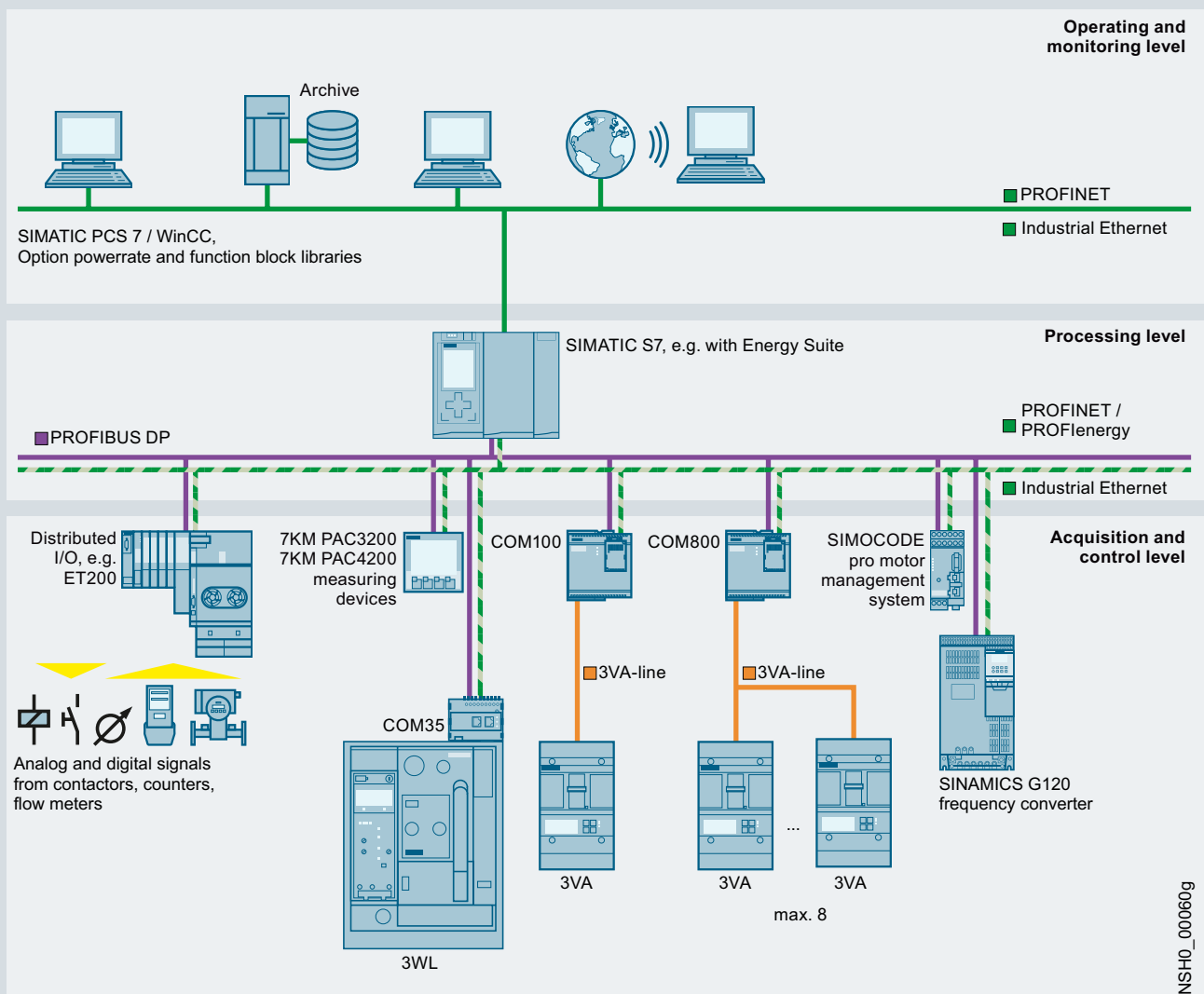
for 7KM PAC3200/4200 measuring devices

Use and version	Valid for	Type	Article No.
Communication via the integrated PN interface for reading values out of PAC 3200 and PAC PAC 4200 devices, single license	1 CPU and up to 20 SENTRON PACs	Modbus/TCP 20 SENTRON PAC	6AV6676-6MA30-0AX0
	1 CPU and up to 100 SENTRON PACs	Modbus/TCP 100 SENTRON PAC	6AV6676-6MA30-1AX0
	1 CPU and up to 512 SENTRON PACs	Modbus/TCP 512 SENTRON PAC	6AV6676-6MA30-2AX0

PAC/3WL/3VA SIMATIC PCS 7 library

for 7KM PAC3200/4200 measuring devices and 3WL/3VA/3VL circuit breakers

Application	Version	Type of delivery	Article No.
PAC/3WL/3VA SIMATIC PCS 7 library			
<ul style="list-style-type: none"> AS blocks and faceplates for integrating the 3WL/3VA/3VL circuit breakers into SIMATIC PCS 7, V8.x or V9.0 SP1 For each SIMATIC PCS 7 Operator Station of the single station/server version, a license containing the following is required: <ul style="list-style-type: none"> Engineering license for one SIMATIC PCS 7 Operator Station of the single station/server version Runtime license for one automation system (1 required per automation system, further AS runtime licenses can be ordered separately) 	Engineering and runtime software, software class A, 2-language (English, German), single license for one installation	Software and electronic documentation on DVD, engineering and runtime license as Certificate of License	3ZS2787-1CC30-0YG0
AS runtime license for PAC/3WL/3VA library for SIMATIC PCS 7			
License for one automation system in each case	Runtime software, software class A, 2-language (English, German), single license for one installation	Runtime license as Certificate of License without software and documentation	3ZS2787-1CC30-6YH0



NSHO_00060g

7KM PAC measuring devices

Basic units



Connections	Power supply	Display	Interface	MID	7KM PAC2200	7KM PAC3200T	7KM PAC3100	7KM PAC3120 new	
Transformer measurement									
Screw terminals	Self-powered	With	M-Bus	With	7KM2200-2EA30-1GA1	–	–	–	
				Without	7KM2200-2EA30-1CA1	–	–	–	
			Modbus RTU	With	7KM2200-2EA30-1HA1	–	–	–	
				Without	7KM2200-2EA30-1DA1	–	–	–	
			Modbus TCP	With	7KM2200-2EA30-1JA1	–	–	–	
				Without	7KM2200-2EA30-1EA1	–	–	–	
	AC/DC wide-voltage power supply unit	With	Modbus RTU	Without	–	–	7KM3133-0BA00-3AA0	7KM3120-0BA01-1DA0	
				Modbus TCP	Without	–	–	–	–
			Without	Modbus TCP	Without	–	7KM3200-0CA01-1AA0	–	–
		DC power supply unit with extra-low voltage	With	Modbus TCP	Without	–	–	–	–
				Modbus RTU	Without	–	–	–	7KM3120-1BA01-1EA0
			Without	Modbus TCP	Without	–	–	–	–
Ring cable lug connection	AC/DC wide-voltage power supply unit	With	Modbus TCP	Without	–	–	–	–	
Direct measurement									
Screw terminals	Self-powered	With	M-Bus	With	7KM2200-2EA40-1GA1	–	–	–	
				Without	7KM2200-2EA40-1CA1	–	–	–	
			Modbus RTU	With	7KM2200-2EA40-1HA1	–	–	–	
				Without	7KM2200-2EA40-1DA1	–	–	–	
			Modbus TCP	With	7KM2200-2EA40-1JA1	–	–	–	
				Without	7KM2200-2EA40-1EA1	–	–	–	

Further technical specifications

Further technical specifications		7KM2200-..	7KM3200-..	7KM3133-..	7KM3120-0..	7KM3120-1..
Basic data						
Installation		Standard mounting rail	Standard mounting rail	Front mounting	Front mounting	
Mounting width		6 MW	6 MW	–	–	
Control panel instrument		–	–	96 × 96 mm	96 × 96 mm	
External auxiliary voltage	50/60 Hz AC	–	90 ... 276 V	100 ... 240 V ±10%	100 ... 250 V ±10%	–
	DC	–	110 ... 275 V	110 ... 250 V ±10%	100 ... 250 V ±10%	24 ... 60 V ±20%
Measuring inputs						
Transformer connection	Secondary input current I_e	x/1 A or x/5 A	x/1 A or x/5 A	x/5 A	x/1 A or x/5 A	
Direct connection	Input voltage U_e 3 AC 50/60 Hz	480/277 V	480/277 V	480/277 V	690/400 V	690/400 V
	Rated current I_n	65 A	–	–	–	–



7KM PAC3200

7KM PAC3220 **new**

7KM PAC4200

7KM PAC5100

7KM PAC5200

-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
7KM2112-0BA00-3AA0	7KM3220-0BA01-1DA0	7KM4212-0BA00-3AA0	7KM5212-6BA00-1EA2	7KM5412-6BA00-1EA2
-	-	-	7KM5212-6CA00-1EA8	7KM5412-6CA00-1EA8
7KM2111-1BA00-3AA0	7KM3220-1BA01-1EA0	7KM4211-1BA00-3AA0	-	-
7KM2112-0BA00-2AA0	-	7KM4212-0BA00-2AA0	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-

10

7KM2112-..	7KM2111-..	7KM3220-0..	7KM3220-1..	7KM4212-..	7KM4211-..	7KM5212-	7KM5412
Front mounting		Front mounting		Front mounting		Front mounting/ standard mounting rail	Front mounting/ standard mounting rail
-		-		-		-	-
96 × 96 mm		96 × 96 mm		96 × 96 mm		96 × 96 mm	96 × 96 mm
95 ... 240 V ±10%	-	100 ... 250 V ±10%	-	95 ... 240 V ±10%	-	110 ... 230 V ±10%	110 ... 230 V ±10%
110 ... 340 V ±10%	22 ... 65 V ±10%	100 ... 250 V ±10%	24 ... 60 V ±20%	110 ... 340 V ±10%	22 ... 65 V ±10%	24 ... 250 V ±10%	24 ... 250 V ±10%
x/1 A or x/5 A		x/1 A or x/5 A		x/1 A or x/5 A		x/1 A or x/5 A	x/1 A or x/5 A
690/400 V	400/230 V	690/400 V	690/400 V	690/400 V	500/289 V	690/400 V	690/400 V
-		-		-		-	-

7KM PAC measuring devices

Accessories

7KM PAC3100
7KM PAC3120
7KM PAC3200
7KM PAC3220
7KM PAC4200

7KM PAC TMP2 standard mounting rail adapter



- Two-tier adapter for mounting a measuring device on a standard mounting rail
- Front display
- For manual intervention

7KM9900-0XA00-0AA0

7KM PAC TMP mounting plate



- Adapter for mounting a measuring device on standard mounting rail
- Display faces backwards towards standard mounting rail
- Readout and evaluation of measurements solely via mains operation

7KM9900-0YA00-0AA0

Compact holder



- Device holder for 7KM PAC3100 /3120/3200/3220/4200
- 10 holders for 5 PAC devices
- For seamless side-by-side mounting of the devices (without spaces)

7KM9900-0GA00-0AA0






Spare parts 7KM PAC



- Spare parts comprising:
 - Device holders for panel mounting (2X)
 - Screw terminal for connection of voltage inputs
 - Screw terminal for connection of current inputs
 - Terminal block inputs/outputs for 7KM PAC3100/4200
 - Terminal block inputs/outputs for 7KM PAC3200
 - RS485 terminal blocks for 7KM PAC3100

7KM9900-0SA00-0AA0

Expansion and communication modules

	7KM PAC3200	7KM PAC3220 7KM PAC4200	COM100/800 (3VA)
7KM Switched Ethernet PROFINET communication module			
 <ul style="list-style-type: none"> • Latest PROFINET switching properties • S2 system redundancy for operation in H systems • CIR Configuration in Run • Firmware update via the modules for PAC4200 and PAC3220 			
		7KM9300-0AE02-0AA0	
7KM PROFIBUS DP communication module			
			
		7KM9300-0AB01-0AA0	
7KM RS485 communication module			
			
		7KM9300-0AM00-0AA0 ¹⁾	
7KM PAC 4DI/2DO expansion module			
			
		7KM9200-0AB00-0AA0	
7KM PAC I(N), I(Diff), analog expansion module			
 <ul style="list-style-type: none"> • To add the following functions to the measuring inputs: <ul style="list-style-type: none"> – N conductor measurement – Two analog inputs, also for measuring non-electrical quantities such as temperature, water or air pressure – Residual current measurement via type A or type B summation current transformers 			
	7KM9200-0AD00-0AA0	7KM9200-0AD00-0AA0	

¹⁾ Suitable for 7KM PAC4200 (especially for the Modbus TCP/RTU Gateway)

Residual-current transformers for 7KM PAC I(N), I(Diff), analog expansion module, [see page 11/1](#)

7KT PAC measuring devices

Basic unit PAC1600



Connections	Version	Power supply	Display	Interface	MID	7KT PAC1600			
Transformer measurement									
Screw terminals	3-phase	Self-powered	With	Modbus RTU	Without	7KT1661			
					With	7KT1662			
				M-Bus	Without	7KT1663			
					With	7KT1664			
				SO-Interface	Without	7KT1672			
					With	7KT1673			
	3-phase, universal	Auxiliary power: 100 ... 240 V AC, 110 ... 250 V DC 50/60Hz	With	–	Without	7KT1681			
				Modbus RTU	Without	7KT1682			
	Direct measurement								
	Screw terminals	1-phase	Self-powered	With	Modbus RTU	Without	7KT1651		
With						7KT1652			
M-Bus					Without	7KT1653			
					With	7KT1654			
SO-Interface					Without	7KT1655			
					With	7KT1656			
3-phase					Self-powered	With	Modbus RTU	Without	7KT1665
								With	7KT1666
		M-Bus	Without	7KT1667					
			With	7KT1668					
		SO-Interface	Without	7KT1670					
			With	7KT1671					

PAC1200 multichannel current measuring system

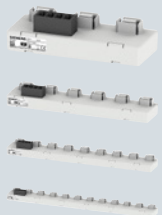


Connections	Version	Power supply	Display	Interface	MID	7KT PAC1200
Direct measurement						
Screw terminals	3-phase	Self-powered	Without	Modbus TCP	Without	7KT1260

PAC1200

7KT PAC1200

Data manager with 7KT1260, sensor bars



Number of connections

3

6

9

12

Article No.

7KT1233

7KT1236

7KT1238

7KT1242

Data manager with 7KT1260, sensors



Current I_e

40 A

63 A

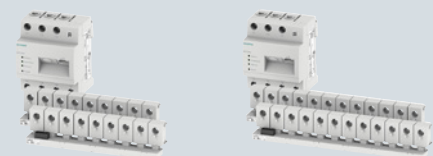
Article No.

7KT1254

7KT1255

10

PAC1200 Bundles



Data manager	Sensor bars	Sensors	18 bundle	24 bundle
1× data manager 7KT1260	2× 9-sensor bar 7KT1238	18× sensors 40 A 7KT1254	7KT1222	–
1× data manager 7KT1260	2× 12-sensor bar 7KT1242	24× sensors 40 A 7KT1254	–	7KT1223

SEM3 multichannel current measuring system

Data manager



Connections	Version	Power supply	Display	Interface	MID	
Transformer measurement						
Screw terminals	3-phase	Self-powered	Without	Modbus TCP RS485 Modbus RTU	Without	US2:SEM3CONTROLLER

Further technical specifications

SEM3

Basic data	
Installation	Screw mounting
Measuring inputs	
Max. input voltage 50/60 Hz AC	480 V / 277 V
Standard current transformers	50 ... 1200 A / 0.1 A
Folding transformer	50 ... 2000 A / 0.1 A

Accessories

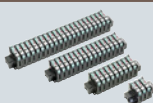
Metering modules



- For recording measured values
- Accuracy of 0.2% or 1% for the entire measurement including current transformer
- Simple setting of phase configuration by means of slide switch
- Connection of a current transformer for measuring a phase
- Metering module is plugged into meter rack

Measuring accuracy	Article No.
0.2%	US2:SEM3PHAMETER
1%	US2:SEM3PLAMETER

Meter racks



Version	Article No.
For 3 metering modules	US2:SEM3RACK3
For 9 metering modules	US2:SEM3RACK9
For 15 metering modules	US2:SEM3RACK15
For 21 metering modules	US2:SEM3RACK21

Connecting cables



Length	Article No.
0.3 m	US2:SEM3CAB12INCH
0.6 m	US2:SEM3CAB24INCH
0.9 m	US2:SEM3CAB36INCH

Standard current transformers



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

Output signal	Transformer transmission ratio	Article No.
100 mA	50 : 0.1	US2:SEM3SCCT50
	125 : 0.1	US2:SEM3SCCT125
	250 : 0.1	US2:SEM3SCCT250
	400 : 0.1	US2:SEM3SCCT400
	600 : 0.1	US2:SEM3SCCT600
	800 : 0.1	US2:SEM3SCCT800
	1200 : 0.1	US2:SEM3SCCT1200

Folding transformers **new**



- Standard power cable brown and yellow, 1.82 m long
- Can be extended up to 100 m while still maintaining accuracy
- Transformer configuration is carried out in the data manager

Output signal	Transformer transmission ratio	Article No.
100 mA	50 : 0.1	7KT1280-5MA00
	125 : 0.1	7KT1280-5MA01
	250 : 0.1	7KT1280-5MA02
	400 : 0.1	7KT1280-5MA03
	600 : 0.1	7KT1280-5MA04
	800 : 0.1	7KT1280-5MA05
	1200 : 0.1	7KT1280-5MA06
	1600 : 0.1	7KT1280-5MA07
2000 : 0.1	7KT1280-5MA08	

DIN rail adapters **new**



Article No.
US2:SEM3DINKIT

Time and pulse counters

Mechanical counting mechanisms



Display	Resetting	Rated frequency	Rated control supply voltage U_c	48 × 48 mm	72 × 72 mm	–
Time counter						
00000.00 h	Without	–	10 ... 80 V DC	7KT5500	–	–
			10 ... 50 V DC	–	7KT5600	–
			12 ... 24 V DC	–	–	7KT5801
		50 Hz	24 V AC	7KT5505	–	7KT5802
			115 V AC	7KT5501	7KT5601	7KT5803
			230 V AC	7KT5502	7KT5602	7KT5804
		60 Hz	115 V AC	7KT5503	7KT5603	7KT5806
			230 V AC	7KT5504	7KT5604	7KT5807
Pulse counter						
0000000	Without	–	12 ... 24 V DC	–	–	7KT5811
		50/60 Hz	24 V AC	–	–	7KT5812
			230 V AC	–	–	7KT5814

Further technical specifications

	7KT55..	7KT56..	7KT58..
Basic data			
Installation	Front mounting	Front mounting	Standard mounting rail
Mounting width	–	–	2 MW
Front frame	48 × 48 mm	72 × 72 mm	–
Display	Drum-type register	Drum-type register	Drum-type register
Version	–	With narrow frame according to DIN 43700	–

Accessories

	7KT55..	7KT56..	7KT58..
Cover			
Size	Article No.	Article No.	Article No.
55 × 55 mm	7KT9020	–	–
Sealing ring for cover			
Degree of protection	Scope of supply	Article No.	Article No.
IP43 (in switchboards with smooth surfaces)	1 set = 5 units	7KT9000	–
Terminal cover			
Degree of protection	Article No.	Article No.	Article No.
IP20 (with connected conductors)	–	7KT9021	–

Electronic counting mechanisms



Display	Resetting	Rated frequency	Rated control supply voltage U_c	
Time counter				
000000.0 h	Without	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5821
	Electrical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5822
	Electrical and mechanical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5823
Pulse counter				
0000000	Electrical and mechanical	50/60 Hz	24 ... 240 V AC, 12 ... 150 V DC	7KT5833

Further technical specifications

7KT58..

Basic data	
Installation	Standard mounting rail
Mounting width	2 MW
Display	LCD display

Current transformers

for measuring purposes



Size	Rated operational voltage U_e	Rated primary current I_{pr}	Rated power P_n	$I_{sr} = 5 \text{ A}$		
				$I_{sr} = 5 \text{ A}$	$I_{sr} = 1 \text{ A}$	$I_{sr} = 5 \text{ A}$
Accuracy class 0.2						
1	720 V	150 A	1 VA	4NC5121-2FA21	–	–
		200 A	2.5 VA	4NC5122-2FC21	–	–
		250 A	2.5 VA	4NC5123-2FC21	–	–
		300 A	5 VA	4NC5124-2FE21	–	–
		400 A	5 VA	4NC5125-2FE21	–	–
		500 A	5 VA	4NC5126-2FE21	–	–
5	720 V	600 A	5 VA	4NC5227-2FE21	–	–
		700 A	5 VA	4NC5228-2FE21	–	–
		800 A	5 VA	4NC5231-2FE21	–	–
		1000 A	5 VA	4NC5232-2FE21	–	–
Accuracy class 0.5						
1	720 V	100 A	1 VA	4NC5117-2DA21	4NC5117-0DA21	–
		150 A	2.5 VA	4NC5121-2DC21	4NC5121-0DC21	–
		200 A	5 VA	4NC5122-2DE21	4NC5122-0DE21	–
		250 A	5 VA	4NC5123-2DE21	4NC5123-0DE21	–
2	720 V	200 A	5 VA	4NC5222-2DE21	4NC5222-0DE21	–
		250 A	5 VA	4NC5223-2DE21	4NC5223-0DE21	–
		300 A	5 VA	4NC5224-2DE21	4NC5224-0DE21	–
		400 A	5 VA	4NC5225-2DE21	4NC5225-0DE21	–
3	720 V	400 A	5 VA	4NC5325-2DE21	4NC5325-0DE21	–
		500 A	5 VA	4NC5326-2DE21	4NC5326-0DE21	–
		600 A	5 VA	4NC5327-2DE21	4NC5327-0DE21	–
		750 A	5 VA	4NC5330-2DE21	4NC5330-0DE21	–
		800 A	5 VA	4NC5331-2DE21	–	–
4	720 V	800 A	10 VA	4NC5431-2DH21	4NC5431-0DH21	–
		1000 A	10 VA	4NC5432-2DH21	4NC5432-0DH21	–
		1200 A	10 VA	4NC5433-2DH21	4NC5433-0DH21	–
		1500 A	10 VA	4NC5435-2DH21	4NC5435-0DH21	–
		1600 A	15 VA	4NC5436-2DK21	–	–
		2000 A	20 VA	4NC5438-2DL21	–	–
		2500 A	25 VA	4NC5440-2DM21	–	–
3000 A	30 VA	4NC5441-2DN21	–	–		



Size	Rated operational voltage U_e	Rated primary current I_{pr}	Rated power P_n	Accuracy class 1.0		
				$I_{sr} = 5 \text{ A}$	$I_{sr} = 1 \text{ A}$	$I_{sr} = 5 \text{ A}$
1	720 V	50 A	1.2 VA	4NC5112-2CB21	4NC5112-0CB21	–
		60 A	1.2 VA	4NC5113-2CB21	4NC5113-0CB21	–
			1.25 VA	–	–	7KT1200
		75 A	2.5 VA	4NC5115-2CC21	4NC5115-0CC21	–
		100 A	2.5 VA	4NC5117-2CC21	4NC5117-0CC21	7KT1201
		150 A	2.5 VA	4NC5121-2CC21	4NC5121-0CC21	–
			3.75 VA	–	–	7KT1202
		200 A	5 VA	4NC5122-2CE21	4NC5122-0CE21	–
2	720 V	250 A	5 VA	4NC5123-2CE21	4NC5123-0CE21	–
		200 A	5 VA	4NC5222-2CE21	4NC5222-0CE21	–
		250 A	5 VA	4NC5223-2CE21	4NC5223-0CE21	–
		300 A	5 VA	4NC5224-2CE21	4NC5224-0CE21	–
		400 A	5 VA	4NC5225-2CE21	4NC5225-0CE21	–
3	720 V	400 A	5 VA	4NC5325-2CE21	4NC5325-0CE21	–
		500 A	5 VA	4NC5326-2CE21	4NC5326-0CE21	–
		600 A	5 VA	4NC5327-2CE21	4NC5327-0CE21	–
		750 A	5 VA	4NC5330-2CE21	4NC5330-0CE21	–
		800 A	10 VA	4NC5431-2CH21	4NC5431-0CH21	–
4	720 V	1000 A	10 VA	4NC5432-2CH21	4NC5432-0CH21	–
		1250 A	10 VA	4NC5434-2CH21	4NC5434-0CH21	–
		1500 A	10 VA	4NC5435-2CH21	4NC5435-0CH21	–
		2000 A	12.5 VA	4NC5438-2CJ21	4NC5438-0CJ21	–
		2500 A	12.5 VA	4NC5440-2CJ21	4NC5440-0CJ21	–
		3000 A	30 VA	4NC5441-2CN21	–	–

10

Accessories

Standard rail mounting



For transformer size	Article No.	Article No.	Article No.
1 and 5	4NC5923-5LT21	4NC5923-5LT21	–
2	4NC5925-5LT21	4NC5925-5LT21	–
3	4NC5930-5LT21	4NC5930-5LT21	–
4	4NC5940-5LT21	4NC5940-5LT21	–



Well-monitored – well-protected

Monitoring devices perform numerous functions to protect people and machinery: At dusk, they switch on automatically, control the temperature or signal the location where a fuse has tripped.

They also ensure reliable switchover to emergency power supply, monitor the emergency lighting, ensure overload-free operation of motors and neutral monitoring for breakage and overvoltages.

Monitoring devices can do even more, e.g., underload monitoring of asynchronous motors in no-load operation.

Monitoring Devices



All the information you need	11/2
System overview	11/4
Monitoring devices for electrical values	11/6
5SV8 residual current monitors	11/6
5SV8 modular RCCB device	11/8
5TT3 undervoltage relays	11/12
5TT3 short-time voltage relay	11/14
5TT3 undervoltage and overvoltage relays	11/15
5TT6 current relays	11/16
5TT3 fuse monitors	11/17
5TT3 phase monitors	11/18
5TT3 phase sequence monitors	11/19
5TT3 insulation monitors for industrial applications	11/20
Monitoring devices for plants and equipment	11/21
5TT5 EMERGENCY STOP modules	11/21
5TT3 level relays	11/22
5TT3 line circuit relays	11/23
7LQ2 dimmer switches	11/24

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about monitoring devices, please visit our website

www.siemens.com/lowvoltage

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Monitoring devices sie.ag/2m3no4A

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Monitoring devices (45316099)

Technical overview of monitoring devices



The fast way to get you to our online services

This page provides you with comprehensive information and links on monitoring devices

www.siemens.com/lowvoltage/product-support (109769086)

System overview

Monitoring devices for electrical values



Residual current monitor



Modular RCCB device



Relay



Monitors

Accessories



Summation current transformer



Holders for standard mounting rails



Magnetic field centering sleeves

Monitoring devices for plants and equipment



EMERGENCY STOP modules



Relay

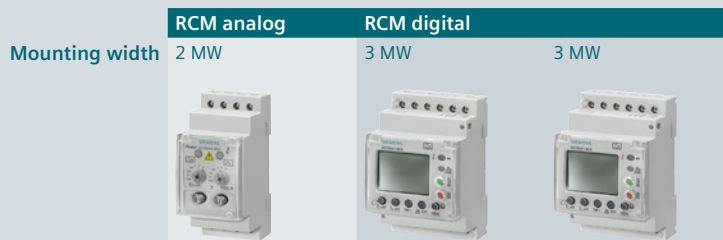
Accessories



Immersion electrodes

5SV8 residual current monitors

Type A and type AC



Rated operational voltage U_e	Rated residual current $I_{\Delta n}$		Response time Δt	Mounting width		
	Type A	Type AC		2 MW	3 MW	3 MW
230 V AC	0.03 ... 5 A	>3 A	0.02 ... 5 s	5SV8000-6KK	–	–
	0.03 ... 3 A	5 ... 30 A	0.02 ... 10 s, INS, SEL ¹⁾	–	5SV8001-6KK	5SV8200-6KK

Further technical specifications

	5SV8000-6KK	5SV8001-6KK	5SV8200-6KK
Standards			
Standards	EN 62020, IEC 62020	EN 62020, IEC 62020	EN 62020, IEC 62020
Approvals	–	UL	UL
Supply			
Rated operational voltage U_e	230 V AC	230 V AC	230 V AC
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Rated residual current $I_{\Delta n}$	Type A	0.03 ... 3 A	0.03 ... 3 A
	Type AC	>3 A	5 ... 30 A
Response time Δt	0.02 ... 5 s	0.02 ... 10 s, INS, SEL ¹⁾	0.02 ... 10 s, INS, SEL ¹⁾
Relay contacts			
Relay contacts	1× alarm	1× pre-alarm, 1× alarm	1× pre-alarm, 4× alarm
Rated voltage	230 V AC	230 V AC	230 V AC
Rated current	6 A	6 A	6 A
Summation current transformer			
Diameter	20 ... 210 mm		
Equipment			
Maximum cable length RCM/CT	10 m (shielded cable)	10 m (shielded cable)	10 m (shielded cable)
Conductor cross-section	1.5 mm ²	1.5 mm ²	1.5 mm ²
Test/reset	Yes/Yes	Yes/Yes	Yes/Yes
External tripping operation/external reset	–/Yes	Yes/Yes	Yes/Yes
Safety			
Degree of protection	Contacts	IP20	
	Front	IP41	
Ambient conditions			
Operating temperature	–10 ... +50 °C		

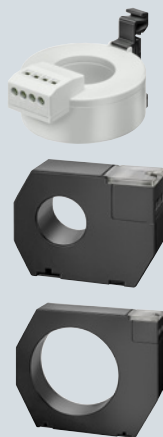
¹⁾ INS: Instantaneous,
SEL: Selective

Accessories

Summation current transformers

- Including holder for standard mounting rail or wall mounting
- Standard ②

Mounting options	Lowest measurable residual current $I_{\Delta n, min}$	Rated current I_n	Maximum current ²⁾ I_{max}	Internal diameter	Article No.
Standard mounting rail	30 mA	≤ 40 A	240 A	20 mm	5SV8700-0KK
		≤ 63 A	380 A	30 mm	5SV8701-0KK
Wall mounting, standard mounting rail ¹⁾	30 mA	≤ 80 A	480 A	35 mm	5SV8702-0KK
		≤ 200 A	1200 A	70 mm	5SV8703-0KK
Wall mounting	100 mA 300 mA	≤ 250 A	1500 A	105 mm	5SV8704-0KK
		≤ 500 A	3000 A	140 mm	5SV8705-0KK
		≤ 600 A	3600 A	210 mm	5SV8706-0KK



Holders for standard mounting rails

- Suitable for summation current transformers with internal diameter of 20 mm, 30 mm, 35 mm, 70 mm
- Cannot be used together with magnetic field centering sleeves.



Article No.

5SV8900-1KK

Magnetic field centering sleeves



Internal diameter	Article No.
35 mm	5SV8902-1KK
70 mm	5SV8903-1KK
105 mm	5SV8904-1KK
140 mm	5SV8905-1KK
210 mm	5SV8906-1KK

¹⁾ The holder for standard mounting rails is additionally required for mounting onto the standard mounting rail.

²⁾ Short-time starting current, up to 2 s

5SV8 modular RCCB device

Type A



Rated operational voltage U_e	Rated residual current $I_{\Delta n}$ Type A	Response time Δt	
230 V AC	0.03 ... 3 A	0.02 ... 10 s, INS, SEL ¹⁾	5SV8101-6KK

Further technical specifications

Standards		
Standards		EN 60947-2 (Annex M), IEC 60947-2 (Annex M)
Approvals		–
Supply		
Rated operational voltage U_e		230 V AC from a 1-phase auxiliary voltage source (also externally)
Frequency		50/60 Hz
Rated residual current $I_{\Delta n}$	Type A	0.03 ... 3 A (default setting: 30 mA)
	Type AC	–
Response time Δt	$I_{\Delta n} = 30 \text{ mA}$	INS instantaneous
	$I_{\Delta n} > 30 \text{ mA}$	INS – SEL – 0.06 ... 10 s ¹⁾ (default setting INS)
Relay contacts		
Relay contacts		1× alarm, 1× tripping operation
Rated voltage		230 V AC
Rated current		6 A
Summation current transformer		
Diameter		35 ... 210 mm
Equipment		
Maximum cable length RCM/CT		10 m (shielded cable)
Conductor cross-section		0.125 ... 2.08 mm ²
Test/reset		Yes/Yes
External tripping operation/external reset		Yes/Yes
Safety		
Degree of protection	Contacts	IP20
	Front	IP41
Ambient conditions		
Operating temperature		–10 ... +50 °C

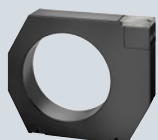
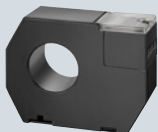
¹⁾ INS: Instantaneous,
SEL: Selective

Accessories

Summation current transformers

- Including holder for wall mounting
- Standard ②

Mounting options	Lowest measurable residual current $I_{\Delta n, min}$	Rated current I_n	Maximum current ²⁾ I_{max}	Internal diameter	Article No.
Wall mounting, standard mounting rail ¹⁾	30 mA	≤80 A	480 A	35 mm	5SV8702-OKK
	30 mA	≤200 A	1200 A	70 mm	5SV8703-OKK
Wall mounting	100 mA	≤250 A	1500 A	105 mm	5SV8704-OKK
	300 mA	≤500 A	3000 A	140 mm	5SV8705-OKK
		≤600 A	3600 A	210 mm	5SV8706-OKK



Holders for standard mounting rails

- Suitable for summation current transformers with internal diameter of 20 mm, 30 mm, 35 mm, 70 mm
- Cannot be used together with magnetic field centering sleeves.



Article No.

5SV8900-1KK

Magnetic field centering sleeves

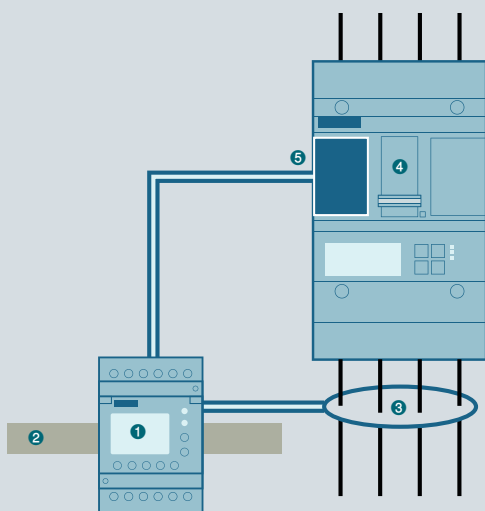


Internal diameter	Article No.
35 mm	5SV8902-1KK
70 mm	5SV8903-1KK
105 mm	5SV8904-1KK
140 mm	5SV8905-1KK
210 mm	5SV8906-1KK

¹⁾ The holder for standard mounting rails is additionally required for mounting onto the standard mounting rail.

²⁾ Short-time starting current, up to 2 s

Tested combination options



5SV8101-6KK / - (tested combinations)

① Modular RCCB device

5SV8101-6KK

② Standard mounting rail

EN 60715 – TH35 – 7.5 35 – 15

③ Summation current transformers

Magnetic field centering sleeves

Ø 35 mm	5SV8702-OKK	5SV8902-1KK
Ø 70 mm	5SV8703-OKK	5SV8903-1KK
Ø 105 mm	5SV8704-OKK	5SV8904-1KK
Ø 140 mm	5SV8705-OKK	5SV8905-1KK
Ø 210 mm	5SV8706-OKK	5SV8906-1KK

④ Molded case circuit breakers

⑤ Trip element

⑥ Trip element

3VL17...	3VL9400-1ST00	3VL9400-1UP00
3VL27...		
3VL37...		
3VL47...		
3VA10...	3VA9988-OBL30	3VA9908-0BB11
3VA11...	3VA9988-OBL32	3VA9908-0BB20
3VA20...	3VA9988-OBL33	3VA9908-0BB24
3VA21...		3VA9908-0BB25
3VA22...		
3VA12...	3VA9988-OBL30	3VA9908-0BB11
3VA23...	3VA9988-OBL32	3VA9908-0BB20
3VA24...	3VA9988-OBL33	3VA9908-0BB24

5SV8 modular RCCB device

Type B

Mounting width **MRCD digital**
2 MW



Rated operational voltage U_e	Rated residual current $I_{\Delta n}$	Response time Δt	
230 V AC	0.03 ... 1 A	0 ... 10 s	5SV8101-4KK
24 V DC	0.03 ... 1 A	0 ... 10 s	5SV8111-4KK

Further technical specifications

	5SV8101-4KK	5SV8111-4KK
Standards		
Standards	EN 60947-2 (Annex M), IEC 60947-2 (Annex M)	
Supply		
Supply voltage U_s	230 V AC (70 ... 300 V AC)	24 V DC (9.6 ... 94 V DC)
Frequency	50/60 Hz	–
Power consumption	<6.5 VA	<6.5 VA
Relay contacts		
Relay contacts	1× alarm, 1× tripping operation	
Rated voltage	250 V AC	
Rated current	5 A	
External summation current transformer		
Internal diameter	35 ... 210 mm (5SV8701-2KK, 5SV8701-2KP, 5SV8702-2KK, 5SV8702-2KP, 5SV8703-2KK, 5SV8704-2KK)	
Rated voltage	(Summation current transformers)	690 V
Response characteristic	Acc. to IEC 60947-2 (M)	Type B
Rated frequency		0 ... 2 kHz
Response residual current	$I_{\Delta n1}$ (AL1 alarm)	50 ... 100% of $I_{\Delta n2}$ (factory setting: 50%)
	$I_{\Delta n2}$ (TP2 tripping)	30 mA ... 1 A (factory setting: 30 mA)
Response delay	t_{on1} (alarm)	0 ... 10 s (factory setting: 1 s)
	t_{on2} (tripping)	0 ... 10 s (factory setting: 0 s)
Equipment		
Maximum cable length MRCD/converter	10 m (6 × 0.75 mm ²)	
Password	off / 0 ... 999 (factory setting: 0)	
Safety		
Degree of protection	Components (IEC 60529)	IP30
	Terminals (IEC 60529)	IP20
EMC	IEC 60947-2 (M)	
Overvoltage category	III	
Pollution degree	3	
Mechanical data		
Width	36 mm (2 MW)	
Depth	64 mm	
Height	85 mm	
Weight	150 g	
Fixing	Standard mounting rail	
Enclosure material	Polycarbonate	
Electrical connection	Screw terminals	
Conductor cross-section	Rigid	0.2 ... 4 mm ²
	Flexible, with end sleeve	0.2 ... 2.5 mm ² (AWG 24 ... 12)
Stripped length	8 ... 9 mm	
Tightening torque	0.5 ... 0.6 Nm	
Ambient conditions		
Operating temperature	–25 ... +55 °C	

Accessories

Summation current transformers



Lowest measurable residual current $I_{\Delta n \text{ min}}$	Rated current I_n	Maximum current ¹⁾ I_{max}	Internal diameter	Version	Article No.
10 mA	≤80 A	500 A	35 mm	Standard	5SV8701-2KK
				With shield	5SV8701-2KP
	≤160 A	1000 A	60 mm	Standard	5SV8702-2KK
				With shield	5SV8702-2KP
100 mA	≤330 A	2000 A	120 mm	Standard	5SV8703-2KK
300 mA	≤630 A	3800 A	210 mm	Standard	5SV8704-2KK

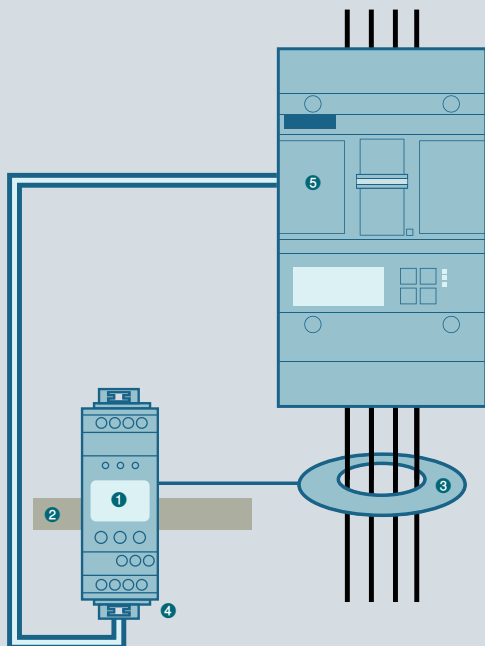
Holders for standard mounting rails



Suitable for summation current transformers	Article No.
5SV8701-2KK, 5SV8701-2KP	5SV8900-2KK
5SV8702-2KK, 5SV8702-2KP	5SV8900-3KK

¹⁾ Short-time starting current, up to 2 s

Tested combination options



5SV8101-4KK / 5SV8111-4KK (tested combinations)

1 Modular RCCB device

5SV8101-4KK / 5SV8111-4KK

2 Standard mounting rail

EN 60715 – TH35 – 7,5 35 – 15

3 Summation current transformers

Ø 35 mm 5SV8701-2KK / 5SV8701-2KP

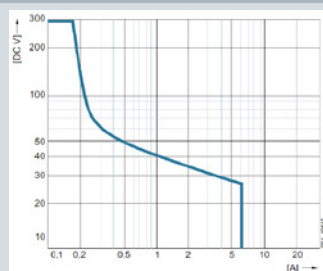
Ø 60 mm 5SV8702-2KK / 5SV8702-2KP

Ø 120 mm 5SV8703-2KK

Ø 210 mm 5SV8704-2KK

4 Relay contacts

DC:



AC: max. 230 V, 5A

5 Molded case circuit breakers

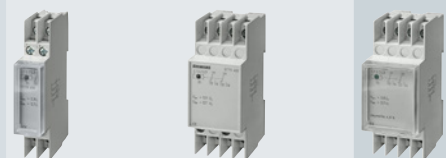
Trip element

3VA1...	3VA9988-OBL30	3VA9908-0BB11
3VA20...	3VA9988-OBL32	3VA9908-0BB24
3VA21...	3VA9988-OBL33	3VA9908-0BB25
3VA22...		
3VA23...	3VA9988-OBL30	3VA9908-0BB11
3VA24...	3VA9988-OBL32	3VA9908-0BB25
	3VA9988-OBL33	

5TT3 undervoltage relays

Without response delay

Contacts	For the monitoring of	
	1, 2 or 3 phases against N	3 phases against N
Mounting width	1 MW	2 MW
	1 CO	2 CO
	2 CO	2 CO



Rated operational voltage U_e	Rated operational current I_e	Switching thresholds	Hysteresis			
Not adjustable						
230 V AC	4 A	0.7 and 0.9 × U_c	–	5TT3400	5TT3402	5TT3404
		0.85 and 0.95 × U_c	–	5TT3401	–	5TT3405
Adjustable						
230 V AC	4 A	0.7 ... 0.95 × U_c	5%	–	–	5TT3406
		0.9 ... 0.95 × U_c	–	–	5TT3403	–

5TT3400

5TT3401

5TT3402

5TT3403

5TT3404

5TT3405



5TT3406

Further technical specifications

Standards		IEC 60255, DIN VDE 0435-110, DIN VDE 0435-303		
Standards				
Supply				
Rated control circuit voltage U_c		230 / 400 V AC		
Operating range (overload capability)		1.1 × U_c		
Rated frequency		50/60 Hz		
Contacts				
μ contact	AC-11	4 A	4 A	4 A
Response values	ON-switching	0.9 / 0.95 × U_c	0.9 / 0.95 × U_c	4% hysteresis
	OFF-switching	0.7 / 0.85 × U_c	0.7 / 0.85 × U_c	0.7 ... 0.95 × U_c
Minimum contact load		10 V / 100 mA	10 V / 100 mA	10 V / 100 mA
Safety				
Rated insulation voltage U_i		Between coil/contact	4 kV	4 kV
Electrical isolation, creepage distances and clearances		Actuator/contact	3 mm	5.5 mm
Rated impulse withstand voltage U_{imp}		Actuator/contact	>2.5 kV	>4 kV
Functions				
Phase asymmetry	Setting accuracy	–	Approx. 5 ... 10%	Approx. 5 ... 10%
	Repeat accuracy	–	1	1
Phase failure detection	At L1 or L2 or L3	100 ms	100 ms	100 ms
Functions	Monitoring of 1/2 phases against N	Yes	–	–
	Monitoring of 3 phases against N	Yes	Yes	Yes
	Asymmetry (failure) detection	–	Yes	Yes
	Reverse (failure) detection	–	Yes	Yes
	Phase failure detection	Yes	Yes	Yes
	N-conductor monitoring	–	Yes	Yes
Connection				
Terminals		± screw (Pozidriv)	PZ 1	
Conductor cross-sections	Rigid		Max. 2 × 2.5 mm ²	
	Flexible, with end sleeve		Max. 1 × 0.5 mm ²	
Ambient conditions				
Permissible ambient temperature		–20 ... +60 °C		
Resistance to climate		Acc. to EN 60068-1	20/60/4	

5TT3 undervoltage relays

With response delay

		For the monitoring of 1, 2 or 3 phases against N	
Contacts		1 CO	2 CO
Mounting width		1 MW	1 MW
			

Rated operational voltage U_e	Rated operational current I_e	Switching thresholds	Hysteresis	Standard	With TEST pushbutton
Not adjustable					
230 V AC	4 A	$0.85 \times U_c$	5%	5TT3414	5TT3415

Further technical specifications

		5TT3414	5TT3415
Supply			
Rated control circuit voltage U_c		230 / 400 V AC	
Operating range (overload capability)		$1.15 \times U_c$	
Rated frequency		50/60 Hz	
Contacts			
Contacts	AC-15	1 CO	2 CO
Response values	ON-switching	5% hysteresis	5% hysteresis
	OFF-switching	$0.85 \times U_c$	$0.85 \times U_c$
Response delay		0.5 s	0.5 s
Return transfer delay		60 s	60 s
Minimum contact load		10 V / 100 mA	10 V / 100 mA
Electrical service life in switching cycles	AC-15 (1 A, 230 V AC)	1×10^5	1×10^5
Safety			
Rated insulation voltage U_i	Between coil/contact	–	
Rated impulse withstand voltage	Acc. to IEC 60664-1	6 kV	
Pollution degree		2	
Functions			
Phase failure detection	At L1 or L2 or L3	500 ms	
Functions	Monitoring of 1 or 2 phases against N	Yes	
	Monitoring of 3 phases against N	Yes	
	Phase failure detection	Yes	
Connection			
Terminals	– screw (slot)	3.5 mm	
Conductor cross-sections	Rigid	$1 \times 4 \text{ mm}^2$	
	Flexible, with end sleeve	$1 \times 2.5 \text{ mm}^2$	
Ambient conditions			
Permissible ambient temperature		–25 ... +60 °C	
Resistance to climate	Acc. to EN 60068-1	20/060/04	

5TT3 short-time voltage relay

Without response delay

For the monitoring of
1, 2 or 3 phases against N

Contacts 2 CO
Mounting width 2 MW



Rated operational voltage U_e	Rated operational current I_e	Switching thresholds	
Not adjustable			
230 V AC	4 A	$0.8 \dots 0.85 \times U_c$	5TT3407

Further technical specifications

Standards			
Standards		IEC 60255, DIN VDE 0435-303	
Supply			
Rated control circuit voltage U_c		230/400 V AC	
Operating range (overload capability)		$1.1 \times U_c$	
Rated frequency		50/60 Hz	
Rated operational power P_s		AC operation:	230 V and p.f. = 1 230 V and p.f. = 0.4
		DC operation:	$U_e = 24 \text{ V}$ and $I_e = 6 \text{ A}$ $U_e = 60 \text{ V}$ and $I_e = 1 \text{ A}$ $U_e = 110 \text{ V}$ and $I_e = 0.6 \text{ A}$ $U_e = 220 \text{ V}$ and $I_e = 0.5 \text{ A}$
Back-up fuse		Terminals L1/L2/L3	2 A
Contacts			
μ contact		AC-11	3 A
Response values		ON-switching	$0.85 \times U_c$
		OFF-switching	$0.8 \times U_c$
Automatic reclosing delay (return transfer delay)		0.2 ... 2 s	
Minimum contact load		10 V / 100 mA	
Safety			
Rated insulation voltage U_i		Between coil/contact	4 kV
Electrical isolation, creepage distances and clearances		Actuator/contact	4 mm
Rated impulse withstand voltage U_{imp}		Actuator/contact	>4 kV
Functions			
Phase failure detection		At L1 or L2 or L3	$\geq 20 \text{ ms}$
Phase asymmetry		Setting accuracy	Approx. 5 ... 10%
		Repeat accuracy	1
Functions		Monitoring of 1 or 2 phases against N	Yes
		Monitoring of 3 phases against N	Yes
		Phase failure detection	Yes
		N-conductor monitoring	Yes
Connection			
Terminals		\pm screw (Pozidriv)	PZ 1
Conductor cross-sections		Rigid	Max. $2 \times 2.5 \text{ mm}^2$
		Flexible, with end sleeve	Max. $1 \times 0.5 \text{ mm}^2$
Ambient conditions			
Permissible ambient temperature		$-20 \dots +60 \text{ }^\circ\text{C}$	
Humidity class		Acc. to IEC 60068-2-30	F

5TT3 undervoltage and overvoltage relays

With adjustable response delay

For the monitoring of
3 phases against N

Contacts 2 CO
Mounting width 2 MW








Rated operational voltage U_e	Rated operational current I_e	Switching thresholds	Hysteresis	
Adjustable				
230 V AC	4 A	0.7 and $1.1 \times U_c$ 0.9 and $1.3 \times U_c$	4% 4%	5TT3408

Further technical specifications

Standards			
Standards			IEC 60255, DIN VDE 0435-303
Supply			
Rated control circuit voltage U_c			230/400 V AC
Operating range (overload capability)			$1.35 \times U_c$
Rated frequency			50/60 Hz
Back-up fuse	Terminals L1/L2/L3		2 A
Contacts			
μ contact	AC-11		1 A
Response values	Overvoltage:	ON-switching	4% hysteresis
		OFF-switching	$0.9 \dots 1.3 \times U_c$
	Undervoltage:	ON-switching	4% hysteresis
		OFF-switching	$0.7 \dots 1.1 \times \text{voltage}_c$
On/off-delay (response delay)			0.1 ... 20 s
Automatic reclosing delay (return transfer delay)			–
Minimum contact load			10 V / 100 mA
Safety			
Rated insulation voltage U_i	Between coil/contact		4 kV
Electrical isolation, creepage distances and clearances	Contact/contact		4 mm
	Actuator/contact		4 mm
Rated impulse withstand voltage U_{imp}	Actuator/contact		>4 kV
Functions			
Phase failure detection	At L1 or L2 or L3		100 ms
Phase asymmetry	Setting accuracy		Approx. 5 ... 10%
	Repeat accuracy		1
Functions	Monitoring of 1 or 2 phases against N		–
	Monitoring of 3 phases against N		Yes
	Asymmetry detection		Yes
	Reverse voltage detection		Yes
	Phase failure detection		Yes
	N-conductor monitoring		Yes
Connection			
Terminals	\pm screw (Pozidriv)		PZ 1
Conductor cross-sections	Rigid		Max. $2 \times 2.5 \text{ mm}^2$
	Flexible, with end sleeve		Max. $1 \times 0.5 \text{ mm}^2$
Ambient conditions			
Permissible ambient temperature			$-20 \dots +60 \text{ }^\circ\text{C}$
Humidity class	Acc. to IEC 60068-2-30		F

5TT6 current relays

For single-phase loads up to 230 V AC

Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control current I_c	Auxiliary voltage and load voltage				
				not isolated		galvanically isolated		
Mounting width				1 MW	1 MW	2 MW	2 MW	2 MW
								
				Monitoring Undercurrent	Overcurrent	Monitoring Undercurrent	Overcurrent	Overcurrent/undercurrent
230 V AC	5 A	1 CO	1 ... 10 A	5TT6111	5TT6112	–	–	–
		2 CO	0.1 - 1 A, 0.5 ... 5 A, 1 ... 10 A, 1.5 ... 15 A	–	–	5TT6113	5TT6114	5TT6115

Further technical specifications

Standards		5TT6111	5TT6112	5TT6113	5TT6114	5TT6115
Standards			IEC 60255		IEC 60255	DIN VDE 0435-303
Supply						
Rated control current I_c			1 ... 10 A		0.1 ... 1 A, 0.5 ... 5 A, 1 ... 10 A, 1.5 ... 15 A	
Rated control circuit voltage U_c			230 V AC		230 V AC	
Primary operating range			0.9 ... 1.1 × U_c		0.9 ... 1.1 × U_c	
Overload capability		Continuous	15 A		20 A	
		At 50 °C ambient temperature max. 3 s	20 A		–	
		Independent of measuring range, max. 3 s	–		30 A	
Rated frequency			50/60 Hz		50/60 Hz	
Contacts						
μ contact (AC-15)		NO contacts	3 A		5 A	
		NC contacts	1 A		1 A	
Response values		ON-switching	Infinitely variable		Infinitely variable	
		OFF-switching	Permanent, 4% hysteresis		Permanent, 4% hysteresis	
Switching delay t_v			0.1 ... 20 s, continuously adjustable		0.1 ... 20 s, continuously adjustable	
Response time		Non-adjustable	Current corresponds to the rated operational power of the continuous-flow heater		See Siemens Service and Support Portal, search term "Article No.", e.g. 5TT6113	
Minimum contact load			10 V / 100 mA		10 V / 100 mA	
Safety						
Rated insulation voltage U_i		Between coil/contact	2.5 kV			
Electrical isolation, creepage distances and clearances		Actuator/contact	3 mm			
Rated impulse withstand voltage U_{imp}		Actuator/contact	>4 kV			
Connection						
Terminals		± screw (Pozidriv)	PZ 1			
Conductor cross-sections		Rigid	Max. 2 × 2.5 mm ²			
		Flexible, with end sleeve	Max. 1 × 0.5 mm ²			
Ambient conditions						
Permissible ambient temperature			–20 ... +60 °C			
Resistance to climate		Acc. to EN 60068-1	20/60/4			

5TT3 fuse monitors

For all low-voltage fuse systems

Mounting width 2 MW



Rated operational voltage U_e	Rated operational current I_e	Rated control circuit voltage U_c	
Adjustable			
250 V AC	4 A	380 ... 415 V AC	5TT3170

Further technical specifications

Standards		
Standards	IEC 60255, DIN VDE 0435-110	
Supply		
Rated operational voltage U_e	250 V AC	
Rated operational current I_e	AC-1	4 A
Rated control circuit voltage U_c	3 AC	380 ... 415 V
Primary operating range	0.8 ... 1.1 × U_c	
Rated frequency	50 ... 400 Hz	
Contacts		
Internal resistance of measuring paths	>1000 Ω/V	
Max. permissible rear feed	90%	
Response/release time	<50 ms	
Electrical endurance AC-11	In switching cycles at 1 A	1.5 × 10 ⁵
Safety		
Rated impulse withstand voltage U_{imp}	Input/output	>4 kV
Application		
Area of application	Asymmetric, systems afflicted with harmonics, regenerative motors	
Message	Also for disconnected loads	
Connection		
Terminals	± screw (Pozidriv)	PZ 1
Conductor cross-sections	Rigid	Max. 2 × 2.5 mm ²
	Flexible, with end sleeve	Max. 1 × 0.5 mm ²
Ambient conditions		
Permissible ambient temperature	-20 ... +45 °C	
Resistance to climate	Acc. to EN 60068-1	20/45/4

5TT3 phase monitors

For monitoring of voltages in a three-phase system

Mounting width 1 MW




Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control circuit voltage U_c	With 3 green LEDs for 3 phases
250 V AC	4 A	1 CO	230/400 V	5TT3421

Further technical specifications

Standards		
Standards		IEC 60255, DIN VDE 0435
Supply		
Rated operational voltage U_e		250 V AC
Rated operational current I_e		4 A
Rated control circuit voltage U_c		230/400 V AC
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency		50/60 Hz
Rated power dissipation P_v	Electronics	9 VA
	Contacts	0.2 VA
Contacts		
μ contact	AC-11	3 A
Minimum contact load		10 V / 100 mA
Safety		
Rated insulation voltage U_i	Between coil/contact	4 kV
Electrical isolation, creepage distances and clearances	Actuator/contact	4 mm
Rated impulse withstand voltage U_{imp}	Actuator/contact	>2.5 kV
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140/VDE 0140-1	II
Connection		
Terminals	± screw (Pozidriv)	PZ 1
Conductor cross-sections	Rigid	Max. 2 × 2.5 mm ²
	Flexible, with end sleeve	–
Ambient conditions		
Permissible ambient temperature		–20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/60/4

5TT3 phase sequence monitors

For monitoring of phase sequence in a three-phase system

Phase sequence monitors				
Mounting width	1 MW			
				
Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control circuit voltage U_c	With one green LED, which lights up for right-rotating field
250 V AC	4 A	1 CO	400 V	5TT3423

Further technical specifications

Standards			
Standards	IEC 60255, DIN VDE 0435		
Supply			
Rated operational voltage U_e	250 V AC		
Rated operational current I_e	4 A		
Rated control circuit voltage U_c	400 V AC		
Primary operating range	0.8 ... 1.1 × U_c		
Rated frequency	50/60 Hz		
Rated power dissipation P_v	Electronics	9 VA	
	Contacts	0.2 VA	
Contacts			
μ contact	AC-11	3 A	
Minimum contact load	10 V / 100 mA		
Safety			
Rated insulation voltage U_i	Between coil/contact	4 kV	
Electrical isolation, creepage distances and clearances	Actuator/contact	4 mm	
Rated impulse withstand voltage U_{imp}	Actuator/contact	>2.5 kV	
Degree of protection	Acc. to EN 60529	IP20, with connected conductors	
Safety class	Acc. to EN 61140/VDE 0140-1	II	
Connection			
Terminals	± screw (Pozidriv)	PZ 1	
Conductor cross-sections	Rigid	Max. 2 × 2.5 mm ²	
	Flexible, with end sleeve	–	
Ambient conditions			
Permissible ambient temperature	–20 ... +60 °C		
Resistance to climate	Acc. to EN 60068-1	20/60/4	

5TT3 insulation monitors for industrial applications

Are used for protection of persons and against fire in non-grounded systems (IT systems)

Mounting width 2 MW



Measurement voltage range U_{meas}	Measuring range	Contacts	Rated control circuit voltage U_c	
0 ... 500 V AC	5 ... 100 k Ω	2 CO	230 V AC	5TT3470
12 ... 280 V DC	5 ... 200 k Ω	2 CO	–	5TT3471

Further technical specifications

		5TT3470	5TT3471
Supply			
Rated operational voltage U_e		230 V AC	12 ... 280 V DC
Rated operational current I_s	Thermal current I_{th}	4 A	4 A
	DC-13 at 24 V DC	–	2 A
	DC-13 at 250 V DC	–	0.2 A
	AC-15	–	3 A
	AC-15 NO contacts	5 A	–
	AC-15 NC contacts	2 A	–
Supply voltage U_c	For AC supply	220 ... 240 V AC	–
Primary operating range	For AC supply	0.8 ... 1.1 $\times U_c$	–
Frequency range for U_c		45 ... 400 Hz	–
Rated power dissipation P_v	For AC supply	Approx. 2 VA	–
	For DC supply	–	Approx. 1 W
Contacts			
μ contact		2 W	2 W
Switching hysteresis	At R_{meas} 50 k Ω	15%	10 ... 15%
Measuring circuit			
Measuring circuit		For three-phase and AC systems	For direct voltage systems
Measurement voltage range U_{meas}		0 ... 500 V AC	12 ... 280 V DC
Measurement voltage U_{meas}	Internal	Approx. 15 V DC	–
Primary operating range		0 ... 1.1 $\times U_{\text{meas}}$	0.9 ... 1.1 $\times U_{\text{meas}}$
Frequency range for U_{meas}		10 ... 10000 Hz	–
Alarm values	Measuring shunt R_{AL}	5 ... 100 k Ω	5 ... 200 k Ω
Setting of alarm value	On absolute scale	Infinitely variable	Infinitely variable
Alternating current internal resistance	Internal testing resistance	>250 k Ω	–
Direct current internal resistance	Internal testing resistance	>250 k Ω	–
	L+ and L- to PE	–	75 k Ω each
Max. measurement current I_{meas}	Short circuit	<0.1 mA	0.2 ... 4 mA, depending on the voltage
Direct interference voltage	Max. permissible	500 V DC	–
Response delay	∞ to 0.9 $\times R_{\text{meas}}$	<1.3 s	0.8 s
at R_{AL} 50 k Ω and 1 μ F	R_{meas} from ∞ to 0 Ω	<0.7 s	0.4 s
Safety			
Rated impulse withstand voltage U_{imp}	Terminals A1 to A2	<4 kV	<4 kV
	Terminals L to PE	<4 kV	<4 kV
	Terminals A1, A2 to L, PE	<4 kV	<3 kV
	Terminals against contacts	<6 kV	<6 kV
Degree of protection	Terminals (according to EN 60529)	IP20	IP20
	Enclosure (according to EN 60529)	IP40	IP40
Connection			
Terminals	\pm screw (Pozidriv)	PZ 2	
Conductor cross-sections	Rigid	Max. 2 \times 2.5 mm ²	
	Flexible, with end sleeve	Min. 1 \times 0.50 mm ²	
Ambient conditions			
Permissible ambient temperature		–20 ... +60 °C	
Resistance to climate	Acc. to EN 60068-1	20/060/04	

5TT5 EMERGENCY STOP modules

Efficient personal and machine protection in small units

Mounting width 4 MW



Rated operational voltage U_e	Rated operational current I_e	Rated control circuit voltage U_c	
400 V AC	5 A	230 V AC	5TT5200

Further technical specifications

Standards		
Standards		ISO 13849-1: 2015; EN 62061: 2005 + AC: 2010 + A1: 2013 + A2: 2015; ISO 13850: 2015; EN 60204-1: 2006 + A1: 2009 + AC: 2010 (in extracts); EN 60947-5: 2004 + A1: 2009; EN 50178: 1997; EN 61508 Parts 1-7: 2010; EN 50156-1: 2005 (in extracts)
Certification		German Technical Inspectorate Rheinland
Supply		
Primary operating range		$0.8 \dots 1.1 \times U_c$
Rated frequency f_n		50 Hz
Rated power dissipation P_v	Coil/drive	3.5 VA
	Contact per pole	0.8 VA
Control voltage	Terminal Y1	24 V AC/DC
Control current	Terminal Y1	45 mA
Contacts		
Contacts	NO contacts AC-15	3 A
	NC contacts AC-15	2 A
	NO contact/NC contact AC-1	5 A
Contact gap		>1 mm
Electrical service life	AC-15 (2 A, 230 V AC)	10^5 operating cycles
Reliable switching frequency		600 operating cycles/h
Recovery time		500 ms
Safety		
Rated impulse withstand voltage U_{imp}	Actuator/contact	>4 kV
Electrical isolation, creepage distances and clearances	Actuator/contact	3 mm
Vibration resistance	Amplitude acc. to EN 60068-2-610 (up to 55 Hz)	0.35 mm
Connection		
Terminals	\pm screw (Pozidriv)	PZ 1
Conductor cross-sections of main current paths	Rigid	Max. $2 \times 2.5 \text{ mm}^2$
	Flexible, with end sleeve	Min. $1 \times 0.50 \text{ mm}^2$
Ambient conditions		
Permissible ambient temperature		0 ... +50 °C
Resistance to climate	Acc. to EN 60068-1	0/55/04

5TT3 level relays

For level monitoring and control

Mounting width 2 MW



Rated operational voltage U_e	Rated operational current I_e	Rated control circuit voltage U_c	
250 V AC	5 A	230 V AC	5TT3435

Further technical specifications

Standards		
Standards		IEC 60255; DIN VDE 0435-110
Supply		
Rated operational voltage U_e		250 V AC
Rated operational current I_e		5 A
Rated control circuit voltage U_c		230 V AC
Primary operating range		0.8 ... 1.1 × U_c
Rated frequency f_n		50/60 Hz
Measuring circuit		
Setting range of the liquid level		2 ... 450 kΩ
Switching point hysteresis of set value	At 450 kΩ	3%
	At 2 kΩ	6%
Electrode voltage		Max. approx. 10 V AC
Electrode current		Max. approx. 1.5 mA AC
Response delay	Adjustable	0.2 ... 20 s
OFF-delay	Adjustable	0.2 ... 20 s
Test voltage	Input/auxiliary circuit	4 kV
	Input/output circuit	4 kV
	Auxiliary/output circuit	4 kV
Voltage temperature influence	From set value	<2%
Max. cable length to the electrodes at 100 μF/km	Set value 450 kΩ	50 m
	Set value 100 kΩ	200 m
	Set value 35 kΩ	500 m
	Set value 10 kΩ	1500 m
	Set value 5 kΩ	3000 m
Connection		
Terminals	± screw (Pozidriv)	PZ 2
Conductor cross-sections	Rigid, max.	Max. 2 × 2.5 mm ²
	Flexible, with end sleeve	Min. 1 × 0.50 mm ²
Ambient conditions		
Permissible ambient temperature		-20 ... +60 °C
Resistance to climate	Acc. to EN 60068-1	20/60/4

Accessories

Immersion electrodes



- Made of stainless steel, with PG13 sealing cap
- Suitable for pure water in open containers

Temperature range	Connection	Article No.
0 ... 60 °C	Terminal connection	5TG8223

5TT3 line circuit relays

To interrupt circuits where there are no active loads

Mounting width 1 MW



Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control circuit voltage U_c	
250 V AC	16 A	1 NC contact	230 V AC	5TT3171

Further technical specifications

Standards			
Standards		IEC 60255; DIN VDE 0435-110	
Supply			
Rated operational voltage U_e			250 V AC
Rated operational current I_e	AC-1		16 A
Rated control circuit voltage U_c			230 V AC
Primary operating range			0.85 ... $1.15 \times U_c$
Rated frequency			50/60 Hz
Rated power dissipation P_v	Electronics		5 VA
	Contacts		2.6 VA
Contacts			
Response value	Adjustable		2 ... 20 VA
Release value	% of the response value		70%
Electrical service life	In switching cycles at 3 A (AC-11)		5×10^5
Safety			
Rated impulse withstand voltage U_{imp}	Input/output		>4 V
Degree of protection	Acc. to IEC/EN 60529		IP20, with connected conductors
Safety class	Acc. to EN 61140/VDE 0140-1		II
Monitoring voltage			3 V
Connection			
Terminals	\pm screw (Pozidriv)		PZ 1
Conductor cross-sections	Rigid		Max. $2 \times 2.5 \text{ mm}^2$
	Flexible, with end sleeve		Min. $1 \times 0.50 \text{ mm}^2$
Ambient conditions			
Permissible ambient temperature			$-20 \dots +45 \text{ }^\circ\text{C}$
Humidity class	Acc. to IEC 60068-2-30		F

Accessories

Base load resistors for electronic devices

- With 15 cm connection wires, end sleeves and shrink sleeving

Article No.

5TG8222

7LQ2 dimmer switches

For lighting system monitoring and control

Mounting width 1 MW




Rated operational voltage U_e	Rated operational current I_e	Contacts	Rated control circuit voltage U_c	
230 V AC	16 A	1 NO contact	250 V AC	7LQ2300

Further technical specifications

Standards		
Standards	EN 60669-1	
Supply		
Rated operational voltage U_e	230 V AC	
Rated frequency f_n	50/60 Hz	
Safety		
Degree of protection	IP30	
Contacts		
Incandescent lamp/halogen lamp load	2000 W	
Energy-saving lamp load	1000 W	
Fluorescent lamp load	Series corrected	2000 W
	Parallel corrected (at max. 70 μ F)	1000 W
LV halogen lamp load ECG	2000 W	
Luminosity setting	1 ... 100 000 Lux	
Measuring circuit		
On/off-delay	Approx. 90 s	
Connection		
Terminals	\pm screw (Pozidriv) PZ1	
Conductor cross-sections	Rigid, max. Max. 2 x 1.5 mm ²	
Mechanical data		
Width	17.5 mm (1 MW)	
Fixing	Standard mounting rail	
Ambient conditions		
Permissible ambient temperature	-20 ... +55 °C	

Spare part

Light sensor		
 <ul style="list-style-type: none"> Included in the 7LQ2300 package IP65 Degree of protection 	Temperature range	Mounting
	-20 ... +70 °C	Surface mounting
		Article No.
		7LQ2920



Simply well supplied

Whether you need socket outlets for installing in VDE, UL, CEI or CEE distribution boards or power supply units – our electrical installation technology offers you a complete program.

Short-circuit-proof transformers und power supply units with different voltage and power ratings fulfill every requirement for safety extra-low voltage systems.

Transformers, Power Supply Units and Socket Outlets



All the information you need	12/2
System overview	12/4
Transformers	12/6
4AC32 bell transformer	12/6
4AC37 safety transformer	12/8
Power supply units	12/10
4AC2 electronic power supply unit	12/10
Socket outlets	12/12
5TE6 socket outlet for modular installation devices	12/12

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about transformers, power supply units and socket outlets, please visit our website
www.siemens.com/lowvoltage

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products
www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Transformers, power supply units and socket outlets
sie.ag/2mmSHHu

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Transformers, power supply units and socket outlets ([45315886](tel:45315886))

Technical overview of transformers, power supply units and socket outlets



The fast way to get you to our online services

This page provides you with comprehensive information and links on transformers, power supply units and socket outlets

www.siemens.com/lowvoltage/product-support ([109764946](tel:109764946))

System overview

Transformers



Bell transformers



Safety transformers

Power supply units



Electronic power supply units

Socket outlets



Modular installation devices-socket outlets

Accessories



Hinged lid

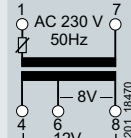
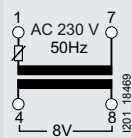
4AC32 bell transformer

U_e 230 V AC



Bell transformers

Mounting width 2 MW



Rated secondary current I_{sec} AC
at rated secondary voltage U_{sec} AC

4 V	8 V	12 V	24 V
–	1.0 A	–	–
–	–	0.6 A	–
2.0 A	2.0 A	1.5 A	–
–	2.0 A	1.3 A	0.6 A

Rated operational power P_s

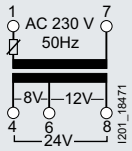
8 VA	8 VA
4AC3208-0	–
–	4AC3208-1
–	–

Further technical specifications

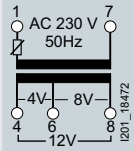
	4AC3208-0	4AC3208-1	4AC3214-0	4AC3218-0
Standards				
Standards	EN 61558-1, EN 61558-2-8			
Supply				
Rated operational voltage U_e	230 V AC	230 V AC	230 V AC	230 V AC
Operating range at 50 Hz	$1.04 \times U_e$	$1.04 \times U_e$	$1.04 \times U_e$	$1.04 \times U_e$
Rated frequency	50 Hz	50 Hz	50 Hz	50 Hz
Rated power dissipation P_v	In no-load operation	1.2 W	1.2 W	1.3 W
	At a rated voltage of 4 V	–	–	5.5 W
	At a rated voltage of 8 V	5.7 W	5.7 W	10.5 W
	At a rated voltage of 12 V	–	3.8 W	7.4 W
	At a rated voltage of 24 V	–	–	4.2 W
Safety				
Safe separation	Creepage distances and clearances		>6 mm	
Insulation class	E			
Test voltage (50 Hz, 1 s)	Primary against secondary winding		4 kV	
Connection				
Conductor cross-section	Rigid	1 × 4 mm ² or 2 × 2.5 mm ²		
	Flexible, with end sleeve	1 × 2.5 mm ² or 2 × 1.5 mm ²		
Environmental conditions				
Permissible ambient temperature	40 °C	35 °C	40 °C	40 °C
Permissible humidity	91%	91%	91%	91%
Degree of protection	Acc. to EN 60629	IP20	IP20	IP20
Safety class	Acc. to EN 61140 (VDE 0140-1)	II	II	II



2 MW



2 MW



14 VA

-
-
-
4AC3214-0

18 VA

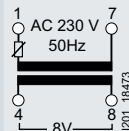
-
-
4AC3218-0
-

4AC37 safety transformer

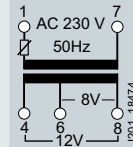
U_e 230 V AC



Mounting width 2 MW



3 MW



Rated secondary current I_{sec} AC
at rated secondary voltage U_{sec} AC

8 V	12 V	16 V	24 V	32 V
2.0 A	–	–	–	–
–	2.0 A	–	–	–
–	3.3 A	2.5 A	1.6 A	1.2 A
–	–	–	1.6 A	–
–	5.2 A	–	2.6 A	–

Rated operational power P_s

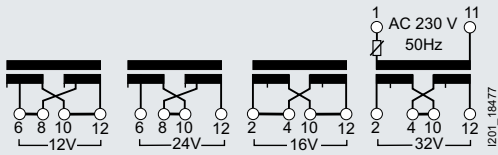
16 VA	24 VA
4AC3716-0	–
–	4AC3724-0
–	–
–	–
–	–

Further technical specifications

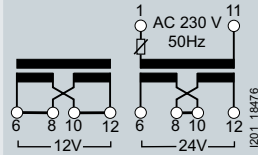
	4AC3716-0	4AC3724-0	4AC3740-0	4AC3740-1	4AC3763-0
Standards					
Standards	EN 61558-1, EN 61558-2-6				
Supply					
Rated operational voltage U_e	230 V AC	230 V AC	230 V AC	230 V AC	230 V AC
Operating range at 50 Hz	$1.04 \times U_e$	$1.04 \times U_e$	$1.04 \times U_e$	$1.04 \times U_e$	$1.04 \times U_e$
Rated frequency	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Rated power dissipation P_v	In no-load operation	1.1 W	1.1 W	3.5 W	3.9 W
	At a rated voltage of 8 V	6.8 W	4.6 W	–	–
	At a rated voltage of 12 V	–	7.6 W	7.1 W	7.5 W
	At a rated voltage of 16 V	–	–	–	7.7 W
	At a rated voltage of 24 V	–	–	7.7 W	8.1 W
	At a rated voltage of 32 V	–	–	–	7.6 W
Safety					
Safe separation	Creepage distances and clearances	>6 mm	>6 mm	>6 mm	>6 mm
Insulation class		E	E	F	F
Test voltage (50 Hz, 1 s)	Primary against secondary winding	4 kV	4 kV	4 kV	4 kV
Connection					
Conductor cross-section	Rigid	1 × 4 mm ² or 2 × 2.5 mm ²			
	Flexible, with end sleeve	1 × 2.5 mm ² or 2 × 1.5 mm ²			
Environmental conditions					
Permissible ambient temperature		25 °C			
Permissible humidity		91%			
Degree of protection	Acc. to EN 60629	IP20			
Safety class	Acc. to EN 61140 (VDE 0140-1)	II			



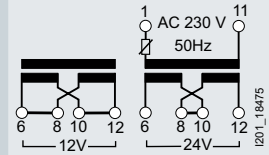
5 MW



5 MW



5 MW



40 VA

-
-
4AC3740-1
-
-

40 VA

-
-
-
4AC3740-0
-

63 VA

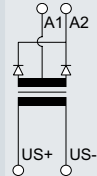
-
-
-
-
4AC3763-0

4AC2 electronic power supply unit

SELV, short-circuit-proof



Mounting width 2 MW



Rated operational voltage U_e		Rated secondary voltage U_{sec}	Rated secondary current I_{sec}	Rated operational power P_s	4AC2402
AC	DC				
85 ... 265 V	85 ... 300 V	24 ±5% V	0.35 A	8.4 W	

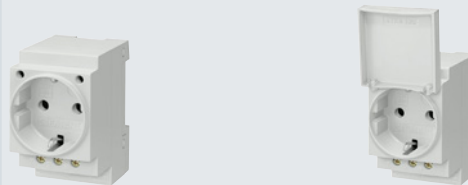
Further technical specifications

Standards		
Standards		EN 60068-2, EN 61558-1, EN 61000-4
Approvals		–
Supply		
Primary operating range	At 50/60 Hz	–
Rated frequency		50/60 Hz
Operating frequency range		–
Rated power dissipation P_v	In no-load operation	–
	At rated load	–
Safety		
Current limitation		Electronic overload protection
Residual ripple		<100 mV
Hum-free	Core molded	–
Safe separation, creepage distances and clearances		>5.5 mm
Insulation class		–
Test voltage (50 Hz, 1 min)	Primary against secondary winding	–
Insulation resistance		4 kV
Rated impulse withstand voltage / degree of pollution	Acc. to IEC 60664-1	6 kV/2
Static discharge	Acc. to IEC/EN 61000-4-2	8 kV
RF irradiation	Acc. to IEC/EN 61000-4-3	10 V/m
Transient overvoltage (burst)	Acc. to IEC/EN 61000-4-4	4 kV
Transient overvoltage (surge)	Acc. to IEC/EN 61000-4-5	
	Supply lines A1, A2	1 kV
	A1/A2 and ground	2 kV
RF, conducted disturbance	Acc. to IEC/EN 61000-4-6	10 V
Interference suppression to lower limit class	Acc. to EN 61000-6-3	Complied with
Connection		
Terminals	Screw (slotted-head)	M2.5
	± screw (Pozidriv)	–
Conductor cross-section	Rigid	0.5 ... 2.5 mm ²
	Flexible, with end sleeve, min.	0.5 ... 1.5 mm ²
Environmental conditions		
Permissible ambient temperature		–20 ... +60 °C
Resistance to climate	Acc. to IEC/EN 60068-1	20/045/04
Resistance to vibrations, frequency 10 ... 55 Hz	Acc. to IEC/EN 60068-2-6	0.35 mm amplitude
Degree of protection	Acc. to EN 60529	IP20, with connected conductors
Safety class	Acc. to EN 61140	II

5TE6 socket outlet for modular installation devices

SCHUKO® socket outlet DIN VDE 0620-1

Version



Rated operational voltage U_e	Rated operational current I_e	Mounting width		
Without hinged lid ¹⁾				
125 V AC	15 A	2.5 MW	–	–
230 V AC	16 A	2.5 MW	5TE6800	–
With hinged lid ²⁾				
230 V AC	16 A	2.5 MW	–	5TE6801

Accessories

5TE6 hinged lids for socket outlets



Mounting width	Article No.	Article No.
2.5 MW	5TE9120	–





¹⁾ The lids can be retrofitted on all devices.


²⁾ In distribution boards with 55 mm mounting depth, the socket outlet can only be used without the hinged lid.

³⁾ In system components where equipment is still live even after the main switch has been disconnected, this must be indicated according to EN 50110-1 (VDE 0105-1) and IEC/EN 60204-1/VDE 0113-1. Yellow socket outlets are used for these applications.

Further technical specifications

	5TE6800 5TE6801 5TE6810	5TE6802	5TE6803	5TE6804
Standards				
Standards	VDE 0620-1	CEI 23-50	CEE 7 standard sheet V	UL 498
Approvals	VDE 0620-1	–	–	UL File No. E258598/ CSA C22.2 No. 182.3M
Connection				
Terminals	± screw (Pozidriv)	PZ1		
Terminal tightening torque	Max.	0.8 ... 1 Nm		
Stripped length		10 mm		
Conductor cross-section	Rigid	1.5 ... 6 mm ² (AWG 10 ... 14)		
	Flexible, with end sleeve	0.5 ... 4 mm ² (AWG 14)		
Environmental conditions				
Permissible ambient temperature		–10 ... +55 °C		
Degree of protection	Acc. to EN 60529	IP20, with connected conductors		
Mounting position	Without lid	Any		
	With lid	Horizontally or vertically		

	Socket outlets CEE 7 standard sheet V	Socket outlets CEI 23-50	Socket outlets UL 498
Yellow RAL 1018 ³⁾	With grounding pin		
			
-	-	-	5TE6804
5TE6810	5TE6803	-	-
-	-	5TE6802	-
Article No.	Article No.	Article No.	Article No.
-	5TE9120	-	5TE9120



Simplified distribution board design and time-saving assembly

Simplified assembly and connection of electrical power distribution systems and devices ensures that customer requirements can be met more quickly and flexibly.

In addition, installation and plant engineers benefit from a simplified configuration and reduced space requirements in distribution systems and control cabinets.

Our busbar systems for electrical installations offer a particularly easy way of fitting distribution systems with electrotechnical components.

The modular design saves space, while quick assembly contacts ensure fast mounting.

Busbar Systems



All the information you need	13/2
System overview	13/4
Quick selection guide	13/5
40 mm 8US busbar system	13/6
Basic assemblies	13/6
60 mm 8US compact busbar system	13/7
Basic assemblies	13/7
Infeeds and connection methods	13/8
Built-in components	13/8
Device adapters	13/10
60 mm 8US busbar system	13/12
Basic assemblies	13/12
Infeeds and connection methods	13/16
Built-in components	13/22
Device adapters and device holders	13/26

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about busbar systems, please visit our website

www.siemens.com/lowvoltage

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Busbar systems sie.ag/2IXoUFI

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual Busbar systems (81379793)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Technical overview of busbar systems



The fast way to get you to our online services

This page provides you with comprehensive information and links on busbar systems

www.siemens.com/lowvoltage/product-support (109769087)

System overview

1 Basic assemblies



Busbar supports



N/PE busbar supports

Accessories



Flat copper profiles



TT special profiles



Connection pieces



Cover profiles



Blanking covers

2 Infeeds and connection methods



Connection modules



Terminals

Accessories



Covers

3 Built-in components



Bus-mounting fuse bases



Bus-mounting fuse holders



Bus-mounting switch disconnectors

Accessories



Covers



Auxiliary switches



Lateral modules

4 Device adapters



Device adapters



Device holders

Accessories



N/PE modules

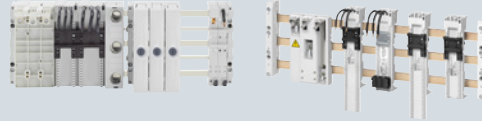


Lateral modules



Vibration & shock kits

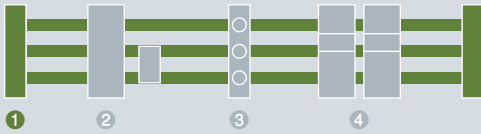
Quick selection guide



		40 mm busbar system	60 mm compact busbar system	60 mm busbar system flat copper profile	60 mm busbar system TT profile
Busbars					
Busbar center-to-center spacing		40 mm	60 mm	60 mm	60 mm
Flat copper profiles		5 mm 12 × 5 mm 15 × 5 mm	12 × 5 mm	12 × 5 mm 15 × 5 mm 20 × 5 mm 25 × 5 mm 30 × 5 mm	–
		10 mm 12 × 10 mm 15 × 10 mm	12 × 10 mm	20 × 10 mm 30 × 10 mm	–
TT special profile		–	–	–	2400 × 30 × 40 mm
Rated values					
Rated current I _e		IEC 200 ... 360 A	200 ... 360 A	200 ... 900 A	1020 ... 1600 A
		UL 508 –	300 A	630 A	1400 A
Rated voltage U _e		IEC 690 V AC	690 V AC	690 V AC	690 V AC
		UL 508 –	600 V AC	600 V AC	600 V AC
Standards					
IEC		■	■	■	■
UL 508		■	■	■	■
Connection modules and terminals for					
Circular conductors		IEC –	Cu 1.5 ... 150 mm ²	Cu 1.5 ... 300 mm ² Al 95 ... 300 mm ²	Cu 16 ... 300 mm ²
		UL 508 –	Cu AWG 2 ... MCM 300	Cu AWG 16 ... MCM 600 Al AWG 3	Cu AWG 4 ... MCM 600
Laminated copper		–	Cu lam. 15 ... 20 × 5 ... 10 mm	Cu lam. 3 × 20 × 1 ... 10 × 32 × 1 mm	Cu lam. 2 × 40 × 10 mm
Cable lugs		–	–	Max. 240 mm ²	–
Built-in components for					
NEOZED bus-mounting fuse bases		–	■	■	■
DIAZED bus-mounting fuse bases		–	–	■	■
Bus-mounting fuse holders for cylindrical fuses 10 × 38 mm		–	–	■	■
Class CC bus-mounting fuse holders		–	–	■	■
Class J bus-mounting fuse holders		–	–	■	■
NEOZED bus-mounting switch disconnectors		–	–	■	■
Device adapters for					
Universal application 3P / 5P		–	■ / ■	■ / ■	■ / ■
Molded case circuit breakers		–	■	■	■
Switch disconnectors		–	–	■	■
Fuse switch disconnectors		–	–	■	■
SIRIUS 3RM1 motor starters		–	■	–	–
SIRIUS load feeders		–	–	■	■
3RM193 fuse module		–	■	–	–
5SY miniature circuit breakers		–	■	–	–
More information					
Catalog LV 10		See page 13/6	See page 13/7	See page 13/12	See page 13/14

1 Basic assemblies

For 40 mm 8US busbar system up to 400 A



No. of poles	Busbar supports	
	3P	5P
		

Flat copper profiles				Rated voltage U_e IEC	Standard	Connection L1–L3	Connection L1–L3 + N + PE/N
12 × 5 mm	15 × 5 mm	12 × 10 mm	15 × 10 mm				
Interior mounting							
■	■	■	■	690 V AC	IEC	8US1903-3AB00 ¹⁾	–
■	–	■	–	690 V AC	IEC	–	8US1903-5AA00

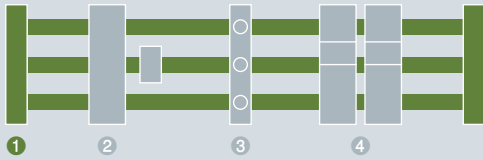
¹⁾ One package contains 2 busbar supports including inlay parts for bar thickness 5 mm and lateral finger-safe covers.

Suitable accessories

					3P	5P
Flat copper profile						
	Surface	Length	Size	Article No.	Article No.	
	Bare	2400 mm	12 × 5 mm	8WC5123	8WC5123	
			15 × 5 mm	8WC5121	–	
Cover profiles for busbars						
	Material	Length	Size	Article No.	Article No.	
	Plastic profile	1000 mm	12 × 5 mm	8US1922-2CA00	8US1922-2CA00	
			15 × 5 mm	8US1922-2AA00	–	

1 Basic assemblies

For 8US compact busbar system up to 360 A (3P) or 200 A (5P)



No. of poles	Busbar supports ¹⁾
3P / 5P	

Flat copper profiles		Rated voltage U_e		Short-circuit current rating SCCR		Standard	Dimensions	Min. order quantity	Connection
12 × 5 mm	12 × 10 mm	IEC	UL 508	3-pole	5-pole				L1–L3 + N + PE/N
Interior mounting									
■	■	690 V AC	–	54 kA	32 kA	IEC	12 × 160 × 45 mm	10 units	8US1923-5CA02
		–	600 V AC	18 kA	–	UL 508	12 × 160 × 45 mm	10 units	8US1923-5CA02

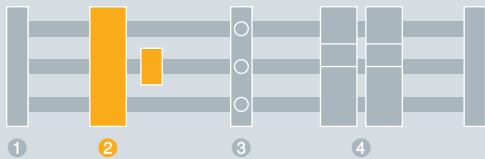
¹⁾ Including end cover

Suitable accessories

Flat copper profiles				
	Surface	Length	Size	Article No.
	Bare	2400 mm	12 × 5 mm	8WC5123
UL spacers for busbar supports				
	Dimensions	Minimum order quantity	Height	Article No.
	12 × 160 × 18 mm	10 units	18 mm	8US1922-1CA02
Stabilizing modules				
	<ul style="list-style-type: none"> Only for 12 × 5 mm busbars For protecting the N and PE busbars against bending 			
	Dimensions	Minimum order quantity	Article No.	
	2 × 160 × 47 mm	10 units	8US1928-5CA02	
Cover profiles				
	Dimensions	Minimum order quantity	Article No.	
	700 × 160 × 63 mm	2 units	8US1922-2CB02	
Holders for 8US1922-2CB02 cover profile				
	Dimensions	Minimum order quantity	Article No.	
	5 × 156 × 55 mm	10 units	8US1922-2CA02	

② Infeeds and connection methods

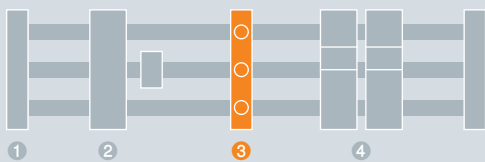
For 8US compact busbar system up to 360 A (3P) or 200 A (5P)



Conductor cross-section	Rated current I_e		Rated voltage U_e		Rated peak with-stand current IEC I_{pk} Max.	Standard	Minimum order quantity	Dimensions
	IEC	UL 508	IEC	UL 508				
Spring terminal								
1.5 ... 16 mm ²	63 A	48 A	690 V AC	600 V AC	10 kA	IEC, UL 508	6 units	20 × 160 × 91 mm
Connecting terminal								
6 ... 50 mm ²	175 A	175 A	690 V AC	600 V AC	40.5 kA	IEC, UL 508	1 unit	54 × 160 × 115 mm
10 ... 120 mm ²	250 A	200 A	690 V AC	600 V AC	35.4 kA	IEC, UL 508	1 unit	90 × 160 × 80 mm
			690 V AC	600 V AC	35.1 kA	IEC, UL 508	1 unit	30 × 160 × 80 mm
			690 V AC	600 V AC	35.4 kA	IEC, UL 508	1 unit	30 × 160 × 80 mm
35 ... 150 mm ²	275 A	285 A	690 V AC	600 V AC	45.9 kA	IEC, UL 508	1 unit	90 × 160 × 115 mm

③ Built-in components

For 8US compact busbar systems up to 360 A (3P)



Number of poles
Mounting width

Conductor cross-section	For flat copper profiles		Rated current I_e IEC	Rated voltage U_e IEC	Standard	Minimum order quantity
	12 × 5 mm	12 × 10 mm				
Box terminals						
Rigid 1.5 ... 10 mm ²	■	■	63 A	400 V AC	IEC	6 units
Flexible 1.5 ... 25 mm ²	■	■				

For NEOZED screw caps, NEOZED adapter sleeves and NEOZED fuse links, see page 7/1

For 12 × 5 mm and 12 × 10 mm flat copper profiles
For 3-pole system (up to 360 A)



Connection modules

3P

8US1921-1BA02

8US1921-1CB02

–

–

–

8US1921-1CC02

For 5-pole system (up to 200 A)



Connection modules

3P

–

–

8US1921-1CD02

–

–

–



Connection modules

N

–

–

8US1921-1CE02

–

–

–



Connection modules

PE

–

–

–

8US1921-1CF02

–

–

NEOZED bus-mounting bases

Size D02

3P

2 MW

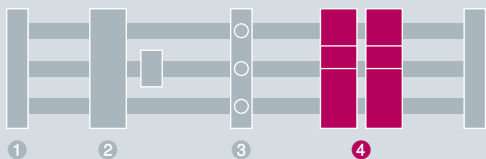


With touch protection

5SG6208

4 Device adapters

For 8US compact busbar system up to 360 A (3P) or 200 A (5P)




For 3-pole system
For universal applications




Rated current I _e	Rated voltage U _e		Standard	For flat copper profiles		Dimensions	Min. order quantity		
	IEC	UL 508		IEC	UL 508				12 × 5 mm
16 A	–	690 V AC	–	IEC	–	–	160 × 22.5 × 122 mm	4 units	–
							200 × 22.5 × 122 mm	5 units	–
25 A	–	690 V AC	–	IEC	■	–	160 × 22.5 × 41.5 mm	5 units	–
							185 × 22.5 × 23.5 mm	5 units	–
							200 × 22.5 × 41.5 mm	5 units	–
32 A	–	690 V AC	–	IEC	■	–	160 × 18 × 73 mm	12 units	–
	25 A	690 V AC	600 V AC	IEC, UL 508	■	■	160 × 45 × 63 mm	4 units	8US1651-5DK02
63 A	–	690 V AC	–	IEC	■	–	160 × 18 × 73 mm	12 units	–
							160 × 18 × 82 mm	12 units	–
	65 A	690 V AC	600 V AC	IEC, UL 508	■	■	160 × 54 × 63 mm	4 units	8US1661-5FK02
144 A	–	690 V AC	–	IEC	■	■	160 × 77 × 35 mm	1 unit	–

Suitable accessories

N modules

	Rated voltage U _e	Connecting terminal	Dimensions	Minimum order quantity	Article No.
	690 V AC	1.5 ... 16 mm ²	9 × 160 × 114 mm	12 units	–

PE modules

	Rated voltage U _e	Connecting terminal	Dimensions	Minimum order quantity	Article No.
	690 V AC	1.5 ... 16 mm ²	9 × 160 × 114 mm	12 units	–

Support modules






	Dimensions	Minimum order quantity	Article No.
	18 × 160 × 54 mm	6 units	8US1620-5AK02

Lateral modules

	Dimensions	Minimum order quantity	Article No.
	9 × 160 × 47 mm	12 units	8US1998-2BH02

Set of module connectors

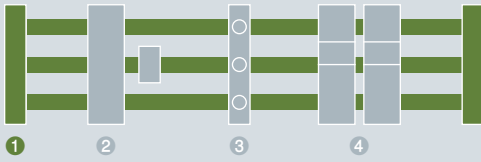
	Purpose	Package	Article No.
	For connecting adapters	1 pack = 100 units	–

For 3-pole system For 3VA10/11 molded case circuit breakers	For 5-pole system For universal applications	For SIRIUS 3RM1 motor starters and for relays	For 3RM193 fuse module	For 5SY miniature circuit breakers
				
With latching function	Adapters, 1-pole	With fuse module and DIN mounting rail	With DIN mounting rail	Adapters, 1-pole
–	–	8US1615-5CK10	–	–
–	–	8US1215-5CS10	–	–
–	–	–	8US1616-0AK02	–
–	–	–	8US1716-0RK00	–
–	–	–	8US1216-0AS00	–
–	8US1621-2NJ02	–	–	–
–	–	–	–	–
–	8US1621-2FK02	–	–	–
–	–	–	–	8US1624-2FK02
–	–	–	–	–
8US1613-4AU01	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
–	8US1600-0RE02	8US1600-0RE02	8US1600-0RE02	8US1600-0RE02	8US1600-0RE02
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
–	8US1600-0RF02	8US1600-0RF02	8US1600-0RF02	8US1600-0RF02	8US1600-0RF02
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1620-5AK02	8US1620-5AK02	8US1620-5AK02	8US1620-5AK02	8US1620-5AK02	8US1620-5AK02
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1998-2BH02	8US1998-2BH02	8US1998-2BH02	8US1998-2BH02	8US1998-2BH02	8US1998-2BH02
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
–	8US1998-1AA02	8US1998-1AA02	8US1998-1AA02	8US1998-1AA02	8US1998-1AA02

1 Basic assemblies

Up to 630 A



Flat copper profiles							Standard
12 × 5 mm	15 × 5 mm	20 × 5 mm	25 × 5 mm	30 × 5 mm	20 × 10 mm	30 × 10 mm	
Interior mounting							
■	■	■	■	■	■	■	IEC 61439-1
-	-	■	-	-	■	■	IEC 61439-1, UL 508 ¹⁾
■	■	■	■	■	■	■	IEC 61439-1
■	-	■	-	■	■	■	IEC 61439-1
■	■	■	■	■	■	■	IEC 61439-1, UL 508
Exterior mounting							
■	■	■	■	■	■	■	IEC 61439-1
■	■	■	■	■	■	■	IEC 61439-1

¹⁾ Only with base plate 8US1922-2UA01





Suitable accessories

Flat copper profile							
Surface	Length	Size	Rated current	Cross-section	Standard	Article No.	
Bare	1100 mm	25 × 5 mm	400 A	125 mm ²	EN 12167	8WC5031-1AA00	
		30 × 5 mm	447 A	150 mm ²	EN 12167	8WC5033-1AA00	
	2400 mm	12 × 5 mm	200 A	60 mm ²	EN 12167	8WC5123	
		15 × 5 mm	250 A	75 mm ²	EN 12167	8WC5121	
		20 × 5 mm	320 A	100 mm ²	EN 12167	8WC5126	
		25 × 5 mm	400 A	125 mm ²	EN 12167	8WC5131	
		30 × 5 mm	447 A	150 mm ²	EN 12167	8WC5133	
		20 × 10 mm	520 A	200 mm ²	EN 12167	8WC5128	
		30 × 10 mm	630 A	300 mm ²	EN 12167	8WC5134	
		Tin-plated	2000 mm	12 × 5 mm	200 A	60 mm ²	EN 12167
15 × 5 mm	250 A			75 mm ²	EN 12167	8WC5052	
20 × 5 mm	320 A			100 mm ²	EN 12167	8WC5053	
25 × 5 mm	400 A			125 mm ²	EN 12167	8WC5054	
30 × 5 mm	447 A			150 mm ²	EN 12167	8WC5055	
20 × 10 mm	520 A			200 mm ²	EN 12167	8WC5063	
30 × 10 mm	630 A			300 mm ²	EN 12167	8WC5065	


End covers			
For connection	For busbar support	Standard	Article No.
L1-L3	8US1923-2AA01, 8US1923-3AA01, 8US1923-3UA01	UL 508	8US1922-1AC00

Cover profiles for busbars						
Length	Width	Depth	Flat copper profile size	Standard	Article No.	
1000 mm	15 mm	10 mm	12 × 5 mm	UL 508	8US1922-2CA00	
	40 mm	9 mm	15, 20, 25, 30 × 5 mm	UL 508	8US1922-2AA00	
	40 mm	14 mm	12, 15, 20, 25, 30 × 10 mm	UL 508	8US1922-2BA00	


13

No. of poles	End and intermediate holders			N/PE busbar supports
	3P	2P	4P	1P
				
	Connection L1-L3	Connection L1-L3 + PE/N	Connection L1-L3 + PE/N	Connection PE/N
	8US1923-3AA01	–	–	–
	8US1923-3UA01	–	–	–
	–	–	8US1923-4AA00	–
	–	–	–	5SH3540
	–	–	–	8US1923-1AA01
	8US1923-2AA01	–	–	–
	–	8US1923-5AA00	–	–

Blanking covers

	Length	Height	Depth	Standard	Article No.
	700 mm	195 mm	63 mm	UL 508	8US1922-2EB00



Supports for blanking covers

	Depth	Standard	Article No.
	32 mm	UL 508	8US1922-2EA00
	107 mm	UL 508	8US1922-2EA01

Base plates

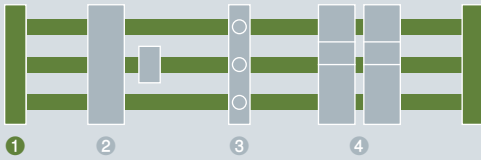
	Version	Length	Width	Standard	Article No.
	For 3-pole system	1100 mm	240 mm	UL 508	8US1922-2UA01

Connecting piece for flat copper profiles

	Length	For flat copper profiles	Article No.
	40 mm	20×5 mm, 25×5 mm, 30×5 mm, 20×10 mm, 25×10 mm, 30×10 mm	8US1921-2BE00
	55 mm	12×5 mm, 15×5 mm, 20×5 mm 12×10 mm, 15×10 mm, 20×10 mm	8US1921-2BF00

1 Basic assemblies

Up to 1600 A



Busbar supports	
No. of poles	3P

Copper profile	Rated current I_c		Rated voltage U_c		Short-circuit current rating SCCR		Standard	Connection
	IEC	UL 508	IEC	UL 508	IEC	UL 508		
Interior mounting								
TT special profile	1600 A	1400 A	690 V AC	600 V AC	90 kA	100 kA	IEC, UL 508	8US1943-3AA00

1 pack = 2 busbar supports + finger-safe end covers

Suitable accessories

TT special copper profile

Surface	Length	Rated current	Rated voltage	Cross-section	Article No.
Tin-plated	2400 mm	1600 A	690 V AC	720 mm ²	8US1948-2AA00

Cover profile for TT special copper profile

Length	Article No.
1000 mm	8US1922-2DA00

Blanking covers

Length	Height	Depth	Standard	Article No.
700 mm	195 mm	63 mm	UL 508	8US1922-2EB00

Supports for blanking covers

Depth	Standard	Article No.
32 mm	UL 508	8US1922-2EA00
107 mm	UL 508	8US1922-2EA01

Connecting piece for TT special profile

Article No.
8US1941-2BF01

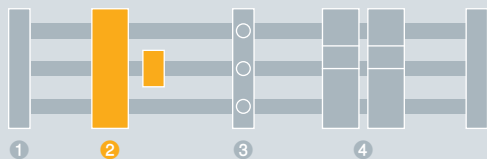
Partitions, closed

Length	Depth	Article No.
2400 mm	76 mm	8US1922-1JA00

• For additional lateral touch protection at the top / bottom

② Infeeds and connection methods

Up to 1600 A



Conductor cross-section, circular conductor		Conductor cross-section, laminated copper	Rated current I _e		Rated voltage U _e		Standard	Length
IEC	UL 508		IEC	UL 508	IEC	UL 508		
With cover								
Cu 1.5 ... 16 mm ²	Cu AWG 16 ... 4	Cu lam. 8 × 6 × 0.5 mm	63 A	48 A	690 V AC	600 V AC	IEC, UL 508	200 mm
Cu 6 ... 50 mm ²	Cu AWG 10 ... 2	–	175 A	175 A	690 V AC	600 V AC	IEC, UL 508	200 mm
Cu 25 ... 120 mm ²	Cu AWG 6 ... MCM 250	–	250 A	250 A	690 V AC	600 V AC	IEC, UL 508	200 mm
Cu 95 ... 300 mm ²	AWG 3/0 ... MCM 600	–	500 A	420 A	690 V AC	–	IEC, UL 508	200 mm
Al 120 ... 240 mm ²								
Without cover								
Cu 95 ... 300 mm ²	AWG 3/0 ... MCM 600	–	500 A	420 A	690 V AC	600 V AC	IEC, UL 508	184 mm
–	–	Cu lam. 3 × 20 × 1 ... 10 × 32 × 1 mm	550 A	420 A	690 V AC	600 V AC	IEC, UL 508	184 mm
For 4th pole (PE/N)²⁾								
Cu 1.5 ... 16 mm ²	–	–	–	–	690 V AC	600 V AC	IEC, UL 508	242 mm

¹⁾ Shown without cover

²⁾ For mounting on device adapter or device holder

Suitable accessories

Cover for connection module



Connection modules
 For 5 mm and 10 mm flat copper profiles For 5 mm and 10 mm flat copper profiles and TT special profile For laminated copper

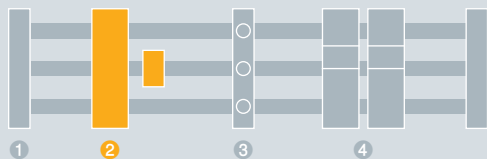


Width	Connection modules	Connection modules	Connection modules	Connection modules	Connection modules
	3P	3P	3P	PE/N	3P
20 mm	5SH3538	–	–	–	–
54 mm	–	–	8US1921-1BA00	–	–
81 mm	–	–	8US1921-1AA00	–	–
135 mm	–	5SH3535 ¹⁾	–	–	–
153 mm	–	–	–	–	8US1941-2AA03
153 mm	–	–	–	–	8US1941-2AA04
18 mm	–	–	–	8US1200-0AA00	–

Article No.	Article No.	Article No.	Article No.	Article No.
–	–	–	–	8US1922-1GC00

② Infeeds and connection methods

Up to 1600 A



Conductor cross-section, circular conductor		Conductor cross-section, laminated copper	Rated current I _e		Rated voltage U _e		Standard	Minimum order quantity
IEC	UL 508		IEC	UL 508	IEC	UL 508		
Cu 1.5 ... 16 mm ²	AWG 16 .. 6	Cu lam. 8×6×0.5 mm	65 A	55 A	690 V AC	600 V AC	IEC, UL 508	15 units 100 units
Cu 4 ... 35 mm ²	AWG 10 ... 2	Cu lam. 3×9×0.8 mm, Cu lam. 6×9×0.8 mm	115 A	115 A	690 V AC	600 V AC	IEC, UL 508	15 units 50 units
Cu 16 ... 70 mm ²	AWG 4 ... 2/0	Cu lam. 2×9×0.8 mm Cu lam. 6×9×0.8 mm Cu lam. 6×13×0.5 mm	175 A	175 A	690 V AC	600 V AC	IEC, UL 508	15 units 50 units
Cu 16 ... 120 mm ²	AWG 4 ... MCM 250	Cu lam. 4×15.5×0.8 mm Cu lam. 6×15.5×0.8 mm Cu lam. 10×15.5×0.5 mm	250 A	255 A	690 V AC	600 V AC	IEC, UL 508	15 units 50 units

Suitable accessories

Terminal covers for circular conductors



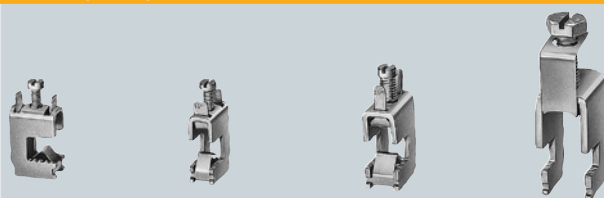
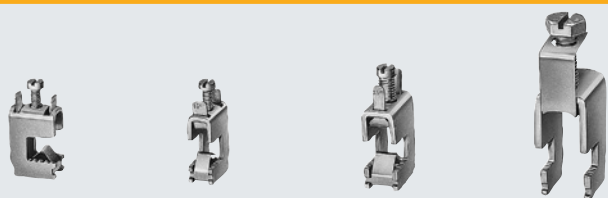
- Fixing to busbar

Length	Width
200 mm	84 mm

Terminals

For 12 × 5 mm, 15 × 5 mm, 20 × 5 mm, 25 × 5 mm and 30 × 5 mm flat copper profiles

For 12 × 10 mm, 15 × 10 mm, 20 × 10 mm, 25 × 10 mm and 30 × 10 mm flat copper profiles and TT special profile

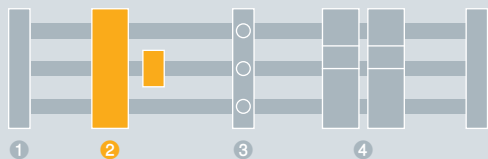


8US1921-2AA01	–	–	–	8US1921-2BA01	–	–	–
8US1921-2AA00	–	–	–	8US1921-2BA00	–	–	–
–	8US1921-2AB01	–	–	–	8US1921-2BB01	–	–
–	8US1921-2AB00	–	–	–	8US1921-2BB00	–	–
–	–	8US1921-2AD01	–	–	–	8US1921-2BD01	–
–	–	8US1921-2AD00	–	–	–	8US1921-2BD00	–
–	–	–	8US1921-2AC01	–	–	–	8US1921-2BC01
–	–	–	8US1921-2AC00	–	–	–	8US1921-2BC00

Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00	8US1922-1GA00

② Infeeds and connection methods

Up to 1600 A



Conductor cross-section, circular conductor		Conductor cross-section, laminated copper	Conductor cross-section, cable lugs	Rated current I _e		Rated voltage U _e		Standard
IEC	UL 508			IEC	UL 508	IEC	UL 508	
Cu 95 ... 185 mm ² Al 95 ... 185 mm ²	AWG 3/0 ... MCM 350	–	–	300 A	310 A	690 V AC	600 V AC	IEC, UL 508
Cu 95 ... 300 mm ² Al 120 ... 140 mm ²	AWG 3/0 ... MCM 600	–	–	500 A	420 A	690 V AC	600 V AC	IEC, UL 508
–	–	Cu lam. 3×20× 1 ... 10×24×1 mm	–	500 A	420 A	690 V AC	600 V AC	IEC, UL 508
–	–	Cu lam. 2×40×10 mm	–	1250 A	–	690 V AC	–	IEC
–	–	–	Max. 240 mm ²	630 A	–	690 V AC	–	IEC

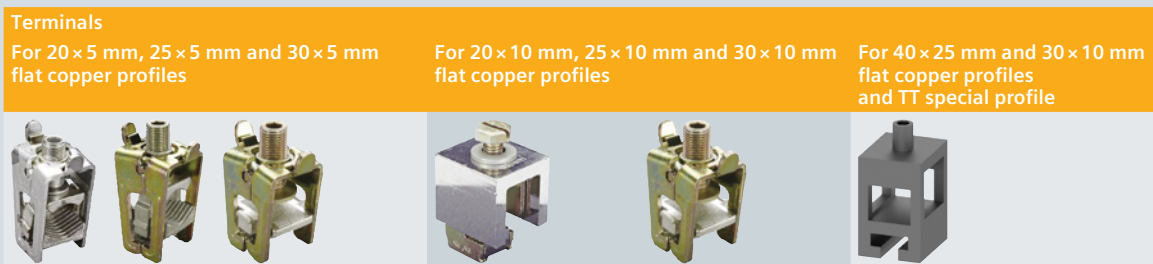
Suitable accessories

Terminal covers for circular conductors



- Fixing to busbar

Length	Width
200 mm	270 mm



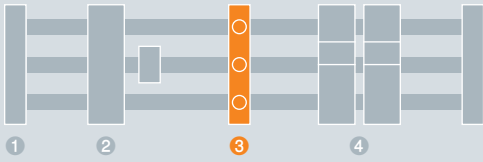
Fixing

-	8US1941-2AA01	-	-	-	-
-	8US1941-2AA02	-	-	-	-
M16 threaded pin, size 8 Allen key	-	8US1941-2BB00	-	8US1941-2BB00	-
M16 threaded pin, size 8 Allen key	-	-	-	-	8US1941-2BA00
M16 threaded pin, size 8 Allen key, M10 hexagon bolt, width across flats 17	-	-	8US1941-2AC00	-	-

Article No.	Article No.	Article No.	Article No.	Article No.
8US1922-1GA02	-	-	-	-

3 Built-in components

Up to 630 A



NEOZED bus-mounting fuse bases Size D02

Mounting width

1.5 MW

1.5 MW

2 MW



For flat copper profiles	Rated current I _e		Rated voltage U _e		Standard	Standard	With touch protection		
	IEC	UL 508	IEC AC	IEC DC			UL		
Box terminals									
5 mm and 10 mm	25 A	–	500 V AC	–	–	IEC	–	–	
	63 A	–	400 V AC	250 V DC	–	IEC	5SG6202	5SG6206	5SG6207
			690 V AC	–	600 V AC	IEC,	–	–	–
	–	30 A	690 V AC	–	–	600 V AC	IEC,	–	–
								–	–
								–	–
								–	–
–	100 A	–	–	–	600 V AC		–	–	
–	200 A	–	–	–	600 V AC		–	–	
–	400 A	–	–	–	600 V AC		–	–	








Suitable accessories

NEOZED SR60 covers for standard version

	Size	Version	Mounting width	Article No.	Article No.	Article No.
	D02	Standard	1.5 MW	5SH5241	–	–
		Extra wide	2 MW	5SH5242	–	–
		With double width	3 MW	5SH5243	–	–

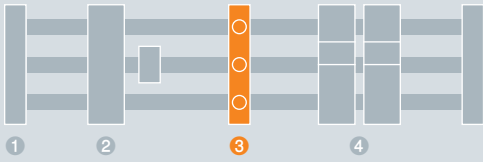
DIAZED SR60 covers for standard version

	Size	Mounting width	Article No.	Article No.	Article No.
	DII	2.3 MW	–	–	–
	DIII	3.2 MW	–	–	–

DIAZED bus-mounting fuse bases		Bus-mounting fuse holders				
Size DII	Size DIII	Cylindrical fuses 10 x 38 mm	Class CC	Class J		
2.3 MW	3.2 MW	1.5 MW	1.5 MW	106 mm	184 mm	256 mm
						
Standard	With touch protection			3P	3P	3P
5SF6015	5SF6020	-	-	-	-	-
-	-	-	-	-	-	-
5SF6215	5SF6220	-	-	-	-	-
-	-	3NW7431	-	-	-	-
-	-	-	3NW7431-0HG	-	-	-
-	-	-	-	3NW7431-6HG	-	-
-	-	-	-	-	3NW7431-7HG	-
-	-	-	-	-	-	3NW7431-8HG
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
5SH2042	-	-	-	-	-	-
5SH2242	-	-	-	-	-	-

3 Built-in components

Up to 630 A



NEOZED bus-mounting switch disconnectors Size D02

Mounting width



For flat copper profiles	Rated current I_n		Rated voltage U_n			Standard	Without LED signal detector		With LED signal detector
	IEC	UL 508	IEC AC	IEC DC	UL 508				
Box terminals									
5 mm and 10 mm	63 A	–	400 V AC	–	–	IEC	5SG7234-1 ²⁾	–	5SG7234-2 ²⁾
				110 V DC	–	IEC	–	5SG7230 ¹⁾	–

¹⁾ From 35 A current load use 5SH5526 lateral module
²⁾ From 35 A current load use 5SH5533 lateral module

Suitable accessories

Auxiliary switches



- For signaling the switching state for bus-mounting switch disconnectors

Contacts	Mounting width	Article No.	Article No.	Article No.
1 CO contact	0.5 MW	–	5SH5525	–

Lateral modules



- For greater heat dissipation for loads from 35 A

Mounting width	Article No.	Article No.	Article No.
0.5 MW	5SH5533	5SH5526	5SH5533

Reducers



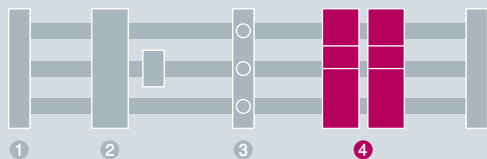
- For NEOZED D01 fuse links in SR60 bus-mounting switch disconnectors

Article No.	Article No.	Article No.
–	5SH5527	–

13

4 Device adapters and device holders

For universal application up to 1600 A



Rated current I _e		Rated voltage U _e		Standard	For copper profiles	Adapters		Connecting cable		
IEC	UL 508	IEC	UL 508			Width	Length	Cross-section	Max. temperature	Length
25 A	25 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	45 mm	200 mm	AWG 12	150 °C	99 mm
							260 mm	AWG 12	150 °C	167 mm
							260 mm	AWG 12	150 °C	167 mm
32 A	32 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	45 mm	200 mm	AWG 10	105 °C	118 mm
							260 mm	AWG 10	150 °C	99 mm
							260 mm	AWG 10	150 °C	167 mm
80 A	80 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	54 mm	200 mm	AWG 4	150 °C	150 mm
							260 mm	AWG 4	150 °C	150 mm
							119 mm	AWG 4	150 °C	150 mm
100 A	100 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	72 mm	200 mm	AWG 4	105 °C	210 mm
-	-	-	-	-	5 mm, 10 mm, TT profile	45 mm	200 mm	-	-	-
-	-	-	-	-	5 mm, 10 mm, TT profile	45 mm	260 mm	-	-	-

13

Accessories

Lateral modules



- For extending device adapters and device holders of the same length

Length	Width
200 mm	9 mm

Device adapters with connecting cables
For contact with busbars

Device holders
No electrical contact



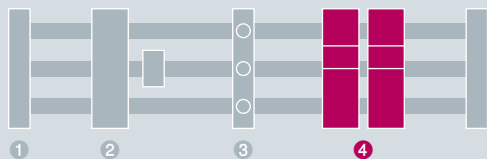
For lateral mounting
on device adapter

8US1251-5DS10	–	–	–	–	–	–	–
8US1251-5DS11	–	–	–	–	–	–	–
8US1251-5DT10	–	–	–	–	–	–	–
8US1251-5DT11	–	–	–	–	–	–	–
–	8US1211-1NS10	–	–	–	–	–	–
–	–	8US1251-5NS10	–	–	–	–	–
–	–	8US1251-5NS11	–	–	–	–	–
–	–	8US1251-5NT10	–	–	–	–	–
–	–	8US1251-5NT11	–	–	–	–	–
–	–	–	8US1261-5MS13	–	–	–	–
–	–	–	8US1261-6MT10	–	–	–	–
–	–	–	–	–	8US1211-6MT10	–	–
–	–	–	–	8US1211-4TR00	–	–	–
–	–	–	–	–	–	8US1250-1AA10	–
–	–	–	–	–	–	8US1250-5AS10	–
–	–	–	–	–	–	8US1250-5AT10	–

Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.	Article No.
8US1998-2BJ10	8US1998-2BJ10	8US1998-2BJ10	8US1998-2BJ10	–	–	8US1998-2BJ10	–

4 Device adapters and device holders

For molded case circuit breakers and switch disconnectors up to 1600 A



Rated current I_e		Rated voltage U_e		Standard	For copper profile	Adapters		Connecting cable
IEC	UL 508	IEC	UL 508			Length	Width	
Screw terminals								
80 A	80 A	–	600 V AC	UL 508	5 mm, 10 mm, TT profile	200 mm	81 mm	AWG 4
125 A	125 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	90 mm	Cu laminated 6×9×0.8 mm
Busbar contact								
144 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	200 mm	76 mm	–
160 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	175 mm	108 mm	–
250 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	175 mm	108 mm	–
Tubular contacts								
150 A	150 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	190 mm	105 mm	–
250 A	250 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	190 mm	105 mm	–
						240 mm	105 mm	–
	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	270 mm	140 mm	–
400 A	400 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	296 mm	140 mm	–
540 A	540 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	296 mm	140 mm	–
580 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	325 mm	184 mm	–
590 A	600 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	300 mm	140 mm	–
	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	300 mm	185 mm	–
M10 pin connector								
400 A	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	320 mm	184 mm	–
630 A	630 A	690 V AC	600 V AC	IEC, UL 508	5 mm, 10 mm, TT profile	320 mm	250 mm	–
	–	690 V AC	–	IEC	5 mm, 10 mm, TT profile	320 mm	184 mm	–
						320 mm	250 mm	–

¹⁾ Observe the short-circuit strength of the busbar system: Short-circuit strength > 50 kA on request.

²⁾ Usable only for 3VL circuit breakers with line-side box terminals.

³⁾ Only for 3VL 250 A circuit breakers, for screw fixing with metric thread, for flat terminals.

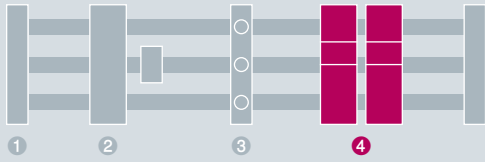
⁴⁾ Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R with cable lug, or as a flat conductor for an M10 pin connector.

⁵⁾ Without connecting cables. The connecting cable between adapter and device should be manufactured in accordance with the rated current as a round cable, e.g. H07V-R, bared at both ends for tunnel terminals.

Device Size / version	Device adapter For molded case circuit breakers				
	3-pole	4-pole	3-pole	For switch disconnectors 3KA and 3KL	For fuse switch disconnectors 3NP5
NGG, HGG, LGG	8US1240-5MA00	–	–	–	–
3VA10, 3VA11, 3VA51, NGG, HGG, LGG (connection at top)	8US1211-4SS00	–	–	–	–
3VA10, 3VA11, 3VA51 (connection at bottom)	8US1215-4SS00	–	–	–	–
3VA10 3VA11	8US1213-4AU01	–	–	–	–
3VL1 ²⁾ , 3VL2 ²⁾	–	–	8US1211-4SL01	–	–
3NP5060 (NH00)	–	–	–	–	8US1291-4SB00
3VL3 ³⁾	–	–	8US1211-4SL00	–	–
VL150X UL CG frame	–	–	8US1213-4AQ01	–	–
VL150 UL DG frame	–	–	8US1213-4AQ03	–	–
VL250 UL FG frame	–	–	8US1213-4AQ03	–	–
3VA12, 3VA20, 3VA21, 3VA22, 3VA52, 3VA61, 3VA62	8US1213-4AP03	–	–	–	–
3VA12, 3VA20, 3VA21, 3VA22	–	8US1313-4AH03	–	–	–
VL400 UL JG frame	–	–	8US1213-4AH00	–	–
VL400X UL LG frame	–	–	8US1213-4AH00	–	–
3VL5	–	–	8US1213-4AF00	–	–
3VA23, 3VA24, 3VA63, 3VA64	8US1213-4AH04	–	–	–	–
3VA23, 3VA24	–	8US1313-4AM04	–	–	–
3VL1 up to 3VL4 (also with RCD module) ²⁾	–	–	8US1210-4AF00 + 8US1927-4AF01	–	–
3NP52, 3NP53, 3NP54 ⁵⁾	–	–	–	–	8US1210-4AG00
3KA52, 3KA53, 3KL52, 3KL53	–	–	–	8US1210-4AF00 ⁴⁾	–
3KA55, 3KA57, 3KA58, 3KL55, 3KL57	–	–	–	8US1210-4AG00 ⁴⁾	–

4 Device adapters and device holders

For load feeders up to 1600 A



Rated current I _e		Rated voltage U _e		Standard	For copper profile	Adapters		Connecting cable		Device Size	
IEC	UL 508	IEC	UL 508			U, s	Length	Width	Cross-section		Max. temperature
Screw terminals											
25 A	25 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 12	150 °C	S00
							260 mm	45 mm	AWG 12	150 °C	S00
32 A	32 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 10	150 °C	S0
							260 mm	45 mm	AWG 10	150 °C	S0
							–	–	690 V AC	UL, C	5 mm, 10 mm, TT profile
65 A	65 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	260 mm	54 mm	AWG 4	150 °C	S2
								119 mm	AWG 4	150 °C	S2
80 A	80 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	54 mm	AWG 4	150 °C	S2
							215 mm	72 mm	AWG 4	150 °C	S3
Spring-loaded terminals											
25 A	25 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 12	150 °C	S00
							260 mm	45 mm	AWG 12	150 °C	S00
32 A	32 A	690 V AC	600 V AC	–	IEC, UL 508	5 mm, 10 mm, TT profile	200 mm	45 mm	AWG 10	150 °C	S0
							260 mm	45 mm	AWG 10	150 °C	S0

13

Suitable accessories

Vibration & shock kit S2



Purpose

For size 2 devices

Lateral modules



- For extending device adapters and device holders of the same length

Length

200 mm

Width

9 mm

Device adapters for load feeders

SIRIUS 3RV2/3RT2

Circuit breakers

Direct-on-line starters

Reversing starters

SIRIUS 3RV1/3RT1

Circuit breakers

SIRIUS 3RA6

Direct-on-line starters

Reversing starters



8US1251-5DS10	8US1251-5DS10	8US1251-5DS10 + 8US1250-5AS10	–	–	–
8US1251-5DS10	–	–	–	–	–
–	8US1251-5DT10	–	–	–	–
8US1251-5NS10	–	–	–	–	–
8US1251-5NT10	8US1251-5NT10	8US1251-5NT10 + 8US1250-5AT10	–	–	–
–	–	–	–	8US1211-1NS10	8US1211-1NS10 + 8US1250-1AA10
–	8US1261-6MT10	–	–	–	–
–	–	8US1211-6MT10	–	–	–
8US1261-5MS13	–	–	–	–	–
–	–	–	8US1211-4TR00	–	–
8US1251-5DS11	–	–	–	–	–
8US1251-5DT11	8US1251-5DT11	8US1251-5DT11 + 8US1250-5AT10	–	–	–
8US1251-5NS11	–	–	–	–	–
8US1251-5NT11	8US1251-5NT11	8US1251-5NT11 + 8US1250-5AT10	–	–	–

Article No.

8US1998-1DA10

Article No.

8US1998-1DA10

Article No.

8US1998-1DA10

Article No.

–

Article No.

–

Article No.

–

Article No.

8US1998-2BJ10

Article No.

8US1998-2BJ10

Article No.

8US1998-2BJ10

Article No.

–

Article No.

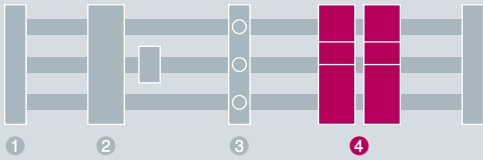
8US1998-2BJ10

Article No.




8US1998-2BJ10

4 Device adapters and device holders

Accessories for device adapters for SIRIUS 3RV2/3RT2 load feeders





Support rails (35 mm) made of plastic with fixing screws


	Length	Article No.
	45 mm	8US1998-7CB45
	54 mm	8US1998-7CB54
	72 mm	8US1998-7CB72

Positioning pieces


- For pushing on
- Secures the adaptable devices on the adapter

	For adapter width	Article No.
	45 mm	8US1998-1DA45
	54 mm	8US1998-1DA54

Connecting element

	<ul style="list-style-type: none"> • For connecting busbar adapters and device holders 	Article No. 8US1998-1AA10
---	---	------------------------------

Spacers

	<ul style="list-style-type: none"> • Fix the feeder to the busbar adapter 	Article No. 8US1998-1BA10
---	--	------------------------------

Vibration & shock kit

		Article No. 8US1998-1CA10
--	--	------------------------------

13



Always the right connection

Terminal blocks enable incoming and outgoing cables to be connected in switchboards and control systems in a convenient and space-saving manner. They can be used in transport systems and automation technology as well as in building installation technology.

We offer you the complete range of connection technology with screw terminals, spring-loaded terminals and In-Push-out (iPo) terminals, combination plug-in terminals, insulation displacement terminals and a wide variety of accessories. These can be combined with each other. This allows you to benefit from a high level of flexibility as well as simplified configuration.

Terminal Blocks



All the information you need	14/2
Quick selection guide	14/4
8WH terminal blocks	14/4
8WA terminal blocks	14/6
8WH terminal blocks	14/8
8WH6 iPo plug-in terminals	14/8
8WH6 iPo installation terminals	14/18
8WH2 spring-loaded terminals	14/24
8WH5 combination plug-in terminals	14/36
8WH3 insulation displacement terminals	14/40
8WH1 screw terminals	14/44
Accessories for 8WH terminal blocks	14/57
8WA terminal blocks	14/62
8WA1 screw terminals	14/62
8WA2 spring-loaded terminals	14/76
Accessories for 8WA terminal blocks	14/78

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about terminal blocks, please visit our website

www.siemens.com/distribution-components

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Siemens YouTube channel

Our video range

- Siemens ALPHA FIX terminal blocks – 8WH3 insulation displacement terminals (IDC)
bit.ly/2Y3JCVq
- Siemens ALPHA FIX terminal blocks – 8WH2 terminal with spring-loaded-connection
bit.ly/2kKVz0D

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Terminal blocks sie.ag/2kW8ZXo

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Technical overview of terminal blocks

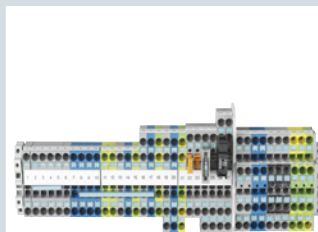


The fast way to get you to our online services

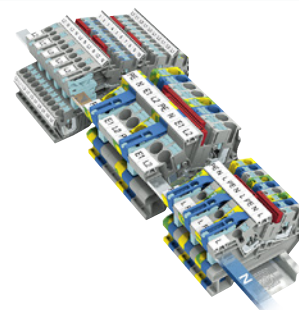
This page provides you with comprehensive information and links on terminal blocks

www.siemens.com/lowvoltage/product-support (109769088)

8WH terminal blocks

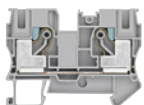


8WH6
iPo plug-in terminals



8WH6
iPo installation terminals

Through-type terminals



Through-type terminals

Two-tier terminals

Three-tier terminals

Four-tier motor terminals

2.5 ... 150 mm² [See page 14/8](#)

2.5 ... 4 mm² [See page 14/11](#)

–

–

Isolating terminals



Isolating and isolating blade terminals

Two-tier isolating terminals

N conductor isolating terminals

Measuring transformer isolating terminals

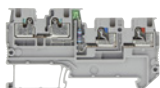
2.5 ... 4 mm² [See page 14/12](#)

–

–

–

Initiator/actuator terminals



Initiator terminals

Actuator terminals

Feeder terminals

1.5 mm² [See page 14/16](#)

1.5 mm² [See page 14/16](#)

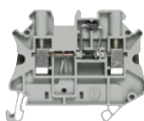
2.5 mm² [See page 14/15](#)

–

–

–

Function terminals



Fuse terminals

Three-tier terminals

Three-tier isolating terminals

Diode terminals

Two-tier diode terminals

Shield terminals

4 mm² [See page 14/14](#)

–

–

–

–

–

Further information

[From page 14/8](#)

2.5 ... 35 mm² [See page 14/18](#)

–

–

–

2.5 ... 35 mm² [See page 14/20](#)

–

–

–

–

–

–

2.5 mm² [See page 14/22](#)

2.5 mm² [See page 14/23](#)

–

–

–

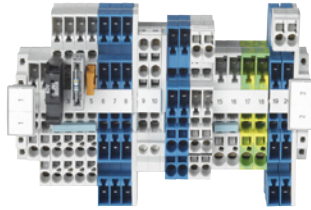
[From page 14/18](#)



8WH2
spring-loaded terminals

1.5 ... 35 mm ²	See page 14/24
1.5 ... 4 mm ²	See page 14/27
2.5 mm ²	See page 14/28
2.5 ... 4 mm ²	See page 14/29
2.5 ... 4 mm ²	See page 14/30
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
4 mm ²	See page 14/32
–	–
–	–
2.5 mm ²	See page 14/34
2.5 mm ²	See page 14/34
–	–

From page 14/24



8WH5
combination plug-in terminals

2.5 mm ²	See page 14/36
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–

From page 14/36



8WH3
insulation displacement terminals

1.5 ... 2.5 mm ²	See page 14/40
1.5 mm ²	See page 14/40
–	–
–	–
–	–
1.5 ... 2.5 mm ²	See page 14/40
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–

From page 14/40

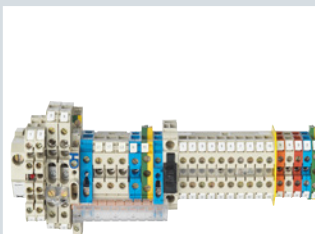


8WH1
screw terminals

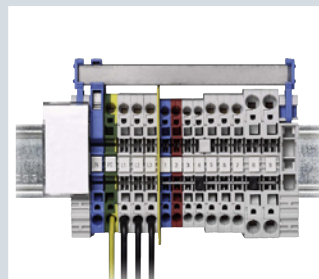
2.5 ... 240 mm ²	See page 14/44
2.5 ... 4 mm ²	See page 14/47
–	–
–	–
–	–
4 ... 6 mm ²	See page 14/48
4 mm ²	See page 14/50
–	–
6 mm ²	See page 14/51
–	–
–	–
–	–
–	–
–	–
4 ... 6 mm ²	See page 14/52
–	–
–	–
4 mm ²	See page 14/54
2.5 mm ²	See page 14/55
Diameter 2 ... 35 mm	See page 14/56

From page 14/44

8WA terminal blocks

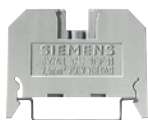


8WA1
screw terminals



8WA2
spring-loaded
terminals

Through-type terminals



Through-type terminals

2.5 ... 95 mm² See page 14/62

Two-tier terminals

4 mm² See page 14/67

Three-tier terminals

2.5 mm² See page 14/68

Four-tier motor terminals

–

Isolating terminals



Isolating and isolating blade terminals

–

Two-tier isolating terminals

–

N conductor isolating terminals

2.5 ... 16 mm² See page 14/69

Measuring transformer terminals

6 mm² See page 14/71

Initiator/actuator terminals



Initiator terminals

–

1.5 mm² See page 14/76

Actuator terminals

–

1.5 mm² See page 14/76

Feeder terminals

–

1.5 mm² See page 14/77

Function terminals



Fuse terminals

1.5 mm² See page 14/72

Three-tier terminals

–

Three-tier isolating terminals

–

Diode terminals

2.5 mm² See page 14/73

Two-tier diode terminals

4 mm² See page 14/74

Shield terminals

–

Further information

From page 14/62

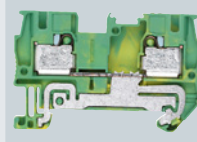
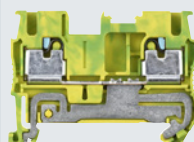
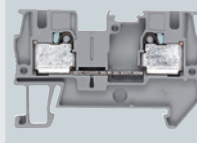
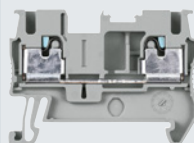
From page 14/76

8WH6 iPo plug-in terminals

Through-type terminals



	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Operational current I _{max}	30 A	38 A
Operational voltage U _{max}	800 V	800 V
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²	0.2 ... 6 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 2.5 mm ²	0.2 ... 4 mm ²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus	



Terminals	Color		
① Through-type terminals			
2	● Gray	8WH6000-0AF00	8WH6000-0AG00
	● Blue	8WH6000-0AF01	8WH6000-0AG01
3	● Gray	8WH6003-0AF00	8WH6003-0AG00
	● Blue	8WH6003-0AF01	8WH6003-0AG01
4	● Gray	8WH6004-0AF00	8WH6004-0AG00
	● Blue	8WH6004-0AF01	8WH6004-0AG01
② PE through-type terminals			
2	● Green-yellow	8WH6000-0CF07	8WH6000-0CG07
3	● Green-yellow	8WH6003-0CF07	8WH6003-0CG07
4	● Green-yellow	8WH6004-0CF07	8WH6004-0CG07

Special accessories

Covers



Terminals	Color	Width	Article No.	Article No.
2	● Gray	2.2 mm	8WH9000-1GA00	8WH9003-1GA00
3	● Gray	2.2 mm	8WH9000-2GA00	8WH9003-2SA00
4	● Gray	2.2 mm	8WH9000-4GA00	8WH9003-4SA00

Partitions



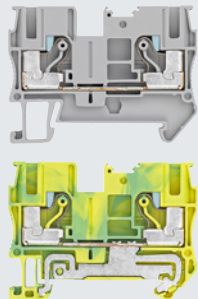
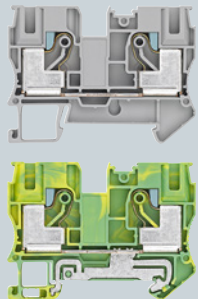
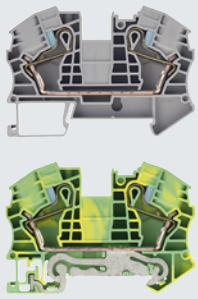
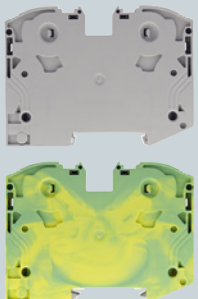
Terminals	Color	Width	Article No.	Article No.
2	● Gray	2.0 mm	8WH9070-0AA00	8WH9070-0AA00
3	● Gray	2.0 mm	8WH9070-0GA00	8WH9070-0GA00
4	● Gray	2.0 mm	8WH9070-0HA00	8WH9070-0HA00

Cover segments



Color	Article No.	Article No.
● Gray	8WH9000-0GA00	–

General accessories, page 14/57 onwards

6 mm ²	10 mm ²	16 mm ²	35 mm ²
8.2 mm	10.2 mm	12.2 mm	16 mm
41 A	57 A	90 A	125 A
1000 V	1000 V	1000 V	1000 V
20 ... 8	20 ... 6	20 ... 4	10 ... 2
0.5 ... 10 mm ²	0.5 ... 16 mm ²	0.5 ... 25 mm ²	6 ... 35 mm ²
0.5 ... 6 mm ²	0.5 ... 10 mm ²	0.5 ... 16 mm ²	6 ... 35 mm ²
IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, UL, CE	IEC 60947-7-1, IEC 60947-7-2, UL, CE
			

8WH6000-0AH00	8WH6000-0AJ00	8WH6000-0AK00	8WH6000-0AM00
8WH6000-0AH01	8WH6000-0AJ01	8WH6000-0AK01	8WH6000-0AM01
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
8WH6000-0CH07	8WH6000-0CJ07	8WH6000-0CK07	8WH6000-0CM07
-	-	-	-
-	-	-	-

Article No.	Article No.	Article No.	Article No.
8WH9004-3SA00	8WH9005-1SA00	8WH9006-1SA00	-
-	-	-	-
-	-	-	-

Article No.	Article No.	Article No.	Article No.
-	-	-	-
-	-	-	-
-	-	-	-

Article No.	Article No.	Article No.	Article No.
-	-	-	-

8WH6 iPo plug-in terminals

Through-type terminals for high-current applications



	Terminal size		
	50 mm ²	95 mm ²	150 mm ²
Terminal width	20 mm	25 mm	31 mm
Operational current I_{max}	150 A	232 A	309 A
Operational voltage AC/DC	1000 V / 1500 V	1000 V / 1500 V	1000 V / 1500 V
AWG	8 ... 2/0	4 ... 3/0	1/0 ... 300 kcmil
Connection capacity, rigid	10 ... 70 mm ²	25 ... 95 mm ²	95 ... 150 mm ²
Connection capacity, flexible with end sleeve	10 ... 50 mm ²	25 ... 95 mm ²	95 ... 150 mm ²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, cULus

Terminals	Color			
① Through-type terminals				
2	Gray	8WH6000-0AN00	8WH6000-0AQ00	8WH6000-0AS00
	Blue	8WH6000-0AN01	8WH6000-0AQ01	8WH6000-0AS01
② PE through-type terminals				
2	Green-yellow	8WH6000-0CN07	8WH6000-0CQ07	–

Special accessories

Connecting combs



Number of poles	Article No.	Article No.	Article No.
2-pole	8WH9020-3AB00	8WH9020-3AD00	8WH9020-3AF00
3-pole	8WH9020-3AC00	8WH9020-3AE00	8WH9020-3AG00

Tap-off terminal



Number of poles	Article No.	Article No.	Article No.
1-pole	8WH9120-0DA00	8WH9120-0DA00	8WH9120-0DA00

Test plugs



Surface	Article No.	Article No.	Article No.
Metal	8WH9010-0NB00	8WH9010-0NB00	8WH9010-0NB00

Insulating sleeves for test plugs



Color	Article No.	Article No.	Article No.
Red	8WH9010-0MB02	8WH9010-0MB02	8WH9010-0MB02

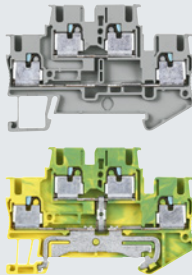
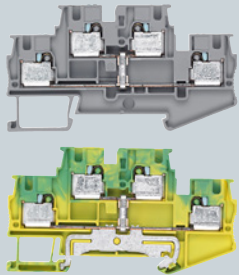
General accessories, page 14/57 onwards

Two-tier terminals



Connection capacity, one rigid conductor
Connection capacity, one flexible conductor
with end sleeve

Standard


	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Operational current I _{max}	26 A	32 A
Operational voltage U _{max}	500 V	500 V
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²	0.2 ... 6 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 2.5 mm ²	0.2 ... 4 mm ²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULUS	IEC 60947-7-1, IEC 60947-7-2, cULUS
		

Version	Color		
1 Two-tier terminals			
Without equipotential bonding	● Gray	8WH6020-0AF00	8WH6020-0AG00
	● Blue	8WH6020-0AF01	8WH6020-0AG01
With equipotential bonding	● Gray	8WH6025-0AF00	8WH6025-0AG00
2 PE two-tier terminals¹⁾			
	● Green-yellow	8WH6020-0CF07	8WH6020-0CG07


¹⁾ Bridging the terminal is only possible in the top tier (in the center).

Special accessories

Covers

	Terminals	Color	Width	Article No.	Article No.
	4	● Gray	2.2 mm	8WH9000-4SE00	–
	4	● Gray	2.2 mm	–	8WH9003-1VA00

Compartment partitions

	Terminals	Color	Thickness	Article No.	Article No.
	4	● Gray	2 mm	8WH9070-0BA00	8WH9070-0BA00

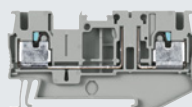
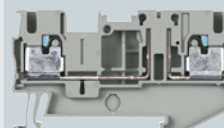
General accessories, page 14/57 onwards

8WH6 iPo plug-in terminals

Isolating terminals

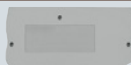



	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Operational current I_{max}	20 A	20 A
Operational voltage U_{max}	400 V	400 V
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²	0.2 ... 6 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 2.5 mm ²	0.2 ... 4 mm ²
Standard	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus







Terminals	Color		
2	● Gray	8WH6000-6CF00	8WH6000-6AG00
3	● Gray	8WH6003-6CF00	–
4	● Gray	8WH6004-6CF00	–

Special accessories

Covers					
	Terminals	Color	Width	Article No.	Article No.
	2	● Gray	2.2 mm	8WH9000-3SC00	8WH9003-1GA00
	3	● Gray	2.2 mm	8WH9000-3SD00	–
	4	● Gray	2.2 mm	8WH9000-5GA00	–

Compartment partitions					
	Terminals	Color	Width	Article No.	Article No.
	2	● Gray	2.2 mm	8WH9070-0AA00	8WH9070-0AA00
	3	● Gray	2.2 mm	8WH9070-0GA00	8WH9070-0GA00

Plug-in zone connectors						
	Type	Color	I_{max}	Illuminated display	Article No.	Article No.
	Isolating plugs	● Orange	–	–	8WH9040-0DB04	8WH9040-0DB04
	Through-type connectors	● Gray	16 A	–	8WH9020-8AB00	8WH9020-8AB00
	Fused connectors ¹⁾	● Black	6.3 A	12 ... 30 V, 1 ... 2.5 mA	8WH9040-3AB08	8WH9040-3AB08
				110 ... 250 V, 0.5 ... 2.5 mA	8WH9040-3CB08	8WH9040-3CB08
				Without	8WH9040-3DB08	8WH9040-3DB08
	Component connectors	● Gray	6 A	–	8WH9040-0BB00	8WH9040-0BB00

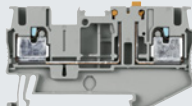
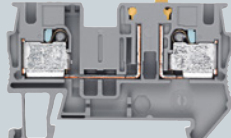
¹⁾ The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. Higher ambient temperatures represent an additional load for the fuse links. A shift in rated current should therefore be taken into account in such applications.

General accessories, page 14/57 onwards

Isolating blade terminals



	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Operational current I _{max}	20 A	20 A
Operational voltage U _{max}	400 V	400 V
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²	0.2 ... 6 mm ²
Connection capacity, two rigid conductors	–	0.5 ... 6 mm ²
Connection capacity, one flexible conductor	0.14 ... 2.5 mm ²	0.2 ... 4 mm ²
Standard	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus

Terminals	Color		
2	● Gray	8WH6000-6AF00	8WH6000-6CG00
3	● Gray	8WH6003-6AF00	–
4	● Gray	8WH6004-6AF00	–

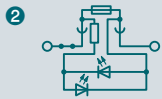
Special accessories

Covers					
	Terminals	Color	Width	Article No.	Article No.
	2	● Gray	2.2 mm	8WH9000-3SC00	8WH9003-1GA00
	3	● Gray	2.2 mm	8WH9000-3SD00	–
	4	● Gray	2.2 mm	8WH9000-5GA00	–
Compartment partitions					
	Terminals	Color	Thickness	Article No.	Article No.
	2	● Gray	2 mm	8WH9070-0AA00	8WH9070-0AA00

General accessories, page 14/57 onwards

8WH6 iPo plug-in terminals

Fuse terminals



Terminal size

4 mm²

Terminal width 6.2 mm

Operational current I_{max} 6.3 A

Operational voltage U_{max} 500 V

AWG 24 ... 10

Connection capacity, one rigid conductor 0.2 ... 4 mm²

Connection capacity, one flexible conductor with end sleeve 0.2 ... 4 mm²

Standard cULus, CE



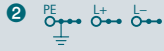
LED	Color	
Fuse terminals for 5 × 20 mm G fuse links		
① Without	● Black	8WH6000-1GG08
② 10 ... 30 V AC/DC	● Black	8WH6000-1KG38
② 110 ... 250 V AC/DC	● Black	8WH6000-1MG88

Special accessories

Covers	Terminals	Color	Width	Article No.
	2	● Gray	2.2 mm	8WH9003-1GA00

General accessories, page 14/57 onwards

Feeder terminals for initiator/actuator terminals



Connection capacity, flexible with end sleeve, with plastic sleeve
 Connection capacity, flexible with end sleeve, without plastic sleeve
 Standard

Terminal size

2.5 mm²

Terminal width 7 mm

Operational current I_{max} 20 A

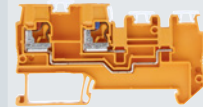
Operational voltage U_{max} 250 V

AWG 24 ... 12

0.14 ... 1.0 mm²

0.14 ... 1.5 mm²

IEC 60947-7-1



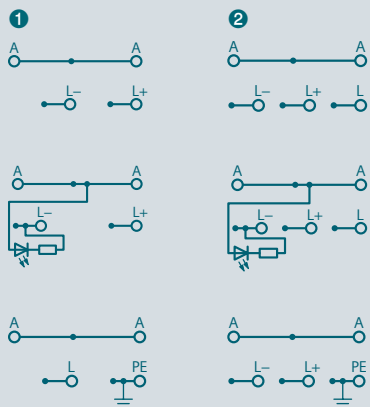
Conductors ¹⁾	Color	
① 3-wire, L+, L-	Orange	8WH6003-0DF04
② 4-wire, L+, L-, PE	Orange	8WH6004-0HE04

General accessories, page 14/57 onwards

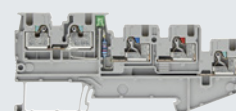
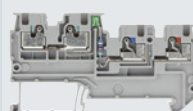
¹⁾ L+ = red, L- = blue, A (output) = petrol, L = petrol, PE (ground) = green/yellow

8WH6 iPo plug-in terminals

Initiator/actuator terminals



	Terminal size 1.5 mm ²	
Terminal width	3.5 mm	3.5 mm
Operational current I_{max}	13.5 A	10 A
Operational voltage U_{max}	250 V	65 V
AWG	26 ... 14	26 ... 14
Connection capacity, flexible with end sleeve, with plastic sleeve	0.14 ... 1.0 mm ²	0.14 ... 1.0 mm ²
Connection capacity, flexible with end sleeve, without plastic sleeve	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Standard	IEC 60947-7-1	IEC 60947-7-1




Conductors ¹⁾	LED	Color		
1 Initiator terminal				
3-wire, L+, L-, A	–	● Gray	8WH6003-0DE00	–
3-wire, L+, L-, A	Green, 24 V (15 ... 30 V DC)	● Gray	8WH6003-0FE00	–
3-wire, L, A, PE	–	● Gray	8WH6003-0HE00	–
2 Actuator terminal				
4-wire, L+, L-, L, A	–	● Gray	–	8WH6004-0DE00
4-wire, L+, L-, L, A	Green, 24 V (15 ... 30 V DC)	● Gray	–	8WH6004-0FE00
4-wire, L+, L-, PE, A	–	● Gray	–	8WH6004-0HE00

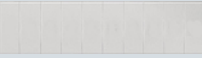
Special accessories

Covers	Version	Width	Color	Article No.	Article No.
	For 3-wire	2.2 mm	● Gray	8WH9001-2VD00	–
	For 4-wire	2.2 mm	● Gray	–	8WH9001-4VE00

¹⁾ L+ = red, L- = blue, A (output) = petrol, L = petrol, PE (ground) = green/yellow

General accessories for 8WH6 initiator/actuator terminals

Connecting combs					
	Number of poles	Load current	Color	Article No.	
	2-pole	17.5 A	● Red	8WH9020-6JC02	
			● Blue	8WH9020-6JC01	
			● Gray	8WH9020-6JC00	
	3-pole	17.5 A	● Red	8WH9020-6JD02	
			● Blue	8WH9020-6JD01	
			● Gray	8WH9020-6JD00	
	4-pole	17.5 A	● Red	8WH9020-6JE02	
			● Blue	8WH9020-6JE01	
			● Gray	8WH9020-6JE00	
	5-pole	17.5 A	● Red	8WH9020-6JF02	
			● Blue	8WH9020-6JF01	
			● Gray	8WH9020-6JF00	
	10-pole	17.5 A	● Red	8WH9020-6JL02	
			● Blue	8WH9020-6JL01	
			● Gray	8WH9020-6JL00	
	20-pole	17.5 A	● Red	8WH9020-6JS02	
			● Blue	8WH9020-6JS01	
			● Gray	8WH9020-6JS00	

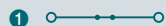
Labels, front, for terminal width 3.5 mm and terminal size 1.5 mm ²					
	Variant	Color	Article No.		
	Blank	● White	8WH8110-0AA05		
	Custom inscription	Printed vertically	● White	8WH8140-0XA05-Z Y01	
		Printed horizontally	● White	8WH8120-0XA05-Z Y01	

Labels, flat, for terminal width 3.5 mm and terminal size 1.5 mm ²						
	Variant	Inscription	Color	Article No.		
	Blank		● White	8WH8111-0AA05		
	Consecutive numbering	Printed vertically	1 ... 10 (10×)	● White	8WH8141-0AB05	
			11 ... 20 (10×)	● White	8WH8141-0AB15	
			21 ... 30 (10×)	● White	8WH8141-0AB25	
			31 ... 40 (10×)	● White	8WH8141-0AB35	
			41 ... 50 (10×)	● White	8WH8141-0AB45	
	Consecutive numbering	Printed horizontally	1 ... 10 (10×)	● White	8WH8121-0AB05	
			11 ... 20 (10×)	● White	8WH8121-0AB15	
			21 ... 30 (10×)	● White	8WH8121-0AB25	
			31 ... 40 (10×)	● White	8WH8121-0AB35	
			41 ... 50 (10×)	● White	8WH8121-0AB45	
	Consecutive numbering	Printed horizontally	51 ... 60 (10×)	● White	8WH8121-0AB55	
	Custom inscription	Printed vertically	● White	8WH8141-0XA05-Z Y01		
		Printed horizontally	● White	8WH8121-0XA05-Z Y01		

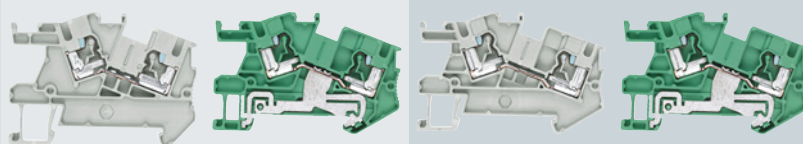
Labels for 8WH initiator/actuator terminals for labeling system					
	Variant	Terminal width	Standard	Color	Article No.
	Front, blank	3.5 mm	WIN 486	● White	8WH8112-0AA05
	Flat, blank	3.5 mm	WIN 416	● White	8WH8113-0AA05

8WH6 iPo installation terminals

Through-type terminals



	Terminal size			
	2.5 mm ²		4 mm ²	
Terminal width	5.2 mm	5.2 mm	6.2 mm	6.2 mm
Terminal length	59.5 mm	59.5 mm	66 mm	66 mm
Terminal height	43 mm	43 mm	46.3 mm	46.3 mm
Max. load current I _{max}	24 A	–	32 A	–
Rated voltage U _n	800 V	–	800 V	–
Rated impulse withstand voltage	–	–	–	–
AWG	26 ... 12	24 ... 12	24 ... 10	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²	0.2 ... 4 mm ²	0.2 ... 6 mm ²	0.2 ... 6 mm ²
Connection capacity, two rigid conductors	–	–	–	–
Connection capacity, flexible with end sleeve	0.25 ... 2.5 mm ²	0.25 ... 2.5 mm ²	0.25 ... 4 mm ²	0.25 ... 4 mm ²
Connection capacity, flexible without end sleeve	0.25 ... 2.5 mm ²	0.25 ... 2.5 mm ²	0.25 ... 4 mm ²	0.25 ... 4 mm ²
Tightening torque	–	–	–	–
Standard	IEC 60947-7-1	IEC 60947-7-2	IEC 60947-7-1	IEC 60947-7-2



Terminals	Color	iPo plug-in technology	iPo plug-in technology
1 Through-type terminals			
2	● Gray	8WH6001-0AF00	–
	● Blue	8WH6001-0AF01	–
2 PE through-type terminals			
2	● Green-yellow	–	8WH6001-OCF07
		–	8WH6001-OCG07

Special accessories

Covers



Color	Width	Article No.	Article No.
● Gray	2 mm	8WH9000-1WA00	8WH9003-7WA00

Support brackets



- For holding the N busbar

Color	Article No.	Article No.
● Blue	8WH9143-0AF01	8WH9143-0AF01

Connecting combs



Number of poles	Article No.	Article No.
2-pole	–	–
3-pole	–	–
10-pole	–	–

Compartment partitions



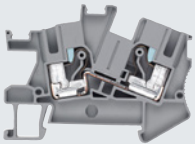
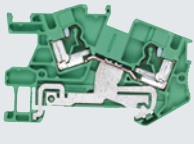


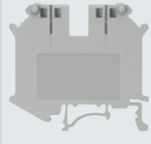

Color	Article No.	Article No.
● Gray	–	–

Insulation plate



Color	Article No.	Article No.
● Gray	–	–

General accessories, page 14/57 onwards

6 mm ²		16 mm ²		35 mm ²	
8.2 mm	8.2 mm	12.2 mm	12.2 mm	16 mm	16 mm
66 mm	66 mm	42.5 mm	42.5 mm	55 mm	55 mm
50 mm	50 mm	47 mm	47 mm	51 mm	51 mm
41 A	–	101 A	101 A	125 A	125 A
800 V	–	400 V	–	800 V	–
–	–	6 kV	6 kV	8 kV	8 kV
20 ... 8	20 ... 8	22 ... 4	22 ... 4	18 ... 2	18 ... 2
0.5 ... 10 mm ²	0.5 ... 10 mm ²	1.5 ... 16 mm ²	1.5 ... 16 mm ²	0.75 ... 35 mm ²	0.75 ... 35 mm ²
–	–	1.5 ... 6 mm ²	1.5 ... 6 mm ²	0.75 ... 10 mm ²	0.75 ... 10 mm ²
0.5 ... 6 mm ²	0.5 ... 6 mm ²	1.5 ... 4 mm ²	1.5 ... 4 mm ²	0.75 ... 10 mm ²	0.75 ... 10 mm ²
0.5 ... 6 mm ²	0.5 ... 6 mm ²	–	–	–	–
–	–	1.5 ... 1.8 Nm	1.5 ... 1.8 Nm	3.2 ... 3.7 Nm	3.2 ... 3.7 Nm
IEC 60947-7-1	IEC 60947-7-2	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus, CE	cULus, CE	cULus, CE
					
iPo plug-in technology		Screw terminals		Screw terminals	
8WH6001-0AH00	–	8WH1001-0AK00	–	8WH1001-0AM00	–
8WH6001-0AH01	–	8WH1001-0AK01	–	8WH1001-0AM01	–
–	8WH6001-0CH07	–	8WH1001-0CK07	–	8WH1001-0CM07

Article No.
8WH9004-1WA00

Article No.
8WH9005-3PA00

Article No.
–

Article No.
8WH9143-0AH01

Article No.
–

Article No.
–

Article No.
–

Article No.
–

Article No.
8WH9030-6BC00

–

–

8WH9030-6BD00

–

8WH9030-6AL00

–

Article No.
–

Article No.
8WH9070-6HA00

Article No.
–

Article No.
–

Article No.
8WH9070-6GA00

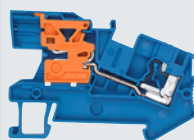
Article No.
8WH9070-6GA00

8WH6 iPo installation terminals

N conductor isolating terminals



	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Terminal length	59 mm	66 mm
Terminal height	46.3 mm	46.3 mm
Rated current I _n /cross-section	24 A/2.5 mm ²	32 A/4 mm ²
Rated voltage U _n	250 V	250 V
Rated impulse withstand voltage	–	–
AWG	26 ... 12	24 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²	0.2 ... 6 mm ²
Connection capacity, two rigid conductors	–	–
Connection capacity, one flexible conductor with end sleeve	0.14 ... 2.5 mm ²	0.25 ... 4 mm ²
Connection capacity, two flexible conductors with end sleeve	–	–
Tightening torque	–	–
Standard	IEC 60947-7-1	IEC 60947-7-1



Terminals	Color	iPo plug-in technology	iPo plug-in technology
2	● Blue	8WH6001-0BF01	8WH6001-0BG01

Special accessories

Covers



Color	Article No.	Article No.
● Blue	8WH9000-1SA00	8WH9003-1SA00
● Gray	–	–

Support brackets



- For holding the N busbar 10 × 3 mm
- To be placed every 20 cm

Color	Article No.	Article No.
● Blue	8WH9143-0AF01	8WH9143-0AF01
–	–	–

Connecting terminals



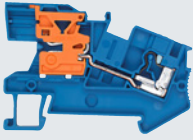



Color	Width	Article No.	Article No.
● Blue	10.3 mm	8WH9126-0BA01	8WH9126-0BA01

N busbars, 10 × 3 mm



Version	Length	Article No.	Article No.
Copper, tinned	1000 mm	8WA2842	8WA2842

General accessories, page 14/57 onwards

6 mm ²	10 mm ²	16 mm ²	35 mm ²
8.2 mm	10 mm	12 mm	16 mm
66.3 mm	43.5 mm	43.5 mm	55 mm
50 mm	47 mm	54 mm	51 mm
41 A/6 mm ²	63 A/16 mm ²	90 A/25 mm ²	110 A/35 mm ²
400 V	–	–	–
–	6 kV	6 kV	6 kV
20 ... 8	–	–	–
0.5 ... 10 mm ²	1.5 ... 10 mm ²	1.5 ... 16 mm ²	0.75 ... 35 mm ²
–	1.5 ... 4 mm ²	1.5 ... 6 mm ²	0.75 ... 10 mm ²
0.5 ... 6 mm ²	1.5 ... 6 mm ²	1.5 ... 16 mm ²	0.75 ... 35 mm ²
–	1.5 ... 2.5 mm ²	1.5 ... 8 mm ²	0.75 ... 10 mm ²
–	1.5 ... 1.8 Nm	1.5 ... 1.8 Nm	3.2 ... 3.7 Nm
IEC 60947-7-1	IEC 60947-7-1	IEC 60947-7-1	IEC 60947-7-1
			
iPo plug-in technology	Screw terminals	Screw terminals	Screw terminals
8WH6001-0BH01	8WH1001-0BJ01	8WH1001-0BK01	8WH1001-0BM01

Article No.	Article No.	Article No.	Article No.
8WH9004-1SA00	–	–	–
–	8WH9005-3PA00	8WH9005-3PA00	–

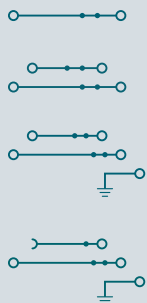
Article No.	Article No.	Article No.	Article No.
8WH9143-0AH01	–	–	–
–	8WH9141-0BA01	8WH9141-0BA01	8WH9141-0BA01

Article No.	Article No.	Article No.	Article No.
8WH9126-0BA01	8WH9126-0BA01	8WH9126-0BA01	–

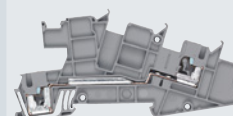
Article No.	Article No.	Article No.	Article No.
8WA2842	8WA2842	8WA2842	8WA2842

8WH6 iPo installation terminals

Three-tier terminals



	Terminal size
	2.5 mm ²
Terminal width	5.2 mm
Terminal length	101 mm
Terminal height	50.5 mm
Rated current I _n / cross-section	24 A / 4 mm ²
Rated voltage U _n (L-L)	400 V
Rated voltage U _n (L-N, L-PE)	250 V
AWG	26 ... 12
Connection capacity, rigid	0.14 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.14 ... 2.5 mm ²



Versions	Color	
L	● Gray	8WH6001-4QF00
L/L	● Gray	8WH6001-4DF00
L/N	● Gray	8WH6001-4CF00
PE/L/L	● Gray	8WH6001-4HF00
PE/L/N	● Gray	8WH6001-4EF00
PE/L/NT	● Gray	8WH6001-4FF00

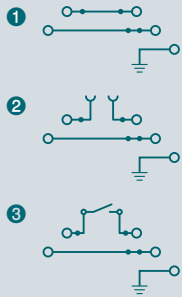
Special accessories

Covers			
	Color		Article No.
	● Gray		8WH9000-3SA00
Support brackets			
	<ul style="list-style-type: none"> For holding the N busbar To be placed every 20 cm 		
	Color	Width	Article No.
	● Blue	2 mm	8WH9142-0AF01
N busbars, 10 × 3 mm			
	Version	Length	Article No.
	Copper, tinned ¹⁾	1000 mm	8WA2842

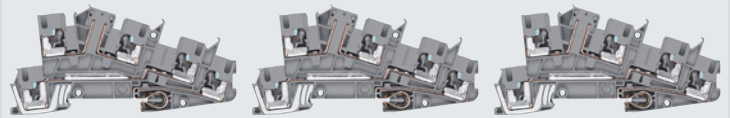
¹⁾ Only copper busbars may be installed.

General accessories, page 14/57 onwards

Three-tier isolating terminals



	Terminal size		
	2.5 mm ²		
Terminal width	5.2 mm	5.2 mm	5.2 mm
Terminal length	101 mm	101 mm	101 mm
Terminal height	50.5 mm	50.5 mm	50.5 mm
Rated current I_n / cross-section	24 A / 4 mm ²	24 A / 4 mm ²	24 A / 4 mm ²
Rated voltage U_n (L-L)	400 V	400 V	400 V
Rated voltage U_n (L-N, L-PE)	250 V	250 V	250 V
AWG	22 ... 12	22 ... 12	22 ... 12
Connection capacity, rigid	0.25 ... 4 mm ²	0.25 ... 4 mm ²	0.25 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.25 ... 2.5 mm ²	0.25 ... 2.5 mm ²	0.25 ... 2.5 mm ²



Versions	Color			
1 Through-type terminals with identical contour				
PE/L/L	● Gray	–	–	8WH6001-4PF00
2 Isolating terminals				
PE/L/L isolation	● Gray	8WH6001-4MF00	–	–
3 Isolating blade terminals				
PE/L/L isolating blade	● Gray	–	8WH6001-4NF00	–
PE/L/N isolating blade	● Gray	–	8WH6001-4GF00	–

Special accessories

Covers for isolating terminal in the contour

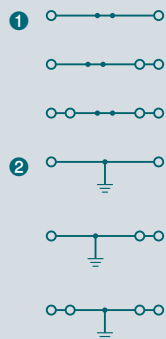


Color	Article No.	Article No.	Article No.
● Gray	–	8WH9000-6SA00	8WH9000-6SA00

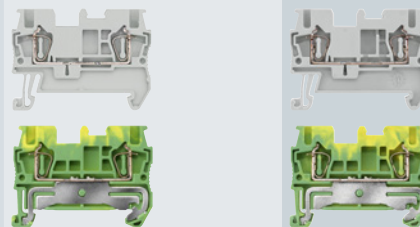
General accessories, page 14/57 onwards

8WH2 spring-loaded terminals

Through-type terminals



	Terminal size	
	1.5 mm ²	2.5 mm ²
Terminal width	4.2 mm	5.2 mm
Load current I	17.5 A	28 A
Operational voltage U	500 V	800 V
AWG	28 ... 16	28 ... 12
Connection capacity, rigid	0.08 ... 1.5 mm ²	0.08 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 1.5 mm ²	0.08 ... 2.5 mm ²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus, c	IEC 60947-7-1, IEC 60947-7-2, cULus



Terminals	Color		
① Through-type terminals			
2	● Gray	8WH2000-0AE00	8WH2000-0AF00
	● Blue	8WH2000-0AE01	8WH2000-0AF01
	● Orange	8WH2000-0AE04	8WH2000-0AF04
	● Red	8WH2000-0AE02	8WH2000-0AF02
	● Black	8WH2000-0AE08	8WH2000-0AF08
	● Green	8WH2000-0AE03	8WH2000-0AF03
	● White	8WH2000-0AE05	8WH2000-0AF05
	● Yellow	8WH2000-0AE06	8WH2000-0AF06
3	● Gray	8WH2003-0AE00	8WH2003-0AF00
	● Blue	8WH2003-0AE01	8WH2003-0AF01
	● Orange	8WH2003-0AF04	8WH2003-0AF04
4	● Gray	8WH2004-0AE00	8WH2004-0AF00
	● Blue	8WH2004-0AE01	8WH2004-0AF01
	● Orange	8WH2004-0AF04	8WH2004-0AF04
② PE through-type terminals			
2	● Green-yellow	8WH2000-0CE07	8WH2000-0CF07
3	● Green-yellow	8WH2003-0CE07	8WH2003-0CF07
4	● Green-yellow	8WH2004-0CE07	8WH2004-0CF07

Special accessories

Covers

Color	Terminals	Article No.	Article No.
● Gray	2	8WH9000-1GA00	8WH9000-1GA00
	3	8WH9000-2GA00	8WH9000-2GA00
	4	8WH9000-4GA00	8WH9000-4GA00

Compartment partitions

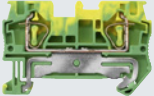
Color	Terminals	Article No.	Article No.
● Gray	2	8WH9070-0AA00	8WH9070-0AA00
	3	8WH9070-0GA00	8WH9070-0GA00
	4	8WH9070-0HA00	8WH9070-0HA00

Cover segments

	<ul style="list-style-type: none"> For covering multi-wire terminals when mounting two-wire terminals side-by-side 		
	Color	Article No.	Article No.
● Gray	8WH9000-0GA00	8WH9000-0GA00	

Warning covers for the operating shafts of 8WH2 through-type terminals

	Article No.	Article No.
	8WH9061-5AA06	8WH9060-5AA06

4 mm ²	6 mm ²	10 mm ²	16 mm ²	35 mm ²
6.2 mm	8.2 mm	10.2 mm	12 mm	16 mm
40 A	52 A	65 A	90 A	125 A
800 V	1000 V	1000 V	1000 V	1000 V
28 ... 10	24 ... 8	24 ... 6	24 ... 4	14 ... 2
0.08 ... 6 mm ²	0.2 ... 10 mm ²	1.5 ... 16 mm ²	1.5 ... 25 mm ²	2.5 ... 35 mm ²
0.08 ... 4 mm ²	0.2 ... 6 mm ²	1.5 ... 10 mm ²	1.5 ... 16 mm ²	2.5 ... 35 mm ²
IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus
 	 	 	 	 

8WH2000-0AG00	8WH2000-0AH00	8WH2000-0AJ00	8WH2000-0AK00	8WH2000-0AM00
8WH2000-0AG01	8WH2000-0AH01	8WH2000-0AJ01	8WH2000-0AK01	8WH2000-0AM01
8WH2000-0AG04	–	–	–	–
8WH2000-0AG02	–	–	–	–
8WH2000-0AG08	–	–	–	–
8WH2000-0AG03	–	–	–	–
8WH2000-0AG05	–	–	–	–
8WH2000-0AG06	–	–	–	–
8WH2003-0AG00	8WH2003-0AH00	–	–	–
8WH2003-0AG01	8WH2003-0AH01	–	–	–
–	–	–	–	–
8WH2004-0AG00	–	–	–	–
8WH2004-0AG01	–	–	–	–
–	–	–	–	–
8WH2000-0CG07	8WH2000-0CH07	8WH2000-0CJ07	8WH2000-0CK07	8WH2000-0CM07
8WH2003-0CG07	8WH2003-0CH07	–	–	–
8WH2004-0CG07	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.
8WH9003-1GA00	8WH9004-1GA00	8WH9005-1GA00	8WH9006-1GA00	–
8WH9003-2GA00	8WH9004-2GA00	–	–	–
8WH9003-4GA00	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.
8WH9070-0AA00	8WH9070-0DA00	–	–	–
8WH9070-0GA00	8WH9070-0DA00	–	–	–
8WH9070-0HA00	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.
8WH9003-0GA00	–	–	–	–

Article No.	Article No.	Article No.	Article No.	Article No.
8WH9063-5AA06	8WH9064-5AA06	8WH9065-5AA06	8WH9066-5AA06	8WH9067-5AA06

8WH2 spring-loaded terminals

Hybrid through-type terminals



	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Load current I	28 A	32 A
Operational voltage U	800 V	800 V
AWG Spring	28 ... 12	28 ... 10/26 ... 10
Connection capacity, rigid, spring-loaded	0.08 ... 4 mm ²	0.08 ... 6 mm ²
Connection capacity, flexible, spring-loaded	0.08 ... 2.5 mm ²	0.08 ... 4 mm ²
AWG screw	26 ... 14	28 ... 10/26 ... 10
Connection capacity, rigid, screw-type	0.14 ... 4 mm ²	0.14 ... 6 mm ²
Connection capacity, flexible, screw-type	0.14 ... 2.5 mm ²	0.14 ... 4 mm ²
Standard	IEC 60947-7-1, IEC 60947-7-2	IEC 60947-7-1, IEC 60947-7-2

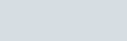
Terminals	Color	Screw-type connection and spring-loaded connection	Screw-type connection and spring-loaded connection
1 Hybrid through-type terminals			
3	● Gray	8WH2103-2BF00	8WH2103-2BG00
	● Blue	8WH2103-2BF01	8WH2103-2BG01
2 PE hybrid through-type terminals			
3	● Green-yellow	8WH2103-3BF07	8WH2103-3BG07

Special accessories

Covers				
	Color	Terminals	Article No.	Article No.
	● Gray	3	8WH9000-2HA00	8WH9003-2HA00

General accessories, page 14/57 onwards

Two-tier terminals



	Terminal size		
	1.5 mm ²	2.5 mm ²	4 mm ²
Terminal width	4.2 mm	5.2 mm	6.2 mm
Load current I	17.5 A	26 A	32 A
Operational voltage U	500 V	500 V	500 V
AWG	28 ... 16	28 ... 12	28 ... 10
Connection capacity, rigid	0.08 ... 1.5 mm ²	0.08 ... 4 mm ²	0.08 ... 6 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 1.5 mm ²	0.08 ... 2.5 mm ²	0.08 ... 4 mm ²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus, CE	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus

Version	Number of poles	Terminals	Color			
① Two-tier terminals						
Without equipotential bonding	2-pole	4	● Gray	8WH2020-0AE00	8WH2020-0AF00	8WH2020-0AG00
			● Blue	8WH2020-0AE01	8WH2020-0AF01	8WH2020-0AG01
	6	● Gray	–	8WH2023-0AF00	–	
		● Blue	–	8WH2023-0AF01	–	
With equipotential bonding	1-pole	4	● Gray	8WH2025-0AE00	8WH2025-0AF00	8WH2025-0AG00
			● Blue	–	8WH2025-0AF01	–
	6	● Gray	–	8WH2022-0AF00	–	
② Two-tier terminals, N at top and L at bottom						
Without equipotential bonding	2-pole	4	● Gray	–	8WH2020-4CF00	–
③ PE two-tier terminals¹⁾						
		4	● Green-yellow	8WH2020-0CE07	8WH2020-0CF07	8WH2020-0CG07
		6	● Green-yellow	–	8WH2023-0CF07	–

¹⁾ Only top tier can be fitted with connecting combs.

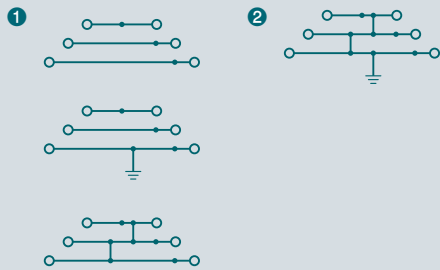
Special accessories

Covers						
	Terminals	Color	Article No.	Article No.	Article No.	
	4	● Gray	8WH9000-1VA00	8WH9000-1VA00	8WH9003-1VA00	
	6	● Gray	–	8WH9000-2VA00	–	
Compartment partitions						
		Color	Article No.	Article No.	Article No.	
		● Gray	8WH9070-0BA00	8WH9070-0BA00	8WH9070-0BA00	

General accessories, page 14/57 onwards

8WH2 spring-loaded terminals

Three-tier terminals



Terminal size

2.5 mm²

Terminal width 5.2 mm

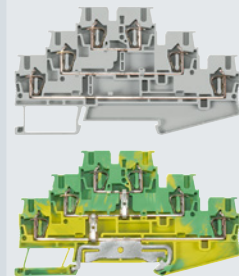
Load current I 28 A ¹⁾

Operational voltage U 500 V

AWG 28 ... 12

Connection capacity, rigid 0.08 ... 4 mm²Connection capacity, flexible with end sleeve 0.08 ... 2.5 mm²

Standard

IEC 60947-7-1,
IEC 60947-7-2, e_{us}

Version	Versions	Color	
1 Three-tier terminals			
Without equipotential bonding	–	● Gray	8WH2030-0AF00
		● Blue	8WH2030-0AF01
	PE/L/N	● Gray	8WH2030-4EF00
	PE/L/L	● Gray	8WH2030-4HF00
With equipotential bonding		● Gray	8WH2035-0AF00
		● Blue	8WH2035-0AF01
2 PE three-tier terminals			
		● Green-yellow	8WH2035-0CF07

Special accessories

Covers



Color

● Gray

Article No.

8WH9000-1GD00

Label holder



Color

● Gray

Article No.

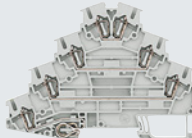

8WH9060-4BA00

General accessories, page 14/57 onwards

¹⁾ The total current through all connected conductors must not exceed the maximum load current.

Four-tier motor terminals



	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Load current I	26 A	32 A
Operational voltage U	800 V	800 V
AWG	28 ... 12	28 ... 10
Connection capacity, rigid	0.08 ... 4 mm ²	0.08 ... 6 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm ²	0.08 ... 4 mm ²
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus, ©
		

Variant	Color		
L/L/L/PE	● Gray	8WH2040-4LF00	8WH2040-4LG00

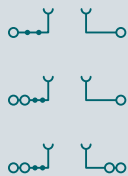
Special accessories

Covers			
	Color	Article No.	Article No.
	● Gray	8WH9000-1GE00	–

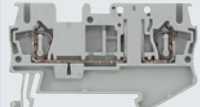

General accessories, page 14/57 onwards

8WH2 spring-loaded terminals

Isolating terminals





	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Load current I	16 A	16 A
Operational voltage U	400 V	400 V
AWG	28 ... 12	28 ... 10
Connection capacity, rigid	0.08 ... 4 mm ²	0.08 ... 6 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm ²	0.08 ... 4 mm ²
Standard	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus





Terminals	Color			
2	● Gray		8WH2000-6AF00	8WH2000-6AG00
3	● Gray		8WH2003-6AF00	–
4	● Gray		8WH2004-6AF00	–

Special accessories

Covers				
	Color	Terminals	Article No.	Article No.
	● Gray	2	8WH9000-2GA00	–
		3	8WH9000-4GA00	–
		4	8WH9000-5GA00	–

Compartment partitions				
	Color	Terminals	Article No.	Article No.
	● Gray	2	8WH9070-0AA00	8WH9070-0AA00
		3	8WH9070-0GA00	–
		4	8WH9070-0HA00	–

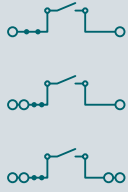
Cover segments				
	Color	Terminals	Article No.	Article No.
				
	● Gray	3/4	8WH9000-0GA00	–

Plug-in zone connectors						
Type	Color	I _{max}	Illuminated display	Article No.	Article No.	
 Isolating plugs	● Orange	20 A	–	8WH9040-0DB04	8WH9040-0DB04	
 Through-type connectors	● Gray	16 A	–	8WH9020-8AB00	8WH9020-8AB00	
 Fused connectors ¹⁾	● Black	6.3 A	12 ... 30 V, 1 ... 2.5 mA	8WH9040-3AB08	8WH9040-3AB08	
			110 ... 250 V, 0.5 ... 2.5 mA	8WH9040-3CB08	8WH9040-3CB08	
			Without	8WH9040-3DB08	8WH9040-3DB08	
 Component connectors	● Gray	6 A	–	8WH9040-0BB00	8WH9040-0BB00	

General accessories, page 14/57 onwards

¹⁾ The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. Higher ambient temperatures represent an additional load for the fuse links. A shift in rated current should therefore be taken into account in such applications.

Isolating blade terminals



	Terminal size		
	2.5 mm ²	5.2 mm	4 mm ²
Terminal width	5.2 mm	5.2 mm	6.2 mm
Load current I	16 A	16 A ¹⁾	16 A
Operational voltage U	400 V	400 V	400 V
AWG	28 ... 12	26 ... 14	28 ... 10
Connection capacity, rigid	0.08 ... 4 mm ²	0.14 ... 4 mm ²	0.08 ... 6 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm ²	0.14 ... 2.5 mm ²	0.08 ... 4 mm ²
Standard	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus

Terminals	Color	Terminal size	Article No.	Article No.	Article No.
2	● Gray	2.5 mm ²	8WH2000-6CF00	–	8WH2000-6CG00
3	● Gray	5.2 mm	–	8WH2003-6CF00	–
4	● Gray	5.2 mm	–	8WH2004-6CF00	–

Special accessories

Covers					
	● Gray	Terminals	Article No.	Article No.	Article No.
		2	8WH9000-2GA00	8WH9000-2GA00	–
		3	8WH9000-4GA00	8WH9000-4GA00	–
		4	8WH9000-5GA00	8WH9000-5GA00	–
Compartment partitions					
	● Gray	Terminals	Article No.	Article No.	Article No.
		2	8WH9070-0AA00	8WH9070-0AA00	8WH9070-0AA00
		3	8WH9070-0GA00	8WH9070-0GA00	–
		4	8WH9070-0HA00	8WH9070-0HA00	–
Cover segments					
	● Gray	Terminals	Article No.	Article No.	Article No.
		3/4	8WH9000-0GA00	8WH9000-0GA00	–

General accessories, page 14/57 onwards




¹⁾ On terminals with three and four clamping points, the total current through all connected conductors must not exceed the max. load current.

8WH2 spring-loaded terminals

Fuse terminals



	Terminal size		
	4 mm ²		
Terminal width	6.2 mm	8.2 mm	8.2 mm
Load current I	6.3 A	10 A	30 A
Operational voltage U	250 V	400 V	400 V
Max. individual power loss as overload protection	1.6 W	–	–
Max. power loss as a group as overload protection	1.6 W	–	–
Max. individual power loss as short-circuit protection	4 W	–	–
Max. power loss as a group as short-circuit protection	2.5 W	–	–
AWG	28 ... 10	28 ... 10	28 ... 10
Connection capacity, rigid	0.08 ... 6 mm ²	0.08 ... 6 mm ²	0.08 ... 6 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 4 mm ²	0.08 ... 4 mm ²	0.08 ... 4 mm ²
Standard	IEC 60947-7-3,	IEC 60947-7-3,	IEC 60947-7-3,


Illuminated display		Color			
For 5 × 20 mm G fuse links					
①	Without	● Black	8WH2000-1GG08	–	–
②	15 ... 30 V	● Black	8WH2000-1JG38	–	–
②	30 ... 60 V	● Black	8WH2000-1JG68	–	–
②	110 ... 250 V	● Black	8WH2000-1MG08	–	–
For 6.3 × 32 mm G fuse links					
①	Without	● Black	–	8WH2000-1HG08	–
②	100 ... 250 V	● Black	–	8WH2000-1RG08	–
For blade-type fuses according to ISO/DIS 8820 and DIN 72581-3 ¹⁾					
①	Without	● Black	–	–	8WH2000-1AG08
②	12 V	● Black	–	–	8WH2000-1BG28
②	24 V	● Black	–	–	8WH2000-1BG38

¹⁾ Blade-type fuses must be ordered separately.

14

Special accessories

Compartment partitions

	Color	Terminals	Article No.	Article No.	Article No.
	● Gray	2	8WH9070-0AA00	8WH9070-0AA00	8WH9070-0AA00

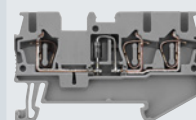
General accessories, page 14/57 onwards

8WH2 spring-loaded terminals

Diode terminals



Terminal size	2.5 mm²
Terminal width	5.2 mm
Load current	Determined by the diode
Uninterrupted limiting current	0.5 A
Operational voltage U	500 V
Blocking voltage	1300 V
AWG	28 ... 12
Connection capacity, rigid	0.08 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm ²
Diode	1N 4007, integrated
Standard	UL



Terminals	Color	Let-through	
3	● Gray	① From left to right	8WH2003-5DF00
	● Gray	② From right to left	8WH2003-5CF00

Special accessories

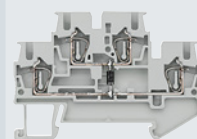
Covers			
	Color	Terminals	Article No.
	● Gray	3	8WH9000-4GA00
Compartment partitions			
	Color	Terminals	Article No.
	● Gray	3	8WH9070-0GA00
Cover segments			
		• For covering multi-wire terminals when mounting two-wire terminals side-by-side	
	Color	Terminals	Article No.
	● Gray	3	8WH9000-0GA00

General accessories, page 14/57 onwards

Two-tier diode terminals



Terminal size	2.5 mm ²
Terminal width	5.2 mm
Load current	26 A
Uninterrupted limiting current	0.5 A
Operational voltage U	500 V
Blocking voltage	1300 V
AWG	28 ... 12
Connection capacity, rigid	0.08 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm ²
Diode	1N 4007, integrated
Standard	UL US



Versions	Color	
1 With one diode		
Let-through from top to bottom	● Gray	8WH2020-5AF00
Let-through from bottom left to bottom right	● Gray	8WH2020-5DF00
2 With two diodes		
Let-through from top to bottom left and from bottom right to bottom left	● Gray	8WH2020-5KF00
3 With illuminated display		
15 ... 30 V DC / 2.5 ... 7.5 A	● Gray	8WH2020-5JF30

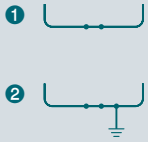
Special accessories

Covers		
	Color	Article No.
	● Gray	8WH9000-1VA00
Compartment partitions		
	Color	Article No.
	● Gray	8WH9070-0BA00

General accessories, page 14/57 onwards

8WH5 combination plug-in terminals

Through-type terminals



Terminal size

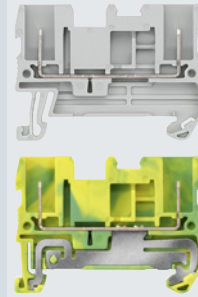
2.5 mm²

Terminal width 5.2 mm

Load current 24 A

Operational voltage U 500 V

Standard IEC 61984, cULus

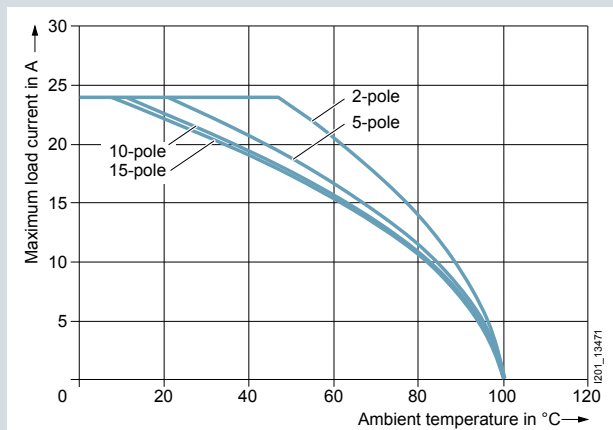


Terminals	Color	Combination plug-in connection
1 Through-type terminals		
2	● Gray	8WH5000-0AF00
	● Blue	8WH5000-0AF01
2 PE through-type terminals		
2	● Green-yellow	8WH5000-0CF07

Special accessories

Covers			
Image	Terminals	Color	Article No.
	2	● Gray	8WH9000-1VA00
Compartment partitions			
Image	Terminals	Color	Article No.
	2	● Gray	8WH9070-0BA00

General accessories, page 14/57 onwards



Derating curve for 8WH5000-0AF00

Hybrid through-type terminals



		Terminal size
		2.5 mm ²
Terminal width		5.2 mm
Rated current I _n / cross-section		24 A / 2.5 mm ²
Rated voltage U _n		500 V
AWG		26 ... 12
Connection capacity, rigid		0.14 ... 4 mm ²
Connection capacity, flexible with end sleeve		0.14 ... 2.5 mm ²
Standard		UL

Terminals	Color	iPo plug-in connection and combination plug-in connection
① Hybrid through-type terminals		
2	● Gray	8WH5100-2PF00
② PE hybrid through-type terminals		
2	● Green-yellow	8WH5100-3PF07

Special accessories










Covers			
	Terminals	Color	Article No.
	2	● Gray	8WH9000-1GA00
Compartment partitions			
	Terminals	Color	Article No.
	4	● Gray	8WH9070-0HA00

General accessories, page 14/57 onwards

8WH5 combination plug-in terminals






8WH9 plugs

	Terminal size 2.5 mm ²	
Terminal width	5.2 mm	5.2 mm
Load current	24 A	24 A
Operational voltage U	500 V	500 V
AWG	28 ... 12	28 ... 12
Connection capacity, rigid	0.08 ... 4 mm ²	0.08 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.08 ... 2.5 mm ²	0.08 ... 2.5 mm ²
Number of poles	1P	1P
Standard	 US	 US
		

Version	Color	With slot for comb	Without slot for comb
Plug			
Left element	 Gray	8WH9040-1DB00	8WH9040-1AB00
	 Blue	8WH9040-1DB01	8WH9040-1AB01
Central element	 Gray	8WH9040-1EB00	8WH9040-1BB00
	 Blue	8WH9040-1EB01	8WH9040-1BB01
Right element	 Gray	8WH9040-1FB00	8WH9040-1CB00
	 Blue	8WH9040-1FB01	8WH9040-1CB01
PE plugs			
Left element	 Green-yellow	8WH9040-1DB07	8WH9040-1AB07
Central element	 Green-yellow	8WH9040-1EB07	–
Right element	 Green-yellow	8WH9040-1FB07	8WH9040-1CB07

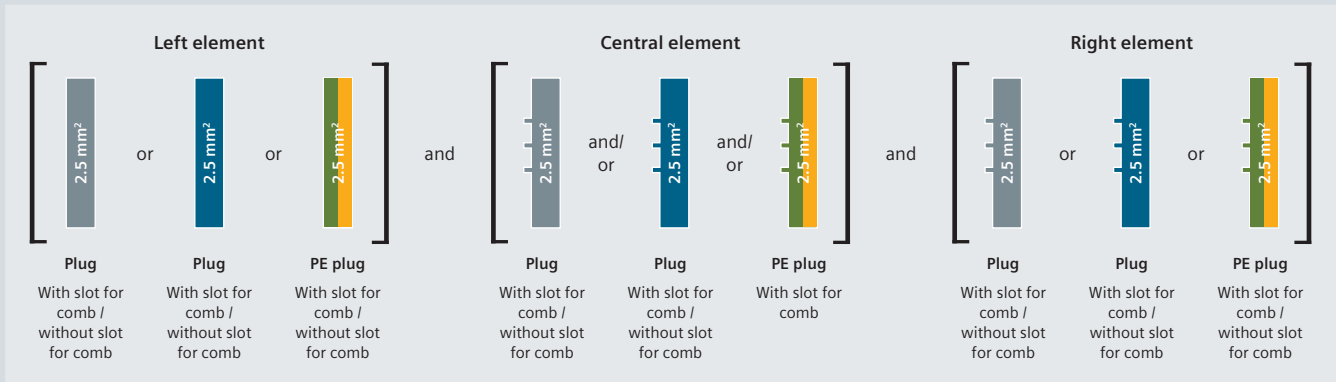
14

Special accessories

Latches				
	Version	Color	Article No.	Article No.
	With strain relief	 Orange	8WH9050-2BA04	8WH9050-2BA04
	Without strain relief	 Orange	8WH9050-2AA04	8WH9050-2AA04
Shielding				
	• For connection of shielded cables			
	Cable diameter	Color	Article No.	Article No.
5 ... 10 mm	 Black	8WH9120-0DB08	8WH9120-0DB08	

General accessories, page 14/57 onwards

Configuration of combination plug

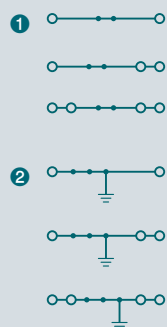


Note:

The configuration concept shown is just one example of how combination plugs can be configured.

8WH3 insulation displacement terminals

Through-type terminals



	Terminal size	Terminal size	
		1.5 mm ²	2.5 mm ²
Terminal width	5.2 mm	6.2 mm	
Load current I	17.5 A ¹⁾	24 A ¹⁾	
Operational voltage U	800 V	800 V	
AWG	24 ... 16	20 ... 14	
Connection capacity, rigid	0.25 ... 1.5 mm ²	0.5 ... 2.5 mm ²	
Connection capacity, flexible with end sleeve	0.25 ... 1.5 mm ²	0.5 ... 2.5 mm ²	

Terminals	Color		
① Through-type terminals			
2	● Gray	8WH3000-0AE00	8WH3000-0AF00
	● Blue	8WH3000-0AE01	8WH3000-0AF01
3	● Gray	8WH3003-0AE00	8WH3003-0AF00
	● Blue	8WH3003-0AE01	8WH3003-0AF01
4	● Gray	8WH3004-0AE00	–
	● Blue	8WH3004-0AE01	–
② PE through-type terminals			
2	● Green-yellow	8WH3000-0CE07	8WH3000-0CF07
3	● Green-yellow	8WH3003-0CE07	8WH3003-0CF07
4	● Green-yellow	8WH3004-0CE07	–

Special accessories

Covers					
	Terminals	Color	Article No.	Article No.	
	2	● Gray	8WH9001-1AA00	8WH9000-1AA00	
	3	● Gray	8WH9001-2AA00	8WH9000-2AA00	
	4	● Gray	8WH9001-4AA00	–	
Compartment partitions					
	Terminals	Color	Thickness	Article No.	Article No.
	2	● Gray	2 mm	8WH9070-0JA00	8WH9070-0JA00
	3	● Gray	2 mm	8WH9070-0KA00	8WH9070-0KA00
	4	● Gray	2 mm	8WH9070-0LA00	–
Cover segments					
	<ul style="list-style-type: none"> For covering multi-wire terminals when mounting two-wire terminals side-by-side 				
	Terminals	Color	Article No.	Article No.	
	3	● Gray	–	8WH9000-0AA00	

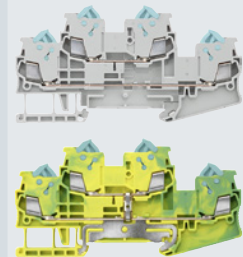
General accessories, page 14/57 onwards

¹⁾ On terminals with three and four clamping points, the total current through all connected conductors must not exceed the maximum load current.

Two-tier terminals



Terminal size	1.5 mm ²
Terminal width	5.2 mm
Load current	17.5 A
Operational voltage U	500 V
AWG	24 ... 16
Connection capacity, rigid	0.25 ... 1.5 mm ²
Connection capacity, flexible with end sleeve	0.25 ... 1.5 mm ²
Standard	UL 94V-0



Version	Color	
① Two-tier terminals		
Without equipotential bonding	● Gray	8WH3020-0AE00
	● Blue	8WH3020-0AE01
② PE two-tier terminals		
	● Green-yellow	8WH3020-0CE07

Special accessories

Covers



Color	Article No.
● Gray	8WH9001-1BA00

Compartment partitions





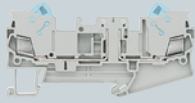
Color	Article No.
● Gray	8WH9070-0MA00


General accessories, page 14/57 onwards

8WH3 insulation displacement terminals

Isolating terminals













	Terminal size	
	1.5 mm ²	2.5 mm ²
Terminal width	5.2 mm	6.2 mm
Load current	16 A	16 A
Operational voltage U	400 V	400 V
AWG	24 ... 16	20 ... 14
Connection capacity, rigid	0.25 ... 1.5 mm ²	0.5 ... 2.5 mm ²
Connection capacity, flexible with end sleeve	0.25 ... 1.5 mm ²	0.5 ... 2.5 mm ²
Standard	 US	 US
		

Terminals	Color	Article No.	Article No.
2	 Gray	8WH3000-6AE00	8WH3000-6AF00

Special accessories

Covers			
	Color	Article No.	Article No.
	 Gray	8WH9001-2AA00	8WH9000-2AA00

Compartment partitions			
	Color	Article No.	Article No.
	 Gray	8WH9070-0KA00	8WH9070-0KA00

Plug-in zone connectors						
	Type	Color	I _{max}	Illuminated display	Article No.	Article No.
	Isolating plugs	 Orange	–	–	8WH9040-0DB04	8WH9040-0DB04
	Through-type connectors	 Gray	16 A	–	8WH9020-8AB00	8WH9020-8AB00
	Fused connectors ¹⁾	 Black	6.3 A	12 ... 30 V, 1 ... 2.5 mA	8WH9040-3AB08	8WH9040-3AB08
				110 ... 250 V, 0.5 ... 2.5 mA	8WH9040-3CB08	8WH9040-3CB08
				Without	8WH9040-3DB08	8WH9040-3DB08
	Component connectors	 Gray	6 A	–	8WH9040-0BB00	8WH9040-0BB00

General accessories, page 14/57 onwards

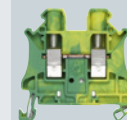
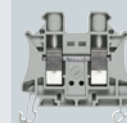
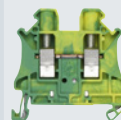
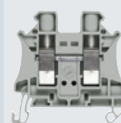
¹⁾ The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. Higher ambient temperatures represent an additional load for the fuse links. A shift in rated current should therefore be taken into account in such applications.

8WH1 screw terminals

Through-type terminals



	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Max. load current I_{max}	32 A	41 A
Rated voltage U_n	1000 V	1000 V
AWG	26 ... 12	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²	0.14 ... 6 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm ²	0.14 ... 6 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Tightening torque	0.6 ... 0.8 Nm	0.6 ... 0.8 Nm
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus, ©	IEC 60947-7-1, IEC 60947-7-2, cULus, ©



Terminals	Color		
1 Through-type terminals			
2	<ul style="list-style-type: none"> ● Gray ● Blue ● Orange ● Red ● Black ● Green ● Yellow 	8WH1000-0AF00 8WH1000-0AF01 8WH1000-0AF04 8WH1000-0AF02 8WH1000-0AF08 8WH1000-0AF03 8WH1000-0AF06	8WH1000-0AG00 8WH1000-0AG01 8WH1000-0AG04 8WH1000-0AG02 8WH1000-0AG08 – –
2 PE through-type terminals			
2	● Green-yellow	8WH1000-0CF07	8WH1000-0CG07

Special accessories

Covers



Width
2.2 mm

Color
● Gray

Article No.
8WH9000-1PA00

Article No.
8WH9000-1PA00

Compartment partitions



Thickness
2 mm

Color
● Gray

Article No.
8WH9070-6BA00

Article No.
8WH9070-6BA00

Reducing combs



Version
From screw to screw
From screw to spring

Color
● Turquoise
● Turquoise

Article No.
–
–

Article No.
–
–

Warning covers for 8WH1



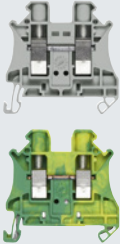
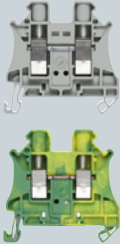
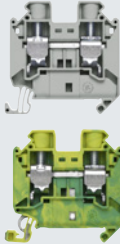
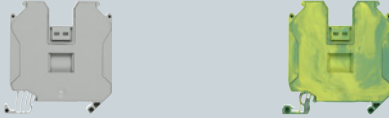
Image
Lightning symbol

Color
● Yellow

Article No.
8WH9060-5BA06

Article No.
8WH9063-5BA06

General accessories, page 14/57 onwards

6 mm ²	10 mm ²	16 mm ²	35 mm ²	
8.2 mm	10.2 mm	12.2 mm	16 mm	16 mm
57 A	76 A	101 A	150 A	–
1000 V	1000 V	1000 V	1000 V	–
24 ... 8	20 ... 6	16 ... 4	16 ... 1/0	16 ... 2
0.2 ... 10 mm ²	0.5 ... 16 mm ²	1.5 ... 25 mm ²	1.5 ... 50 mm ²	1.5 ... 35 mm ²
0.2 ... 2.5 mm ²	0.5 ... 4 mm ²	1 ... 6 mm ²	1.5 ... 16 mm ²	1.5 ... 16 mm ²
0.2 ... 10 mm ²	0.5 ... 16 mm ²	1.5 ... 25 mm ²	1.5 ... 50 mm ²	1.5 ... 35 mm ²
0.2 ... 2.5 mm ²	0.5 ... 4 mm ²	1 ... 6 mm ²	1.5 ... 10 mm ²	1.5 ... 10 mm ²
1.5 ... 1.8 Nm	1.6 ... 1.8 Nm	2.5 ... 3.0 Nm	3.2 ... 3.7 Nm	3.2 ... 3.7 Nm
IEC 60947-7-1, IEC 60947-7-2, cULus, CE	IEC 60947-7-1, IEC 60947-7-2, cULus, CE	IEC 60947-7-1, IEC 60947-7-2, cULus, CE	IEC 60947-7-1, IEC 60947-7-2, cULus, CE	IEC 60947-7-1, IEC 60947-7-2, cULus, CE
				
8WH1000-0AH00	8WH1000-0AJ00	8WH1000-0AK00	8WH1000-0AM00	–
8WH1000-0AH01	8WH1000-0AJ01	8WH1000-0AK01	8WH1000-0AM01	–
–	–	–	–	–
8WH1000-0AH02	–	–	–	–
8WH1000-0AH08	–	–	–	–
–	–	–	–	–
–	–	–	–	–
8WH1000-0CH07	8WH1000-0CJ07	8WH1000-0CK07	–	8WH1000-0CM07
Article No.	Article No.	Article No.	Article No.	Article No.
8WH9000-1PA00	8WH9000-1PA00	8WH9076-1PA00	–	–
Article No.	Article No.	Article No.	Article No.	Article No.
8WH9070-6BA00	8WH9070-6BA00	–	–	–
Article No.	Article No.	Article No.	Article No.	Article No.
8WH9002-8AC10	8WH9002-8CC10	8WH9002-8EC10	8WH9002-8GC10	8WH9002-8GC10
8WH9002-8BC10	8WH9002-8DC10	8WH9002-8FC10	8WH9002-8HC10	8WH9002-8HC10
Article No.	Article No.	Article No.	Article No.	Article No.
8WH9064-5BA06	8WH9065-5BA06	8WH9066-5BA06	8WH9067-5BA06	8WH9067-5BA06

8WH1 screw terminals

Through-type terminals for high-current applications



	Terminal size			
	50 mm ²	95 mm ²	150 mm ²	240 mm ²
Terminal width	20 mm	25 mm	31 mm	36 mm
Rated current I	150 A	232 A	309 A	415 A
Rated voltage U	1000 V	1000 V	1000 V	1000 V
AWG	6 ... 0	4 ... 000	2 ... 300 kcmil	00 ... 500 kcmil
Connection capacity, rigid	16 ... 50 mm ²	25 ... 95 mm ²	35 ... 150 mm ²	70 ... 240 mm ²
Connection capacity, flexible with end sleeve	25 ... 50 mm ²	35 ... 95 mm ²	50 ... 150 mm ²	70 ... 240 mm ²
Tightening torque	6 ... 8 Nm	15 ... 20 Nm	25 ... 30 Nm	25 ... 30 Nm
Standard	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, IEC 60947-7-2, cULus	IEC 60947-7-1, cULus	IEC 60947-7-1, cULus

Terminals	Color				
① Through-type terminals					
2	● Gray	8WH1000-0AN00	8WH1000-0AQ00	8WH1000-0AS00	8WH1000-0AU00
	● Blue	8WH1000-0AN01	8WH1000-0AQ01	8WH1000-0AS01	8WH1000-0AU01
② PE through-type terminals					
2	● Green-yellow	8WH1000-0CN07	8WH1000-0CQ07	–	–

Special accessories

Tap-off terminal



- When wiring a tap-off with a smaller cross-section, observe the overload and short-circuit strength specified in VDE 0100 Part 430

I _{max}	Cross-section	Article No.	Article No.	Article No.	Article No.
57 A	10 mm ²	8WH9120-0AA00	8WH9120-0BA00	8WH9120-0CA00	8WH9120-0CA00

Insertion profiles



- Evens out the prismatic sleeve base when using flat conductors

Article No.	Article No.	Article No.	Article No.
8WH9020-3MA00	8WH9020-3NA00	8WH9020-3PA00	8WH9020-3PA00

Combs



- Fully insulated, fitted in the clamping sleeve and latched with the terminal enclosure

I _{max}	Number of poles	Article No.	Article No.	Article No.	Article No.
232 A	2-pole	–	8WH9020-3AA00	8WH9020-3CA00	–
	3-pole	–	8WH9020-3BA00	8WH9020-3DA00	–
320 A	2-pole	–	–	–	8WH9020-3EA00
	3-pole	–	–	–	8WH9020-3FA00

Permanent links



- For cross links
- Screw heads with insulating collar
- Remove partition first

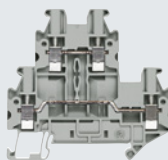
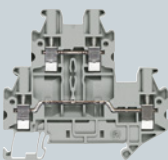
I _{max}	Number of poles	Article No.	Article No.	Article No.	Article No.
150 A	2-pole	8WH9020-6HC00	–	–	–
	3-pole	8WH9020-6HD00	–	–	–

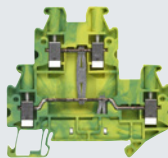
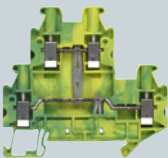
General accessories, page 14/57 onwards

Two-tier terminals



	Terminal size	
	2.5 mm ²	4 mm ²
Terminal width	5.2 mm	6.2 mm
Max. load current I _{max}	28 A	36 A
Rated voltage U _{max}	500 V	800 V
AWG	26 ... 12	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²	0.14 ... 6 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm ²	0.14 ... 6 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Tightening torque	0.5 ... 0.6 Nm	0.6 ... 0.8 Nm
Standard	cULus, CE	cULus, CE

Version	Color		
1 Two-tier terminals			
Without equipotential bonding	● Gray	8WH1020-0AF00	8WH1020-0AG00
With equipotential bonding	● Blue	8WH1020-0AF01	8WH1020-0AG01
	● Gray	8WH1025-0AF00	8WH1025-0AG00
2 PE two-tier terminals			
	● Green-yellow	8WH1020-0CF07	8WH1020-0CG07

Special accessories

Covers				
	Width	Color	Article No.	Article No.
	2.2 mm	● Gray	8WH9000-1QA00	8WH9000-1QA00
Compartment partitions				
	Thickness	Color	Article No.	Article No.
	2 mm	● Gray	8WH9070-6FA00	8WH9070-6FA00
Spacer plates				
	• Compensates for tier offset if other terminals are mounted side by side			
	Thickness	Color	Article No.	Article No.
2.5 mm	● Gray	8WH9160-0AA00	8WH9160-0AA00	

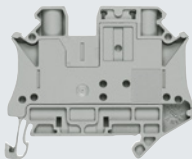
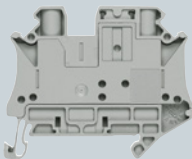
General accessories, page 14/57 onwards

8WH1 screw terminals

Isolating terminals







	Terminal size	
	4 mm ²	6 mm ²
Terminal width	6.2 mm	8.2 mm
Max. load current I_{max}	20 A	20 A
Rated voltage U_n	400 V	500 V
AWG	26 ... 10	24 ... 8
Connection capacity, one rigid conductor	0.14 ... 6 mm ²	0.2 ... 10 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²	0.2 ... 2.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm ²	0.2 ... 10 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²	0.2 ... 2.5 mm ²
Tightening torque	0.6 ... 0.8 Nm	1.5 ... 1.8 Nm
Standard	cULus, c	cULus

Terminals	Color		
2	● Gray	8WH1000-6AG00	8WH1000-6AH00

Special accessories

Plug-in zone connectors

	Type	Color	I_{max}	Illuminated display	Article No.	Article No.
	Isolating plugs	● Orange	–	–	8WH9040-0DB04	8WH9040-0DB04
	Through-type connectors	● Gray	16 A	–	8WH9020-8AB00	8WH9020-8AB00
	Fused connectors ¹⁾	● Black	6.3 A	12 ... 30 V, 1 ... 2.5 mA	8WH9040-3AB08	8WH9040-3AB08
				110 ... 250 V, 0.5 ... 2.5 mA	8WH9040-3CB08	8WH9040-3CB08
				Without	8WH9040-3DB08	8WH9040-3DB08
	Component connectors	● Gray	6 A	–	8WH9040-0BB00	8WH9040-0BB00

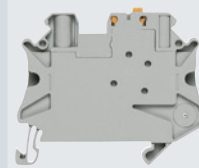
General accessories, page 14/57 onwards

¹⁾ The G fuse holders must be selected according to the maximum power loss (heat dissipation) of the G fuse links. Depending on the application and method of installation, the heat rise conditions in closed fuse holders must be tested. Higher ambient temperatures represent an additional load for the fuse links. A shift in rated current should therefore be taken into account in such applications.

Isolating blade terminals



	Terminal size
	4 mm²
Terminal width	6.2 mm
Max. load current I_{max}	20 A
Rated voltage U_n	500 V
AWG	26 ... 12
Connection capacity, one rigid conductor	0.14 ... 4 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²
Tightening torque	0.6 ... 0.8 Nm
Standard	UL, CE



Terminals	Color	
2	● Gray	8WH1000-6CG00

Special accessories

Warning covers for 8WH1		
Image	Color	Article No.
	● Yellow Lightning symbol	8WH9063-5BA06

General accessories, page 14/57 onwards

8WH1 screw terminals

Two-tier terminals with isolating function

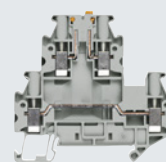
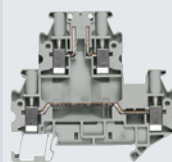


Terminal width	6.2 mm	6.2 mm
Max. load current I_{\max}	38 A	38 A
Rated voltage U_{\max}	500 V	500 V
AWG	26 ... 10	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 6 mm ²	0.14 ... 6 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm ²	0.14 ... 6 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Tightening torque	0.6 ... 0.8 Nm	0.6 ... 0.8 Nm
Standard	UL, CE	UL, CE

Terminal size




4 mm²

Terminal width	6.2 mm	6.2 mm
Max. load current I_{\max}	38 A	38 A
Rated voltage U_{\max}	500 V	500 V
AWG	26 ... 10	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 6 mm ²	0.14 ... 6 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm ²	0.14 ... 6 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²	0.14 ... 1.5 mm ²
Tightening torque	0.6 ... 0.8 Nm	0.6 ... 0.8 Nm
Standard	UL, CE	UL, CE



Version	Color	Article No.	Article No.
1 Isolating terminal			
Isolating terminal in the upper tier	● Gray	8WH1020-6AG00	–
2 Isolating blade			
Isolating blade in the upper tier	● Gray	–	8WH1020-6AC00

Special accessories

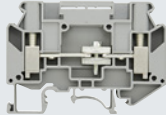
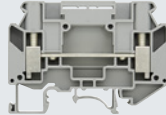
Covers				
	Width	Color	Article No.	Article No.
	2.2 mm	● Gray	8WH9000-1QA00	8WH9000-1QA00
Compartment partitions				
	Thickness	Color	Article No.	Article No.
	2 mm	● Gray	8WH9070-6FA00	8WH9070-6FA00
Spacer plates				
	• Compensates for tier offset if other terminals are mounted side by side			
	Thickness	Color	Article No.	Article No.
	2.5 mm	● Gray	8WH9160-0AA00	8WH9160-0AA00

General accessories, page 14/57 onwards

Measuring transformer isolating terminals


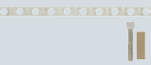


	Terminal size 6 mm ²	
Terminal width	8.2 mm	8.2 mm
Rated uninterrupted current I _u	41 A	41 A
Rated insulation voltage U _i	500 V	800 V
AWG	24	8
Connection capacity, rigid	0.5 ... 10 mm ²	0.5 ... 10 mm ²
Connection capacity, flexible with end sleeve	0.5 ... 6 mm ²	0.5 ... 6 mm ²
Disconnect slide tightening torque	0.6 ... 0.8 Nm	–
Tightening torque	1.5 ... 1.6 Nm	1.5 ... 1.6 Nm
Standard	UL, CE	UL, CE

Terminals	Color		
1 Isolating terminals			
2 recesses for screwing in the test sockets	● Gray	8WH1000-7AH00	–
2 Through-type terminals with identical contour			
2 recesses for screwing in the test sockets	● Gray	–	8WH1000-7BH00

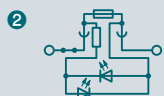
Special accessories

Covers				
	Width 2.2 mm	Color ● Gray	Article No. 8WH9000-3UA00	Article No. 8WH9000-3UA00
Disconnecting links				
	<ul style="list-style-type: none"> For bridging two adjacent terminals Cannot be used with the bare 8WH9010-0MB12 test socket 			
	Tightening torque 0.6 ... 0.8 Nm	Number of poles 2-pole	Color ● Gray	Article No. 8WH9021-0AC00
				Article No. 8WH9021-0AC00
Connecting combs, separable				
	<ul style="list-style-type: none"> Consisting of connection wire, spacer sleeves and screws For bridging terminals, the connection wire is adjustable Cannot be used with the bare 8WH9010-0MB12 test socket 			
	Tightening torque 0.6 ... 0.8 Nm	Number of poles 10-pole	Color ● Gray	Article No. 8WH9021-0AL00
				Article No. 8WH9021-0AL00
Short-circuiting plugs, fully insulated				
	<ul style="list-style-type: none"> For short-circuiting adjacent terminals For simple transformer measurements Required when the bare 8WH9010-0MB12 test adapter is used in the measuring transformer terminal 			
	I _{max} 20 A	Number of poles 2-pole	Color ● Black	Article No. 8WH9010-0BC08
				Article No. 8WH9010-0BC08
Test sockets, insulated				
	<ul style="list-style-type: none"> For screwing into the measuring transformer terminals The 8WH9021-0AC00 disconnecting link shall be used for short-circuiting adjacent terminals 			
	Tightening torque 0.6 ... 0.8 Nm		Color ● Green ● Violet ● Yellow	Article No. 8WH9010-0MB03 8WH9010-0MB11 8WH9010-0MB06
				Article No. 8WH9010-0MB03 8WH9010-0MB11 8WH9010-0MB06
Test sockets, bare				
	<ul style="list-style-type: none"> For screwing into the measuring transformer terminals For simple transformer measurements For tapping with test plug The 8WH9010-0BC08 short-circuiting plug shall be used for short-circuiting adjacent terminals 			
	Tightening torque 0.6 ... 0.8 Nm			Article No. 8WH9010-0MB12
				Article No. 8WH9010-0MB12

General accessories, page 14/57 onwards

8WH1 screw terminals

Fuse terminals



Connection capacity, one rigid conductor
Connection capacity, two rigid conductors
Connection capacity, one flexible conductor with end sleeve
Connection capacity, two flexible conductors with end sleeve

	Terminal size	
	4 mm ²	6 mm ²
Terminal width	6.2 mm	8.2 mm
Max. load current I _{max}	6.3 A	10 A
Rated voltage U _n	500 V	630 V
AWG	26 ... 10	24 ... 8
Connection capacity, one rigid conductor	0.14 ... 6 mm ²	0.2 ... 10 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²	0.2 ... 2.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm ²	0.2 ... 10 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²	0.2 ... 2.5 mm ²
Tightening torque	0.6 ... 0.8 Nm	1.5 ... 1.8 Nm
Standard	UL, CE	UL, CE



LED	Color		
For 5 × 20 mm G fuse links			
① Without	● Black	8WH1000-1GG08	–
② AC/DC with LED 10 ... 30 V	● Black	8WH1000-1KG38	–
② AC/DC with LED 110 ... 250 V	● Black	8WH1000-1MG88	–
For 6.3 × 32 mm G fuse links (inch fuses)			
① Without	● Black	–	8WH1000-1HH08
② AC/DC with LED 12 ... 30 V	● Black	–	8WH1000-1PH38

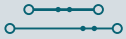
Special accessories

Reducing combs

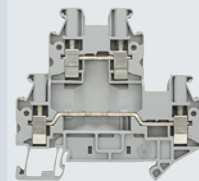


- For connecting terminals from terminal size 6 mm² to 2.5 mm² or 4 mm²

Version	Color	Article No.	Article No.
From screw to screw	● Turquoise	–	8WH9002-8AC10




Two-tier terminals for soldering of components ¹⁾

	Terminal size
	2.5 mm²
Terminal width	5.2 mm
Max. load current I_{max}	28 A
Rated voltage U_{max}	500 V
AWG	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²
Tightening torque	0.5 ... 0.6 Nm
Standard	UL, CE



Terminals	Color	Article No.
4	● Gray	8WH1020-5LF00

Special accessories

Covers			
	Width	Color	Article No.
	2.2 mm	● Gray	8WH9000-1QA00
Compartment partitions			
	Thickness	Color	Article No.
	2 mm	● Gray	8WH9070-6FA00
Spacer plates			
	• Compensates for tier offset if other terminals are mounted side by side		
	Thickness	Color	Article No.
	2.5 mm	● Gray	8WH9160-0AA00

General accessories, page 14/57 onwards

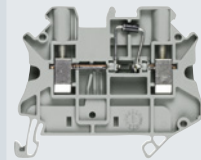
¹⁾ Supplied without components; the appropriate components (resistors, diodes, capacitors, ...) are to be soldered in by user

8WH1 screw terminals

Diode terminals



	Terminal size
	4 mm ²
Terminal width	6.2 mm
Uninterrupted limiting current	0.5 A
Rated insulation voltage U _i	800 V
Blocking voltage	1300 V
AWG	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 6 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 6 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²
Tightening torque	0.6 ... 0.8 Nm
Diode	1N 4007, integrated
Standard	UL, CE



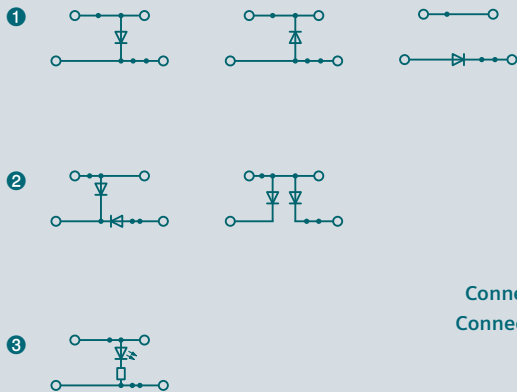
Let-through	Color	Article No.
① From left to right	● Gray	8WH1000-6LG00
② From right to left	● Gray	8WH1000-6KG00

Special accessories

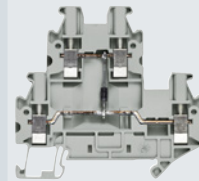
Covers			
Image	Width	Color	Article No.
	2.2 mm	● Gray	8WH9000-2PA00
Warning covers			
Image	Color	Article No.	
	● Yellow	8WH9063-5BA06	

General accessories, page 14/57 onwards

Two-tier diode terminals



Terminal size	2.5 mm ²
Terminal width	5.2 mm
Max. load current I_{max}	28 A
Uninterrupted limiting current	0.5 A
Rated insulation voltage U_i	500 V
AWG	26 ... 10
Connection capacity, one rigid conductor	0.14 ... 4 mm ²
Connection capacity, two rigid conductors	0.14 ... 1.5 mm ²
Connection capacity, one flexible conductor with end sleeve	0.14 ... 4 mm ²
Connection capacity, two flexible conductors with end sleeve	0.14 ... 1.5 mm ²
Tightening torque	0.5 ... 0.6 Nm
Diode	1N 4007, integrated
Standard	UL, CE



Versions	LED	Color	
1 With one diode			
Let-through from top to bottom		● Gray	8WH1020-5AF00
Let-through from bottom to top		● Gray	8WH1020-5BF00
Let-through from bottom left to bottom right		● Gray	8WH1020-5DF00
2 With two diodes			
Let-through from top to bottom left and from bottom right to bottom left		● Gray	8WH1020-5FF00
Let-through from top to bottom left and from top to bottom right		● Gray	8WH1020-5HF00
3 With illuminated display			
Let-through from top to bottom	24 V DC	● Gray	8WH1020-5JF30

Special accessories

Covers



Width	Color	Article No.
2.2 mm	● Gray	8WH9000-1QA00

Compartment partitions



Thickness	Color	Article No.
2 mm	● Gray	8WH9070-6FA00

Spacer plates



Thickness	Color	Article No.
2.5 mm	● Gray	8WH9160-0AA00

- Compensates for tier offset if other terminals are mounted side by side

General accessories, page 14/57 onwards

8WH1 screw terminals

Shield terminals

	Terminal diameter			
	3 ... 8 mm	3 ... 14 mm	3 ... 20 mm	20 ... 35 mm
Tightening torque	0.6 Nm	0.8 Nm	0.8 Nm	1.5 ... 1.8 Nm
Sheet thickness, mounting plate	1 ... 2 mm	1 ... 2 mm	1 ... 2 mm	1 ... 2 mm
				
				

Version

For direct shield attachment on conductive mounting plate



For connecting cable shield and enclosure ground	8WH9130-0AA00	8WH9130-0BA00	8WH9130-0CA00	8WH9130-0DA00
--	---------------	---------------	---------------	---------------

For 10 × 3 mm busbars


For connecting cable shield and enclosure ground	8WH9130-0LA00	8WH9130-0MA00	8WH9130-0NA00	8WH9130-0PA00
--	---------------	---------------	---------------	---------------

Special accessories

Support brackets

	Version	Article No.	Article No.	Article No.	Article No.
	Made of molded plastic and conductive connection with retaining screw	8WH9140-0DA00	8WH9140-0DA00	8WH9140-0DA00	8WH9140-0DA00
	For mounting rail with clearance of approx. 30 mm to the busbar	8WH9140-0BA00	8WH9140-0BA00	8WH9140-0BA00	–
	For mounting rail with clearance of approx. 65 mm to the busbar	8WH9140-0CA00	8WH9140-0CA00	8WH9140-0CA00	–

N busbars, 10 × 3 mm

	Version	Length	Article No.	Article No.	Article No.	Article No.
	Copper, tinned	1000 mm	8WA2842	8WA2842	8WA2842	8WA2842

Accessories for 8WH terminal blocks

Individual labeling system

Labeling systems for

- Terminal blocks
- Modular installation devices
- Circuit breakers
- Switch disconnectors

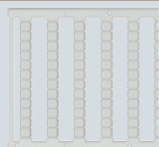
Labeling systems available from:

Murrplastik Systemtechnik GmbH
Postfach 1143
D-71570 Oppenweiler
Telephone: 07191-482-0
email: info@murrplastik.de

The inscription labels can be inscribed with Murrplastik labeling systems or by hand.

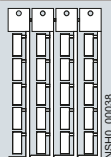
The WIN designation facilitates assignment in the inscription software.

Blank labels



Version	Terminal width	Designation	Color	Article No.
Front	3.5 mm	WIN 97	● White	8WH8112-0AA05
	4.2 mm	WIN 97	● White	8WH8112-1AA05
	5.2 and 6.2 mm	WIN 88	● White	8WH8112-2AA05
	8.2, 10, 12 and 16 mm	WIN 40	● White	8WH8112-4AA05
Flat	3.5 mm	WIN 97	● White	8WH8113-0AA05
	4.2 mm	WIN 180	● White	8WH8113-1AA05
	5.2 mm	WIN 182	● White	8WH8113-1AA05
	6.2 mm	WIN 184	● White	8WH8113-1AA05
	8.2 mm	WIN 186	● White	8WH8113-1AA05
	10 mm	WIN 188	● White	8WH8113-1AA05
	12 and 16 mm	WIN 46Z	● White	8WH8113-6AA05

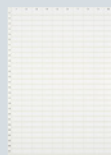
Snap-on device labels



- For identification of, e.g. circuit breakers, contactors and control systems

Version	Designation	Color	Article No.
20 × 7 mm, snap-on hooks at side	WIN 95	● White	8WH8210-0AA55
20 × 7 mm, snap-on hooks at side	WIN 95	● Turquoise	8WH8210-0AA56

Adhesive device labels

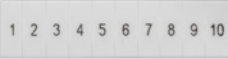


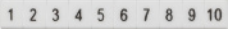




- For identification of, e.g. modular installation devices and switch disconnectors

Versions	Designation	Color	Article No.
15 × 6 mm	WIN 098	● White	8WH8210-0AA35
	WIN 099	● Yellow	8WH8210-0AA36
19 × 8 mm	WIN 088	● White	8WH8210-0AA45
	WIN 082	● Yellow	8WH8210-0AA46

Accessories for 8WH terminal blocks

Standard labeling system

				Terminal size	1.5 mm ²	2.5 mm ²				
				Terminal width	4.2 mm / 5.2 mm (8WH3)	5.2 mm / 6.2 mm (8WH3)				
Front										
	Vertical	Inscription	Consecutive numbering	Inscription	Article No.	Article No.				
				1 ... 10 (10×)	8WH8120-1AB05	8WH8120-2AB05				
				11 ... 20 (10×)	8WH8120-1AB15	8WH8120-2AB15				
				21 ... 30 (10×)	8WH8120-1AB25	8WH8120-2AB25				
				31 ... 40 (10×)	8WH8120-1AB35	8WH8120-2AB35				
				41 ... 50 (10×)	8WH8120-1AB45	8WH8120-2AB45				
				51 ... 60 (10×)	8WH8120-1AB55	8WH8120-2AB55				
				61 ... 70 (10×)	8WH8120-1AB65	8WH8120-2AB65				
				71 ... 80 (10×)	8WH8120-1AB75	8WH8120-2AB75				
				81 ... 90 (10×)	8WH8120-1AB85	8WH8120-2AB85				
				91 ... 100 (10×)	8WH8120-1AC05	8WH8120-2AC05				
				L1, L2, L3, N, PE	–	8WH8120-2AA15				
				U, V, W, N, grounding	–	–				
				Custom inscription	–	8WH8120-1XA05-Z Y01	8WH8120-2XA05-Z Y01			
					Horizontal	Inscription	Consecutive numbering	Inscription	Article No.	Article No.
1 ... 10 (10×)	8WH8140-1AB05	8WH8140-2AB05								
11 ... 20 (10×)	8WH8140-1AB15	8WH8140-2AB15								
21 ... 30 (10×)	8WH8140-1AB25	8WH8140-2AB25								
31 ... 40 (10×)	8WH8140-1AB35	8WH8140-2AB35								
41 ... 50 (10×)	–	8WH8140-2AB45								
51 ... 60 (10×)	–	8WH8140-2AB55								
61 ... 70 (10×)	–	8WH8140-2AB65								
71 ... 80 (10×)	–	8WH8140-2AB75								
81 ... 90 (10×)	–	8WH8140-2AB85								
91 ... 100 (10×)	–	8WH8140-2AC05								
Custom inscription	–	8WH8140-1XA05-Z Y01	8WH8140-2XA05-Z Y01							
	Blank	Inscription	–					Article No.	8WH8110-1AA05	8WH8110-2AA05
								–	–	
Flat										
	Vertical	Inscription	Consecutive numbering	Inscription	Article No.	Article No.				
				1 ... 10 (10×)	8WH8121-1AB05	8WH8121-2AB05				
				11 ... 20 (10×)	8WH8121-1AB15	8WH8121-2AB15				
				21 ... 30 (10×)	8WH8121-1AB25	8WH8121-2AB25				
				31 ... 40 (10×)	8WH8121-1AB35	8WH8121-2AB35				
				41 ... 50 (10×)	8WH8121-1AB45	8WH8121-2AB45				
				51 ... 60 (10×)	8WH8121-1AB55	8WH8121-2AB55				
				61 ... 70 (10×)	–	8WH8121-2AB65				
				71 ... 80 (10×)	–	8WH8121-2AB75				
				81 ... 90 (10×)	–	8WH8121-2AB85				
				91 ... 100 (10×)	–	8WH8121-2AC05				
				Custom inscription	–	8WH8121-1XA05-Z Y01	8WH8121-2XA05-Z Y01			
					Horizontal	Inscription	Consecutive numbering	Inscription	Article No.	Article No.
								1 ... 10 (10×)	8WH8141-1AB05	8WH8141-2AB05
								11 ... 20 (10×)	8WH8141-1AB15	8WH8141-2AB15
21 ... 30 (10×)	8WH8141-1AB25	8WH8141-2AB25								
31 ... 40 (10×)	8WH8141-1AB35	8WH8141-2AB35								
41 ... 50 (10×)	8WH8141-1AB45	8WH8141-2AB45								
51 ... 60 (10×)	–	8WH8141-2AB55								
61 ... 70 (10×)	–	8WH8141-2AB65								
71 ... 80 (10×)	–	8WH8141-2AB75								
81 ... 90 (10×)	–	8WH8141-2AB85								
91 ... 100 (10×)	–	8WH8141-2AC05								
Custom inscription	–	8WH8141-1XA05-Z Y01	8WH8141-2XA05-Z Y01							
	Blank	Inscription	–					Article No.	8WH8111-1AA05	8WH8111-2AA05
								–	–	

4 mm ²	6 mm ²	10 and 16 mm ²	35 mm ²
6.2 mm	8.2 mm	10 and 12 mm	16 mm
Article No.	Article No.	Article No.	Article No.
8WH8120-3AB05	8WH8120-4AB05	8WH8120-5AB05	–
8WH8120-3AB15	8WH8120-4AB15	8WH8120-5AB15	–
8WH8120-3AB25	8WH8120-4AB25	8WH8120-5AB25	–
8WH8120-3AB35	8WH8120-4AB35	8WH8120-5AB35	–
8WH8120-3AB45	8WH8120-4AB45	–	–
8WH8120-3AB55	8WH8120-4AB55	–	–
8WH8120-3AB65	8WH8120-4AB65	–	–
8WH8120-3AB75	8WH8120-4AB75	–	–
8WH8120-3AB85	8WH8120-4AB85	–	–
8WH8120-3AC05	8WH8120-4AC05	–	–
8WH8120-3AA15	8WH8120-4AA15	8WH8120-5AA15	8WH8120-7AA15
–	–	8WH8120-5AA25	–
8WH8120-3XA05-Z Y01	8WH8120-4XA05-Z Y01	8WH8120-5XA05-Z Y01	8WH8120-7XA05-Z Y01
8WH8140-3AB05	8WH8140-4AB05	8WH8140-5AB05	–
8WH8140-3AB15	8WH8140-4AB15	8WH8140-5AB15	–
8WH8140-3AB25	8WH8140-4AB25	8WH8140-5AB25	–
8WH8140-3AB35	–	8WH8140-5AB35	–
8WH8140-3AB45	–	–	–
8WH8140-3AB55	–	–	–
8WH8140-3AB65	–	–	–
8WH8140-3AB75	–	–	–
8WH8140-3AB85	–	–	–
8WH8140-3AC05	–	–	–
8WH8140-3XA05-Z Y01	8WH8140-4XA05-Z Y01	8WH8140-5XA05-Z Y01	8WH8140-7XA05-Z Y01
8WH8110-3AA05	8WH8110-4AA05	8WH8110-5AA05	8WH8110-7AA05
Article No.	Article No.	Article No.	Article No.
8WH8121-3AB05	8WH8121-4AB05	8WH8121-5AB05	–
8WH8121-3AB15	8WH8121-4AB15	8WH8121-5AB15	–
8WH8121-3AB25	8WH8121-4AB25	8WH8121-5AB25	–
8WH8121-3AB35	–	–	–
8WH8121-3AB45	–	–	–
8WH8121-3AB55	–	–	–
8WH8121-3AB65	–	–	–
8WH8121-3AB75	–	–	–
8WH8121-3AB85	–	–	–
8WH8121-3AC05	–	–	–
8WH8121-3XA05-Z Y01	8WH8121-4XA05-Z Y01	8WH8121-5XA05-Z Y01	–
8WH8141-3AB05	8WH8141-4AB05	8WH8141-5AB05	–
–	8WH8141-4AB15	–	–
–	8WH8141-4AB25	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
8WH8141-3XA05-Z Y01	8WH8141-4XA05-Z Y01	8WH8141-5XA05-Z Y01	–
8WH8111-3AA05	8WH8111-4AA05	8WH8111-5AA05	8WH8111-7AA05

Accessories for 8WH terminal blocks

Mounting accessories

Lateral mounting test plugs



- For individual assembly of test plug connectors
- Cannot be used for 8WH3 insulation displacement terminals.

Terminal size	Terminal width	Color	Article No.
2.5 mm ²	5.2 mm	● Red	8WH9010-0EB02

Spacer plates



- For skipping single terminals for individual test adapter assembly
- Not suitable for 8WH3 insulation displacement terminals

Terminal size	Terminal width	Color	Article No.
2.5 mm ²	5.2 mm	● Red	8WH9010-2BA02

Terminal strip markers, for end retainers



- Height-adjustable
- For quick-fit end retainers
- For inscription with two front labels, for terminal width 10.2 mm and terminal strip markers

Labeling field size	Color	Article No.
20 x 8 mm	● Gray	8WH9150-1CA00

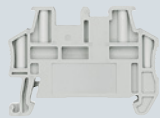
Test adapters



- For 4 mm Ø test plugs and 4 mm Ø safety test plugs
- Makes contact in the bridge slot

Color	Article No.
● Gray	8WH9010-0JB00

Quick-fit end retainers



- For inscription with front labels, for terminal width 5.2 mm and terminal strip markers

Color	Article No.
● Gray	8WH9150-0CA00

Reducing combs



- For connecting two through-type terminals
- Cannot be used for 8WH1 through-type terminals and 8WH3 insulation displacement terminals

From terminal size	To terminal size	Color	Article No.
2.5 mm ² or 4 mm ²	1.5 mm ²	● Turquoise	8WH9020-0CC10
	6 mm ²	● Turquoise	8WH9020-0FC10
	10 mm ²	● Turquoise	8WH9020-0AC10
	16 mm ²	● Turquoise	8WH9020-0BC10
	35 mm ²	● Turquoise	8WH9020-0EC10
16 mm ²	35 mm ²	● Turquoise	8WH9020-0DC10

Connecting combs



Terminal size	Terminal width	Max. load current I_{\max}	Used for 8WH3	Number of poles	Article No.
1.5 mm ²	4.2 mm	17.5 A	Cannot be used	2-pole	8WH9020-6AC10
				3-pole	8WH9020-6AD10
				4-pole	8WH9020-6AE10
				5-pole	8WH9020-6AF10
				10-pole	8WH9020-6AL10
				20-pole	8WH9020-6AS10
2.5 mm ²	5.2 mm	24 A	Can be used for terminal size 1.5 mm ²	2-pole	8WH9020-6BC10
				3-pole	8WH9020-6BD10
				4-pole	8WH9020-6BE10
				5-pole	8WH9020-6BF10
				10-pole	8WH9020-6BL10
				20-pole	8WH9020-6BS10
4 mm ²	6.2 mm	32 A	Can be used for terminal size 2.5 mm ²	2-pole	8WH9020-6CC10
				3-pole	8WH9020-6CD10
				4-pole	8WH9020-6CE10
				5-pole	8WH9020-6CF10
				10-pole	8WH9020-6CL10
				20-pole	8WH9020-6CS10
6 mm ²	8.2 mm	41 A	Cannot be used	2-pole	8WH9020-6DC10
				3-pole	8WH9020-6DD10
				4-pole	8WH9020-6DE10
				5-pole	8WH9020-6DF10
				10-pole	8WH9020-6DL10
10 mm ²	10 mm	57 A	Cannot be used	2-pole	8WH9020-6EC10
16 mm ²	12 mm	76 A	Cannot be used	2-pole	8WH9020-6FC10
35 mm ²	16 mm	101 A	Cannot be used	2-pole	8WH9020-6GC10

Screwdrivers



Variant	Article No.
0.4 × 2.5 mm	8WH9200-0AA00
0.6 × 3.5 mm	8WH9200-0AB00
0.8 × 4.0 mm	8WH9200-0AC00
1.0 × 5.5 mm	8WH9200-0AD00

8WA1 screw terminals

Through-type terminals



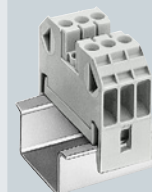
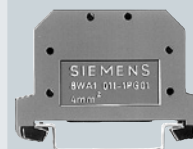
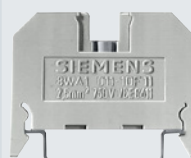
Terminal width, through-type terminal	6 mm
Terminal width, PE/PEN through-type terminal	6 mm
3-pole terminal block width	18 mm
10-pole terminal block width	61 mm
Rated uninterrupted current I_u	24 A
Rated voltage U_e (VA, Ⓢ)	600 V
Rated insulation voltage U_i	800 V
AWG VA	22 ... 12
AWG Ⓢ	18 ... 12
Connection capacity, rigid	0.5 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.5 ... 2.5 mm ²
Tightening torque	0.5 Nm
Standard	IEC 60947-7-1, IEC 60947-7-2, VA, Ⓢ

Terminal size











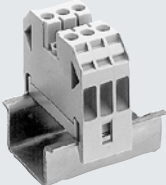


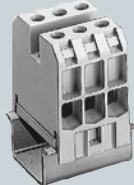




2.5 mm²

4 mm²

Terminal width, through-type terminal	6 mm	6.5 mm
Terminal width, PE/PEN through-type terminal	6 mm	7.2 mm
3-pole terminal block width	18 mm	19.5 mm
10-pole terminal block width	61 mm	65.5 mm
Rated uninterrupted current I_u	24 A	32 A
Rated voltage U_e (VA, Ⓢ)	600 V	600 V
Rated insulation voltage U_i	800 V	800 V
AWG VA	22 ... 12	18 ... 10
AWG Ⓢ	18 ... 12	18 ... 10
Connection capacity, rigid	0.5 ... 4 mm ²	0.5 ... 6 mm ²
Connection capacity, flexible with end sleeve	0.5 ... 2.5 mm ²	0.5 ... 4 mm ²
Tightening torque	0.5 Nm	0.5 Nm
Standard	IEC 60947-7-1, IEC 60947-7-2, VA, Ⓢ	IEC 60947-7-1, IEC 60947-7-2, VA, Ⓢ



Terminals	Number of poles	Inscription	Color		
1 Through-type terminal – single terminal					
2	1-pole	Blank	Beige	8WA1011-1DF11	8WA1011-1DG11
			Blue	8WA1011-1BF23	8WA1011-1BG11
			Red	8WA1011-1BF21	8WA1011-1BG21
			Orange	8WA1011-1BF22	8WA1011-1BG22
			Yellow	8WA1011-1BF26	–
			Black	8WA1011-1BF24	8WA1011-1BG24
			Green	8WA1011-1BF25	–
2 PE/PEN through-type terminal – single terminal					
1	1-pole	Blank	Green-yellow	8WA1011-1PF01	8WA1011-1PG01
2	1-pole	Blank	Green-yellow	8WA1011-1PF00	8WA1011-1PG00
1 Through-type terminal block					
6	3-pole	Blank	Beige	8WA1011-3DF21	8WA1011-3DG21
20	10-pole	Blank	Beige	8WA1011-0DF21	8WA1011-0DG21
		1 ... 10	Beige	8WA1011-0DF22	8WA1011-0DG22

6 mm ²	16 mm ²	35 mm ²	70 mm ²
8 mm	10 mm	16 mm	25 mm
8 mm	12 mm	16 mm	–
24.5 mm	30 mm	48 mm	–
–	–	–	–
41 A	76 A	125 A	192 A
600 V	600 V	600 V	600 V
800 V	800 V	800 V	800 V
14 ... 8	12 ... 4	10 ... 1	8 ... 3/0
16 ... 8	14 ... 6	12 ... 2	8 ... 1/0
0.7 ... 10 mm ²	1.5 ... 16 mm ²	4 ... 16 mm ²	10 ... 95 mm ²
1.5 ... 6 mm ²	2.5 ... 16 mm ²	4 ... 35 mm ²	16 ... 70 mm ²
0.8 Nm	1.2 Nm	2.5 ... 3 Nm	6 Nm
IEC 60947-7-1, IEC 60947-7-2,  	IEC 60947-7-1, IEC 60947-7-2,  	IEC 60947-7-1, IEC 60947-7-2,  	IEC 60947-7-1,  
  	  	  	

8WA1011-1DH11	8WA1204	8WA1205	8WA1206
8WA1011-1BH23	8WA1011-1BK11	8WA1011-1BM11	8WA1011-1BP11
–	–	–	–
–	–	–	–
–	–	–	–
8WA1011-1BH24	–	–	–
–	–	–	–
–	–	–	–
8WA1011-1PH00	8WA1011-1PK00	8WA1011-1PM00	–
8WA1011-3DH21	8WA1304	8WA1305	–
–	–	–	–
–	–	–	–

8WA1 screw terminals

Through-type terminals

Special accessories

	Terminal size	2.5 mm ²	4 mm ²
Covers			
	Version	Article No.	Article No.
	With lightning symbol	8WA1810	8WA1811
	White, facility for labeling	8WA1860	8WA1862
	For connection bars, transparent	8WA1822-7AX01	8WA1822-7AX01
	For connection bars, white, inscription possible	8WA1822-7AX03	8WA1822-7AX03
Jumpers			
	Version	Article No.	Article No.
	For connection bars	8WA1822-7VF01	8WA1822-7VG00
Disconnecting links			
	<ul style="list-style-type: none"> The terminals must be fitted with end plates and must be mounted with the end plates facing each other 		
	I_n Up to 32 A	Article No. 8WA1865	Article No. 8WA1865
End retainers, thermoplastic			
	Width	Article No.	Article No.
	10 mm	8WA1808	8WA1808
Insulation plate			
		Article No.	Article No.
		8WA1825	8WA1825
Barriers			
	<ul style="list-style-type: none"> Between terminals with terminal sizes 2.5 and 6 mm² two 8WH1820 barriers are required 		
	Thickness	Article No.	Article No.
	2 mm	8WA1820	8WA1820
Connection bars			
	Version	Article No.	Article No.
	For two terminals	8WA1895	8WA1850
	For three terminals	8WA1896	8WA1851
	For four terminals	8WA1897	8WA1852
	For ten terminals	8WA1898	8WA1853

General accessories, page 14/78 onwards

6 mm ²	16 mm ²	35 mm ²	70 mm ²
Article No.	Article No.	Article No.	Article No.
8WA1811	8WA1812	8WA1813	8WA1814
8WA1862	8WA1892	8WA1893	–
8WA1822-7AX01	8WA1822-7AX02	8WA1822-7AX02	–
8WA1822-7AX03	–	–	–
Article No.	Article No.	Article No.	Article No.
8WA1822-7VH00	–	–	–
Article No.	Article No.	Article No.	Article No.
8WA1865	–	–	–
Article No.	Article No.	Article No.	Article No.
8WA1808	8WA1808	8WA1808	8WA1808
Article No.	Article No.	Article No.	Article No.
8WA1825	8WA1822-7TK00	8WA1822-7TK00	–
Article No.	Article No.	Article No.	Article No.
8WA1821	8WA1821	8WA1823	8WA1824
Article No.	Article No.	Article No.	Article No.
8WA1885	8WA1842	8WA1828	8WA1216
8WA1886	8WA1845	8WA1803	–
8WA1887	8WA1848	–	–
8WA1888	8WA1802	8WA1804	–

8WA1 screw terminals

PE through-type terminals, bare



	Terminal size	
	6 mm ²	95 mm ²
Terminal width	6 mm	16 mm
Terminal length	44 mm	75 mm
Terminal height	25 mm	63 mm
Tightening torque	0.8 Nm	15 ... 20 Nm
Connection capacity, rigid	0.5 ... 10 mm ²	–
Connection capacity, flexible with end sleeve	1.5 ... 6 mm ²	50 ... 95 mm ²
Standard	☉	☉




Terminals	Surface		
PE through-type terminals			
2	● Bare	8WA1010-1PH01	8WA1010-1PQ00

Special accessories

Barriers	Article No.	Article No.
	8WA1821	–

General accessories, page 14/78 onwards

Two-tier terminals



	Terminal size	4 mm ²
	Terminal width	6.5 mm
	Rated uninterrupted current I_u	32 A
	Rated insulation voltage U_i	690 V
	AWG 	18 ... 10
	AWG 	18 ... 10
	Connection capacity, rigid	0.5 ... 6 mm ²
	Connection capacity, flexible with end sleeve	0.75 ... 4 mm ²
	Standard	,



Version	Color	
1 Two-tier terminals without equipotential bonding		
2-pole with two isolated connections		
	Beige	8WA1011-2DG11
	Blue	8WA1011-2BG11
2 Two-tier terminals with equipotential bonding		
1-pole		
	Beige	8WA1011-6DG11
	Blue	8WA1011-6BG11

Special accessories

Covers			
	Version	With lightning symbol	Article No. 8WA1811
		White, facility for labeling	8WA1862
		For connection bars, transparent	8WA1822-7AX01
Jumpers			
	Version	For upper tier of 2-pole terminals	Article No. 8WA1822-7VG00
		For lower tier of 1 and 2-pole terminals	8WA1822-7VG01
Disconnecting links			
			Article No. 8WA1865
End plates			
			Article No. 8WA1817
Insulation plate			
	Version	For upper and lower tier	Article No. 8WA1825
Connection bars			
	Version	For upper tier of 2-pole terminals	Article No.
			For two terminals 8WA1850
			For three terminals 8WA1851
			For four terminals 8WA1852
			For ten terminals 8WA1853
		For lower tier of 1 and 2-pole terminals	For two terminals 8WA1835
		For ten terminals 8WA1838	
Barriers			
	Color	Gray	Article No. 8WA1823

General accessories, page 14/78 onwards

8WA1 screw terminals

Insta or three-tier terminals



Terminal width	6 mm
Rated uninterrupted current I_u	24 A
Rated insulation voltage U_i between phase conductors	400 V
Rated insulation voltage U_i between phase and protective conductors and for neutral isolating distance	250 V
AWG	22 ... 12
Connection capacity, rigid	0.5 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.5 ... 4 mm ²
Tightening torque	0.5 Nm
Standard	UL

Terminal size

2.5 mm²

6 mm

24 A

400 V

250 V

22 ... 12

0.5 ... 4 mm²

0.5 ... 4 mm²

0.5 Nm

UL



Type	Color	Article No.
① L, L	Beige	8WA1011-3JF18
② PE, L, L	Beige	8WA1011-3JF16
③ PE, L, N	Beige	8WA1011-3JF17
④ PE, L, NT	Beige	8WA1011-3JF20

Special accessories

Covers				
	Version			Article No.
	For connection bars, transparent			8WA1822-7AX01
	For connection bars, white			8WA1822-7AX03
Bare feeder terminals, for N busbars				
	Size	Conductor cross-section	Rated uninterrupted current	Article No.
	6 × 6 mm and 10 × 3 mm	Up to 4 mm ²	32 A	8WA2867
		Up to 25 mm ²	76 A	8WA2868
		Up to 35 mm ²	125 A	8WA2870
N busbars, 6 × 6 mm				
	Version	Length	Rated uninterrupted current	Article No.
	For four-field	1109 mm	125 A	8GF9324-2
End retainers, thermoplastic				
	Width			Article No.
	10 mm			8WA1808
Terminal strip labels for end retainers				
	Version			Article No.
	Blank (WIN 67)			8WA8212-0AA65
Insulation carriers				
	Use			Article No.
	For mounting insulated support rails			8WA1857
Labels, blank				
	Label size	Version	Article No.	
	5 × 7 mm (WIN 68)	Suitable for plotting	8WA8348-2AY	
Connection bars				
	Version	Versions	Article No.	
	For Insta terminals	For two terminals	8WA1822-7VF02	
		For three terminals	8WA1822-7VF03	
		For ten terminals	8WA1822-7VF10	
Barriers				
	Version	Color	Article No.	
	For Insta terminals	Gray	8WA1822-7TH00	

General accessories, page 14/78 onwards

N conductor isolating and branch terminals



	Terminal size			
	2.5 mm ²	4 mm ²	6 mm ²	16 mm ²
Terminal width	6 mm	6.5 mm	8 mm	10 mm
Rated uninterrupted current I _u	24 A	32 A	41 A	76 A
Rated insulation voltage U _i	500 V	500 V	500 V	500 V
AWG	22 ... 12	18 ... 10	14 ... 8	12 ... 4
AWG	22 ... 12	18 ... 10	14 ... 8	–
Connection capacity, rigid	2.5 ... 4 mm ²	0.5 ... 6 mm ²	0.75 ... 10 mm ²	1.5 ... 16 mm ²
Connection capacity, flexible with end sleeve	0.5 ... 2.5 mm ²	0.75 ... 4 mm ²	0.5 ... 6 mm ²	1.5 ... 16 mm ²
Tightening torque	0.5 Nm	0.5 Nm	0.8 Nm	1.2 Nm
Standard				

Terminals	Color				
2	Blue	8WA1011-1NF01	8WA1011-1NG31	8WA1011-1NH01	8WA1604

Special accessories

Feeder terminals, for N busbars						
	Size	Rated uninterrupted current	Article No.	Article No.	Article No.	Article No.
	6 × 6 mm and 10 × 3 mm	32 A	8WA2867	8WA2867	–	–
		76 A	8WA2868	8WA2868	8WA2868	8WA2868
		125 A	8WA2870	8WA2870	8WA2870	8WA2870
N busbars, 6 × 6 mm, for four-field						
	Length	Rated uninterrupted current	Article No.	Article No.	Article No.	Article No.
	1109 mm	125 A	8GF9324-2	8GF9324-2	8GF9324-2	8GF9324-2
Label holder						
			Article No.	Article No.	Article No.	Article No.
			3TX4210-0J	3TX4210-0J	3TX4210-0J	3TX4210-0J

General accessories, page 14/78 onwards

8WA1 screw terminals

Through-type terminals with sectionalizing feature



	Terminal size
	2.5 mm ²
Terminal width	6 mm
Rated uninterrupted current I_u	10 A
Rated insulation voltage U_i for open isolating distance	380 V AC, 450 V DC
Rated insulation voltage U_i when using barriers	750 V AC, 900 V DC
Connection capacity, rigid	0.25 ... 4 mm ²
Connection capacity, flexible without end sleeve	0.5 ... 2.5 mm ²
Connection capacity, flexible with end sleeve	0.5 ... 1.5 mm ²
Tightening torque	0.5 Nm
Standard	IEC 60947-1, 60947-5-1



Terminals	Version	Color	Article No.
2	With 2 holes for Ø 2.3 mm test plug	● Gray	8WA1501

Special accessories

Barriers		Color	Article No.
		● Gray	8WA1820

General accessories, page 14/78 onwards

Measuring transformer terminals

		Terminal size			
		6 mm ²			
1		Terminal width	8 mm	8 mm	8 mm
2		Rated uninterrupted current I _N	41 A	41 A	41 A
		Rated insulation voltage U _i	500 V	500 V	500 V
		AWG	14 ... 8	14 ... 8	14 ... 8
		AWG	16 ... 10	16 ... 10	16 ... 10
		Connection capacity, rigid	0.75 ... 10 mm ²	0.75 ... 10 mm ²	0.75 ... 10 mm ²
		Connection capacity, flexible with end sleeve	0.75 ... 10 mm ²	0.75 ... 10 mm ²	0.75 ... 10 mm ²
		Tightening torque	0.8 Nm	0.8 Nm	0.8 Nm
		Standard			
Test sockets	Color	1 Isolating terminal	2 Isolating blade terminal	3 Through-type terminals with identical contour	
Without test socket	Beige	8WA1011-1MH11	–	8WA1011-1MH10	
With test socket	Beige	–	8WA1011-1MH15	–	

Special accessories

Covers, for connection bars													
	<table border="1"> <thead> <tr> <th>Versions</th> <th>Article No.</th> </tr> </thead> <tbody> <tr> <td>Transparent</td> <td>8WA1822-7AX01</td> </tr> <tr> <td>White, facility for labeling</td> <td>8WA1822-7AX03</td> </tr> </tbody> </table>	Versions	Article No.	Transparent	8WA1822-7AX01	White, facility for labeling	8WA1822-7AX03						
Versions	Article No.												
Transparent	8WA1822-7AX01												
White, facility for labeling	8WA1822-7AX03												
Test sockets													
	<table border="1"> <thead> <tr> <th>Diameter</th> <th>Article No.</th> </tr> </thead> <tbody> <tr> <td>4 mm</td> <td>8WA1822-7PH00</td> </tr> </tbody> </table>	Diameter	Article No.	4 mm	8WA1822-7PH00								
Diameter	Article No.												
4 mm	8WA1822-7PH00												
Disconnecting links													
	<ul style="list-style-type: none"> Rated insulation voltage with disconnecting link open according to DIN VDE 0110: 125 V, size C or 250 V size B <table border="1"> <thead> <tr> <th>Article No.</th> </tr> </thead> <tbody> <tr> <td>8WA1822-7VH01</td> </tr> </tbody> </table>	Article No.	8WA1822-7VH01										
Article No.													
8WA1822-7VH01													
Insulation plate													
	<table border="1"> <thead> <tr> <th>Article No.</th> </tr> </thead> <tbody> <tr> <td>8WA1825</td> </tr> </tbody> </table>	Article No.	8WA1825										
Article No.													
8WA1825													
Connecting comb													
	<table border="1"> <thead> <tr> <th>Number of poles</th> <th>Article No.</th> </tr> </thead> <tbody> <tr> <td>2-pole</td> <td>8WA1822-7VH22</td> </tr> <tr> <td>10-pole, can be shortened as required</td> <td>8WA7163</td> </tr> </tbody> </table>	Number of poles	Article No.	2-pole	8WA1822-7VH22	10-pole, can be shortened as required	8WA7163						
Number of poles	Article No.												
2-pole	8WA1822-7VH22												
10-pole, can be shortened as required	8WA7163												
Connection bars													
	<table border="1"> <thead> <tr> <th>Versions</th> <th>Article No.</th> </tr> </thead> <tbody> <tr> <td>Two terminals</td> <td>8WA1885</td> </tr> <tr> <td>Three terminals</td> <td>8WA1886</td> </tr> <tr> <td>Four terminals</td> <td>8WA1887</td> </tr> <tr> <td>Ten terminals</td> <td>8WA1888</td> </tr> <tr> <td>Unmounted for ten terminals</td> <td>8WA1822-7VH10</td> </tr> </tbody> </table>	Versions	Article No.	Two terminals	8WA1885	Three terminals	8WA1886	Four terminals	8WA1887	Ten terminals	8WA1888	Unmounted for ten terminals	8WA1822-7VH10
Versions	Article No.												
Two terminals	8WA1885												
Three terminals	8WA1886												
Four terminals	8WA1887												
Ten terminals	8WA1888												
Unmounted for ten terminals	8WA1822-7VH10												
Barriers													
	<table border="1"> <thead> <tr> <th>Color</th> <th>Article No.</th> </tr> </thead> <tbody> <tr> <td> Gray</td> <td>8WA1822-7TH00</td> </tr> </tbody> </table>	Color	Article No.	Gray	8WA1822-7TH00								
Color	Article No.												
Gray	8WA1822-7TH00												

General accessories, page 14/78 onwards

8WA1 screw terminals

Fuse terminals



	Terminal size
	1.5 mm ²
Terminal width	10 mm
Rated uninterrupted current I _u when using fuses	6.3 A
Rated uninterrupted current I _u when using the isolating link	16 A
Rated insulation voltage U _i when using fuses	250 V
Rated insulation voltage U _i when using the isolating link	800 V
AWG	18 ... 14
AWG	18 ... 14
Connection capacity, rigid	1 ... 2.5 mm ²
Connection capacity, flexible with end sleeve	0.75 ... 1.5 mm ²
Tightening torque	0.8 Nm
Standard	



Version	Color	
For 5 × 25 mm G fuse links		
① Without LED	Beige	8WA1011-1SF12
② With LED 24 V AC/DC	Beige	8WA1011-1SF13
③ With LED 230 V AC/DC	Beige	8WA1011-1SF15
For 6.3 × 32 mm G fuse links (inch fuses)		
① Without LED	Beige	8WA1011-1SF30
② With LED 24 V AC/DC	Beige	8WA1011-1SF31
③ With LED 120 V AC/110 V DC	Beige	8WA1011-1SF32

Special accessories

5 × 25 mm G fuse links				
	Versions	Breaking capacity	Rated uninterrupted current	Article No.
	Quick	Large	1 A	8WA1822-7EF16
			1.6 A	8WA1822-7EF18
			2.5 A	8WA1822-7EF21
			4 A	8WA1822-7EF23
			6.3 A	8WA1822-7EF25
	Slow	Small	1 A	8WA1822-7EF76
			1.6 A	8WA1822-7EF78
			2.5 A	8WA1822-7EF81
			4 A	8WA1822-7EF83
			6.3 A	8WA1822-7EF85
Isolating links, 5 × 25 mm				
	Size			Article No.
	5 × 25 mm			8WA1891

General accessories, page 14/78 onwards

Terminals for self-fitting with components



Terminal size	1.5 mm ²
Terminal width	10 mm
Rated uninterrupted current I_u	6.3 A
Rated insulation voltage U_i	500 V
Connection capacity, rigid	1 ... 2.5 mm ²
Connection capacity, flexible with end sleeve	0.75 ... 1.5 mm ²
Tightening torque	0.8 Nm



Terminals	Color	Article No.
Screw terminal at both ends for 2 conductors each	● Gray	8WA1011-1EE00

Special accessories

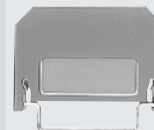
Plugs for components	Version	Article No.
	With PCB and inscription label (20 × 9 mm)	8WA1822-7EE00

General accessories, page 14/78 onwards

Diode terminals



Terminal size	2.5 mm ²
Terminal width	6 mm
Rated uninterrupted current I_u	1 A
Rated insulation voltage U_{RRM}	250 V
Peak blocking voltage	1000 V
Connection capacity, rigid	0.5 ... 4 mm ²
Connection capacity, flexible without end sleeve	0.5 ... 2.5 mm ²
Connection capacity, flexible with end sleeve	0.5 ... 1.5 mm ²
Tightening torque	0.5 Nm



Terminals	Version	Color	Article No.
2	With 2 holes for Ø 2.3 mm test plug	● Gray	8WA1011-1EF20

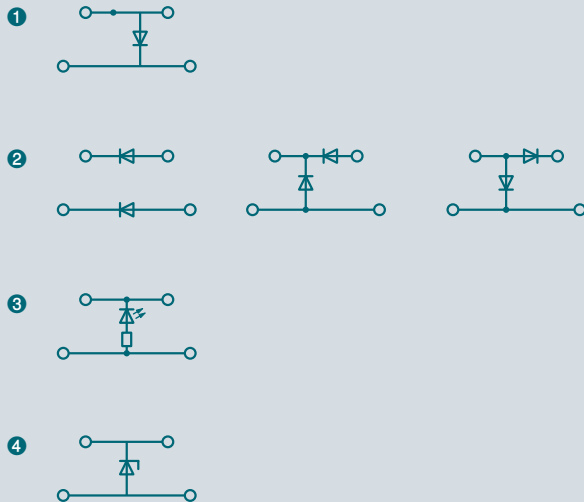
Special accessories

Barriers	Color	Article No.
	● Gray	8WA1820

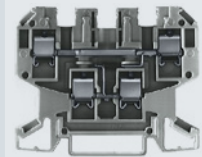
General accessories, page 14/78 onwards

8WA1 screw terminals

Two-tier diode terminals



	Terminal size
	4 mm ²
Terminal width	6.5 mm
Rated uninterrupted current I _u	1 A
Rated insulation voltage U _i	250 V
Let-through current	–
Avalanche voltage U _Z	–
AWG	18 ... 10
Connection capacity, rigid	0.5 ... 6 mm ²
Connection capacity, flexible without end sleeve	0.5 ... 4 mm ²
Connection capacity, flexible with end sleeve	0.5 ... 4 mm ²
Tightening torque	0.5 Nm
Standard	



Versions	Bridging	Color	
① With one diode			
Let-through from top to bottom	Not possible	● Gray	–
② With two diodes			
Let-through from top right to top left and from bottom right to bottom left	Not possible	● Gray	8WA1011-6EG22
Let-through from top right to top left and from bottom to top	Not possible	● Gray	–
Let-through from top left to top right and from top to bottom	Not possible	● Gray	–
③ With red LED			
Without diode for voltage limitation		● Gray	–
④ With Zener diode			
Let-through from bottom to top		● Gray	–

Special accessories

End plates



Color

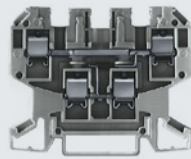
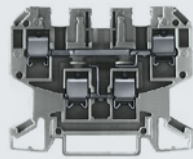
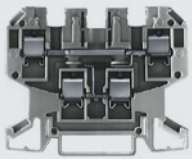
- Gray

Article No.

8WA1817

General accessories, page 14/78 onwards

6.5 mm	6.5 mm	6.5 mm
32/1 A	32 A	–
250 V	24 V DC	–
–	–	0.25 A
–	–	2.4 V, ± 5%
18 ... 10	18 ... 10	18 ... 10
0.5 ... 6 mm ²	0.5 ... 6 mm ²	0.5 ... 6 mm ²
0.5 ... 4 mm ²	0.5 ... 4 mm ²	0.5 ... 4 mm ²
0.5 ... 4 mm ²	0.5 ... 4 mm ²	0.5 ... 4 mm ²
0.5 Nm	0.5 Nm	0.5 Nm

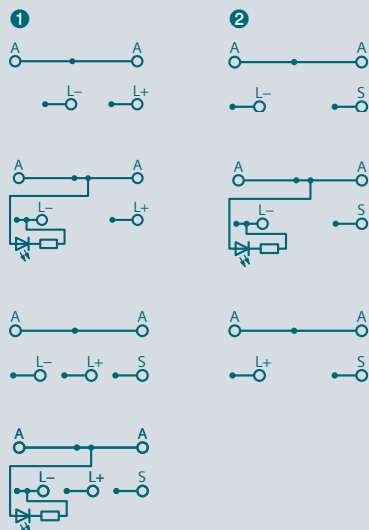


8WA1011-6EG20	–	–
–	–	–
8WA1011-6EG23	–	–
8WA1011-6EG24	–	–
–	8WA1011-6EG25	–
–	–	8WA1011-6EG44

Article No.	Article No.	Article No.
8WA1817	8WA1817	8WA1817

8WA2 spring-loaded terminals

Initiator/actuator terminals



Terminal size

1.5 mm²

Terminal width 5 mm

Rated current I_n 10 A

Rated voltage U_e 65 V

Current consumption with LED 4.8 mA

AWG 22 ... 16

AWG 28 ... 16

Connection capacity, rigid 0.08 ... 1.5 mm²

Connection capacity, flexible with end sleeve 0.2 ... 1.5 mm²

Standard



Version	Conductors ¹⁾	LED	Color	
1 Initiator terminal				
PNP	L+, L-, A	–	● Light gray	8WA2011-3KE10
		Yellow, 15 ... 30 V DC	● Light gray	8WA2011-3KE12
	L+, L-, S, A	–	● Light gray	8WA2011-3KE11
		Yellow, 15 ... 30 V DC	● Light gray	8WA2011-3KE13
2 Actuator terminal				
PNP	L-, S, A	–	● Light gray	8WA2011-3KE31
		Yellow, 15 ... 30 V DC	● Light gray	8WA2011-3KE33
NPN	L+, S, A	–	● Light gray	8WA2011-3KE30

Special accessories

Connection module

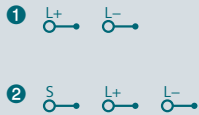


Version	Width	Height	Color	Article No.
For 8 initiator/actuator terminals and one feeder terminal	47 mm	65 mm	● Black	8WA2011-3KE50
For 16 initiator/actuator terminals, one feeder terminal and space for one terminal for further bridging for subsequent module	93 mm	65 mm	● Black	8WA2011-3KE51

General accessories, page 14/78 onwards

¹⁾ L+ = brown, L- = blue, S (shield) = green, A (output) not colored

Feeder terminals for initiator/actuator terminals



Terminal size	1.5 mm ²
Terminal width	5 mm
Rated current I _n	10 A
Rated voltage U _e	65 V
Current consumption with LED	4.8 mA
AWG	22 ... 16
AWG	28 ... 16
Connection capacity, rigid	0.08 ... 1.5 mm ²
Connection capacity, flexible with end sleeve	0.2 ... 1.5 mm ²
Standard	



Version	Conductors ¹⁾	LED	Color	
Feeder terminal				
PNP	① L+, L-	–	Orange	8WA2011-3KE01
	② L+, L-, S	–	Orange	8WA2011-3KE00
		Green, 15 ... 30 V DC	Orange	8WA2011-3KE02
NPN	② L+, L-, S	–	Orange	8WA2011-3KE00
	① L+, L-, without ground connection	–	Orange	8WA2011-3KE01

Special accessories

Connection module					
	Version	Width	Height	Color	Article No.
	For 8 initiator/actuator terminals and one feeder terminal	47 mm	65 mm	Black	8WA2011-3KE50
	For 16 initiator/actuator terminals, one feeder terminal and space for one terminal for further bridging for subsequent module	93 mm	65 mm	Black	8WA2011-3KE51

General accessories, page 14/78 onwards

¹⁾ L+ = brown, L- = blue, S (shield) = green, A (output) connection not colored

Accessories for 8WA terminal blocks

Individual labeling system

Labeling systems for

- Terminal blocks
- Modular installation devices
- Circuit breakers
- Switch disconnectors

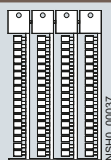
Labeling systems available from:

Murrplastik Systemtechnik GmbH
Postfach 1143
D-71570 Oppenweiler
Telephone: 07191-482-0
email: info@murrplastik.de

The inscription labels can be inscribed with Murrplastik labeling systems or by hand.

The WIN designation facilitates assignment in the inscription software.

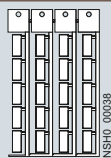
Blank labels



- For 8WA1 and 8WA2, individually removable
- Cannot be used for two-tier terminals (lower tier), 8WA1010-1PQ00 flat terminals and 8WA1808 end retainers

Version	Designation	Color	Article No.
5 × 7 mm	WIN 68	● White	8WA8850-2AY
5 × 10 mm	WIN 68	● White	8WA8851-2AY

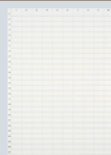
Snap-on device labels



- For identification of, e.g. circuit breakers, contactors and control systems

Version	Designation	Color	Article No.
20 × 7 mm, snap-on hooks at side	WIN 95	● White	8WH8210-0AA55
		● Turquoise	8WH8210-0AA56


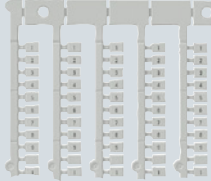
Adhesive device labels



- For identification of, e.g. modular installation devices and switch disconnectors

Versions	Designation	Color	Article No.
15 × 6 mm	WIN 098	● White	8WH8210-0AA35
	WIN 099	● Yellow	8WH8210-0AA36
19 × 8 mm	WIN 088	● White	8WH8210-0AA45
	WIN 082	● Yellow	8WH8210-0AA46

Standard labeling system

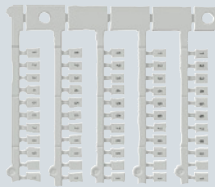
Labels, blank (WIN 68)				
	Text alignment	Label size	Article No.	
	Vertical	5 × 7 mm	8WA8348-2AY	
	Horizontal and vertical	5 × 10 mm	8WA8310-2AY	
Labels, with inscription				
	• Label size 5 × 7 mm, font height 2 mm			
	Text alignment	Inscription	Scope of supply	Article No.
Horizontal	1 ... 5		3 cards each with 13× (1 ... 5) + 1× (1 ... 3)	8WA8360-OBA
	6 ... 10		3 cards each with 13× (6 ... 10) + 1× (6 ... 8)	8WA8360-0BB
	11 ... 15		3 cards each with 13× (11 ... 15) + 1× (11 ... 13)	8WA8360-0BC
	16 ... 20		3 cards each with 13× (16 ... 20) + 1× (16 ... 18)	8WA8360-0BD
	21 ... 25		3 cards each with 13× (21 ... 25) + 1× (21 ... 23)	8WA8360-0BE
	26 ... 30		3 cards each with 13× (26 ... 30) + 1× (26 ... 28)	8WA8360-0BF
	31 ... 35		3 cards each with 13× (31 ... 35) + 1× (31 ... 33)	8WA8360-0BG
	36 ... 40		3 cards each with 13× (36 ... 40) + 1× (36 ... 38)	8WA8360-0BH
	41 ... 45		3 cards each with 13× (41 ... 45) + 1× (41 ... 43)	8WA8360-0BJ
	46 ... 50		3 cards each with 13× (46 ... 50) + 1× (46 ... 48)	8WA8360-0BK
	56 ... 60		3 cards each with 13× (56 ... 60) + 1× (56 ... 58)	8WA8360-0BM
	61 ... 65		3 cards each with 13× (61 ... 65) + 1× (61 ... 63)	8WA8360-0BN
	71 ... 75		3 cards each with 13× (71 ... 75) + 1× (71 ... 73)	8WA8360-0BQ
	76 ... 80		3 cards each with 13× (76 ... 80) + 1× (76 ... 78)	8WA8360-0BR
	81 ... 85		3 cards each with 13× (81 ... 85) + 1× (81 ... 83)	8WA8360-0BS
	91 ... 95		3 cards each with 13× (91 ... 95) + 1× (91 ... 93)	8WA8360-0BU
	96 ... 100		3 cards each with 13× (96 ... 100) + 1× (96 ... 98)	8WA8360-0BV
	1 ... 20		3 cards each with 3× (1 ... 20) + 1× (1 ... 8)	8WA8360-0AB
	1 ... 40		3 cards each with 1× (1 ... 40) + 1× (1 ... 28)	8WA8360-0AC
	41 ... 100		3 cards each with 1× (41 ... 100) + 1× (41 ... 48)	8WA8360-0AD
	1 ... 100		3 cards each with 2× (1 ... 100) + 1× (1 ... 4)	8WA8360-0AE
	101 ... 200		3 cards each with 2× (101 ... 200) + 1× (101 ... 104)	8WA8360-0AF
	201 ... 300		3 cards each with 2× (201 ... 300) + 1× (201 ... 204)	8WA8360-0AG
	A ... T		3 cards each with 3× (A ... T) + 1× (A ... H)	8WA8360-1AA
	U, V, W, X, Y, Z, +, -		3 cards each with 8× (U ... -) + 1× (U ... X)	8WA8360-1AB
	L1, L2, L3, N, PE		3 cards each with 9× (L1 ... PE) + 1× (L1 ... L3)	8WA8360-1AC
	U1, V1, W1, U2, V2, W2		3 cards each with 11× (U1 ... W2) + 1× (U1, V1)	8WA8360-1AD
	Vertical	1 ... 5		3 cards each with 13× (1 ... 5) + 1× (1 ... 3)
6 ... 10			3 cards each with 13× (6 ... 10) + 1× (6 ... 8)	8WA8361-0BB
11 ... 15			3 cards each with 13× (11 ... 15) + 1× (11 ... 13)	8WA8361-0BC
16 ... 20			3 cards each with 13× (16 ... 20) + 1× (16 ... 18)	8WA8361-0BD
21 ... 25			3 cards each with 13× (21 ... 25) + 1× (21 ... 23)	8WA8361-0BE
26 ... 30			3 cards each with 13× (26 ... 30) + 1× (26 ... 28)	8WA8361-0BF
31 ... 35			3 cards each with 13× (31 ... 35) + 1× (31 ... 33)	8WA8361-0BG
36 ... 40			3 cards each with 13× (36 ... 40) + 1× (36 ... 38)	8WA8361-0BH
41 ... 45			3 cards each with 13× (41 ... 45) + 1× (41 ... 43)	8WA8361-0BJ
46 ... 50			3 cards each with 13× (46 ... 50) + 1× (46 ... 48)	8WA8361-0BK
51 ... 55			3 cards each with 13× (51 ... 55) + 1× (51 ... 53)	8WA8361-0BL
56 ... 60			3 cards each with 13× (56 ... 60) + 1× (56 ... 58)	8WA8361-0BM
61 ... 65			3 cards each with 13× (61 ... 65) + 1× (61 ... 63)	8WA8361-0BN
66 ... 70			3 cards each with 13× (66 ... 70) + 1× (66 ... 68)	8WA8361-0BP
71 ... 75			3 cards each with 13× (71 ... 75) + 1× (71 ... 73)	8WA8361-0BQ
76 ... 80			3 cards each with 13× (76 ... 80) + 1× (76 ... 78)	8WA8361-0BR
81 ... 85			3 cards each with 13× (81 ... 85) + 1× (81 ... 83)	8WA8361-0BS
86 ... 90			3 cards each with 13× (86 ... 90) + 1× (86 ... 88)	8WA8361-0BT
91 ... 95			3 cards each with 13× (91 ... 95) + 1× (91 ... 93)	8WA8361-0BU
96 ... 100			3 cards each with 13× (96 ... 100) + 1× (96 ... 98)	8WA8361-0BV

Accessories for 8WA terminal blocks

Standard labeling system

Labels, with inscription (continued)

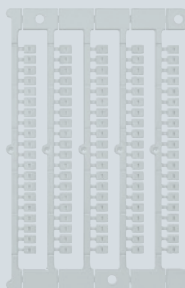
- Label size 5 × 7 mm, font height 2 mm



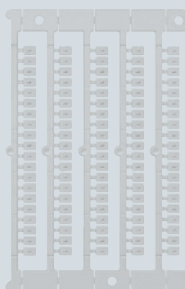
Text alignment	Inscription	Scope of supply	Article No.
Vertical	1 ... 20	3 cards each with 3× (1 ... 20) + 1× (1 ... 8)	8WA8361-0AB
	1 ... 40	3 cards each with 1× (1 ... 40) + 1× (1 ... 28)	8WA8361-0AC
	41 ... 100	3 cards each with 1× (41 ... 100) + 1× (41 ... 48)	8WA8361-0AD
	1 ... 100	3 cards each with 2× (1 ... 100) + 1× (1 ... 4)	8WA8361-0AE
	101 ... 200	3 cards each with 2× (101 ... 200) + 1× (101 ... 104)	8WA8361-0AF
	201 ... 300	3 cards each with 2× (201 ... 300) + 1× (201 ... 204)	8WA8361-0AG
	A ... T	3 cards each with 3× (A ... T) + 1× (A ... H)	8WA8361-1AA
	U, V, W, X, Y, Z, +, -	3 cards each with 8× (U ... -) + 1× (U ... X)	8WA8361-1AB
	L1, L2, L3, N, PE	3 cards each with 9× (L1 ... PE) + 1× (L1 ... L3)	8WA8361-1AC
	U1, V1, W1, U2, V2, W2	3 cards each with 11× (U1 ... W2) + 1× (U1, V1)	8WA8361-1AD

Labels, type 347/348, with inscription

- Label size 5 × 7 mm, font height 2 mm



Text alignment	Inscription	Article No.
Horizontal	L1	8WA8347-2AC
	L2	8WA8347-2AD
	L3	8WA8347-2AE
	N	8WA8347-1AR
	PE	8WA8347-2AH
	L+	8WA8347-2AF
	L-	8WA8347-2AG



Vertical	L1	8WA8348-2AC
	L2	8WA8348-2AD
	L3	8WA8348-2AE
	N	8WA8348-1AR
	MP	8WA8348-2AB
	PE	8WA8348-2AH
	L+	8WA8348-2AF
	L-	8WA8348-2AG
	X	8WA8348-1AG
	Y	8WA8348-1AH

Labels, custom inscriptions

- Label size 5 × 7 mm, font height 2 mm
- Specify required inscription in plain text
- Can only be ordered with the order code -Z Y01

Text alignment	Article No.
Horizontal	8WA8347-0XA-Z Y01
Vertical	8WA8348-0XA-Z Y01

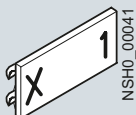
End labeling plates



- Paper label, inscription possible, with transparent cover
- Suitable for 8WA1805, 8WA1808 and 8WA2808 end retainers

Text alignment	Label size	Article No.
Horizontal and vertical	21 × 42 mm	8WA1806

Terminal strip labels



- Paper label, inscription possible, with transparent cover
- Suitable for 8WA1808 end retainers

Text alignment	Versions	Article No.
Horizontal	With inscription	8WA8826-0AA
		8WA8826-0AB
		8WA8826-0AC
	Blank (WIN 67)	8WA8212-0AA65

Mounting accessories

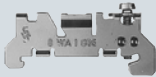
End retainers, with screw fixing



- Suitable for 8WA1806 end labeling plate or 8WA8826-0A. terminal strip identification label or 3TX4 210-0H device label or four 8WA88 labels

Mounting width	Article No.
10 mm	8WA1808

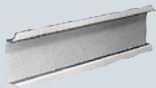
End retainers, steel



- Suitable for 8WA1806 end label
- An 8WA1820 barrier must be inserted if using end retainers against an 8WA189 connection bar (size 2.5)

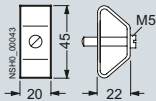
Mounting width	Article No.
10.3 mm	8WA1805

Standard mounting rail



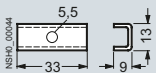
Version	Material	Standard	Length	Thickness	Article No.
Perforated	Steel, sendzimir-galvanized	EN 50022-35 × 7.5	2 m	1 mm	5ST1145
Non-perforated	Steel, sendzimir-galvanized	EN 50022-35 × 7.5	2 m	1 mm	5ST1141
	Copper	EN 50022-35 × 15	2 m	2.3 mm	8WA7551
	Steel, galvanized, chromated	Similar to EN 50022-35 × 15	2 m	1.5 mm	5ST1142

Spacer brackets



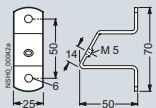
Version	Article No.
For raised mounting of terminal strips	8WA753

Spacers



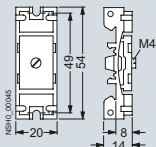
Version	Drill hole	Article No.
For raised mounting of terminal strips	5.5 mm	8WA752

Mounting brackets



Version	Article No.
For support rails	8WA746

Insulation carriers



Version	Article No.
For insulated mounting of support rails onto plates, frame profiles and standard mounting rails EN 50022-35	8WA1857

Reliable and efficient power supply in infrastructure and industrial applications

The electrical power distribution in buildings, infrastructure and industry is undergoing a transformation. A growing number of electrical loads, fluctuating load conditions and an increasing level of automation pose new challenges for switchboard manufacturers and electrical planners. Availability, safety and efficiency of the power distribution system are becoming more important. This is reflected in detailed standards and regulations and in requirements for company power management.

The planning and operation of electrical power distribution systems are becoming more complex, and the technical demands placed on the underlying systems and products are rising – in particular with respect to flexibility, communication capability and integrability. A data-based engineering process, hardware and software systems, an intelligent data management must all interact smoothly to provide optimum support to dynamic industrial and infrastructure processes.

The basis for a reliable and efficient power supply is provided by our portfolio of power distribution boards and distribution boards with innovative products and systems. A data-based engineering process with SIMARIS software tools, high availability of product-related data support the value chain of the switchboard manufacturer – from planning to documentation of the installation.



Power Distribution Boards, Motor Control Centers and Distribution Boards



All the information you need	15/2
Quick selection guide	15/4
SIVACON and ALPHA distribution systems	15/4
SIMARIS® planning tools	15/8
Power Distribution Boards and Motor Control Centers	15/10
SIVACON S8 / ALPHA 3200 system overview	15/10
SIVACON S4 power distribution boards	15/12
System overview	15/12
Frame and enclosure	15/14
Busbar systems	15/30
Section expansion	15/32
Internal separation	15/96
ALPHA UNIVERSAL distribution boards (NF technology)	15/106
ALPHA UNIVERSAL system overview	15/106
ALPHA 800 UNIVERSAL floor-mounted distribution boards	15/108
ALPHA 630 UNIVERSAL wall-mounted distribution boards	15/110
ALPHA 630 UNIVERSAL floor-mounted distribution boards	15/112
ALPHA 125 UNIVERSAL distribution boards	15/116
Assembly kits	15/118
Busbars	15/126
Accessories	15/130
ALPHA distribution boards (DIN technology)	15/138
ALPHA system overview	15/138
ALPHA 1250 floor-mounted distribution boards	15/140
ALPHA 1250 marshaling boxes	15/142
ALPHA 630 floor-mounted distribution boards	15/144
ALPHA 630 marshaling boxes	15/146
ALPHA 400 distribution boards	15/148
ALPHA 160 distribution boards	15/151
Assembly kits	15/152
Quick-assembly kits	15/166
Busbars	15/168
Accessories	15/169
Small distribution boards	15/180
ALPHA SIMBOX XL small distribution boards	15/180
ALPHA SIMBOX WP small distribution boards	15/183

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

You will find information about power distribution boards, motor control centers and distribution boards on our websites

www.siemens.com/sivacon-S8
www.siemens.com/distributionsystems

Contact persons in your region

We are there when you need us

You can find your local contacts at
www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technical basic information – SIVACON S4 power distribution boards and ALPHA UNIVERSAL distribution boards ([109767882](https://www.siemens.com/lowvoltage/product-support))

The relevant tender specifications can be found at
www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products
www.siemens.com/conversion-tool

Siemens YouTube channel

Our video range

- Power Distribution - SIVACON (general)
[bit.ly/2m4oSLI](https://www.youtube.com/watch?v=2m4oSLI)
- Siemens SIVACON S4 power distribution boards up to 4000 A
[bit.ly/2kzni6h](https://www.youtube.com/watch?v=2kzni6h)

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- SIVACON S4 power distribution boards
[sie.ag/2JUQwE4](https://www.siemens.com/lowvoltage/product-support)
- ALPHA distribution boards [sie.ag/2kURLd8](https://www.siemens.com/lowvoltage/product-support)
- SIMARIS planning tools [sie.ag/2m3oFbS](https://www.siemens.com/lowvoltage/product-support)

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.
www.siemens.com/product?Article No.

How you can get your SIVACON S8

Use the competence and experience of our experts at one of the production locations near to your
www.siemens.com/lowvoltage/contact

Our certified SIVACON Technology Partners are also available to you for questions relating to the high quality of our low-voltage switchboards
www.siemens.com/sivacon-partnerfinder

... can be found in our online services

Commissioning + operation

Planning tools

BIM-compliant SIMARIS planning tools

The SIMARIS planning tools effectively assist you in your planning process. Project-specific BIM (Building Information Modeling) data for cross-package planning is also possible.

www.siemens.com/simaris

Configuration software

SIMARIS configuration

SIMARIS configuration supports the engineering process of the SIVACON and ALPHA distribution systems from planning to documentation of the installation.

www.siemens.com/simarisconfig

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Planning manual SIVACON S8 – Technical planning information (**107113936**)
- Manual SIVACON S4 (**25909512**)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at

www.siemens.com/sitrain-lowvoltage

- SIMARIS configuration (WT-LVASIMC)

Technical overview of power distribution boards, motor control centers and distribution boards



The fast way to get you to our online services

This page provides you with comprehensive information and links on power distribution boards, motor control centers and distribution boards

www.siemens.com/lowvoltage/product-support (**109769089**)

SIVACON and ALPHA distribution systems

Power distribution
boards and motor
control centers



SIVACON S8

Power distribution
boards



SIVACON S4

Basic data

Rated current	A	7010	4000
Overvoltage category		IV	III/IV
Rated impulse withstand voltage U_{imp}	kV	8	12
Rated insulation voltage U_i	V	1000	1000
Rated operational voltage U_e	V AC	Up to 690	690
Rated short-circuit current I_{pk}	kA	Up to 330	220
Rated short-time current I_{cw} (1 s)	kA	Up to 150	100
Degree of protection according to IEC 60529/EN 60529		IP30 ... IP54	IP40 + IPX1 / IP55
Safety class		I	I
Color		RAL 7035 (light gray)	RAL 7035 (light gray)

Dimensions

Height	mm	2000/2200 Base 100/200	2000 Base 100/200
Width	mm	200 ... 1400	350 ... 1200
Depth	mm	500 ... 1200	400/600/800

Standards and specifications

IEC		IEC 61439-2	IEC 61439-1/2
Operating personnel	Ordinary person	–	–
	Electrically skilled person	■	■
Approvals		DNV GL, ABS, LR, ASTA, EAC, CCC, DEKRA	VDE

Equipment

Busbar position		Top, rear	Top, bottom, rear
Form of internal separation		4b	4b
Tested for resistance to internal arcing acc. to EN 61439-2 Supplement 1		■	–
SIMARIS control		■	–
Active protection against internal arcs		■	–
Section for reactive power compensation		■	–

Other

Type of installation		Wall / back to back / double-fronted	Wall / back to back
Type of delivery	Flat pack / individual parts	■	■
	Pre-assembled without copper	■	■
	Pre-assembled with copper	■	■

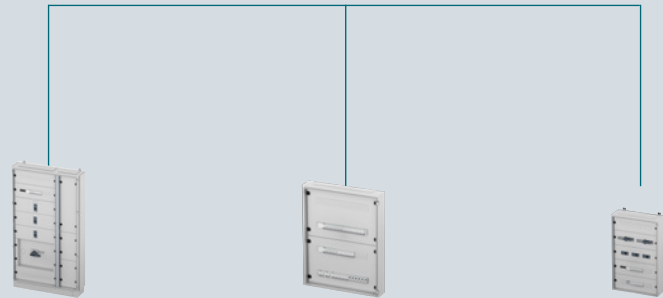
More information

Catalog LV 10			See page 15/2
---------------	--	--	-------------------------------

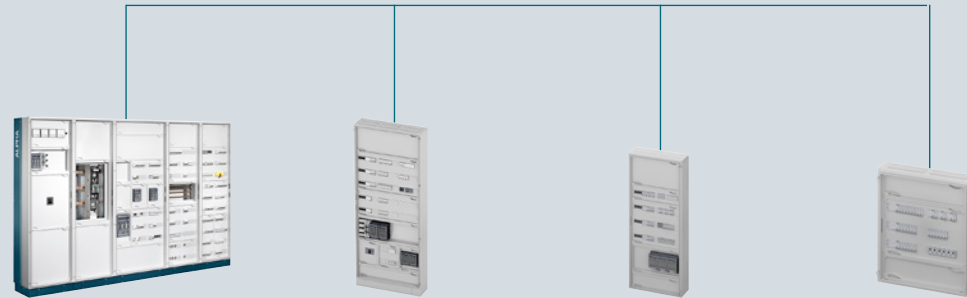
Power distribution boards



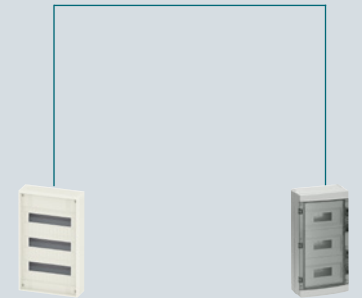
ALPHA UNIVERSAL distribution boards (NF technology)



ALPHA distribution boards (DIN technology)



Small distribution boards



ALPHA 3200	ALPHA 800 UNIVERSAL	ALPHA 630 UNIVERSAL	ALPHA 125 UNIVERSAL	ALPHA 1250	ALPHA 630	ALPHA 400	ALPHA 160	ALPHA SIMBOX XL	ALPHA SIMBOX WP
3200	800	630	125	1250	630	400	160	63	63
III/IV	III	III	III	III	III	III	II	II	II
8	6	6	6	8	6	6	6	-	-
1000	690	690	400	690	690	690	690	-	1000
690	690	690	400	690	690	690	690	400	400
165	74	53	10	110	76	76	-	-	-
75	35	25	17	35	34	34	-	-	-
IP40 + IPX1/IP54	IP30/IP43/IP55	IP30/IP43/IP55	IP30/IP31D/IP43	IP55	IP43/IP55	IP31/IP43/IP55	IP31/IP43/IP44	IP30	IP65
I	I	I	I	I	I/II	I/II	II	II	II
RAL 7035 (light gray)	RAL 7035 (light gray)	RAL 7035 (light gray)	RAL 7035 (light gray)	RAL 7035 (light gray)	RAL 7035 (light gray)	RAL 9016 (traffic white) / RAL 7035 (light gray)	RAL 9016 (traffic white) / RAL 7035 (light gray)	RAL 9010 (pure white)	RAL 7035 (light gray)
2000 Base 100/200	1800/2000	400/600/800/ 1000/1200/1600/ 1800/2000	400/600/800/ 1000/1200	1950 Base 100	1950 Base 100	650/800/950/1100/ 1250/1400	500/650/800/950/1100	1 to 4-tier	1 to 4-tier
350 ... 1400	300/600/900	600 + 250/900	600	300/550/800/ 1050/1300	300/550/800/ 1050/1300	300/550/800/ 1050/1300	300/550	305	4 ... to 18 MW
600	400	250	140	400	210/250/320	210	140	88/99	100/140/160
IEC 61439-1/2	IEC 61439-1/2	IEC 61439-1/2	IEC 61439-1/3	IEC 61439-1/2	IEC 61439-1/2	IEC 61439-1/2/3	IEC 61439-1/3	IEC 61439-1/3	IEC 61439-1/3
-	-	-	-	-	-	■	■	■	■
■	■	■	■	■	■	■	■	■	■
-	VDE	VDE	VDE	VDE	VDE	VDE	VDE	VDE	VDE
Rear	-	-	-	-	-	-	-	-	-
2b	1	1	1	-	-	-	-	-	-
1 personal protection	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
■	-	-	-	-	-	-	-	-	-
Wall / back to back	-	-	-	Surface mounting	Surface mounting	Surface mounting/flush mounting	Surface mounting/flush mounting	Surface mounting/hollow wall/flush mounting	Surface mounting
-	-	■	-	■	■	■	■	■	■
■	-	-	-	■	■	■	■	-	-
■	-	-	-	-	-	-	-	-	-
	See page 15/108	See page 15/110	See page 15/116	See page 15/140	See page 15/144	See page 15/148	See page 15/151	See page 15/180	See page 15/183

SIVACON and ALPHA distribution systems

Additional options

To specify the options, add „Z“ to the complete Article No. and indicate the appropriate order code(s).

8GK.....-.....-..... -Z

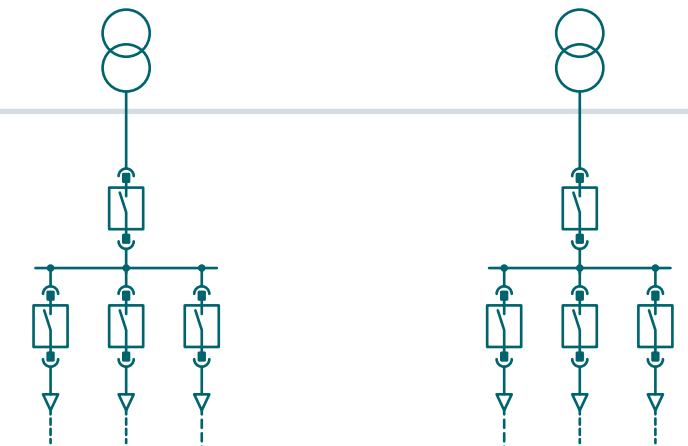
Order code

Special colors for ALPHA

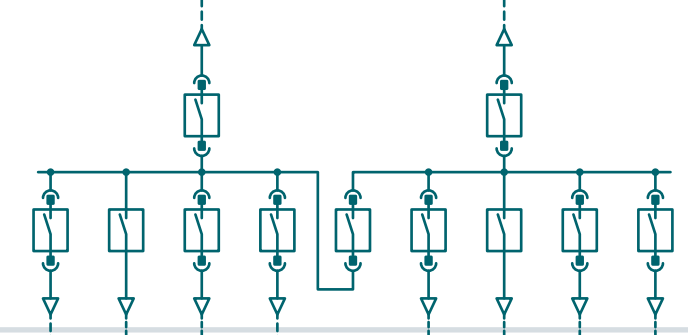
	RAL 1003, signal yellow	Semi-gloss	Smooth	C	2	7
	RAL 2000, yellow orange	Semi-gloss	Smooth	C	2	5
	RAL 3000, flame red	Silky gloss	Surface structure	C	3	1
	RAL 5005, signal blue	Semi-gloss	Smooth	C	2	3
	RAL 5010, gentian blue	Semi-gloss	Smooth	C	2	4
	RAL 5017, traffic blue	Silky gloss	Surface structure	C	2	2
	RAL 6018, yellow green	Semi-gloss	Smooth	C	2	6
	RAL 7032, pebble gray	Semi-gloss	Surface structure	C	1	3
	RAL 7033, cement gray	Semi-gloss	Surface structure	C	2	8
	RAL 7035, light gray	Semi-gloss	Smooth	C	1	1
	RAL 7038, agate gray	Semi-gloss	Surface structure	C	1	2
	RAL 9001, cream	Semi-gloss	Smooth	C	2	1
	RAL 9002, gray white	Semi-gloss	Smooth	C	1	8
			Surface structure	C	1	9
			Silky gloss	C	2	9
	RAL 9003, signal white	Semi-gloss	Surface structure	C	2	0
	RAL 9005, jet black	Semi-gloss	Smooth	C	1	6
			Surface structure	C	1	7
	RAL 9010, pure white	Semi-gloss	Smooth	C	1	5
			Surface structure	C	3	0
	RAL 9016, traffic white	Semi-gloss	Smooth	C	1	0

Applications

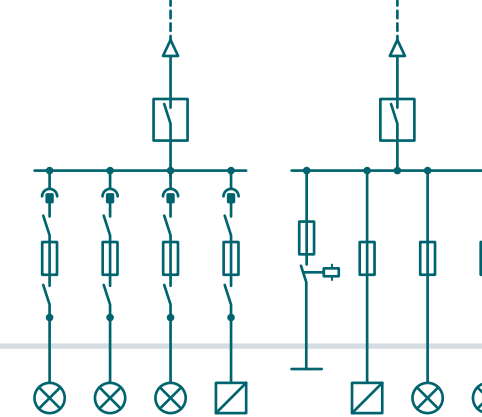
Power Center



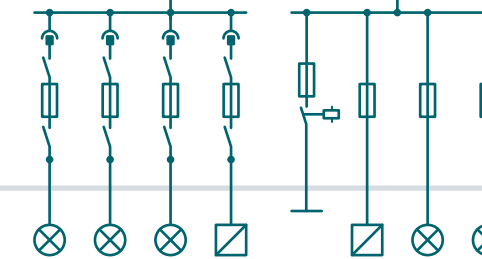
Main distribution boards



Subdistribution boards



Loads



SIVACON S8



SIVACON S8



SIVACON S4



ALPHA 3200



ALPHA UNIVERSAL (NF technology)

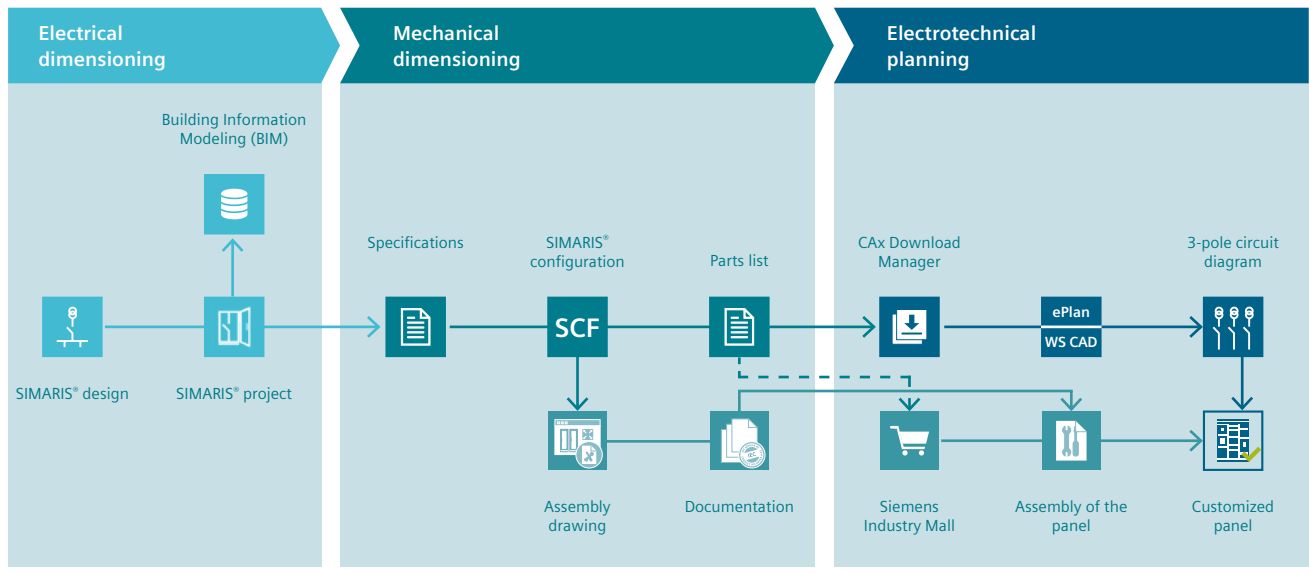
ALPHA (DIN technology)



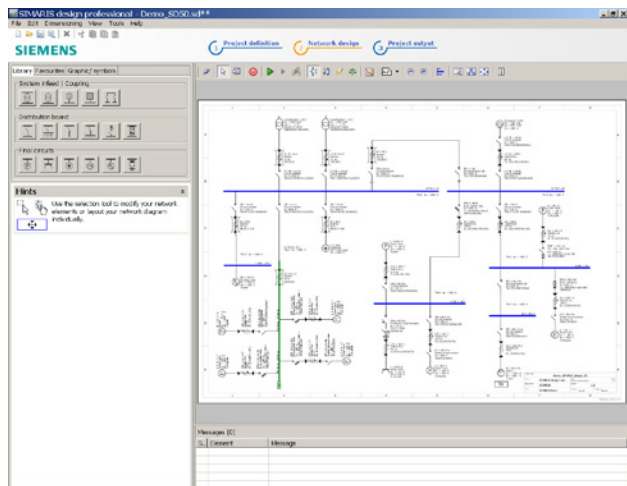
SIMARIS® planning tools

For planning and visualizing the power distribution system

From planning to commissioning



SIMARIS® design

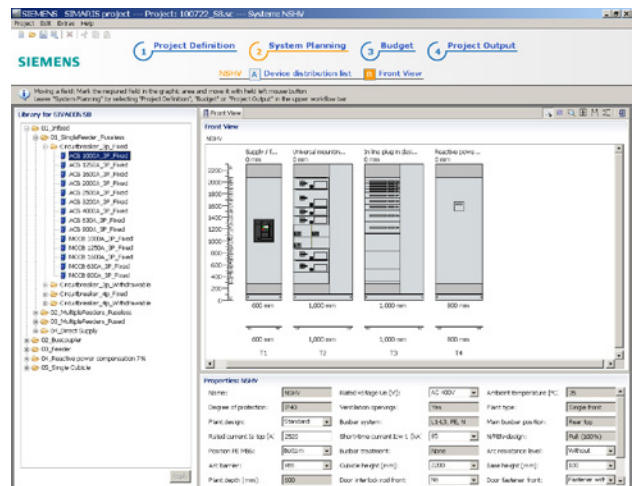


SIMARIS® design is a planning tool for quick, effective network calculations and dimensioning of electrical power distribution systems for non-residential and industrial buildings.

- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the integrated product database

Free download of the basic version and further information at: www.siemens.com/simarisdesign

SIMARIS® project

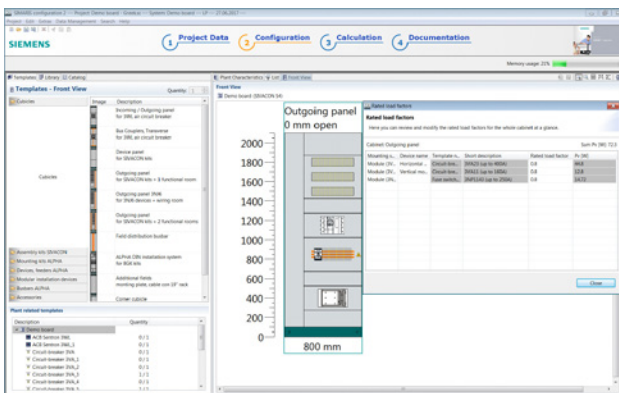


SIMARIS® project is a planning tool for fast calculation of space requirements and electrical power distribution system budgets for non-residential and industrial buildings, and for generating specifications automatically.

- Import of projects created in SIMARIS® design
- Export of 3D data in IFC 4.x format for BIM (Building Information Modeling)

Free download and further information at: www.siemens.com/simarisproject

SIMARIS® configuration

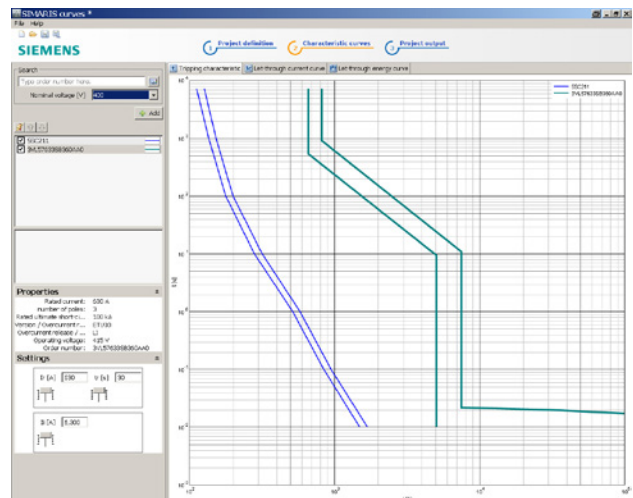


With the configuration software SIMARIS® configuration, both the power distribution boards and the ALPHA distribution boards can be quickly and reliably configured.

- Comprehensive documentation of the installation with design verification acc. to IEC 61439
- Configuration of the devices from the SENTRON portfolio with the exact article numbers and integrated price calculation feature

Free download and further information at:
www.siemens.com/simariscfg

SIMARIS® curves



SIMARIS® curves is a planning tool for visualizing and evaluating characteristic curves of Siemens low-voltage protection equipment and fuses (IEC) quickly and easily, including the possibility of simulating instrument settings.

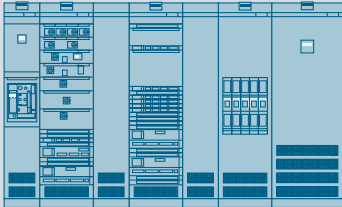
- is available both as a PC version and also as an app for use on a tablet PC or a smartphone

Free download and further information at:
www.siemens.com/simariscurves

SIVACON S8 / ALPHA 3200 system overview

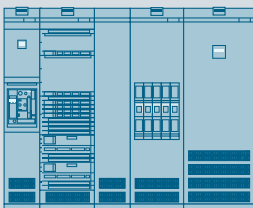
Section design and installable devices

SIVACON S8



	Circuit breaker design	Fixed-mounted design	In-line design, plugged in
Devices	3WL and 3VA	3VA, 3RV, 3NP, 3K... and 5S...	3NJ6
Installation system	Fixed-mounted Withdrawable	Fixed-mounted with front covers	Plug-in
Functions	Infeed, Outgoing feeder, Coupling	Outgoing cable feeders	Outgoing cable feeders
Rated values	Up to 6300 A	Up to 630 A	Up to 630 A
Connection type	Front or rear	Front	Front

ALPHA 3200



	Circuit breaker design	Fixed-mounted design	In-line design, plugged in
Devices	3WL and 3VA	3VA, 3RV, 3NP, 3K..	3NJ6
Installation system	Fixed-mounted Withdrawable	Fixed-mounted with front covers	Plug-in
Functions	Infeed, Outgoing feeder, Coupling	Outgoing cable feeders	Outgoing cable feeders
Rated values	Up to 3200 A	Up to 630 A	Up to 630 A
Connection type	Front or rear	Front	Front



In-line design, fixed-mounted	Reactive power compensation	Active protection against internal arcs	Universal mounting design / motor control center	Frequency converter technology
3NJ4	Capacitor units, controllers	Internal arc protection system	3VA, 3RV, 3NP, 3K..., 3R..., 3UF, 3NJ6 and 3LD	SINAMICS G120 (6SL)
Fixed-mounted	Fixed-mounted	Fixed-mounted	Withdrawable Fixed-mounted with modular doors Plug-in	Fixed-mounted (modules)
Outgoing cable feeders	Central compensation of reactive power	Active protection against internal arcs	Outgoing cable feeders Motor feeders (MCC)	Motor feeders (MCC)
Up to 630 A	Without inductor up to 600 kvar With inductor up to 500 kvar	Short-circuit-proof up to 100 kA at 690 V	Up to 630 A, up to 250 kW	Up to 132 kW
Front	Front	–	Front or rear	Front



In-line design, fixed-mounted	Reactive power compensation	Active protection against internal arcs	Universal mounting design / motor control center	Frequency converter technology
3NJ4	Capacitor units, controllers	–	–	–
Fixed-mounted	Fixed-mounted	–	–	–
Outgoing cable feeders	Central compensation of reactive power	–	–	–
Up to 630 A	Without inductor up to 600 kvar With inductor up to 500 kvar	–	–	–
Front	Front	–	–	–

System overview

SIVACON S4 power distribution boards

Frame and enclosure



Accessories for frame and enclosure



Hinges for covers

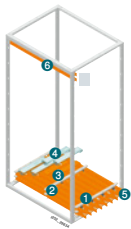


Locks

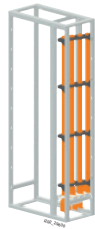


Mech. mounting parts

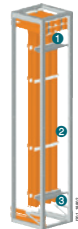
Busbar systems



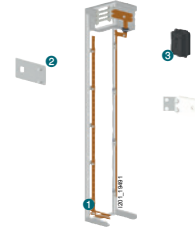
Main busbars



Vertical distribution busbars, cascaded



Vertical distribution busbars, non-cascaded



N/PE bar

Section expansion



3WL incoming feeder panels



3VA outgoing feeder panels
 3NP1 modular installation devices



3NJ4 outgoing feeder panels



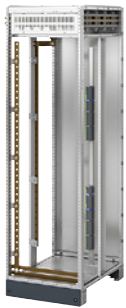
3NJ6 outgoing feeder panels



3WL coupling panels



Mounting plates



Cable section



Corner sections

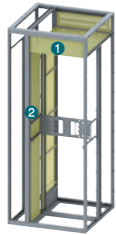


ALPHA 8GK DIN section

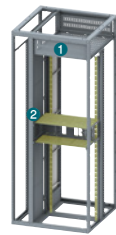
Internal separation



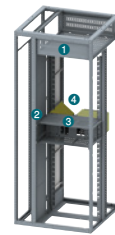
Form 1
 Without separation



Form 2
 Separation
 + busbar systems



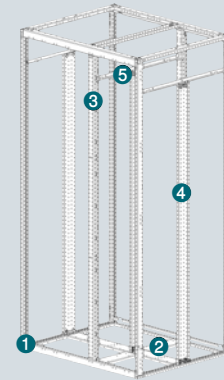
Form 3
 Separation
 + busbar systems
 + device compartments



Form 4
 Separation
 + busbar systems
 + device compartments
 + connections

Frame

Main busbar at top



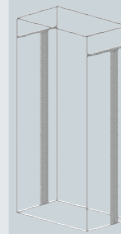
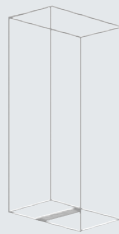
- ❶ Frame
- ❷ Bottom plate partition crossbar
- ❸ Exterior intermediate upright
- ❹ Interior side upright
- ❺ Section division

Main busbar at top

Main busbar at bottom

Main busbar at rear

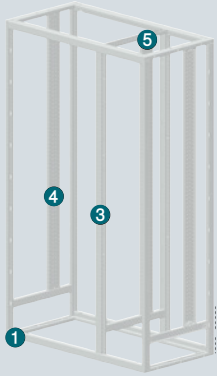
Frame without main busbar



Width	Depth	❶ Frame	❷ Bottom plate partition crossbar	❸ Exterior intermediate upright	❹ Interior side upright	❺ Section division
400 mm	400 mm	8PQ1204-4BA01	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1204-6BA01	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1204-8BA01	2x 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34
600 mm	400 mm	8PQ1206-4BA01	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1206-6BA01	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1206-8BA01	2x 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34
800 mm	400 mm	8PQ1208-4BA01	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1208-6BA01	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1208-8BA01	2x 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34
1000 mm	400 mm	8PQ1201-4BA02	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1201-6BA02	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1201-8BA03	2x 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34
1200 mm	400 mm	8PQ1202-4BA02	8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA65	8PQ3000-1BA31
	600 mm	8PQ1202-6BA02	8PQ3000-1BA40	8PQ3000-1BA43	8PQ3000-0BA01	8PQ3000-1BA32
	800 mm	8PQ1202-8BA02	2x 8PQ3000-1BA38	8PQ3000-1BA43	8PQ3000-0BA02	8PQ3000-1BA34

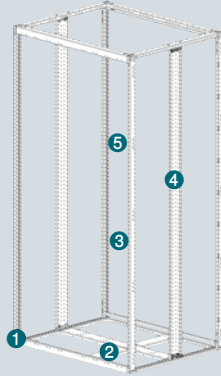
15

Main busbar at bottom



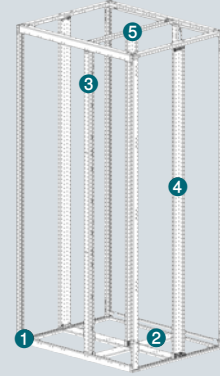
- 1 Frame
-
- 3 Exterior intermediate upright
- 4 Interior side upright
- 5 Section division

Main busbar at rear

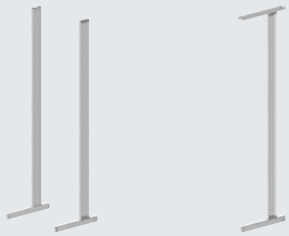


- 1 Frame
- 2 Bottom plate partition crossbar
- 3 Exterior intermediate upright
- 4 Interior side upright
- 5 Section division

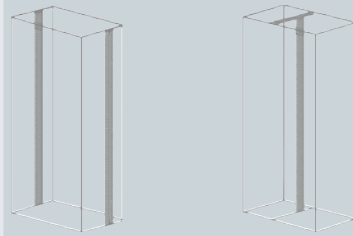
Frame without main busbar



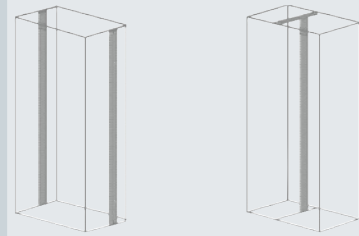
- 1 Frame
- 2 Bottom plate partition crossbar
- 3 Exterior intermediate upright
- 4 Interior side upright
- 5 Section division



4 Interior side upright 5 Section division



4 Interior side upright 5 Section division


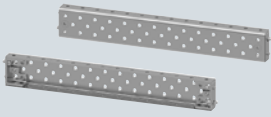




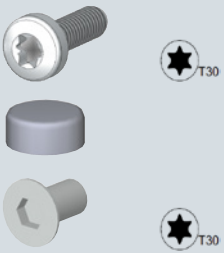


4 Interior side upright 5 Section division

8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37
8PQ3000-0BA10	8PQ3000-0BA10	–	–	–	–
8PQ3000-3BA10	8PQ3000-3BA47	–	–	8PQ3000-0BA03	8PQ3000-1BA36
8PQ3000-3BA11	8PQ3000-3BA48	8PQ3000-0BA03	8PQ3000-1BA37	8PQ3000-0BA03	8PQ3000-1BA37

Frame

Accessories

Frame reinforcement					
	Use			Scope of supply	Article No.
	For frame widths from 1000 mm			2 units	8PQ9400-0BA35
Crossbars					
	Version	Width	Crossbar length	Scope of supply	Article No.
	–	400 mm	350 mm	2 units	8PQ3000-0BA12
		600 mm	550 mm	2 units	8PQ3000-0BA71
		800 mm	750 mm	2 units	8PQ3000-0BA72
		1000 mm	950 mm	2 units	8PQ3000-0BA84
	Version	Depth	Crossbar length	Article No.	
	Without uprights	400 mm	300 mm	2 units	8PQ3000-0BA10
		600 mm	500 mm	2 units	8PQ3000-1BA24
		800 mm	700 mm	2 units	8PQ3000-1BA25
	With uprights	600 mm	300 mm	2 units	8PQ3000-0BA10
800 mm		300 mm	2 units	8PQ3000-0BA10	
Universal brackets					
	Version			Scope of supply	Article No.
	For mounting expansion elements			1 unit	8MF1000-2CP
Forming rows of frames					
	Version			Scope of supply	Article No.
	Mechanical connection, incl. standard parts			6 units	8PQ1204-4BA05
Board coupling gasket kits					
	Version			Scope of supply	Article No.
	To maintain degree of protection IP55			5.5 m	8PQ1204-4BA04
Self-tapping screws					
	Version	Version			Article No.
	Cylinder-head screws	M6 × 10 mm	100 units		8PQ9500-0BA34
		M6 × 16 mm	100 units		8PQ9500-0BA32
		M6 × 20 mm	100 units		8PQ9500-0BA31
	Covering caps	M6, RAL 7035	100 units		8PQ9400-0BA14
Countersunk screws	M6 × 12 mm	100 units		8PQ9500-1BA07	

Enclosure

Paneling sections



Main busbar at top

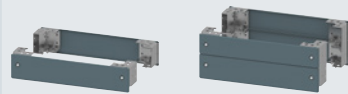
Main busbar at bottom

1 Bases

2 Bottom plates

Corners with front cover

Side covers



Width	Depth	Height 100 mm		Height 100 mm	Bottom plates		
		200 mm	200 mm		IP40 cable entry	IP55	IP20
200 mm	400 mm	–	–	–	–	8PQ2302-4BA04	–
	600 mm	–	–	–	–	8PQ2302-6BA04	–
	800 mm	–	–	–	–	2x 8PQ2302-4BA04	–
400 mm	400 mm	8PQ1014-0BA01	8PQ1024-0BA01	8PQ1010-4BA01	8PQ2304-4BA06	8PQ2304-4BA05	8PQ2304-4BA14
	600 mm	8PQ1014-0BA01	8PQ1024-0BA01	8PQ1010-6BA01	8PQ2306-4BA06	8PQ2306-4BA05	8PQ2304-6BA11
	800 mm	8PQ1014-0BA01	8PQ1024-0BA01	8PQ1010-8BA01	2x 8PQ2304-4BA06	2x 8PQ2304-4BA05	8PQ2304-8BA05
600 mm	400 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-4BA01	8PQ2306-4BA06	8PQ2306-4BA05	8PQ2306-4BA10
	600 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-6BA01	8PQ2306-6BA06	8PQ2306-6BA05	8PQ2306-6BA16
	800 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-8BA01	2x 8PQ2306-4BA06	2x 8PQ2306-4BA05	8PQ2306-8BA05
800 mm	400 mm	8PQ1018-0BA01	8PQ1028-0BA01	8PQ1010-4BA01	8PQ2308-4BA06	8PQ2308-4BA05	8PQ2308-4BA13
	600 mm	8PQ1018-0BA01	8PQ1028-0BA01	8PQ1010-6BA01	8PQ2308-6BA06	8PQ2308-6BA05	8PQ2308-6BA13
	800 mm	8PQ1018-0BA01	8PQ1028-0BA01	8PQ1010-8BA01	2x 8PQ2308-4BA06	2x 8PQ2308-4BA05	8PQ2308-8BA10
1000 mm	400 mm	8PQ1011-0BA01	8PQ1021-0BA01	8PQ1010-4BA01	–	8PQ2301-4BA04	8PQ2301-4BA06
	600 mm	8PQ1011-0BA01	8PQ1021-0BA01	8PQ1010-6BA01	–	–	8PQ2301-6BA05
	800 mm	8PQ1011-0BA01	8PQ1021-0BA01	8PQ1010-8BA01	–	2x 8PQ2301-4BA04	8PQ2301-8BA04
1200 mm	400 mm	8PQ1012-0BA01	8PQ1022-0BA01	8PQ1010-4BA01	–	–	8PQ2302-4BA05
	600 mm	8PQ1012-0BA01	8PQ1022-0BA01	8PQ1010-6BA01	–	–	8PQ2302-6BA05
	800 mm	8PQ1012-0BA01	8PQ1022-0BA01	8PQ1010-8BA01	–	–	8PQ2302-8BA04

15

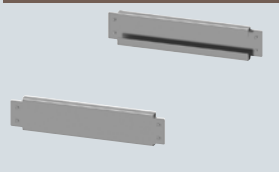
Rear panels		Side panels (1 set = 2 units)		Top plates			
IP40	IP55	IP55	IP55 with design strip	IP40	IP40 cable entry	IPX1 upgrade	IP55
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-
8PQ2420-4BA02	8PQ2420-4BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2304-4BA02	8PQ2304-4BA03	8PQ2304-4BA04	8PQ2304-4BA01
8PQ2420-4BA02	8PQ2420-4BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2304-6BA02	8PQ2304-6BA03	8PQ2304-6BA04	8PQ2304-6BA01
8PQ2420-4BA02	8PQ2420-4BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2304-8BA02	8PQ2304-8BA03	8PQ2304-8BA04	8PQ2304-8BA01
8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2306-4BA02	8PQ2306-4BA03	8PQ2306-4BA04	8PQ2306-4BA01
8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2306-6BA02	8PQ2306-6BA03	8PQ2306-6BA04	8PQ2306-6BA01
8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2306-8BA02	8PQ2306-8BA03	8PQ2306-8BA04	8PQ2306-8BA01
8PQ2420-8BA02	8PQ2420-8BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2308-4BA02	8PQ2308-4BA03	8PQ2308-4BA04	8PQ2308-4BA01
8PQ2420-8BA02	8PQ2420-8BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2308-6BA02	8PQ2308-6BA03	8PQ2308-6BA04	8PQ2308-6BA01
8PQ2420-8BA02	8PQ2420-8BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2308-8BA02	8PQ2308-8BA03	8PQ2308-8BA04	8PQ2308-8BA01
8PQ2420-1BA02	8PQ2420-1BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2301-4BA02	-	8PQ2301-4BA03	8PQ2301-4BA01
8PQ2420-1BA02	8PQ2420-1BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2301-6BA02	-	8PQ2301-6BA03	8PQ2301-6BA01
8PQ2420-1BA02	8PQ2420-1BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2301-8BA02	-	8PQ2301-8BA03	8PQ2301-8BA01
8PQ2420-2BA02	8PQ2420-2BA01	8PQ2520-4BA02	8PQ2520-4BA01	8PQ2302-4BA02	-	8PQ2302-4BA03	8PQ2302-4BA01
8PQ2420-2BA02	8PQ2420-2BA01	8PQ2520-6BA02	8PQ2520-6BA01	8PQ2302-6BA02	-	8PQ2302-6BA03	8PQ2302-6BA01
8PQ2420-2BA02	8PQ2420-2BA01	8PQ2520-8BA02	8PQ2520-8BA01	8PQ2302-8BA02	-	8PQ2302-8BA03	8PQ2302-8BA01

Enclosure

Paneling sections

Accessories

Reinforcements for transport



Height	Width/depth	Article No.
100 mm	400 mm	8PQ1014-0BA02
	600 mm	8PQ1016-0BA02
	800 mm	8PQ1018-0BA02
	1000 mm	8PQ1011-1BA01
	1200 mm	8PQ1012-2BA01

Enclosure

Paneling sections



		6 Doors			Outer cover		Frame paneling
Hinge position	Width	IP40	IP55	IP55 glass doors	IP40	IP55	IP30
With double-bit lock							
Left	200 mm	–	–	–	8PQ2197-2BA15	8PQ2197-2BA14	–
	400 mm	8PQ2197-4BA08	8PQ2197-4BA05	–	8PQ2197-4BA02	8PQ2197-4BA01	–
	600 mm	8PQ2197-6BA06	8PQ2197-6BA03	8PQ2197-6BA10	–	–	8PQ2197-6BA11
	800 mm	8PQ2197-8BA06	8PQ2197-8BA03	8PQ2197-8BA10	–	–	8PQ2197-8BA11
	1000 mm	8PQ2197-1BA06	8PQ2197-1BA03	8PQ2197-1BA10	–	–	–
Right	200 mm	–	–	–	8PQ2197-2BA15	8PQ2197-2BA14	–
	400 mm	8PQ2197-4BA11	8PQ2197-4BA10	–	8PQ2197-4BA02	8PQ2197-4BA01	–
	600 mm	8PQ2197-6BA13	8PQ2197-6BA12	8PQ2197-6BA14	–	–	8PQ2197-6BA11
	800 mm	8PQ2197-8BA13	8PQ2197-8BA12	8PQ2197-8BA14	–	–	8PQ2197-8BA11
	1000 mm	8PQ2197-1BA18	8PQ2197-1BA17	8PQ2197-1BA20	–	–	–
For profile semicylinder							
Left	200 mm	–	–	–	8PQ2197-2BA15	8PQ2197-2BA14	–
	400 mm	8PQ2197-4BA06	8PQ2197-4BA03	–	8PQ2197-4BA02	8PQ2197-4BA01	–
	600 mm	8PQ2197-6BA04	8PQ2197-6BA01	8PQ2197-6BA07	–	–	8PQ2197-6BA11
	800 mm	8PQ2197-8BA04	8PQ2197-8BA01	8PQ2197-8BA07	–	–	8PQ2197-8BA11
	1000 mm	8PQ2197-1BA07	8PQ2197-1BA04	8PQ2197-1BA11	–	–	–
Right	200 mm	–	–	–	8PQ2197-2BA15	8PQ2197-2BA14	–
	400 mm	8PQ2197-4BA07	8PQ2197-4BA04	–	8PQ2197-4BA02	8PQ2197-4BA01	–
	600 mm	8PQ2197-6BA05	8PQ2197-6BA02	8PQ2197-6BA08	–	–	8PQ2197-6BA11
	800 mm	8PQ2197-8BA05	8PQ2197-8BA02	8PQ2197-8BA08	–	–	8PQ2197-8BA11
	1000 mm	8PQ2197-1BA08	8PQ2197-1BA05	8PQ2197-1BA12	–	–	–

15

Accessories

Cubicle keys			
	Version	Scope of supply	Article No.
	3 mm double bit	10 units	8PQ9400-0BA12
Inner door struts			
	Height	Article No.	
	1975 mm	8PQ2197-0BA10	
Cubicle ID plate			
	Version	Article No.	
	SIVACON designed by Siemens	8PQ9400-0BA06	
Flat cylinders/two-way interlocking mechanism			
	Version	Article No.	
	Rotary handles with flat cylinder	8PQ9400-0BA07	
	<ul style="list-style-type: none"> • With key • Identical key type 		
	Rotary handles with two-way interlocking mechanism	8PQ9400-0BA08	
	Coupling bars	8PQ9400-0BA27	
	Locking rods	8PQ9400-0BA37	
Bar guides	8PQ9400-0BA36		
Profile semicylinders			
	Version	Article No.	
	Rotary handles for profile semicylinders	8PQ9400-0BA41	
	Coupling bars	8PQ9400-0BA28	
	Locking rods	8PQ9400-0BA38	
	Bar guides	8PQ9400-0BA36	
	Profile semicylinders Acc. to DIN 18252/18254, 8 × 45° adjustable, with identical keys (key number 333), including key	8PQ9400-0BA26	
Door hinges			
	Version	Scope of supply	Article No.
	Suitable for modular or section doors	2 units	8PQ9400-0BA55

Enclosure

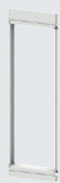
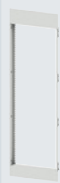
Internal covers



Main busbar at top

Frame without main busbar

Masking frames



Width	Fixed	Swivel	Fixed	Swivel
600 mm	8PQ2000-6BA03	8PQ2000-6BA02	8PQ2000-6BA04	8PQ2000-6BA01
800 mm	8PQ2000-8BA03	8PQ2000-8BA02	8PQ2000-8BA04	8PQ2000-8BA01

Blanking covers



Height	Width 600 mm	Width 800 mm
50 mm	8PQ2005-6BA01	8PQ2005-8BA01
100 mm	8PQ2010-6BA01	8PQ2010-8BA01
150 mm	8PQ2015-6BA02	8PQ2015-8BA02
200 mm	8PQ2020-6BA01	8PQ2020-8BA01
250 mm	8PQ2025-6BA01	8PQ2025-8BA01
300 mm	8PQ2030-6BA01	8PQ2030-8BA01
350 mm	8PQ2035-6BA01	8PQ2035-8BA01
400 mm	8PQ2040-6BA01	8PQ2040-8BA01
500 mm	8PQ2050-6BA01	8PQ2050-8BA01
550 mm	8PQ2055-6BA01	8PQ2055-8BA01
600 mm	8PQ2060-6BA01	8PQ2060-8BA01
650 mm	8PQ2065-6BA01	8PQ2065-8BA01
800 mm	8PQ2080-6BA01	8PQ2080-8BA01

Accessories

4 Covers, ventilated			
	Height	Width	Article No.
	100 mm	600 mm	8PQ2010-6BA02
		800 mm	8PQ2010-8BA02
Quick-release lock			
	Version	Scope of supply	Article No.
	SIVACON - Blue green basic	20 units	8PQ9400-0BA54
Hinges for covers			
	Version	Scope of supply	Article No.
	Set for one cover	2 units	8PQ2000-0BA08

Enclosure

Modular doors




Device compartments






Width	Height	Modular doors		Covers	
		IP4X	IP55 upgrade	IP4X	IP55 upgrade
400 mm	50 mm	–	–	8PQ2005-4BA03	8PQ2005-4BA01
	100 mm	–	–	8PQ2010-4BA02	8PQ2010-4BA01
	150 mm	8PQ2015-4BA04	8PQ2015-4BA05	–	–
	200 mm	8PQ2020-4BA01	8PQ2020-4BA03	–	–
	250 mm	8PQ2025-4BA01	8PQ2025-4BA02	–	–
	300 mm	8PQ2030-4BA01	8PQ2030-4BA02	–	–
	350 mm	8PQ2035-4BA01	8PQ2035-4BA02	–	–
	400 mm	8PQ2040-4BA01	8PQ2040-4BA03	–	–
	450 mm	8PQ2045-4BA01	8PQ2045-4BA02	–	–
	500 mm	8PQ2050-4BA01	8PQ2050-4BA02	–	–
	550 mm	8PQ2055-4BA11	8PQ2055-4BA07	–	–
	600 mm	8PQ2060-4BA01	8PQ2060-4BA03	–	–
	650 mm	8PQ2065-4BA01	8PQ2065-4BA02	–	–
	700 mm	8PQ2070-4BA07	8PQ2070-4BA08	–	–
	750 mm	8PQ2072-4BA01	8PQ2075-4BA01	–	–
	800 mm	8PQ2080-4BA01	8PQ2080-4BA04	–	–
600 mm	50 mm	–	–	8PQ2005-6BA04	8PQ2005-6BA03
	100 mm	–	–	8PQ2010-6BA04	8PQ2010-6BA03
	150 mm	8PQ2015-6BA10	8PQ2015-6BA12	–	–
	200 mm	8PQ2020-6BA14	8PQ2020-6BA15	–	–
	250 mm	8PQ2025-6BA07	8PQ2025-6BA08	–	–
	300 mm	8PQ2030-6BA10	8PQ2030-6BA12	–	–
	350 mm	8PQ2035-6BA12	8PQ2035-6BA13	–	–
	400 mm	8PQ2040-6BA12	8PQ2040-6BA13	–	–
	450 mm	8PQ2045-6BA05	8PQ2045-6BA06	–	–
	500 mm	8PQ2050-6BA03	8PQ2050-6BA04	–	–
	550 mm	8PQ2055-6BA04	8PQ2055-6BA06	–	–
	600 mm	8PQ2060-6BA06	8PQ2060-6BA07	–	–
	650 mm	8PQ2065-6BA03	8PQ2065-6BA04	–	–
	700 mm	8PQ2070-6BA03	8PQ2070-6BA04	–	–
	750 mm	8PQ2075-6BA01	8PQ2075-6BA02	–	–
	800 mm	8PQ2080-6BA03	8PQ2080-6BA04	–	–
800 mm	50 mm	–	–	8PQ2005-8BA04	8PQ2005-8BA03
	100 mm	–	–	8PQ2010-8BA04	8PQ2010-8BA03
	150 mm	8PQ2015-8BA05	8PQ2015-8BA07	–	–
	200 mm	8PQ2020-8BA07	8PQ2020-8BA08	–	–
	250 mm	8PQ2025-8BA04	8PQ2025-8BA05	–	–
	300 mm	8PQ2030-8BA05	8PQ2030-8BA06	–	–
	350 mm	8PQ2035-8BA06	8PQ2035-8BA07	–	–
	400 mm	8PQ2040-8BA12	8PQ2040-8BA13	–	–
	450 mm	8PQ2045-8BA03	8PQ2045-8BA04	–	–
	500 mm	8PQ2050-8BA03	8PQ2050-8BA04	–	–
	550 mm	8PQ2055-8BA03	8PQ2055-8BA06	–	–
	600 mm	8PQ2060-8BA04	8PQ2060-8BA05	–	–
	650 mm	8PQ2065-8BA03	8PQ2065-8BA04	–	–
	700 mm	8PQ2070-8BA01	8PQ2070-8BA02	–	–
	750 mm	8PQ2075-8BA01	8PQ2075-8BA02	–	–
	800 mm	8PQ2080-8BA03	8PQ2080-8BA04	–	–

Head compartments

		1 Doors		Covers
				
Width	Height	IP4X	IP55 upgrade	IP4X
Main busbar at top				
400 mm	225 mm	8PQ2022-4BA04	8PQ2022-4BA03	8PQ2022-4BA01
600 mm	225 mm	8PQ2022-6BA04	8PQ2022-6BA02	8PQ2022-6BA01
800 mm	225 mm	8PQ2022-8BA03	8PQ2022-8BA02	8PQ2022-8BA01
Main busbar at bottom				
400 mm	175 mm	–	8PQ2022-4BA03	8PQ2000-4BA03
600 mm	175 mm	–	8PQ2022-6BA02	8PQ2000-6BA10
800 mm	175 mm	–	8PQ2022-8BA02	8PQ2000-8BA10
400 mm	725 mm	8PQ2072-4BA02	8PQ2070-4BA06	–
600 mm	725 mm	8PQ2072-6BA01	8PQ2070-6BA11	–


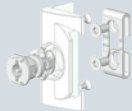
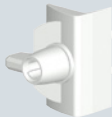



Base compartments

		2 Doors		Covers
				
Width	Height	IP4X	IP55 upgrade	IP4X
400 mm	150 + 25 mm	–	8PQ2015-4BA03	8PQ2015-4BA01
600 mm	150 + 25 mm	–	8PQ2015-6BA13	8PQ2000-6BA07
800 mm	150 + 25 mm	–	8PQ2015-8BA08	8PQ2000-8BA07
400 mm	700 + 25 mm	8PQ2070-4BA01	–	–
600 mm	700 + 25 mm	8PQ2070-6BA05	–	–

Enclosure

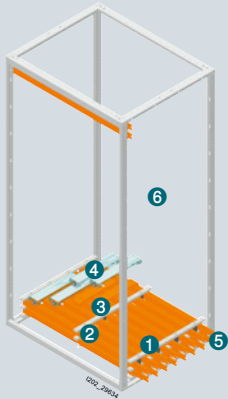
Modular doors

Accessories

Door hinges			
	Version	Scope of supply	Article No.
	Suitable for modular or section doors	2 units	8PQ9400-0BA55
Locks			
	Version	Article No.	
	Two-way interlocking mechanisms	8PQ9400-0BA40	
Handles for modular door			
	Version	Article No.	
	Without lock	8PQ9400-0BA73	
	With flat cylinder, identical key type	8PQ9400-0BA72	
ID strips			
	Width	Scope of supply	Article No.
	400 mm	6 units	8PQ5000-3BA42
	600 mm	6 units	8PQ5000-3BA43
	800 mm	6 units	8PQ5000-3BA46
Inner door struts			
	Height	Article No.	
	400 mm	8PQ2040-0BA06	
	550 mm	8PQ2055-0BA05	
	600 mm	8PQ2060-0BA14	
	625 mm	8PQ2060-0BA14	
	700 mm	8PQ2070-0BA02	
	725 mm	8PQ2070-0BA02	
	800 mm	8PQ2080-0BA07	
Cubicle keys			
	Version	Scope of supply	Article No.
	3 mm double bit	10 units	8PQ9400-0BA12

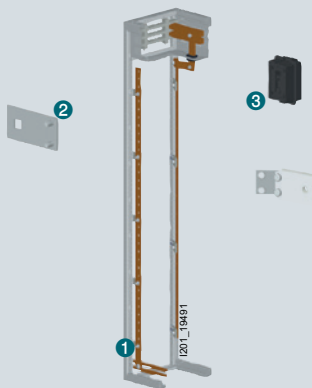
Busbar systems

Main busbars



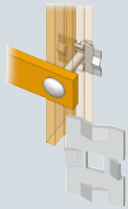
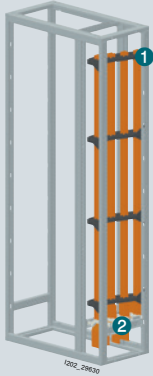
	1 Busbar supports		2 Reinforcement		3 Equipotential bonding	4 Covers	5 PEN grounding	Arcing fault barriers
Position	Up to 3200 A	Up to 4000 A	Up to 3200 A	Up to 4000 A				
Top	8PQ4000-0BA04	8PQ4000-0BA60	8PQ4000-0BA37	2x 8PQ4000-0BA37	8PQ4000-0BA62	–	8PQ4000-0BA12	8PQ9400-0BA21
Bottom	8PQ4000-0BA04	8PQ4000-0BA60	8PQ4000-0BA37	2x 8PQ4000-0BA37	8PQ4000-0BA62	8PQ4000-1BA25	8PQ4000-0BA12	8PQ9400-0BA21
Rear	8PQ4000-0BA04	–	8PQ4000-0BA37	–	–	–	8PQ4000-2BA24	8PQ9400-0BA21
	+ 8PQ3000-0BA10							

N/PE bars







	1 Frame connection	2 PE holders	3 N holders
Position of main busbar			
Top, bottom, rear	8PQ4000-0BA82	8PQ4000-2BA22	8PQ4000-2BA23

Vertical distribution busbars, cascaded, up to $I_{CW} = 65 \text{ kA}$

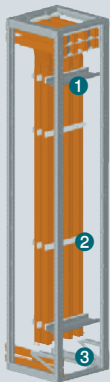


	① Busbar supports	② Supports
Position of main busbar	30 × 10 mm, 910 – 1600 A	40 × 10 mm, 1100 – 1640 A
Top	8PQ4000-0BA32	8PQ4000-0BA63
Bottom	8PQ4000-0BA32	8PQ4000-0BA63
		8PQ4000-1BA23

Accessories

Connection				
	Component	Version	Scope of supply	Article No.
	Busbar clamps	–	20 units	8PQ9400-0BA02
	Saucer-head bolts	M10 × 35 mm	50 units	8PQ9500-0BA14
		M10 × 45 mm	50 units	8PQ9500-0BA16
		M10 × 55 mm	50 units	8PQ9500-1BA36
		M10 × 65 mm	50 units	8PQ9500-1BA25
	Spring washers	For M10	50 units	8PQ9500-0BA60
	Hexagonal nuts	M10	50 units	8PQ9500-0BA05

Vertical distribution busbars, non-cascaded, up to $I_{CW} = 100 \text{ kA}$



	① Busbar supports	② Reinforcement	③ Supports
Position of main busbar	Width		
Top	200 mm	8PQ4000-2BA25	8PQ4000-0BA37
	400 mm	8PQ4000-2BA26	8PQ4000-0BA37
Bottom	200 mm	8PQ4000-2BA25	8PQ4000-0BA37
	400 mm	8PQ4000-2BA26	8PQ4000-0BA37
			8PQ4000-0BA78
			8PQ4000-0BA61
			–
			–

Section expansion

Air circuit breakers 3WL, infeed main busbar at top



① Head compartment doors

② Modular doors



Installation type	Size	Width	Depth	Head compartment doors		Modular doors		
				IP40	IP55 upgrade	IP40	IP55	IP55 upgrade
Fixed-mounted	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
	III	1000 mm	800 mm	8PQ2067-1BA01	8PQ2067-1BA02	8PQ2055-1BA03 + 3WL9111-0AP01-0AA0	8PQ2055-1BA04 + 3WL9111-0AP02-0AA0	8PQ2055-1BA06
Withdrawable	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
	III	1000 mm	800 mm	8PQ2067-1BA01	8PQ2067-1BA02	8PQ2055-1BA03 + 3WL9111-0AP01-0AA0	8PQ2055-1BA04 + 3WL9111-0AP02-0AA0	8PQ2055-1BA06

15

Technical specifications

Size	I _n	Rated operational current I _{ec}													
		Ventilated IP40							Non-ventilated IP55						
		20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
I	1600 A	1600 A	1600 A	1590 A	1550 A	1510 A	1460 A	1420 A	1370 A	1340 A	1310 A	1270 A	1240 A	1200 A	1170 A
	2000 A	2000 A	2000 A	1990 A	1940 A	1890 A	1830 A	1780 A	1720 A	1680 A	1640 A	1590 A	1550 A	1510 A	1460 A
II	2000 A	2000 A	2000 A	2000 A	2000 A	2000 A	2000 A	2000 A	1960 A	1920 A	1870 A	1820 A	1780 A	1730 A	1670 A
	3200 A	2850 A	2790 A	2720 A	2650 A	2580 A	2510 A	2430 A	2260 A	2210 A	2160 A	2100 A	2050 A	1990 A	1930 A
III	4000 A	4000 A	4000 A	4000 A	4000 A	3950 A	3870 A	3780 A	3230 A	3150 A	3080 A	3000 A	2920 A	2840 A	2750 A

⑤ Base compartment doors

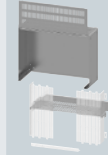
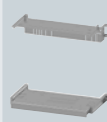
④ Mounting plates

⑤ Main busbar connection

⑥ Separation 4b

⑦ Cable connection

⑧ Insulation



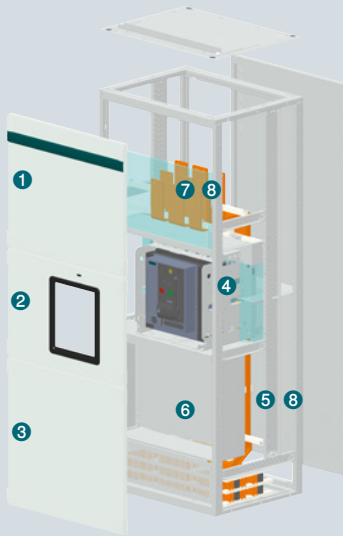
IP40

IP55 upgrade

8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA28	8PQ6000-5BA81	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA30	8PQ6000-5BA81	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA31	8PQ6000-5BA81	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ5000-4BA32	8PQ6000-5BA83	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ5000-4BA33	8PQ6000-5BA83	–
8PQ2075-1BA01	8PQ2075-1BA02	8PQ6000-5BA23	8PQ6000-5BA33	8PQ5000-5BA11	8PQ6000-5BA84	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA28	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA30	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA31	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ5000-4BA32	8PQ6000-5BA83	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ5000-4BA33	8PQ6000-5BA83	–
8PQ2075-1BA01	8PQ2075-1BA02	8PQ6000-5BA23	8PQ6000-5BA33	8PQ5000-5BA11	8PQ6000-5BA84	–

Section expansion

3WL air circuit breakers, infeed main busbar at bottom



1 Head compartment doors

2 Modular doors





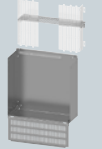




Installation type	Size	Width	Depth	Head compartment doors		Modular doors		
				IP40	IP55 upgrade	IP40	IP55	IP55 upgrade
Fixed-mounted	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
Withdrawable	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06

15

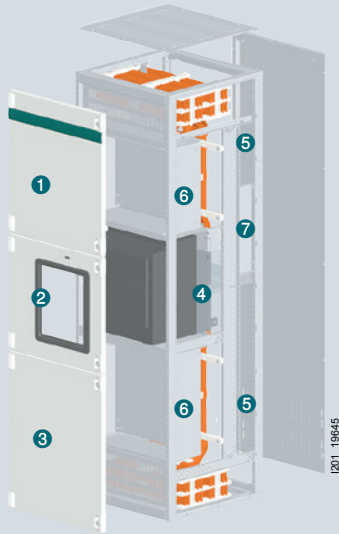
Technical specifications

Size	I _n	Rated operational current I _{ec}													
		Ventilated IP40							Non-ventilated IP55						
		20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
I	1600 A	1540 A	1500 A	1470 A	1430 A	1390 A	1350 A	1310 A	1390 A	1350 A	1320 A	1290 A	1240 A	1190 A	1140 A
	2000 A	1930 A	1880 A	1840 A	1790 A	1740 A	1690 A	1640 A	1710 A	1670 A	1630 A	1590 A	1530 A	1470 A	1410 A
II	2000 A	2000 A	2000 A	2000 A	2000 A	1990 A	1920 A	1830 A	2000 A	1950 A	1880 A	1820 A	1750 A	1680 A	1610 A
	3200 A	2710 A	2640 A	2570 A	2490 A	2400 A	2300 A	2200 A	2320 A	2250 A	2180 A	2100 A	2030 A	1950 A	1860 A

⑤ Base compartment doors		④ Mounting plates	⑤ Main busbar connection	⑥ Separation 4b	⑦ Cable connection	⑧ Insulation
						
IP40	IP55 upgrade					
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA34	8PQ6000-5BA81	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA35	8PQ6000-5BA81	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA36	8PQ6000-5BA81	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ5000-4BA37	8PQ6000-5BA83	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ5000-4BA38	8PQ6000-5BA83	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA34	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA35	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	8PQ6000-6BA75	8PQ5000-4BA36	8PQ6000-5BA82	8PQ6000-7BA28
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ5000-4BA37	8PQ6000-5BA83	–
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	8PQ6000-6BA76	8PQ5000-4BA38	8PQ6000-5BA83	–

Section expansion

3WL air circuit breakers, coupling



① Head compartment doors

② Modular doors



Installation type	Size	Width	Depth	IP40		IP4X		IP55 upgrade	
				IP40	IP55 upgrade	IP4X	IP55	IP55 upgrade	IP55 upgrade
Fixed-mounted	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06	
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06	
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06	
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06	
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06	
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06	
Withdrawable	I	600 mm	400 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06	
			600 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06	
			800 mm	8PQ2067-6BA01	8PQ2067-6BA02	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	8PQ2055-6BA17 + 3WL9111-0AP02-0AA0	8PQ2055-6BA06	
	II	800 mm	600 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06	
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06	
			800 mm	8PQ2067-8BA01	8PQ2067-8BA02	8PQ2055-8BA08 + 3WL9111-0AP01-0AA0	8PQ2055-8BA10 + 3WL9111-0AP02-0AA0	8PQ2055-8BA06	

Technical specifications

Size	I _n	Rated operational current I _{ec}													
		Ventilated IP40							Non-ventilated IP55						
		20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
I	1600 A	1540 A	1500 A	1470 A	1430 A	1390 A	1350 A	1310 A	1390 A	1350 A	1320 A	1290 A	1240 A	1190 A	1140 A
	2000 A	1930 A	1880 A	1840 A	1790 A	1740 A	1690 A	1640 A	1710 A	1670 A	1630 A	1590 A	1530 A	1470 A	1410 A
II	2000 A	2000 A	2000 A	2000 A	2000 A	1990 A	1920 A	1830 A	2000 A	1950 A	1880 A	1820 A	1750 A	1680 A	1610 A
	3200 A	2710 A	2640 A	2570 A	2490 A	2400 A	2300 A	2200 A	2320 A	2250 A	2180 A	2100 A	2030 A	1950 A	1860 A

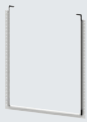
⑥ Base compartment doors

④ Mounting plates

⑤ Main busbar connection

⑥ Separation 4b

⑦ Uprights



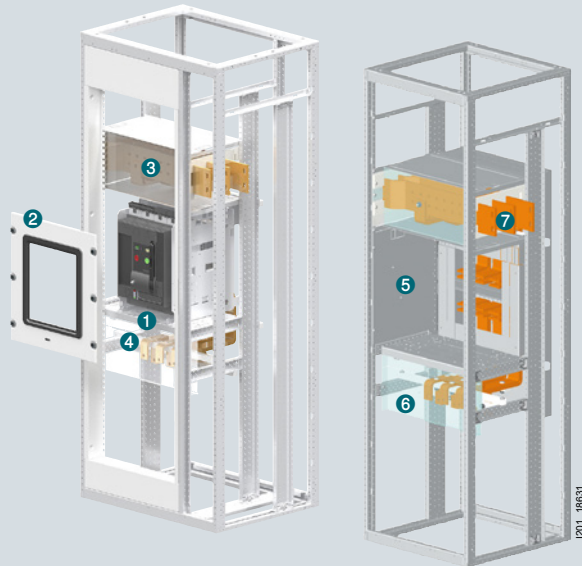
IP40

IP55 upgrade

8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2x 8PQ6000-6BA75	8PQ5000-5BA12	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2x 8PQ6000-6BA75	8PQ5000-5BA13	2x 8PQ3000-3BA50
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2x 8PQ6000-6BA75	8PQ5000-5BA14	2x 8PQ3000-3BA51
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	2x 8PQ6000-6BA76	8PQ5000-5BA15	2x 8PQ3000-3BA50
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	2x 8PQ6000-6BA76	8PQ5000-5BA16	2x 8PQ3000-3BA51
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2x 8PQ6000-6BA75	8PQ5000-5BA12	–
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2x 8PQ6000-6BA75	8PQ5000-5BA13	2x 8PQ3000-3BA50
8PQ2075-6BA01	8PQ2075-6BA03	8PQ6000-5BA26	2x 8PQ6000-6BA75	8PQ5000-5BA14	2x 8PQ3000-3BA51
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	2x 8PQ6000-6BA76	8PQ5000-5BA15	2x 8PQ3000-3BA50
8PQ2075-8BA01	8PQ2075-8BA03	8PQ6000-5BA24	2x 8PQ6000-6BA76	8PQ5000-5BA16	2x 8PQ3000-3BA51

Section expansion

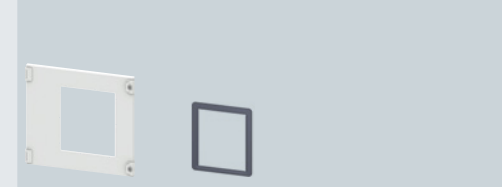
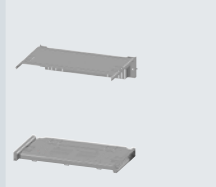
3WL air circuit breakers, connection of section busbar systems



Modular doors

1 Mounting plates

2 Modular doors

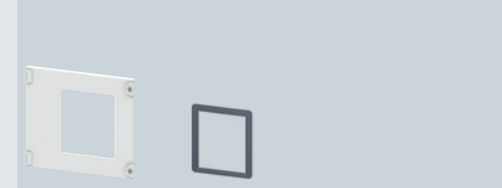
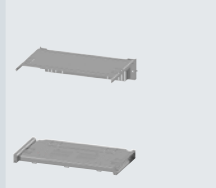


Installation type	Size	Width	Number of poles	Rated current		IP4X
Fixed-mounted	I	400 mm	3-pole	1600 A	8PQ6000-5BA25	8PQ2055-4BA12 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-5BA25	8PQ2055-4BA12 + 3WL9111-0AP01-0AA0
	600 mm	4-pole	1600 A	8PQ6000-5BA26	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	
			2000 A	8PQ6000-5BA26	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	
Withdrawable	I	400 mm	3-pole	1600 A	8PQ6000-5BA25	8PQ2055-4BA12 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-5BA25	8PQ2055-4BA12 + 3WL9111-0AP01-0AA0
	600 mm	4-pole	1600 A	8PQ6000-5BA26	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	
			2000 A	8PQ6000-5BA26	8PQ2055-6BA16 + 3WL9111-0AP01-0AA0	

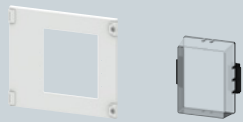
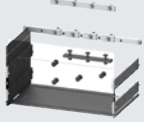
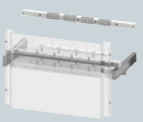



Covers

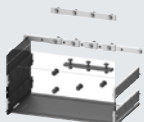
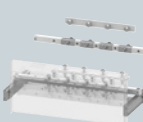

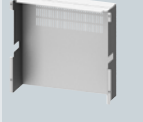

1 Mounting plates

2 Covers




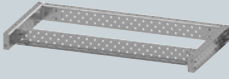
Installation type	Size	Width	Number of poles	Rated current		IP4X
Fixed-mounted	I	600 mm	3-pole	1600 A	8PQ6000-3BA31	8PQ2055-6BA05 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA31	8PQ2055-6BA05 + 3WL9111-0AP01-0AA0
			4-pole	1600 A	8PQ6000-3BA31	8PQ2055-6BA07 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA31	8PQ2055-6BA07 + 3WL9111-0AP01-0AA0
		800 mm	3/4-pole	1600 A	8PQ6000-3BA32	8PQ2055-8BA04 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA32	8PQ2055-8BA04 + 3WL9111-0AP01-0AA0
Withdrawable	I	600 mm	3-pole	1600 A	8PQ6000-3BA31	8PQ2055-6BA05 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA31	8PQ2055-6BA05 + 3WL9111-0AP01-0AA0
			4-pole	1600 A	8PQ6000-3BA31	8PQ2055-6BA07 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA31	8PQ2055-6BA07 + 3WL9111-0AP01-0AA0
		800 mm	3/4-pole	1600 A	8PQ6000-3BA32	8PQ2055-8BA04 + 3WL9111-0AP01-0AA0
				2000 A	8PQ6000-3BA32	8PQ2055-8BA04 + 3WL9111-0AP01-0AA0

	③ Section busbars	④ Cable connection	⑤ Device compartment	⑥ Cable connection	⑦ Section busbars	
				Separation, form 3 	Separation, form 4 	Separation, form 4 
IP55						
–	8PQ6000-5BA48	8PQ6000-5BA78	8PQ5000-3BA82	8PQ5000-3BA84	8PQ5000-3BA84	
–	8PQ6000-7BA05	8PQ6000-5BA78	8PQ5000-3BA82	8PQ5000-4BA00	8PQ5000-3BA85	
8PQ2055-6BA17 + 3WL91111-0AP02-0AA0	8PQ6000-5BA51	8PQ6000-5BA81	8PQ5000-3BA82	8PQ5000-3BA86	8PQ5000-3BA86	
8PQ2055-6BA17 + 3WL91111-0AP02-0AA0	8PQ6000-7BA07	8PQ6000-5BA81	8PQ5000-3BA82	8PQ5000-4BA01	8PQ5000-3BA87	
–	8PQ6000-5BA50	8PQ6000-5BA80	8PQ5000-3BA82	8PQ5000-3BA84	8PQ5000-3BA84	
–	8PQ6000-7BA06	8PQ6000-5BA80	8PQ5000-3BA82	8PQ5000-4BA00	8PQ5000-3BA85	
8PQ2055-6BA17 + 3WL91111-0AP02-0AA0	8PQ6000-5BA52	8PQ6000-5BA82	8PQ5000-3BA82	8PQ5000-3BA86	8PQ5000-3BA86	
8PQ2055-6BA17 + 3WL91111-0AP02-0AA0	8PQ6000-7BA08	8PQ6000-5BA82	8PQ5000-3BA82	8PQ5000-4BA01	8PQ5000-3BA87	

	③ Section busbars	④ Cable connection	⑤ Device compartment	⑥ Cable connection	⑦ Section busbars
			Separation, form 3 	Separation, form 4 	Separation, form 4 
8PQ6000-5BA45	8PQ6000-5BA75	8PQ5000-0BA08	8PQ5000-0BA30	8PQ5000-0BA14	
8PQ6000-7BA03	8PQ6000-5BA75	8PQ5000-0BA08	8PQ5000-0BA30	8PQ5000-0BA14	
8PQ6000-5BA45	8PQ6000-5BA75	8PQ5000-0BA08	8PQ5000-0BA30	8PQ5000-0BA14	
8PQ6000-7BA03	8PQ6000-5BA75	8PQ5000-0BA08	8PQ5000-0BA30	8PQ5000-0BA14	
8PQ6000-5BA46	8PQ6000-5BA76	8PQ5000-1BA65	8PQ5000-1BA68	8PQ5000-1BA67	
8PQ6000-7BA04	8PQ6000-5BA76	8PQ5000-1BA65	8PQ5000-1BA68	8PQ5000-1BA67	
8PQ6000-5BA45	8PQ6000-5BA75	8PQ5000-0BA07	8PQ5000-0BA30	8PQ5000-0BA14	
8PQ6000-7BA03	8PQ6000-5BA75	8PQ5000-0BA07	8PQ5000-0BA30	8PQ5000-0BA14	
8PQ6000-5BA45	8PQ6000-5BA75	8PQ5000-0BA07	8PQ5000-0BA30	8PQ5000-0BA14	
8PQ6000-7BA03	8PQ6000-5BA75	8PQ5000-0BA07	8PQ5000-0BA30	8PQ5000-0BA14	
8PQ6000-5BA46	8PQ6000-5BA76	8PQ5000-1BA66	8PQ5000-1BA68	8PQ5000-1BA67	
8PQ6000-7BA04	8PQ6000-5BA76	8PQ5000-1BA66	8PQ5000-1BA68	8PQ5000-1BA67	

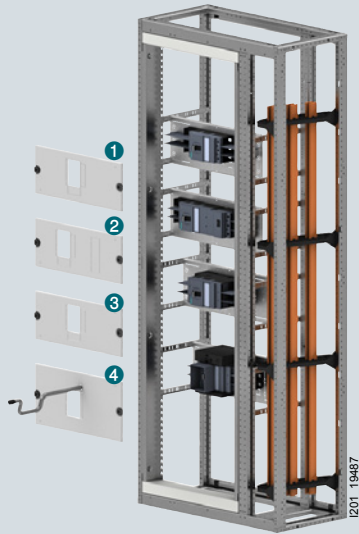
Section expansion

3WL air circuit breakers, accessories

			Busbar holders	Busbar connections
			1 set = 4 holders	For use with SIVACON 8PS
				
Size	Width	Number of poles		
I	600 mm	3, 4	8PQ6000-4BA35	8PQ3000-1BA70
	800 mm	3, 4	8PQ6000-4BA37	8PQ3000-1BA71
II	600 mm	3	8PQ6000-4BA36	8PQ3000-1BA70
	800 mm	3, 4	8PQ6000-4BA38	8PQ3000-1BA71
III	1000 mm	3, 4	8PQ6000-4BA40	8PQ3000-1BA72

Section expansion

3VA molded case circuit breakers, internal cover, horizontal, 3-pole



1 Fixed-mounted version



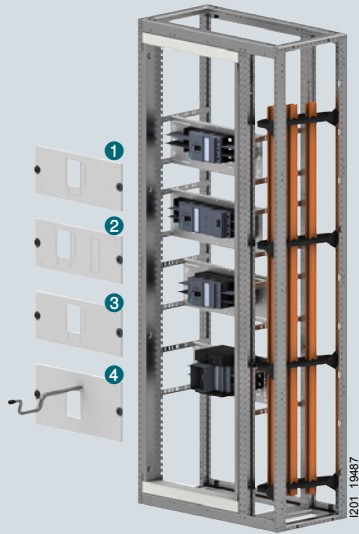
Type	I _n	Width	Height	Operating mechanism			Device holders
				Direct	Rotary	Motorized	
3VA10	100 A	600 mm	150 mm	■	■	–	8PQ6000-8BA01
		800 mm	150 mm	■	■	–	8PQ6000-8BA02
3VA11	160 A	600 mm	150 mm	■	■	■	8PQ6000-8BA01
		800 mm	150 mm	■	■	■	8PQ6000-8BA02
3VA12	250 A	600 mm	150 mm	■	■	■	8PQ6000-8BA03
			–	–	–	–	
		800 mm	200 mm	■	■	■	8PQ6000-8BA07
3VA20	100 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
			–	–	–	–	
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
3VA21	160 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
			–	–	–	–	
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
3VA22	250 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
			–	–	–	–	
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
3VA23	400 A	600 mm	200 mm	■	■	■	8PQ6000-8BA23
			–	–	–	–	
		800 mm	250 mm	■	■	■	8PQ6000-8BA27
3VA24	630 A	600 mm	200 mm	■	■	■	8PQ6000-8BA23
			–	–	–	–	
		800 mm	250 mm	■	■	■	8PQ6000-8BA27

② Fixed-mounted version with RCD		③ Plug-in version		④ Withdrawable version		
Covers	Device holders	Covers	Device holders	Covers	Device holders	Covers
8PQ2015-6BA26	–	–	–	–	–	–
8PQ2015-8BA11	–	–	–	–	–	–
8PQ2015-6BA26	8PQ6000-8BA01	8PQ2015-6BA27	8PQ6000-8BA01	8PQ2015-6BA26	–	–
8PQ2015-8BA11	8PQ6000-8BA02	8PQ2015-8BA11	8PQ6000-8BA02	8PQ2015-8BA11	–	–
8PQ2015-6BA28	8PQ6000-8BA03 ¹⁾	8PQ2015-6BA30	8PQ6000-8BA04	8PQ2015-6BA28	–	–
–	–	–	–	–	8PQ6000-8BA04	8PQ2025-6BA21
8PQ2020-8BA20	8PQ6000-8BA07	8PQ2020-8BA20	8PQ6000-8BA07	8PQ2020-8BA20	–	–
–	–	–	–	–	8PQ6000-8BA07	8PQ2025-8BA12
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2025-6BA22
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2025-8BA13
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2025-6BA22
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2025-8BA13
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2025-6BA22
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2025-8BA13
8PQ2020-6BA41	–	–	8PQ6000-8BA24	8PQ2020-6BA41	–	–
–	–	–	–	–	8PQ6000-8BA24	8PQ2030-6BA27
8PQ2025-8BA14	8PQ6000-8BA27	8PQ2025-8BA14	8PQ6000-8BA28	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6000-8BA28	8PQ2030-8BA14
8PQ2020-6BA41	–	–	8PQ6000-8BA24	8PQ2020-6BA41	–	–
–	–	–	–	–	8PQ6000-8BA24	8PQ2030-6BA27
8PQ2025-8BA14	8PQ6000-8BA27	8PQ2025-8BA14	8PQ6000-8BA28	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6000-8BA28	8PQ2030-8BA14

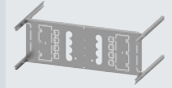
¹⁾ For applications >415 V, front mounted rotary operating mechanism or motorized operating mechanism required for compliance with safety clearances.

Section expansion

3VA molded case circuit breakers, internal cover, horizontal, 4-pole



1 Fixed-mounted version



Type	I _n	Width	Height	Operating mechanism			Device holders
				Direct	Rotary	Motorized	
3VA10	100 A	600 mm	150 mm	■	■	–	8PQ6000-8BA01
		800 mm	150 mm	■	■	–	8PQ6000-8BA02
3VA11	160 A	600 mm	150 mm	■	■	■	8PQ6000-8BA01
		800 mm	150 mm	■	■	■	8PQ6000-8BA02
3VA12	250 A	600 mm	150 mm	■	■	■	8PQ6000-8BA05
		800 mm	200 mm	■	–	■	–
		800 mm	200 mm	■	–	■	8PQ6000-8BA07
3VA20	100 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
		800 mm	200 mm	■	–	■	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
3VA21	160 A	600 mm	200 mm	■	–	■	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
		800 mm	200 mm	■	–	■	–
3VA22	250 A	600 mm	200 mm	■	■	■	8PQ6000-8BA08
		800 mm	200 mm	■	–	■	–
		800 mm	200 mm	■	■	■	8PQ6000-8BA10
3VA23	400 A	600 mm	200 mm	■	■	■	8PQ6000-8BA25
		800 mm	250 mm	■	–	–	–
		800 mm	250 mm	■	■	■	8PQ6000-8BA27
3VA24	630 A	600 mm	200 mm	■	■	■	8PQ6000-8BA25
		800 mm	250 mm	■	–	–	–
		800 mm	250 mm	■	■	■	8PQ6000-8BA27

② Fixed-mounted version with RCD		③ Plug-in version			④ Withdrawable version	
Covers	Device holders	Covers	Device holders	Covers	Device holders	Covers
8PQ2015-6BA26	–	–	–	–	–	–
8PQ2015-8BA11	–	–	–	–	–	–
8PQ2015-6BA26	8PQ6000-8BA01	8PQ2015-6BA27	8PQ6000-8BA01	8PQ2015-6BA26	–	–
8PQ2015-8BA11	8PQ6000-8BA02	8PQ2015-8BA11	8PQ6000-8BA02	8PQ2015-8BA11	–	–
8PQ2020-6BA36	8PQ6000-8BA05 ¹⁾	8PQ2020-6BA37	8PQ6000-8BA06	8PQ2020-6BA36	–	–
–	–	–	–	–	8PQ6000-8BA06	8PQ2030-6BA25
8PQ2020-8BA20	8PQ6000-8BA07	8PQ2020-8BA20	8PQ6000-8BA07	8PQ2020-8BA20	–	–
–	–	–	–	–	8PQ6000-8BA07	8PQ2030-8BA12
8PQ2020-6BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2030-6BA26
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2030-8BA13
8PQ2020-8BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2030-6BA26
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2030-8BA13
8PQ2020-8BA38	8PQ6000-8BA11	8PQ2020-6BA40	8PQ6000-8BA08	8PQ2020-6BA38	–	–
–	–	–	–	–	8PQ6000-8BA08	8PQ2030-6BA26
8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	8PQ6000-8BA10	8PQ2020-8BA21	–	–
–	–	–	–	–	8PQ6000-8BA10	8PQ2030-8BA13
8PQ2020-8BA23	–	–	8PQ6000-8BA26	8PQ2025-6BA23	–	–
–	–	–	–	–	8PQ6000-8BA26	8PQ2035-6BA25
8PQ2020-8BA14	8PQ6000-8BA27	8PQ2025-8BA14	8PQ6000-8BA28	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6000-8BA28	8PQ2035-8BA15
8PQ2020-8BA23	–	–	8PQ6000-8BA26	8PQ2025-6BA23	–	–
–	–	–	–	–	8PQ6000-8BA26	8PQ2035-6BA25
8PQ2020-8BA14	8PQ6000-8BA27	8PQ2025-8BA14	8PQ6000-8BA28	8PQ2025-8BA14	–	–
–	–	–	–	–	8PQ6000-8BA28	8PQ2035-8BA15

¹⁾ For applications >415 V, front mounted rotary operating mechanism or motorized operating mechanism required for compliance with safety clearances.

Accessories

N-Link



Version

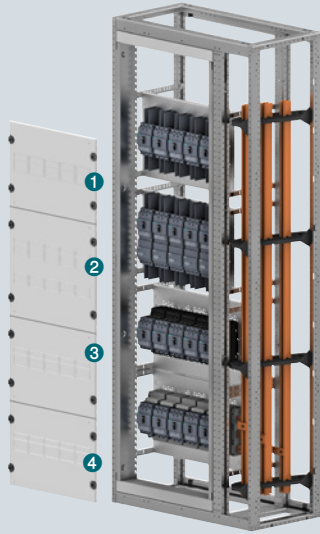
3VA10 (up to 100 A); 3VA11 (up to 160 A), 3VA12 (up to 250 A)
3VA23 (up to 400 A); 3VA24 (up to 630 A)

Article No.

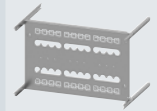
8PQ6000-8BA31
8PQ6000-8BA32

Section expansion

3VA molded case circuit breakers, internal cover, vertical, 3-pole



1 Fixed-mounted version

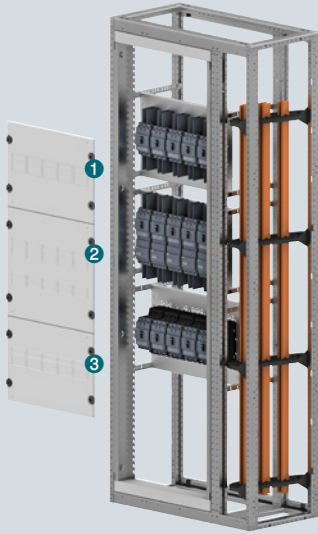


Type	I _n	No. of switching devices	Width	Height	Operating mechanism			Device holders
					Direct	Rotary	Motorized	
3VA10	100 A	5	600 mm	350 mm	■	■	–	8PQ6000-8BA33
		7	800 mm	350 mm	■	■	–	8PQ6000-8BA47
3VA11	160 A	5	600 mm	350 mm	■	■	■	8PQ6000-8BA33
		7	800 mm	450 mm	■	■	■	–
				450 mm	■	■	■	–
3VA12	250 A	3	600 mm	400 mm	■	■	■	8PQ6000-8BA35
		5	500 mm	■	■	■	–	
			800 mm	400 mm	■	■	■	8PQ6000-8BA43
3VA20	100 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
				550 mm	■	■	–	8PQ6000-8BA37
				–	–	■	–	
		5	800 mm	450 mm	■	■	–	8PQ6000-8BA50
				550 mm	■	■	–	8PQ6000-8BA50
				–	–	■	–	
3VA21	160 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
				550 mm	■	■	–	–
		5	800 mm	450 mm	■	■	–	–
				550 mm	■	■	–	8PQ6000-8BA50
3VA22	250 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37
				550 mm	■	■	–	–
		5	800 mm	450 mm	■	■	–	8PQ6000-8BA50
				550 mm	■	■	–	–
3VA23	400 A	3	600 mm	450 mm	■	■	■	8PQ6000-8BA54
				600 mm	■	■	■	–
		4	800 mm	450 mm	■	■	■	8PQ6000-8BA57
3VA24	630 A	3	600 mm	450 mm	■	■	■	8PQ6000-8BA54
				600 mm	■	■	■	–
				4	800 mm	450 mm	■	■
600 mm	■	■	■			–		

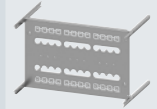
② Fixed-mounted version with RCD			③ Plug-in version		④ 8US design	
Covers	Device holders	Covers	Device holders	Covers	Device holders	Covers
8PQ2035-6BA26	–	–	–	–	8PQ6000-8BA33	8PQ2035-6BA26
8PQ2035-8BA16	–	–	–	–	8PQ6000-8BA40	8PQ2035-8BA20
8PQ2035-6BA26	–	–	8PQ6000-8BA33	8PQ2035-6BA26	8PQ6000-8BA33	8PQ2035-6BA26
–	8PQ6000-8BA33	8PQ2045-6BA08	–	–	–	–
8PQ2035-8BA16	–	–	8PQ6000-8BA47	8PQ2035-8BA16	8PQ6000-8BA40	8PQ2035-8BA20
–	8PQ6000-8BA47	8PQ2045-8BA08	–	–	–	–
8PQ2040-6BA26	–	–	8PQ6000-8BA36	8PQ2040-6BA26	8PQ6000-8BA36	8PQ2040-6BA26
–	8PQ6000-8BA35	8PQ2050-6BA10	–	–	–	–
8PQ2040-8BA23	–	–	8PQ6000-8BA44	8PQ2040-8BA23	8PQ6000-8BA41	8PQ2040-8BA23
–	8PQ6000-8BA43	8PQ2050-8BA12	–	–	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11	8PQ6000-8BA38	8PQ2045-6BA11
8PQ2045-6BA13	–	–	8PQ6000-8BA38	8PQ2045-6BA13	8PQ6000-8BA38	8PQ2045-6BA13
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–	–	–
–	8PQ6000-8BA37	8PQ2055-6BA21	–	–	–	–
8PQ2045-8BA11	–	–	8PQ6000-8BA51	8PQ2045-8BA11	8PQ6000-8BA42	8PQ2045-8BA11
8PQ2045-8BA15	–	–	8PQ6000-8BA51	8PQ2045-8BA15	8PQ6000-8BA42	8PQ2045-8BA15
–	8PQ6000-8BA50	8PQ2055-8BA11	–	–	–	–
–	8PQ6000-8BA50	8PQ2055-8BA13	–	–	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11	8PQ6000-8BA38	8PQ2045-6BA11
–	–	–	8PQ6000-8BA38	8PQ2045-6BA13	–	–
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–	–	–
–	–	–	8PQ6000-8BA51	8PQ2045-8BA11	8PQ6000-8BA42	8PQ2045-8BA11
8PQ2045-8BA15	–	–	8PQ6000-8BA51	8PQ2045-8BA15	–	–
–	8PQ6000-8BA50	8PQ2055-8BA11	–	–	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11	8PQ6000-8BA38	8PQ2045-6BA11
–	–	–	8PQ6000-8BA38	8PQ2045-6BA13	–	–
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–	–	–
8PQ2045-8BA11	–	–	8PQ6000-8BA51	8PQ2045-8BA11	8PQ6000-8BA42	8PQ2045-8BA11
–	–	–	8PQ6000-8BA51	8PQ2045-8BA15	–	–
–	8PQ6000-8BA50	8PQ2055-8BA11	–	–	–	–
8PQ2045-6BA12	–	–	8PQ6000-8BA56	8PQ2045-6BA12	–	–
–	8PQ6000-8BA55	8PQ2060-6BA25	–	–	–	–
8PQ2045-8BA13	–	–	8PQ6000-8BA60	8PQ2045-8BA13	–	–
–	8PQ6000-8BA58	8PQ2060-8BA07	–	–	–	–
8PQ2045-6BA12	–	–	8PQ6000-8BA56	8PQ2045-6BA12	–	–
–	8PQ6000-8BA55	8PQ2060-6BA25	–	–	–	–
8PQ2045-8BA13	–	–	8PQ6000-8BA60	8PQ2045-8BA13	–	–
–	8PQ6000-8BA58	8PQ2060-8BA07	–	–	–	–

Section expansion

3VA molded case circuit breakers, internal cover, vertical, 4-pole



1 Fixed-mounted version

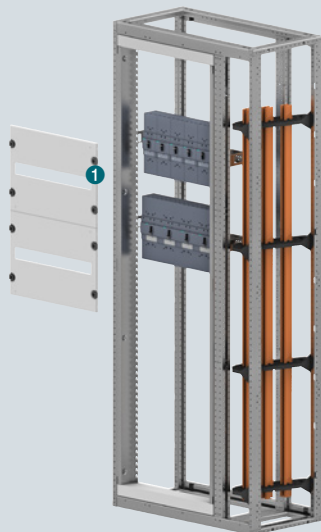


Type	I _n	No. of switching devices	Width	Height	Operating mechanism			Device holders	
					Direct	Rotary	Motorized		
3VA10	100 A	4	600 mm	350 mm	■	■	–	8PQ6000-8BA34	
		5	800 mm	350 mm	■	■	–	8PQ6000-8BA48	
3VA11	160 A	4	600 mm	350 mm	■	■	■	8PQ6000-8BA34	
		5	450 mm	–	■	■	■	–	
			800 mm	350 mm	■	■	■	8PQ6000-8BA48	
3VA12	250 A	3	600 mm	400 mm	■	■	■	8PQ6000-8BA35	
			500 mm	–	■	■	■	–	
		4	800 mm	400 mm	■	■	■	8PQ6000-8BA45	
3VA20	100 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37	
				–	–	–	■	8PQ6000-8BA37	
				550 mm	■	■	–	–	
		4	800 mm	450 mm	■	■	–	8PQ6000-8BA52	
				–	–	–	■	8PQ6000-8BA52	
				550 mm	■	■	–	–	
3VA21	160 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37	
				–	–	–	■	8PQ6000-8BA37	
				550 mm	■	■	–	–	
		4	800 mm	450 mm	■	■	–	8PQ6000-8BA52	
				–	–	–	■	–	
				550 mm	■	■	–	–	
3VA22	250 A	3	600 mm	450 mm	■	■	–	8PQ6000-8BA37	
				–	–	–	■	8PQ6000-8BA37	
				550 mm	■	■	–	–	
		4	800 mm	450 mm	■	■	–	8PQ6000-8BA52	
				–	–	–	■	8PQ6000-8BA52	
				550 mm	■	■	–	–	
3VA23	400 A	2	600 mm	450 mm	■	■	■	8PQ6000-8BA64	
			600 mm	–	■	■	■	–	
		3	800 mm	450 mm	■	■	■	8PQ6000-8BA61	
3VA24	630 A	2	600 mm	450 mm	■	■	■	8PQ6000-8BA64	
				600 mm	–	■	■	■	–
				3	800 mm	450 mm	■	■	■
		3	800 mm	450 mm	■	■	■	–	
				600 mm	■	■	■	–	
				600 mm	■	■	■	–	

⊕ Fixed-mounted version with RCD		⊕ Plug-in version		
Covers	Device holders	Covers	Device holders	Covers
8PQ2035-6BA27	–	–	–	–
8PQ2035-8BA17	–	–	–	–
8PQ2035-6BA27	–	–	8PQ6000-8BA34	8PQ2035-6BA27
–	8PQ6000-8BA34	8PQ2045-6BA10	–	–
8PQ2035-8BA17	–	–	8PQ6000-8BA48	8PQ2035-8BA17
–	8PQ6000-8BA48	8PQ2045-8BA10	–	–
8PQ2040-6BA26	–	–	8PQ6000-8BA36	8PQ2040-6BA26
–	8PQ6000-8BA35	8PQ2050-6BA10	–	–
8PQ2040-8BA24	–	–	8PQ6000-8BA46	8PQ2040-8BA24
–	8PQ6000-8BA45	8PQ2050-8BA13	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11
8PQ2045-6BA13	–	–	8PQ6000-8BA38	8PQ2045-6BA13
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–
–	8PQ6000-8BA37	8PQ2055-6BA21	–	–
8PQ2045-8BA12	–	–	8PQ6000-8BA53	8PQ2045-8BA12
8PQ2045-8BA16	–	–	8PQ6000-8BA53	8PQ2045-8BA16
–	8PQ6000-8BA52	8PQ2055-8BA12	–	–
–	8PQ6000-8BA52	8PQ2055-8BA14	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11
8PQ2045-6BA13	–	–	8PQ6000-8BA38	8PQ2045-6BA13
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–
–	8PQ6000-8BA37	8PQ2055-6BA21	–	–
8PQ2045-8BA12	–	–	8PQ6000-8BA53	8PQ2045-8BA12
–	–	–	8PQ6000-8BA53	8PQ2045-8BA16
–	8PQ6000-8BA52	8PQ2055-8BA12	–	–
–	8PQ6000-8BA52	8PQ2055-8BA14	–	–
8PQ2045-6BA11	–	–	8PQ6000-8BA38	8PQ2045-6BA11
8PQ2045-6BA13	–	–	8PQ6000-8BA38	8PQ2045-6BA13
–	8PQ6000-8BA37	8PQ2055-6BA20	–	–
8PQ2045-8BA12	–	–	8PQ6000-8BA53	8PQ2045-8BA12
8PQ2045-8BA16	–	–	8PQ6000-8BA53	8PQ2045-8BA16
–	8PQ6000-8BA52	8PQ2055-8BA12	–	–
8PQ2045-6BA14	–	–	8PQ6000-8BA66	8PQ2045-6BA14
–	8PQ6000-8BA65	8PQ2060-6BA26	–	–
8PQ2045-8BA14	–	–	8PQ6000-8BA63	8PQ2045-8BA14
–	8PQ6000-8BA62	8PQ2060-8BA08	–	–
8PQ2045-6BA14	–	–	8PQ6000-8BA66	8PQ2045-6BA14
–	8PQ6000-8BA65	8PQ2060-6BA26	–	–
8PQ2045-8BA14	–	–	8PQ6000-8BA63	8PQ2045-8BA14
–	8PQ6000-8BA62	8PQ2060-8BA08	–	–

Section expansion

3VA molded case circuit breakers, internal cover, vertical



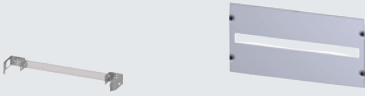
3-pole

Type	I_n	No. of switching devices	Width	Height	Operating mechanism		
					Direct	Rotary	Motorized
3VA10	100 A	5	600 mm	350 mm	■	–	–
		8	800 mm	350 mm	■	–	–
3VA11	160 A	4	600 mm	350 mm	■	–	–
		5	800 mm	350 mm	■	–	–

4-pole

Type	I_n	No. of switching devices	Width	Height	Operating mechanism		
					Direct	Rotary	Motorized
3VA10	100 A	4	600 mm	350 mm	■	–	–
		6	800 mm	350 mm	■	–	–
3VA11	160 A	3	600 mm	350 mm	■	–	–
		4	800 mm	350 mm	■	–	–

1 Standard rail mounting

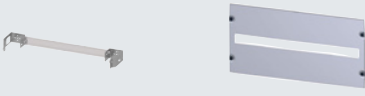


Device holders

Covers

8PQ6000-3BA36	8PQ2035-6BA28
8PQ6000-3BA37	8PQ2035-8BA18
8PQ6000-3BA36	8PQ2035-6BA28
8PQ6000-3BA37	8PQ2035-8BA18

1 Standard rail mounting



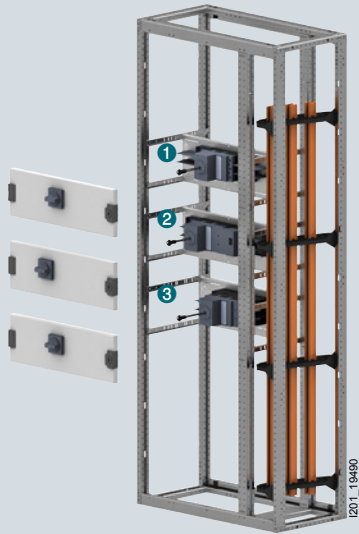
Device holders

Covers

8PQ6000-3BA36	8PQ2035-6BA28
8PQ6000-3BA37	8PQ2035-8BA18
8PQ6000-3BA36	8PQ2035-6BA28
8PQ6000-3BA37	8PQ2035-8BA18

Section expansion

3VA molded case circuit breakers, modular door, horizontal



3-pole

Type	I_n	Width	Height	Device holders	Modular doors
3VA10	100 A	600 mm	150 mm	8PQ6000-8BA01	8PQ2015-6BA31
		800 mm	150 mm	8PQ6000-8BA02	8PQ2015-8BA12
3VA11	160 A	600 mm	150 mm	8PQ6000-8BA01	8PQ2015-6BA31
		800 mm	150 mm	8PQ6000-8BA02	8PQ2015-8BA12
3VA12	250 A	600 mm	150 mm	8PQ6000-8BA03	8PQ2015-6BA34
3VA20	100 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA21	160 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA22	250 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA23	400 A	600 mm	200 mm	8PQ6000-8BA23	8PQ2020-6BA46
3VA24	630 A	600 mm	200 mm	8PQ6000-8BA23	8PQ2020-6BA46

1 Fixed-mounted version







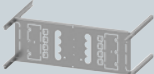



4-pole

Type	I_n	Width	Height	Device holders	Modular doors
3VA10	100 A	600 mm	150 mm	8PQ6000-8BA01	8PQ2015-6BA31
		800 mm	150 mm	8PQ6000-8BA02	8PQ2015-8BA12
3VA11	160 A	600 mm	150 mm	8PQ6000-8BA01	8PQ2015-6BA31
		800 mm	150 mm	8PQ6000-8BA02	8PQ2015-8BA12
3VA12	250 A	600 mm	200 mm	8PQ6000-8BA05	8PQ2020-6BA42
		800 mm	200 mm	8PQ6000-8BA07	8PQ2020-8BA22
3VA20	100 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA21	160 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA22	250 A	600 mm	200 mm	8PQ6000-8BA08	8PQ2020-6BA44
		800 mm	200 mm	8PQ6000-8BA10	8PQ2020-8BA23
3VA23	400 A	600 mm	250 mm	8PQ6000-8BA25	8PQ2025-6BA24
		800 mm	250 mm	8PQ6000-8BA27	8PQ2025-8BA15
3VA24	630 A	600 mm	250 mm	8PQ6000-8BA25	8PQ2025-6BA24
		800 mm	250 mm	8PQ6000-8BA27	8PQ2025-8BA15

1 Fixed-mounted version

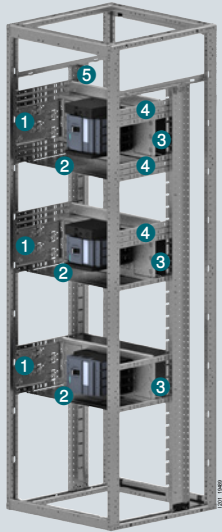


⊗ Fixed-mounted version with RCD		⊗ Plug-in version	
			
Device holders	Modular doors	Device holders	Modular doors
–	–	–	–
–	–	–	–
8PQ6000-8BA01	8PQ2015-6BA33	8PQ6000-8BA01	8PQ2015-6BA31
8PQ6000-8BA02	8PQ2015-8BA12	8PQ6000-8BA02	8PQ2015-8BA12
8PQ6000-8BA03	8PQ2015-6BA35	8PQ6000-8BA04	8PQ2015-6BA34
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
–	–	8PQ6000-8BA24	8PQ2020-6BA46
–	–	8PQ6000-8BA24	8PQ2020-6BA46

⊗ Fixed-mounted version with RCD		⊗ Plug-in version	
			
Device holders	Modular doors	Device holders	Modular doors
–	–	–	–
–	–	–	–
8PQ6000-8BA01	8PQ2015-6BA33	8PQ6000-8BA01	8PQ2015-6BA31
8PQ6000-8BA02	8PQ2015-8BA12	8PQ6000-8BA02	8PQ2015-8BA12
8PQ6000-8BA05	8PQ2020-6BA43	8PQ6000-8BA06	8PQ2020-6BA42
8PQ6000-8BA07	8PQ2020-8BA22	8PQ6000-8BA07	8PQ2020-8BA22
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
8PQ6000-8BA11	8PQ2020-6BA45	8PQ6000-8BA08	8PQ2020-6BA44
8PQ6000-8BA10	8PQ2020-8BA23	8PQ6000-8BA10	8PQ2020-8BA23
–	–	8PQ6000-8BA26	8PQ2025-6BA24
8PQ6000-8BA27	8PQ2025-8BA15	8PQ6000-8BA28	8PQ2025-8BA15
–	–	8PQ6000-8BA26	8PQ2025-6BA24
8PQ6000-8BA27	8PQ2025-8BA15	8PQ6000-8BA28	8PQ2025-8BA15

Section expansion

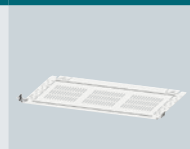
3VA molded case circuit breakers, internal separation – front connection



3-pole, width 600 mm

① Cable connection

② Separation, horizontal



Type	I _n	Height		Operating mechanism				
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28 + 8PQ5000-0BA05	8PQ5000-2BA61
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05	8PQ5000-2BA61
3VA12	250 A	150 mm	Fixed-mounted	■	■	–	8PQ6000-8BA12	8PQ5000-2BA61
			–	–	■	8PQ6000-8BA13	8PQ5000-2BA61	
			Plug-in	■	■	–	8PQ6000-8BA13	8PQ5000-2BA61
		–	–	■	8PQ6000-8BA12	8PQ5000-2BA61		
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA12	8PQ5000-2BA61
		3VA20	100 A	200 mm	Fixed-mounted	■	■	■
Plug-in	■				■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA61
250 mm	Withdrawable				■	–	■	8PQ5000-2BA30
3VA21	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA61
			250 mm	Withdrawable	■	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05
3VA22	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA16	8PQ5000-2BA61
			–	–	■	8PQ6000-8BA17	8PQ5000-2BA61	
			Plug-in	■	■	–	8PQ6000-8BA17	8PQ5000-2BA61
		–	–	■	8PQ6000-8BA16	8PQ5000-2BA61		
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA16	8PQ5000-2BA61
		3VA23	400 A	200 mm	Fixed-mounted	■	■	–
–	–				■	8PQ6000-8BA18	8PQ5000-2BA61	
Plug-in	■			■	■	8PQ6000-8BA18	8PQ5000-2BA61	
300 mm	Withdrawable			■	–	–	8PQ6000-8BA20	8PQ5000-2BA61
3VA24	630 A	200 mm	Fixed-mounted	■	■	■	8PQ6000-8BA20	8PQ5000-2BA61
			–	–	–	8PQ6000-8BA18	8PQ5000-2BA61	
		Plug-in	■	■	■	8PQ6000-8BA18	8PQ5000-2BA61	
		300 mm	Withdrawable	■	–	–	8PQ6000-8BA20	8PQ5000-2BA61

15

③ Separation, rear

④ Increase in module height

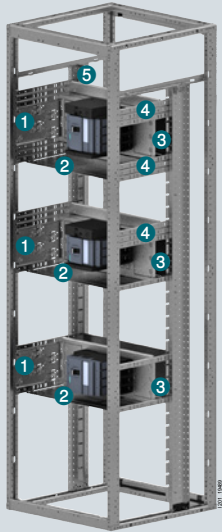
Horizontal separation with increase in module height



8PQ5000-4BA40	–	–
8PQ5000-4BA40	–	–
8PQ5000-4BA40	–	–
8PQ5000-4BA40	–	–
8PQ5000-4BA40	–	–
8PQ5000-4BA40	–	–
8PQ5000-4BA40	–	–
8PQ5000-4BA40	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	8PQ5000-4BA62	8PQ5000-4BA70
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	8PQ5000-4BA62	8PQ5000-4BA70
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	8PQ5000-4BA62	8PQ5000-4BA70
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	2x 8PQ5000-4BA62	2x 8PQ5000-4BA70
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	–	–
8PQ5000-4BA41	2x 8PQ5000-4BA62	2x 8PQ5000-4BA70

Section expansion

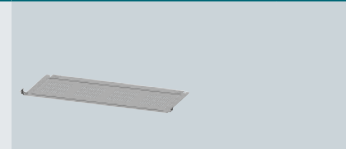
3VA molded case circuit breakers, internal separation – front connection



3-pole, width 800 mm

① Cable connection

② Separation, horizontal



Type	I _n	Height	Operating mechanism	Operating mechanism			Cable connection	Separation, horizontal
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28 + 8PQ5000-0BA05	8PQ5000-2BA62
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05	8PQ5000-2BA62
3VA12	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA14	8PQ5000-2BA62
3VA20	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA62
3VA21	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05	8PQ5000-2BA62
3VA22	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA16	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ6000-8BA17	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA16	8PQ5000-2BA62
3VA23	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ6000-8BA21	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ6000-8BA22	8PQ5000-2BA62
3VA24	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ6000-8BA21	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ6000-8BA22	8PQ5000-2BA62

15

③ Separation, rear

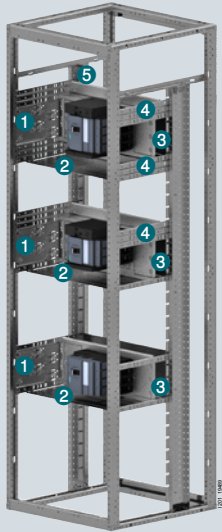
④ Increase in module height



-	-
-	-
-	-
8PQ5000-4BA48	-
8PQ5000-4BA48	-
8PQ5000-4BA48	8PQ5000-4BA61 + 8PQ5000-4BA71
8PQ5000-4BA48	-
8PQ5000-4BA48	-
8PQ5000-4BA48	8PQ5000-4BA63 + 8PQ5000-4BA72
8PQ5000-4BA48	-
8PQ5000-4BA48	-
8PQ5000-4BA48	8PQ5000-4BA63 + 8PQ5000-4BA72
8PQ5000-4BA48	-
8PQ5000-4BA48	-
8PQ5000-4BA48	-
8PQ5000-4BA48	8PQ5000-4BA63 + 8PQ5000-4BA72
8PQ5000-4BA50	-
8PQ5000-4BA50	-
8PQ5000-4BA50	-
8PQ5000-4BA50	8PQ5000-4BA63 + 8PQ5000-4BA72
8PQ5000-4BA50	-
8PQ5000-4BA50	-
8PQ5000-4BA50	-
8PQ5000-4BA50	8PQ5000-4BA63 + 8PQ5000-4BA72

Section expansion

3VA molded case circuit breakers, internal separation – front connection



4-pole, width 600 mm

1 Cable connection



Type	I _n	Height	Operating mechanism	Operating mechanism			Terminals	4th pole
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28 + 8PQ5000-0BA05	
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05	
			Plug-in	■	■	■	8PQ5000-2BA28 + 8PQ5000-0BA05	
3VA12	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA14	
			Plug-in	–	–	■	8PQ6000-8BA15	
		300 mm	Fixed-mounted	■	■	–	8PQ6000-8BA15	
			Withdrawable	–	–	■	8PQ6000-8BA14	
3VA20	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	
			Plug-in	■	■	–	8PQ5000-2BA30 + 8PQ5000-0BA05	
		300 mm	Fixed-mounted	–	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05	
			Withdrawable	■	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05	
3VA21	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30 + 8PQ5000-0BA05	
			Plug-in	■	■	–	8PQ5000-2BA30 + 8PQ5000-0BA05	
		300 mm	Fixed-mounted	–	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05	
			Withdrawable	■	–	■	8PQ5000-2BA30 + 8PQ5000-0BA05	
3VA22	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA16	+ 8PQ5000-4BA58
			Plug-in	–	–	■	8PQ6000-8BA17	+ 8PQ5000-4BA58
		200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA17	+ 8PQ5000-4BA58
			Withdrawable	–	–	■	8PQ6000-8BA17	+ 8PQ5000-4BA58
3VA23	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	
			Plug-in	–	–	■	8PQ6000-8BA21	
		350 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	
3VA24	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	
			Plug-in	–	–	■	8PQ6000-8BA21	
		350 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22	
			Withdrawable	–	–	■	8PQ6000-8BA21	

15

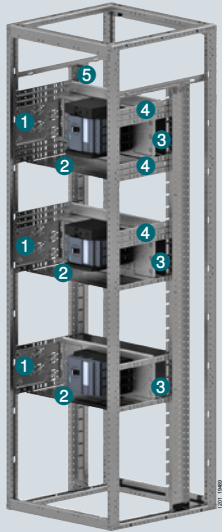
② Separation, horizontal ③ Separation, rear ④ Increase in module height



8PQ5000-2BA61	8PQ5000-4BA40	–
8PQ5000-2BA61	8PQ5000-4BA40	–
8PQ5000-2BA61	8PQ5000-4BA40	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	2x 8PQ5000-4BA60 + 2x 8PQ5000-4BA68
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA41	–
8PQ5000-2BA61	8PQ5000-4BA42	–
8PQ5000-2BA61	8PQ5000-4BA42	–
8PQ5000-2BA61	8PQ5000-4BA42	–
8PQ5000-2BA61	8PQ5000-4BA42	2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70
8PQ5000-2BA61	8PQ5000-4BA42	–
8PQ5000-2BA61	8PQ5000-4BA42	–
8PQ5000-2BA61	8PQ5000-4BA42	–
8PQ5000-2BA61	8PQ5000-4BA42	2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70

Section expansion

3VA molded case circuit breakers, internal separation – front connection



4-pole, width 800 mm

1 Cable connection

4 units



Type	I _n	Height		Operating mechanism			Terminals		4th pole
				Direct	Rotary	Motorized			
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	+ 8PQ5000-0BA05	
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28	+ 8PQ5000-0BA05	
			Plug-in	■	■	■	8PQ5000-2BA28	+ 8PQ5000-0BA05	
3VA12	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA14		
			–	–	–	8PQ6000-8BA15			
			Plug-in	■	■	–	8PQ6000-8BA15		
		–	–	■	8PQ6000-8BA14				
		300 mm	Withdrawable	■	–	■	8PQ6000-8BA14		
3VA20	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	+ 8PQ5000-0BA05	
			Plug-in	■	■	■	8PQ5000-2BA30	+ 8PQ5000-0BA05	
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	+ 8PQ5000-0BA05	
3VA21	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	+ 8PQ5000-0BA05	
			Plug-in	■	■	■	8PQ5000-2BA30	+ 8PQ5000-0BA05	
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	+ 8PQ5000-0BA05	
3VA22	250 A	200 mm	Fixed-mounted	■	■	–	8PQ6000-8BA16		+ 8PQ5000-4BA58
			–	–	–	8PQ6000-8BA17		+ 8PQ5000-4BA58	
			Plug-in	■	■	–	8PQ6000-8BA17		+ 8PQ5000-4BA58
		–	–	■	8PQ6000-8BA16		+ 8PQ5000-4BA58		
		250 mm	Withdrawable	■	–	■	8PQ6000-8BA16		+ 8PQ5000-4BA58
3VA23	400 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22		
			–	–	■	8PQ6000-8BA21			
		Plug-in	■	■	■	8PQ6000-8BA21			
		350 mm	Withdrawable	■	–	–	8PQ6000-8BA22		
3VA24	630 A	250 mm	Fixed-mounted	■	■	–	8PQ6000-8BA22		
			–	–	■	8PQ6000-8BA21			
		Plug-in	■	■	■	8PQ6000-8BA21			
350 mm	Withdrawable	■	–	–	8PQ6000-8BA22				

15

② Separation, horizontal ③ Separation, rear ④ Increase in module height




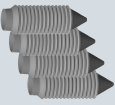
8PQ5000-2BA62	–	–
8PQ5000-2BA62	–	–
8PQ5000-2BA62	–	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	2x 8PQ5000-4BA61 + 2x 8PQ5000-4BA71
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	–
8PQ5000-2BA62	8PQ5000-4BA48	2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72
8PQ5000-2BA62	8PQ5000-4BA50	–
8PQ5000-2BA62	8PQ5000-4BA50	–
8PQ5000-2BA62	8PQ5000-4BA50	–
8PQ5000-2BA62	8PQ5000-4BA50	2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72
8PQ5000-2BA62	8PQ5000-4BA50	–
8PQ5000-2BA62	8PQ5000-4BA50	–
8PQ5000-2BA62	8PQ5000-4BA50	–
8PQ5000-2BA62	8PQ5000-4BA50	2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72

Section expansion

3VA molded case circuit breakers, internal separation – front connection

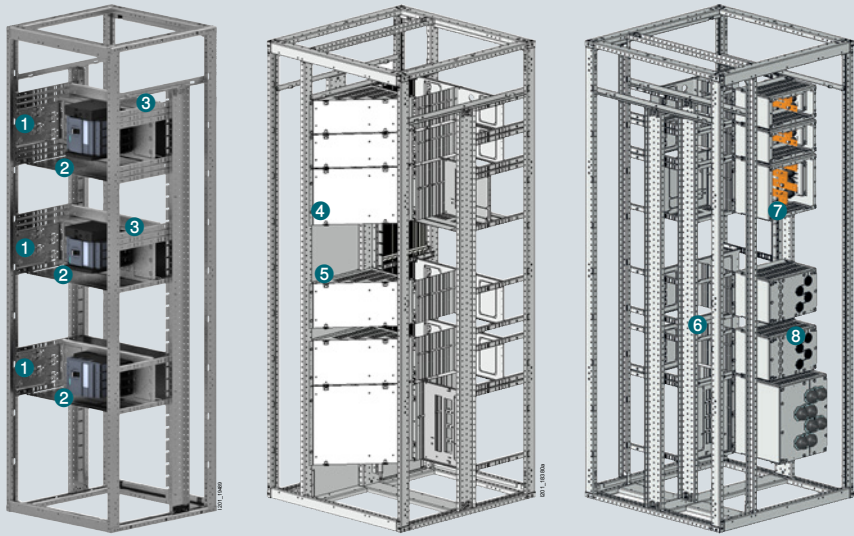
Accessories

6 Plug-in rails			
	Equipment height	Busbar system	Article No.
	1600 mm	Top	8PQ3000-0BA82
	1800 mm	Rear or without	8PQ3000-0BA83

Protective bellows			
	Version	Scope of supply	Article No.
	For connecting terminal	4 units	8PQ9400-0BA71

Section expansion

3VA molded case circuit breakers, internal separation – rear connection



3-pole, width 600 mm

1 Side

2 Horizontal



Type	I _n	Height	Operating mechanism	Operating mechanism				
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	8PQ5000-2BA61
3VA11	160 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	8PQ5000-2BA61
			Plug-in	■	–	–	8PQ5000-2BA28	8PQ5000-2BA61
3VA12	250 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA28	8PQ5000-2BA61
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA28	8PQ5000-2BA61
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA21	160 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA22	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA23	400 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA31	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA31	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA31	8PQ5000-2BA61
3VA24	630 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA31	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA31	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA31	8PQ5000-2BA61

③ Increase in module height

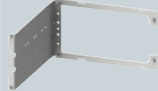
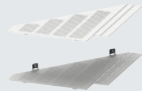
④ Vertical busbar connection

⑤ Segment covers

⑥ Support plates

⑦ Connection compartments

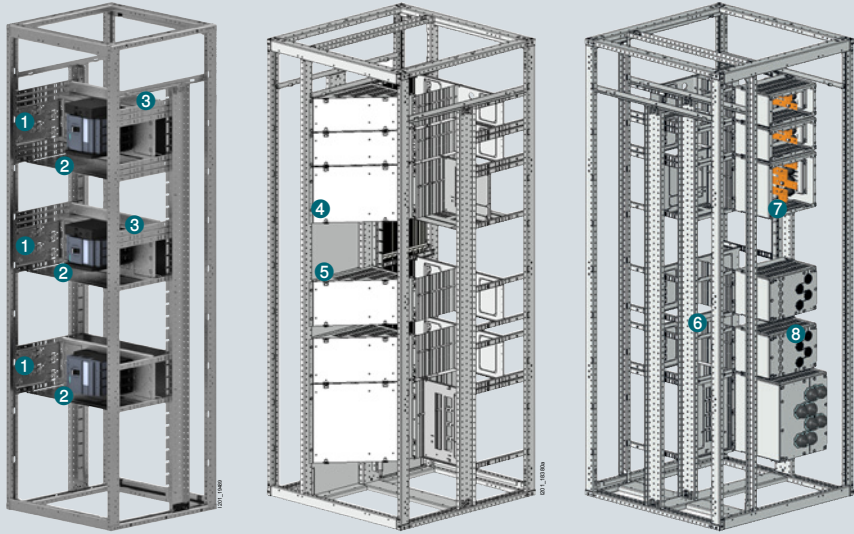
⑧ Cover plates



–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA15	8PQ5000-3BA71
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA15	8PQ5000-3BA71
2x 8PQ5000-4BA60 + 2x 8PQ5000-4BA68	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA15	8PQ5000-3BA71
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
8PQ5000-4BA62 + 8PQ5000-4BA70	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
8PQ5000-4BA62 + 8PQ5000-4BA70	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-8BA30	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-8BA30	8PQ5000-3BA72
8PQ5000-4BA62 + 8PQ5000-4BA70	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-8BA30	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73
2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73
2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA18	8PQ5000-3BA73

Section expansion

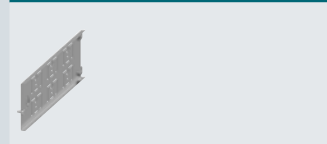
3VA molded case circuit breakers, internal separation – rear connection



4-pole, width 600 mm

1 Side

2 Horizontal



Type	I _n	Height	Operating mechanism	Operating mechanism			8PQ5000-2BA28	8PQ5000-2BA61
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	8PQ5000-2BA61
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28	8PQ5000-2BA61
			Plug-in	■	■	–	8PQ5000-2BA28	8PQ5000-2BA61
3VA12	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA21	160 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA22	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA61
3VA23	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA61
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA61
3VA24	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA61
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA61
		350 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA61

15

③ Increase in module height

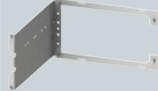
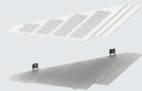
④ Vertical busbar connection

⑤ Segment covers

⑥ Support plates

⑦ Connection compartments

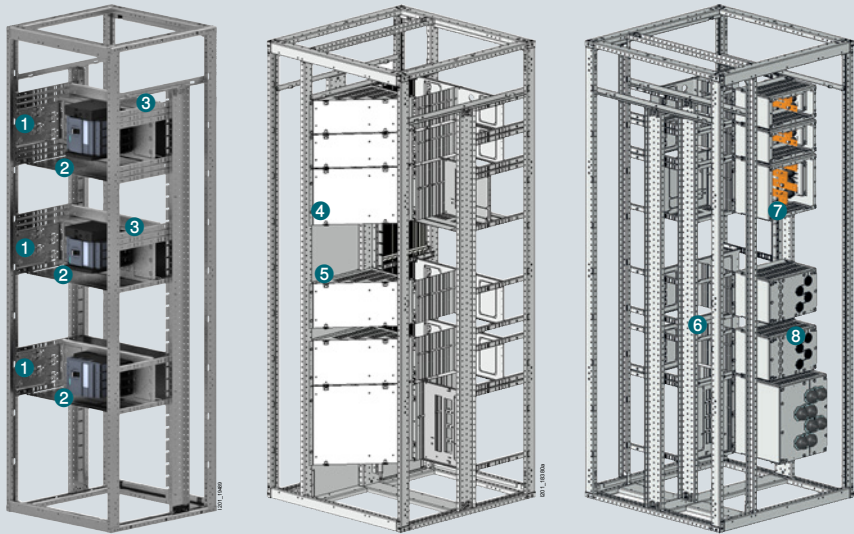
⑧ Cover plates



–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA52	8PQ5000-3BA63	8PQ5000-4BA73	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
2x 8PQ5000-4BA60 + 2x 8PQ5000-4BA68	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA53	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70	8PQ5000-3BA55	8PQ5000-3BA63	8PQ5000-4BA74	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74
2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70	8PQ5000-3BA56	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA54	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74
2x 8PQ5000-4BA62 + 2x 8PQ5000-4BA70	8PQ5000-3BA56	8PQ5000-3BA63	8PQ5000-4BA75	8PQ6000-5BA20	8PQ5000-3BA74

Section expansion

3VA molded case circuit breakers, internal separation – rear connection



3-pole, width 800 mm

1 Side

2 Horizontal



Type	I _n	Height		Operating mechanism				
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	–	–	8PQ5000-2BA28	8PQ5000-2BA62
3VA11	160 A	150 mm	Fixed-mounted	■	–	–	8PQ5000-2BA28	8PQ5000-2BA62
			Plug-in	■	–	–	8PQ5000-2BA28	8PQ5000-2BA62
3VA12	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	–	8PQ5000-2BA30	8PQ5000-2BA62
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA62
3VA21	160 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA62
3VA22	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		250 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA62
3VA23	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
3VA24	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62

③ Increase in module height

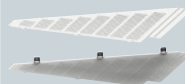
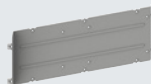
④ Vertical busbar connection

⑤ Segment covers

⑥ Support plates

⑦ Connection compartments

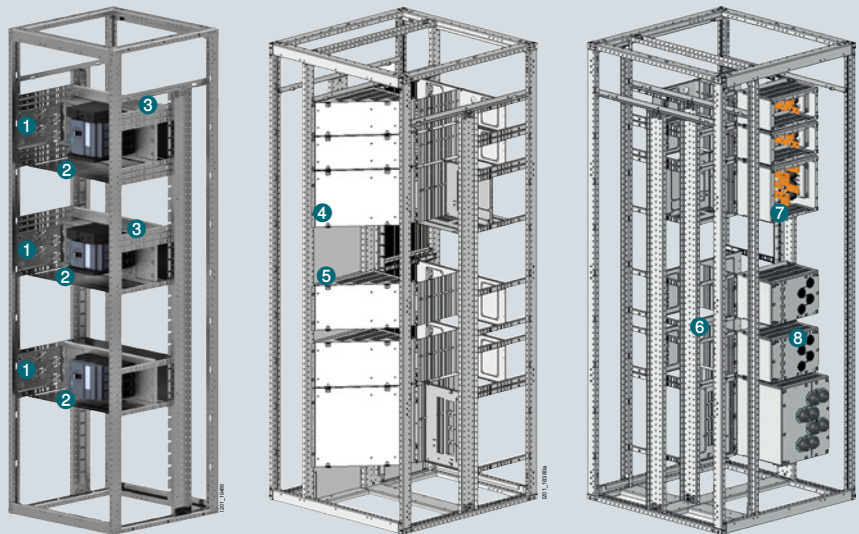
⑧ Cover plates



-		8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
-		8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
-		8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
-		8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
-		8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
8PQ5000-4BA61	+ 8PQ5000-4BA71	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
-		8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
-		8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
8PQ5000-4BA63	+ 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
-		8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
-		8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
8PQ5000-4BA63	+ 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
-		8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-8BA30	8PQ5000-3BA72
-		8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-8BA30	8PQ5000-3BA72
8PQ5000-4BA63	+ 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-8BA30	8PQ5000-3BA72
-		8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
-		8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
8PQ5000-4BA63	+ 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
-		8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
-		8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
8PQ5000-4BA63	+ 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74

Section expansion

3VA molded case circuit breakers, internal separation – rear connection



4-pole, width 800 mm

1 Side

2 Horizontal



Type	I_n	Height	Operating mechanism	Operating mechanism				
				Direct	Rotary	Motorized		
3VA10	100 A	150 mm	Fixed-mounted	■	■	–	8PQ5000-2BA28	8PQ5000-2BA62
3VA11	160 A	150 mm	Fixed-mounted	■	■	■	8PQ5000-2BA28	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA28	8PQ5000-2BA62
3VA12	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA62
3VA20	100 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA62
3VA21	160 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA62
3VA22	250 A	200 mm	Fixed-mounted	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA30	8PQ5000-2BA62
		300 mm	Withdrawable	■	–	■	8PQ5000-2BA30	8PQ5000-2BA62
3VA23	400 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
		350 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62
3VA24	630 A	250 mm	Fixed-mounted	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
			Plug-in	■	■	■	8PQ5000-2BA33	8PQ5000-2BA62
		350 mm	Withdrawable	■	–	–	8PQ5000-2BA33	8PQ5000-2BA62

③ Increase in module height

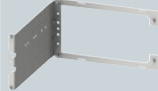
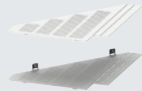
④ Vertical busbar connection

⑤ Segment covers

⑥ Support plates

⑦ Connection compartments

⑧ Cover plates




–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA57	8PQ5000-3BA64	8PQ5000-4BA76	8PQ6000-5BA13	8PQ5000-4BA80
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
2x 8PQ5000-4BA61 + 2x 8PQ5000-4BA71	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA14	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72	8PQ5000-3BA58	8PQ5000-3BA64	8PQ5000-4BA77	8PQ6000-5BA17	8PQ5000-3BA72
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
–	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74
2x 8PQ5000-4BA63 + 2x 8PQ5000-4BA72	8PQ5000-3BA60	8PQ5000-3BA64	8PQ5000-4BA78	8PQ6000-5BA20	8PQ5000-3BA74

Section expansion

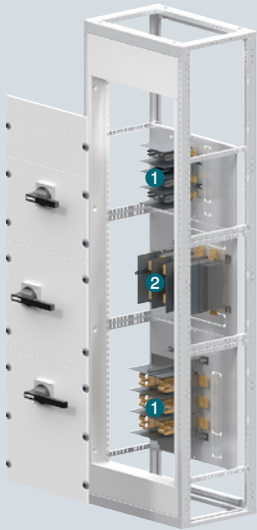
3VA molded case circuit breakers, internal separation – rear connection

Accessories

6 Plug-in rails			
	Equipment height	Busbar system	Article No.
	1600 mm	Top	8PQ3000-0BA82
	1800 mm	Rear or without	8PQ3000-0BA83

Section expansion

3K switch disconnectors

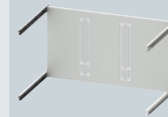


Horizontal

3-pole



4-pole

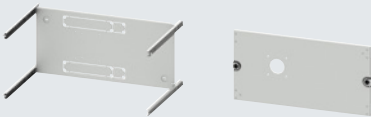


Switching devices	Width	Height	Device holders	Covers	Device holders	Covers
3KL50/3KL52	600 mm	250 mm	–	–	–	–
		300 mm	8PQ6000-2BA65	8PQ2030-6BA06	8PQ6000-2BA65	8PQ2030-6BA06
3KL55/3KL57	600 mm	350 mm	8PQ6000-2BA71	8PQ2035-6BA08	8PQ6000-2BA71	8PQ2035-6BA08
3KL61	600 mm	450 mm	–	–	–	–
		550 mm	8PQ6000-2BA50	8PQ2055-6BA02	8PQ6000-2BA50	8PQ2055-6BA02
3KL711/3KA711	600 mm	200 mm	8PQ6000-2BA52	8PQ2020-6BA10	8PQ6000-2BA52	8PQ2020-6BA10
		800 mm	–	–	–	–
3KL712/3KA712	600 mm	250 mm	8PQ6000-2BA55	8PQ2025-6BA03	8PQ6000-2BA55	8PQ2025-6BA03
		800 mm	–	–	–	–
3KL713/3KA713	600 mm	300 mm	8PQ6000-2BA58	8PQ2030-6BA04	8PQ6000-2BA58	8PQ2030-6BA04
		800 mm	–	–	–	–
3KL714/3KA714	600 mm	350 mm	8PQ6000-2BA62	8PQ2035-6BA06	8PQ6000-2BA62	8PQ2035-6BA06
		800 mm	–	–	–	–
3KL715/3KA715 ¹⁾	600 mm	450 mm	8PQ6000-2BA67	8PQ2045-6BA02	8PQ6000-2BA67	8PQ2045-6BA02
		800 mm	–	–	–	–

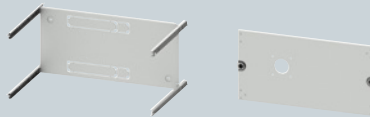
¹⁾ Due to the size of its handle, the 3KA715 disconnector can be used only up to 1250 A/35 kA when installed horizontally.
Due to the size of its handle, the 1250 A/50 kA 3KA715 disconnector requires an additional 200 mm cover.

⊗ Vertical

3-pole



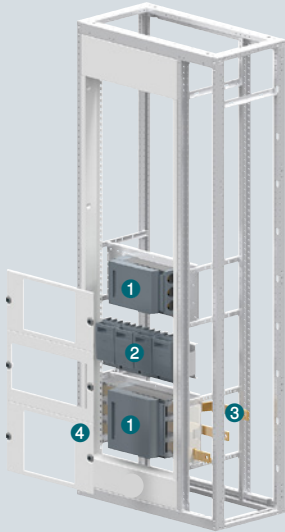
4-pole



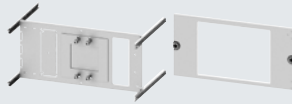
3-pole		4-pole	
Device holders	Covers	Device holders	Covers
8PQ6000-2BA66	8PQ2025-6BA05	8PQ6000-2BA66	8PQ2025-6BA05
–	–	–	–
8PQ6000-2BA72	8PQ2035-6BA10	8PQ6000-2BA72	8PQ2035-6BA10
8PQ6000-2BA51	8PQ2045-6BA01	–	–
–	–	–	–
8PQ6000-2BA53	8PQ2020-6BA11	8PQ6000-2BA53	8PQ2020-6BA11
8PQ6000-2BA54	8PQ2020-8BA04	8PQ6000-2BA54	8PQ2020-8BA04
8PQ6000-2BA56	8PQ2025-6BA04	8PQ6000-2BA56	8PQ2025-6BA04
8PQ6000-2BA57	8PQ2025-8BA02	8PQ6000-2BA57	8PQ2025-8BA02
8PQ6000-2BA60	8PQ2030-6BA05	8PQ6000-2BA60	8PQ2030-6BA05
8PQ6000-2BA61	8PQ2030-8BA02	8PQ6000-2BA61	8PQ2030-8BA02
8PQ6000-2BA63	8PQ2035-6BA07	8PQ6000-2BA63	8PQ2035-6BA07
8PQ6000-2BA64	8PQ2035-8BA04	8PQ6000-2BA64	8PQ2035-8BA04
8PQ6000-2BA68	8PQ2045-6BA03	8PQ6000-2BA68	8PQ2045-6BA03
8PQ6000-2BA70	8PQ2045-8BA01	8PQ6000-2BA70	8PQ2045-8BA01

Section expansion

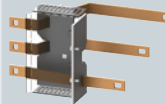
3NP1 fuse switch disconnectors, 3-pole



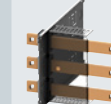
1 Horizontal



2 Section busbars



4 Cable connection



Switching devices	Width	Device holders	Covers	Section busbars	Cable connection
3NP1143	600 mm	8PQ6000-3BA75	8PQ2025-6BA16	8PQ6000-5BA68	8PQ6000-5BA72
3NP1153	600 mm	8PQ6000-3BA75	8PQ2025-6BA17	8PQ6000-5BA70	8PQ6000-5BA73
3NP1163	600 mm	8PQ6000-3BA77	8PQ2030-6BA22	8PQ6000-5BA71	8PQ6000-5BA74

2 Vertical






Switching device	Width	No. of switching devices	Device holders	Covers
3NP1123	600 mm	4	8PQ6000-3BA78	8PQ2025-6BA18
	800 mm	6	8PQ6000-3BA82	8PQ2025-8BA10
3NP1133	600 mm	4	8PQ6000-3BA78	8PQ2030-6BA23
	800 mm	5	8PQ6000-3BA82	8PQ2030-8BA11


Section expansion




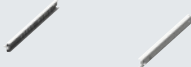
3NJ4 fuse switch disconnectors



	Device holders	Busbar holders	Covers
			
Size	Width	No. of switching devices	
Sizes 1, 2, 3	600 mm	4x 100 mm	8PQ6000-2BA48
	800 mm	6x 100 mm	8PQ6000-2BA48
			2 x 3NJ5974-0AB
			2 x 3NJ5974-0AB
			8PQ2000-6BA06
			8PQ2000-8BA06

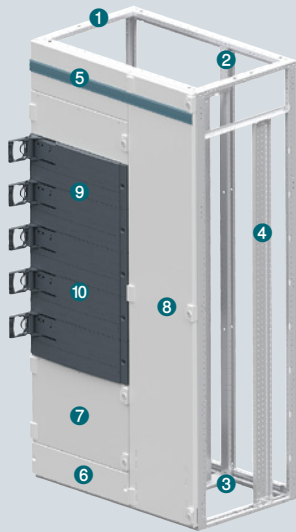
Accessories

Blanking covers			
	Size	Width	Article No.
	Size 00	50 mm	3NJ4912-2AA00
	Sizes 1, 2, 3	100 mm	3NJ4912-2BA00

Modular doors	Separation, form 3b	Separation, horizontal	Support rails
			
<p>8PQ2080-6BA10 8PQ2080-8BA05</p>	<p>8PQ5000-1BA70 8PQ5000-1BA71</p>	<p>8PQ5000-2BA61 8PQ5000-2BA62</p>	<p>8PQ5000-2BA63 8PQ5000-2BA63</p>

Section expansion

3NJ6 switch disconnectors with fuses



Technical specifications, distribution busbar

Cross-section	Rated operational current I_n , ventilated						
	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
60 × 10 mm	1680 A	1640 A	1600 A	1560 A	1520 A	1480 A	1430 A
80 × 10 mm	2260 A	2210 A	2155 A	2100 A	2045 A	1985 A	1925 A

Frame

Main busbar at top

1 Frame	2 Exterior intermediate uprights	3 Bottom plate partition crossbars	4 Uprights

Width	Depth				
600 + 400 mm	400 mm	8PQ1201-4BA02	8PQ3000-1BA43	1× 8PQ3000-1BA38	8PQ3000-0BA65
	600 mm	8PQ1201-6BA02	8PQ3000-1BA43	1× 8PQ3000-1BA40	8PQ3000-0BA01
	800 mm	8PQ1201-8BA03	8PQ3000-1BA43	2× 8PQ3000-1BA38	8PQ3000-0BA02
600 + 600 mm	400 mm	8PQ1202-4BA02	8PQ3000-1BA43	1× 8PQ3000-1BA38	8PQ3000-0BA65
	600 mm	8PQ1202-6BA02	8PQ3000-1BA43	1× 8PQ3000-1BA40	8PQ3000-0BA01
	800 mm	8PQ1202-8BA02	8PQ3000-1BA43	2× 8PQ3000-1BA38	8PQ3000-0BA02

Device compartment

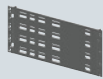
1 Head compartment covers

	Height 225 mm	Article No. 8PQ2022-6BA01
--	------------------	------------------------------

2 3NJ6 assembly kit

	Height 1600 mm	Width 600 mm	Article No. 8PQ3000-1BA48
--	-------------------	-----------------	------------------------------

Busbar cover



Height	Article No.
200 mm	8x 3NJ6916-4EA00

7 Device compartments



Height	Article No.
200 mm	8PQ3000-1BA50
400 mm	8PQ3000-1BA51

10 Blanking covers



Height	Article No.
50 mm	3NJ6900-4CB00

Form 2b separation



Position of main busbar	Width	Depth	Article No.
Top, front	600 mm	400 mm	8PQ3000-1BA44
		600 mm	8PQ3000-1BA45
		800 mm	8PQ3000-1BA46
Top, both sides	600 mm	800 mm	8PQ3000-1BA47

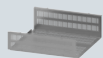
6 Base compartment covers



Height	Article No.
150 mm	8PQ2000-6BA07

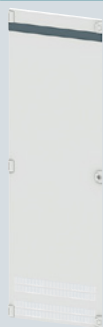
Cable compartment

Form 2b separation



Position of main busbar	Width	Depth	Article No.
Top, front	400 mm	400 mm	8PQ3000-0BA67
		600 mm	8PQ3000-0BA52
		800 mm	8PQ3000-0BA55
	600 mm	400 mm	8PQ3000-0BA68
		600 mm	8PQ3000-0BA53
		800 mm	8PQ3000-0BA56
Top, both sides	400 mm	800 mm	8PQ3000-0BA58
	600 mm	800 mm	8PQ3000-0BA60

8 Section doors



Lock type	Hinge position	Width	Article No.
Double-bit	Left	400 mm	8PQ2197-4BA08
		600 mm	8PQ2197-6BA06
	Right	400 mm	8PQ2197-4BA11
		600 mm	8PQ2197-6BA13
Profile semicylinders	Left	400 mm	8PQ2197-4BA06
		600 mm	8PQ2197-6BA04
	Right	400 mm	8PQ2197-4BA07
		600 mm	8PQ2197-6BA05

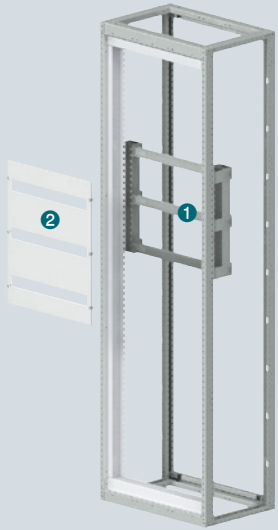
Terminal covers, form 4b



Version	Article No.
Size 00	3NJ6923-1DA00
Size 1	3NJ6933-1DA01
Size 2	3NJ6943-1DA00
4th pole for all sizes	3NJ6904-1DA00

Section expansion

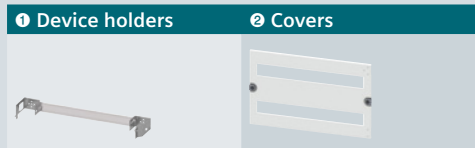
Modular installation devices



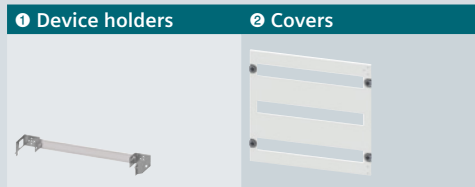
Internal covers



Width	MW	Tier spacing	Height	Device holders	Covers
600 mm	1x 24	150 mm	150 mm	1x 8PQ6000-3BA36	8PQ2015-6BA07
		200 mm	200 mm	1x 8PQ6000-3BA36	8PQ2020-6BA12
800 mm	1x 35	150 mm	150 mm	1x 8PQ6000-3BA37	8PQ2015-8BA03
		200 mm	200 mm	1x 8PQ6000-3BA37	8PQ2020-8BA05



Width	MW	Tier spacing	Height	Device holders	Covers
600 mm	2x 24	150 mm	300 mm	2x 8PQ6000-3BA36	8PQ2030-6BA07
		200 mm	400 mm	2x 8PQ6000-3BA36	8PQ2040-6BA10
800 mm	2x 35	150 mm	300 mm	2x 8PQ6000-3BA37	8PQ2030-8BA03
		200 mm	400 mm	2x 8PQ6000-3BA37	8PQ2040-8BA10



Width	MW	Tier spacing	Height	Device holders	Covers
600 mm	3x 24	150 mm	450 mm	3x 8PQ6000-3BA36	8PQ2045-6BA04
		200 mm	600 mm	3x 8PQ6000-3BA36	8PQ2060-6BA04
800 mm	3x 35	150 mm	450 mm	3x 8PQ6000-3BA37	8PQ2045-8BA02
		200 mm	600 mm	3x 8PQ6000-3BA37	8PQ2060-8BA02

Modular doors



Width	MW	Tier spacing	Height	Device holders	Covers
600 mm	1x 24	200 mm	200 mm	1x 8PQ6000-6BA52	8PQ2020-6BA28
800 mm	1x 35	200 mm	200 mm	1x 8PQ6000-6BA53	8PQ2020-8BA14

Accessories

Cable duct fastening

Version	Article No.
Mounting brackets	8PQ6000-0BA16

Blanking strips

Versions	Article No.
For 12 MW	8GK9910-0KK00
Length 1 m, to cut to length	8GK9910-0KK01

Section expansion

Cable section



1 PE bars



Version	Scope of supply	Article No.
Busbar supports	5 units	8PQ4000-2BA23

2 N/PEN connection



Version	Article No.
Busbar supports and connection terminals	8PQ4000-2BA22

3 Cable fixtures



Version	Scope of supply	Article No.
Holders	10 units	8PQ3000-0BA73

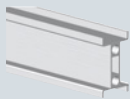


Version	Width	Depth	Scope of supply	Article No.
C profile (30 mm)	350 mm	–	5 units	8PQ3000-0BA38
	400 mm	–	5 units	8PQ3000-0BA41
	600 mm	–	5 units	8PQ3000-0BA42
	800 mm	–	5 units	8PQ3000-0BA43
	–	400 mm	5 units	8PQ3000-0BA38
	–	600 mm	5 units	8PQ3000-0BA38
	–	800 mm	5 units	8PQ3000-0BA38

4 DIN rail outgoing terminals



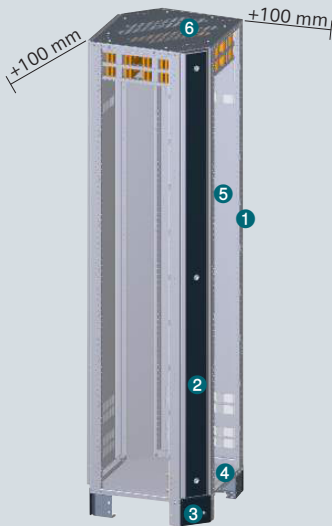
Version	Scope of supply	Article No.
Universal brackets	10 units	8PQ9400-0BA01







Length	DIN rail	Article No.
1600 mm	35 mm	8PQ9600-0BA01

Section expansion

Corner sections



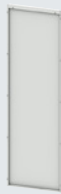
Main busbar at bottom

	① Frames	② Conversion kits	③ Base corner pieces		④ Base plates
					
Depth			Height 100 mm	200 mm	IP20
400 mm	8PQ1204-4BA01	8PQ1200-0BA03	8PQ1010-0BA04	8PQ1024-4BA01	8PQ2300-4BA25
600 mm	8PQ1206-6BA01	8PQ1200-0BA03	8PQ1010-0BA05	8PQ1026-6BA01	8PQ2300-6BA27
800 mm	8PQ1208-8BA01	8PQ1200-0BA03	8PQ1018-8BA01	8PQ1028-8BA01	8PQ2300-8BA14

Main busbar at top

⊖ Rear panels

⊖ Top plates



IP55	IP40	IP55	IP40	IP55	IPX1
8PQ2304-4BA12	2x 8PQ2420-4BA02	2x 8PQ2420-4BA01	8PQ2304-4BA10	8PQ2304-4BA08	8PQ2304-4BA11
8PQ2306-6BA12	2x 8PQ2420-6BA02	2x 8PQ2420-6BA01	8PQ2306-6BA10	8PQ2306-6BA08	8PQ2306-6BA11
8PQ2308-8BA08	2x 8PQ2420-8BA02	2x 8PQ2420-8BA01	8PQ2308-8BA06	8PQ2308-8BA05	8PQ2308-8BA07

Section expansion

Mounting plates

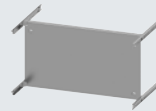
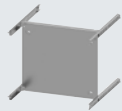


	❶ Double section doors – with double-bit lock		❶ Double section doors – for profile semicylinders		❷ Inner doors	Inner door struts
					Height 1900 mm 	Height 700 mm
Width	IP40	IP55	IP40	IP55		
600 mm	–	–	–	–	8PQ2000-6BA05	2x 8PQ2080-0BA07
800 mm	–	–	–	–	8PQ2000-8BA05	2x 8PQ2080-0BA07
1000 mm (600 mm + 400 mm)	8PQ2197-1BA14	8PQ2197-1BA13	8PQ2197-1BA16	8PQ2197-1BA15	8PQ2000-1BA01	2x 8PQ2080-0BA07
1200 mm (600 mm + 600 mm)	8PQ2197-2BA11	8PQ2197-2BA10	8PQ2197-2BA13	8PQ2197-2BA12	–	–

15

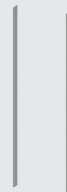
	❸ Mounting plates	❹ Connecting panels		
Height	Position of main busbar	Width		
1600 mm	Top	400 mm	8PQ3000-0BA33	8PQ3000-1BA10
		600 mm	8PQ3000-0BA35	8PQ3000-1BA10
		800 mm	8PQ3000-0BA37	8PQ3000-1BA10
		1000 mm	8PQ3000-1BA06	8PQ3000-1BA10
		1200 mm	8PQ3000-1BA07	8PQ3000-1BA10
1900 mm	Without	400 mm	8PQ3000-0BA32	8PQ3000-1BA08
		600 mm	8PQ3000-0BA34	8PQ3000-1BA08
		800 mm	8PQ3000-0BA36	8PQ3000-1BA08
		1000 mm	8PQ3000-1BA04	8PQ3000-1BA08
		1200 mm	8PQ3000-1BA05	8PQ3000-1BA08

Modular mounting plates



Height	Width		
	400 mm	600 mm	800 mm
150 mm	8PQ3000-2BA60	8PQ3000-2BA62	8PQ3000-2BA64
200 mm	8PQ3000-2BA17	8PQ3000-1BA56	8PQ3000-1BA58
300 mm	8PQ3000-2BA66	8PQ3000-2BA51	8PQ3000-2BA53
400 mm	8PQ3000-2BA18	8PQ3000-1BA61	8PQ3000-1BA63
550 mm	–	8PQ3000-3BA07	8PQ3000-3BA08
600 mm	8PQ3000-2BA21	8PQ3000-1BA65	8PQ3000-1BA67
800 mm	8PQ3000-2BA23	8PQ3000-1BA26	8PQ3000-1BA28

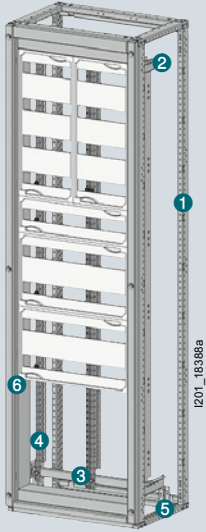
Uprights



Height	Position of main busbar	Depth	
1600 mm	Top	600 mm	8PQ3000-0BA01
		800 mm	8PQ3000-0BA02
1900 mm	Without	600 mm	8PQ3000-0BA03
		800 mm	8PQ3000-0BA03

Section expansion

ALPHA 8GK DIN sections, frame



Main busbar at top: Equipment height 1650 mm

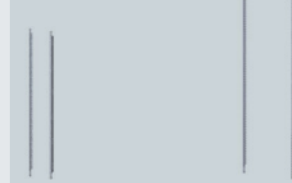
Main busbar at bottom: Equipment height 1800 mm

① Frames

② Adapters

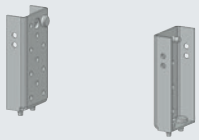
③ Crossbars

④ Longitudinal stays

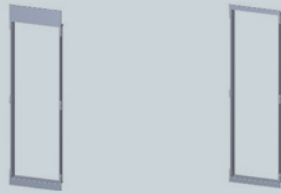


Width	Depth					
350 mm	400 mm	8PQ1200-4BA15	8PQ3000-1BA74	8PQ3000-1BA76	8PQ3000-2BA88	8PQ3000-1BA82
	600 mm	8PQ1200-6BA14	8PQ3000-1BA74	8PQ3000-1BA76	8PQ3000-2BA88	8PQ3000-1BA82
	800 mm	8PQ1200-8BA01	8PQ3000-1BA74	8PQ3000-1BA76	8PQ3000-2BA88	8PQ3000-1BA82
600 mm	400 mm	8PQ1206-4BA01	8PQ3000-1BA74	8PQ3000-1BA78	8PQ3000-2BA88	8PQ3000-1BA82
	600 mm	8PQ1206-6BA01	8PQ3000-1BA74	8PQ3000-1BA78	8PQ3000-2BA88	8PQ3000-1BA82
	800 mm	8PQ1206-8BA01	8PQ3000-1BA74	8PQ3000-1BA78	8PQ3000-2BA88	8PQ3000-1BA82
850 mm	400 mm	8PQ1200-4BA16	8PQ3000-1BA74	8PQ3000-1BA80	8PQ3000-2BA88	8PQ3000-1BA82
	600 mm	8PQ1200-6BA15	8PQ3000-1BA74	8PQ3000-1BA80	8PQ3000-2BA88	8PQ3000-1BA82
	800 mm	8PQ1200-8BA02	8PQ3000-1BA74	8PQ3000-1BA80	8PQ3000-2BA88	8PQ3000-1BA82

Supports



Touch protection covers



8PQ3000-1BA75	8PQ3000-2BA85	8PQ3000-2BA45
8PQ3000-1BA75	8PQ3000-2BA85	8PQ3000-2BA45
8PQ3000-1BA75	8PQ3000-2BA85	8PQ3000-2BA45
8PQ3000-1BA75	8PQ3000-2BA86	8PQ3000-2BA46
8PQ3000-1BA75	8PQ3000-2BA86	8PQ3000-2BA46
8PQ3000-1BA75	8PQ3000-2BA86	8PQ3000-2BA46
8PQ3000-1BA75	8PQ3000-2BA87	8PQ3000-2BA47
8PQ3000-1BA75	8PQ3000-2BA87	8PQ3000-2BA47
8PQ3000-1BA75	8PQ3000-2BA87	8PQ3000-2BA47

Section expansion

ALPHA 8GK DIN sections, enclosure



Main busbar at top

1 Bases

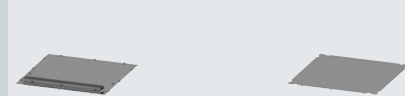
Corners with front cover



Side covers



2 Bottom plates



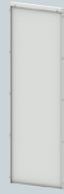
Width	Depth	Height 100 mm		Height 100 mm		IP40 cable entry	IP55 closed
			200 mm				
350 mm	400 mm	8PQ1010-0BA01	8PQ1020-0BA01	8PQ1010-4BA01		8PQ2300-4BA18	8PQ2300-4BA16
	600 mm	8PQ1010-0BA01	8PQ1020-0BA01	8PQ1010-6BA01		8PQ2300-6BA22	8PQ2300-6BA20
	800 mm	8PQ1010-0BA01	8PQ1020-0BA01	8PQ1010-8BA01		2x 8PQ2300-4BA18	2x 8PQ2300-4BA16
600 mm	400 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-4BA01		8PQ2306-4BA06	8PQ2306-4BA05
	600 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-6BA01		8PQ2306-6BA06	8PQ2306-6BA05
	800 mm	8PQ1016-0BA01	8PQ1026-0BA01	8PQ1010-8BA01		2x 8PQ2306-4BA06	2x 8PQ2306-4BA05
850 mm	400 mm	8PQ1010-0BA02	8PQ1020-0BA02	8PQ1010-4BA01		8PQ2300-4BA20	8PQ2300-4BA17
	600 mm	8PQ1010-0BA02	8PQ1020-0BA02	8PQ1010-6BA01		8PQ2300-6BA23	8PQ2300-6BA21
	800 mm	8PQ1010-0BA02	8PQ1020-0BA02	8PQ1010-8BA01		2x 8PQ2300-4BA20	2x 8PQ2300-4BA17

15

Main busbar at bottom

⊕ Rear panels

⊕ Side panels



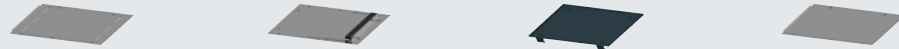
IP20	IP40	IP55	IP40 with design strip	IP55
8PQ2300-4BA23	8PQ2420-0BA01	8PQ2420-0BA03	8PQ2520-4BA01	8PQ2520-4BA02
8PQ2300-6BA25	8PQ2420-0BA01	8PQ2420-0BA03	8PQ2520-6BA01	8PQ2520-6BA02
8PQ2300-8BA10	8PQ2420-0BA01	8PQ2420-0BA03	8PQ2520-8BA01	8PQ2520-8BA02
8PQ2306-4BA10	8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-4BA01	8PQ2520-4BA02
8PQ2306-6BA16	8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-6BA01	8PQ2520-6BA02
8PQ2306-8BA05	8PQ2420-6BA02	8PQ2420-6BA01	8PQ2520-8BA01	8PQ2520-8BA02
8PQ2300-4BA24	8PQ2420-0BA02	8PQ2420-0BA04	8PQ2520-4BA01	8PQ2520-4BA02
8PQ2300-6BA26	8PQ2420-0BA02	8PQ2420-0BA04	8PQ2520-6BA01	8PQ2520-6BA02
8PQ2300-8BA11	8PQ2420-0BA02	8PQ2420-0BA04	8PQ2520-8BA01	8PQ2520-8BA02

Section expansion

ALPHA 8GK DIN sections, enclosure



⑤ Top plates



Width	Depth	IP40	IP40 cable entry	IPX1 upgrade	IP55
350 mm	400 mm	8PQ2300-4BA06	8PQ2300-4BA14	8PQ2300-4BA11	8PQ2300-4BA04
	600 mm	8PQ2300-6BA13	8PQ2300-6BA17	8PQ2300-6BA15	8PQ2300-6BA11
	800 mm	8PQ2300-8BA03	8PQ2300-8BA07	8PQ2300-8BA05	8PQ2300-8BA01
600 mm	400 mm	8PQ2306-4BA02	8PQ2306-4BA03	8PQ2306-4BA04	8PQ2306-4BA01
	600 mm	8PQ2306-6BA02	8PQ2306-6BA03	8PQ2306-6BA04	8PQ2306-6BA01
	800 mm	8PQ2306-8BA02	8PQ2306-8BA03	8PQ2306-8BA04	8PQ2306-8BA01
850 mm	400 mm	8PQ2300-4BA07	8PQ2300-4BA15	8PQ2300-4BA12	8PQ2300-4BA05
	600 mm	8PQ2300-6BA14	8PQ2300-6BA18	8PQ2300-6BA16	8PQ2300-6BA12
	800 mm	8PQ2300-8BA04	8PQ2300-8BA08	8PQ2300-8BA06	8PQ2300-8BA02

Section expansion

ALPHA 8GK DIN sections, doors



6 Doors



Hinge position	Width	IP40	IP55	IP55 glass doors
With double-bit lock				
Left	350 mm	8PQ2197-0BA03	8PQ2197-0BA06	–
	600 mm	8PQ2197-6BA06	8PQ2197-6BA03	8PQ2197-6BA10
	850 mm	8PQ2197-0BA04	8PQ2197-0BA07	8PQ2197-0BA01
Right	350 mm	8PQ2197-0BA16	8PQ2197-0BA18	–
	600 mm	8PQ2197-6BA13	8PQ2197-6BA12	8PQ2197-6BA14
	850 mm	8PQ2197-0BA17	8PQ2197-0BA20	8PQ2197-0BA21
For profile semicylinders				
Left	350 mm	8PQ2197-0BA34	8PQ2197-0BA31	–
	600 mm	8PQ2197-6BA04	8PQ2197-6BA01	8PQ2197-6BA07
	850 mm	8PQ2197-0BA35	8PQ2197-0BA32	8PQ2197-0BA33
Right	350 mm	8PQ2197-0BA40	8PQ2197-0BA36	–
	600 mm	8PQ2197-6BA05	8PQ2197-6BA02	8PQ2197-6BA08
	850 mm	8PQ2197-0BA41	8PQ2197-0BA37	8PQ2197-0BA38

Section expansion

ALPHA 8GK DIN sections, doors

Accessories

Flat cylinders/two-way interlocking mechanism				
	Version		Article No.	
	Rotary handles with flat cylinder	<ul style="list-style-type: none"> • With key • Identical key type 	8PQ9400-0BA07	
	Rotary handles with two-way interlocking mechanism		8PQ9400-0BA08	
	Coupling bars		8PQ9400-0BA27	
	Locking rods		8PQ9400-0BA37	
	Bar guides		8PQ9400-0BA36	
	Profile semicylinders			
	Rotary handles for profile semicylinders		8PQ9400-0BA41	
	Coupling bars		8PQ9400-0BA28	
	Locking rods		8PQ9400-0BA38	
	Bar guides		8PQ9400-0BA36	
	Profile semicylinders	Acc. to DIN 18252/18254, 8 × 45° adjustable, with identical keys (key number 333), including key		8PQ9400-0BA26
	Door hinges			
	Version	Scope of supply	Article No.	
	Suitable for modular or section doors	2 units	8PQ9400-0BA55	

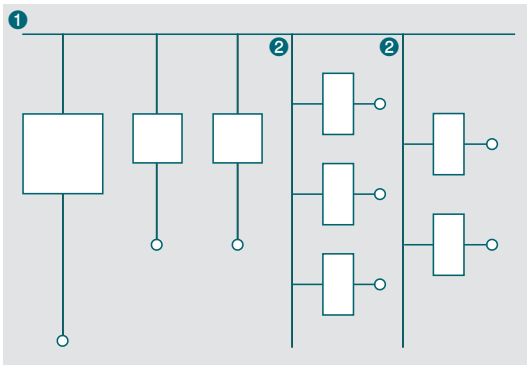
Cubicle keys			
	Version	Scope of supply	Article No.
	3 mm double bit	10 units	8PQ9400-0BA12
Inner door struts			
	Height	Article No.	
	1975 mm	8PQ2197-0BA10	
Cubicle ID plate			
	Version	Article No.	
	SIVACON designed by Siemens	8PQ9400-0BA06	
Reinforcements for transport			
	Height	Width/depth	Article No.
	100 mm	350 mm	8PQ1010-0BA06
		400 mm	8PQ1014-0BA02
		600 mm	8PQ1016-0BA02
		800 mm	8PQ1018-0BA02
		850 mm	8PQ1010-0BA07

Internal separation

Quick selection guide

Form 1

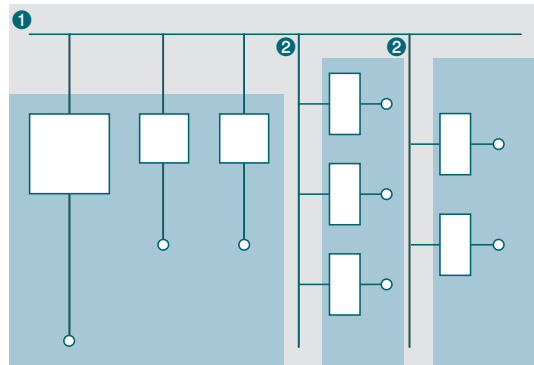
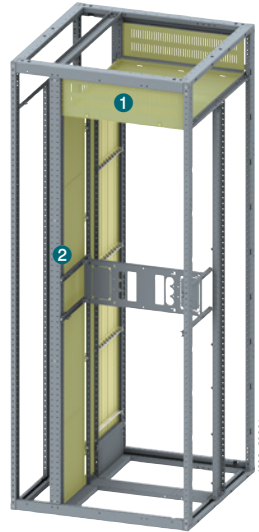
Outgoing feeder panel
No internal separation



 Functional unit
  Connection

Form 2b

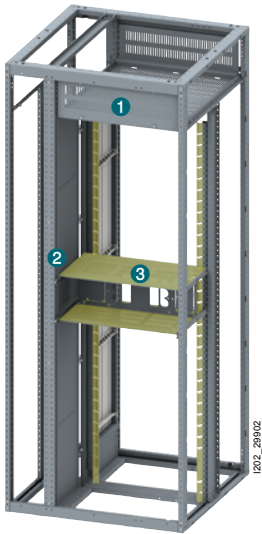
Outgoing feeder panel
 + separation of main busbar ①
 + separation of the vertical busbar ②



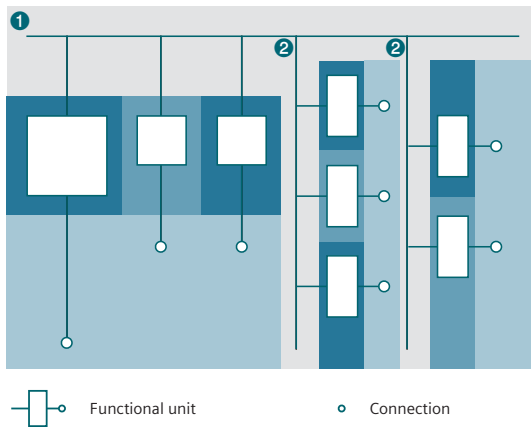
 Functional unit
  Connection

Form 3b

Outgoing feeder panel
 With separation of main busbar ❶
 With separation of the vertical busbar ❷
 + separation of device compartments (functional units) ❸

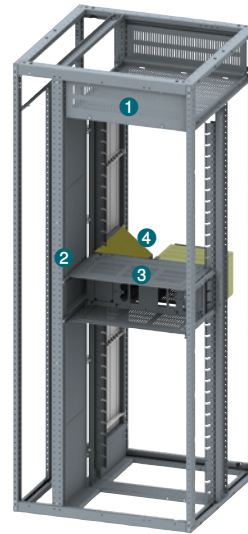


1202_29902

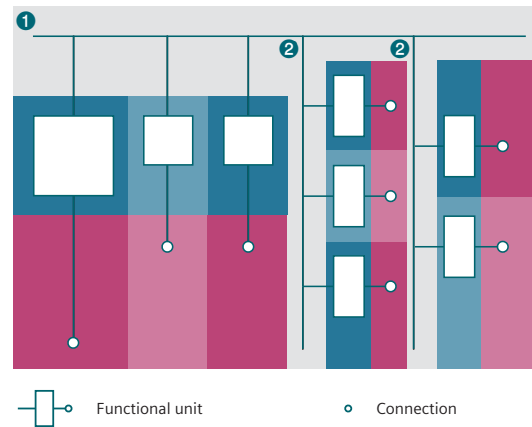


Form 4b

Outgoing feeder panel
 With separation of main busbar ❶
 With separation of the vertical busbar ❷
 With separation of device compartments (functional units) ❸
 + separation of connections ❹

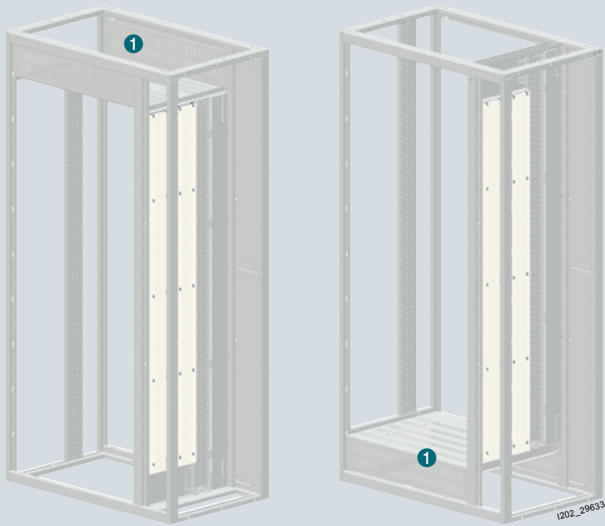


1202_29903



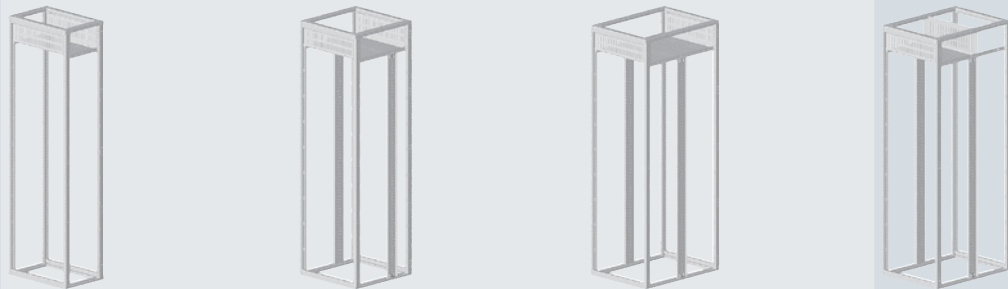
Internal separation

Main busbar, form 2b



Main busbar at top

1 Main busbars



Width	Depth 400 mm			Depth 800 mm	
	400 mm	600 mm	800 mm	800 mm	800 mm
200 mm	8PQ3000-1BA52	8PQ3000-1BA53	8PQ3000-1BA55	8PQ3000-1BA54	8PQ3000-1BA54
350 mm	8PQ3000-2BA68	8PQ3000-2BA71	8PQ3000-2BA75	8PQ3000-2BA73	8PQ3000-2BA73
400 mm	8PQ3000-0BA67	8PQ3000-0BA52	8PQ3000-0BA58	8PQ3000-0BA55	8PQ3000-0BA55
600 mm	8PQ3000-0BA68	8PQ3000-0BA53	8PQ3000-0BA60	8PQ3000-0BA56	8PQ3000-0BA56
800 mm	8PQ3000-0BA70	8PQ3000-0BA54	8PQ3000-0BA61	8PQ3000-0BA57	8PQ3000-0BA57
850 mm	8PQ3000-2BA70	8PQ3000-2BA72	8PQ3000-2BA76	8PQ3000-2BA74	8PQ3000-2BA74
1000 mm	8PQ3000-1BA13	8PQ3000-1BA14	8PQ3000-1BA20	8PQ3000-1BA17	8PQ3000-1BA17
1200 mm	8PQ3000-1BA15	8PQ3000-1BA16	8PQ3000-1BA21	8PQ3000-1BA18	8PQ3000-1BA18

Main busbar at bottom

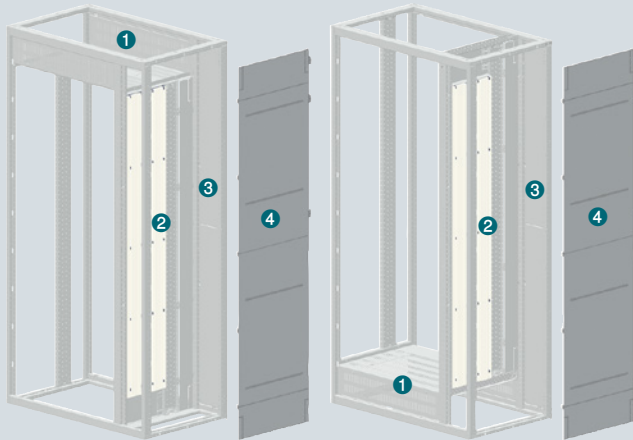
Main busbar at rear



Main busbar at bottom			Main busbar at rear	
Depth			Depth	
400 mm	600 mm	800 mm	800 mm	800 mm
–	–	–	–	–
8PQ3000-3BA13	8PQ3000-3BA22	8PQ3000-3BA31	8PQ3000-2BA77	–
8PQ3000-3BA14	8PQ3000-3BA23	8PQ3000-3BA32	8PQ3000-0BA78	8PQ5000-4BA24
8PQ3000-3BA15	8PQ3000-3BA24	8PQ3000-3BA33	8PQ3000-0BA80	8PQ5000-4BA25
8PQ3000-3BA16	8PQ3000-3BA25	8PQ3000-3BA34	8PQ3000-0BA81	8PQ5000-4BA26
8PQ3000-3BA17	8PQ3000-3BA26	8PQ3000-3BA35	8PQ3000-2BA78	–
8PQ3000-3BA18	8PQ3000-3BA27	8PQ3000-3BA36	8PQ3000-1BA22	8PQ5000-4BA27
8PQ3000-3BA20	8PQ3000-3BA28	8PQ3000-3BA37	8PQ3000-1BA23	–

Internal separation

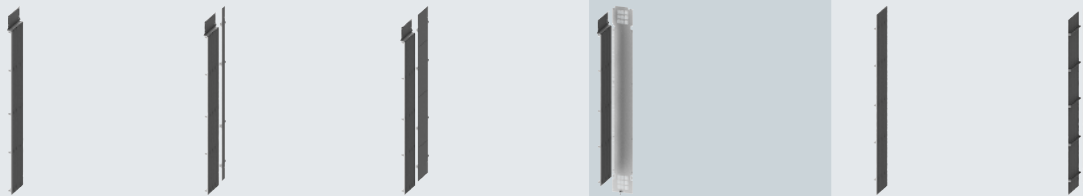
Vertical busbar, form 2b



Main busbar at top

Without main busbar

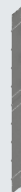
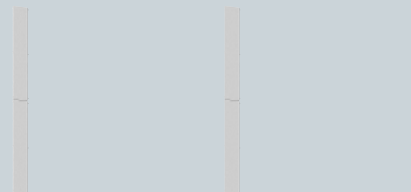
Vertical busbar



Width	Main busbar at top			Without main busbar		
	Depth 400 mm	600 mm	800 mm	Depth 800 mm	Depth 400 mm	600 mm
200 mm	8PQ4000-OBA05	8PQ4000-OBA07	8PQ4000-OBA64	8PQ4000-OBA02	8PQ4000-OBA06	8PQ4000-OBA03
400 mm	8PQ4000-OBA05	8PQ4000-OBA07	8PQ4000-OBA64	8PQ4000-OBA01	8PQ4000-OBA06	8PQ4000-OBA03

③ Touch protection covers

④ Vertical separation between sections



800 mm

Depth
600 mm

800 mm

Depth
400 mm

600 mm

800 mm

8PQ4000-0BA76

8PQ3000-2BA50

8PQ3000-2BA50

8PQ3000-0BA15

8PQ3000-0BA16

2x 8PQ3000-0BA15

8PQ4000-0BA76

8PQ3000-0BA51

8PQ3000-0BA51

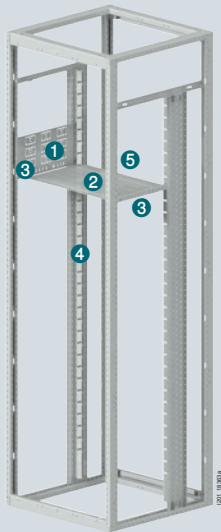
8PQ3000-0BA15

8PQ3000-0BA16

2x 8PQ3000-0BA15

Internal separation

Modular kits, form 3b



Main busbar at top

Main busbar at bottom

Main busbar at rear

Frame without main busbar

① Side

⊗ Horizontal

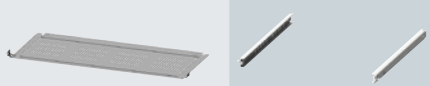
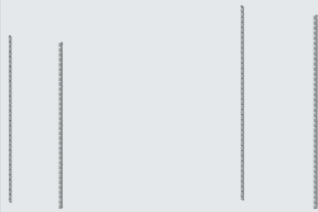

Kit version support rail

Kit version crossbar



Height	Branch current	Assembly kits	Branch current	Assembly kits	Width	
					400 mm	600 mm
50 mm		–		–	–	–
100 mm		8PQ5000-2BA27		–	8PQ5000-3BA44	8PQ5000-2BA61
150 mm		8PQ5000-2BA28		–	8PQ5000-3BA44	8PQ5000-2BA61
200 mm	≤250 A	8PQ5000-2BA30		–	8PQ5000-3BA44	8PQ5000-2BA61
	≥400 A	8PQ5000-2BA31		–	8PQ5000-3BA44	8PQ5000-2BA61
250 mm	≤250 A	8PQ5000-2BA32		–	8PQ5000-3BA44	8PQ5000-2BA61
	≥400 A	8PQ5000-2BA33		–	8PQ5000-3BA44	8PQ5000-2BA61
300 mm	≤250 A	8PQ5000-2BA34		–	8PQ5000-3BA44	8PQ5000-2BA61
	≥400 A	8PQ5000-2BA35		–	8PQ5000-3BA44	8PQ5000-2BA61
350 mm		8PQ5000-2BA36		–	8PQ5000-3BA44	8PQ5000-2BA61
400 mm		8PQ5000-2BA37	≥800 A	8PQ5000-3BA50	8PQ5000-3BA44	8PQ5000-2BA61
450 mm		8PQ5000-2BA38	≥800 A	8PQ5000-2BA65	8PQ5000-3BA44	8PQ5000-2BA61
500 mm		8PQ5000-2BA40	≥800 A	8PQ5000-2BA66	8PQ5000-3BA44	8PQ5000-2BA61
550 mm		8PQ5000-2BA41		–	8PQ5000-3BA44	8PQ5000-2BA61
600 mm		8PQ5000-2BA42	≥800 A	8PQ5000-2BA48	8PQ5000-3BA44	8PQ5000-2BA61
650 mm		8PQ5000-2BA43		–	8PQ5000-3BA44	8PQ5000-2BA61
700 mm		8PQ5000-2BA44	≥800 A	8PQ5000-2BA50	8PQ5000-3BA44	8PQ5000-2BA61
800 mm		8PQ5000-2BA45		–	8PQ5000-3BA44	8PQ5000-2BA61

15

③ Support rails		④ Plug-in rails		⑤ Rear	
					
Width 800 mm		Height 1600 mm		Width 600 mm	
		1800 mm		800 mm	
–	–	–	–	8PQ5000-2BA51	8PQ5000-2BA67
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-2BA52	8PQ5000-2BA68
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA40	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA41	8PQ5000-4BA48
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA41	8PQ5000-4BA48
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA42	8PQ5000-4BA50
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA42	8PQ5000-4BA50
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA43	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA43	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA44	8PQ5000-4BA51
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA45	8PQ5000-4BA52
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA46	8PQ5000-4BA53
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	8PQ5000-4BA47	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–
8PQ5000-2BA62	8PQ5000-2BA63	8PQ3000-0BA82	8PQ3000-0BA83	–	–


Internal separation


Accessories


Connecting terminals				
	Rated current	Busbar	Scope of supply	Article No.
	–	–	4 units	8PQ5000-0BA05
	250 A	2 × 25 × 5 mm	2 units	8PQ5000-0BA72
	400 A	30 × 10 mm	4 units	8PQ5000-0BA73
	630 A	40 × 10 mm	4 units	8PQ5000-0BA74
Protective bellows				
	Version		Scope of supply	Article No.
	For connecting terminal		4 units	8PQ9400-0BA71
Self-tapping screws – frame				
	Version	Version	Scope of supply	Article No.
	Cylinder-head screws	M6 × 10 mm	100 units	8PQ9500-0BA34
		M6 × 16 mm	100 units	8PQ9500-0BA32
		M6 × 20 mm	100 units	8PQ9500-0BA31
	Covering caps	M6, RAL 7035	100 units	8PQ9400-0BA14
	Countersunk screws	M6 × 12 mm	100 units	8PQ9500-1BA07
	Standardized parts - electrical connections			
	Version	Version	Scope of supply	Article No.
	Hexagonal nuts	For M10	50 units	8PQ9500-0BA05
	Spring washers	For M10	50 units	8PQ9500-0BA60
	Plain washers	For M10	50 units	8PQ9500-0BA67
	Lock washers	For M10	50 units	8PQ9500-0BA50

Universal mounting brackets			
		Scope of supply	Article No.
		10 units	8PQ9400-0BA01

Transport aids				
	Version	Width	Scope of supply	Article No.
	Lifting eyebolts	–	4 units	8PQ9400-0BA11
	Lifting brackets	800 mm	2 units	8PQ3000-1BA01
		850 mm	2 units	8PQ3000-2BA38
		1000 mm	2 units	8PQ3000-1BA02
		1200 mm	2 units	8PQ3000-1BA03

Cable entries			
	Version	Scope of supply	Article No.
	Cables with diam. up to 20 mm	20 units	8PQ9400-0BA16
	Cables with diam. 14 ... 38 mm	6 units	8PQ9400-0BA33

Torx bits for screwdriver			
	Length	Scope of supply	Article No.
	200 mm	2 units	8PQ9400-0BA10

Extended delivery options			
	Version	Description	Article No.
	<ul style="list-style-type: none"> After prior consultation with ALPHA-support.ic@siemens.com 		
	Pre-assembled solutions	Based on SIMARIS configuration <ul style="list-style-type: none"> In various expansion stages Mechanically with or without copper insert 	8PQ9998-0BA20-Z
	Copper for system sections	Drawings from SIMARIS	8PQ9998-0BA30-Z

ALPHA UNIVERSAL system overview

Distribution boards, assembly kits and accessories

ALPHA UNIVERSAL 800



ALPHA UNIVERSAL 630



Unequipped distribution boards



ALPHA 800



ALPHA 630

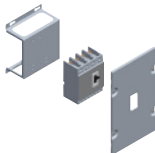


ALPHA 125

Assembly kits



For molded case circuit breakers



For switch disconnectors



For fuse switch disconnectors



For modular installation devices



For front cover with cutout

ALPHA UNIVERSAL 125



Busbars



Cu busbars



Busbar supports

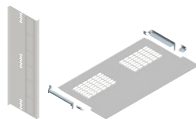
Accessories



Bases



Crossbars



Partitions



Front covers



Locking systems

ALPHA 800 UNIVERSAL floor-mounted distribution boards

Rated current 800 A

Unequipped distribution boards

Degree of protection IP30/IP55



Height outside	inside	Depth outside	Width outside	inside	Safety class I
1850 mm	1800 mm	400 mm	350 mm	300 mm	8GK2420-6KK14
			650 mm	600 mm	8GK2420-6KK24
			950 mm	900 mm	8GK2420-6KK34
2050 mm	2000 mm	400 mm	350 mm	300 mm	8GK2420-7KK14
			650 mm	600 mm	8GK2420-7KK24
			950 mm	900 mm	8GK2420-7KK34

Unequipped distribution boards

Accessories

Sheet-steel doors

Versions	Width	Cubicle height	Cubicle width	Article No.
Standard	–	1800 mm	300 mm	8GK9515-8KK11
			600 mm	8GK9515-8KK21
			900 mm	8GK9515-8KK31
		2000 mm	300 mm	8GK9515-8KK12
			600 mm	8GK9515-8KK22
			900 mm	8GK9515-8KK32
For cable compartment	250 mm	1800 mm	900 mm	8GK9515-8KK41
		2000 mm	900 mm	8GK9515-8KK42

Transparent doors

Versions	Cubicle height	Cubicle width	Article No.
Standard	1800 mm	300 mm	8GK9505-8KK12
		600 mm	8GK9505-8KK21
		900 mm	8GK9505-8KK31
	2000 mm	300 mm	8GK9505-8KK10
		600 mm	8GK9505-8KK22
		900 mm	8GK9505-8KK32
Giugiaro design	1800 mm	600 mm	8GK9507-8KK21
		900 mm	8GK9507-8KK31
		900 mm	8GK9507-8KK32
	2000 mm	600 mm	8GK9507-8KK22
		900 mm	8GK9507-8KK31
		900 mm	8GK9507-8KK32


Double doors

Versions	Width	Cubicle height	Cubicle width	Article No.
Made of sheet steel	600 + 250 mm	1800 mm	900 mm	8GK9515-8KK21 + 8GK9515-8KK41
		2000 mm	900 mm	8GK9515-8KK22 + 8GK9515-8KK42
Transparent door + sheet-steel door	600 + 250 mm	1800 mm	900 mm	8GK9505-8KK21 + 8GK9515-8KK41
		2000 mm	900 mm	8GK9505-8KK22 + 8GK9515-8KK42
Transparent door in Giugiaro design + sheet-steel door	600 + 250 mm	1800 mm	900 mm	8GK9507-8KK21 + 8GK9515-8KK41
		2000 mm	900 mm	8GK9507-8KK22 + 8GK9515-8KK42


Unequipped distribution boards

Accessories

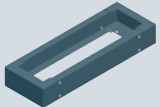
Vertical profile bars for compartment/busbars

	Cubicle height	Cubicle width	Article No.
	1800 mm	300/600/900 mm	8GK9200-8KK00
	2000 mm	300/600/900 mm	8GK9200-8KK01


Front covers for cabling compartment

Height	Width	Cubicle height	Cubicle width	Article No.
	250/300 mm	1800 mm	300 mm	8GK9607-5KK10 + 8GK9607-7KK10
			900 mm	8GK9606-5KK10 + 8GK9606-7KK10
1000 + 1000 mm	250/300 mm	2000 mm	300 mm	8GK9607-7KK10 + 8GK9607-7KK10
			900 mm	8GK9606-7KK10 + 8GK9606-7KK10

Bases

Color	Height	Cubicle height	Cubicle width	Article No.
	Blue-green	1800/2000 mm	100 mm	8GK9906-0KK15
			600 mm	8GK9906-0KK25
			900 mm	8GK9906-0KK35

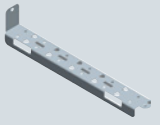
Side panels

Color	Cubicle height	Cubicle width	Article No.
	1800 mm	300/600/900 mm	8GK9200-8KK04
	2000 mm	300/600/900 mm	8GK9200-8KK05
Blue-green	1800 mm	300/600/900 mm	8GK9200-8KK07
	2000 mm	300/600/900 mm	8GK9200-8KK08

Supports

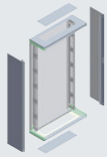
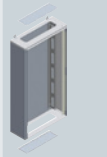

Versions	Height	Article No.	
	Mounting stays (pair)	1600 mm	8GK6850-0KK02
		1800 mm	8GK6850-0KK03
		2000 mm	8GK6850-0KK04
Rear universal supports	1800 mm	8GK6850-0KK05	
	2000 mm	8GK6850-0KK06	

Crossbars

Versions	Article No.	
	Upper crossbar	8GK6850-0KK00
	Lateral crossbar	8GK6850-0KK01
Adapter for installation of assembly kits in the cabling compartment, width 250 mm (2 units)		8GK9920-0KK01

ALPHA 630 UNIVERSAL wall-mounted distribution boards

Rated current 630 A

					Flat pack	Unequipped distribution boards	Distribution boards with built-in distribution board panels
					Degree of protection		
					IP43	IP30	IP55
							
Height outside	inside	Depth outside	Width outside	inside	Safety class I	Safety class I	Safety class I
450 mm	400 mm	250 mm	650 mm	600 mm	8GK2100-0KS23	–	–
650 mm	600 mm	250 mm	650 mm	600 mm	8GK2100-1KS23	8GK2124-1KK23	–
850 mm	800 mm	250 mm	650 mm	600 mm	8GK2100-2KS23	8GK2124-2KK23	8GK9988-0KL00
1050 mm	1000 mm	250 mm	650 mm	600 mm	8GK2100-3KS23	8GK2124-3KK23	8GK9988-0KL01
			950 mm	900 mm	8GK2100-4KS23	8GK2124-3KK33	–
1250 mm	1200 mm	250 mm	650 mm	600 mm	8GK2100-3KL23	8GK2124-4KK23	8GK9988-0KL02
			950 mm	900 mm	8GK2100-4KL23	8GK2124-4KK33	–

Accessories

Sheet-steel doors

				Flat pack	Unequipped distribution boards
Versions	Cubicle height	Cubicle width	Article No.	Article No.	
Standard	400 mm	600 mm	8GK9515-3KK20	–	
	600 mm	600 mm	8GK9515-4KK20	8GK9515-4KK20	
	800 mm	600 mm	8GK9515-5KK20	8GK9515-5KK23	
	1000 mm	600 mm	8GK9515-6KK20	8GK9515-6KK23	
		900 mm	8GK9515-6KK30	8GK9515-6KK33	
	1200 mm	600 mm	8GK9515-7KK20	8GK9515-7KK23	
For cable compartment	1000 mm	900 mm	8GK9515-7KK30	8GK9515-7KK33	
		900 mm	8GK9515-7KK30	8GK9515-7KK33	
	1200 mm	900 mm	8GK9515-6KK40	8GK9515-6KK43	
		900 mm	8GK9515-7KK40	8GK9515-7KK33	
		600 + 300 mm	–	8GK9515-7KK43	

Transparent doors

				Flat pack	Unequipped distribution boards
Versions	Cubicle height	Cubicle width	Article No.	Article No.	
Standard	400 mm	600 mm	8GK9505-3KK20	–	
	600 mm	600 mm	8GK9505-4KK20	8GK9505-4KK20	
	800 mm	600 mm	8GK9505-5KK20	8GK9505-5KK23	
	1000 mm	600 mm	8GK9505-6KK20	8GK9505-6KK23	
		900 mm	8GK9505-6KK30	8GK9505-6KK33	
	1200 mm	600 mm	8GK9505-7KK20	8GK9505-7KK23	
Giugiaro design	400 mm	600 mm	8GK9507-2KK23	–	
		600 mm	8GK9507-4KK23	8GK9507-4KK23	
	800 mm	600 mm	8GK9507-5KK23	8GK9507-5KK23	
		600 mm	8GK9507-7KK23	8GK9507-7KK23	
	1000 mm	600 mm	8GK9507-7KK33	8GK9507-7KK33	
		900 mm	8GK9507-7KK33	8GK9507-7KK33	
1200 mm	600 mm	8GK9507-8KK23	8GK9507-8KK23		
	900 mm	8GK9507-8KK33	8GK9507-8KK33		

15

Accessories

					Flat pack	Unequipped distribution boards	
Double doors							
	Versions	Width	Cubicle height	Cubicle width	Article No.	Article No.	
	Made of sheet steel	600 + 250 mm ¹⁾	1000 mm	900 mm	8GK9515-6KK20 + 8GK9515-6KK40	8GK9515-6KK23 + 8GK9515-6KK43	
			1200 mm	900 mm	8GK9515-7KK20 + 8GK9515-7KK40	8GK9515-7KK23 + 8GK9515-7KK43	
	Transparent door + sheet-steel door	600 + 250 mm	1000 mm	900 mm	8GK9505-6KK20 + 8GK9515-6KK40	8GK9505-6KK23 + 8GK9515-6KK43	
			1200 mm	900 mm	8GK9505-7KK20 + 8GK9515-7KK40	8GK9505-7KK23 + 8GK9515-7KK43	
	Transparent door in Giugiaro design + sheet-steel door	600 + 250 mm ¹⁾	1600 mm	900 mm	8GK9507-7KK23 + 8GK9515-6KK40	8GK9507-7KK23 + 8GK9515-6KK43	
			1800 mm	900 mm	8GK9507-8KK23 + 8GK9515-7KK40	8GK9507-8KK23 + 8GK9515-7KK43	
	Vertical profile bars for cabling compartment						
				Cubicle height	Cubicle width	Article No.	Article No.
			1000 mm	900 mm	8GK9125-7KK01	8GK9125-7KK01	
			1200 mm	900 mm	8GK9127-8KK01	8GK9127-8KK01	
Front covers for cabling compartment							
	Height	Width	Cubicle height	Cubicle width	Article No.	Article No.	
	1000 mm	250/300 mm	1000 mm	900 mm	8GK9606-7KK10	8GK9606-7KK10	
	600 + 600 mm	250/300 mm	1200 mm	900 mm	8GK9606-4KK10 + 8GK9606-4KK10	8GK9606-4KK10 + 8GK9606-4KK10	
Bases							
	Color	Height	Cubicle height	Cubicle width	Article No.	Article No.	
	Blue-green	100 mm	600/1200 mm	600 mm	8GK9906-0KK23	8GK9906-0KK23	
			1000/1200 mm	900 mm	8GK9606-4KK10	8GK9906-0KK33	
Covers for cable entry and cable duct							
			Cubicle height	Cubicle width	Article No.	Article No.	
			600/1200 mm	600 mm	8GK9920-0KK41	8GK9920-0KK41	
			1000/1200 mm	900 mm	8GK9920-0KK42	8GK9920-0KK42	
Side panels							
	Color		Cubicle height	Cubicle width	Article No.	Article No.	
	Blue-green		600 mm	600 mm	–	8GK9122-4KK01	
			800 mm	600 mm	–	8GK9122-5KK01	
			1000 mm	600/900 mm	–	8GK9122-6KK01	
			1200 mm	600/900 mm	–	8GK9122-7KK01	

¹⁾ For distribution boards of width 900 with double door and vertical profile bar

ALPHA 630 UNIVERSAL floor-mounted distribution boards





Rated current 630 A

					Flat pack	Unequipped distribution boards	Distribution boards with built-in distribution board panels	With assembly kit for 3VL molded case circuit breakers
					Degree of protection			
					IP43	IP30	IP55	IP55
								
Height outside	Height inside	Depth outside	Width outside	Width inside	Safety class I	Safety class I	Safety class I	Safety class I
1650 mm	1600 mm	250 mm	350 mm	300 mm	8GK2300-5KL13	8GK2325-5KK13	–	–
			650 mm	600 mm	8GK2300-5KL23	8GK2325-5KK23	–	–
			950 mm	900 mm	8GK2300-5KL43	8GK2325-5KK43	–	–
1850 mm	1800 mm	250 mm	350 mm	300 mm	8GK2300-6KL13	8GK2325-6KK13	–	–
			650 mm	600 mm	8GK2300-6KL23	8GK2325-6KK23	8GK2348-7KL00	8GK2348-7KL01
			950 mm	900 mm	8GK2300-6KL43	8GK2325-6KK43	–	–
2050 mm	2000 mm	250 mm	350 mm	300 mm	8GK2300-7KL13	8GK2325-7KK13	–	–
			650 mm	600 mm	8GK2300-7KL23	8GK2325-7KK23	–	–
			950 mm	900 mm	8GK2300-7KL43	8GK2325-7KK43	–	–

ALPHA 630 UNIVERSAL floor-mounted distribution boards

Rated current 630 A

Accessories

					Flat pack	Unequipped distribution boards	
Sheet-steel doors							
	Versions	Width	Cubicle height	Cubicle width	Article No.	Article No.	
	Standard	-	1600 mm	300 mm	8GK9515-8KK10	8GK9515-8KK10	
				600 mm	8GK9515-8KK20	8GK9515-8KK20	
				900 mm	8GK9515-8KK30	8GK9515-8KK30	
			1800 mm	300 mm	8GK9515-8KK11	8GK9515-8KK11	
				600 mm	8GK9515-8KK21	8GK9515-8KK21	
				900 mm	8GK9515-8KK31	8GK9515-8KK31	
			2000 mm	300 mm	8GK9515-8KK12	8GK9515-8KK12	
				600 mm	8GK9515-8KK22	8GK9515-8KK22	
				900 mm	8GK9515-8KK32	8GK9515-8KK32	
	For cable compartment	250 mm	1600 mm	900 mm	8GK9515-8KK40	8GK9515-8KK40	
			1800 mm	900 mm	8GK9515-8KK41	8GK9515-8KK41	
			2000 mm	900 mm	8GK9515-8KK42	8GK9515-8KK42	
	Transparent doors						
		Versions		Cubicle height	Cubicle width	Article No.	Article No.
Standard			1600 mm	300 mm	8GK9505-8KK11	8GK9505-8KK11	
				600 mm	8GK9505-8KK20	8GK9505-8KK20	
				900 mm	8GK9505-8KK30	8GK9505-8KK30	
			1800 mm	300 mm	8GK9505-8KK12	8GK9505-8KK12	
				600 mm	8GK9505-8KK21	8GK9505-8KK21	
				900 mm	8GK9505-8KK31	8GK9505-8KK31	
			2000 mm	300 mm	8GK9505-8KK10	8GK9505-8KK10	
				600 mm	8GK9505-8KK22	8GK9505-8KK22	
				900 mm	8GK9505-8KK32	8GK9505-8KK32	
Giugiaro design			1600 mm	600 mm	8GK9507-8KK20	8GK9507-8KK20	
				900 mm	8GK9507-8KK30	8GK9507-8KK30	
			1800 mm	600 mm	8GK9507-8KK21	8GK9507-8KK21	
				900 mm	8GK9507-8KK31	8GK9507-8KK31	
			2000 mm	600 mm	8GK9507-8KK22	8GK9507-8KK22	
	900 mm			8GK9507-8KK32	8GK9507-8KK32		
Double doors							
	Versions	Width	Cubicle height	Cubicle width	Article No.	Article No.	
	Made of sheet steel	600 + 250 mm	1600 mm	900 mm	8GK9515-8KK20 + 8GK9515-8KK40	8GK9515-8KK20 + 8GK9515-8KK40	
				900 mm	8GK9515-8KK21 + 8GK9515-8KK41	8GK9515-8KK21 + 8GK9515-8KK41	
			1800 mm	900 mm	8GK9515-8KK22 + 8GK9515-8KK42	8GK9515-8KK22 + 8GK9515-8KK42	
				900 mm	8GK9515-8KK20 + 8GK9515-8KK40	8GK9515-8KK20 + 8GK9515-8KK40	
			2000 mm	900 mm	8GK9515-8KK21 + 8GK9515-8KK41	8GK9515-8KK21 + 8GK9515-8KK41	
				900 mm	8GK9515-8KK22 + 8GK9515-8KK42	8GK9515-8KK22 + 8GK9515-8KK42	
	Transparent door + sheet-steel door	600 + 250 mm	1600 mm	900 mm	8GK9505-8KK20 + 8GK9515-8KK40	8GK9505-8KK20 + 8GK9515-8KK40	
				900 mm	8GK9505-8KK21 + 8GK9515-8KK41	8GK9505-8KK21 + 8GK9515-8KK41	
			1800 mm	900 mm	8GK9505-8KK22 + 8GK9515-8KK42	8GK9505-8KK22 + 8GK9515-8KK42	
				900 mm	8GK9505-8KK20 + 8GK9515-8KK40	8GK9505-8KK20 + 8GK9515-8KK40	
			2000 mm	900 mm	8GK9505-8KK21 + 8GK9515-8KK41	8GK9505-8KK21 + 8GK9515-8KK41	
900 mm				8GK9505-8KK22 + 8GK9515-8KK42	8GK9505-8KK22 + 8GK9515-8KK42		
Transparent door in Giugiaro design + sheet-steel door	600 + 250 mm	1600 mm	900 mm	8GK9507-8KK20 + 8GK9515-8KK40	8GK9507-8KK20 + 8GK9515-8KK40		
			900 mm	8GK9507-8KK21 + 8GK9515-8KK41	8GK9507-8KK21 + 8GK9515-8KK41		
		1800 mm	900 mm	8GK9507-8KK22 + 8GK9515-8KK42	8GK9507-8KK22 + 8GK9515-8KK42		
			900 mm	8GK9507-8KK20 + 8GK9515-8KK40	8GK9507-8KK20 + 8GK9515-8KK40		
		2000 mm	900 mm	8GK9507-8KK21 + 8GK9515-8KK41	8GK9507-8KK21 + 8GK9515-8KK41		
			900 mm	8GK9507-8KK22 + 8GK9515-8KK42	8GK9507-8KK22 + 8GK9515-8KK42		
Vertical profile bars for cabling compartment							
			Cubicle height	Cubicle width	Article No.	Article No.	
			1600 mm	900 mm	8GK9125-8KK11	8GK9125-8KK11	
			1800 mm	900 mm	8GK9125-8KK12	8GK9125-8KK12	
			2000 mm	900 mm	8GK9125-8KK13	8GK9125-8KK13	

Accessories

Front covers for cabling compartment

Height	Width	Cubicle height	Cubicle width	Flat pack		Unequipped distribution boards	
				Article No.	Article No.	Article No.	Article No.
800 + 800 mm	250/300 mm	1600 mm	300 mm	8GK9607-5KK10 + 8GK9607-5KK10	8GK9607-5KK10 + 8GK9607-5KK10	8GK9607-5KK10 + 8GK9607-5KK10	8GK9607-5KK10 + 8GK9607-5KK10
			900 mm	8GK9606-5KK10 + 8GK9606-5KK10	8GK9606-5KK10 + 8GK9606-5KK10	8GK9606-5KK10 + 8GK9606-5KK10	8GK9606-5KK10 + 8GK9606-5KK10
800 + 1000 mm	250/300 mm	1800 mm	300 mm	8GK9607-5KK10 + 8GK9607-7KK10	8GK9607-5KK10 + 8GK9607-7KK10	8GK9607-5KK10 + 8GK9607-7KK10	8GK9607-5KK10 + 8GK9607-7KK10
			900 mm	8GK9606-5KK10 + 8GK9606-7KK10	8GK9606-5KK10 + 8GK9606-7KK10	8GK9606-5KK10 + 8GK9606-7KK10	8GK9606-5KK10 + 8GK9606-7KK10
1000 + 1000 mm	250/300 mm	2000 mm	300 mm	8GK9607-7KK10 + 8GK9607-7KK10	8GK9607-7KK10 + 8GK9607-7KK10	8GK9607-7KK10 + 8GK9607-7KK10	8GK9607-7KK10 + 8GK9607-7KK10
			900 mm	8GK9606-7KK10 + 8GK9606-7KK10	8GK9606-7KK10 + 8GK9606-7KK10	8GK9606-7KK10 + 8GK9606-7KK10	8GK9606-7KK10 + 8GK9606-7KK10

Bases

Color	Height	Cubicle height	Cubicle width	Article No.	Article No.
Blue-green	100 mm	1600/2000 mm	300 mm	8GK9906-0KK13	8GK9906-0KK13
		1600/2000 mm	600 mm	8GK9906-0KK23	8GK9906-0KK23
		1600/2000 mm	900 mm	8GK9906-0KK33	8GK9906-0KK33

Covers for cable entry and cable duct





Cubicle height	Cubicle width	Article No.	Article No.
1600/2000 mm	300 mm	8GK9920-0KK40	8GK9920-0KK40
1600/2000 mm	600 mm	8GK9920-0KK41	8GK9920-0KK41
1600/2000 mm	900 mm	8GK9920-0KK42	8GK9920-0KK42

Side panels

Color	Cubicle height	Cubicle width	Article No.	Article No.
RAL 7035 (pair)	1600 mm	300/600/900 mm	8GK9120-8KK00	8GK9122-8KK03
	1800 mm	300/600/900 mm	8GK9120-8KK01	8GK9122-8KK04
	2000 mm	300/600/900 mm	8GK9120-8KK02	8GK9122-8KK05

ALPHA UNIVERSAL 125 distribution boards

Rated current 125 A

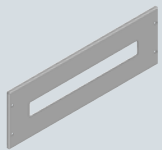
						Surface-mounting distribution boards		Flush-mounting distribution boards	
						With sheet-steel door	With transparent door	With sheet-steel door	With transparent door
						IP43	IP43	IP31D	IP31D
Degree of protection									
Height outside	Height inside	Depth outside	Width outside	Width inside	Tiers (MW = 18 mm)	Safety class I	Safety class I	Safety class I	Safety class I
450 mm	400 mm	140 mm	660 mm	600 mm	48 (2 × 24)	8GK2042-0KL21	8GK2042-0KM21	–	–
650 mm	600 mm	140 mm	660 mm	600 mm	72 (3 × 24)	8GK2042-1KL21	8GK2042-1KM21	–	–
800 mm	850 mm	140 mm	660 mm	600 mm	96 (4 × 24)	8GK2042-2KL21	8GK2042-2KM21	–	–
1050 mm	1000 mm	140 mm	660 mm	600 mm	120 (5 × 24)	8GK2042-3KL21	8GK2042-3KM21	–	–
1250 mm	1200 mm	140 mm	660 mm	600 mm	144 (6 × 24)	8GK2042-4KL21	8GK2042-4KM21	–	–
508 mm	400 mm	140 mm	718 mm	600 mm	48 (2 × 24)	–	–	8GK2043-0KL21	8GK2043-0KM21
708 mm	600 mm	140 mm	718 mm	600 mm	72 (3 × 24)	–	–	8GK2043-1KL21	8GK2043-1KM21
908 mm	800 mm	140 mm	718 mm	600 mm	96 (4 × 24)	–	–	8GK2043-2KL21	8GK2043-2KM21
1108 mm	1000 mm	140 mm	718 mm	600 mm	120 (5 × 24)	–	–	8GK2043-3KL21	8GK2043-3KM21
1308 mm	1200 mm	140 mm	718 mm	600 mm	144 (6 × 24)	–	–	8GK2043-4KL21	8GK2043-4KM21

Accessories

Front covers

- With quick-lock screws and integrated grounding connection

Version	Height	Width	Article No.
Closed	50 mm	600 mm	8GK9620-1KK20
	100 mm	600 mm	8GK9621-1KK20
	150 mm	600 mm	8GK9622-1KK20
	200 mm	600 mm	8GK9623-1KK20
	400 mm	600 mm	8GK9622-2KK20
	600 mm	600 mm	8GK9622-4KK20
	800 mm	600 mm	8GK9622-5KK20
For modular installation devices	150 mm	600 mm	8GK9608-1KK22
	200 mm	600 mm	8GK9608-1KK20
	300 mm	600 mm	8GK9608-2KK22
	400 mm	600 mm	8GK9608-2KK20
	450 mm	600 mm	8GK9608-3KK22
	600 mm	600 mm	8GK9608-4KK20



Standard mounting rails for modular installation devices

Width	Article No.
600 mm	8GK9920-0KK11



Holders for cable duct

Width	Article No.
600 mm	8GK9920-0KK20



Grounding bars, PE

Width	Article No.
600 mm (20 × 5 mm ²)	8GK9920-0KK10



Hinges for covers

Version	Article No.
For hinged covers	8GK9120-0KK11



Rotary handles

Version	Color	Article No.
Plastic	Black	8GK9560-0KK04
Lockable	Black	8GK9560-0KK13



Profile semicylinders E012

Version	Article No.
Insert and key 8GK9560	8GK9560-0KK07



Rotary handles for profile semicylinders

Version	Article No.
For 40 mm profile semicylinders	8GK9560-0KK06



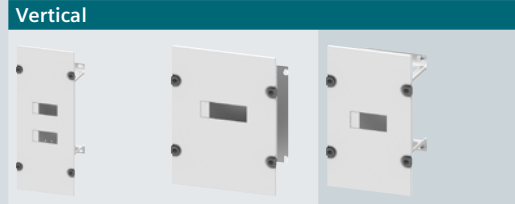
Assembly kits

For 3VA molded case circuit breakers

Horizontal



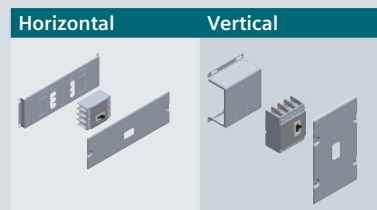
Type	Height outside	Width outside	No. of switching devices	Operating mechanism Rotary	with RCD module Infeed side	without RCD module
3VA10.. and 3VA11.. (100 A/160 A)	200 mm	600 mm	1	–	8GK6735-2KK23	8GK6730-2KK23
			1	■	–	8GK6733-2KK23
	900 mm	600 mm	1	–	8GK6735-2KK33	8GK6730-2KK33
			1	■	–	8GK6733-2KK33
3VA12 .. (160 A/250 A)	200 mm	600 mm	1	–	8GK6736-2KK23	8GK6721-2KK23
			1	■	–	8GK6734-2KK23
	900 mm	600 mm	1	–	8GK6736-2KK33	8GK6721-2KK33
			1	■	–	8GK6734-2KK33
3VA20.. and 3VA22.. (100 A/160 A/250 A)	200 mm	600 mm	1	–	8GK6725-2KK23	8GK6720-2KK23
			1	■	–	8GK6723-2KK23
	900 mm	600 mm	1	–	8GK6725-2KK33	8GK6720-2KK33
			1	■	–	8GK6723-2KK33
3VA23.. and 3VA24.. (400 A/630 A)	400 mm	600 mm	1	–	–	8GK6740-4KK23
		900 mm	1	–	8GK6745-4KK23	8GK6740-4KK33



Type	Height outside	Width outside	No. of switching devices	Operating mechanism Motor	Vertical		without RCD module		
					with RCD module Infeed side	At side			
3VA10.. and 3VA11.. (100 A/160 A)	200 mm	300 mm	1	–	–	–	8GK6731-2KK13		
			3	–	–	–	8GK6731-2KK23		
		600 mm	3	■	–	–	–	8GK6734-4KK23	
			5	–	–	–	–	8GK6731-2KK33	
			5	■	–	–	–	8GK6734-4KK33	
	400 mm	250 mm	1	–	–	–	–	8GK6730-4KK43	
			1	–	–	8GK6731-6KK13	8GK6730-4KK13		
		300 mm	1	■	–	8GK6738-6KK13	8GK6734-4KK13		
			1	■	–	8GK6731-6KK23	8GK6730-4KK23		
		600 mm	3	–	–	8GK6737-6KK23	–		
			3	■	–	–	–	8GK6730-4KK33	
		900 mm	3	–	–	–	–	8GK6731-6KK33	
			3	–	–	–	–	8GK6731-6KK33	
			3	■	–	8GK6737-6KK33	–		
		600 mm	250 mm	1	–	–	8GK6735-4KK43	–	–
				1	–	–	8GK6735-6KK13	–	–
			300 mm	1	■	–	8GK6736-6KK13	–	–
				1	■	–	8GK6736-6KK23	–	–
600 mm	3		–	–	8GK6735-6KK23	–	–		
	3		–	–	8GK6736-6KK23	–	–		
900 mm	5		■	–	8GK6736-6KK33	–	–		
	5		■	–	–	–	–		
3VA12 ... (160 A/250 A)	400 mm	300 mm	1	–	–	–	8GK6721-4KK13		
			3	–	–	–	8GK6721-4KK23		
		600 mm	3	■	–	–	–	8GK6722-6KK23	
			5	–	–	–	–	8GK6721-4KK33	
			5	■	–	–	–	8GK6722-6KK33	
	600 mm	250 mm	1	–	–	8GK6732-6KK13	–	8GK6730-6KK13	
			1	–	–	8GK6722-6KK13	8GK6721-6KK13		
		300 mm	1	–	–	8GK6724-6KK23	8GK6721-6KK23		
			1	■	–	8GK6723-6KK23	–		
		600 mm	3	–	–	8GK6724-6KK33	8GK6721-6KK33		
			3	■	–	8GK6723-6KK33	–		
		900 mm	5	–	–	–	–	8GK6721-6KK33	
5	■		–	–	–	8GK6723-6KK33			
3VA20.. and 3VA22.. (100 A/160 A/250 A)	400 mm	300 mm	1	–	–	–	8GK6720-4KK13		
			3	–	–	–	8GK6720-4KK23		
		600 mm	3	■	–	–	–	8GK6724-4KK23	
			3	■	–	–	–	8GK6720-4KK33	
	600 mm	300 mm	5	–	–	–	8GK6720-4KK33		
			5	■	–	–	–	8GK6724-4KK33	
		600 mm	3	–	–	8GK6725-6KK13	–	–	
			3	–	–	8GK6725-6KK23	–	–	
900 mm	5	–	–	8GK6725-6KK33	–	–			
	5	–	–	–	–	–			
3VA23.. and 3VA24.. (400 A/630 A)	600 mm	300 mm	1	–	–	–	8GK6740-6KK13		
			2	–	–	–	8GK6740-6KK23		
		3	–	–	8GK6745-6KK33	–	8GK6740-6KK33		

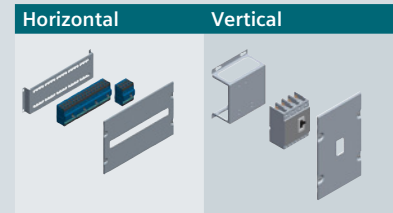
Assembly kits

For 3VL molded case circuit breakers



Type	Version	Height outside	Width outside	No. of switching devices	Horizontal	Vertical		
VL160X – VL160 – VL250	Max. 250 A	200 mm	300 mm ²⁾	1	8GK6711-2KK13	–		
			600 mm	3	8GK6710-2KK23	–		
			900 mm	5	8GK6710-2KK33	–		
		400 mm	250 mm ¹⁾	1	–	8GK6710-4KK13	–	
			300 mm ²⁾	1	–	8GK6711-4KK13	–	
			600 mm	3	–	8GK6710-4KK23	–	
			900 mm	5	–	8GK6710-4KK33	–	
		With rotary operating mechanism	200 mm	600 mm	3	8GK6711-2KK23	–	
				900 mm	5	8GK6701-2KK33	–	
		VL160X	With interconnected residual current operated circuit breaker	300 mm	600 mm	1	–	8GK6710-3KK23
900 mm	1				–	8GK6710-3KK33		
With residual current operated circuit breaker mounted underneath	200 mm		600 mm	3	8GK6712-2KK23	–		
			900 mm	5	8GK6704-2KK33	–		
			400 mm	250 mm ¹⁾	1	–	8GK6725-4KK13	
	600 mm		250 mm ¹⁾	1	–	8GK6713-4KK13		
			600 mm	3	–	8GK6710-6KK23		
			900 mm	5	–	8GK6710-6KK33		
VL160 – VL250	With residual current operated circuit breaker mounted underneath	200 mm	600 mm	3	8GK6713-2KK23	–		
			900 mm	5	8GK6705-2KK33	–		
		400 mm	250 mm ¹⁾	1	–	8GK6726-4KK13		
			600 mm	250 mm ¹⁾	1	–	8GK6712-4KK13	
		600 mm	250 mm ¹⁾	1	–	8GK6711-6KK23		
			600 mm	3	–	8GK6711-6KK23		
			900 mm	5	–	8GK6711-6KK33		
			900 mm	5	–	8GK6711-6KK33		
VL400	Max. 400 A	200 mm	600 mm	1	8GK6714-2KK23	–		
			900 mm	2	8GK6706-2KK33	–		
			600 mm	250 mm ¹⁾	1	–	8GK6710-6KK13	
				300 mm ²⁾	1	–	8GK6723-6KK13	
		600 mm	600 mm	1	–	8GK6712-6KK23		
			900 mm	2	–	8GK6712-6KK33		
		With residual current operated circuit breaker mounted underneath	200 mm	600 mm	1	8GK6715-2KK23	–	
				900 mm	2	8GK6707-2KK33	–	
			600 mm	250 mm ¹⁾	1	–	8GK6712-6KK13	
				300 mm ²⁾	1	–	8GK6727-6KK13	
				600 mm	1	–	8GK6713-6KK23	
				900 mm	2	–	8GK6713-6KK33	
		VL630	Max. 630 A	400 mm	600 mm	1	8GK6715-4KK23	–
					900 mm	1	8GK6715-4KK33	–
600 mm	250 mm ¹⁾			1	–	8GK6711-6KK13		
	300 mm ²⁾			1	–	8GK6724-6KK13		
	600 mm			1	–	8GK6714-6KK23		
	900 mm			1	–	8GK6714-6KK33		
VL800	Max. 800 A (for ALPHA 800 UNIVERSAL only)			600 mm	600 mm	1	–	8GK6700-6KK24
					900 mm	1	–	8GK6700-6KK34

For 3VT switch disconnectors



Type	Height outside	Width outside	No. of switching devices	Horizontal	Vertical
3VT	200 mm	600 mm	1	8GK6750-2KK23	–
		900 mm	1	8GK6750-2KK33	–
	400 mm	250 mm ³⁾	1	–	8GK6750-4KK13
		300 mm ²⁾	2	–	8GK6751-4KK13
		600 mm	5	–	8GK6750-4KK23
3VT2	200 mm	600 mm	1	8GK6754-2KK23	–
		900 mm	1	8GK6756-2KK33	–
	600 mm	250 mm ³⁾	1	–	8GK6750-6KK13
		300 mm ²⁾	1	–	8GK6753-6KK13
		600 mm	2	–	8GK6752-6KK23
3VT3	400 mm	600 mm	1	8GK6755-4KK23	–
		900 mm	1	8GK6755-4KK33	–
	600 mm	250 mm ³⁾	1	–	8GK6751-6KK13
		300 mm ²⁾	1	–	8GK6754-6KK13
		600 mm	1	–	8GK6754-6KK23
		900 mm	1	–	8GK6754-6KK33

¹⁾ The assembly kits for 3VT1 molded case circuit breakers have a cover with a cutout and are designed to accommodate the installation of both 3 and 4-pole circuit breakers. If installing 3-pole circuit breakers, we recommend that you do not leave the cutout open but cover it with blanking strip 8GK9910-0KK00. For further details, please refer to the mounting instructions at: <http://support.automation.siemens.com/WW/view/en/5347794/130000>

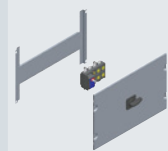
²⁾ In order to install assembly kits in the cubicles width 300 mm of the ALPHA 630 UNIVERSAL, you must order the following inner supports: 8GK9126-8KK03 (height 1600 mm), 8GK9126-8KK04 (height 1800 mm) and 8GK9126-8KK05 (height 2000 mm). In order to use cubicle width 300 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order the following side supports: 8GK6850-0KK02 (height 1600 mm), 8GK6850-0KK03 (height 1800 mm) and 8GK6850-0KK04 (height 2000 mm).

³⁾ In order to install assembly kits in the cubicles width 250 mm of the ALPHA 630 UNIVERSAL you require the following mounting rails (pair): 8GF9655 (height 1000 mm), 8GF9656 (height 1200 mm), 8GF9650 (height 1600 mm), 8GF9658 (height 1800 mm) and 8GF9654 (height 2000 mm). In order to use box width 250 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order side supports and, for each assembly kit, a pair of crossbars 8GK9920-0KK01.

Assembly kits

For 3KA7 switch disconnectors

Vertical



	Description	Height outside	Width outside	Distribution board depth	No. of switching devices	
3KA7	3KA711 size 1 max. 125 A	200 mm	600 mm	–	1	8GK6400-2KK20
			900 mm	–	3	8GK6400-2KK30
	400 mm	250 mm ¹⁾	–	1	8GK6400-4KK10	
		300 mm ²⁾	–	1	8GK6400-4KK11	
	3KA712 size 2 max. 250 A	400 mm	250 mm ¹⁾	–	1	8GK6401-4KK10
			300 mm ²⁾	–	1	8GK6401-4KK12
600 mm		–	–	1	8GK6400-4KK20	
		900 mm	–	3	8GK6400-4KK30	
3KA713 size 3 max. 400 A	400 mm	600 mm	–	1	8GK6401-4KK20	
		900 mm	–	3	8GK6400-4KK31	
3KA7 / 3KL7	3KA7/3KL711 size 1 max. 125 A	200 mm	600 mm	250 mm	2	8GK6430-4KK24
			900 mm	250 mm	2	8GK6430-4KK34
		400 mm	250 mm	250 mm	1	8GK6430-4KK03
			300 mm	250 mm	1	8GK6430-4KK14
	3KA7/3KL712 size 2 max. 250 A	400 mm	250 mm	400 mm	1	8GK6431-4KK04
			300 mm	400 mm	1	8GK6431-4KK14
		600 mm	250 mm	250 mm	2	8GK6431-4KK24
			900 mm	250 mm	2	8GK6431-4KK34
	3KA7/3KL713 size 3 max. 400 A	400 mm	600 mm	400 mm	1	8GK6432-4KK24
			900 mm	400 mm	1	8GK6432-4KK34
		400 mm	600 mm	400 mm	1	8GK6433-4KK24
			900 mm	400 mm	1	8GK6433-4KK34

¹⁾ In order to use box width 250 mm in the ALPHA 630 UNIVERSAL as a switchgear compartment, the following mounting rails (pair) are required:

8GF9655 (height 1000 mm),
8GF9656 (height 1200 mm),
8GF9650 (height 1600 mm),
8GF9658 (height 1800 mm),
8GF9654 (height 2000 mm).

In order to use box width 250 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order side supports and, for each assembly kit, a pair of crossbars 8GK9920-0KK01.

²⁾ In order to use cubicle width 300 mm in the ALPHA 630 UNIVERSAL as a switchgear compartment, you require the following inner supports:

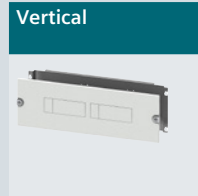
8GK9126-8KK03 (height 1600 mm),
8GK9126-8KK04 (height 1800 mm),
8GK9126-8KK05 (height 2000 mm).

In order to use cubicle width 300 mm in the ALPHA 800 UNIVERSAL as a switchgear compartment, you must order the following side supports:

8GK6850-0KK02 (height 1600 mm),
8GK6850-0KK03 (height 1800 mm),
8GK6850-0KK04 (height 2000 mm).

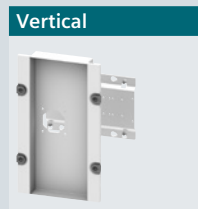
³⁾ Switch disconnectors with door-coupling rotary operating mechanism with key interlocking cannot be mounted

For 3KF switch disconnectors with fuses



Type	Rated current	Height	Width	Depth	Operating mechanism in center	Door-coupling rotary operating mechanism	
2x 3KF1	80 A	200 mm	600 mm	250 mm	■	–	8GK6431-2KK23
			900 mm	250 mm	■	–	8GK6431-2KK33
2x 3KF2	160 A	200 mm	600 mm	250 mm	■	–	8GK6432-2KK23
			900 mm	250 mm	■	–	8GK6432-2KK33
2x 3KF1/3KF2/3KF3/3KF4	400 A	400 mm	600 mm	400 mm	–	■	8GK6431-4KK33
			900 mm	400 mm	–	■	8GK6432-4KK33

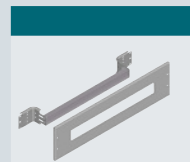
For 3KD switch disconnectors



Height outside	Width outside	Size	No. of switching devices	Operating mechanism	Door-coupling rotary operating mechanism	
400 mm	250 mm	1.2 / 3	1 / 1	■	–	8GK6430-4KK13
	600 mm	1.2 / 3.4	2 / 1	■	–	8GK6430-4KK23
	900 mm	1–4	2	■	–	8GK6430-4KK33

Assembly kits

For modular installation devices



Height outside	Width outside	No. of tiers	MW	
150 mm	600 mm	1	24	8GK6302-1KK23
	900 mm	1	36	8GK6302-1KK33
200 mm	300 mm	1	12	8GK6352-2KK13
	600 mm	1	24	8GK6352-2KK23
	900 mm	1	36	8GK6352-2KK33

Accessories

Standard mounting rails



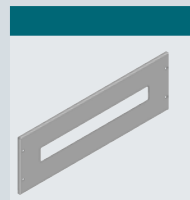
Version	Width	No. of tiers	Article No.
For mounting modular devices at various depths	600 mm	1	8GF9670
	900 mm	1	8GF9671

Depth adapters 9 mm



Version	Width	No. of tiers	MW	Article No.
For linking 5SY and 5SJ on standard mounting rails, L 360 mm ²⁾	600 mm	1	20	8GF9670-1

For front cover with cutout



Height outside	Width outside	No. of tiers	MW	
150 mm	600 mm	1	24	8GK9608-1KK22
	900 mm	1	36	8GK9608-1KK32
200 mm	600 mm	1	24	8GK9608-1KK20
	900 mm	1	36	8GK9608-1KK30
300 mm	600 mm	2	48	8GK9608-2KK22
	900 mm	2	72	8GK9608-2KK32
400 mm	600 mm	2	48	8GK9608-2KK20
	900 mm	2	72	8GK9608-2KK30
450 mm	600 mm	3	72	8GK9608-3KK22
600 mm	600 mm	3	72	8GK9608-4KK20
	900 mm	3	108	8GK9608-4KK30

Accessories

Standard mounting rails

Version	Width	No. of tiers	Article No.
For mounting modular devices at various depths	600 mm	1	8GF9670
	900 mm	1	8GF9671



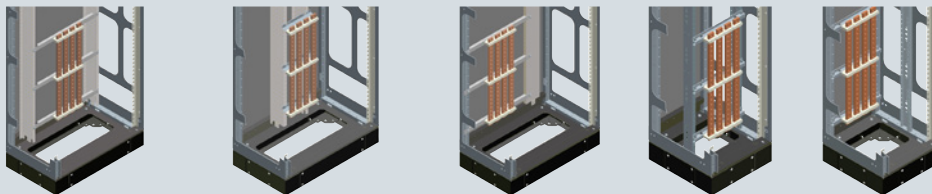
Depth adapters 9 mm

Version	Width	No. of tiers	MW	Article No.
For linking 5SY and 5SJ on standard mounting rails, L 360 mm ²⁾	600 mm	1	20	8GF9670-1



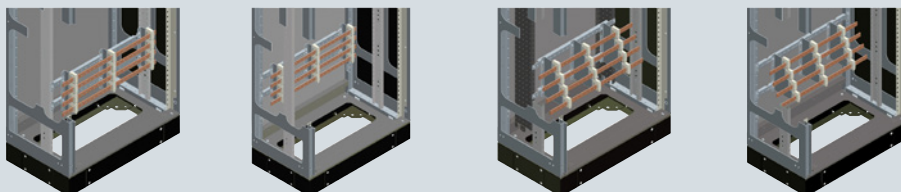
Busbars

Vertical installation of rear busbars (single bars only)



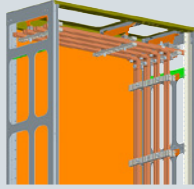
Version	Width 600/900 mm	For a spacing of 150 mm, width 600/900 mm	Recessed, width 600/900 mm	Width 300 mm	Recessed, width 300 mm
Busbar supports:	8GF5764/65 (width 600 mm) 8GF5766/67 (width 900 mm)	8GF5762/63	8GF5764/65 (width 600 mm) 8GF5766/67 (width 900 mm)	8GF5768/70	8GF5768/70
Supplements:	Rear universal supports	8GK6850-0KK05 /06 (2 units)	8GK6850-0KK05 /06 (2 units)	8GK6850-0KK05 /06 (1 unit)	–

Horizontal busbars (single bars only)



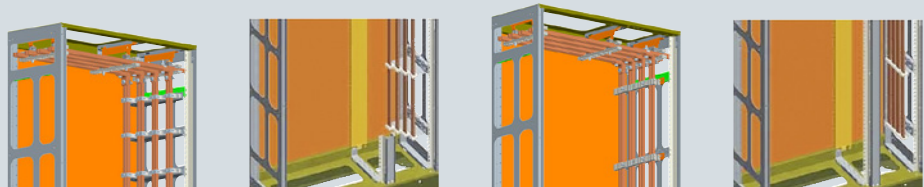
Version	Front	Recessed	At front, with steps	Recessed, with steps
Busbar supports:	8GF9652 (width 600 mm) 8GF9653 (width 900 mm)	8GF9652 (width 600 mm) 8GF9653 (width 900 mm)	8GF5760/61	8GF5760/61
Supplements:	Support plate	8GK9920-0KK35 (width 600 mm) 8GK9920-0KK36 (width 900 mm)	8GK9920-0KK35 (width 600 mm) 8GK9920-0KK36 (width 900 mm)	8GF9652 (width 600 mm) 8GF9653 (width 900 mm)
	Rear universal supports	–	8GK6850-0KK05 /06 (2 units)	–

Horizontal busbars at top (double bars only)




Version		
Busbar supports	With support plate	8GK9750-0KK02
	Without support plate	8PQ4000-1BA12
Supplements	If there is no support 8GK9750-0KK02 mounted onto the side of the cabling compartment, you will need to order an upper crossbar 8GK6850-0KK00.	

Vertical busbars, for sides





Version		Double busbar with steps	Single busbar with steps	Double busbar	Busbar
Busbar supports:		8GK9750-0KK01	8GF5760/61	8GK9750-0KK02	8GF5762/63
Supplements	Lateral crossbar	8GK6850-0KK01	8GK6850-0KK01	8GK6850-0KK01	8GK6850-0KK01


Busbars

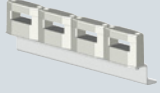
		ALPHA 630	ALPHA 800
Copper busbars			
	Busbar cross-section	Length	Article No.
	15 × 5	2000 mm	8GF5751
		1300 mm	8GF5771
	20 × 5	2000 mm	8GF5737
		1300 mm	8GF5772
	30 × 5	2000 mm	8GF5742
1300 mm		8GF5773	
30 × 10	2000 mm	8GF5752	
	1300 mm	8GF5774	

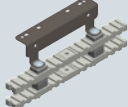
		ALPHA 630	ALPHA 800
Copper grounding bars			
	Busbar cross-section	Length	Width
	20 × 5	1300/2000 mm	600 mm
			900 mm
		Article No.	Article No.
		8GK9920-0KK10	8GK9920-0KK10
		8GK9920-0KK13	8GK9920-0KK13

		ALPHA 630	ALPHA 800	
Busbar supports				
Vertical at side / horizontal, at front, graded				
	Busbar cross-section	Width	Number of poles	
	15/20/30 × 5	600/900 mm	4-pole	
			50 mm	
	30 × 10	600/900 mm	4-pole	50 mm
	15/20/30 × 10	600/900 mm	4-pole	50 mm
20/30 × 10	600/900 mm	4-pole	50 mm	
		Article No.	Article No.	
		8GF5760	8GF5760	
		8GF5761	8GF5761	
		–	8GK9750-0KK01	
		–	8GK9750-0KK02	

		ALPHA 630	ALPHA 800
Vertical			
	Busbar cross-section	Width	Number of poles
	15/20/30 × 5	300 mm	4-pole
			50 mm
30 × 10	300 mm	4-pole	50 mm
		Article No.	Article No.
		8GF5768	8GF5768
		8GF5770	8GF5770



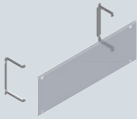
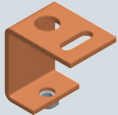
		ALPHA 630	ALPHA 800	
Vertical at rear				
	Busbar cross-section	Width	Number of poles	
	15/20/30 × 5	600 mm	4-pole	
			50 mm	
	30 × 10	600 mm	4-pole	50 mm
			900 mm	4-pole
		Article No.	Article No.	
		8GF5764	8GF5764	
		8GF5766	8GF5766	
		8GF5765	8GF5765	
		8GF5767	8GF5767	

		ALPHA 630	ALPHA 800
Horizontal, at front¹⁾			
	Busbar cross-section	Width	Number of poles
	15/20/30 × 5	300/600/900 mm	4-pole
			50 mm
	30 × 10	300/600/900 mm	4-pole
600/900 mm			4-pole
		Article No.	Article No.
		8GF5762	8GF5762
		8GF5763	8GF5763
		–	8GK9608-1KK22

		ALPHA 630	ALPHA 800
Horizontal, at top			
	Busbar cross-section	Width	Number of poles
	20/30 × 10	600/900 mm	4-pole
		Article No.	Article No.
		–	8GK9750-0KK02
			8PQ4000-1BA12

¹⁾ Can be mounted directly on equipment racks with a clearance of 525 mm (width 600 mm) and 825 mm (width 900 mm).

Further accessories

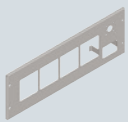
				ALPHA 630	ALPHA 800
Set of screws/bolts for slotted bars					
	Cross-section	Outer thread	Tightening torque	Article No.	Article No.
	15/20/30 × 5	M6	8 Nm	8GF5891	8GF5891
	30 × 10	M8	20 Nm	8GF5892	8GF5892
Crossbars for installation of support					
	Version	Width		Article No.	Article No.
	For 8GF5762, 8GF5760, 8GF5763, 8GK9608-1KK22	600 mm		8GF9652	8GF9652
		900 mm		8GF9653	8GF9653
	For 8GF5760	600 mm		8GK9920-0KK35	8GK9920-0KK35
		900 mm		8GK9920-0KK36	8GK9920-0KK36
	For 8GK9750-0KK02	400 mm		–	8GK6850-0KK00
	For 8GF5760, 8GF5768, 8GF5761, 8GF5770, 8GK9750-0KK01, 8GK9750-0KK02	400 mm		–	8GK6850-0KK01
Transparent cover					
	Version	Width		Article No.	Article No.
	For horizontal busbars, at front	600 mm		8GK9920-0KK37	8GK9920-0KK37
		900 mm		8GK9920-0KK38	8GK9920-0KK38
Connecting kit for double bars					
	Version		Current	Article No.	Article No.
	Connecting kit for upper horizontal bars – vertical busbars		800 A	–	8GK9790-0KK00
	Connecting kit for upper horizontal busbars		800 A	–	8GK9790-0KK01
Holder for grounding bar					
				Article No.	Article No.
				–	8GK9750-0KK00

Accessories

Covers and holders

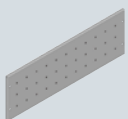
125 630 800

Covers for mounting measuring instruments




Measuring devices	Type	Height	Width	Article No.	125	630	800
72 × 72	2 instruments + 2 selectors	200 mm	600 mm	8GK9610-1KK20	■	■	■
			900 mm	8GK9610-1KK30	■	■	■
	4 instruments + 1 selector	200 mm	600 mm	8GK9611-1KK20	■	■	■
			900 mm	8GK9611-1KK30	■	■	■
96 × 96	2 instruments + 2 selectors	200 mm	600 mm	8GK9612-1KK20	■	■	■
			900 mm	8GK9612-1KK30	■	■	■
	4 instruments + 1 selector	200 mm	600 mm	8GK9613-1KK20	■	■	■
			900 mm	8GK9613-1KK30	■	■	■

Covers for pushbuttons and indicator lights



Height	Width	Article No.	125	630	800
200 mm	600 mm	8GK9630-1KK20	■	■	■
	900 mm	8GK9631-1KK20	■	■	■

Non-transparent covers




Height	Width	Article No.	125	630	800
50 mm	600 mm	8GK9620-1KK20	■	■	■
	900 mm	8GK9620-1KK30	■	■	■
100 mm	600 mm	8GK9621-1KK20	■	■	■
	900 mm	8GK9621-1KK30	■	■	■
150 mm	600 mm	8GK9622-1KK20	■	■	■
	900 mm	8GK9622-1KK30	■	■	■
200 mm	300 mm	8GK9607-1KK10	■	■	■
	600 mm	8GK9623-1KK20	■	■	■
	900 mm	8GK9623-1KK30	■	■	■
400 mm	250 mm	8GK9606-2KK10	■	■	■
	300 mm	8GK9607-2KK10	■	■	■
	600 mm	8GK9622-2KK20	■	■	■
	900 mm	8GK9622-2KK30	■	■	■
600 mm	250 mm	8GK9606-4KK10	■	■	■
	300 mm	8GK9607-4KK10	■	■	■
	600 mm	8GK9622-4KK20	■	■	■
	900 mm	8GK9622-4KK30	■	■	■
800 mm	250 mm	8GK9606-5KK10	■	■	■
	300 mm	8GK9607-5KK10	■	■	■
	600 mm	8GK9622-5KK20	■	■	■
	900 mm	8GK9622-5KK30	■	■	■
1000 mm	250 mm	8GK9606-7KK10	■	■	■
	300 mm	8GK9607-7KK10	■	■	■

Deep-drawn covers 25 mm

Height	Width	Article No.	125	630	800
800 mm	600 mm	8GK9635-5KK20	■	■	■
	900 mm	8GK9635-5KK30	■	■	■
1000 mm	600 mm	8GK9636-7KK20	■	■	■
	900 mm	8GK9636-7KK30	■	■	■

Deep-drawn front covers 35 mm

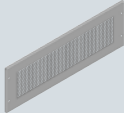


Height	Width	Article No.	125	630	800
200 mm	600 mm	8GK9605-1KK20	■	■	■
	900 mm	8GK9605-1KK30	■	■	■
400 mm	600 mm	8GK9605-2KK20	■	■	■
	900 mm	8GK9605-2KK30	■	■	■
600 mm	600 mm	8GK9605-4KK20	■	■	■
	900 mm	8GK9605-4KK30	■	■	■


Covers and holders

125 630 800


Covers with ventilation openings IP30

	Height	Width	Article No.	125	630	800
	200 mm	600 mm	8GK9632-1KK20	■	■	■
		900 mm	8GK9633-1KK20	■	■	■

Holders for horizontal cable ducts / horizontal busbars (pair)


	Width	Article No.	125	630	800
	600 mm	8GF9652	■	■	■
	900 mm	8GF9653	■	■	■

Horizontal crossbars with steps (pair)

	Width	Article No.	125	630	800
	600 mm	8GK9920-0KK35	■	■	■
	900 mm	8GK9920-0KK36	■	■	■


Mounting rail pair

- ALPHA 630 UNIVERSAL vertical/horizontal busbar support, with steps
- Vertical side terminal strip (not suitable for use in ALPHA 800 UNIVERSAL)

	Height	Article No.	125	630	800
	1000 mm	8GF9655	■	■	■
	1200 mm	8GF9656	■	■	■
	1600 mm	8GF9650	■	■	■
	1800 mm	8GF9658	■	■	■
	2000 mm	8GF9654	■	■	■

Inner supports

- For using cubicle B 300 as a switchgear compartment in ALPHA 630 UNIVERSAL (not suitable for use in ALPHA 800 UNIVERSAL)

	Height	Article No.	125	630	800
	1600 mm	8GK9126-8KK03	■	■	■
	1800 mm	8GK9126-8KK04	■	■	■
	2000 mm	8GK9126-8KK05	■	■	■

Accessories

Mounting plates and inner subdivisions

125 630 800

Modular mounting plates

- ALPHA 800 UNIVERSAL: for mounting on side supports or on the base of the cabinet



Height	Width	Article No.	125	630	800
200 mm	600 mm	8GF7155	■	■	■
	900 mm	8GF7158	■	■	■
400 mm	600 mm	8GF7156	■	■	■
	900 mm	8GF7160	■	■	■
600 mm	600 mm	8GF7157	■	■	■
	900 mm	8GF7161	■	■	■

Recessed modular mounting plates

- ALPHA 800 UNIVERSAL: for mounting on two rear supports or on the rear panel of the cabinet with one rear support



Height	Width	Article No.	125	630	800
200 mm	600 mm	8GF9676	■	■	■
	900 mm	8GF9680	■	■	■
400 mm	600 mm	8GF9677	■	■	■
	900 mm	8GF9681	■	■	■
600 mm	600 mm	8GF9678	■	■	■
	900 mm	8GF9682	■	■	■

2 mm mounting plates for electrotechnical use with height and width of the cabinet

- ALPHA 800 UNIVERSAL: Plates that are not as high as the cabinet can be mounted using side supports and holders 8GF9652/3



Height	Width	Article No.	125	630	800
600 mm	600 mm	8GK9535-4KK21	■	■	■
800 mm	600 mm	8GK9535-5KK21	■	■	■
1000 mm	600 mm	8GK9536-7KK21	■	■	■
	900 mm	8GK9536-7KK31	■	■	■
1200 mm	600 mm	8GK9537-8KK21	■	■	■
	900 mm	8GK9537-8KK31	■	■	■
1600 mm	600 mm	8GK9535-8KK23	■	■	■
	900 mm	8GK9535-8KK26	■	■	■
1800 mm	600 mm	8GK9535-8KK24	■	■	■
	900 mm	8GK9535-8KK34	■	■	■
2000 mm	600 mm	8GK9535-8KK25	■	■	■
	900 mm	8GK9535-8KK35	■	■	■

Adjustable depth brackets for mounting plates



Distribution board depth	Article No.	125	630	800
250 mm	8GK9930-0KK03		■	

Partitions for ALPHA 630 UNIVERSAL




Mounting	Height	Width	Article No.	125	630	800
Horizontal	–	250 mm	8GK9525-0KK03		■	
	–	300 mm	8GK9525-0KK13		■	
	–	600 mm	8GK9525-0KK23		■	
	–	900 mm	8GK9525-0KK33		■	
Vertical	800 mm	–	8GK9525-5KK03		■	
	1000 mm	–	8GK9525-6KK03		■	
	1200 mm	–	8GK9525-7KK03		■	
	1600 mm	–	8GK9525-8KK03		■	
	1800 mm	–	8GK9525-8KK13		■	
	2000 mm	–	8GK9525-8KK23		■	

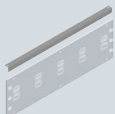
Mounting plates and inner subdivisions

125 630 800

Partitions for ALPHA 800 UNIVERSAL incabinets in form 2b

Mounting	Height	Width	Article No.	125	630	800
 Horizontal subdivisions between devices	–	300 mm	8GK9526-0KK06			■
	–	600 mm	8GK9526-0KK07			■
	–	900 mm	8GK9526-0KK08			■
 Horizontal subdivisions between upper busbar compartment and devices	–	250 mm	8GK9527-0KK05			■
	–	300 mm	8GK9526-0KK03			■
	–	600 mm	8GK9526-0KK04			■
	–	900 mm	8GK9526-0KK05			■
 Vertical subdivisions between the switchgear compartment and busbar compartment	1600 mm	600 mm	8GK9526-0KK00			■
	1800 mm	600 mm	8GK9526-0KK01			■
	2000 mm	600 mm	8GK9526-0KK02			■

Transparent covers

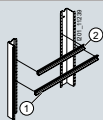
Width	Article No.	125	630	800
 250 mm	8GK9527-0KK03	■	■	■
300 mm	8GK9527-0KK00	■	■	■
600 mm	8GK9527-0KK01	■	■	■
900 mm	8GK9527-0KK02	■	■	■

Accessories

Holders for terminal strips and locking systems

125 630 800

Standard mounting rails for terminal blocks



Version	Height	Width	Article No.			
Horizontal	–	600 mm	8GF9672	■	■	■
	–	900 mm	8GF9674	■	■	■
Horizontal, recessed	–	600 mm	8GF9673	■	■	■
	–	900 mm	8GF9675	■	■	■
Vertical with 3 mounting rails	200 mm	600 mm	8GF7175	■	■	■
	400 mm	600 mm	8GF7176	■	■	■
Vertical with 5 mounting rails	–	900 mm	8GF7178	■	■	■
	400 mm	900 mm	8GF7180	■	■	■

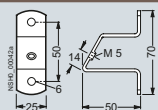
Holder for vertical terminal strips in side compartment L = 900 mm



- ALPHA 800 UNIVERSAL: Each holder must be mounted onto a lateral crossbar

Width	Article No.			
600/900 mm	8GF9683	■	■	■

Mounting brackets



Version	Width	Article No.			
For angular mounting of the terminal blocks	600/900 mm	8WA746	■	■	■

Holders for standard mounting rails

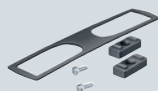
Version	Scope of supply	Width	Article No.			
For mounting the terminal strip vertically in the cabling compartment	4 units	600/900 mm	8GK9920-0KK28	■	■	■

Standard locking devices for wall-mounted distribution boards



Material	Width	Article No.			
Made of plastic, black (spare part)	600/900 mm	8GK9560-0KK04	■	■	■

Seals for standard locking devices



Degree of protection	Width	Article No.			
IP55	600/900 mm	8GK9560-0KK05	■	■	■

Rotary handle locking mechanism



- For wall-mounted distribution boards, IP43 and IP55, semicylinder insert possible for E012

Width	Article No.			
600/900 mm	8GK9560-0KK06	■	■	■

Profile semicylinders E012

- Insert and key



Width	Article No.			
600/900 mm	8GK9560-0KK07	■	■	■

Locking systems for floor-mounted distribution boards




Version	Width	Article No.			
Espagnolette lock with pushbutton (replacement part)	600/900 mm	8GK9561-0KK01	■	■	■
Insert for profile semicylinder with key	600/900 mm	8GK9561-0KK02	■	■	■
Profile semicylinder, 40 mm with lock E012 (for use only with espagnolette lock)	600/900 mm	8GK9561-0KK00	■	■	■


Further accessories

125 630 800


Assembly kit for mounting flat pack cabinets for self-assembly, IP43

	Height	Article No.	125	630	800
	400 mm	8GK9126-3KK00	■	■	■
	600 mm	8GK9126-4KK00	■	■	■
	800 mm	8GK9126-5KK00	■	■	■
	1000 mm	8GK9126-6KK00	■	■	■
	1200 mm	8GK9126-7KK00	■	■	■
	1600 mm	8GK9126-8KK00	■	■	■
	1800 mm	8GK9126-8KK01	■	■	■
	2000 mm	8GK9126-8KK02	■	■	■


Z-shaped crossbar for lifting the flat pack for self-assembly

	Height	Article No.	125	630	800
	600 mm	8GK9127-0KK01	■	■	■
	900 mm	8GK9127-0KK02	■	■	■
	1200 mm	8GK9127-0KK03	■	■	■
	1500 mm	8GK9127-0KK04	■	■	■
	1800 mm	8GK9127-0KK05	■	■	■


Z-shaped crossbar for mounting and vertical linking of wall-mounted distribution boards

	Height	Article No.	125	630	800
	1200 mm	8GK9920-0KK43	■	■	■
	1400 mm	8GK9920-0KK44	■	■	■
	1600 mm	8GK9920-0KK45	■	■	■
	1800 mm	8GK9920-0KK46	■	■	■

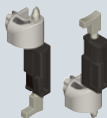
Flange plates for flat pack delivery (optional)

	Height	Article No.	125	630	800
	300 mm	8GK9120-0KK10	■	■	■
	600 mm	8GK9120-0KK20	■	■	■

Ventilation grilles – side panels

	Scope of supply	Article No.	125	630	800
	4 units	8GK9120-0KK30	■	■	■

Replacement hinges for doors for wall/floor-mounted distribution boards

	Scope of supply	Article No.	125	630	800
	2 units	8GK9920-0KK24	■	■	■


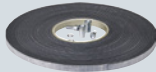







Hinges for front covers

	Scope of supply	Article No.	125	630	800
	10 units	8GK9120-0KK11	■	■	■

Hinges for covers

	Article No.	125	630	800
	8PQ2000-0BA08	■	■	■

Accessories

Further accessories		125	630	800		
Quick-lock screws for ALPHA cabinets with ¼ turn						
	Scope of supply 20 units	Article No. 8GK9562-0KK00	■	■	■	
Mounting kit for modular distribution boards, IP55 (incl. seal)						
		Article No. 8GK9920-0KK31	■	■	■	
Self-tapping screws M6 × 10						
	Scope of supply 10 units	Article No. 8GF9662	■	■	■	
Captive nuts M6						
	Scope of supply 100 units	Article No. 8GF9643	■	■	■	
Transport eyebolts						
	Scope of supply 4 units	Article No. 8GF9660	■	■	■	
Key for double-bit interlocking mechanism						
		Article No. 8GD9290	■	■	■	
"SIEMENS" logo						
	Versions Self-adhesive	Article No. 8GF9661	■	■	■	
	Made of self-adhesive aluminum	8GD9084	■	■	■	
Circuit diagram pockets						
	Versions	Depth	Article No.			
	DIN A3, made of sheet steel	10 mm	8GK9910-0KK22	■	■	■
	DIN A4, transparent sleeve, adhered all-over	10 mm	8GK9910-0KK23	■	■	■
	DIN A4, made of plastic	30 mm	8GD9132	■	■	■
	DIN A4, large pack, made of plastic	30 mm	8GK9910-1KK24	■	■	■
Blanking cover for modular installation devices						
	Version For 12 modular widths (1 MW=18 mm)	Article No. 8GK9910-0KK00	■	■	■	
Cover strips						
	Length 1 m	Article No. 8GK9910-0KK01	■	■	■	
Spare brackets for flat pack assembly						
	Scope of supply 2 units	Article No. 8GK9920-0KK26	■	■	■	

Further accessories

125 630 800

Failsafe kit ALPHA

- Thread-forming tapping screws, captive nuts, hinges for covers, covers etc.

Article No.

8GK9920-0KK32

■ ■ ■

Wall-mounting brackets

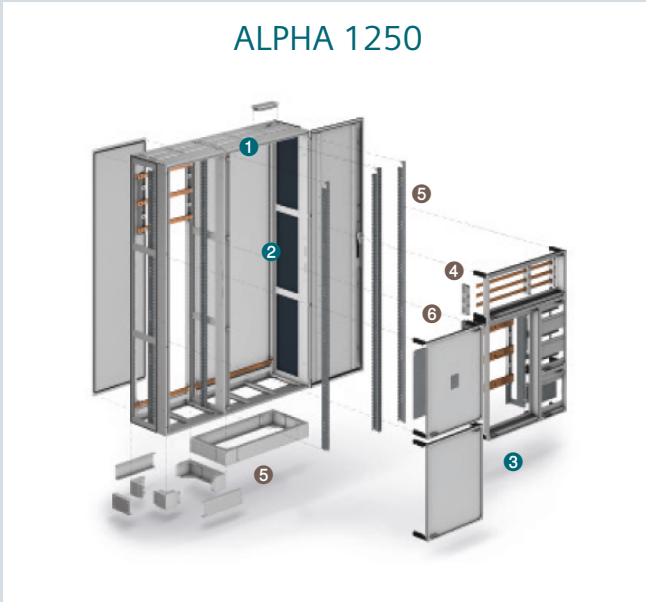
Article No.

8GK9920-0KK33

■ ■ ■

ALPHA system overview

Distribution boards, assembly kits and accessories



1 Unequipped distribution boards



ALPHA 1250



ALPHA 630



ALPHA 630



ALPHA 400



ALPHA 160



ALPHA SIMBOX XL and WP

2 Quick-assembly kits



ALPHA 1250 / 630 / 400



ALPHA 160

3 Assembly kits



For modular installation devices



For terminal blocks



For fuse switch disconnectors



For switch disconnectors



For molded case circuit breakers



For busbar-adaptable units

15



4 Busbars



Cu busbars



Busbar supports

5 Mechanical accessories



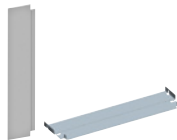
Bases



Stays



Crossbars



Partitions



Front covers



Locking system

6 Electrical accessories



N and PE terminals



Connection terminals



N/PE bars



Flanges



Cable entries



Cable holders

ALPHA 1250 floor-mounted distribution boards

Rated current 1250 A

Degree of protection	Unequipped distribution boards	Unequipped distribution boards for isolating transformers	
	With open side panel	With open side panel	With closed side panel

Degree of protection IP55

IP30

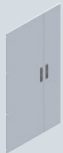
IP30



Height	Depth	Tiers	Width	Safety class I				
				outside	inside	outside		
1950 mm	1800 mm	400 mm	max. 12 MW	300 mm	250 mm	8GK1423-8KK15	8GK1483-8KP15	8GK1483-8KN15
				550 mm	500 mm	8GK1423-8KK25	8GK1483-8KP25	8GK1483-8KN25
				800 mm	750 mm	8GK1423-8KK35	8GK1483-8KP35	8GK1483-8KN35
				1050 mm	1000 mm	8GK1423-8KK45	8GK1483-8KP45	8GK1483-8KN45
				1300 mm	1250 mm	8GK1423-8KK55	–	–

Accessories

Replacement doors

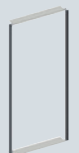


Height	Cubicle width	Door version	Door width	Article No.	
1950 mm	300 mm	Complete	300 mm	8GK9513-8KK10	
	550 mm	Complete	550 mm	8GK9513-8KK20	
	800 mm		Left	525 mm	8GK9513-8KK30
			Right	275 mm	8GK9513-8KK40
	1050 mm		Left	525 mm	8GK9513-8KK30
			Right	525 mm	8GK9513-8KK50
	1300 mm		Left	775 mm	8GK9513-8KK60
			Right	525 mm	8GK9513-8KK50

Side panels, modular distribution board

Depth	Article No.
400 mm	8GK9520-0KK05

Assembly kits for masking frame for front cover



- For mounting the mounting stays at the rear of the modular distribution board

Height	Width	Article No.
1800 mm	250 mm	8GK9913-0KK10
	500 mm	8GK9913-0KK20
	750 mm	8GK9913-0KK30
	1000 mm	8GK9913-0KK40
	1250 mm	8GK9913-0KK50

Flange plates with rubber sleeve



- For lower flange opening (sheet steel closed)

Number of rubber sleeves	Article No.
1	8GK9100-0KK14
2	8GK9100-0KK15
3	8GK9100-0KK16
4	8GK9100-0KK17

Busbar supports



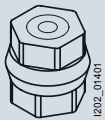
- Busbar spacing 100/185 mm

Version	Article No.
With matching support plate for mounting on the rear panel	8GK9720-0KK00
Without support plate for mounting on the busbar (no fixing to the cabinet enclosure)	8GK9720-0KK01

PEN bar holders and N/PE busbar supports

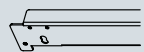
Version	Article No.
PEN bar holder	8GK9721-0KK00
N/PE busbar supports	8GK9110-0KK00

Pin insulator for N busbar



Version	Article No.
1P with M10 female thread and holder	8GK9110-0KK00

Cross arm for N/PEN pin insulators and/or holders for PEN bars



Width	Article No.
250 mm	8GK4854-0KK10
500 mm	8GK4854-0KK20
750 mm	8GK4854-0KK30
1000 mm	8GK4854-0KK40
1250 mm	8GK4854-0KK50

Longitudinal stays



Height	Depth	Article No.
1800 mm	250/320/400 mm	8GK48538KK02

ALPHA 1250 marshaling boxes

Rated current 630 A

Marshaling boxes

Degree of protection IP43



Height outside	Depth outside	Width		Safety class I
		outside	inside	
500 mm	400 mm	300 mm	250 mm	8GK1383-1KK15
		550 mm	500 mm	8GK1383-1KK25
		800 mm	750 mm	8GK1383-1KK35
		1050 mm	1000 mm	8GK1383-1KK45
		1300 mm	1250 mm	8GK1383-1KK55
650 mm	400 mm	300 mm	250 mm	8GK1383-2KK15
		550 mm	500 mm	8GK1383-2KK25
		800 mm	750 mm	8GK1383-2KK35
		1050 mm	1000 mm	8GK1383-2KK45
		1300 mm	1250 mm	8GK1383-2KK55

ALPHA 630 floor-mounted distribution boards

Rated current 630 A

Unequipped distribution boards

Welded and riveted

Degree of protection IP43



Height outside	Height inside	Depth outside	Tiers/MW	Width outside	Width inside	Safety class I	Safety class II	
1950 mm	1800 mm	210 mm	12/144	300 mm	250 mm	8GK1322-8KA12	8GK1332-8KA12	
			24/288	550 mm	500 mm	8GK1322-8KA22	8GK1332-8KA22	
			36/432	800 mm	750 mm	8GK1322-8KA32	8GK1332-8KA32	
			48/576	1050 mm	1000 mm	8GK1322-8KA42	8GK1332-8KA42	
			60/720	1300 mm	1250 mm	8GK1322-8KA52	8GK1332-8KA52	
			12/144	300 mm	250 mm	–	–	
		250 mm	24/288	550 mm	500 mm	–	–	
			36/432	800 mm	750 mm	–	–	
			48/576	1050 mm	1000 mm	–	–	
			60/720	1300 mm	1250 mm	–	–	
			320 mm	12/144	300 mm	250 mm	–	–
				24/288	550 mm	500 mm	–	–
		36/432		800 mm	750 mm	–	–	
		48/576		1050 mm	1000 mm	–	–	
		60/720		1300 mm	1250 mm	–	–	
		–		–	–	–	–	

Accessories

Replacement doors



Height	Cubicle width	Door version	Door width	Article No.	
1950 mm	300 mm	Complete	300 mm	8GK9513-8KK10	
	550 mm	Complete	550 mm	8GK9513-8KK20	
	800 mm		Left	525 mm	8GK9513-8KK30
			Right	275 mm	8GK9513-8KK40
	1050 mm		Left	525 mm	8GK9513-8KK30
			Right	525 mm	8GK9513-8KK50
	1300 mm		Left	775 mm	8GK9513-8KK60
			Right	525 mm	8GK9513-8KK50

Side panels, modular distribution board



Depth	Article No.
250/320 mm	8GK9520-0KK03

Assembly kits for masking frame for front cover





Height	Width	Article No.
1800 mm	250 mm	8GK9913-0KK10
	500 mm	8GK9913-0KK20
	750 mm	8GK9913-0KK30
	1000 mm	8GK9913-0KK40
	1250 mm	8GK9913-0KK50

With closed side panel		With open side panel		Flat pack	
IP55		IP55		IP43	
Safety class I		Safety class I		Safety class I	
Safety class II		Safety class II		Safety class II	
-	-	-	-	8GK1302-8KK12	8GK1312-8KK12
-	-	-	-	8GK1302-8KK22	8GK1312-8KK22
-	-	-	-	8GK1302-8KK32	8GK1312-8KK32
-	-	-	-	8GK1302-8KK42	8GK1312-8KK42
-	-	-	-	8GK1302-8KK52	8GK1312-8KK52
8GK1323-8KN13	8GK1333-8KN13	8GK1323-8KP13	-	-	-
8GK1323-8KN23	8GK1333-8KN23	8GK1323-8KP23	-	-	-
8GK1323-8KN33	8GK1333-8KN33	8GK1323-8KP33	-	-	-
8GK1323-8KN43	8GK1333-8KN43	8GK1323-8KP43	-	-	-
8GK1323-8KN53	8GK1333-8KN53	8GK1323-8KP53	-	-	-
8GK1323-8KN14	8GK1333-8KN14	8GK1323-8KP14	-	-	-
8GK1323-8KN24	8GK1333-8KN24	8GK1323-8KP24	-	-	-
8GK1323-8KN34	8GK1333-8KN34	8GK1323-8KP34	-	-	-
8GK1323-8KN44	8GK1333-8KN44	8GK1323-8KP44	-	-	-
8GK1323-8KN54	8GK1333-8KN54	8GK1323-8KP54	-	-	-

ALPHA 630 marshaling boxes

Rated current 630 A

				Marshaling boxes		
				Degree of protection IP43	IP55	
						
Height outside	Depth outside	Width outside	inside	Safety class I	Safety class I	
350 mm	210 mm ¹⁾	300 mm	250 mm	8GK1382-0KK12	–	
		550 mm	500 mm	8GK1382-0KK22	–	
		800 mm	750 mm	8GK1382-0KK32	–	
		1050 mm	1000 mm	8GK1382-0KK42	–	
		1300 mm	1250 mm	8GK1382-0KK52	–	
	250 mm	300 mm	250 mm	–	8GK1383-0KK13	
		550 mm	500 mm	–	8GK1383-0KK23	
		800 mm	750 mm	–	8GK1383-0KK33	
		1050 mm	1000 mm	–	8GK1383-0KK43	
		1300 mm	1250 mm	–	8GK1383-0KK53	
	320 mm	300 mm	250 mm	–	8GK1383-0KK14	
		550 mm	500 mm	–	8GK1383-0KK24	
		800 mm	750 mm	–	8GK1383-0KK34	
		1050 mm	1000 mm	–	8GK1383-0KK44	
		1300 mm	1250 mm	–	8GK1383-0KK54	
400 mm	250 mm	300 mm	250 mm	–	8GK1383-1KK13	
		550 mm	500 mm	–	8GK1383-1KK23	
		800 mm	750 mm	–	8GK1383-1KK33	
		1050 mm	1000 mm	–	8GK1383-1KK43	
		1300 mm	1250 mm	–	8GK1383-1KK53	
	320 mm	300 mm	250 mm	–	8GK1383-1KK14	
		550 mm	500 mm	–	8GK1383-1KK24	
		800 mm	750 mm	–	8GK1383-1KK34	
		1050 mm	1000 mm	–	8GK1383-1KK44	
		1300 mm	1250 mm	–	8GK1383-1KK54	
	600 mm	250 mm	300 mm	250 mm	–	8GK1383-2KK13
			550 mm	500 mm	–	8GK1383-2KK23
			800 mm	750 mm	–	8GK1383-2KK33
			1050 mm	1000 mm	–	8GK1383-2KK43
			1300 mm	1250 mm	–	8GK1383-2KK53
320 mm		300 mm	250 mm	–	8GK1383-2KK14	
		550 mm	500 mm	–	8GK1383-2KK24	
		800 mm	750 mm	–	8GK1383-2KK34	
		1050 mm	1000 mm	–	8GK1383-2KK44	
		1300 mm	1250 mm	–	8GK1383-2KK54	

¹⁾ For flat pack floor-mounted distribution boards only

ALPHA 400 distribution boards



Rated current 400 A

Surface-mounting distribution boards
Flat pack

Degree of protection IP43




Height outside	inside	Depth outside	Tiers (MW = 18 mm)	Width outside	inside	Safety class I	Safety class II
500 mm	450 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	–	–
				550 mm	500 mm	–	–
650 mm	600 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-2KK12	8GK1112-2KK12
				550 mm	500 mm	8GK1102-2KK22	8GK1112-2KK22
				800 mm	750 mm	8GK1102-2KK32	8GK1112-2KK32
				1050 mm	1000 mm	8GK1102-2KK42	8GK1112-2KK42
800 mm	750 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-3KK12	8GK1112-3KK12
				550 mm	500 mm	8GK1102-3KK22	8GK1112-3KK22
				800 mm	750 mm	8GK1102-3KK32	8GK1112-3KK32
				1050 mm	1000 mm	8GK1102-3KK42	8GK1112-3KK42
950 mm	900 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-4KK12	8GK1112-4KK12
				550 mm	500 mm	8GK1102-4KK22	8GK1112-4KK22
				800 mm	750 mm	8GK1102-4KK32	8GK1112-4KK32
				1050 mm	1000 mm	8GK1102-4KK42	8GK1112-4KK42
				1300 mm	1250 mm	8GK1102-4KK52	8GK1112-4KK52
1100 mm	1050 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-5KK12	8GK1112-5KK12
				550 mm	500 mm	8GK1102-5KK22	8GK1112-5KK22
				800 mm	750 mm	8GK1102-5KK32	8GK1112-5KK32
				1050 mm	1000 mm	8GK1102-5KK42	8GK1112-5KK42
				1300 mm	1250 mm	8GK1102-5KK52	8GK1112-5KK52
1250 mm	1200 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-6KK12	8GK1112-6KK12
				550 mm	500 mm	8GK1102-6KK22	8GK1112-6KK22
				800 mm	750 mm	8GK1102-6KK32	8GK1112-6KK32
				1050 mm	1000 mm	8GK1102-6KK42	8GK1112-6KK42
				1300 mm	1250 mm	8GK1102-6KK52	8GK1112-6KK52
1400 mm	1350 mm	210 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1102-7KK12	8GK1112-7KK12
				550 mm	500 mm	8GK1102-7KK22	8GK1112-7KK22
				800 mm	750 mm	8GK1102-7KK32	8GK1112-7KK32
				1050 mm	1000 mm	8GK1102-7KK42	8GK1112-7KK42
				1300 mm	1250 mm	8GK1102-7KK52	8GK1112-7KK52

Unequipped distribution boards				Flush-mounting distribution boards
IP43		IP55		Unequipped distribution boards
				
Safety class I	Safety class II	Safety class I	Safety class II	Safety class I
8GK1122-1KA12	–	–	–	–
8GK1122-1KA22	–	–	–	–
8GK1122-2KA12	8GK1132-2KA12	–	–	–
8GK1122-2KA22	8GK1132-2KA22	–	–	–
8GK1122-2KA32	8GK1132-2KA32	–	–	–
8GK1122-2KA42	8GK1132-2KA42	–	–	–
8GK1122-3KA12	8GK1132-3KA12	–	–	–
8GK1122-3KA22	8GK1132-3KA22	–	–	8GK1121-3KK22
8GK1122-3KA32	8GK1132-3KA32	–	–	8GK1121-3KK32
8GK1122-3KA42	8GK1132-3KA42	–	–	–
8GK1122-4KA12	8GK1132-4KA12	8GK1123-4KA12	8GK1133-4KA12	–
8GK1122-4KA22	8GK1132-4KA22	8GK1123-4KA22	8GK1133-4KA22	8GK1121-4KK22
8GK1122-4KA32	8GK1132-4KA32	8GK1123-4KA32	8GK1133-4KA32	8GK1121-4KK32
8GK1122-4KA42	8GK1132-4KA42	8GK1123-4KA42	8GK1133-4KA42	–
8GK1122-4KA52	8GK1132-4KA52	8GK1123-4KA52	8GK1133-4KA52	–
8GK1122-5KA12	8GK1132-5KA12	8GK1123-5KA12	8GK1133-5KA12	–
8GK1122-5KA22	8GK1132-5KA22	8GK1123-5KA22	8GK1133-5KA22	–
8GK1122-5KA32	8GK1132-5KA32	8GK1123-5KA32	8GK1133-5KA32	–
8GK1122-5KA42	8GK1132-5KA42	8GK1123-5KA42	8GK1133-5KA42	–
8GK1122-5KA52	8GK1132-5KA52	8GK1123-5KA52	8GK1133-5KA52	–
8GK1122-6KA12	8GK1132-6KA12	8GK1123-6KA12	8GK1133-6KA12	–
8GK1122-6KA22	8GK1132-6KA22	8GK1123-6KA22	8GK1133-6KA22	8GK1121-6KK22
8GK1122-6KA32	8GK1132-6KA32	8GK1123-6KA32	8GK1133-6KA32	8GK1121-6KK32
8GK1122-6KA42	8GK1132-6KA42	8GK1123-6KA42	8GK1133-6KA42	–
8GK1122-6KA52	8GK1132-6KA52	8GK1123-6KA52	8GK1133-6KA52	–
8GK1122-7KA12	8GK1132-7KA12	8GK1123-7KA12	8GK1133-7KA12	–
8GK1122-7KA22	8GK1132-7KA22	8GK1123-7KA22	8GK1133-7KA22	8GK1121-7KK22
8GK1122-7KA32	8GK1132-7KA32	8GK1123-7KA32	8GK1133-7KA32	8GK1121-7KK32
8GK1122-7KA42	8GK1132-7KA42	8GK1123-7KA42	8GK1133-7KA42	–
8GK1122-7KA52	8GK1132-7KA52	8GK1123-7KA52	8GK1133-7KA52	–

ALPHA 400 distribution boards




Rated current 400 A

Accessories

Replacement doors					
	Height	Cubicle width	Door version	Door width	Article No.
	950 mm	300 mm	Complete	300 mm	8GK9510-6KK10
		550 mm	Complete	550 mm	8GK9510-6KK20
		800 mm	Left	525 mm	8GK9510-6KK31
			Right	275 mm	8GK9510-6KK42
		1050 mm	Left	525 mm	8GK9510-6KK31
			Right	525 mm	8GK9510-6KK52
		1300 mm	Left	775 mm	8GK9510-6KK51
			Right	525 mm	8GK9510-6KK52
	1100 mm	300 mm	Complete	300 mm	8GK9510-7KK10
		550 mm	Complete	550 mm	8GK9510-7KK20
		800 mm	Left	525 mm	8GK9510-7KK31
			Right	275 mm	8GK9510-7KK32
		1050 mm	Left	525 mm	8GK9510-7KK31
			Right	525 mm	8GK9510-7KK42
1300 mm		Left	775 mm	8GK9510-7KK41	
		Right	525 mm	8GK9510-7KK42	
1250 mm	300 mm	Complete	300 mm	8GK9510-8KK10	
	550 mm	Complete	550 mm	8GK9510-8KK20	
	800 mm	Left	525 mm	8GK9510-8KK31	
		Right	275 mm	8GK9510-8KK32	
	1050 mm	Left	525 mm	8GK9510-8KK31	
		Right	525 mm	8GK9510-8KK52	
	1300 mm	Left	775 mm	8GK9510-8KK41	
		Right	525 mm	8GK9510-8KK52	
1400 mm	300 mm	Complete	300 mm	8GK9510-8KK16	
	550 mm	Complete	550 mm	8GK9510-8KK26	
	800 mm	Left	525 mm	8GK9510-8KK37	
		Right	275 mm	8GK9510-8KK38	
	1050 mm	Left	525 mm	8GK9510-8KK37	
		Right	525 mm	8GK9510-8KK58	
	1300 mm	Left	775 mm	8GK9510-8KK47	
		Right	525 mm	8GK9510-8KK58	

ALPHA 160 distribution boards

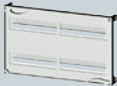

Rated current 160 A

Degree of protection	Surface-mounting distribution boards		Flush-mounting distribution boards
	Unequipped distribution boards	Distribution boards with built-in distribution board panels	Unequipped distribution boards
	IP43	IP43	IP31
			

Height outside	Height inside	Depth outside	Tiers (MW = 18 mm)	Width		Safety class II		Safety class II	
				outside	inside				
500 mm	450 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-1KK11	8GK1052-1KK11	8GK1031-1KK11	
				550 mm	500 mm	8GK1032-1KK21	8GK1052-1KK21	8GK1031-1KK21	
				800 mm	750 mm	8GK1032-1KK31	8GK1052-1KK31	–	
650 mm	600 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-2KK11	8GK1052-2KK11	8GK1031-2KK11	
				550 mm	500 mm	8GK1032-2KK21	8GK1052-2KK21	8GK1031-2KK21	
				800 mm	750 mm	8GK1032-2KK31	8GK1052-2KK31	–	
				1050 mm	1000 mm	8GK1032-2KK41	8GK1052-2KK41	–	
800 mm	750 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-3KK11	8GK1052-3KK11	8GK1031-3KK11	
				550 mm	500 mm	8GK1032-3KK21	8GK1052-3KK21	8GK1031-3KK21	
				800 mm	750 mm	8GK1032-3KK31	8GK1052-3KK31	–	
				1050 mm	1000 mm	8GK1032-3KK41	8GK1052-3KK41	–	
950 mm	900 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-4KK11	8GK1052-4KK11	8GK1031-4KK11	
				550 mm	500 mm	8GK1032-4KK21	8GK1052-4KK21	8GK1031-4KK21	
				800 mm	750 mm	8GK1032-4KK31	8GK1052-4KK31	–	
				1050 mm	1000 mm	8GK1032-4KK41	8GK1052-4KK41	–	
1100 mm	1050 mm	140 mm	12 + 1 MW mountable	300 mm	250 mm	8GK1032-5KK11	8GK1052-5KK11	8GK1031-5KK11	
				550 mm	500 mm	8GK1032-5KK21	8GK1052-5KK21	8GK1031-5KK21	
				800 mm	750 mm	8GK1032-5KK31	8GK1052-5KK31	–	
				1050 mm	1000 mm	8GK1032-5KK41	8GK1052-5KK41	–	




Assembly kits

For modular installation devices

Tier spacing	ALPHA 1250 / 630 / 400		ALPHA 160	
	125 mm	150 mm	125 mm	150 mm
				

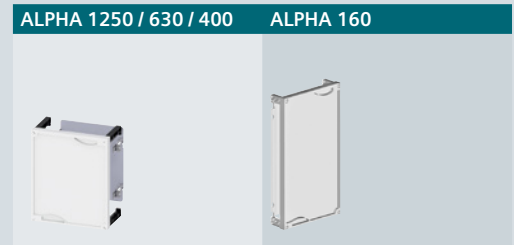
Height outside	Width outside	No. of tiers	MW				
150 mm	250 mm	1	12	–	8GK4351-1KK12	–	8GK4351-1KK11
	500 mm	1	24	–	8GK4351-1KK22	–	8GK4351-1KK21
	750 mm	1	36	–	8GK4351-1KK32	–	–
300 mm	250 mm	2	24	8GK4301-2KK12	8GK4351-2KK12	8GK4301-2KK11	8GK4351-2KK11
	500 mm	2	48	8GK4301-2KK22	8GK4351-2KK22	8GK4301-2KK21	8GK4351-2KK21
	750 mm	2	72	–	8GK4351-2KK32	–	–
450 mm	250 mm	3	36	8GK4301-3KK12	8GK4351-3KK12	8GK4301-3KK11	8GK4351-3KK11
	500 mm	3	72	8GK4301-3KK22	8GK4351-3KK22	8GK4301-3KK21	8GK4351-3KK21
	750 mm	3	108	–	8GK4351-3KK32	–	–
600 mm	250 mm	4	48	8GK4301-4KK12	8GK4351-4KK12	8GK4301-4KK11	8GK4351-4KK11
	500 mm	4	96	8GK4301-4KK22	8GK4351-4KK22	8GK4301-4KK21	8GK4351-4KK21
	750 mm	4	144	–	8GK4351-4KK32	–	–

For terminal blocks

		ALPHA 1250 / 630 / 400		ALPHA 160
				

Height outside	Width outside	Horizontal	Vertical	Horizontal
150 mm	250 mm	8GK4401-1KK12	–	8GK4401-1KK11
	500 mm	–	–	8GK4401-1KK21
300 mm	250 mm	8GK4401-2KK12	8GK4402-2KK12	8GK4401-2KK11
	500 mm	8GK4401-2KK22	8GK4402-2KK22	8GK4401-2KK21
	750 mm	8GK4401-2KK32	8GK4402-2KK32	–
450 mm	250 mm	8GK4401-3KK12	8GK4402-3KK12	–
	500 mm	8GK4401-3KK22	8GK4402-3KK22	–
	750 mm	8GK4401-3KK32	8GK4402-3KK32	–
600 mm	250 mm	–	8GK4402-4KK12	–
	500 mm	–	8GK4402-4KK22	–
	750 mm	–	8GK4402-4KK32	–

With mounting plates



Height outside	Width outside	Mounting plates		Version		
		Height	Width			
300 mm	250 mm	245 mm	207.5 mm	Closed	8GK4451-2KK12	8GK4451-2KK11
	500 mm	245 mm	457.5 mm	Closed	8GK4451-2KK22	–
	750 mm	245 mm	707.5 mm	Closed	8GK4451-2KK32	–
450 mm	250 mm	395 mm	207.5 mm	Closed	8GK4451-3KK12	8GK4451-3KK11
	500 mm	395 mm	457.5 mm	Closed	8GK4451-3KK22	–
	750 mm	395 mm	707.5 mm	Closed	8GK4451-3KK32	–
600 mm	250 mm	545 mm	207.5 mm	Closed	8GK4451-4KK12	8GK4451-4KK11
	500 mm	545 mm	457.5 mm	Closed	8GK4451-4KK22	–
	750 mm	545 mm	707.5 mm	Closed	8GK4451-4KK32	–

For unequipped panels



Height outside	Width outside	ALPHA 1250 / 630 / 400			ALPHA 160
		Standard	With inspection window	With deep-drawn cover 40 mm	Standard
75 mm	250 mm	8GK4501-0KK12	–	–	–
	500 mm	8GK4501-0KK22	–	–	–
150 mm	250 mm	8GK4501-1KK12	–	–	8GK4501-1KK11
	500 mm	8GK4501-1KK22	–	–	8GK4501-1KK21
	750 mm	8GK4501-1KK32	–	–	–
300 mm	250 mm	8GK4501-2KK12	8GK4500-2KK12	8GK4501-2KK13	8GK4501-2KK11
	500 mm	8GK4501-2KK22	8GK4500-2KK22	8GK4501-2KK23	8GK4501-2KK21
	750 mm	8GK4501-2KK32	–	8GK4501-2KK33	–
450 mm	250 mm	8GK4501-3KK12	8GK4500-3KK12	8GK4501-3KK13	8GK4501-3KK11
	500 mm	8GK4501-3KK22	8GK4500-3KK22	8GK4501-3KK23	8GK4501-3KK21
	750 mm	8GK4501-3KK32	–	8GK4501-3KK33	–
600 mm	250 mm	8GK4501-4KK12	8GK4500-4KK12	–	8GK4501-4KK11
	500 mm	8GK4501-4KK22	8GK4500-4KK22	–	8GK4501-4KK21
	750 mm	8GK4501-4KK32	–	–	–
750 mm	250 mm	8GK4501-5KK12	–	–	–
	500 mm	8GK4501-5KK22	–	–	–
	750 mm	8GK4501-5KK32	–	–	–

Assembly kits

For 3NP1 fuse switch disconnectors

ALPHA 1250 / 630 / 400



Size of the LV HRC fuse	No. of switching devices	Height outside	Width outside	Mounting on support plate	on busbars ¹⁾
00/000	2	300 mm	250 mm	8GK4550-2KK12	8GK4650-2KK12
		450 mm	250 mm	–	8GK4650-3KK12
	4	300 mm	500 mm	8GK4550-2KK22	8GK4650-2KK22
		450 mm	500 mm	–	8GK4650-3KK22
1	1	450 mm	250 mm	8GK4550-3KK12	8GK4651-3KK12
	2	450 mm	500 mm	8GK4550-3KK22	8GK4651-3KK22
2	1	450 mm	250 mm	8GK4551-3KK12	8GK4652-3KK12
3	1	450 mm	500 mm	8GK4551-3KK22	–

¹⁾ For busbar support 8GK9711-0KK03

Accessories

Cover 3NP1123 ... size 000



- Required for size 000 fuse switch disconnectors

Article No.

8GK9912-0KK00

Busbar supports



Busbar center-to-center spacing

60 mm

Number of poles

1-pole

2-pole

3-pole

4-pole

5-pole

Article No.

8GK9710-0KK00

8GK9710-0KK01

8GK9711-0KK03

8GK9670-0KK00

8GK9650-0KK00




40 mm

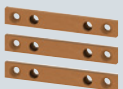
For 3NJ4 fuse switch disconnectors in in-line design



Size	Number of 3NJ4 disconnectors		Height outside	Width outside	Distribution board depth min. 320 mm
	With screw fixing	With fixing claws			
Assembly kits for 3NJ4 fuse switch disconnectors					
NH00	4	3	600 mm	250 mm	8GK4751-4KK13
	9	8	600 mm	500 mm	8GK4751-4KK23
	14	13	600 mm	750 mm	8GK4751-4KK33
NH1 ... NH3	2	–	750 mm	250 mm	–
	4	3	750 mm	500 mm	–
	7	6	750 mm	750 mm	–

Accessories

Blanking covers							
	Switching device size	Busbar center-to-center spacing	Height	Width	Article No.		
	NH00	100 mm	299 mm	50 mm	3NJ4912-2CA00		
	NH1 ... NH3		185 mm	699 mm	50 mm	3NJ4912-2AA00	
					100 mm	3NJ4912-2BA00	

Ready-to-install copper bars				
	Switching device size	Distribution board width outside	Article No.	
	NH00		250 mm	8GK9735-1KK10
			500 mm	8GK9735-1KK20
			750 mm	8GK9735-1KK30
	NH1 ... NH3		250 mm	8GK9735-2KK10
			500 mm	8GK9735-2KK20
		750 mm	8GK9735-2KK30	

Assembly kits

For SR60 busbar-adaptable units

Busbar center-to-center spacing

ALPHA 1250 / 630 / 400
60 mm



Height outside	Width outside	
300 mm	250 mm	8GK4801-2KK13
	500 mm	8GK4801-2KK23
	750 mm	8GK4801-2KK33
450 mm	250 mm	8GK4801-3KK13
	500 mm	8GK4801-3KK23
	750 mm	8GK4801-3KK33

Accessories

Supports for blanking covers			
	<table border="1"> <tr> <th>Article No.</th> </tr> <tr> <td>8US1922-2EA00</td> </tr> </table>	Article No.	8US1922-2EA00
Article No.			
8US1922-2EA00			
Blanking covers			
	<table border="1"> <tr> <th>Article No.</th> </tr> <tr> <td>8US1922-2EB00</td> </tr> </table>	Article No.	8US1922-2EB00
Article No.			
8US1922-2EB00			

For bus-mounting fuse bases, for mounting on busbar systems

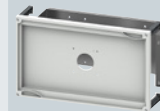


Height outside	Width outside	Number of poles			
		3P	4P		
300 mm	250 mm	■	–	8GK4801-2KK12	–
		■	■	–	8GK4800-2KK12
	500 mm	■	■	–	8GK4800-2KK22
	750 mm	■	■	–	8GK4800-2KK32
450 mm	250 mm	■	–	8GK4801-3KK12	–

Assembly kits

For 3KF switch disconnectors with fuses

Operating mechanism	ALPHA 1250 / 630 / 400	
	Front operating mechanism, center	Door-coupling rotary operating mechanism (mounted in the front cover)



Switching device size	Rated current	Number of poles		Height outside	Width outside	Depth outside	ALPHA 1250 / 630 / 400	
		3P	4P					
3KF1	80 A	■	■	300 mm	250 mm	≥210 mm	8GK4722-2KK10	–
3KF2	160 A	■	■	300 mm	500 mm	≥210 mm	8GK4723-2KK10	–
3KF3 ... 3KF4	400 A	■	■	300 mm	500 mm	≥320 mm	–	8GK4722-2KK20


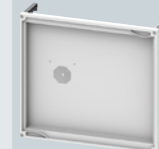
For 3VT switch disconnectors

ALPHA 1250 / 630 / 400



Switching device size	No. of switching devices	Number of poles		Height outside	Width outside	ALPHA 1250 / 630 / 400	
		3P	4P				
3VT1	2	■	■	300 mm	250 mm	8GK4710-2KK10	
3VT2	1	■	■	450 mm	250 mm	8GK4710-3KK10	
3VT3	1	■	■	600 mm	250 mm	8GK4710-4KK10	

For 3KD switch disconnectors

		ALPHA 1250 / 630 / 400	
Operating mechanism		Direct operating mechanism	Door-coupling rotary operating mechanism (mounted in the front cover)
			

Switching device size	No. of switching devices	Number of poles		Height outside	Width outside	Distribution board depth		
		3P	4P					
1	2	■	–	300 mm	250 mm	210 mm	8GK4720-2KK10	–
2	1	■	■	300 mm	250 mm	210 mm	8GK4720-2KK10	–
3	1	■	■	300 mm	250 mm	210 mm	8GK4721-2KK10	–
3...4	1	■	■	450 mm	500 mm	≥250 mm	–	8GK4720-3KK20

For 3KA switch disconnectors on support plate

		ALPHA 1250 / 630 / 400	
Operating mechanism		Direct operating mechanism	Direct operating mechanism
			

Switching device size	No. of switching devices	Number of poles		Height outside	Width outside		
		3P	4P				
3KA 50/51/52/53	1	■	–	300 mm	250 mm	8GK4707-3KK17	–
3KA 55/57/58	1	■	■	300 mm	500 mm	–	8GK4707-4KK27

Assembly kits

For 3VL molded case circuit breakers

ALPHA 1250 / 630 / 400



Switching device size	Switching device type	Height outside	Width outside	No. of switching devices	Number of poles		Standard
					3P	4P	
3VL1	3VL160X	300 mm	250 mm	1	■	■	8GK4701-2KK12
		450 mm	250 mm	1	■	■	8GK4701-3KK12
3VL2	3VL160	300 mm	250 mm	1	■	■	8GK4701-2KK12
		450 mm	250 mm	1	■	■	8GK4701-3KK12
3VL3	3VL250	450 mm	250 mm	1	■	■	8GK4701-3KK12
3VL4	3VL400	600 mm	250 mm	1	■	■	8GK4702-4KK12
		750 mm	250 mm	1	■	■	–
3VL5	3VL630	600 mm	250 mm	1	■	–	8GK4703-4KK13
			500 mm	1	■	■	8GK4704-4KK13
			1	1	■	–	–
			1	1	–	■	–
3VL6	3VL800	600 mm	250 mm	1	■	–	8GK4704-4KK15
			500 mm	1	■	■	8GK4704-4KK25
3VL7	3VL1250	600 mm	500 mm	1	■	■	8GK4705-4KK25
3VL8	3VL1600	600 mm	500 mm	1	■	■	8GK4705-4KK25



With RCD module mounted

For installation with front-operated rotary operating mechanism

-	-
8GK4720-3KK10	8GK4722-3KK10
-	-
8GK4721-3KK10	8GK4722-3KK10
8GK4721-3KK10	8GK4722-3KK10
-	8GK4722-4KK10
8GK4720-5KK10	-
-	-
-	-
-	8GK4723-4KK10
-	8GK4721-4KK20
-	-
-	-
-	-
-	-

Assembly kits

For 3VA molded case circuit breakers, 3-pole and 4-pole

ALPHA 1250 / 630 / 400



Switching device size	Height outside	Width outside	No. of switching devices	Operating mechanism				
				Direct	Rotary	Motorized		
3VA10.., 3VA11..	300 mm ¹⁾	250 mm	1	■	–	–	8GK4731-2KK12	
				–	■	–	8GK4733-2KK12	
				–	–	■	–	
	450 mm	500 mm	3	■	–	–	8GK4731-2KK22	
				–	■	–	8GK4733-2KK22	
				–	–	■	–	
		250 mm	1	1	■	–	–	8GK4730-2KK12
					–	–	■	–
					■	–	–	8GK4730-2KK22
3VA12	300 mm	250 mm	1	■	–	–	8GK4732-2KK12	
				–	■	–	8GK4735-2KK12	
				–	–	■	–	
	450 mm	500 mm	3	■	–	–	8GK4732-2KK22	
				–	■	–	8GK4735-2KK22	
				–	–	■	–	
		250 mm	1	1	■	–	–	8GK4733-3KK10
					–	–	■	–
					■	–	–	8GK4731-3KK20
600 mm	250 mm	1	–	–	■	–		
			–	–	■	–		
			–	–	■	–		
3VA20.., 3VA22..	300 mm	250 mm	1	■	–	–	8GK4730-3KK10	
				–	■	–	8GK4736-2KK12	
				■	–	–	8GK4730-3KK20	
	600 mm	250 mm	1	–	–	■	–	
				–	–	■	–	
				–	–	■	–	
3VA23.., 3VA24..	450 mm	250 mm	1	■	–	–	8GK4730-4KK12	
				–	–	■	–	
				■	–	–	8GK4730-4KK22	
	600 mm	250 mm	1	–	■	–	8GK4733-4KK22	
				–	–	■	–	
				–	–	■	–	
600 mm	500 mm	1	–	–	■	–		
			–	–	■	–		

¹⁾ For insulated connection only

²⁾ Distribution board depth at least 250 mm


³⁾ Distribution board depth at least 320 mm




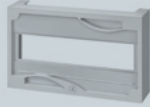
	With RCD module		With RCD module	
	Infeed side	At side	Infeed side	At side
-	-	-	-	-
-	-	-	-	-
8GK4734-2KK12 ²⁾	-	-	-	-
-	-	-	-	-
-	-	-	-	-
8GK4734-2KK22 ²⁾	-	-	-	-
-	-	-	-	-
-	8GK4731-3KK12	8GK4731-3KK10	8GK4734-3KK12 ²⁾	-
-	-	-	-	-
-	8GK4731-3KK22	-	8GK4734-3KK22 ²⁾	-
-	-	-	-	-
-	-	-	-	-
8GK4735-3KK10 ²⁾	-	-	-	-
-	-	-	-	-
-	-	-	-	-
8GK4732-3KK20 ²⁾	-	-	-	-
-	-	-	-	-
-	-	-	-	8GK4733-4KK10 ²⁾
-	-	-	-	-
-	8GK4732-4KK10	-	8GK4736-4KK12	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	8GK4735-4KK12	-	-	-
-	8GK4735-4KK22	-	8GK4736-4KK22 ³⁾	-
-	-	-	-	-
8GK4734-4KK12 ³⁾	-	-	-	-
-	-	-	-	-
-	-	-	-	-
8GK4734-4KK22 ³⁾	-	-	-	-
-	8GK4731-4KK12	-	-	-
-	8GK4731-4KK22	-	-	-

Assembly kits

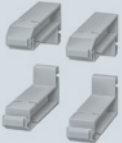
For meter mounting without top and bottom termination area

		ALPHA 630
		
Height outside	Width outside	
450 mm	250 mm	8GE3713-4

For meter mounting with top and bottom termination area

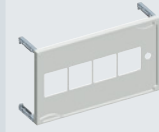
		ALPHA ZS	
		Meter support plate	Covers
			
Height	Width		Top/bottom termination area
150 mm	250 mm	–	8GS4006-0
300 mm	250 mm	–	8GS4006-5
450 mm	250 mm	8GS4007-4	–

Accessories

Supports for front cover		Article No.
		8GS4018-8
Standard mounting rails		Article No.
		8GS4010-6

Front covers for measuring devices

ALPHA 1250 / 630 / 400



Height outside	Width outside	Cutout dimensions	Use	
300 mm	500 mm	92 × 92 mm	1× measuring device 96 mm × 96 mm	8GK4500-2KK20

For cable connections to the door

ALPHA 1250 / 630 / 400



Height	Width	Diameter	
150 mm	250 mm	M20	8GK4500-1KK12
	500 mm	M20	8GK4500-1KK22

Quick-assembly kits

For modular installation devices and terminal blocks

Tier spacing ALPHA 1250 / 630 / 400
125 mm




Height outside	Width outside	No. of tiers	Terminals	MW	With N/PE bar	With 2 N/PE bars
For modular installation devices						
450 mm	250 mm	3	–	36	–	–
600 mm	250 mm	4	–	48	8GK4001-4KK11	–
	500 mm	8	–	96	8GK4001-4KK22	–
750 mm	250 mm	5	–	60	8GK4001-5KK11	–
	500 mm	10	–	120	8GK4001-5KK22	–
900 mm	250 mm	6	–	72	8GK4001-6KK11	8GK4003-6KK11
	500 mm	12	–	144	8GK4001-6KK22	–
1050 mm	250 mm	7	–	84	8GK4001-7KK11	8GK4003-7KK11
	500 mm	14	–	168	8GK4001-7KK22	–
1200 mm	250 mm	8	–	96	8GK4001-8KK12	8GK4003-8KK12
	500 mm	16	–	192	8GK4001-8KK22	–
1350 mm	250 mm	9	–	108	8GK4002-8KK12	8GK4003-8KK13
	500 mm	18	–	216	8GK4002-8KK22	–
For modular installation devices and terminal blocks						
900 mm	250 mm	2	4	48	–	–
	500 mm	4	8	96	–	–
	750 mm	6	12	144	–	–
1050 mm	250 mm	2	5	60	–	–
	500 mm	4	10	120	–	–
	750 mm	6	15	180	–	–
1200 mm	250 mm	2	6	72	–	–
	500 mm	4	12	144	–	–
	750 mm	6	18	216	–	–
1350 mm	250 mm	3	6	72	–	–
	500 mm	6	12	144	–	–
	750 mm	9	18	216	–	–

ALPHA 160		
150 mm	125 mm	150 mm
Without N/PE bar	With N/PE bar	Without N/PE bar
–	8GK4001-3KK11	8GK4051-3KK11
–	8GK4001-4KK11	8GK4051-4KK11
–	–	–
–	8GK4001-5KK11	8GK4051-5KK11
–	–	–
8GK4051-6KK11	8GK4001-6KK11	8GK4051-6KK11
8GK4101-6KK22	–	–
8GK4051-7KK11	8GK4001-7KK11	8GK4051-7KK11
8GK4101-7KK22	–	–
8GK4101-8KK12	–	–
8GK4101-8KK22	–	–
8GK4102-8KK12	–	–
8GK4102-8KK22	–	–
8GK4100-6KK12	–	–
8GK4100-6KK22	–	–
8GK4100-6KK32	–	–
8GK4100-7KK12	–	–
8GK4100-7KK22	–	–
8GK4100-7KK32	–	–
8GK4100-8KK12	–	–
8GK4100-8KK22	–	–
8GK4100-8KK32	–	–
8GK4110-8KK12	–	–
8GK4110-8KK22	–	–
8GK4110-8KK32	–	–

Busbars



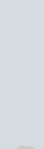


For ALPHA 1250 / 630 / 400 distribution boards

Cu busbars



Cross-section	Current	Length	Article No.
12 × 5 mm	250 A	250 mm	8GK9731-0KK10
		500 mm	8GK9731-0KK20
		750 mm	8GK9731-0KK30
		1000 mm	8GK9731-0KK40
		1250 mm	8GK9731-0KK50
20 × 5 mm	320 A	250 mm	8GK9733-0KK10
		500 mm	8GK9733-0KK20
		750 mm	8GK9733-0KK30
		1000 mm	8GK9733-0KK40
		1250 mm	8GK9733-0KK50
30 × 5 mm	450 A	250 mm	8GK9735-0KK10
		500 mm	8GK9735-0KK20
		750 mm	8GK9735-0KK30
		1000 mm	8GK9735-0KK40
		1250 mm	8GK9735-0KK50
30 × 10 mm	630 A	250 mm	8GK9736-0KK10
		500 mm	8GK9736-0KK20
		750 mm	8GK9736-0KK30
		1000 mm	8GK9736-0KK40
		1250 mm	8GK9736-0KK50

Busbar supports

Version	Use	Busbar center-to-center spacing	Article No.
1-pole	For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm	–	8GK9710-0KK00
2-pole	For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm	60 mm	8GK9710-0KK01
3-pole	For Cu busbars 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm, Bus-mounting fuse bases and 3NP4076 switch disconnectors in conjunction with assembly kits	60 mm	8GK9711-0KK03
4-pole	For Cu busbars 12 × 5 (10) mm, 30 × 5 (10) mm	60 mm	8GK9670-0KK00
5-pole	For Cu busbars 12 × 5 (10) mm 3NP fuse switch disconnectors	40 mm	8GK9650-0KK00

Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

				1250	630	400	160
Wall-mounting rails							
	• For all wall-mounted distribution boards						
	Length	Article No.					
	250 mm	8GK9912-0KK10			■	■	
	500 mm	8GK9912-0KK20			■	■	
	750 mm	8GK9912-0KK30			■	■	
	1000 mm	8GK9912-0KK40			■	■	
1250 mm	8GK9912-0KK50			■	■		
Cabinet mounting lugs, flat							
	Use	Article No.					
	For mounting and fixing a distribution board directly against the wall without a clearance (1 set = 4 units)	8GK9910-0KK36		■	■	■	
	For connecting 2 distribution boards and for mounting and fixing a distribution board directly against the wall without a clearance (8GK9910-0KK36 additionally required for the ends) 1 set = 2 units	8GK9910-0KK37		■	■	■	
Wall mounting lug, standard							
• 1 set = 4 units							
Article No.							
8GK9920-0KK33						■	■
Hollow wall set							
Use						Article No.	
For mounting flush-mounting distribution boards in hollow walls						8GK9910-0KK28	■
M12 transport eyebolts							
	Article No.						
	8GK9918-0KK00						■
Ventilation grilles for side panel							
	Article No.						
	8GK9120-0KK30						■
Bases for flat pack floor-mounted distribution boards							
	Height outside	Depth	Width	Article No.			
	100 mm	210 mm	300 mm	8GK9901-0KK12		■	
			550 mm	8GK9901-0KK22		■	
			800 mm	8GK9901-0KK32		■	
			1050 mm	8GK9901-0KK42		■	
		1300 mm	8GK9901-0KK52		■		

Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

				1250	630	400	160
Bases for pre-assembled (welded) floor-mounted distribution boards							
	Height outside	Depth	Width	Article No.			
	100 mm	210 mm	300 mm	8GK9901-0KA12	■	■	
			550 mm	8GK9901-0KA22	■	■	
			800 mm	8GK9901-0KA32	■	■	
			1050 mm	8GK9901-0KA42	■	■	
			1300 mm	8GK9901-0KA52	■	■	
	250 mm	300 mm	550 mm	8GK9900-0KK13	■	■	
			800 mm	8GK9900-0KK23	■	■	
			1050 mm	8GK9900-0KK33	■	■	
			1300 mm	8GK9900-0KK43	■	■	
			1300 mm	8GK9900-0KK53	■	■	
	320 mm	300 mm	550 mm	8GK9900-0KK14	■	■	
			800 mm	8GK9900-0KK24	■	■	
			1050 mm	8GK9900-0KK34	■	■	
			1300 mm	8GK9900-0KK44	■	■	
			1300 mm	8GK9900-0KK54	■	■	
	400 mm	300 mm	550 mm	8GK9902-0KK13	■	■	
			800 mm	8GK9902-0KK23	■	■	
			1050 mm	8GK9902-0KK33	■	■	
			1300 mm	8GK9902-0KK43	■	■	
			1300 mm	8GK9902-0KK53	■	■	
Partitions, vertical							
	• For the visual and spatial separation of different potentials						
	Cubicle depth	Height	Article No.				
	140 mm	450 mm	8GK9001-3KK01				■
		600 mm	8GK9001-4KK01				■
		750 mm	8GK9001-5KK01				■
		900 mm	8GK9001-6KK01				■
		1050 mm	8GK9001-7KK01				■
		1050 mm	8GK9001-7KK01				■
	210 mm	300 mm	8GK9301-2KK01		■	■	
		450 mm	8GK9301-3KK01		■	■	
		600 mm	8GK9101-4KK01		■	■	
		750 mm	8GK9101-5KK01		■	■	
		900 mm	8GK9101-6KK01		■	■	
		1050 mm	8GK9101-7KK01		■	■	
		1200 mm	8GK9101-8KK01		■	■	
		1350 mm	8GK9102-8KK01		■	■	
		1800 mm	8GK9520-8KK00		■	■	
400 mm	1800 mm	8GK9521-8KK00	■				

1250 630 400 160

Partitions, horizontal

- For the visual and spatial separation of different potentials



Cubicle depth	Width	Article No.	1250	630	400	160
140 mm	250 mm	8GK9002-0KK10				■
210 mm	250 mm	8GK9103-0KK10		■	■	
	500 mm	8GK9103-0KK20		■	■	
	750 mm	8GK9103-0KK30		■	■	
250 /320 mm	250 mm	8GK9520-0KK10		■		
	500 mm	8GK9520-0KK20		■		
400 mm	250 mm	8GK9520-0KK30	■			

Mounting plates



Cubicle Height	Width	Mounting plates		Article No.	1250	630	400	160
		Height	Width					
600 mm	250 mm	596 mm	243 mm	8GK9531-4KK10			■	
	500 mm	596 mm	493 mm	8GK9531-4KK20			■	
750 mm	250 mm	685 mm	243 mm	8GK9531-5KK10			■	
	500 mm	685 mm	493 mm	8GK9531-5KK20			■	
900 mm	250 mm	835 mm	243 mm	8GK9531-6KK10			■	
	500 mm	835 mm	493 mm	8GK9531-6KK20			■	
1050 mm	250 mm	985 mm	243 mm	8GK9531-7KK10			■	
	500 mm	985 mm	493 mm	8GK9531-7KK20			■	
1200 mm	250 mm	1135 mm	243 mm	8GK9531-8KK10			■	
	500 mm	1135 mm	493 mm	8GK9531-8KK20			■	
1350 mm	250 mm	1285 mm	243 mm	8GK9532-8KK10			■	
	500 mm	1285 mm	493 mm	8GK9532-8KK20			■	
1800 mm	250 mm	1680 mm	242 mm	8GK9533-0KK10	■	■		
	500 mm	1680 mm	492 mm	8GK9533-0KK20	■	■		
	750 mm	1680 mm	742 mm	8GK9533-0KK30	■	■		
	1000 mm	1680 mm	992 mm	8GK9533-0KK40	■	■		
	1250 mm	1680 mm	1242 mm	8GK9533-0KK50	■	■		

Mounting plates for telecommunication units

- Made of perforated steel plate
- With insert nuts and quick-locking technology

Cubicle Height	Width	Mounting plates		Article No.	1250	630	400	160
		Height	Width					
900 mm	250 mm	835 mm	243 mm	8GS4016-1			■	
1050 mm	250 mm	985 mm	243 mm	8GS4016-2			■	
1200 mm	250 mm	1135 mm	243 mm	8GS4016-3			■	
1350 mm	250 mm	1285 mm	243 mm	8GS4016-4			■	

Longitudinal stays







- In order to mount the assembly kits in unequipped distribution boards, 2 longitudinal stays are required for each assembly kit width
- 1 set = 2 stays



Cubicle depth	Length	Article No.	1250	630	400	160
210 mm	300 mm	8GK4855-2KK02		■		
	450 mm	8GK4851-3KK00				■
	600 mm	8GK4851-4KK00			■	■
	750 mm	8GK4851-5KK00			■	■
	900 mm	8GK4851-6KK00			■	■
	1050 mm	8GK4851-7KK00			■	■
	1200 mm	8GK4851-8KK00			■	
	1350 mm	8GK4852-8KK00			■	
250 mm, 320 mm, 400 mm	1800 mm	8GK4853-8KK02	■	■		

Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

					1250	630	400	160	
Stay supports									
	<ul style="list-style-type: none"> For depth of 210 mm when mounting stays are to be shifted forward by 55 mm Necessary whenever standard mounting rails are mounted directly on the stays 				Article No.				
					8GK9910-0KK38			■	
Universal brackets									
					Article No.				
					8GK9910-0KK05	■	■		
Connecting kits for longitudinal stays									
	Depth				Article No.				
	250/320 mm				8GK9910-0KK32	■	■	■	
Crossbars									
	Width				Article No.				
	500 mm				8GK4853-0KK20	■	■	■	
	750 mm				8GK4853-0KK30	■	■	■	
Front cover, closed									
	Tier spacing	Height	Width	Article No.					
	150 mm	75 mm	250 mm	8GK9601-0KK10	■	■	■	■	
		150 mm	250 mm	8GK9601-1KK10	■	■	■	■	
			500 mm	8GK9601-1KK20	■	■	■	■	
	300 mm		750 mm	8GK9601-1KK30	■	■	■	■	
		250 mm	250 mm	8GK9601-2KK10	■	■	■	■	
			500 mm	8GK9601-2KK20	■	■	■	■	
	450 mm		750 mm	8GK9601-2KK30	■	■	■	■	
		250 mm	250 mm	8GK9601-3KK10	■	■	■	■	
			500 mm	8GK9601-3KK20	■	■	■	■	
	600 mm		750 mm	8GK9601-3KK30	■	■	■	■	
		250 mm	250 mm	8GK9601-4KK10	■	■	■	■	
			500 mm	8GK9601-4KK20	■	■	■	■	
			750 mm	8GK9601-4KK30	■	■	■	■	
Front cover with cutout									
	Height	Width	Tiers	MW	Article No.				
	150 mm	250 mm	1	12	8GK9601-1KK11	■	■	■	■
		500 mm	1	24	8GK9601-1KK21	■	■	■	■
		750 mm	1	36	8GK9601-1KK31	■	■	■	■
	300 mm	250 mm	2	24	8GK9601-2KK11	■	■	■	■
		500 mm	2	48	8GK9601-2KK21	■	■	■	■
		750 mm	2	72	8GK9601-2KK31	■	■	■	■
	450 mm	250 mm	3	36	8GK9601-3KK11	■	■	■	■
		500 mm	3	72	8GK9601-3KK21	■	■	■	■
		750 mm	3	108	8GK9601-3KK31	■	■	■	■
	600 mm	250 mm	4	48	8GK9601-4KK11	■	■	■	■
		500 mm	4	96	8GK9601-4KK21	■	■	■	■
		750 mm	4	144	8GK9601-4KK31	■	■	■	■

					1250	630	400	160
Supports for front cover								
 <ul style="list-style-type: none"> Plastic 	Version	Length	Mounting	Article No.				
	Spare part	117 mm	Standard	8GK9910-0KK30	■	■	■	
		54 mm	Standard	8GK9910-0KK20				■
	Large pack	117 mm	For 15 mm standard mounting rail directly onto the standard mounting rail holder	8GK9910-0KK31	■	■	■	
		61.5 mm	For 15 mm standard mounting rail directly onto the stays	8GK9910-0KK24	■	■	■	
Assembly tool for supports								
 <ul style="list-style-type: none"> For short and long version With ergonomic handle 					Article No.			
					8GK9910-0KK27	■	■	■
Support extensions								
	Length	Article No.						
	7.5 mm	8GK9911-0KK03			■	■	■	■
Quick-lock screws for front cover								
	Material	Color	Article No.					
	Plastic	RAL 7035 (light gray)	8GK9910-0KK26		■	■	■	■
Replacement door hinges								
 <ul style="list-style-type: none"> For wall/floor-mounted distribution boards 1 set = 2 units 					Article No.			
					8GK9920-0KK24	■	■	■
Circuit diagram pockets								
	Version	Format	Depth	Article No.				
	Sheet steel	DIN A3	10 mm	8GK9910-0KK22	■	■	■	■
	Transparent sleeve, adhered all-over	DIN A4		8GK9910-0KK23	■	■	■	■
	Plastic	DIN A4	30 mm	8GD9132	■	■	■	■
	Plastic, large pack	DIN A4	30 mm	8GK9910-1KK24	■	■	■	■
Siemens nameplate								
	Material	Version	Color	Article No.				
	Aluminum	Self-adhesive	petrol	8GD9084	■	■	■	■

Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

			1250	630	400	160
IP43/IP55 locking systems for wall-mounted distribution boards						
	Version	Article No.				
	Standard locking device with rotary handle	8GK9560-0KK04			■	■
	Retrofit kit for standard locking device with degree of protection IP44	8GK9560-0KK05			■	■
	Rotary handle locking device for profile cylinders (E012 or Senat tumbler)	8GK9560-0KK06			■	■
	Rotary handle, lockable, incl. E012 lock and two keys	8GK9560-0KK13			■	■
Locking systems for floor-mounted distribution boards						
	Version	Article No.				
	Rotary handle, recessable, with pushbutton technique	8GK9561-0KK01	■	■		
	Lock insert for installation of profile semicylinder	8GK9561-0KK02	■	■		
Profile semicylinder for locks						
	Use	Version	Article No.			
	Wall-mounted distribution boards	With E012 lock and two keys	8GK9560-0KK07		■	■
		With Senat tumbler and two keys	8GK9560-0KK08		■	■
		With 3-mm pin as double-bit lock	8GK9560-0KK10		■	■
	Floor-mounted distribution boards	With E012 lock and two keys	8GK9561-0KK00	■	■	
		With Senat tumbler and two keys	8GK9560-0KK03	■	■	

1250 630 400 160

Spare keys



Version	Article No.	1250	630	400	160
For double-bit interlocking mechanism	8GD9290	■	■		
For E012 lock	8GF9390-2	■	■	■	■

Connecting kit, IP43/IP55



<ul style="list-style-type: none"> For side-by-side mounting of enclosures Comprising: screws, washers, nuts and 10 m roll of sealing strip 	Article No.				
	8GK9920-0KK31	■	■	■	

Extra-deep brackets



<ul style="list-style-type: none"> For recessed installation of standard mounting rails 	Article No.				
	8GK9910-0KK34	■	■	■	

Extra-deep brackets, depth-adjustable



	Article No.				
	8GK9911-0KK01	■	■	■	

Drop-down brackets, universal



	Article No.				
	8GK9911-0KK02	■	■	■	

Standard mounting rails, lowered



Width	Article No.	1250	630	400	160
250 mm	8GK9910-0KK35	■	■	■	
500 mm	8GK9910-0KK40	■	■	■	
750 mm	8GK9910-0KK41	■	■	■	

15 mm standard mounting rails



Width	Article No.	1250	630	400	160
250 mm	8GK9910-1KK10	■	■		
500 mm	8GK9910-1KK20	■	■		
750 mm	8GK9910-1KK30	■	■		
1000 mm	8GK9910-1KK40	■	■		
1250 mm	8GK9910-1KK50	■	■		

Standard mounting rail holders for 15 mm standard mounting rail

- Comprising a left and a right holder




Version	Version	Article No.	1250	630	400	160
Long	For 1 standard mounting rail	8GK9910-1KK81	■	■	■	
	For 2 standard mounting rails	8GK9910-1KK83	■	■	■	
	For 3 standard mounting rails	8GK9910-1KK84	■	■	■	
	For 4 standard mounting rails	8GK9910-1KK85	■	■	■	

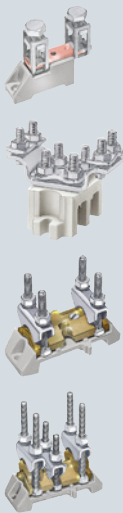
Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

			1250	630	400	160
Iso supports						
	<ul style="list-style-type: none"> For insulated standard mounting rail assembly 					
	Version	Article No.				
	12 mm	8GK9911-0KK04	■	■	■	■
	31.5 mm	8GK9911-0KK05	■	■	■	
	55.5 mm	8GK9911-0KK06	■	■	■	
Screws M5 × 10, self-tapping						
	<ul style="list-style-type: none"> Large pack: 500 units 					
		Article No.				
		8GK9911-0KK00	■	■	■	■
Crossbars for mounting vertical busbar systems						
	Width	Article No.				
	250 mm	8GK9911-1KK00	■	■	■	
	500 mm	8GK9911-1KK01	■	■	■	
	750 mm	8GK9911-1KK02	■	■	■	
Blanking strips						
	Version	Color	Article No.			
	For 12 MW (1 MW = 18 mm)	RAL 7035 (light gray)	8GK9910-0KK00	■	■	■
	Length 1 m w/o pressure-relief joint, to cut to length	RAL 7035 (light gray)	8GK9910-0KK01	■	■	■
Blanking plugs						
	Diameter	Article No.				
	6 mm	8GK9910-0KK06	■	■	■	■
	11 mm	8GK9910-0KK07	■	■	■	■
N terminals						
	<ul style="list-style-type: none"> For snap-on mounting onto the standard mounting rail For distributing the neutral conductor when using several RCCBs 2× screw terminal, conductor cross-section max. 16 mm² 14× plug-in terminal, conductor cross-section max. 4 mm² 					
		Article No.				
		8GS4034-1	■	■	■	■
PE terminals						
	<ul style="list-style-type: none"> For snap-on mounting onto the standard mounting rail 2× screw terminal, conductor cross-section max. 16 mm² 14× plug-in terminal, conductor cross-section max. 4 mm² 					
		Article No.				
		8GS4034-2	■	■	■	■
N/PE terminals						
	<ul style="list-style-type: none"> For snap-on mounting onto the standard mounting rail For distributing the neutral conductor when using several RCCBs 1× screw terminal, conductor cross-section max. 16 mm², per PE and N potential 7× plug-in terminal, conductor cross-section max. 4 mm², per PE and N potential 					
		Article No.				
		8GS4034-3	■	■	■	■
N/N terminals						
	<ul style="list-style-type: none"> For snap-on mounting onto the standard mounting rail For distributing the neutral conductor when using several RCCBs 1× screw terminal, conductor cross-section max. 16 mm², per PE and N potential 7× plug-in terminal, conductor cross-section max. 4 mm², per PE and N potential 					
		Article No.				
		8GS4034-4	■	■	■	■

				1250	630	400	160
Terminals for circular conductors							
	Busbar thickness	Conductor cross-section	Article No.				
	5 mm	1.5 ... 16 mm ²	8US1921-2AA00	■	■	■	
		1.5 ... 35 mm ²	8US1921-2AB00	■	■	■	
		16 ... 70 mm ²	8US1921-2AC00	■	■	■	
	16 ... 120 mm ²	8US1921-2AD00	■	■	■		

Terminals for circular conductors							
	Busbar thickness	Conductor cross-section	Article No.				
	10 mm	1.5 ... 16 mm ²	8US1921-2BA00	■	■	■	
		1.5 ... 35 mm ²	8US1921-2BB00	■	■	■	
		16 ... 70 mm ²	8US1921-2BC00	■	■	■	
	16 ... 120 mm ²	8US1921-2BD00	■	■	■		

Terminals with bases made of glass-fiber reinforced polyester resin								
	Incoming cables		Outgoing cables		Article No.			
	No. of	Cross-section	No. of	Cross-section				
	1	6 ... 70 mm ²	1	6 ... 70 mm ²	8JK401	■	■	■
		4 ... 35 mm ²	3	4 ... 35 mm ²	8JH4044	■	■	■
		50 ... 240 mm ²	1	50 ... 240 mm ²	8JK4061	■	■	■
	2	50 ... 240 mm ²	2	50 ... 185 mm ²	8JK406	■	■	■

Accessories

For ALPHA 1250 / 630 / 400 / 160 distribution boards

1250 630 400 160

Incoming and outgoing terminal for busbars

Busbar Dimensions	No. of	Conductor cross-section	Description	Article No.				
					1250	630	400	160
16 × 3 mm	1	1.5 ... 16 mm ²		8JH4122	■	■	■	
		10 ... 35 mm ²		8JH4124	■	■	■	
6 × 6 mm	1	16 ... 35 mm ²	Can be retrofitted without dismantling the busbar	8JH4114	■	■	■	
20 × 8 mm	1 or 2	50 ... 240 mm ²	1 conductor per clamping point	8JK3171	■	■	■	



Incoming and outgoing terminal for busbars

Busbar Dimensions	No. of	Conductor cross-section	Description	Article No.				
					1250	630	400	160
–	–	–	2 conductors per clamping point	8JK3172	■	■	■	
12 × 5 mm	1	10 ... 35 mm ²		8JH4104	■	■	■	
		16 ... 70 mm ²		8JH4105	■	■	■	
	2	16 ... 35 mm ²		8JH4105	■	■	■	



N/PE bars as plug-in terminals

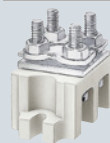
Version	Connections	Article No.				
PE bar	6 screw connections 2.5 ... 16 mm ² and 21 screw connections 1.5 ... 4 mm ²	8GK9910-0KK11				■
PE + N bar	PE bar: 6 screw connections 2.5 ... 16 mm ² and 21 screw connections 1.5 ... 4 mm ² N bar: 2 screw connections 2.5 ... 16 mm ² and 10 screw connections 1.5 ... 4 mm ²	8GK9910-0KK12				■



- For mounting on longitudinal stays at a 30° inclination

Terminal with ceramic base

Incoming cables No. of	Cross-section	Outgoing cables No. of	Cross-section	Article No.				
					1250	630	400	160
1	4 ... 35 mm ²	1	4 ... 35 mm ²	8JH404	■	■	■	■



Cable clamping rail

Width	Article No.				
250 mm	8GK9911-0KK10	■	■	■	
500 mm	8GK9911-0KK20	■	■	■	
750 mm	8GK9911-0KK30	■	■	■	
1000 mm	8GK9911-0KK40	■	■	■	
1250 mm	8GK9911-0KK50	■	■	■	



- For strain relief
- C-profile 30 × 15 mm

1250 630 400 160

Cable holders



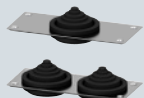
Use	Version	Article No.	1250	630	400	160
For standard mounting rail	Height 45 mm, width 40 mm	8GK9910-0KK80	■	■	■	
For mounting in 5-mm hole	Clip with cable tie	8GK9910-0KK81	■	■	■	

Flange for cable installation



Version	Degree of protection	Cable routing	Article No.	1250	630	400	160
1-component flange	IP43	Bottom	8GK9100-0KK00	■	■	■	
2-component flange			8GK9000-0KK02				■
2-component flange	IP55	Top/bottom	8GK9100-0KK01	■	■	■	
Bushing flange		Busbar system	8GK9100-0KK10	■	■	■	

Flange plate for cable installation



Version	Degree of protection	Cable diameter	Article No.	1250	630	400	160
Blank flange	IP43		8GK9100-0KK02	■	■	■	
	IP55		8GK9100-0KK03	■	■	■	
Sheet steel, without knockouts	IP55		8GK9100-0KK04	■	■	■	
Flange, incl. 1 cable support sleeve	IP55	14–65 mm	8GK9100-0KK05	■	■	■	
Flange, incl. 2 cable support sleeves	IP55	14–65 mm	8GK9100-0KK06	■	■	■	

Rubber cable entries



• For inserting in 38 mm diameter knockouts (= Pg29) • Degree of protection IP65		Article No.	1250	630	400	160
No. of	Cable diameter	Article No.	1250	630	400	160
1	12...29 mm	8HP1805	■	■	■	■
2	6...15 mm	8HP1806	■	■	■	■
3	4...12.5 mm	8HP1807	■	■	■	■
4	4...12 mm	8HP1808	■	■	■	■

Cable entries for cable entry plate



• For 8HP1520 cable entry plates		Article No.	1250	630	400	160
Cable diameter	Article No.	Article No.	1250	630	400	160
14...65 mm	8HC6900	8HC6900	■	■	■	■

Breathers, PG 16



• For distribution boards in an outdoor climate to avoid condensate • Degree of protection IP54		Article No.	1250	630	400	160
		Article No.	1250	630	400	160
		8HE8541	■	■	■	■

ALPHA SIMBOX XL small distribution boards

Flush-mounting and hollow-wall distribution boards, rated current up to 63 A

				Complete supply	Project supply		
Degree of protection				IP30	IP30		
							
Recess dimensions			Type	Safety class II	Safety class II		
Width	Depth	Length			Wall-recessed box	Expansion package	
Flush-mounting distribution boards							
359 mm	88 mm	393 mm	1-tier	8GB5012-1KM	8GB5212-1KM01	8GB5212-3KM01	
		518 mm	2-tier	8GB5024-1KM	8GB5224-1KM01	8GB5224-3KM01	
		643 mm	3-tier	8GB5036-1KM	8GB5236-1KM01	8GB5236-3KM01	
		768 mm	4-tier	8GB5048-1KM	8GB5248-1KM01	8GB5248-3KM01	
Hollow-wall distribution boards							
323 mm	88 mm	355 mm	1-tier	8GB5012-4KM	8GB5212-2KM01	8GB5212-4KM01	
		480 mm	2-tier	8GB5024-4KM	8GB5224-2KM01	8GB5224-4KM01	
		605 mm	3-tier	8GB5036-4KM	8GB5236-2KM01	8GB5236-4KM01	
		730 mm	4-tier	8GB5048-4KM	8GB5248-2KM01	8GB5248-4KM01	

Accessories

Terminal strips with plug-in terminals



Type	Potential 1	Potential 2	Article No.
N/PE	$N = 3 \times 25 + 14 \times 4 \text{ mm}^2$	$PE = 3 \times 25 + 14 \times 14 \text{ mm}^2$	8GB5016-5KM
N/N	$N1 = 3 \times 25 + 14 \times 4 \text{ mm}^2$	$N2 = 3 \times 25 + 14 \times 14 \text{ mm}^2$	8GB5017-5KM
N	$N = 6 \times 25 + 28 \times 4 \text{ mm}^2$		8GB5020-5KM
PE	$PE = 6 \times 16 + 28 \times 5 \text{ mm}^2$		8GB5021-5KM

Terminal strips with screw terminals






Type	Potential 1	Potential 2	Article No.
N/PE	$N = 3 \times 16 + 14 \times 10 \text{ mm}^2$	$PE = 3 \times 16 + 14 \times 10 \text{ mm}^2$	8GB5008-5KM
N/N	$N1 = 3 \times 16 + 14 \times 10 \text{ mm}^2$	$N2 = 3 \times 16 + 14 \times 10 \text{ mm}^2$	8GB5015-5KM
N	$N = 6 \times 16 + 28 \times 10 \text{ mm}^2$		8GB5010-5KM
PE	$PE = 6 \times 16 + 28 \times 10 \text{ mm}^2$		8GB5011-5KM



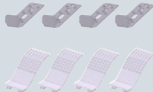
RCCB terminals



Use	Potential	Article No.
For distributing the neutral conductor to two RCCBs	$N = 3 \times 16 + 2 \times 10 \text{ mm}^2$	8GB5005-5KM

Surface-mounting distribution boards, rated current up to 63 A

				Distribution boards without door	Metal doors, white	Plastic doors, white
Degree of protection				IP30	IP30	IP30
						
External dimensions				Safety class II	Safety class II	Safety class II
Width	Depth	Length	Type			
Surface-mounting distribution boards						
305 mm	99 mm	250 mm	1-tier	8GB5012-0KM	8GB5001-5KM	8GB5001-5KM01
		375 mm	2-tier	8GB5024-0KM	8GB5002-5KM	8GB5002-5KM01
		515 mm	3-tier	8GB5036-0KM	8GB5003-5KM	8GB5003-5KM01
		640 mm	4-tier	8GB5048-0KM	8GB5004-5KM	8GB5004-5KM01

Door locking kit				
	Use	Feature	Article No.	
	For snapping into door handle	With two keys	8GB5006-5KM	
Blanking strips				
	Width	Feature	Color	Article No.
	12 MW	Increased flame protection up to 850 °C	White	8GB4683
Mounting aid for flush mounting				
	Use	Article No.		
	For flush-mounting and hollow-wall distribution boards	8GB5013-5KM		

ALPHA SIMBOX XL small distribution boards

Multimedia distribution boards, rated current up to 63 A

Surface-mounting distribution boards

Degree of protection IP30



Cutout width	Cutout depth	Cutout length	Type	Safety class II
Hollow-wall/flush-mounting distribution boards				
323 mm	88 mm	605 mm	3-tier	8GB5036-3KM01
		730 mm	4-tier	8GB5048-3KM01
Surface-mounting distribution boards				
323 mm	88 mm	605 mm	3-tier	8GB5036-3KM00
		730 mm	4-tier	8GB5048-3KM00

Accessories

Connecting lugs

Use

For installing several distribution boards in a row, vertically or horizontally

Article No.

8GB5025-5KM

ALPHA SIMBOX WP small distribution boards

Surface-mounting distribution boards, rated current up to 63 A

Unequipped surface-mounting distribution boards

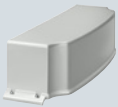
Degree of protection IP65



Type	Height outside	Width outside	Depth outside	Safety class II
Surface-mounting distribution boards				
1-tier	210 mm	143 mm	100 mm	8GB1371-0
		215 mm	100 mm	8GB1371-1
	260 mm	298 mm	140 mm	8GB1371-2
		410 mm	140 mm	8GB1371-3
2-tier	420 mm	298 mm	140 mm	8GB1372-2
	463 mm	410 mm	140 mm	8GB1372-3
3-tier	655 mm	410 mm	140 mm	8GB1373-3
4-tier	878 mm	410 mm	160 mm	8GB1374-3

Accessories

Covers



- For connection of conduit and cable duct entries
- Snap-on mounting

MW	Article No.
12	8GB2051-0
18	8GB2051-1

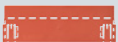
N/PE terminal strips



- For snapping onto device holder

MW	Potential 1	Potential 2	Article No.
8	N = 1 × 25 + 7 × 10 mm ²	PE = 1 × 25 + 7 × 10 mm ²	8GB2052-0
12	N = 3 × 25 + 10 × 10 mm ²	PE = 3 × 25 + 10 × 10 mm ²	8GB2052-1
18	N = 5 × 25 + 14 × 10 mm ²	PE = 5 × 25 + 14 × 10 mm ²	8GB2052-2

Inner partitions, horizontal



MW	Article No.
12	8GB2053-0
18	8GB2053-1

Front covers

MW	Article No.
12	8GB2054-0
18	8GB2054-1

Safety cylinder locks

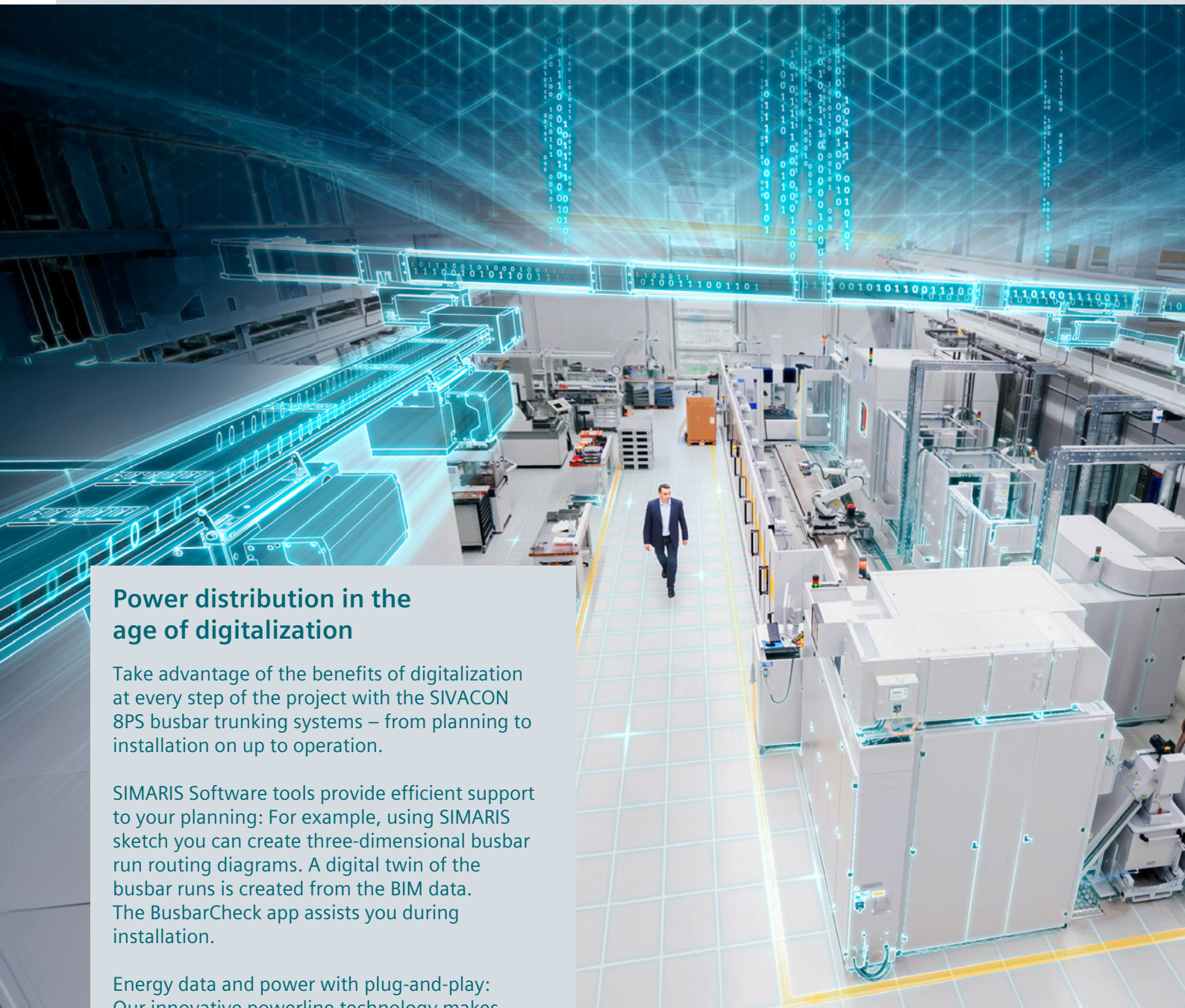


Material	Scope of supply	Article No.
Metal	With key	8GB2055-0

Blanking strips



Version	Color	Article No.
For 12 MW (1 MW = 18 mm)	RAL 7035 (light gray)	8GK9910-0KK00



Power distribution in the age of digitalization

Take advantage of the benefits of digitalization at every step of the project with the SIVACON 8PS busbar trunking systems – from planning to installation on up to operation.

SIMARIS Software tools provide efficient support to your planning: For example, using SIMARIS sketch you can create three-dimensional busbar run routing diagrams. A digital twin of the busbar runs is created from the BIM data. The BusbarCheck app assists you during installation.

Energy data and power with plug-and-play: Our innovative powerline technology makes this possible for SIVACON 8PS busbar trunking systems – efficient and reliable. Energy data is simply transferred to the automation and energy management systems, as well as to cloud-based systems (IoT). Data and electricity travel the same path via the conductor circuits and phases of the BD2, LD and LI busbar trunking systems.

Busbar Trunking Systems



All the information you need	16/2
Quick selection guide	16/4
Busbar trunking systems	16/4
Planning and installation tools	16/6

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about busbar trunking systems, please visit our website

www.siemens.com/sivacon-8PS

Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Brochure – Energy and data successfully put on track [\(109747761\)](#)
- Catalog LV 70 – 2015 – SIVACON 8PS busbar trunking systems – BD01, BD2 up to 1250 A [\(109744546\)](#)

The relevant tender specifications can be found at www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products

www.siemens.com/conversion-tool

Siemens YouTube channel

Our video range

- SIVACON power distribution (general) bit.ly/2m4oSLI

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- SIVACON 8PS sie.ag/2IXpCT1
- SIMARIS planning tools sie.ag/2m3oFbS

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No.

www.siemens.com/product?Article No.

Order support for SIVACON 8PS – BD01 and BD2

www.siemens.com/LV70

Configurators

Configure your SIVACON 8PS BD01 or BD2 busbar trunking system in the [Industry Mall](#)

... can be found in our online services

Commissioning + operation

Planning tools

BIM-compliant SIMARIS planning tools

The SIMARIS planning tools effectively assist you in your planning process. Project-specific BIM (Building Information Modeling) data for cross-package planning is also possible.

www.siemens.com/simaris

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Planning manual – Planning with SIVACON 8PS (109478425)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at

www.power-academy.siemens.com

Technical overview of busbar trunking systems

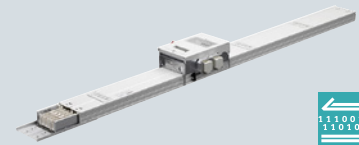
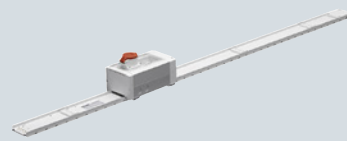


The fast way to get you to our online services

This page provides you with comprehensive information and links on busbar trunking systems


www.siemens.com/lowvoltage/product-support (109769090)

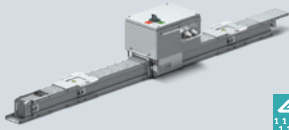
Busbar trunking systems



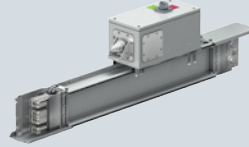
Busbar trunking systems	BD01	BD2
Basic data		
System description	Flexible power supply in workshops and production plants for skilled trades and businesses and commercial enterprises	The universal solution for high power levels in a small space, especially in offices and in industrial transfer lines
Typical applications	<ul style="list-style-type: none"> • Workshops and production plants • Supermarkets • Data centers • High-rise buildings • Trade fair buildings • Automotive industry • Marine applications 	<ul style="list-style-type: none"> • Workshops and production plants • Production industry • Do-it-yourself centers • Data centers • High-rise buildings • Foodstuffs industry • Trade fair buildings • Hospitals • Automotive industry • Marine applications
Basic data		
Rated insulation voltage U_i	400 V AC	690 V AC
Rated operational voltage U_e	400 V AC	690 V AC
Degree of protection	IP54, IP55	IP52, IP55
Rated current I_{nA}	40 ... 160 A	160 ... 1250 A
Rated peak withstand current I_{pk}	Up to 15.3 kA	Up to 90 kA
Rated short-time withstand current I_{cw} (1 s)	Up to 2.5 kA	Up to 34 kA
Number of conductors	4 (PE = enclosure)	5
Connection technology	Connecting flange with built-in expansion compensation	With built-in expansion compensation, bolt-type terminal
Outgoing feeders and junctions		
Tap-off point	On one side every 0.5 or 1 m	On one side every 0.5 m, On two sides offset every 0.25 m
Tap-off unit	Up to 63 A	Up to 530 A
Material		
Conductors	Aluminum / Copper	Aluminum or copper
Enclosures (trunking unit, feeder unit)	Sheet steel zinc-plated and painted	Sheet steel zinc-plated and painted
Communication		
Data transmission	Data line	powerline, data line
Approvals / Certificates		
Approvals	EAC	EAC
Marine classification societies	<ul style="list-style-type: none"> • DNV GL 	<ul style="list-style-type: none"> • DNV GL • Environmental Product Declaration (EPD)

¹⁾ IP66 for pure energy transfer runs without outgoing feeders.

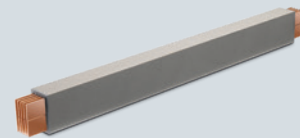
 Data transfer with powerline technology



LD



LI



LR

The proven high-current busbar for industry and special applications

- Automotive industry
- Production industry
- Foodstuffs industry
- Trade fair buildings
- Wind power plants
- Semiconductor production
- Marine applications

An integrated solution for safe and efficient infrastructure power supply – for example in multi-story buildings and industrial applications

- Data centers
- High-rise buildings
- Production industry
- Chemicals industry
- Airports
- Trade fair buildings
- Hospitals
- Do-it-yourself centers
- Shopping malls
- Supermarkets

The reliable busbar for a high degree of protection in harsh environments, for example for networking of building sections outdoors or for power supply in tunnels

- Chemicals industry
- Oil and Gas
- Tunnels and subways
- Outdoor applications

1000 V AC

1000 V AC

1000 V AC

1000 V AC

1000 V AC

1000 V AC

IP34, IP54

IP55, IP66 ¹⁾

IP68

1100 ... 5000 A

800 ... 6300 A

400 ... 6300 A

Up to 286 kA

Up to 330 kA

Up to 275 kA

Up to 116 kA

Up to 150 kA

Up to 125 kA

4, 5

4 ... 6 conductors (incl. 200% N or add. clean earth)

3 and PEN or 3, N and PE

Bolt-type terminal connection with hook and bolt connection

Hook and bolt connection with shear nut

Bolt terminal block

On one side every 1 m

Up to 3 for every 3 m (per side)

On one side every 1 m

Up to 1250 A

Up to 1250 A

On request

Aluminum or copper

Aluminum or copper

Aluminum or copper

Sheet steel zinc-plated and painted

Aluminum painted

Epoxy resin

powerline, data line

powerline, data line

–

EAC

EAC

EAC

- DNV GL

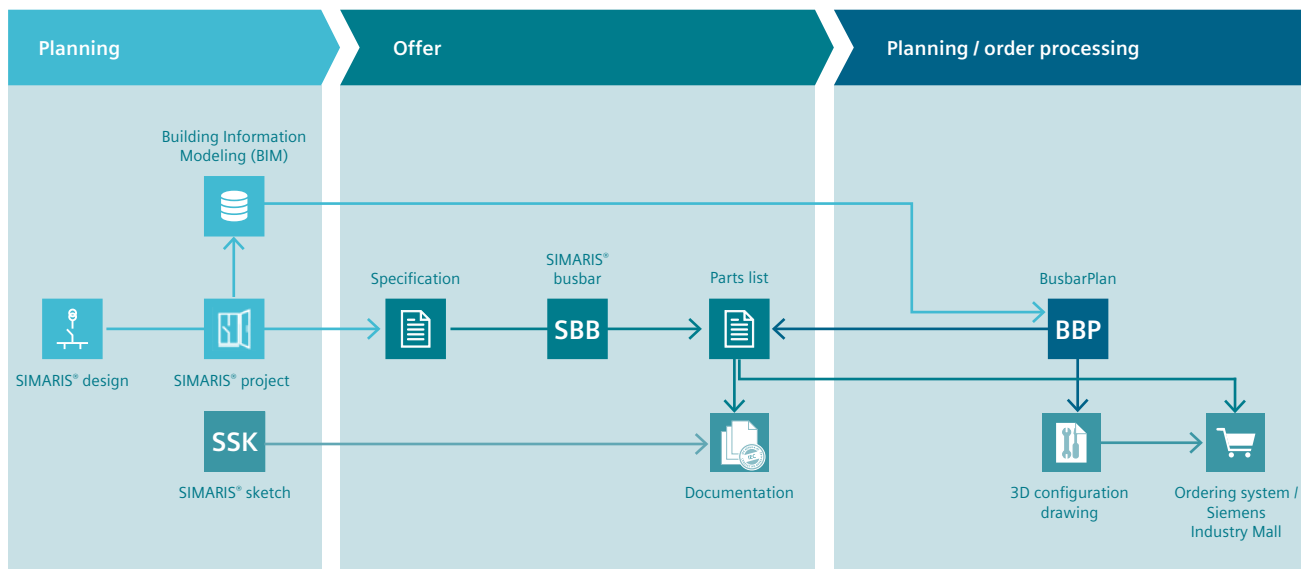
- Environmental Product Declaration (EPD)

- DNV GL
- SEISMIC Qualification Certificate (earthquake test)
- ATEX
- Product Environmental Profile (PEP)

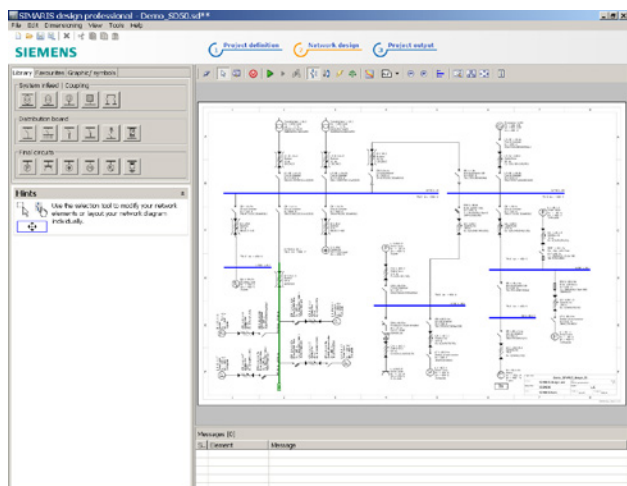
Planning and installation tools

For planning, visualization and installation of busbar trunking systems

From planning to commissioning



SIMARIS® design

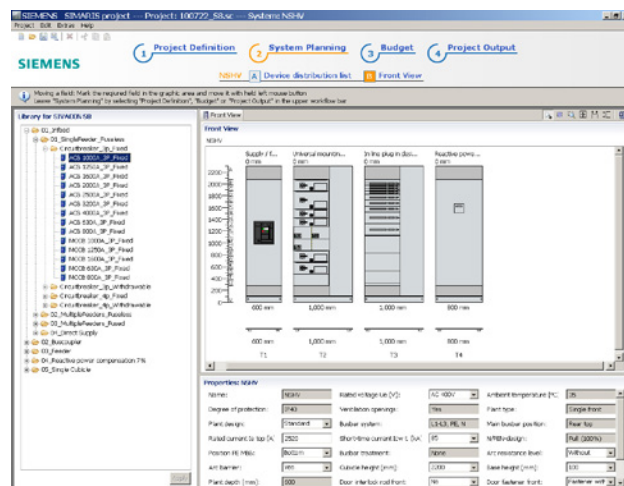


SIMARIS® design is a planning tool for fast and efficient grid calculation and dimensioning of electrical power distribution for special-purpose and industrial buildings.

- Dimensioning of electrical networks on the basis of real products according to acknowledged rules of technology and the applicable standards (VDE, IEC)
- Automatic selection of the appropriate components from the stored product database

Free download of the basic version and further information available at: www.siemens.com/simarisdesign

SIMARIS® project

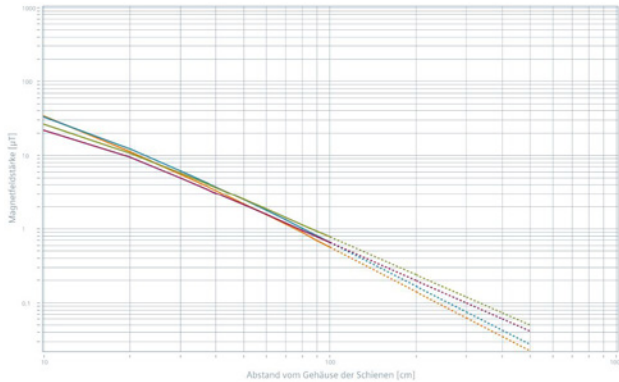


SIMARIS® project is a planning tool used to quickly determine the necessary space requirements and the budget for electrical energy distribution for special-purpose and industrial buildings and for automatic generation of specifications.

- Import into projects created with SIMARIS® design
- Export of 3D data in IFC 4.x format for BIM (Building Information Modeling)

Free download and further information available at: www.siemens.com/simarisproject

SIMARIS® Toolbox (online)



The SIMARIS® Toolbox is a platform for provision of online tools for assisting electrical installation planners. It includes, for example:

- EMC Busbar (tool for calculating magnetic field strength in the vicinity of SIVACON 8PS busbar trunking systems)

Free access and further information at:

www.siemens.com/simaristoolbox

BIM data



BIM simplifies the planning process. While the simple exchange of relevant building data between the planners and the facility manager ensures high quality and reduces costs, the digital twin for power distribution fits in seamlessly with the overall structure – for efficient planning, performance and maintenance.

www.siemens.com/bim-eplanning

SIMARIS® sketch



SIMARIS® sketch is a software tool for quick and easy planning and visualization of busbar trunking systems.

- Representation of complex building structures
- Presentation of complete projects directly in 3D
- Export of parts lists as Excel files and graphics for preparation of orders

Free download and further information available at:

www.siemens.com/simarissketch

BusbarCheck app



BusbarCheck is an installation app to use for easy and high-quality installation and documentation.

- Detailed explanation of all steps
- Written record and proper documentation for better and easier evaluation of the installation
- Can be used by all installation companies and SIVACON 8PS busbar trunking installations in Germany and in other selected countries

Free download from:

[App Store](#) and [Play Store](#)

Equipped for all applications

Maximum flexibility and minimum space requirement – these are the key prerequisites for high-performance switchgear and control cabinets in industrial environments. Switchgear cabinet manufacturers have to respond increasingly rapidly to their efficiency-conscious customers' requirements. Simplified configuration, planning and implementation bring you additional competitive advantages. The SIVACON 8MF1 system cubicles were rigorously designed to meet the increased demands placed on control cabinet construction.

The SIVACON 8MF1 modular system enables custom-tailored solutions to be configured for virtually all industrial sectors and applications. Whether fully assembled, adapted according to your specifications, or developed individually, the system cubicles support the individual creation of added value in control cabinet construction. With SIVACON 8MF1, you can also be sure of absolute compliance with relevant standards: The switchgear enclosures meet all currently applicable standards and regulations. Special versions, and control cabinets with various special certifications and specific approvals, as well as variants adapted to specific sectors, can be individually developed.



System Cubicles, System Lighting and System Air-Conditioning



All the information you need	17/2
System overview	17/4
Complete system cubicles	17/8
Quick selection guide	17/8
Article numbers for complete system cubicles	17/9
Components for configurable system cubicles	17/10
Quick selection guide	17/10
Frame	17/11
Door	17/14
Modular door	17/17
Side/rear panel	17/18
Roof	17/20
Floor	17/22
Mounting panels	17/24
Mounting plates	17/25
Mounting rails	17/26
Online configurator highlights	17/27
19-inch expansion	17/28
Interior installation	17/30
System lighting	17/34
Quick selection guide	17/34
8MR system lighting	17/35
System air-conditioning	17/36
Quick selection guide	17/36
Filter fans and outlet filters	17/37
Roof filter fans and roof outlet filters	17/39
Air conditioners/cooling devices, heat exchangers	17/40
Heater units	17/41
Fan heaters	17/42
Thermostats	17/43
Hygrostats, hygrotherms, switching modules	17/45

A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about system cubicles, system lighting and system air-conditioning, please visit our website www.siemens.com/sivacon-8mf

Contact persons in your region

We are there when you need us

You can find your local contacts at www.siemens.com/lowvoltage/contact

Your product in detail

The Siemens Industry Online Support portal provides comprehensive information www.siemens.com/lowvoltage/product-support

- Technical basic information – SIVACON 8MF1 system cubicle ([109767386](#))
- Brochure – SIVACON 8MF1 system cubicles – As versatile as your requirements ([109744677](#))

The relevant tender specifications can be found at www.siemens.com/lowvoltage/tenderspecifications

Use our conversion tool for quick and easy conversion to Siemens products www.siemens.com/conversion-tool

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- System cubicles, system lighting and system air-conditioning sie.ag/339cQB9

Direct forwarding to the individual products in the Industry Mall by clicking on the Article No. in the catalog or by entering this web address incl. Article No. www.siemens.com/product?Article No.

Configurators

Exactly the right cubicle for your application

The configurator reduces the time and effort required in the planning and ordering process, and allows for individual adaptations. Configure your SIVACON 8MF1 system cubicle at www.siemens.com/lowvoltage/8mf1-configurator

The following are additionally available for your configured SIVACON 8MF1 system cubicle:

- Parts lists
- 2D data
- 3D data

... can be found in our online services

Commissioning + operation

Calculation tool

SIMARIS therm

SIMARIS therm helps you correctly dimension the heat dissipation of control cubicles.

www.siemens.com/simaristherm

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Certificates

Engineering data for CAD or CAE systems are available in the CAx Download Manager at

www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- SIMARIS software SIMARIS therm planning tool (109744553)

The fast track to the experts

Competent expert advice on technical questions with a wide range of demand-optimized services for all our products and systems.

Assistance with technical queries is provided at www.siemens.com/lowvoltage/support-request

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Technical overview of system cubicles, system lighting and system air conditioning



The fast way to get you to our online services

This page provides you with comprehensive information and links on system cubicles, system lighting and system air conditioning

www.siemens.com/lowvoltage/product-support (109769091)

System overview

Complete and configurable cabinets, system lighting and system air conditioning

For complete configuration of your cubicles, system lighting and system air conditioning, please use our online configurator at: www.siemens.com/lowvoltage/8mf1-configurator

Complete cubicles



Basic cubicles, IP40



Basic cubicles, IP55



Ventilated cubicles, IP20



Data cubicles, IP40



Earthquake-reinforced cubicles, IP40

Frames



Standard frames



Corner frames

Frame accessories



Bases



Separators



Trim strips



Transport eyebolts



Transport brackets



Cubicle suites

Enclosures



Section doors



Ventilated doors



Glass doors



Door halves



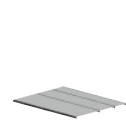
Modular doors



Side walls/rear walls



Rooves



Floors

Enclosure accessories



Roof trays



Covers



Grilles



Strips



Hinges



Rotary handles

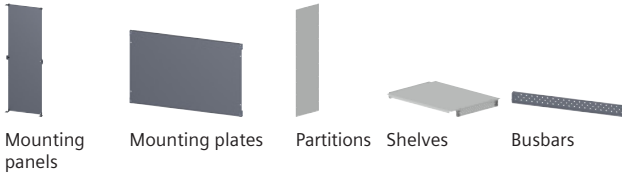


Door position switches



Door stays

Interior installation



Interior installation accessories



19-inch expansion



System lighting



System air-conditioning

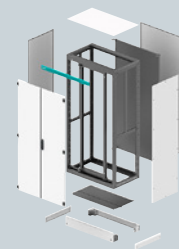


System overview

SIVACON 8MF1 system cubicles



Complete cubicles



Individual modification

Available dimensions				
Height	mm	1800 2000 2200	Special dimensions available on request (max. 2400 mm)	
Width	mm	400 600 800 900 1000 1200	Special dimensions available on request (max. 1600 mm)	
Depth	mm	400 500 600 800 1000	Special dimensions available on request (max. 1200 mm)	
Approvals				
Standards		IEC 62208	IEC 62208	
Protection				
Degree of protection		IP20 IP40 IP55 Shock resistance IK09 Glass doors IK08	IP20 IP21 IP40 IP41 IP42 IP55 Shock resistance IK09 Glass doors IK08	
Safety class		I	I	
Enclosure				
Material		Sheet steel	Sheet steel	
Surface		Zinc-plated Powder-coated	Zinc-plated Powder-coated	
Color		RAL 7035 (light gray)	All RAL colors available, other color palettes available on request	
Corrosivity category in acc. to EN ISO 12944-2		C3 medium, paint thickness 100 µm (+/-25 µm)	C5-M very high (marine), paint thickness 150 µm (+/-25 µm)	
Material thickness				
Frame		2.5 mm	2.5 mm	
Enclosure (without doors)		1.5 mm	2.5 mm	
Mounting panels		2.5 mm	3.0 mm	
Mounting plates		2.0 mm	3.0 mm	
Doors		1.5 mm	2.0 mm	
EMC attenuation				
EMC attenuation		www.siemens.com/sios	www.siemens.com/sios	
Installable module heights (HU = 1 3/4" = 44.45 mm)				
		19" fixed-mounted	19" swing frame	
Height 1800 mm		36 HU	34 HU	On request
Height 2000 mm		41 HU	38 HU	On request
Height 2200 mm		45 HU	43 HU	On request

Quick selection guide for complete cubicles

Two installation variants



Stand-alone installation

- With side panels
(lockable in the case of data cubicles)



Suite installation

- Without side panels

Four versions



Basic version

- IP40 or IP55



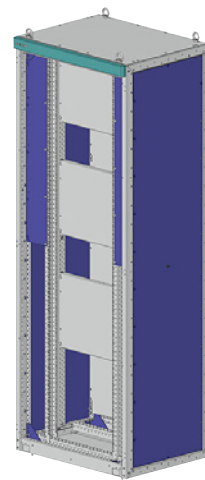
Ventilated cubicles

- IP20
- Door and roof with ventilation fins



Data cubicles

- IP40
- Glass door at front
- Section door at rear
- Roof with cable entry
- 19" fixed mounting



Earthquake-resistant version

- IP40
- Increased stability

Article numbers for complete system cubicles

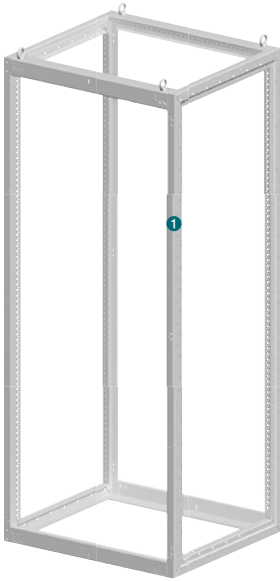
For a complete, verified configuration of your complete cubicle, please use our online configurator at:
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11
8MF1					3			
Height	1800 mm	8						
	2000 mm	0						
	2200 mm	2						
Width	400 mm		4					
	600 mm		6					
	800 mm		8					
	900 mm		9					
	1000 mm		0					
	1200 mm		2					
Depth	400 mm			4				
	500 mm			5				
	600 mm			6				
	800 mm			8				
	1000 mm			0				
Version	Basic					B		
	Ventilated					V		
	Data					D		
	Earthquake-resistant					E		
Installation	Singly						S	
	Side by side						R	
Degree of protection	Basic cubicles, data cubicles	IP40						4
		IP55						5
	Ventilated cubicles	IP20						4
	Earthquake-reinforced cubicles	IP40						5

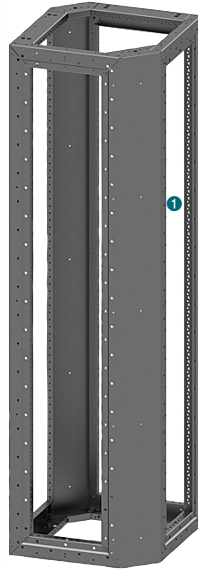
Quick selection guide

Frame

For standard enclosure

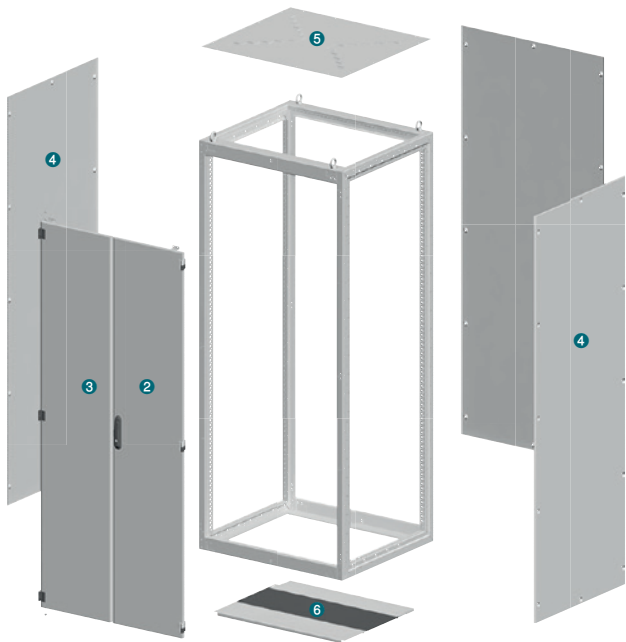


For corner enclosure



1 Frame

Enclosure



2 Door, door half

3 Modular door

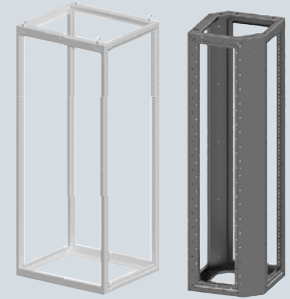
4 Side panels, rear panel

5 Roof

6 Floor

1 Frame

For standard enclosure



For complete, verified configuration of your system cubicle, please use our online configurator at:
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12
8MF1					3	G	S		0
Height	1800 mm	8							
	2000 mm	0							
	2200 mm	2							
Width	400 mm		4						
	600 mm		6						
	800 mm		8						
	900 mm		9						
	1000 mm		0						
	1200 mm		2						
Depth	400 mm			4					
	500 mm			5					
	600 mm			6					
	800 mm			8					
	1000 mm			0					
Material, surface	Zinc-plated							3	
	Powder-coated, RAL 7035							4	

For corner enclosure

		5	6	7	8	9	10	11	12
8MF1					2	G	E		0
Height	1800 mm	8							
	2000 mm	0							
	2200 mm	2							
Width	400 mm		4						
	600 mm		6						
	800 mm		8						
	1000 mm		0						
Depth	400 mm			5					
	600 mm			7					
	800 mm			0					
	1000 mm			1					
Material, surface	Zinc-plated							3	

1 Frame

Accessories

Base

		5	6	7	8	9	10
		8MF1					
Height	100 mm	0					
	200 mm	2					
Width	400 mm		4				
	600 mm		6				
	800 mm		8				
	900 mm		9				
	1000 mm		0				
	1200 mm		2				
Version	Base for cubicles with door at the front and the rear					C	R
	Base and feet for cubicles with door at the front					C	S
	Base for corner cubicle					E	S

Base cover

		5	6	7	8	9	10
		8MF1					
Height	100 mm	0					
	200 mm	2					
Depth	400 mm			4			
	500 mm			5			
	600 mm			6			
	800 mm			8			
	1000 mm			0			
Version	Base covers for cubicle sides						T

Trim strip

		5	6	7	8	9	10	11	12
		8MF1							
Width	400 mm		4						
	600 mm		6						
	800 mm		8						
	900 mm		9						
	1000 mm		0						
	1200 mm		2						
Version	Trim strip petrol								
		Without Siemens logo, above the door						0	0
		With Siemens logo, left, above the door						1	0
		With Siemens logo, right, above the door						1	6
		With Siemens logo, left, above the door						1	7
	Trim strip RAL 7035	Without Siemens logo, below the door						0	8

Separator

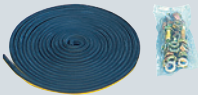
Separator for vertical division of the enclosure



Height	Article No.
1800 mm	8MF1165-2AT30
2000 mm	8MF1185-2AT30
2200 mm	8MF1205-2AT30

Mounting accessories

Accessories for cubicle suites



Version	Degree of protection	Article No.
Screw set	IP40	8MF1000-2CA
Sealing tape	IP40 to IP55	8MF1000-2CB
Side-by-side installation kit	IP40 EMC (IP55 not available)	8MF1000-2CE

Kit for stabilization of corner connections



Article No.
8MF1000-2HF

Transport accessories

Transport eyebolts



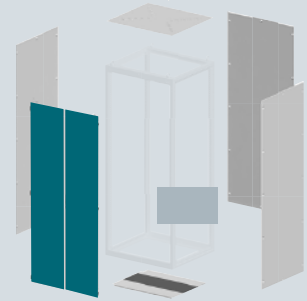
Load bearing capacity	Article No.
Up to 500 kg	8MF1000-2CK

Transport brackets



Width	Article No.
400 mm	8MF1040-2CW
600 mm	8MF1060-2CW
800 mm	8MF1080-2CW
900 mm	8MF1090-2CW
1000 mm	8MF1000-2CW
1200 mm	8MF1020-2CW

2 Door



For complete, verified configuration of your system cubicle, please use our online configurator at: www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13	14	15	16
		8MF1											
Height	1800 mm	8											
	2000 mm	0											
	2200 mm	2											
Width	300 mm		3										
	400 mm		4										
	450 mm		7										
	500 mm		5										
	600 mm		6										
	800 mm		8										
	900 mm		9										
	1000 mm		0										
1200 mm		2											
Door type	Section door / inner door							1					
	Door half							2					
Hinge position	Left								5				
	Right								4				
Door version	IP20	With ventilation openings								1	B	A	2
	IP40	Closed							0		C	A	1
		With ventilation slits							2		B	A	2
	IP55	Closed							0		B	A	2
		With inspection window							0		B	E	2
	IPxx	With cutout 292 × 292 mm (up to IP55) for filter fan							3		B	A	2
	-	Inner door, closed							4		B	A	2

Accessories

Pockets in the doors		
	<ul style="list-style-type: none"> Surface: zinc-plated 	
	For door width	Article No.
	600 mm	8MF1060-2VP
	800 mm	8MF1080-2VP
Grilles		
	<ul style="list-style-type: none"> To upgrade degree of protection from IP2x to IP4x Surface: zinc-plated 	
	Width	Article No.
	300 mm	8MF1030-2HM
	400 mm	8MF1040-2HM
	500 mm	8MF1050-2HM
	600 mm	8MF1060-2HM
	700 mm	8MF1070-2HM
	800 mm	8MF1080-2HM
	900 mm	8MF1090-2HM
Strips		
	<ul style="list-style-type: none"> For door reinforcement Surface: zinc-plated Cannot be used for glass doors 	
	Height	Article No.
	1800 mm	8MF1008-2VM
	2000 mm	8MF1000-2VM
	2200 mm	8MF1002-2VM
Position switches		
	Version	Article No.
	1 NO + 1 NC	8MF1000-2VL
	1 NO + 2 NC	8MF1000-2VR
Circuit diagram pockets		
	<ul style="list-style-type: none"> Cannot be used for glass doors 	
	Version	Article No.
	Plastic	8MF1000-2VK
	Steel, zinc-plated	8MF1000-2VU
Rotary handles		
	Version	Article No.
	With padlock	8MF1000-2VN

2 Door

Accessories

Rotary handle inserts



- Not suitable for door halves

Version	Article No.
Double-bit key	8MF1000-2VA
Square key	8MF1000-2VC
Triangular key	8MF1000-2VD
Daimler	8MF1000-2VE
Cylinder lock	8MF1000-2VF

Door stays



- With variable opening angle
- Surface: zinc-plated

Article No.
8MF1000-2VG

Spare part door

Hinge sets



Version	Article No.
For left-hand hinge	8MF1000-2VT
For right-hand hinge	8MF1000-2VW

Rotary handles



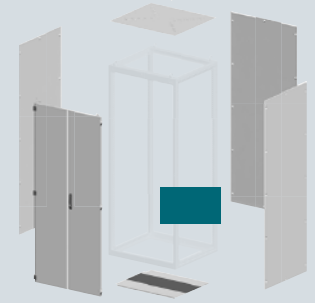
Version	Article No.
Without insert	8MF1000-2VP

Grounding cables for doors



Cable cross-section	Article No.
6 mm ²	8MF1010-2HD3

3 Modular door

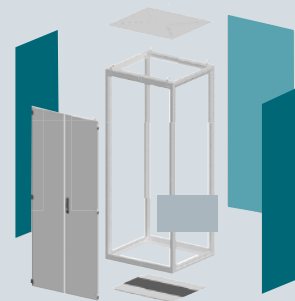


		5	6	7	8	9	10	11	12	13	14	15	16
8MF1				0	2	U	T	3	4	0	B	A	2
Compartment height	300 mm	3											
	400 mm	4											
	500 mm	5											
	600 mm	6											
	700 mm	7											
	800 mm	8											
	900 mm	9											
	1000 mm	0											
	1100 mm	1											
1200 mm	2												
Width	600 mm		6										
	800 mm		8										

Accessories

Limit plates		
	For a number n of modular doors, n-1 limit plates are additionally required. Please order separately	
	Width	Article No.
	600 mm	8MF1060-2AK14-0
800 mm	8MF1080-2AK14-0	

4 Side/rear panel

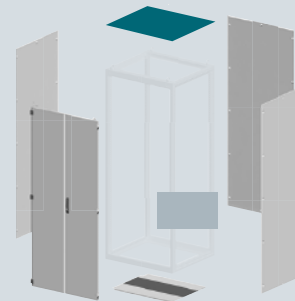


For complete, verified configuration of your system cubicle, please use our online configurator at:
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13	14
8MF1					2	U	W				
Height	1800 mm	8									
	2000 mm	0									
	2200 mm	2									
Width	300 mm		3								
	400 mm		4								
	450 mm		7								
	500 mm		5								
	600 mm		6								
	800 mm		8								
	900 mm		9								
	1000 mm / No selection available for partitions		0								
	1200 mm		2								
Depth	No value			0							
	400 mm			4							
	500 mm			5							
	600 mm			6							
	800 mm			8							
	1000 mm / No selection available for side panels			0							
Side wall/ rear wall	IP40	Closed	Without seal					6	0	1	C
			EMC seal					6	2	1	B
		Flat						6	3	1	C
	IP55	Closed	Foamed seal					6	1	1	C
Partition		Closed	Without seal					7	0	3	C

5 Roof

For standard systems



For complete, verified configuration of your system cubicle, please use our online configurator at:
www.siemens.com/lowvoltage/8mf1-configurator

8MF1			5	6	7	8	9	10	11	12	13	14
			0			2	U	D				
Width	400 mm			4								
	600 mm			6								
	800 mm			8								
	900 mm			9								
	1000 mm			0								
	1200 mm			2								
Depth	400 mm				4							
	500 mm				5							
	600 mm				6							
	800 mm				8							
	1000 mm				0							
Version	IP20	Perforated							2	0	0	A
		Without seal										
	IP40	Closed	Without seal						1	0	0	A
			EMC seal						1	2	0	A
		With ventilation fins	Without seal						3	0	0	A
IP55	Closed	Foamed seal						1	1	0	A	

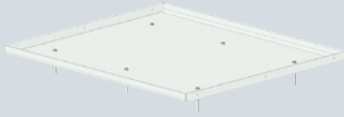
For corner enclosure

8MF1			5	6	7	8	9	10	11	12	13	14
			0	0		2	U	E				
Width/depth	400/400 mm				4							
	600/600 mm				6							
	800/800 mm				8							
	1000/1000 mm				0							
Version	For corner cubicle	IP20	With ventilation openings						2	0	0	A
		IP40	Closed						1	0	0	A
			With ventilation openings						3	0	0	A
		IP55	Closed						1	1	0	A

Accessories

Roof trays

Roof trays for increasing the degree of protection, IPX1



Width	Depth	Article No.
400 mm	400 mm	8MF1044-2VH
	500 mm	8MF1045-2VH
	600 mm	8MF1046-2VH
	800 mm	8MF1048-2VH
	1000 mm	8MF1040-2VH
600 mm	400 mm	8MF1064-2VH
	500 mm	8MF1065-2VH
	600 mm	8MF1066-2VH
	800 mm	8MF1068-2VH
	1000 mm	8MF1060-2VH
800 mm	400 mm	8MF1084-2VH
	500 mm	8MF1085-2VH
	600 mm	8MF1086-2VH
	800 mm	8MF1088-2VH
	1000 mm	8MF1080-2VH
900 mm	400 mm	8MF1094-2VH
	500 mm	8MF1095-2VH
	600 mm	8MF1096-2VH
	800 mm	8MF1098-2VH
	1000 mm	8MF1090-2VH
1000 mm	400 mm	8MF1004-2VH
	500 mm	8MF1005-2VH
	600 mm	8MF1006-2VH
	800 mm	8MF1008-2VH
	1000 mm	8MF1000-2VH
1200 mm	400 mm	8MF1024-2VH
	500 mm	8MF1025-2VH
	600 mm	8MF1026-2VH
	800 mm	8MF1028-2VH
	1000 mm	8MF1020-2VH

Roof tray rims

Roof tray rims for cubicle side, IPX1

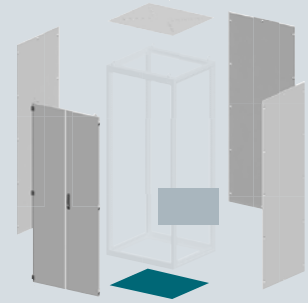


Each cubicle or cubicle group with a roof tray requires two roof tray rims.
 (1 set = 2 units)

Depth	Article No.
400 mm	8MF1004-2VB
500 mm	8MF1005-2VB
600 mm	8MF1006-2VB
800 mm	8MF1008-2VB
1000 mm	8MF1000-2VB

6 Floor

For standard enclosure



For complete, verified configuration of your system cubicle, please use our online configurator at: www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13
		0			2	U	B			
8MF1										
Width	400 mm		4							
	600 mm		6							
	800 mm		8							
	900 mm		9							
	1000 mm		0							
	1200 mm		2							
Depth	400 mm			4						
	500 mm			5						
	600 mm			6						
	800 mm			8						
	1000 mm			0						
Version	IP30 Closed, divided							2	2	0
	IP40 Closed EMC seal							4	2	0
	IP55 Closed Foamed seal							1	2	0
	IPxx With cable entry							3	2	0
	IPxx With cable entry, lateral							5	1	2
IPxx With cut-outs for flanges							5	2	0	

For corner enclosure

		5	6	7	8	9	10	11	12	13
		0	0		2	U	E		1	0
8MF1										
Depth	400 mm			4						
	600 mm			6						
	800 mm			8						
	1000 mm			0						
Degree of protection	IP40							2		
	IP55							1		

Mounting panels

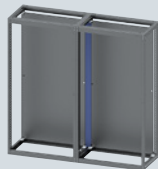


For complete, verified configuration of your system cubicle, please use our online configurator at:
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13
		8MF1			2	A				0
Cubicle height	1800 mm	8								
	2000 mm	0								
	2200 mm	2								
Cubicle width	400 mm		4							
	600 mm		6							
	800 mm		8							
	900 mm		9							
	1000 mm / No selection available for installation on side of cubicle		0							
	1200 mm		2							
Depth	400 mm			4						
	500 mm			5						
	600 mm			6						
	800 mm			8						
	1000 mm / No selection available for installation on cubicle width			0						
Installation location	Cubicle width						L			
	Cubicle side						K			
Version	Smooth							0		
	Perforated							1		
Material	2.5 mm sheet steel								3	

Accessories

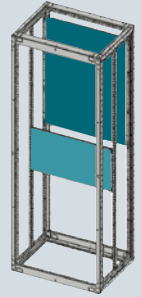
Mounting panel adapters



- For connecting side-by-side mounting panels
- Surface: zinc-plated

Height	Article No.
1800 mm	8MF1800-2CH
2000 mm	8MF1000-2CH
2200 mm	8MF1200-2CH

Mounting plates



For complete, verified configuration of your system cubicle, please use our online configurator at:
www.siemens.com/lowvoltage/8mf1-configurator

		5	6	7	8	9	10	11	12	13
		8MF1		0	2	A				0
Height	100 mm	1								
	200 mm	2								
	300 mm	3								
	400 mm	4								
	600 mm	6								
	800 mm	8								
Width	400 mm		4							
	600 mm		6							
	800 mm		8							
	900 mm		9							
	1000 mm		0							
	1200 mm		2							
Installation location	Fixed with zinc die-cast parts between the bars of the frame						M			
	Fixed directly to the frame						A			
Version	Smooth							0		
	Perforated							1		
Material	2.0 mm sheet steel								2	

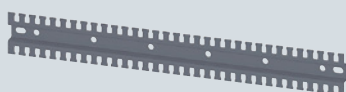
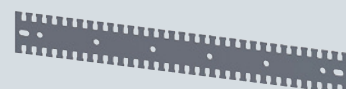
Mounting rails

Mounting rails (50)



Version	Length	Article No.
Suitable for cubicle width	400 mm	8MF1032-2AS30
	600 mm	8MF1052-2AS30
		8MF1055-2AS30
		8MF1062-2AS30
	800 mm	8MF1072-2AS30
		8MF1075-2AS30
	900 mm	8MF1082-2AS30
	1000 mm	8MF1092-2AS30
		8MF1105-2AS30
	1200 mm	8MF1112-2AS30
		8MF1125-2AS30
		8MF1135-2AS30
		8MF1145-2AS30
		8MF1155-2AS30
Suitable for cubicle height	1800 mm	8MF1165-2AS30
		8MF1175-2AS30
	2000 mm	8MF1185-2AS30
		8MF1195-2AS30
	2200 mm	8MF1205-2AS30
		8MF1215-2AS30
		8MF1225-2AS30
	Suitable for cubicle depth	400 mm
500 mm		8MF1035-2AS30
		8MF1042-2AS30
600 mm		8MF1045-2AS30
800 mm		8MF1062-2AS30
1000 mm		8MF1085-2AS30

Mounting rails, serrated



Version	Length	Article No.
Flat	600 mm	8MF1060-2HC13-0
	800 mm	8MF1080-2HC13-0
	900 mm	8MF1090-2HC13-0
	1000 mm	8MF1000-2HC13-0
	1200 mm	8MF1020-2HC13-0
	U-shape	600 mm
800 mm		8MF1080-2HC03-0
900 mm		8MF1090-2HC03-0
1000 mm		8MF1000-2HC03-0
1200 mm		8MF1020-2HC03-0

Mounting rails, compact



Version	Length	Article No.
Suitable for cubicle width	600 mm	8MF1056-2AS30
	1000 mm	8MF1096-2AS30
	1200 mm	8MF1006-2AS30
Suitable for door width	300 mm	8MF1016-2AS30
	400 mm	8MF1026-2AS30
	450 mm	8MF1031-2AS30
	500 mm	8MF1036-2AS30
	600 mm	8MF1046-2AS30
	800 mm	8MF1066-2AS30
	900 mm	8MF1076-2AS30
	1000 mm	8MF1086-2AS30

Mounting rails, heavy duty



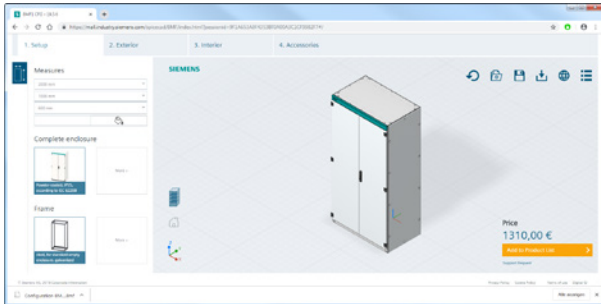
- Can be installed in the cubicle depth and width (the length corresponds to the appropriate cubicle dimension)

Length	Article No.
600 mm	8MF1060-2AH60
800 mm	8MF1080-2AH60
900 mm	8MF1090-2AH60
1000 mm	8MF1000-2AH60
1200 mm	8MF1020-2AH60

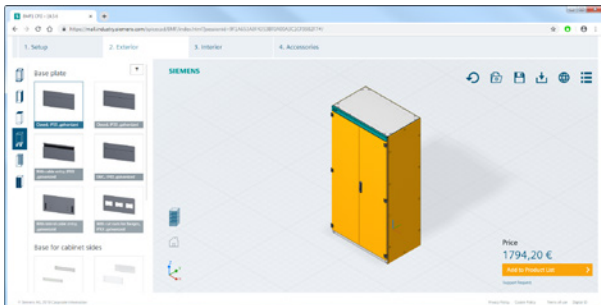
Online configurator highlights

www.siemens.com/lowvoltage/8mf1-configurator

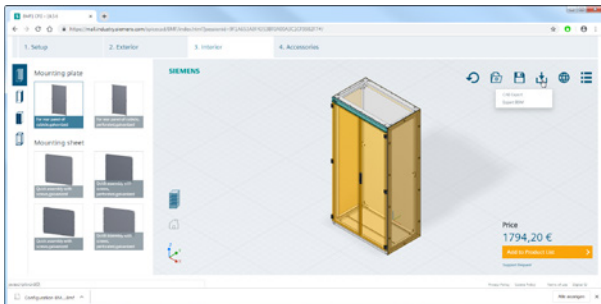
Graphical configuration directly on the 3D model (WYSIWYG)



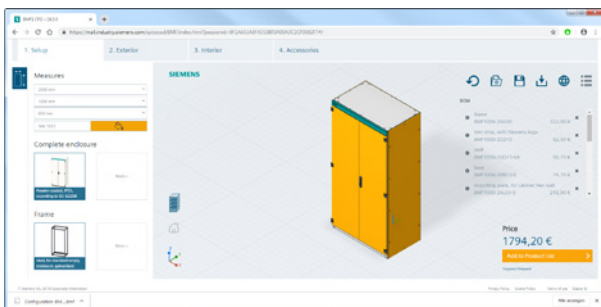
Customization of the control cabinet with cutouts and color



Exporting of parts lists and 3D and 2D data



Dynamic and interactive parts lists



19-inch expansion

Cubicle frames



- For the installation of 19" devices, screwed
- In combination with 2 mounting rails heavy duty in cabinet width (order separately, [see page 17/26](#))
- For cabinet width ≥ 600 mm

Surface	Height	Article No.
Zinc-plated	400 mm	8MF1100-2AN30
	600 mm	8MF1200-2AN30
	800 mm	8MF1300-2AN30
	1000 mm	8MF1400-2AN30
	1200 mm	8MF1500-2AN30
	1400 mm	8MF1600-2AN30
	1800 mm	8MF1700-2AN30
	2000 mm	8MF1800-2AN30
	2200 mm	8MF1900-2AN30

Swing frames



- For the installation of 19" devices, screwed
- Endstop left / right
- In combination with 2 mounting rails heavy duty in cabinet width (order mounting rail separately)
- For cubicle width ≥ 800 mm

Version	Surface	Height	Article No.
Screwed	Zinc-plated	1800 mm	8MF1800-2AR02-4
		2000 mm	8MF1000-2AR02-4
		2200 mm	8MF1200-2AR02-4
	Powder-coated	1800 mm	8MF1800-2AR02-3
		2000 mm	8MF1000-2AR02-3
		2200 mm	8MF1200-2AR02-3
Welded	Powder-coated	1800 mm	8MF1800-2AR02-2
		2000 mm	8MF1000-2AR02-2
		2200 mm	8MF1200-2AR02-2

Accessories

Universal supports



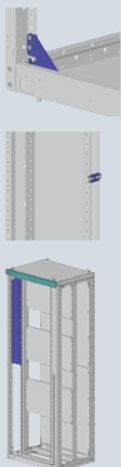






Version	For mounting height	Article No.
For cable channel, DIN rail and C-bar	1 HU	8MF1000-2HH2
	2 HU	8MF1000-2HH3
For cable channel, DIN rail, C-bar and lamp		8MF1000-2HH4

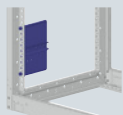
Covers				
	Version	Surface	For mounting height	Article No.
	Closed	RAL 7035	1HU	8MF1000-2AB01
			2HU	8MF1000-2AB02
			3 HU	8MF1000-2AB03
			4 HU	8MF1000-2AB04
			5 HU	8MF1000-2AB05
			6 HU	8MF1000-2AB06
			7 HU	8MF1000-2AB07
	With ventilation openings	RAL 7035	2 HU	8MF1000-2AB32
			3 HU	8MF1000-2AB33
	For modular installation devices	RAL 7035	3 HU	8MF1000-2AB31
Frames				
	Version	Surface		Article No.
	For mounting test switches, 19"	RAL 7035		8MF1000-2AB30
Covers for frames				
	Version	Surface		Article No.
	For mounting 7XP 1/6 standard devices	RAL 7035		8MF1000-2AB34
	For mounting 7XP 2/6 standard devices	RAL 7035		8MF1000-2AB35
	For mounting 7XP 3/6 standard devices	RAL 7035		8MF1000-2AB36
Shelves				
	• For 19" frame			
	Version	Surface	Depth	Article No.
	Non-adjustable	Zinc-plated	230 mm	8MF1000-2AB12
			400 mm	8MF1000-2AB14
Withdrawable	RAL 7035		8MF1000-2HF12	
Slide rails				
	Version	Depth		Article No.
	For 19" fixed mounting (double mounting at front and rear)	400 mm		8MF1004-2HG12
		600 mm		8MF1006-2HG12
		800 mm		8MF1008-2HG12
		1000 mm		8MF1000-2HG12
	For 19" fixed mounting and For 19" swing frame			8MF1000-2HS12
Device panels				
	Surface	Height	Width	Article No.
	Zinc-plated	1800 mm	100 mm	8MF1810-2AB00
			150 mm	8MF1850-2AB00
			200 mm	8MF1820-2AB00
		2000 mm	100 mm	8MF1010-2AB00
			150 mm	8MF1050-2AB00
			200 mm	8MF1020-2AB00
		2200 mm	100 mm	8MF1210-2AB00
			150 mm	8MF1250-2AB00
			200 mm	8MF1220-2AB00

Interior installation

General accessories

Telescopic rails				
	• For withdrawable shelves			
	For cubicle depth		Article No.	
	400 mm and 600 mm		8MF1003-2HF	
	800 mm and 1000 mm		8MF1006-2HF	
Mounting brackets				
	• For mounting expansion elements			
			Article No.	
			8MF1000-2CP	
Earthquake assembly kits				
	For stabilization of		Article No.	
	Corner connections		8MF1000-2HA	
	Intermediate panel		8MF1000-2HW	
	Swing frame		8MF1000-2HE	
Grounding plates				
	• For mounting on frame			
			Article No.	
			8MF1000-2HK	
Grounding bars				
	Version	Width	Article No.	
	30 × 10 mm ²	600 mm	8MF1060-2HD2	
		800 mm	8MF1080-2HD2	
		900 mm	8MF1090-2HD2	
		1000 mm	8MF1000-2HD2	
		1200 mm	8MF1020-2HD2	
	30 × 5 mm ²	600 mm	8MF1060-2HD1	
		800 mm	8MF1080-2HD1	
		900 mm	8MF1090-2HD1	
		1000 mm	8MF1000-2HD1	
		1200 mm	8MF1020-2HD1	
		Grounding screws		
		• For withdrawable shelves		
	Thread		Article No.	
	M12		8MF1000-2HB	
Grounding straps				
	Cross-section		Article No.	
	16 mm ²		8MF1000-2HK1	
	31 mm ²		8MF1000-2HK2	

Universal sheets



- For mounting a heater unit

Article No.

8MF1000-2HG

DIN rails



- For mounting modular installation devices

Height

7.5 mm

15 mm

Article No.

8MF1500-2HS

8MF1100-2HS

Insulated supports



Thread

M8

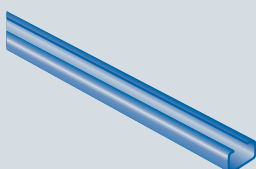
Dimensions

D 40 x 50 mm

Article No.

8MF1000-2VY

Cable clamping rails



Height

30 mm

Width

600 mm

800 mm

900 mm

1000 mm

1200 mm

–

Depth

–

–

–

–

–

400 mm

600 mm

800 mm

1000 mm

Article No.

8MF1360-2HH

8MF1380-2HH

8MF1390-2HH

8MF1310-2HH

8MF1320-2HH

8MF1304-2HH

8MF1306-2HH

8MF1308-2HH

8MF1301-2HH

40 mm

600 mm

800 mm

900 mm

1000 mm

1200 mm

–

400 mm

600 mm

800 mm

1000 mm

8MF1460-2HH

8MF1480-2HH

8MF1490-2HH

8MF1410-2HH

8MF1420-2HH

8MF1404-2HH

8MF1406-2HH

8MF1408-2HH

8MF1401-2HH

50 mm

600 mm

800 mm

900 mm

1000 mm

1200 mm

–

400 mm

600 mm

800 mm

1000 mm

8MF1560-2HH

8MF1580-2HH

8MF1590-2HH

8MF1510-2HH

8MF1520-2HH

8MF1504-2HH

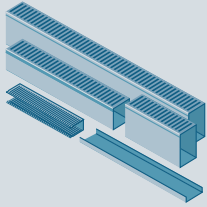
8MF1506-2HH

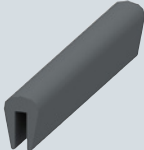
8MF1508-2HH


8MF1501-2HH

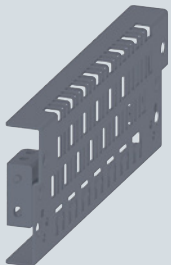
Interior installation


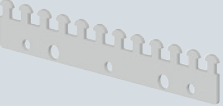

General accessories

Cable ducts					
Image	Version	Color	Height	Width	Article No.
		Halogen-free	RAL 7035	37.5 mm	25 mm
50 mm				25 mm	8MF1220-2HL7
				37.5 mm	8MF1240-2HL7
				50 mm	8MF1250-2HL7
				75 mm	8MF1260-2HL7
75 mm				50 mm	8MF1350-2HL7
				75 mm	8MF1360-2HL7
				100 mm	8MF1370-2HL7
				125 mm	8MF1380-2HL7
Standard		RAL 7030	37.5 mm	25 mm	8MF1120-2HL6
			50 mm	25 mm	8MF1220-2HL6
				37.5 mm	8MF1240-2HL6
				50 mm	8MF1250-2HL6
				75 mm	8MF1260-2HL6
			75 mm	50 mm	8MF1350-2HL6
				75 mm	8MF1360-2HL6
				100 mm	8MF1370-2HL6
				125 mm	8MF1380-2HL6
	100 mm	75 mm	8MF1460-2HL6		

Edge protection		
Image	Dimensions	Article No.
	9.5 mm × 6.5 mm	8MF1000-2CD

Mounting plates			
Image	Dimensions	Version	Article No.
		122 mm × 91 mm	Standard
122 mm × 92 mm		With DIN rail	8MF1000-2HH1

Buses for improving EMC				
Image	Installation in	Width	Depth	Article No.
		Cubicle width	400 mm	–
600 mm			–	8MF1060-2HN
800 mm			–	8MF1080-2HN
900 mm			–	8MF1090-2HN
1000 mm			–	8MF1000-2HN
1200 mm			–	8MF1020-2HN
Cubicle depth		–	400 mm	8MF1004-2HN
			600 mm	8MF1006-2HN
			800 mm	8MF1008-2HN
			1000 mm	8MF1001-2HN

Brackets		
	<ul style="list-style-type: none"> For variable mounting of cable clamping rails 	
		Article No. 8MF1000-2HH5
Toothed bars		
	<ul style="list-style-type: none"> For installation on mounting rail 	
	Length 100 mm	Article No. 8MF1000-2HC
Contact washers		
	<ul style="list-style-type: none"> Size 6 	
	Scope of supply 100 units	Article No. 8MF1000-2VJ
Screws		
	<ul style="list-style-type: none"> M6 × 12 	
	Scope of supply 100 units	Article No. 8MF1000-2VS
Adapters for wiring systems		
	Version For Lütze wiring system	8MF1000-2HL
	For Promet wiring system	8MF1000-2HP

Quick selection guide

SIVACON 8MR system lighting ensures optimum lighting conditions during installation and maintenance. The LED technology is energy-efficient and maintenance-free.

Magnetic fixing

Easy installation at any point on the steel cubicle

Screw fixing

Fixed installation in the case of impact loads or high vibration levels

Clip fixing

The lamp is snapped into the clip bracket and can be turned in both directions

With motion detector

The lights switch on when the door is opened, enabling work in the cubicle to be started immediately



With On/Off switch

Particularly suitable for operation in cubicles and enclosures with a high density of built-in electrical/electronic components



8MR system lighting



	Magnetic fixing	Screw fixing	Clip fixing
LED lights with motion detector			
100 ... 240 V AC, 50/60 Hz	8MR2200-0A	8MR2200-0B	8MR2200-0C
24 ... 48 V DC	8MR2201-0A	8MR2201-0B	8MR2201-0C
LED lights with On/Off switch			
100 ... 240 V AC, 50/60 Hz	8MR2200-1A	8MR2200-1B	8MR2200-1C
24 ... 48 V DC	8MR2201-1A	8MR2201-1B	8MR2201-1C

Accessories

Cables

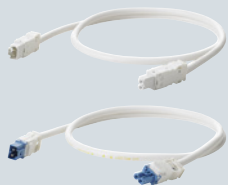
Connecting cables with socket and open end



- For connection of an LED light (switch side)
- Length 2 m

Version	Cross-section	Standard	Article No.
AC connecting cable	2 × 1.5 mm ²	VDE	8MR2210-1B
	AWG 16	UL	8MR2210-2B
DC connecting cable	2 × 1.5 mm ²	VDE	8MR2210-3B
	AWG 16	UL	8MR2210-4B

Extension cables with socket and plug



- For looping through to another LED light
- Length 1 m

Version	Cross-section	Standard	Article No.
AC plastic-sheathed cable	2 × 1.5 mm ²	VDE	8MR2210-1C
	AWG 16	UL	8MR2210-2C
DC plastic-sheathed cable	2 × 1.5 mm ²	VDE	8MR2210-3C
	AWG 16	UL	8MR2210-4C

Individual plugs or sockets for self-assembly of cables

For connection of an LED light (switch side)



Version	Application	Color	Article No.
AC socket	For input side	White	8MR2210-1A
DC socket	For input side	Blue	8MR2210-3A

For looping through to another LED light



Version	Application	Color	Article No.
AC connector	For output side	White	8MR2210-2A
DC connector	For output side	Blue	8MR2210-4A

Quick selection guide

Solutions to provide protection against heat

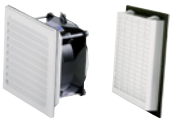
Cooling devices



Heat exchangers



Filter fans / outlet fans



Thermostats



Solutions to provide protection against cold

Heater units



Fan heaters



Thermostats



Solutions to provide protection against corrosion and condensation

Heater units / fan heaters



Filter fans / outlet filters



Thermostats



Hygrostats / hygrotherms



SIMARIS[®] therm

Order number	Description	Quantity	Number	Connected poles	Rated current [A]	RDF (rated divert...)	Power loss, pole-d
6300 49L3210-34E11-BA...	SHIMMEL'S G130...	1	0	0	0,000		-
6300 49L3210-34E11-BA...	SHIMMEL'S G130...	1	0	0	0,000		-
80000 39W1208...	AIR CIRCULF BBE...	1	3	3	500,000		2
50000 39A2010-36103-D...	MICR_RFC-F510...	1	3	3	320,000		1
63000 39A2796-83...	MOCKEY GARD...	1	3	3	63,000		-

Power loss, devices [W] 145,4 with RDF 80 % (Einzelne Geräte können einen abweichenden Ausströmungsfaktor haben)
Power loss, wiring [W] 43,6
Power loss, busbars [W] 0,0
Disippatable power loss for cooling [W] selection of devices: BMR4C3-36306
Total power loss [W] -453,0
Disippatable power loss [W] at the maximum 236,8 corresponds to 20 K at 75% height of the enclosure
 Delay factor of 1/8th starts building 2 x BMR2122-8AA

SIMARIS[®] therm is a software tool that lets you easily and precisely dimension the heat dissipation of your control cubicles, simply by entering the ambient air temperature and selecting the relevant devices in the cubicle.

For a free download, and further information, visit: www.siemens.com/simaristherm

Filter fans and outlet filters

Filter fans


Size	Cutout	Voltage	Input rating at 50 Hz	Color	Degree of protection IP54		Degree of protection IP55		
					Air current, free-blowing at 50 Hz	Article No.	Air current, free-blowing at 50 Hz	Article No.	
Filter fans with EC technology									
	2	125 x 125 mm	115 V AC, 50/60 Hz	4.4 W	RAL 7035	62 m³/h	8MR6411-5LE25	–	
			230 V AC, 50/60 Hz	4.4 W	RAL 7035	62 m³/h	8MR6423-5LE25	–	
	3	177 x 177 mm	115 V AC, 50/60 Hz	4.4 W	RAL 7035	120 m³/h	8MR6411-5LE30	–	
			230 V AC, 50/60 Hz	4.4 W	RAL 7035	120 m³/h	8MR6423-5LE30	–	
Standard filter fans									
	1	92 x 92 mm	115 V AC, 50/60 Hz	12 W	RAL 7035	25 m³/h	8MR6411-5LV10	–	
			230 V AC, 50/60 Hz	12 W	RAL 7032	25 m³/h	8MR6423-2LV10	–	
					RAL 7035	25 m³/h	8MR6423-5LV10	–	
2	125 x 125 mm	115 V AC, 50/60 Hz	20 W	RAL 7035	63 m³/h	8MR6411-5LV25	58 m³/h	8MR6511-5LV25	
			230 V AC, 50/60 Hz	20 W	RAL 7032	63 m³/h	8MR6423-2LV25	–	
					RAL 7035	63 m³/h	8MR6423-5LV25	58 m³/h	8MR6523-5LV25
3	177 x 177 mm	115 V AC, 50/60 Hz	20 W	RAL 7035	115 m³/h	8MR6411-5LV30	105 m³/h	8MR6511-5LV30	
			230 V AC, 50/60 Hz	20 W	RAL 7035	115 m³/h	8MR6423-5LV30	105 m³/h	8MR6523-5LV30
4	223 x 223 mm	115 V AC, 50/60 Hz	18 W	RAL 7035	160 m³/h	8MR6411-5LV45	147 m³/h	8MR6511-5LV45	
			43 W	RAL 7035	250 m³/h	8MR6411-5LV41	230 m³/h	8MR6511-5LV41	
			230 V AC, 50/60 Hz	18 W	RAL 7032	160 m³/h	8MR6423-2LV45	–	
					RAL 7035	160 m³/h	8MR6423-5LV45	147 m³/h	8MR6523-5LV45
			45 W	RAL 7032	250 m³/h	8MR6423-2LV41	–		
					RAL 7035	250 m³/h	8MR6423-5LV41	230 m³/h	8MR6423-5LV41
6	292 x 292 mm	115 V AC, 50/60 Hz	64 W	RAL 7035	580 m³/h	8MR6411-5LV60	531 m³/h	8MR6511-5LV60	
			115 W	RAL 7035	930 m³/h	8MR6411-5LV80	850 m³/h	8MR6511-5LV80	
			230 V AC, 50/60 Hz	64 W	RAL 7032	580 m³/h	8MR6423-2LV60	–	
					RAL 7035	580 m³/h	8MR6423-5LV60	531 m³/h	8MR6523-5LV60
					RAL 7035	930 m³/h	8MR6423-5LV80	850 m³/h	8MR6523-5LV80
EMC filter fans									
	3	177 x 177 mm	115 V AC, 50/60 Hz	20 W	RAL 7035	115 m³/h	8MR6411-6LV30	105 m³/h	8MR6511-6LV30
			230 V AC, 50/60 Hz	20 W	RAL 7035	115 m³/h	8MR6423-6LV30	105 m³/h	8MR6523-6LV30
4	223 x 223 mm	115 V AC, 50/60 Hz	18 W	RAL 7035	160 m³/h	8MR6411-6LV45	147 m³/h	8MR6511-6LV45	
			43 W	RAL 7035	250 m³/h	8MR6411-6LV41	230 m³/h	8MR6511-6LV41	
			230 V AC, 50/60 Hz	18 W	RAL 7035	160 m³/h	8MR6423-6LV45	147 m³/h	8MR6523-6LV45
					RAL 7035	250 m³/h	8MR6423-6LV41	230 m³/h	8MR6523-6LV41

Filter fans and outlet filters

Outlet filters without fan



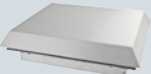
	Size	Cutout	External dimensions W x H	Mounting depth	Cover grille height	Color	Degree of protection			
							Article No.	IP54	Article No.	IP55
	Standard outlet filters									
	1	92 x 92 mm	105 x 105 mm	12 mm	4.5 mm	RAL 7032	8MR6400-2GV10	–		
						RAL 7035	8MR6400-5GV10	–		
	2	125 x 125 mm	148 x 148 mm	23 mm	5.5 mm	RAL 7032	8MR6400-2GV25	–		
						RAL 7035	8MR6400-5GV25	8MR6500-5GV25		
	3	177 x 177 mm	204 x 204 mm	26 mm	6 mm	RAL 7035	8MR6400-5GV30	8MR6500-5GV30		
	4	223 x 223 mm	250 x 250 mm	32 mm	6 mm	RAL 7032	8MR6400-2GV45	–		
						RAL 7035	8MR6400-5GV45	8MR6500-5GV45		
	6	292 x 292 mm	323 x 323 mm	33 mm	6.5 mm	RAL 7032	8MR6400-2GV67	–		
						RAL 7035	8MR6400-5GV67	8MR6500-5GV67		
	EMC outlet filters									
	3	177 x 177 mm	204 x 204 mm	26 mm	6 mm	RAL 7035	8MR6400-6GV30	8MR6500-6GV30		
	4	223 x 223 mm	250 x 250 mm	32 mm	6 mm	RAL 7035	8MR6400-6GV45	8MR6500-6GV45		

Filter mats for filter fans and outlet filters



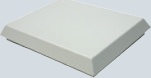
Size	Degree of protection IP54		Degree of protection IP55	
	Dimensions W x H	Article No.	Dimensions W x H	Article No.
	Standard filter mats			
	1	92 x 92 mm	8MR6000-0AM10	–
	2	125 x 125 mm	8MR6000-0AM25	116 x 116 mm 8MR6000-0CF25
	3	177 x 177 mm	8MR6000-0AM30	169 x 169 mm 8MR6000-0CF30
	4	223 x 223 mm	8MR6000-0AM45	215 x 215 mm 8MR6000-0CF45
	6	292 x 292 mm	8MR6000-0AM67	281 x 281 mm 8MR6000-0CF67

Roof filter fans and roof outlet filters

Roof filter fans



	Air current, free-blowing at 50 Hz	External dimensions W x H x D	Voltage	Input rating	Degree of protection IP44 Article No.	Degree of protection IP54 Article No.
	For cutout 223 x 223 mm, color RAL 7035					
	71 m³/h	287 x 287 x 104 mm	230 V AC, 50/60 Hz	40 W	–	8MR6423-5VL44
			115 V AC, 50/60 Hz	48 W	–	8MR6411-5VL44
			24 V DC	8.8 W	–	8MR6402-5VL44
	240 m³/h	287 x 287 x 174 mm	230 V AC, 50/60 Hz	45 W	–	8MR6423-5VL41
			115 V AC, 50/60 Hz	43 W	–	8MR6411-5VL41
			24 V DC	16 W	–	8MR6402-5VL41
	300 m³/h	287 x 287 x 174 mm	230 V AC, 50/60 Hz	45 W	–	8MR6423-5VL55
		For cutout 292 x 292 mm, color RAL 7035				
232 m³/h		361 x 361 x 114 mm	230 V AC, 50/60 Hz	68 W	–	8MR6423-5VL64
			115 V AC, 50/60 Hz	68 W	–	8MR6411-5VL64
			24 V DC	14 W	–	8MR6402-5VL64
550 m³/h		361 x 361 x 211 mm	230 V AC, 50/60 Hz	64 W	–	8MR6423-5VL60
			115 V AC, 50/60 Hz	64 W	–	8MR6411-5VL60
			24 V DC	55 W	–	8MR6402-5VL60
840 m³/h		361 x 361 x 203 mm	230 V AC, 50/60 Hz	135 W	–	8MR6423-5VL80
			115 V AC, 50/60 Hz	115 W	–	8MR6411-5VL80
	24 V DC		105 W	–	8MR6402-5VL80	
	For cutout 345 x 265 mm, color RAL 7035					
	405 m³/h	420 x 340 x 108 mm	115 V AC, 50/60 Hz	40/45 W	8MR6311-5DL40	–
			230 V AC, 50/60 Hz	40/45 W	8MR6323-5DL40	–
	690 m³/h	420 x 340 x 108 mm	115 V AC, 50/60 Hz	100/130 W	8MR6311-5DL42	–
230 V AC, 50/60 Hz			100/130 W	8MR6323-5DL42	–	

Roof outlet filters without fan


	External dimensions W x H x D	Degree of protection IP44 Article No.	Degree of protection IP54 Article No.
	For cutout 223 x 223 mm, color RAL 7035		
	287 x 287 x 85 mm	–	8MR6400-5VE45
	For cutout 292 x 292 mm, color RAL 7035		
	361 x 361 x 96 mm	–	8MR6400-5VE67
	For cutout 345 x 265 mm, color RAL 7035		
420 x 340 x 83 mm	8MR6000-5DE40	–	

Air conditioners/cooling devices

For door or side mounting, degree of protection inside IP54/ outside IP34, color RAL 7035


	Cooling capacity	Rated power	Dimensions W × H × D	Air capacity		Design	Mounting		Article No.
				Inside	Outside		Undrilled	Part	
	230 V, 50/60 Hz								
	380 W	280 W	285 × 460 × 180 mm	280 m³/h	280 m³/h	■	■	–	8MR6423-5EG04
	640 W	400 W	360 × 606 × 212 mm	330 m³/h	570 m³/h	■	■	–	8MR6423-5EG06
	820 W	440 W	348 × 783 × 215 mm	330 m³/h	570 m³/h	■	■	–	8MR6423-5EG08
	1050 W	570 W	348 × 783 × 215 mm	570 m³/h	860 m³/h	■	■	■	8MR6423-5SK10
	1550 W	880 W	400 × 950 × 233 mm	570 m³/h	1050 m³/h	■	■	■	8MR6423-5SK15
	2050 W								
	1080 W	400 × 1265 × 236 mm	860 m³/h	1050 m³/h	■	■	■	8MR6423-5SK20	
	400 V, 50/60 Hz								
	2900 W	1220 W	500 × 1270 × 336 mm	860 m³/h	1450 m³/h	■	■	–	8MR6440-5EG30
	3850 W	1780 W	500 × 1270 × 336 mm	1450 m³/h	1450 m³/h	■	■	–	8MR6440-5EG40
5800 W	2340 W	600 × 2000 × 380 mm	1450 m³/h	2900 m³/h	■	■	–	8MR6440-5EG60	

For roof mounting, degree of protection inside IP54/ outside IP34, color RAL 7035





	Cooling capacity	Rated power	Dimensions W × H × D	Air capacity		Design	Mounting		Article No.
				Inside	Outside		Undrilled	Part	
	230 V, 50/60 Hz								
	410 W	270 W	259 × 264 × 486 mm	235 m³/h	330 m³/h	■	■	–	8MR6423-5DE04
	820 W	510 W	340 × 340 × 600 mm	330 m³/h	570 m³/h	■	■	–	8MR6423-5DE08
	1150 W	550 W	401 × 415 × 567 mm	570 m³/h	1010 m³/h	■	■	–	8MR6423-5DE12
	1550 W	810 W	401 × 415 × 567 mm	860 m³/h	1820 m³/h	■	■	–	8MR6423-5DE15
	2050 W	1190 W	401 × 415 × 567 mm	1050 m³/h	1820 m³/h	■	■	–	8MR6423-5DE20
	400 V, 50/60 Hz								
	2900 W	1210 W	492 × 496 × 797 mm	860 m³/h	3410 m³/h	■	■	–	8MR6440-5DE30
	3850 W	1630 W	492 × 496 × 797 mm	1450 m³/h	3410 m³/h	■	■	–	8MR6440-5DE40

Heat exchangers

Air/air heat exchangers, degree of protection IP54, color RAL 7035




	Thermal power	Rated power	Dimensions W × H × D	Air capacity		Design	Mounting		Article No.
				Inside	Outside		Undrilled	Part	
	230 V, 50/60 Hz								
	36 W/K	140 W	316 × 771 × 103 mm	570 m³/h	570 m³/h	■	■	–	8MR6423-5ML36
	80 W/K	240 W	317 × 1260 × 148 mm	1050 m³/h	1050 m³/h	■	■	–	8MR6423-5ML80

Heater units




	Rated value	Rated power	Shutdown temperature	Article No.
	Heater units with PTC thermistor, UL-approved			
	120 ... 240 V AC/DC	15 W	–	8MR2130-1A
		30 W	–	8MR2130-3A
		45 W	–	8MR2130-4A
		60 W	–	8MR2130-6A
		75 W	–	8MR2130-7A
		100 W	–	8MR2130-0A
150 W		–	8MR2130-5A	
	Semiconductor heater units without thermostat, compact design, UL-approved			
	120 ... 240 V AC/DC	50 W	–	8MR2131-4A
		100 W	–	8MR2131-0A
150 W		–	8MR2131-5A	
	Semiconductor heater units with thermostat, compact design			
	120 ... 240 V AC/DC	50 W	15 °C	8MR2132-1A
			25 °C	8MR2132-1AB
		100 W	15 °C	8MR2132-0A
			25 °C	8MR2132-0AB
		150 W	15 °C	8MR2132-5A
25 °C			8MR2132-5AB	
	Semiconductor heater units			
	12 ... 30 V AC/DC	15 W	–	8MR2130-1BA
		30 W	–	8MR2130-3BA
		45 W	–	8MR2130-4BA
60 W		–	8MR2130-6BA	

Fan heaters

Fan heaters





	Version	Voltage	Continuous heat output	Parameter	Article No.
	Standard version				
	Without fan	230 V AC	100 W	–	8MR2140-0A
			150 W	–	8MR2140-1A
			200 W	–	8MR2140-2A
			300 W	–	8MR2140-3A
			400 W	–	8MR2140-4A
	With fan	230 V AC	100 W	–	8MR2140-0B
			150 W	–	8MR2140-1B
			200 W	–	8MR2140-2B
			300 W	–	8MR2140-3B
400 W			–	8MR2140-4B	
	Compact fan heater				
	Without fan	230 V AC	250 W	–	8MR2122-4A
			400 W	–	8MR2122-8A
		120 V AC	250 W	–	8MR2122-4B
			400 W	–	8MR2122-8B
	With fan	24 V DC	250 W	–	8MR2122-4AB
			48 V DC	250 W	–
		48 V DC	250 W	–	8MR2122-4AC
400 W			–	8MR2122-8AA	
	With integrated thermostat				
	For floor mounting	230 V AC	950 W	0 ... +60 °C	8MR2150-0A
	With integrated hygrostat				
	For floor mounting	230 V AC	950 W	65% R.H.	8MR2150-0BA
	For wall mounting	230 V AC	950 W	65% R.H.	8MR2150-0CA

Semiconductor fan heaters

	Fixing	Voltage	Continuous heat output	Version	Article No.	
	Fan heaters					
	Clip fixing	230 V AC	150 W	–	8MR2150-2C	
			250 W	–	8MR2150-5A	
			400 W	–	8MR2150-4A	
		120 V AC	250 W	–	8MR2150-5AA	
			400 W	–	8MR2150-4AA	
			400 W	–	8MR2150-4AA	
	Screw fixing	230 V AC	150 W	–	8MR2150-2D	
			250 W	–	8MR2150-5B	
			400 W	–	8MR2150-4B	
400 W			–	8MR2150-4B		
	PTC fan heaters for wall mounting					
	Screw fixing	230 V AC	1200 W	With thermostat 0 ... +60 °C	8MR2150-3A	
			1200 W	Without thermostat	8MR2150-3B	
	Clip fixing	120 V AC	1200 W	With thermostat +32 ... +140 °F	8MR2151-3A	
			1200 W	Without thermostat	8MR2151-3B	
		PTC fan heaters for floor mounting				
		Screw fixing	230 V AC	1200 W	With thermostat 0 ... +60 °C	8MR2150-2A
				1200 W	Without thermostat	8MR2150-2B
Clip fixing		120 V AC	1200 W	With thermostat +32 ... +140 °F	8MR2151-2A	
			1200 W	Without thermostat	8MR2151-2B	



Thermostats

Adjustable thermostats

	Version	Max. switching power	Temperature range	Article No.
	Mini thermostat			
	NC contact	250 V AC, 10 (2) A	-10 ... +50 °C	8MR2170-1CA
			0 ... +60 °C	8MR2170-2BA
			+20 ... +80 °C	8MR2170-1DA
	NO contact	250 V AC, 10 (2) A	-10 ... +50 °C	8MR2170-1CB
			0 ... +60 °C	8MR2170-2BB
+20 ... +80 °C			8MR2170-1DB	
	Mechanical thermostat			
	CO contact	250 V AC, 10 (4) A	+5 ... +60 °C	8MR2170-1A
-20 ... +30 °C			8MR2170-1B	
	Electronic thermostat			
	CO contact	230 V AC, 8 (1.6) A	-20 ... +60 °C	8MR2170-1GA
		120 V AC, 8 (1.6) A	-4 ... +140 °F	8MR2170-1GB
		24 V DC, 16 A	0 ... +60 °C	8MR2170-2A
CO contact, integrated	230 V AC, 8 (1.6) A	-20 ... +60 °C	8MR2170-1GC	
	Twin thermostat			
	NC contact and NO contact	250 V AC, 10 (2) A	0 ... +60 °C	8MR2170-1E
	NO contact and NO contact	250 V AC, 10 (2) A	0 ... +60 °C	8MR2170-1EA



Thermostats

Tamper-proof thermostats


	Version	Max. switching power	Shutdown temperature	Article No.
	Tamper-proof thermostat			
	NC contact	250 V AC, 5 (1.6) A	15 °C	8MR2171-1BA
			25 °C	8MR2171-2BA
	NO contact	250 V AC, 5 (1.6) A	35 °C	8MR2171-3BB
			50 °C	8MR2171-1BB
60 °C			8MR2171-2BB	
	Twin thermostat			
	NC contact and NO contact	250 V AC, 5 (1.6) A	15 °C 50 °C (NC contact NO contact)	8MR2172-1A
			25 °C 60 °C (NC contact NO contact)	8MR2172-2A
	NO contact and NO contact	250 V AC, 5 (1.6) A	50 °C 60 °C (NO contact NO contact)	8MR2172-1AB

Hygrostats, hygrotherms, switching modules


Hygrostats

	Version	Relative air humidity	Voltage	Max. switching power	Article No.
	Mechanical hygrostat				
	CO contact	35 ... 95%	230 V AC	250 V AC, 5 (0.2) A / 20 W DC	8MR2170-1C
	Electronic hygrostat				
	CO contact	40 ... 90%	230 V AC	240 V AC, 8 (1.6) A	8MR2170-1AF
			120 V AC	240 V AC, 8 (1.6) A	8MR2170-2AF
		65%	230 V AC	240 V AC	8MR2170-1BF
120 V AC			120 V AC	8MR2170-2BF	

Hygrotherms

	Version	Relative air humidity	Temperature range	Voltage	Max. switching power	Article No.
	Electronic hygrotherm					
	NC contact and NO contact	50 ... 90%	+32 ... +140 °F	100 ... 240 V AC	NC contact: 120 V AC, 6 (1) A NO contact: 120 V AC, 8 (1.6) A	8MR2170-4F
			0 ... +60 °C	100 ... 240 V AC	NC contact: 100 ... 240 V AC, 6 (1) A NO contact: 100 ... 240 V AC, 8 (1.6) A	8MR2170-4E

Switching modules

	Purpose	Switching capacity	Article No.
	For switching high-power DC devices from thermostats, hygrostats or hygrotherms	24 V DC, 16 A	8MR2180-1A
		48 V DC, 16 A	8MR2180-1B



Appendix



Link directory	A/2
Conditions of sale and delivery	A/8
Article number index	A/10
Index	A/17
Notes	A/21

Link directory

Catalog LV 10

General information

Information on low-voltage power distribution and electrical installation technology	www.siemens.com/lowvoltage
Tender specifications	www.siemens.com/lowvoltage/tenderspecifications
Conversion tool	www.siemens.com/conversion-tool
Image database	www.siemens.com/lowvoltage/picturedb
CAX download manager	www.siemens.com/lowvoltage/cax
Newsletter system	www.siemens.com/lowvoltage/newsletter
Siemens YouTube channel	www.youtube.com/Siemens
Brochures / catalogs	www.siemens.com/lowvoltage/catalogs
Operating instructions / manuals	www.siemens.com/lowvoltage/manuals
Siemens Industry Online Support	www.siemens.com/lowvoltage/product-support
Siemens Industry Online Support app	www.siemens.com/support-app
My Documentation Manager (MDM)	www.siemens.com/lowvoltage/mdm
Configurators	www.siemens.com/lowvoltage/configurators
Siemens Industry Mall – product catalog and online ordering system	www.siemens.com/industrymall
Direct forwarding to the Industry Mall	www.siemens.com/product?ArticleNo.
Interactive product catalog CA 01	www.siemens.com/automation/ca01
Training	www.siemens.com/sitrain-lowvoltage
Local contacts	www.siemens.com/lowvoltage/contact
Technical Support	www.siemens.com/lowvoltage/support-request
Information on services	www.siemens.com/service-catalog
Application consulting for control panel construction, machine manufacture, and plant building	www.siemens.com/applicationconsulting
Manual for the generation, transmission and distribution of electrical energy	www.siemens.com/power-engineering-guide
Control panels for the North American market	www.siemens.com/northamerican-standards
Control panel building	www.siemens.com/controlpanel
Energy savings and amortization	www.automation.siemens.com/sinasave
Energy Suite	www.siemens.com/energysuite
SITOP power supplies	www.siemens.com/sitop
Efficiency class IE3	www.siemens.com/IE3ready
Power distribution with Totally Integrated Power	www.siemens.com/tip

Information + ordering

Technical overviews	
Air circuit breakers	www.siemens.com/lowvoltage/product-support (109766020)
Molded case circuit breakers	www.siemens.com/lowvoltage/product-support (109767421)
Miniature circuit breakers	www.siemens.com/lowvoltage/product-support (109769082)
Residual current protective devices / arc fault detection devices	www.siemens.com/lowvoltage/product-support (109769082)
Switching devices	www.siemens.com/lowvoltage/product-support (109769083)
Overvoltage protection devices	www.siemens.com/lowvoltage/product-support (109769084)
Fuse systems	www.siemens.com/lowvoltage/product-support (109769085)
Switch disconnectors	www.siemens.com/lowvoltage/product-support (109764946)
Transfer switching equipment and load transfer switches	www.siemens.com/lowvoltage/product-support (109764946)
Measuring devices, power monitoring and digitalization solutions	www.siemens.com/lowvoltage/product-support (109764480)
Monitoring devices	www.siemens.com/lowvoltage/product-support (109769086)
Transformers, power supply units and socket outlets	www.siemens.com/lowvoltage/product-support (109764946)
Busbar systems	www.siemens.com/lowvoltage/product-support (109769087)
Terminal blocks	www.siemens.com/lowvoltage/product-support (109769088)

Technical overviews

Power distribution boards, motor control center and distribution boards	www.siemens.com/lowvoltage/product-support (109769089)
Busbar trunking systems	www.siemens.com/lowvoltage/product-support (109769090)
System cubicles, system lighting and system air-conditioning	www.siemens.com/lowvoltage/product-support (109769091)

All the important things at a glance

Air circuit breakers	www.siemens.com/3WL
Molded case circuit breakers	www.siemens.com/3VA
Miniature circuit breakers	www.siemens.com/mcb www.siemens.com/protection-concept
Residual current protective devices / arc fault detection devices	www.siemens.com/rccb www.siemens.com/protection-concept
Switching devices	www.siemens.com/switching-devices
Overvoltage protection devices	www.siemens.com/overvoltage-protection
Fuse systems	www.siemens.com/lowvoltage/fuse-systems
Switch disconnectors	www.siemens.com/switching-devices
Transfer switching equipment and load transfer switches	www.siemens.com/switching-devices
Measuring devices, power monitoring and digitalization solutions	www.siemens.com/powermonitoring www.siemens.com/lowvoltage/digitalization
Monitoring devices	www.siemens.com/lowvoltage
Transformers, power supply units and socket outlets	www.siemens.com/lowvoltage
Busbar systems	www.siemens.com/lowvoltage
Terminal blocks	www.siemens.com/distribution-components
Power distribution boards, motor control center and distribution boards	www.siemens.com/sivacon-S8 www.siemens.com/distributionsystems
Busbar trunking systems	www.siemens.com/sivacon-8PS
System cubicles, system lighting and system air-conditioning	www.siemens.com/sivacon-8mf

Your product in detail

3WL air circuit breakers – Quick selection guide	www.siemens.com/lowvoltage/product-support (109751638)
Technical basic information – 3WL air circuit breakers	www.siemens.com/lowvoltage/product-support (109767789)
Technical basic information – 3VA molded case circuit breakers	www.siemens.com/lowvoltage/product-support (109766672)
Technical basic information – SENTRON protection concept	www.siemens.com/lowvoltage/product-support (109767456)
Technical basic information – Switch disconnectors and transfer switching equipment	www.siemens.com/lowvoltage/product-support (109763354)
Technical basic information – SENTRON power monitoring and digital solutions	www.siemens.com/lowvoltage/product-support (109769851)
Technical basic information – SIVACON S4 power distribution boards and ALPHA UNIVERSAL distribution boards	www.siemens.com/lowvoltage/product-support (109767882)
Technical basic information – SIVACON 8MF1 system cubicle	www.siemens.com/lowvoltage/product-support (109767386)
Technology primer – Miniature circuit breakers	www.siemens.com/lowvoltage/product-support (109482304)
Technology primer – Residual current protective devices	www.siemens.com/lowvoltage/product-support (109482301)
Technology primer – Overvoltage protection devices	www.siemens.com/lowvoltage/product-support (109756965)
Technology primer – Fuse systems	www.siemens.com/lowvoltage/product-support (109482303)
Brochure – Reliable, sustainable, and efficient – TÜV-certified power monitoring system in accordance with ISO 50001	www.siemens.com/lowvoltage/product-support (109744679)
Brochure – SENTRON portfolio for power monitoring	www.siemens.com/lowvoltage/product-support (109744725)
Brochure – Energy and data successfully put on track	www.siemens.com/lowvoltage/product-support (109747761)
Brochure – SIVACON 8MF1 system cubicles – As versatile as your requirements	www.siemens.com/lowvoltage/product-support (109744677)
Catalog LV 70 – 2019 – SIVACON 8PS busbar trunking systems – BD01, BD2 up to 1250 A	www.siemens.com/lowvoltage/product-support (109744546)

Siemens YouTube channel

3WL air circuit breakers (general)	bit.ly/2ZH1rXH
3VA molded-case circuit-breakers (general)	bit.ly/2xNxIFA
Miniature circuit breakers (general)	bit.ly/2kJP2Dq
Residual current protective devices (general)	bit.ly/2kKQhCj

Link directory

Catalog LV 10

Siemens YouTube channel

Siemens fuse systems	bit.ly/2kWaepz
Power monitoring (general)	bit.ly/2lZ9QqC
Siemens ALPHA FIX terminal blocks – 8WH3 insulation displacement terminals (IDC)	bit.ly/2Y3JCVq
Siemens ALPHA FIX terminal blocks – 8WH2 terminal with spring-loaded-connection	bit.ly/2kKVz0D
Power distribution – SIVACON (general)	bit.ly/2m4oSLI
Siemens SIVACON S4 power distribution boards up to 4000 A	bit.ly/2krni6h

Everything you need for your order

Air circuit breakers	sie.ag/2lXiZjB
Molded case circuit breakers	sie.ag/2mmLcAk
Miniature circuit breakers	sie.ag/2kTFXl5
Residual current protective devices / arc fault detection devices	sie.ag/2m55Y7j
Switching devices	sie.ag/2m4eG5M
Overvoltage protection devices	sie.ag/2kTfytV
Fuse systems	sie.ag/2kW3pnU
Switching devices	sie.ag/2mryctm
Switch disconnectors and transfer switching equipment	sie.ag/2mmMw6g
Measuring devices and power monitoring	sie.ag/2kTH9Lz
Digitalization solutions	sie.ag/2olliNi
Library for SIMATIC	sie.ag/2kpbwcs
powermanager / powerconfig	sie.ag/2kTJjuF
Monitoring devices	sie.ag/2m3no4A
Transformers, power supply units and socket outlets	sie.ag/2mmSHHu
Busbar systems	sie.ag/2lXoUFl
Terminal blocks	sie.ag/2kW8ZXo
SIVACON S4 power distribution boards	sie.ag/2JUQwE4
ALPHA distribution boards	sie.ag/2kURLd8
SIMARIS planning tools	sie.ag/2m3oFbS
SIVACON 8PS	sie.ag/2lXpCT1
System cubicles, system lighting and system air-conditioning	sie.ag/339cQB9
SIVACON S8	www.siemens.com/sivacon-partnerfinder

Order support

3KD switch disconnectors – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109750228)
3LD2 main control and EMERGENCY-STOP-switching equipment – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109755626)
3NP1 fuse switch disconnectors – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109755624)
3KF switch disconnectors with fuses – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109750229)
3NJ6 switch disconnectors with fuses – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109755619)
3KC automatic transfer switching equipment (ATSE) – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109755620)
3KC remotely operated transfer switching equipment (RTSE) – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109755627)
3KC manual transfer switching equipment (MTSE) – End-to-end safety for user and systems	www.siemens.com/lowvoltage/catalogs (109750227)
SIVACON 8PS – BD01 and BD2	www.siemens.com/LV70

Configurators

3WL10 air circuit breakers	www.siemens.com/lowvoltage/3wl10-configurator
3WL air circuit breakers	www.siemens.com/lowvoltage/3wl-configurator
3VA molded case circuit breakers	www.siemens.com/lowvoltage/3va-configurator
3VA27 molded case circuit breakers	www.siemens.com/lowvoltage/3va27-configurator
SITOR semiconductor fuse	www.siemens.com/lowvoltage/sitor-configurator
3NJ62 switch disconnectors	www.siemens.com/lowvoltage/3nj62-configurator
SIVACON 8MF1 system cubicle	www.siemens.com/lowvoltage/8mf1-configurator
SIVACON 8PS	sie.ag/2lXpCT1

Commissioning + operation

Tools / software

SIMARIS configuration configuration software	www.siemens.com/simarisconfig
powerconfig configuration software	www.siemens.com/powerconfig
BIM-compliant SIMARIS planning tools	www.siemens.com/simaris
SIMARIS therm calculation tool	www.siemens.com/simaristherm

Manuals

Low voltage protection devices selectivity tables	www.siemens.com/lowvoltage/manuals (109748621)
System manual – 3WL / 3VL circuit breakers with communication capability – Modbus	www.siemens.com/lowvoltage/manuals (39850157)
System manual – 3WL / 3VL circuit breakers with communication capability – PROFIBUS	www.siemens.com/lowvoltage/manuals (12560390)
Equipment manual – 3VA27 molded case circuit breakers & 3WL10 air circuit breakers	www.siemens.com/lowvoltage/manuals (109753821)
Communication manual – 3WL air circuit breakers via COM35 – PROFINET IO, Modbus TCP	www.siemens.com/lowvoltage/manuals (109757987)
Communication manual – 3WL10 air circuit breakers & 3VA27 molded case circuit breakers	www.siemens.com/lowvoltage/manuals (109760220)
Configuration manual 3VA selectivity	www.siemens.com/lowvoltage/manuals (109743975)
System manual – 3VA communication IEC / UL	www.siemens.com/lowvoltage/manuals (98746267)
Equipment manual – 3VA molded case circuit breakers with IEC certificate	www.siemens.com/lowvoltage/manuals (90318775)
Configuration manual Miniature circuit breakers	www.siemens.com/lowvoltage/manuals (45302792)
Configuration manual Residual protective devices / arc fault detection devices	www.siemens.com/lowvoltage/manuals (45303255)
Configuration manual Switching devices	www.siemens.com/lowvoltage/manuals (45315361)
Configuration manual Overvoltage protection devices	www.siemens.com/lowvoltage/manuals (45315289)
Configuration manual Fuse systems	www.siemens.com/lowvoltage/manuals (45314810)
Planning manual – Planning with SIVACON 8PS	www.siemens.com/lowvoltage/manuals (109478425)
Configuration manual Switch disconnectors	www.siemens.com/lowvoltage/manuals (109769744)
Configuration manual Busbar systems	www.siemens.com/lowvoltage/manuals (109769746)
System manual SENTRON 3NJ62 in-line plug-in switch disconnectors with fuses	www.siemens.com/lowvoltage/manuals (31753460)
Equipment manual 3KD switch disconnectors	www.siemens.com/lowvoltage/manuals (109758120)
System manual SENTRON 3NP1 fuse switch disconnectors	www.siemens.com/lowvoltage/manuals (33515690)
Equipment manual 3KC3 and 3KC6 Transfer switching equipment	www.siemens.com/lowvoltage/manuals (109754954)
Equipment manual 3KCO manual Transfer switching equipment	www.siemens.com/lowvoltage/manuals (109763232)
Equipment manual 3KC4 and 3KC8 Transfer switching equipment	www.siemens.com/lowvoltage/manuals (109738725)
Equipment manual 3KC ATC3100 Transfer control device	www.siemens.com/lowvoltage/manuals (100341671)
Equipment manual 3KC ATC6300 Transfer control device	www.siemens.com/lowvoltage/manuals (109755149)

Link directory

Catalog LV 10

Manuals

Equipment manual 3KC ATC6500 Transfer control device	www.siemens.com/lowvoltage/manuals (109758018)
Configuration manual Transfer switching equipment and load transfer switches	www.siemens.com/lowvoltage/manuals (109769745)
Configuration manual Measuring devices and power monitoring	www.siemens.com/lowvoltage/manuals (45315973)
Equipment manual 7KT PAC1600 energy meter	www.siemens.com/lowvoltage/manuals (109759827)
Equipment manual 7KT PAC1600 multimeter	www.siemens.com/lowvoltage/manuals (109760293)
System manual 7KT multichannel current measuring system	www.siemens.com/lowvoltage/manuals (109483442)
Equipment manual PAC2200 Measuring device	www.siemens.com/lowvoltage/manuals (109746835)
Equipment manual SENTRON PAC3200 Power monitoring device	www.siemens.com/lowvoltage/manuals (26504150)
Equipment manual PAC3200T Measuring device	www.siemens.com/lowvoltage/manuals (109746833)
System manual SENTRON PAC4200 Power monitoring device	www.siemens.com/lowvoltage/manuals (34261595)
Equipment manual PAC3100 Measuring device	www.siemens.com/lowvoltage/manuals (37881976)
Equipment manual SENTRON PAC5100/5200 7KM5212/5412	www.siemens.com/lowvoltage/manuals (109477872)
Equipment manual 7KM PAC3120 and 7KM PAC3220	www.siemens.com/lowvoltage/manuals (109767307)
Communication manual SENTRON PAC5100/5200 7KM5212/5412	www.siemens.com/lowvoltage/manuals (109477870)
System manual – 3VA communication IEC/UL	www.siemens.com/lowvoltage/manuals (98746267)
SEM3™ – Embedded Micro Metering Module™	www.siemens.com/lowvoltage/manuals (109748928)
Configuration manual Monitoring devices	www.siemens.com/lowvoltage/manuals (45316099)
Configuration manual Transformers, power supply units and socket outlets	www.siemens.com/lowvoltage/manuals (45315886)
Configuration manual Busbar systems	www.siemens.com/lowvoltage/manuals (81379793)
Planning manual SIVACON S8 – Technical planning information	www.siemens.com/lowvoltage/manuals (107113936)
Manual SIVACON S4	www.siemens.com/lowvoltage/manuals (25909512)
Planning manual – Planning with SIVACON 8PS	www.siemens.com/lowvoltage/manuals (109478425)
SIMARIS software SIMARIS therm planning tool	www.siemens.com/lowvoltage/manuals (109744553)

Training and tutorials

Video tutorial on the 3WL air circuit breaker	www.lowvoltage.siemens.com/wcms/3wl-tutorial
Protection systems in low-voltage power distribution	www.siemens.com/sitrain-lowvoltage (WT-LVAPS)
3WL air circuit breakers	www.siemens.com/sitrain-lowvoltage (WT-LVA3WL)
Protection concept	www.siemens.com/sitrain-lowvoltage (WT-LVBPC)
5SM6 arc fault detection devices	www.siemens.com/sitrain-lowvoltage (WT-LVBAFDD)
Power monitoring with SENTRON	www.siemens.com/sitrain-lowvoltage (WT-LVAEM)
SIMARIS configuration	www.siemens.com/sitrain-lowvoltage (WT-LVASIMC)
Communication with SENTRON components	www.siemens.com/sitrain-lowvoltage (LV-COM)
Maintenance and operation of 3WL circuit breakers	www.siemens.com/sitrain-lowvoltage (LV-CBMAIN)
Energy management – Basic training	www.siemens.com/sitrain-lowvoltage (LV-EMSENTB)
Energy management – Training for experts	www.siemens.com/sitrain-lowvoltage (LV-EMSENTE)
Siemens power academy	www.power-academy.siemens.com

Further links

SIRIUS

Industrial Controls – SIRIUS	www.siemens.com/sirius
Industry Online Support – SIRIUS	www.siemens.com/sirius/support
Smart products for controlling, protecting, and starting motors	www.siemens.com/sirius-modular-system
Brochures / catalogs	www.siemens.com/sirius/catalogs
Control and signaling devices SIRIUS ACT – Performance in Action	www.siemens.com/sirius-act
Load feeders and motor starters	www.siemens.com/motorstarter
IO-Link –the new communication standard	www.siemens.com/io-link
Systematic industrial safety technology: Safety Integrated	www.siemens.com/safety-integrated
SIMOCODE pro motor management	www.siemens.com/simocode
3SK system safety relays – simple, flexible and efficient	www.siemens.com/safety-relays
Explosion protection (ATEX)	www.siemens.com/sirius/atex
Configurators – SIRIUS	www.siemens.com/sirius/configurators
SIRIUS Media	www.siemens.com/sirius/news

Conditions of sale and delivery

1. General standards

By using this catalog you can acquire hardware and software products described therein from Siemens AG subject to these conditions of sale and delivery (hereinafter: CSD). Please note! The scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. These CSD apply exclusively for orders placed with Siemens AG, Germany.

1.1 For customers with a seat or registered office in Germany

For customers with a seat or registered office in Germany, the following shall be subordinate to these CSD

- for installation, the "Standard Terms and Conditions for Installation Germany" and
- for Plant Analytics Services the "Standard Terms and Conditions for Plant Analytics Services for Customers in Germany"¹⁾ and
- for standalone software products and software products that are part of another product or project, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office in Germany"¹⁾ and
- for other supplies and services, the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"¹⁾.

In the event that such other supplies and services include open-source software, the conditions of which override the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"¹⁾, the product will be supplied with a notice detailing the special conditions that apply for the relevant open-source software. This applies accordingly in the case of a reference to other third-party software components.

1.2 For customers with a seat or registered office outside of Germany

For customers with a seat or registered office outside of Germany, the following shall be subordinate to these CSD

- for Plant Analytics Services the "Standard Terms and Conditions for Plant Analytics Services"¹⁾ (only available in English) and
- for services, the "International Terms & Conditions for Services"¹⁾ supplemented by the "Software Licensing Conditions"¹⁾ and
- for the supply of other hardware and software the "International Terms & Conditions for Products"¹⁾ supplemented by the "Software Licensing Conditions"¹⁾.

1.3 For customers with framework agreements

To the extent that our products and services are covered by an existing framework agreement, the conditions there apply instead of this CSD.

2. Additional terms and conditions

All dimensions are in mm. In Germany, according to the German law on units in metrology, data in inches only apply to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the corresponding pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

3. Export regulations

We shall not be obligated to fulfill this agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes or other sanctions.

Exporting may be subject to authorization. In delivery information, we label authorization obligations according to German, European and US export lists.

Our products are controlled by the U.S. authorities (goods labeled with "ECCN" not equal to "N") and may only be supplied to the stated country of the end user for sole use by the end user. Without U.S. government approval or other approval under U.S. law, the products may not be sold, transferred or otherwise forwarded to other countries or to other persons other than the specified end user, either in their original form or after further processing into other goods. Goods labeled with an "AL" not equal to "N" are subject to European/national export authorization requirements.

Please note that you can also preview the export designations in the respective product description via our "Industry Mall" online catalog system. The deciding factors, however, are the AL or ECCN export designations indicated on order confirmations, delivery notes and invoices.

Unmarked items or items marked "AL:N" / "ECCN:N" or "AL:9X9999" / "ECCN: 9X9999" may require authorization based on their intended use or ultimate destination.

If you transfer goods (hardware and/or software and/or technology as well as corresponding documentation, regardless of the mode of provision) delivered by us or works and services (including all kinds of technical support) performed by us to a third party worldwide, you shall comply with all applicable national and international (re-)export control regulations.

¹⁾ You can download the text of the Siemens AG terms and conditions of trade at www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

If required to conduct export control checks, you, at our request, shall promptly provide us with all information pertaining to particular end customers, destination and intended use of goods, works and services provided by us, as well as any relevant export control restrictions.

The products listed in this catalog may be subject to European/ German and/or US export regulations. Therefore, any export requiring a license is subject to approval by the competent authorities.

Errors excepted and subject to change without prior notice.

Article number index

Article No.	Page
3K	
3KC03	9/18–9/19
3KC04	9/18–9/19
3KC34	9/6, 9/10
3KC43	9/10
3KC44	9/10
3KC64	9/6, 9/11
3KC83	9/11
3KC84	9/11
3KC90	9/26, 9/28
3KC91	9/20–9/21, 9/23
3KC92	9/20–9/21
3KC93	9/20–9/21, 9/23
3KC94	9/20–9/21, 9/23
3KC95	9/20–9/21, 9/23
3KC96	9/10, 9/12–9/13, 9/15
3KC97	9/13
3KC98	9/12–9/17
3KD16	8/50–8/51
3KD22	8/50–8/51
3KD26	8/50–8/51
3KD28	8/50–8/51
3KD30	8/50–8/51
3KD32	8/50–8/51
3KD34	8/50–8/51
3KD36	8/50–8/51
3KD38	8/50–8/51
3KD40	8/50–8/51
3KD42	8/50–8/51
3KD44	8/50–8/51
3KD46	8/50–8/51
3KD48	8/50–8/51
3KD50	8/50–8/51
3KD52	8/50–8/51
3KD54	8/50–8/51
3KD91	8/52–8/53, 8/55–8/57, 8/109–8/110, 9/20, 9/23
3KD92	8/52–8/53, 8/56–8/57, 9/20
3KD93	8/52–8/53, 8/56–8/57, 8/110–8/111, 9/22–9/23
3KD94	8/52–8/53, 8/56–8/57, 8/110–8/111, 9/22–9/23
3KD95	8/52–8/53, 8/56–8/57, 8/110–8/111, 9/22–9/23
3KF13	8/104–8/106
3KF14	8/104–8/105
3KF23	8/104–8/106
3KF24	8/104–8/105
3KF33	8/104–8/106
3KF34	8/104–8/105

Article No.	Page
3KF43	8/104–8/106
3KF44	8/104–8/105
3KF53	8/104–8/106
3KF54	8/104–8/105
3KF90	7/70, 8/110
3KF91	8/56, 8/107, 8/109, 8/111, 9/23
3KF92	8/56, 8/107, 8/111
3KF93	8/107, 8/110–8/111
3KF94	8/56, 8/107, 8/111
3KF95	8/56, 8/107, 8/111
3L	
3LD20	8/20–8/23, 8/26–8/29, 8/32–8/39
3LD21	8/20–8/23, 8/26–8/29, 8/32–8/39, 9/24–9/25
3LD22	8/20–8/23, 8/26–8/29, 8/32–8/41, 9/24–9/25
3LD23	8/20–8/23, 8/26–8/29, 8/32–8/35, 9/24–9/25
3LD24	8/20–8/23, 8/26–8/29, 8/32–8/35, 9/24–9/25
3LD25	8/20–8/23, 8/26–8/29, 8/32–8/39, 9/24–9/25
3LD27	8/20–8/23, 8/26–8/29, 8/32–8/39, 9/24–9/25
3LD28	8/20–8/23, 8/26–8/29, 8/32–8/39
3LD30	8/10–8/15
3LD31	8/10–8/15
3LD32	8/10–8/15
3LD33	8/10–8/15
3LD34	8/10–8/15
3LD92	8/20–8/39, 8/42–8/43, 9/24–9/25
3LD93	8/10–8/17
3N	
3NA30	7/38
3NA31	7/38
3NA32	7/39
3NA33	7/39
3NA34	7/39
3NA36	7/39
3NA38	7/38
3NA61	7/36–7/37
3NA62	7/37
3NA68	7/36
3NA71	7/36–7/37
3NA72	7/37
3NA78	7/36
3NB11	7/58
3NB12	7/58
3NB13	7/58
3NB23	7/58
3NB33	7/47

Article No.	Page	Article No.	Page
3NC10	7/25, 7/60, 7/62, 7/66	3NG12	7/23, 8/71, 8/111
3NC14	7/25, 7/60, 7/62, 7/67	3NG13	7/23, 8/71, 8/111
3NC18	7/61	3NG14	7/23, 8/71, 8/111
3NC22	7/25, 7/61, 7/63	3NG15	7/23
3NC23	7/25, 7/59, 7/61, 7/63	3NH30	7/22–7/23
3NC24	7/46–7/47, 7/50, 7/52	3NH31	7/22
3NC26	7/61, 7/63	3NH32	7/21–7/22
3NC32	7/53–7/54	3NH33	7/22
3NC33	7/53, 7/55	3NH34	7/22
3NC34	7/53, 7/55	3NH35	7/22
3NC55	7/56	3NH40	7/23
3NC58	7/56	3NH42	7/23
3NC73	7/57	3NH50	7/25
3NC84	7/46–7/47, 7/52	3NH53	7/25
3ND13	7/40	3NH54	7/25
3ND18	7/40	3NH57	7/25
3ND21	7/40	3NH72	7/21
3ND22	7/40	3NH73	7/21
3ND23	7/40	3NH74	7/21
3NE10	7/42, 7/44	3NH75	7/23
3NE12	7/35, 7/42, 7/45–7/46	3NJ41	8/80, 8/82–8/83, 8/85, 8/87, 8/89
3NE13	7/35, 7/42, 7/45, 7/47	3NJ49	8/82, 8/84, 8/86, 8/88
3NE14	7/35, 7/42, 7/45, 7/47	3NJ56	8/80
3NE18	7/42	3NJ59	8/82, 8/84
3NE32	7/46, 7/50	3NJ62	8/122
3NE33	7/51	3NJ69	8/116, 8/118, 8/120, 8/122
3NE34	7/52	3NP11	8/64–8/65
3NE35	7/57	3NP19	8/66–8/73
3NE36	7/52–7/54	3NP50	8/76
3NE41	7/44, 7/49, 7/56–7/57	3NP52	8/76
3NE43	7/51, 7/57	3NP53	8/76
3NE53	7/47, 7/51	3NP54	8/76
3NE54	7/52–7/53	3NW10	7/65
3NE56	7/52	3NW11	7/65
3NE64	7/56–7/57	3NW12	7/65
3NE74	7/52	3NW13	7/65
3NE76	7/52–7/53	3NW20	7/65
3NE80	7/43–7/44, 7/48–7/49	3NW21	7/65
3NE82	7/49–7/50	3NW22	7/65
3NE83	7/49	3NW23	7/65
3NE87	7/43, 7/48	3NW30	7/65
3NE88	7/44, 7/49	3NW31	7/65
3NE93	7/51	3NW32	7/65
3NE94	7/56–7/57	3NW33	7/65
3NE96	7/53	3NW60	7/41, 7/64
3NG10	7/23, 8/71, 8/111	3NW61	7/41
3NG11	7/23	3NW62	7/41

Article number index

Article No.	Page
3NW63	7/41
3NW66	7/64
3NW70	7/24, 7/26, 7/64
3NW71	7/20, 7/24, 7/67
3NW72	7/24
3NW73	7/24
3NW74	7/11, 7/24, 7/27–7/28
3NW75	7/27–7/28, 7/66
3NW76	7/26, 7/64
3NW79	7/24
3NW80	7/41
3NW81	7/41
3NW82	7/41
3NX10	7/23, 7/70
3NX20	7/22
3NX31	7/21–7/22
3NY10	8/77
3NY11	8/76–8/77
3NY12	8/76–8/77
3NY13	8/77
3NY14	8/77
3NY15	8/77
3NY19	8/76–8/77
3NY30	8/77
3NY40	8/77
3S	
3SU14	8/55, 8/110, 9/20
3T	
3TX42	14/69
3V	
3VA90	2/30, 2/56, 2/58–2/61
3VA91	2/26–2/27, 2/33–2/37, 2/39, 2/41, 2/43–2/46, 2/48–2/49, 2/51–2/52, 2/56, 2/58, 2/60–2/61
3VA92	2/26–2/29, 2/33, 2/35, 2/37, 2/39, 2/41, 2/43, 2/45, 2/47–2/49, 2/51, 2/58, 2/60–2/61
3VA93	2/35, 2/37, 2/43, 2/45, 2/48–2/49, 2/51–2/52, 2/56, 2/58–2/59, 2/61
3VA94	2/26–2/29, 2/33, 2/35, 2/37, 2/39, 2/41, 2/43, 2/45, 2/47, 2/49, 2/51, 2/59
3VA95	2/37, 2/59, 2/61
3VA96	2/26, 2/28–2/30, 2/35, 2/39, 2/43, 2/45, 2/47, 2/56
3VA99	2/24–2/25, 2/27–2/28, 2/30, 2/32, 2/49, 2/51, 2/54, 2/56–2/59
3VW81	1/28, 2/70
3VW90	1/29–1/36, 1/61, 2/57, 2/71–2/80
3VW97	1/33, 2/75–2/76, 2/78–2/79

Article No.	Page
3W	
3WL91	1/36, 1/58–1/67, 1/69–1/72, 2/80, 15/32, 15/34, 15/36, 15/38–15/39
3WL93	1/58
3Z	
3ZS27	10/13, 10/17
3ZS28	10/13
4A	
4AC24	12/10
4AC32	12/6–12/7
4AC37	12/8–12/9
4N	
4NC51	10/28–10/29
4NC52	10/28–10/29
4NC53	10/28–10/29
4NC54	10/28–10/29
4NC59	10/29
5S	
5SA26	7/33
5SA27	7/33
5SA28	7/33
5SB26	7/33
5SB27	7/33
5SB28	7/33
5SB40	7/33
5SB41	7/33
5SB42	7/33
5SB43	7/33
5SD74	6/6–6/16
5SD80	7/33
5SE13	7/34
5SE20	7/32
5SE22	7/32
5SE23	7/32
5SF10	7/18
5SF12	7/18
5SF42	7/19
5SF50	7/18
5SF52	7/18
5SF60	7/9, 7/20, 13/23
5SF62	7/9, 7/20, 13/23
5SG13	7/8, 7/16, 7/67
5SG15	7/17
5SG16	7/17

Article No.	Page	Article No.	Page
5SG17	7/8, 7/16, 7/67	5SL61	3/14
5SG18	7/17	5SL62	3/14
5SG53	7/8, 7/16–7/17, 7/67	5SL63	3/14
5SG55	7/17	5SL64	3/15
5SG56	7/17	5SL65	3/14
5SG57	7/8, 7/16–7/17, 7/67	5SL66	3/15
5SG62	7/9, 7/20, 13/9, 13/22	5SM21	4/32
5SG71	7/13, 8/125	5SM23	4/32–4/34, 4/36–4/37
5SG72	7/14, 8/93, 8/95, 8/125, 13/24	5SM24	4/32, 4/34, 4/36
5SG76	7/12, 8/91	5SM26	4/32–4/34, 4/36–4/37
5SH11	7/18	5SM27	4/32, 4/34, 4/36
5SH12	7/18	5SM28	4/32–4/34, 4/36–4/37
5SH20	7/20, 13/23	5SM33	4/30–4/31
5SH22	7/20, 13/23	5SM34	4/30–4/31
5SH34	7/19	5SM36	4/30–4/31
5SH35	13/13, 13/17	5SM37	4/31
5SH37	7/19	5SM60	3/17, 3/23, 3/27, 3/29, 3/35, 3/37, 3/42, 3/50, 4/39, 4/41, 4/43, 4/45, 4/49, 4/51–4/52, 4/54
5SH41	7/16	5SP32	3/25
5SH43	7/16	5SP33	3/25
5SH50	7/16	5SP34	3/25
5SH51	7/17	5SP37	3/24–3/25
5SH52	7/17, 7/20, 13/22	5SP38	3/24–3/25
5SH53	7/67–7/68	5SP41	3/30
5SH54	7/16–7/17	5SP42	3/30
5SH55	7/13–7/14, 7/67, 8/125, 13/24	5SP43	3/31
5SJ41	3/38	5SP44	3/31
5SJ42	3/39	5ST11	14/81
5SJ43	3/39	5ST13	3/24–3/25
5SJ61	3/18	5ST21	3/53, 4/62, 4/64, 7/66, 7/68
5SJ62	3/18	5ST25	3/72–3/75
5SJ63	3/18	5ST26	7/24
5SJ65	3/18	5ST30	3/13, 3/15, 3/17, 3/21, 3/23, 3/27, 3/29, 3/31, 3/33, 3/35, 3/37, 3/39–3/40, 3/42, 3/44–3/49, 3/52, 4/15, 4/17, 4/19, 4/21, 4/23, 4/25, 4/27, 4/29, 4/33, 4/35, 4/37, 4/39, 4/41, 4/43, 4/45, 4/47, 4/49, 4/51–4/54, 4/56–4/62, 5/7, 5/13, 5/15, 5/17, 7/13, 8/125
5SL30	3/20	5ST36	3/54–3/57, 3/59, 3/61–3/66, 3/68, 4/64, 4/66–4/69, 7/68–7/69
5SL31	3/12	5ST37	3/55–3/61, 3/63, 3/65–3/66, 3/68, 3/70, 4/64, 4/67–4/69, 7/66–7/69
5SL32	3/12	5ST38	3/13, 3/15, 3/17, 3/23, 3/27, 3/29, 3/31, 3/33, 3/35, 3/37, 3/40, 3/44–3/49, 3/52, 4/15, 4/17, 4/19, 4/21, 4/23, 4/25, 4/27, 4/29, 4/33, 4/35, 4/37, 4/39, 4/41, 4/43, 4/45, 4/49, 4/51, 4/56–4/62, 5/7, 5/13, 5/15
5SL33	3/12	5SU11	4/41
5SL34	3/13	5SU13	4/38–4/42, 4/44–4/46
5SL35	3/12	5SU14	4/39
5SL36	3/13	5SU16	4/38–4/41, 4/45–4/46
5SL41	3/16	5SU18	4/46
5SL42	3/16	5SV13	4/48, 4/50
5SL43	3/17		
5SL44	3/17		
5SL45	3/16		
5SL46	3/17		
5SL60	3/22		

Article number index

Article No.	Page
5SV31	4/16
5SV33	4/16–4/18, 4/22–4/24, 4/26, 4/28
5SV34	4/16–4/17, 4/22–4/23
5SV36	4/16–4/18, 4/22–4/24, 4/26, 4/28
5SV37	4/22, 4/28
5SV38	4/23
5SV41	4/14
5SV43	4/14, 4/20
5SV44	4/14, 4/20
5SV46	4/14, 4/20
5SV47	4/20
5SV60	4/53
5SV80	11/6
5SV81	11/8–11/11
5SV82	11/6
5SV87	11/7, 11/9–11/11
5SV89	11/7, 11/9, 11/11
5SW12	3/53
5SW30	3/53, 4/62
5SW33	4/56
5SY17	3/40
5SY41	3/28
5SY42	3/28
5SY43	3/29
5SY44	3/29
5SY45	3/28
5SY46	3/29
5SY51	3/32
5SY52	3/32
5SY54	3/32
5SY61	3/26
5SY62	3/26
5SY63	3/26
5SY64	3/27
5SY65	3/26
5SY66	3/27
5SY71	3/34
5SY72	3/34
5SY73	3/35
5SY74	3/35
5SY75	3/34
5SY76	3/35
5SY81	3/36
5SY82	3/36
5SY83	3/36
5SY84	3/37
5SY85	3/36

Article No.	Page
5SY86	3/37
5SZ92	4/63
5T	
5TE12	8/59
5TE13	8/59
5TE14	8/59
5TE16	8/59
5TE25	5/16
5TE48	5/8–5/9
5TE58	5/10
5TE68	12/12–12/13
5TE81	5/6, 5/12
5TE82	5/12
5TE90	8/59
5TE91	5/18, 12/12–12/13
5TG80	5/7, 5/9, 5/11
5TG82	3/52, 5/7, 5/13, 5/15, 5/29, 11/22–11/23
5TL11	5/14–5/15
5TL12	5/14–5/15
5TL13	5/14–5/15
5TL14	5/14–5/15
5TL16	5/14–5/15
5TT31	5/47, 7/70, 11/17, 11/23
5TT34	5/35, 11/12–11/15, 11/18–11/20, 11/22
5TT41	5/20–5/22
5TT42	5/28–5/29
5TT44	5/24
5TT49	5/21, 5/23, 5/25–5/27
5TT50	5/30
5TT52	11/21
5TT58	5/32
5TT59	5/31, 5/33–5/34
5TT61	11/16
6A	
6AV66	10/16
6MF28	1/68, 2/54
7K	
7KM21	10/19
7KM22	10/18
7KM31	10/18
7KM32	10/18–10/19
7KM42	10/19
7KM52	10/3, 10/19, A/6
7KM54	10/19
7KM92	10/21

Article No.	Page
7KM93	2/54, 10/21
7KM99	10/20
7KN13	10/15
7KN27	10/14
7KT12	10/23, 10/25, 10/29
7KT16	10/22
7KT55	10/26
7KT56	10/26
7KT58	10/26–10/27
7KT90	10/26

7L

7LF45	5/36–5/39
7LF49	5/38–5/40
7LF53	5/42–5/45
7LF63	5/46
7LF90	3/53, 5/40, 5/43, 5/45
7LQ23	11/24
7LQ29	11/24

8G

8GB13	15/183
8GB20	15/183
8GB45	3/53
8GB46	15/181
8GB50	15/180–15/182
8GB52	15/180
8GD90	15/136, 15/173
8GD91	15/136, 15/173
8GD92	15/136, 15/175
8GE37	15/164
8GF57	15/126–15/129
8GF58	15/129
8GF71	15/132, 15/134
8GF93	14/68–14/69, 15/175
8GF96	15/121–15/122, 15/124–15/126, 15/129, 15/131–15/132, 15/134, 15/136
8GK10	15/151
8GK11	15/148–15/149
8GK13	15/142, 15/144–15/146
8GK14	15/140
8GK20	15/116
8GK21	15/110
8GK23	15/112
8GK24	15/108
8GK40	15/166–15/167
8GK41	15/167
8GK43	15/152

Article No.	Page
8GK44	15/152–15/153
8GK45	15/153–15/154, 15/165
8GK46	15/154
8GK47	15/155, 15/158–15/163
8GK48	15/141, 15/156–15/157, 15/171–15/172
8GK63	15/124
8GK64	15/122–15/123
8GK67	15/118–15/121
8GK68	15/109, 15/121–15/122, 15/126–15/127, 15/129
8GK90	15/170–15/171, 15/179
8GK91	15/111, 15/114–15/115, 15/117, 15/121–15/122, 15/131, 15/135, 15/140–15/141, 15/169–15/171, 15/179
8GK92	15/109
8GK93	15/170
8GK95	15/108, 15/110–15/111, 15/114, 15/117, 15/132–15/134, 15/136, 15/140, 15/144, 15/150, 15/170–15/171, 15/174
8GK96	15/109, 15/111, 15/115, 15/117, 15/125, 15/128–15/131, 15/154, 15/168, 15/172
8GK97	15/127–15/129, 15/141, 15/154–15/155, 15/168
8GK99	15/82, 15/109–15/111, 15/115, 15/117, 15/121–15/122, 15/126, 15/128–15/129, 15/131–15/132, 15/134–15/137, 15/140, 15/144, 15/154, 15/169–15/170, 15/172–15/173, 15/175–15/176, 15/178–15/179, 15/183
8GS40	15/164, 15/171, 15/176

8H

8HC69	15/179
8HE85	15/179
8HP15	15/179
8HP18	15/179

8J

8JH40	15/177
8JH41	7/68, 15/178
8JK31	15/178
8JK40	15/177

8M

8MF10	15/16, 17/13, 17/15–17/17, 17/21, 17/24, 17/26, 17/28–17/33
8MF11	17/13, 17/26, 17/28, 17/31–17/32
8MF12	17/13, 17/24, 17/26, 17/28–17/29, 17/32
8MF13	17/28, 17/31–17/32
8MF14	17/28, 17/31–17/32
8MF15	17/28, 17/31
8MF16	17/28
8MF17	17/28
8MF18	17/24, 17/28–17/29
8MF19	17/28
8MR21	17/41–17/45
8MR22	17/35

Article number index

Article No.	Page
8MR60	17/38–17/39
8MR63	17/39
8MR64	17/37–17/40
8MR65	17/37–17/38

8P

8PQ10	15/18, 15/20, 15/84, 15/90, 15/95
8PQ12	15/14, 15/16, 15/80, 15/84, 15/88
8PQ20	15/24–15/28, 15/32–15/39, 15/43, 15/45, 15/47, 15/49, 15/51–15/53, 15/74–15/76, 15/78–15/82, 15/86, 15/135
8PQ21	15/22–15/23, 15/81, 15/86, 15/93, 15/95
8PQ23	15/18–15/19, 15/84–15/85, 15/90–15/92
8PQ24	15/19, 15/85, 15/91
8PQ25	15/19, 15/91
8PQ30	15/14–15/16, 15/30, 15/37, 15/40, 15/62, 15/72, 15/80–15/81, 15/83, 15/86–15/89, 15/98–15/99, 15/101, 15/103, 15/105
8PQ40	15/30–15/31, 15/83, 15/100–15/101, 15/127–15/128
8PQ50	15/28, 15/33, 15/35, 15/37, 15/39, 15/54–15/61, 15/64–15/71, 15/79, 15/99, 15/102–15/104
8PQ60	15/33, 15/35, 15/37–15/40, 15/42–15/49, 15/51–15/54, 15/56, 15/58, 15/60, 15/65, 15/67, 15/69, 15/71, 15/74–15/76, 15/78, 15/82
8PQ94	15/16, 15/23, 15/25, 15/28, 15/30–15/31, 15/62, 15/83, 15/94–15/95, 15/104–15/105
8PQ95	15/16, 15/31, 15/104
8PQ96	15/83
8PQ99	15/105

8U

8UC60	8/31, 8/54–8/55, 8/109, 9/22
8UC71	8/30
8UC72	8/30
8UD11	8/53, 8/108, 9/21
8UD17	2/28, 8/54, 8/108, 9/21
8UD18	2/76, 8/54, 8/108, 9/21
8UD19	2/27–2/30, 2/76, 8/54–8/55, 8/109, 9/22
8US12	8/76, 13/11, 13/17, 13/27, 13/29, 13/31
8US13	13/29
8US16	13/10–13/11
8US17	13/11
8US19	13/6–13/7, 13/9–13/14, 13/17, 13/19, 13/21, 13/27, 13/29, 13/31–13/32, 15/156, 15/177

8W

8WA10	14/62–14/63, 14/66–14/69, 14/71–14/75, 14/78
8WA12	14/63, 14/65
8WA13	14/63
8WA15	14/70
8WA16	14/69
8WA18	14/64–14/68, 14/70–14/75, 14/78, 14/80–14/81

Article No.	Page
8WA20	14/76–14/77
8WA28	14/20–14/22, 14/56, 14/68–14/69, 14/80
8WA71	14/71
8WA75	14/81
8WA82	14/68, 14/80
8WA83	14/68, 14/79–14/80
8WA88	14/78, 14/80–14/81
8WC50	13/12
8WC51	13/6–13/7, 13/12
8WH10	14/19, 14/21, 14/44–14/55
8WH18	14/64
8WH20	14/24–14/25, 14/27–14/32, 14/34–14/35
8WH21	14/26
8WH30	14/40–14/42
8WH50	14/36
8WH51	14/37
8WH60	14/8–14/16, 14/18–14/23
8WH81	14/17, 14/57–14/59
8WH82	3/53, 4/62, 14/57, 14/78
8WH90	3/41, 14/8–14/14, 14/16–14/32, 14/34–14/38, 14/40–14/42, 14/44–14/55, 14/60–14/61
8WH91	14/10, 14/18–14/22, 14/38, 14/46–14/47, 14/50, 14/53, 14/55–14/56, 14/60
8WH92	14/61

US

US2:S	10/24–10/25
-------	-------------

XP

XPT:8	8/122
-------	-------

Index

Keyword	Page
0–9	
19-inch expansion	17/28
3KD switch disconnectors	8/44–8/56
3KF LV HRC and 3KF SITOR switch disconnectors	8/96–8/102
3KF LV HRC switch disconnectors	8/104
3KF SITOR switch disconnectors	8/106
3LD2 EMERGENCY-STOP switches	8/22, 8/28, 8/34, 8/38
3LD2 load transfer switches	9/24
3LD2 main control and EMERGENCY-STOP switches	8/18, 8/24, 8/30, 8/41, 8/42
3LD2 main control switches	8/20, 8/26, 8/32, 8/36, 8/40
3LD3 main control and EMERGENCY-STOP switches	8/10–8/16
3LD3 main control and EMERGENCY-STOP switches System overview	8/8
3NJ4 fuse switch disconnectors	8/78–8/88
3NJ62 switch disconnectors	8/112–8/122
3NP1 fuse switch disconnectors	8/62–8/72
3NP5 fuse switch disconnectors	8/74–8/76
3VA1 basic units up to 1000 A	2/8–2/10
3VA10 – 3VA25	2/20, 2/24–2/26, 2/32–2/34, 2/48–2/52, 2/58–2/60
3VA2 basic units up to 1600 A	2/12–2/14
3VA27	2/62, 2/71, 2/74
3VL up to 1600 A, IEC	2/81
3VL	2/81
3WL10 system overview	1/20
3WL10	1/20, 1/29, 1/32
3WL11 – 3WL13	1/38, 1/58
40 mm 8US busbar system	13/6
4AC2 electronic power supply unit	12/10
4AC32 bell transformer	12/6
4AC37 safety transformer	12/8
5SD74 combination surge arresters, type 1 / type 2	6/10
5SD74 combination surge arresters, type 1 + type 2	6/8
5SD74 lightning arresters, type 1	6/6
5SD74 surge arresters, type 2	6/12–6/14
5SD74 surge arresters, type 3	6/16
5SG switch disconnectors with fuse	8/124
5SG76 fuse switch disconnectors	8/90
5SJ4..HG.. miniature circuit breakers	3/38
5SJ6...-KS miniature circuit breakers	3/18
5SK9 device protection switches	3/41
5SL3 miniature circuit breakers	3/12
5SL30 miniature circuit breakers	3/20
5SL4 miniature circuit breakers	3/16
5SL6 miniature circuit breakers	3/14
5SL60 miniature circuit breakers	3/22
5SM2 RC units	4/32–4/36
5SM3 RCCBs	4/30
5SM6 arc fault detection devices	4/52
5SP3 selective main miniature circuit breakers (SHU)	3/24
5SP4 miniature circuit breakers	3/30
5SU1 RCBOs	4/38–4/46
5SV RCCBs	4/14–4/24
5SV1 RCBOs	4/48–4/50
5SV3 RCCBs (SIQUENCE)	4/26–4/28
5SV6 arc fault detection devices	4/53

Keyword	Page
5SV8 modular RCCB device	11/8–11/10
5SV8 residual current monitors	11/6
5SY17 device protection switches	3/40
5SY4 miniature circuit breakers	3/28
5SY5 miniature circuit breakers	3/32
5SY6 miniature circuit breakers	3/26
5SY7 miniature circuit breakers	3/34
5SY8 miniature circuit breakers	3/36
5TE busbars	5/18
5TE DC isolator	5/16
5TE1 switch disconnectors	8/58, 8/59
5TE48 pushbuttons	5/8
5TE58 light indicators	5/10
5TE6 socket outlet for modular installation devices	12/12
5TE8 control switches	5/6
5TE81/82 On/Off switches	5/12
5TL1 On/Off switches	5/14
5TT3 fuse monitors	11/17
5TT3 insulation monitors for industrial applications	11/20
5TT3 level relays	11/22
5TT3 line circuit relays	11/23
5TT3 phase monitors	11/18
5TT3 phase sequence monitors	11/19
5TT3 short-time voltage relay	11/14
5TT3 soft-starting devices	5/35
5TT3 timers for industrial applications	5/47
5TT3 undervoltage and overvoltage relays	11/15
5TT3 undervoltage relays	11/12, 11/13
5TT4 auxiliary switches	5/26
5TT41 remote control switches	5/20–5/22
5TT42 switching relays	5/28
5TT44 remote control switches	5/24
5TT5 auxiliary switches	5/34
5TT5 EMERGENCY STOP modules	11/21
5TT50 Insta contactors	5/30
5TT58 Insta contactors	5/32
5TT6 current relays	11/16
60 mm 8US busbar system	13/12
60 mm 8US compact busbar system	13/7
7KM PAC measuring devices	10/18–10/20
7KN Powercenter	10/15
7KT PAC measuring devices	10/22
7LF4 digital time switches	5/36–5/40
7LF5 mechanical time switches	5/42–5/44
7LF6 timers for buildings	5/46
7LQ2 dimmer switches	11/24
8MR system lighting	17/35
8WA terminal blocks	14/6, 14/62, 14/76–14/78
8WA1 screw terminals	14/62–14/74
8WA2 spring-loaded terminals	14/76
8WH terminal blocks	14/4, 14/8, 14/18, 14/24, 14/36, 14/40, 14/44, 14/57
8WH1 screw terminals	14/44–14/56
8WH2 spring-loaded terminals	14/24–14/34
8WH3 insulation displacement terminals	14/40–14/42
8WH5 combination plug-in terminals	14/36–14/38
8WH6 iPo installation terminals	14/18–14/22

Index

Keyword	Page
8WH6 iPo plug-in terminals	14/8–14/16
A	
Accessories	3/42–3/44, 3/52–3/54, 3/66, 3/72, 4/54–4/56, 4/62–4/64, 7/66, 8/107, 8/108–8/110, 9/12–9/16, 9/20–9/22, 10/8, 15/130–15/136, 15/169, 15/170–15/178
Accessories and spare parts	1/32–1/36, 1/58–1/72
Accessories for 8WA terminal blocks	14/78–14/80
Accessories for 8WH terminal blocks	14/57, 14/58–14/60
Accessories for busbars	3/66–3/70
Accessories for connection and insulation	2/74
Accessory options	1/24, 1/46–1/56, 2/68
Air Circuit Breakers	1/1, 1/2–1/4, 1/20, 1/29, 1/32, 1/38, 1/58
Air conditioners/cooling devices	17/40
All the information you need	1/2, 2/2, 3/2, 4/2, 5/2, 6/2, 7/2, 8/2, 9/2, 10/2, 11/2, 12/2, 13/2, 14/2, 15/2, 16/2, 17/2
ALPHA 1250 floor-mounted distribution boards	15/140
ALPHA 1250 marshaling boxes	15/142
ALPHA 160 distribution boards	15/151
ALPHA 400 distribution boards	15/148–15/150
ALPHA 630 floor-mounted distribution boards	15/144
ALPHA 630 marshaling boxes	15/146
ALPHA 630 UNIVERSAL floor-mounted distribution boards	15/112–15/114
ALPHA 630 UNIVERSAL wall-mounted distribution boards	15/110
ALPHA 800 UNIVERSAL floor-mounted distribution boards	15/108
ALPHA distribution boards (DIN technology)	15/138–15/140, 15/152, 15/166–15/168, 15/169
ALPHA SIMBOX WP small distribution boards	15/183
ALPHA SIMBOX XL small distribution boards	15/180–15/182
ALPHA system overview	15/138
ALPHA UNIVERSAL 125 distribution boards	15/116
ALPHA UNIVERSAL distribution boards (NF technology)	15/106–15/108, 15/118, 15/126, 15/130
ALPHA UNIVERSAL system overview	15/106
Arc fault detection devices (AFDD)	4/12
Article numbers for complete system cubicles	17/9
Assembly kits	15/118–15/124, 15/152–15/164
Automatic transfer switching equipment (ATSE)	9/11
Auxiliary release, closing coil	2/77, 2/78
B	
Basic assemblies	13/6, 13/7, 13/12–13/14
Basic units and accessories	2/6
Basic units for AC	1/6–1/8
Basic units for AC and DC	1/4
Basic units for DC	1/10–1/12
Basic units	3/12, 4/14, 6/6
Built-in components	13/8, 13/22, 13/24
Busbar Systems	13/1, 13/2–13/7, 13/12, 15/30
Busbar Trunking Systems	16/1–16/4
Busbars	7/66–7/68, 15/126–15/128, 15/168
Bus-mounting bases	7/20

Keyword	Page
C	
Class CC fuse holders	7/28
Class CC fuse links	7/65
Class J fuse holders	7/27
Communication	2/52–2/56
Compact busbars	3/64, 4/68
Complete system cubicles	17/8
Components for configurable system cubicles	17/10
Connection	1/18
Connection technology	2/34–2/46
Control cabinets / System cubicles	1/21
Cover frame and mounting	2/60
Current transformers	10/28
Cylindrical fuse holders	7/24
Cylindrical fuse links	7/41
D	
Device adapters	13/10
Device adapters and device holders	13/26–13/32
Device protection switches	3/10
Devices for all applications	3/4
DIAZED fuse bases	7/18
DIAZED fuse links	7/33
Distribution blocks for standard rail mounting	3/72–3/74
Distribution systems	1/20
Door	17/14–17/16
E	
Electrical accessories	3/44–3/46, 3/48–3/50, 4/56–4/58, 4/60
Electronic trip unit ETU	1/14–1/16
Electronic trip unit ETU and accessories	2/71–2/72
Electronic trip units ETU and accessories	1/29–1/30
Enclosure	15/18–15/28
Examples of digitalization in industry	1/9
Examples of digitalization in infrastructure	1/8
F	
Fan heaters	17/42
Filter fans and outlet filters	17/37–17/38
Floor	17/22
Frame	15/14–15/16, 17/11, 17/12
Fuse holders and bases	7/8
Fuse links	7/30
Fuse switch disconnectors	8/60–8/62, 8/74, 8/78, 8/90
Fuse Systems	7/1, 7/2–7/4, 7/8, 7/30, 7/66
Fuseless switch disconnectors	8/6–8/8, 8/18, 8/44, 8/58
G	
Guide frames	1/28, 1/57, 2/70
H	
Hardware components	10/6
Heat exchangers	17/40
Heater units	17/41
Hygrostats, hygrotherms, switching modules	17/45

Keyword	Page
I	
Infeeds and connection methods	13/8, 13/16–13/20
Installation switching devices	5/6
Interior installation	17/30–17/32
Interlocking	2/79–2/80
Internal accessories	2/24
Internal separation	15/96–15/104
Introduction	4/5
Introduction to the topic of digitalization and Industry 4.0	I/10
L	
Load transfer switches	9/24
Locking, blocking and interlocking	2/58
LV HRC fuse bases	7/22
LV HRC fuse links	7/36–7/40
LV HRC signal detectors, electronic fuse monitoring	7/70
M	
Manual operators	2/26–2/30
Manual transfer switching equipment (MTSE)	9/18
Measuring devices	10/18
Mechanical accessories	3/52, 4/62
MINIZED fuse switch disconnectors	7/12
MINIZED switch disconnectors	7/13
Modular door	17/17
Molded case circuit breakers for all applications	2/4
Monitoring devices for electrical values	11/6
Monitoring devices for plants and equipment	11/21
Motor operators	2/32
Motor operators and manual operators	2/76
Mounting concept	9/8
Mounting panels	17/24, 17/25
Mounting rails	17/26
N	
NEOZED bus-mounting switch disconnectors	7/14
NEOZED fuse bases	7/16
NEOZED fuse links	7/32
O	
Online configurator highlights	1/26, 1/44, 2/18, 17/27
Operating mechanism, auxiliary release, auxiliary switch	1/19
Overview of fuse holders, bases and D0 fuse switching devices	7/8–7/10
Overview of fuse links	7/30
Overview of fuse systems according to IEC	7/6
Overview of fuse systems	7/6
Overview of modular system	4/54
Overview of protection, switching, measuring and monitoring tasks	I/12–I/18
Overview of the modular system	3/42
Overviews	9/4
P	
PAC/3WL/3VA SIMATIC PCS 7 library	10/17
Photovoltaic cumulative fuse bases	7/21
Photovoltaic cumulative fuses	7/35

Keyword	Page
Photovoltaic cylindrical fuse holders	7/26
Photovoltaic cylindrical fuse links	7/64
Planning and installation tools	16/6
Plug-in and draw-out technology	2/48
Power Distribution Boards and Motor Control Centers	15/10
Power monitoring	10/4
Power supply units	12/10
powerconfig	10/12
powermanager V3	10/13
powermanager V4	10/14
Products and their applications in industry	I/7
Products and their applications in infrastructure	I/6
Q	
Quick selection guide	1/4, 2/6, 3/6, 4/6, 8/4, 10/4, 13/5, 14/4, 15/4, 16/4, 17/10, 17/34–17/36
Quick selection guide for applications	9/4
Quick selection guide for complete cubicles	17/8
Quick selection guide for transfer switching equipment and load transfer switches	9/6
Quick-assembly kits	15/166
R	
RC units	4/8
RCBOs	4/10
RCCB protective socket outlets	4/63
RCCBs	4/6
Remote transfer switching equipment (RTSE)	9/10
Residual current devices RCD	2/50
Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)	4/1, 4/2–4/4, 4/14, 4/54–4/56, 4/62–4/64
Roof	17/20
Roof filter fans and roof outlet filters	17/39
S	
Section expansion	15/32–15/94
SEM3 multichannel current measuring system	10/24
Side/rear panel	17/18
SIKclip wiring system	3/75
SILIZED fuse links	7/34
SIMARIS® planning tools	I/19, 15/8
SIMATIC Energy Suite	10/16
SIMATIC Modbus/TCP SENTRON PAC	10/16
SITOR cylindrical semiconductor fuses	7/59
SITOR fuse bases and holders	7/25
SITOR LV HRC semiconductor fuses	7/42–7/58
SITOR semiconductor fuses	7/60–7/62
SIVACON and ALPHA distribution systems	15/4–15/6
SIVACON S4 power distribution boards	15/12–15/14, 15/30–15/32, 15/42, 15/74–15/76, 15/82, 15/88, 15/96
SIVACON S8 / ALPHA 3200 system overview	15/10
Small distribution boards	15/180
Software	10/10–10/12
Standard busbars	3/54–3/62, 4/64–4/66
Structure of the article numbers	1/22, 1/40–1/42, 2/22, 2/64–2/66
Switch disconnectors with fuse	8/92–8/96, 8/112, 8/124

Index

Keyword	Page
System overview	2/20, 2/62, 4/4, 5/4, 6/4, 7/4, 9/5, 11/4, 12/4, 13/4, 15/12, 17/4, 17/6, 3/5
System overview 3WL11 – 3WL13	1/38

T

The fast route to the product	I/2–I/4
Thermostats	17/43–17/44
Time and pulse counters	10/26
Timers	5/36
Transfer control devices	9/26
Transfer switching equipment	9/10
Transformers	12/6
Trip units	2/16

Catalogs and further information



LV 10 Low-Voltage Power Distribution and Electrical Installation Technology SENTRON • SIVACON • ALPHA

Protection, Switching, Measuring and
Monitoring Devices, Switchboards and
Distribution Systems

PDF (E86060-K8280-A101-A10-7600)
Print (E86060-K8280-A101-A6-7600)



LV 14 Power Monitoring Made Simple SENTRON

PDF/Print (E86060-K1814-A101-A6-7600)



LV 18 Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification SENTRON

PDF (E86060-K8280-E347-A3-7600)



ET D1 Switches and Socket Outlets DELTA

PDF



IC 10 Industrial Controls SIRIUS

PDF/Print (E86060-K1010-A101-B1-7600)



IK PI Industrial Communication SIMATIC NET

PDF (E86060-K6710-A101-B8-7600)



Industry Mall Information and Ordering Platform on the Internet:

www.siemens.com/industrymall



CA 01 Products for Automation and Drives Interactive Catalog

Information and download:
www.siemens.com/automation/ca01



Siemens TIA Selection Tool for the selection, configuration and ordering of TIA products and devices

www.siemens.com/tst



Training for Industry SITRAIN

www.siemens.com/sitrain

The catalogs listed above and additional catalogs are available in PDF format at Siemens Industry Online Support www.siemens.com/lowvoltage/catalogs

Further information on low-voltage power distribution and electrical installation technology is available on the Internet at www.siemens.com/lowvoltage

Get more information

www.siemens.com/lowvoltage

Published by
Siemens AG

For the U.S. published by
Siemens Industry Inc.

Smart Infrastructure
Low Voltage Products
Siemensstraße 10
93055 Regensburg, Germany

100 Technology Drive
Alpharetta, GA 30005
United States

PDF (E86060-K8280-A101-A10-7600)
KG 1219 1064 En
Produced in Germany
© Siemens 2019

Subject to changes and errors. The information given in this catalog only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

All product designations may be trademarks or other rights of Siemens AG, its affiliated companies or other companies whose use by third parties for their own purposes could violate the rights of the respective owner.

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the Internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit <https://www.siemens.com/industrialsecurity>

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under <https://www.siemens.com/industrialsecurity>