

SIEMENS



SIVACON S4 Power Distribution Boards

Totally Integrated Power – SIVACON

Catalogue
LV 56

Edition
2015

siemens.com/lowvoltage

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SIVACON S4 LV 56
 Power Distribution Boards
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Contents

Air circuit breakers • Molded case circuit breakers • Miniature circuit breakers • Residual current protective devices / AFDDs • Fuse systems • Overvoltage protection devices • Switch disconnectors • Switching devices • Transformers, power supply units and socket outlets • Busbar systems • Measuring devices and power monitoring • Monitoring devices • Software • Switchboards • Busbar trunking systems • System cubicles, system lighting and system air-conditioning • Distribution boards • Molded-plastic distribution systems • 8WH2 spring-loaded terminals

Products for the DC side • Products for the AC side • Measuring and monitoring devices • Distribution systems and system cubicles • Terminal blocks

Miniature circuit breakers • Residual current protective devices • Fuse systems • Switch disconnectors • Switching devices • ALPHA FIX terminal blocks • DELTA profil • Medium-Voltage components

System overview • Frame • Enclosure • Expansion • Preconfigured cubicles • Special cubicles • SIVACON 8MF/8MR system lighting • SIVACON 8MR system air-conditioning

Frame and enclosure • Busbar systems • Assembly kits • Internal separation • ALPHA modular installation system • Accessories • SIVACON 8MF/8MR system lighting • SIVACON 8MR system air-conditioning

Online

Catalog PDF

Internet:
www.siemens.com/lowvoltage/infomaterial



Technical Support



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

www.siemens.com/lowvoltage/contact

SIVACON S4 Power Distribution Boards

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Totally Integrated Power – SIVACON



Catalogue LV 56 · 2015

Supersedes:
Catalogue LV 56 · 2014

Refer to the Industry Mall for current updates of this catalogue:

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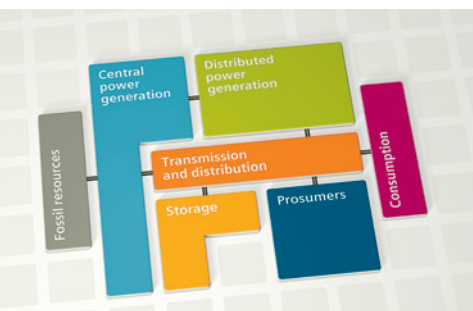
The products and systems listed in this catalogue are developed and manufactured using a certified quality management system in accordance with EN ISO 9001:2008.

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Totally Integrated Power

We bring power to the point – safely and reliably.



Comprehensive answers for power distribution in complex energy systems – from Siemens

Efficient, reliable, safe: These are the demands placed on electrification and especially power distribution. And our answer – for all application areas of the energy system – is Totally Integrated Power (TIP). It's based on our comprehensive range of products, systems, and solutions for low and medium voltage, rounded out by our support throughout the entire lifecycle – from planning with our own software tools to installation, operation, and services.

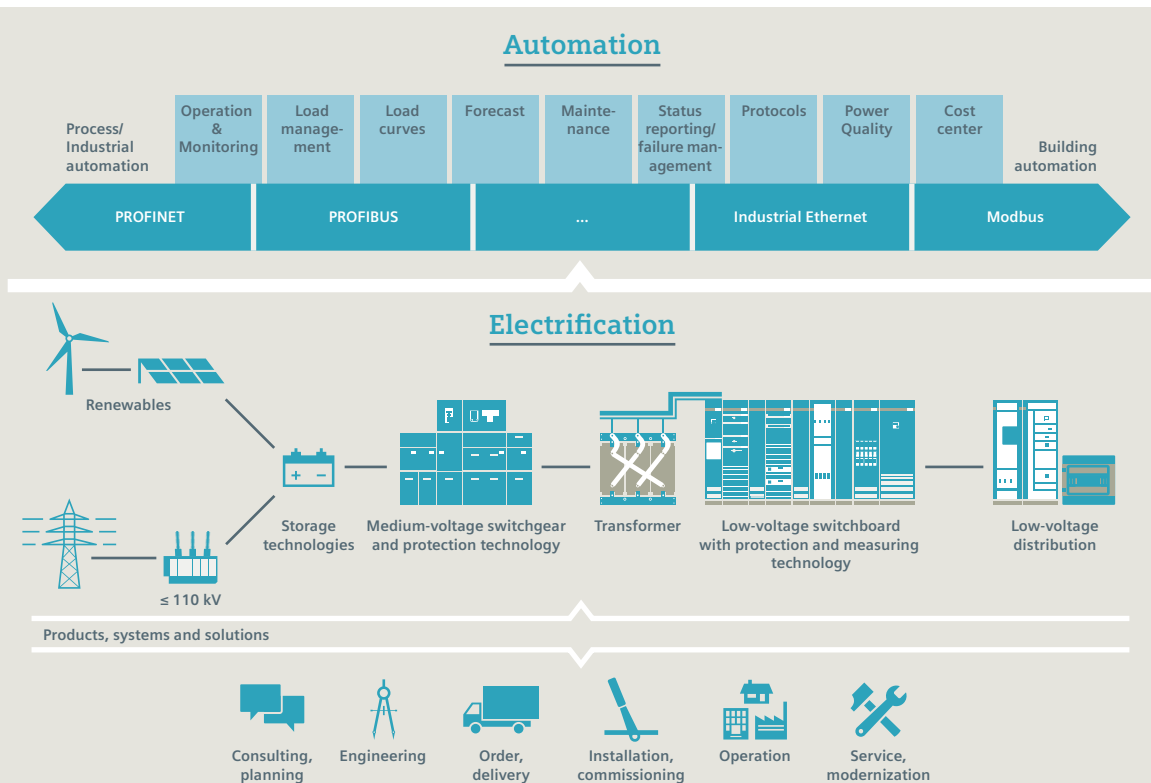
Smart interfaces allow linking to industrial or building automation, making it possible to fully exploit all the optimization potential of an integrated solution. This is how we provide our customers around the world with answers to their challenges. With highly efficient, reliable, and safe power distribution, we lay the foundation for sustainable infrastructure and cities, buildings, and industrial plants. We bring power to the point – wherever and whenever it is needed.

More information: www.siemens.com/tip

Totally Integrated Power offers more:

- **Consistency:**
For simplified plant engineering and commissioning as well as smooth integration into automation solutions for building or production processes
- **One-stop-shop:**
A reliable partner with a complete portfolio for the entire process and lifecycle – from the initial idea to after-sales service
- **Safety:**
A comprehensive range of protection components for personnel safety and line and fire protection, safety by means of type testing
- **Reliability:**
A reliable partner who works with customers to develop long-lasting solutions that meet the highest quality standards
- **Efficiency:**
Bringing power to the point means greater plant availability and maximum energy efficiency in power distribution
- **Flexibility:**
End-to-end consistency and modular design of Totally Integrated Power for any desired expansions and adaptation to future requirements
- **Advanced technology:**
Reliable power distribution especially for applications in which supply is critical, continuous refinement of the technology

Challenges are our speciality





The right one for everyone

Our portfolio includes switchboards, distribution boards, protection, switching, measuring and monitoring devices, switches and socket outlets. All over the world, the universality, modularity and intelligence of our components and systems give you innumerable benefits – all the time they are in use. With products developed according to the respective international standards, we offer forward-looking design with innovative functions while ensuring the highest quality standards worldwide.

Sustainability in focus

As a worldwide leader in the provision of high-quality, standard-compliant products and systems for low-voltage power distribution, we contribute to the sustainable and responsible handling of electrical energy. With our integrated portfolio which ranges from power supply and distribution, short-circuit and overload protection through to power monitoring, we support the implementation of environmentally friendly energy concepts based on wind power, photovoltaics, intelligent buildings and electromobility.



Universal, safe and intelligent power distribution

Whether in industrial plants, in infrastructure or in buildings: every technical plant depends on the reliable supply of electricity. Our products provide a safe, reliable and efficient electrical infrastructure at the medium and low-voltage levels. Our components reliably protect against accidents, faults and fires caused by electrical installations and allow consumers to utilize electrical power in a sustainable, responsible manner.

We are happy to help you with comprehensive support from the initial information gathering stage through to operation.

Everything for power distribution

Consistent solutions are required for electrical power distribution in buildings. Our answer is Totally Integrated Power (TIP). TIP stands for innovative products, systems and software tools which ensure the safe and reliable distribution of electric power. They are supplemented by circuit breakers and modules with communication capability which connect the power distribution system to the building automation or industrial automation solutions. These in turn can be linked to a comprehensive energy management system which contributes to optimizing the consumption of electricity, hence lowering the costs of operation.

Excellent support

As a competent and reliable partner, we also offer you comprehensive support – from the initial information gathering stage, through planning, configuring and ordering up to commissioning, operation and technical support. We know the needs of your working environment and your daily business. This enables us to offer you flexible and high quality support, allowing you to concentrate on your customers and their needs.

IE3 ready

Ambitious climate targets in Europe demand increasingly energy-efficient components.

As from January 2015, the energy-efficiency class IE3 will be mandatory, with a few exceptions only, for three-phase asynchronous motors. This will have an effect on motors, low-voltage power distribution and electrical installation technology, as well as industrial controls.

This will apply as from:

- January 1, 2015 for motors ranging from 7.5 kW to 375 kW
- January 1, 2017 for motors ranging from 0.75 kW to 375 kW

With the **3VA and 3VL molded case circuit breakers** and the components of the SIRIUS modular system you are excellently equipped for the current generation of motors.

You can find more information on IE3 at:

www.siemens.com/IE3ready

and in the "Configuration Manual for SIRIUS Controls with IE3 Motors" at

<http://support.automation.siemens.com/WW/view/en/94770820>



Technical Support

The Technical Support for low-voltage power distribution and electrical installation technology assists you with all your technical queries about our products and systems – both before and after delivery.

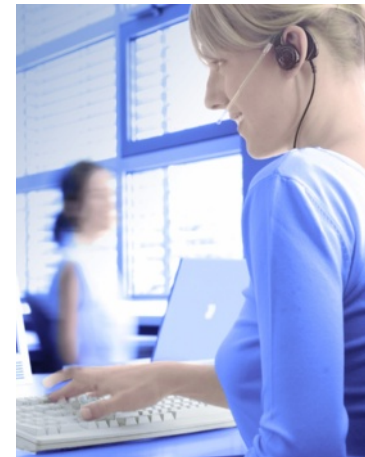
Still have questions?

Our experts will help you with competent specialist support



Competent and fast specialist support with:

- Product selection
- Old/new conversion
- Competitor conversion
- Special versions
- Special requirements
- Commissioning
- Issues during operation



1201_19/185

Get all the information you need – with just one click



Technical Support – fast online access to the latest information (Service and Support)

www.siemens.com/lowvoltage/product-support

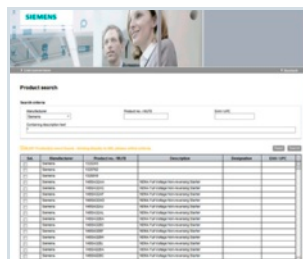
In Product Support you will find FAQs, manuals, certificates, applications and tools, etc.



Support Request – the quickest route to the experts

www.siemens.com/lowvoltage/technical-support

You can put your question directly to our Technical Support team using the Support Request Form in Online Support.



Conversion tool – the easy and efficient way of finding successor products

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The benefits for you

- Response within 4 hours in 93% of cases
- Global support for external and internal customers as well as regional support

Get all the information you need – with just one click



Catalog LV 10 • 2015: SENTRON • SIVACON • ALPHA (English)



Infrastructure



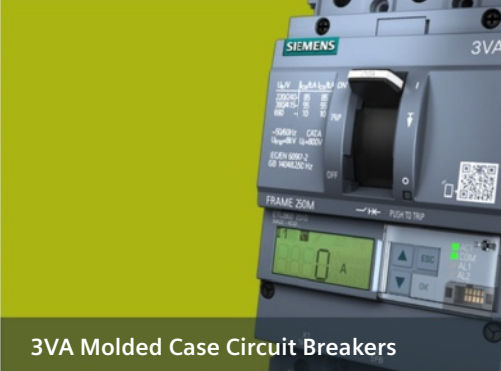
Industry



Photovoltaik



Windenergy



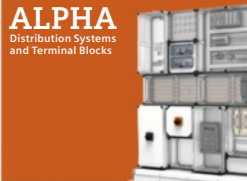
3VA Molded Case Circuit Breakers



SENTRON
Protection, Switching, Measuring and Monitoring Devices



SIVACON
Switchboards and Busbar Trunking Systems



ALPHA
Distribution Systems and Terminal Blocks



Support



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I201_19157

LV Explorer – Discover Low Voltage in 3D
Get comprehensive and specific information about our products using our 3D animations, trailers and technical information.



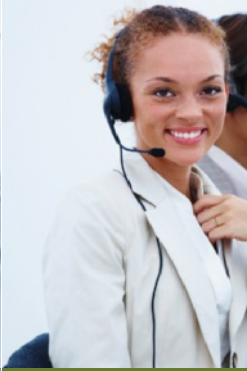
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I201_19079

Always at your service – every step of the way
We offer comprehensive support, from planning and configuration to operation.

Introduction



1/2	System overview
1/5	Technical specifications

For further technical product information:

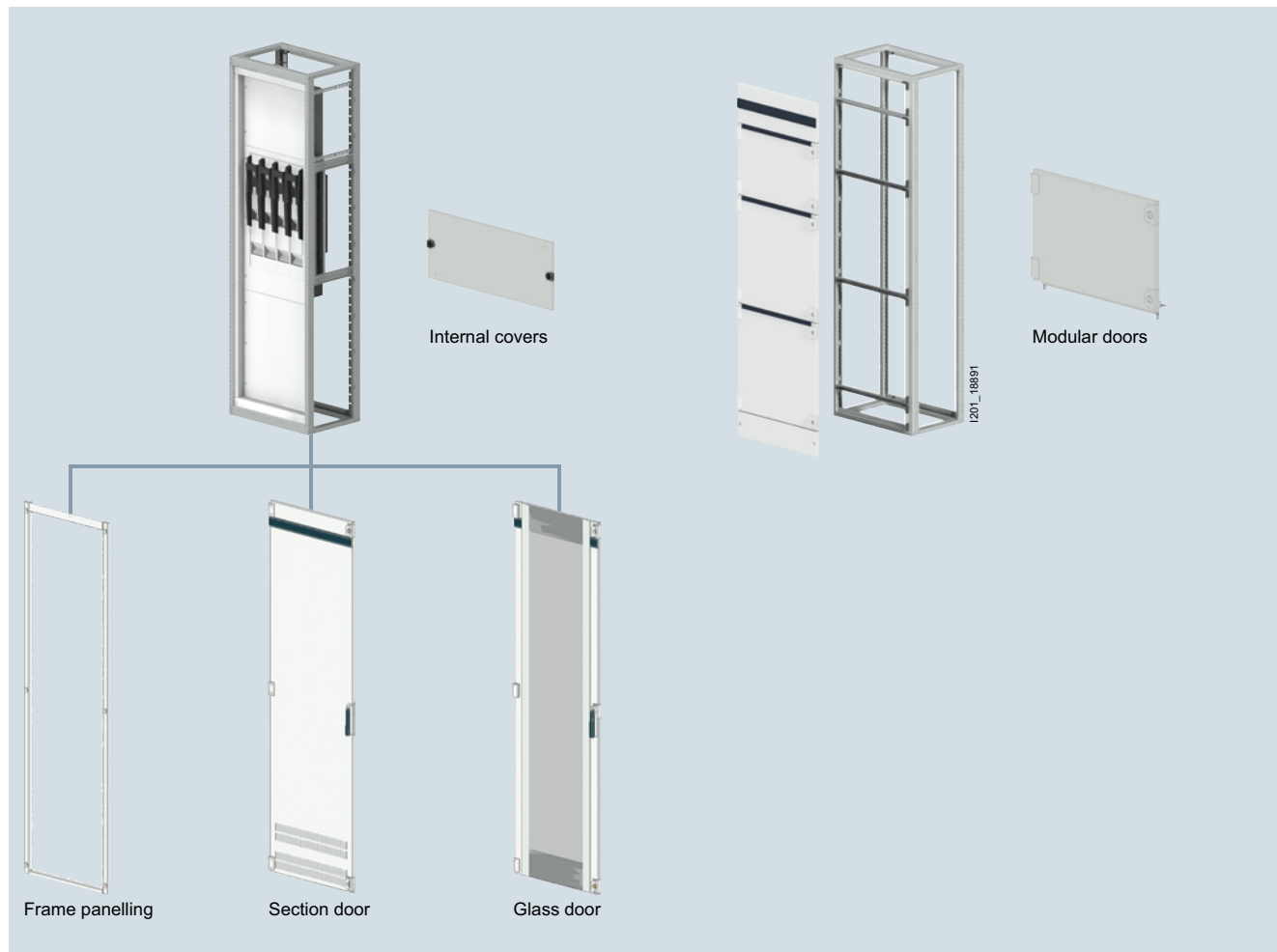
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→ Entry type:
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Certificate
Characteristic
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Product note
Software archive
Technical data

Introduction

System overview

Overview



SIVACON S4 is a switchgear and controlgear system with design verification according to IEC 61439-1/2 and EN 61439-1/2, for infrastructural power supply applications in administrative and utility buildings, in industrial and service sector facilities, as well as in public buildings such as schools and hospitals. The concept of the SIVACON S4 low-voltage power distribution board is characterised by a high level of personal and machine safety.

SIVACON S4 low-voltage power distribution boards are constructed according to a modular design system. Thanks to the use of requirement-based, standardised and series-produced assembly kits and the wide range of possible combinations offered by SIVACON S4 modular technology, all needs in connection with low-voltage power distribution can be optimally met.

Panelling for control elements

The front panelling can be realised in different ways depending on customers' wishes. Section doors can be additionally fitted with internal covers. In this variant, the devices installed are covered for protection against electric shock hazard even when the door is open. Frame panelling elements enable direct access to control elements.

It is also possible to create a separate compartment with modular doors for each device. Thanks to the various systems, SIVACON S4 can be adapted flexibly to customers' needs.

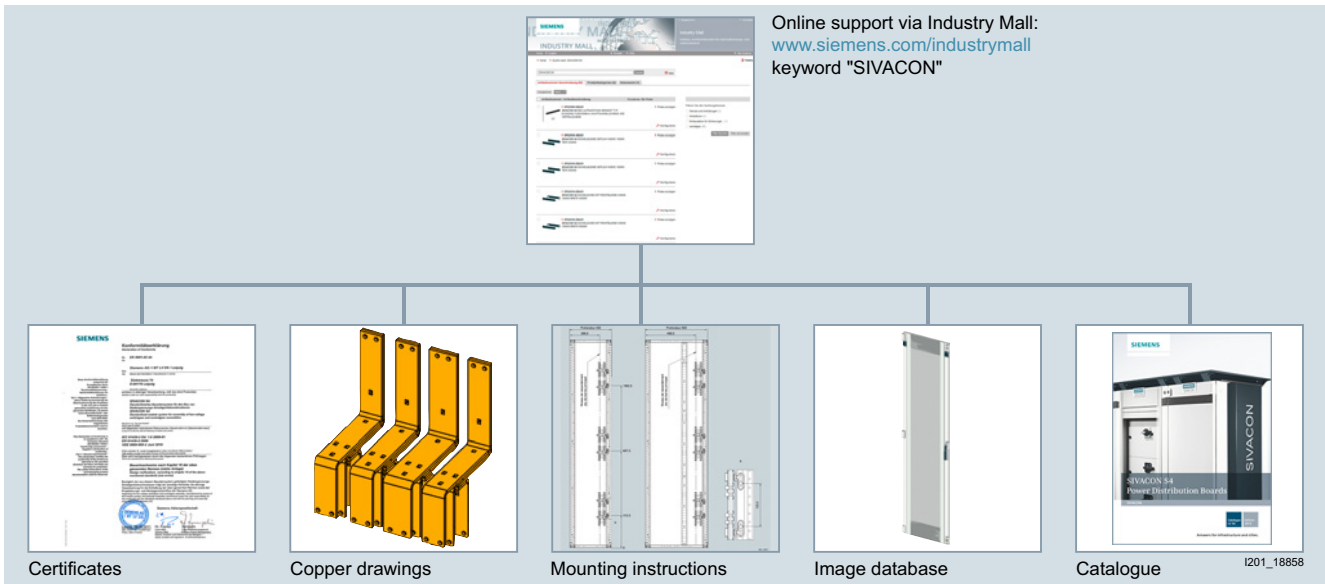
System

SIVACON S4 is a system of low-voltage power distribution boards for indoor use, panelled on four sides by sheet steel, suitable for self-standing or wall-mounted installation.

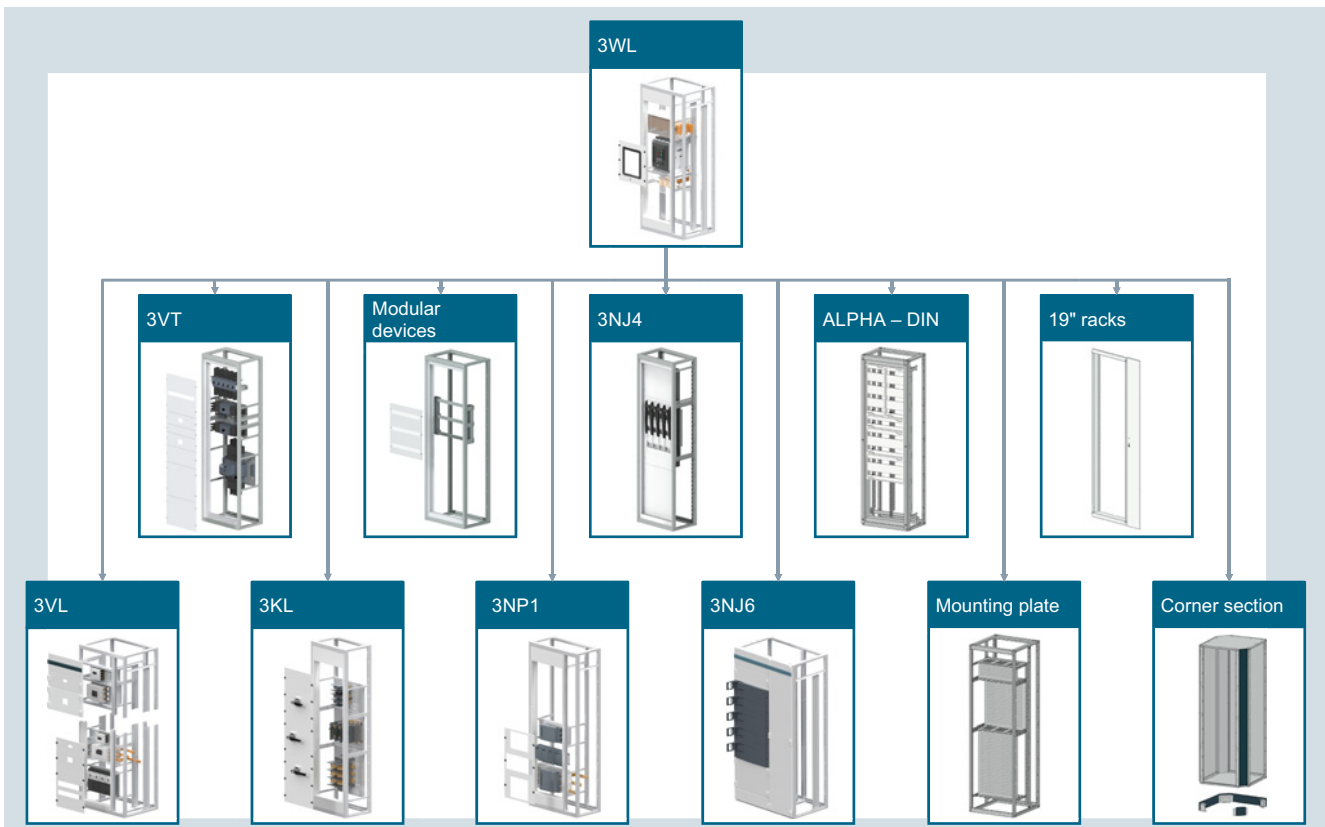
Online support via Industry Mall

Can be contacted at
www.siemens.com/industrymall

Components for which copper drawings are available in the Industry Mall are marked with the following symbol:



Online support via Industry Mall

Program overview

Introduction

System overview

Benefits

Features at a glance

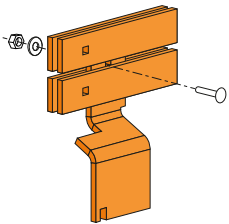
- Controlgear assembly design-verified in accordance with IEC 61439-1/2 and EN 61439-1/2
- High flexibility and simple implementation
- Attractive design, innovative ventilation and closing system
- Copper drawings for users' own production of connection modules
- Online support via Industry Mall
www.siemens.com/industrymall
- Colour RAL 7035
- Doors with universal stop
- Degree of protection IP30, IP31, IP40, IP41 and IP55
- Busbar systems up to 4000 A, I_{cw} up to 100 kA (1 s), I_{pk} up to 220 kA
- Internal separation form 1, 2, 3 and 4
- Easy design and configuration with the SIMARIS CFB software tool
- RoHS-compliant

Construction and testing modalities

Switchgear engineers must observe the manufacturer's construction and mounting instructions when constructing and mounting the low-voltage switchboard.

The installation and individual testing of the low-voltage boards must be performed according to IEC 61439-1/2 and EN 61439-1/2.

Innovative busbar concept



The phases of the main busbar always consist of several sub-conductors. This results in the following advantages for the user

- Mounting mostly without the need to drill holes
- Increased current carrying capacity
- Lower use of copper
- Simplified handling of one or more cubicles



Overview

Standards and regulations	Design-verified low-voltage switchgear and controlgear assembly	IEC 61439-1/2 EN 61439-1/2
Internal separation		1, 2b, 3b, 4b
Rated operating voltage (U_e)		Up to 690 V
Rated frequency		50/60 Hz
Main busbar air clearance Rated impulse withstand voltage (U_{imp})		Up to 12 kV
Main busbar creepage distance Pollution degree Material group Rated insulation voltage (U_i)		3 II 1000 V
Rated current (I_n) of (3-pole and 4-pole) busbar system Main busbars	Rated current Rated peak withstand current (I_{pk}) Rated short-time withstand current (I_{cw})	Up to 4000 A Up to 220 kA Up to 100 kA, 1s
Main busbar arcing fault testing in accordance with IEC 61641	Rated utilisation voltage Rated short-time alternating current Length of internal arc Length of internal arc with barrier	400 V 50 kA 100 ms 300 ms
Surface treatment Frame components, interior components Enclosure parts	Sendzimir-galvanised Epoxy polyester resin Iron phosphating Thickness of coating	Min. 20 µm RAL 7035 Min. 70 µm
Insulation class	According to IEC 61140, EN 61140	I
Degree of protection	According to IEC 60529, EN 60529 Ventilated Non-ventilated	IP30, IP31, IP40, IP41 IP55
Resistance to mechanical impacts	According to IEC 62262, Paragraph 9.6 IK08 IK09 IK10	Front frame with quick-closing covers Top plate Door, side panel, rear panel
Additional static loads on frame components		
Front frame	Swivel Fixed	1.0 kg 5.0 kg
Cover	With quick-closing screws, height 50-300 mm With quick-closing screws, height 350-550 mm With quick-closing screws, height 600-800 mm	0.5 kg 1.0 kg 2.0 kg
Inner door		2.5 kg
Section door/double door	Width 400 mm, 600 mm Width 800 mm Width 1000 mm, 1200 mm	10.0 kg 5.0 kg 2.5 kg
Modular door	Height 150-200 mm Height 250-350 mm Height 400-800 mm	0.5 kg 1.5 kg 3.0 kg
Outer cover		10.0 kg
Max. construction weight According to IEC 62208, Paragraph 9.3, 9.4, type tested with static load by lifting a frame		1200 kg
Operating conditions Ambient temperature ¹⁾ Installation altitude		≤ 35 °C ≤ 2000 m
Sheet steel thicknesses	• Frame • Enclosure • Covers	2.5 mm 1.5 mm 1.0 mm
Dimensions		
Exterior dimensions	Height in mm Width in mm Depth in mm	2000 350, 400, 600, 800, 850, 1000, 1200 400, 600, 800
Hole pattern in frame acc. to DIN 43660	In mm	25
Base	Height in mm	100, 200

¹⁾ Observe correction factors for other ambient temperatures and installation altitudes.

Introduction

Notes

1

Frame and Enclosure



Frame	
2/2	Without main busbar
2/4	Main busbar at top
2/6	Main busbar at bottom
2/8	Main busbar at rear
2/10	Frame accessories
2/11	Corner sections
Enclosure	
2/13	Panelling sections
2/21	Internal covers
2/23	Modular doors
2/26	Mechanical dimensions

For further technical product information:

Siemens Industry Online Support:
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Frame and Enclosure

Frame

Without main busbar

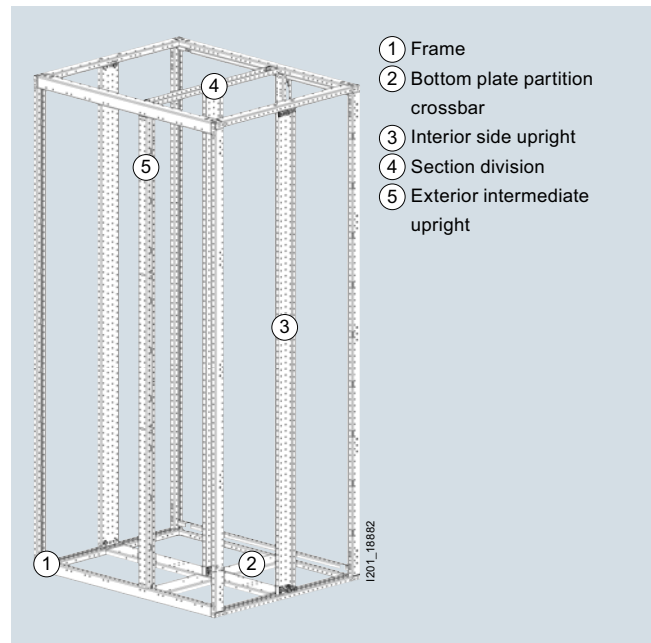
Overview

Features

Standardised grid dimensions

- Frame divisions: possible every 200 mm
- Assembly kits: 400, 600 and 800 mm
- Cable compartments: 200, 400 mm
- Vertical busbar: 200, 400 mm

Equipment height for assembly kits: 1800 mm



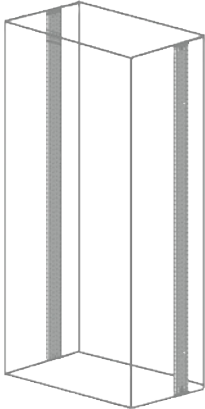
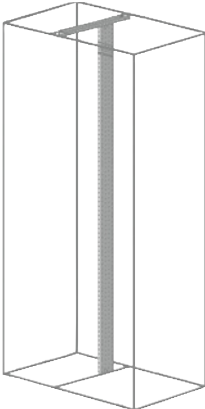
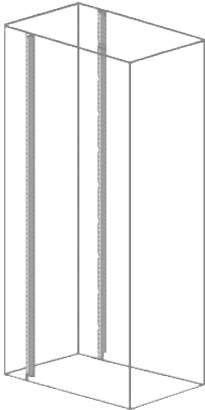
Selection and ordering data

	Configuration	Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	① Frame Height: 2000 mm		
	Width in mm	Depth in mm	
	400	400	8PQ1204-4BA01 1 unit
		600	8PQ1204-6BA01 1 unit
		800	8PQ1204-8BA01 1 unit
	600	400	8PQ1206-4BA01 1 unit
		600	8PQ1206-6BA01 1 unit
		800	8PQ1206-8BA01 1 unit
	800	400	8PQ1208-4BA01 1 unit
		600	8PQ1208-6BA01 1 unit
		800	8PQ1208-8BA01 1 unit
	1000	400	8PQ1201-4BA02 1 unit
		600	8PQ1201-6BA02 1 unit
		800	8PQ1201-8BA03 1 unit
	1200	400	8PQ1202-4BA02 1 unit
		600	8PQ1202-6BA02 1 unit
		800	8PQ1202-8BA02 1 unit
	② Bottom plate partition crossbars For width 600 to 1200 mm		
	Depth in mm	Quantity	
	400	1 ×	8PQ3000-1BA38 1 unit
	600	1 ×	8PQ3000-1BA40 1 unit
	800	2 ×	8PQ3000-1BA38 1 unit

Frame and Enclosure

Frame

Without main busbar

Configuration		Article No. www.siemens.com/ product?Article.No.	PS*/ P. unit
	③ Interior side uprights • For width from 400 to 1200 mm • For depth from 600 to 800 mm • Not required for depth 400	8PQ3000-0BA03	1 unit
	Depth in mm		
	600 800		
	④ Section division • Not required for depth 400	8PQ3000-1BA36 8PQ3000-1BA37	1 unit 1 unit
	Depth in mm		
	600 800		
	⑤ Exterior intermediate uprights For fitting • Outer covers • Section doors • Modular doors	8PQ3000-1BA43	1 unit

Frame and Enclosure

Frame

Main busbar at top

Overview

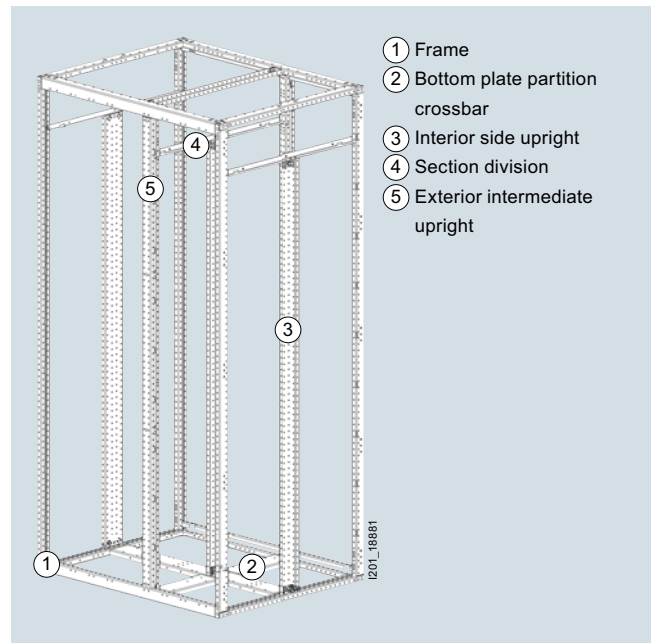
Frame divisions in a grid size of 200 mm are possible.

Features

Standardised section widths

- Frame divisions: possible every 200 mm
- Assembly kits: 400, 600 and 800 mm
- Cable compartments: 200, 400 mm
- Vertical busbar: 200, 400 mm

Equipment height for assembly kits: 1600 mm



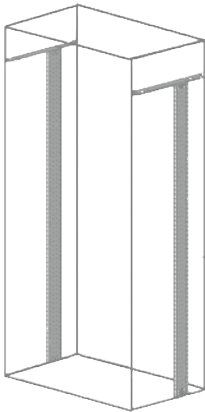
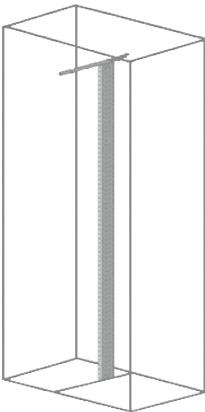
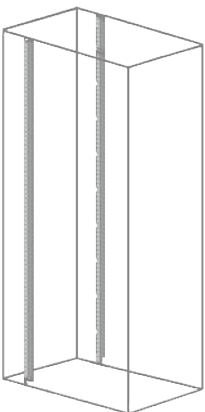
Selection and ordering data

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	① Frame Height: 2000 mm		
	Width in mm	Depth in mm	
	400	400	8PQ1204-4BA01 1 unit
		600	8PQ1204-6BA01 1 unit
		800	8PQ1204-8BA01 1 unit
	600	400	8PQ1206-4BA01 1 unit
		600	8PQ1206-6BA01 1 unit
		800	8PQ1206-8BA01 1 unit
	800	400	8PQ1208-4BA01 1 unit
		600	8PQ1208-6BA01 1 unit
		800	8PQ1208-8BA01 1 unit
	1000	400	8PQ1201-4BA02 1 unit
		600	8PQ1201-6BA02 1 unit
		800	8PQ1201-8BA03 1 unit
	1200	400	8PQ1202-4BA02 1 unit
		600	8PQ1202-6BA02 1 unit
		800	8PQ1202-8BA02 1 unit
	② Bottom plate partition crossbars For width 800 to 1200 mm		
	Depth in mm	Quantity	
	400	1 ×	8PQ3000-1BA38 1 unit
	600	1 ×	8PQ3000-1BA40 1 unit
	800	2 ×	8PQ3000-1BA38 1 unit

Frame and Enclosure

Frame

Main busbar at top

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	③ Interior side uprights For width from 800 to 1200 mm		
	Depth in mm		
	400	8PQ3000-0BA65	1 unit
	600	8PQ3000-0BA01	1 unit
	800	8PQ3000-0BA02	1 unit
	④ Section division		
	Depth in mm		
	400	8PQ3000-1BA31	1 unit
	600	8PQ3000-1BA32	1 unit
	800	8PQ3000-1BA34	1 unit
	⑤ Exterior intermediate uprights For fitting	8PQ3000-1BA43	1 unit
	• Outer covers • Section doors • Modular doors		

Frame and Enclosure

Frame

Main busbar at bottom

Overview

Features

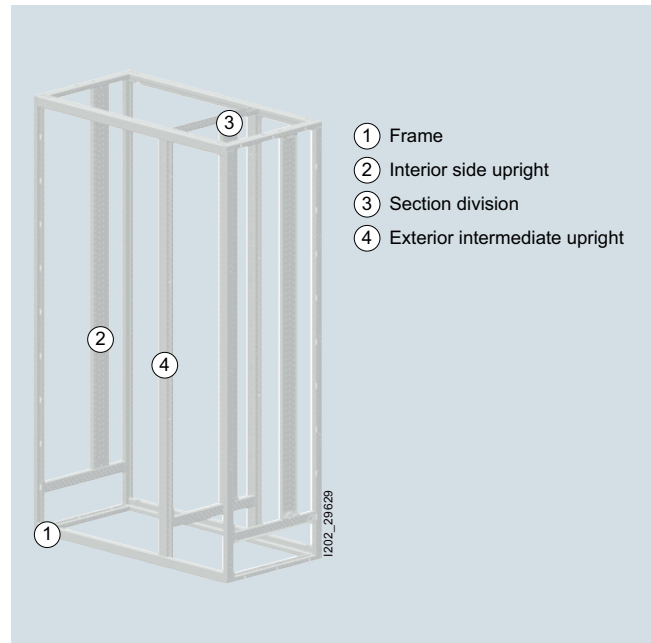
Standardised grid dimensions

- Frame divisions possible every 200 mm
- Assembly kits: 400, 600, 800 mm
- Cable compartments: 400, 600 mm
- Vertical busbar: 200, 400

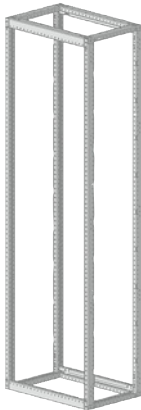
Equipment height for assembly kits: 1600 mm

Configuration

Main busbar at bottom conditionally at least form 2b



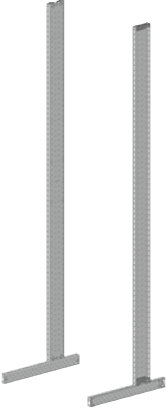
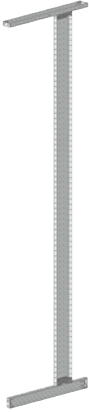
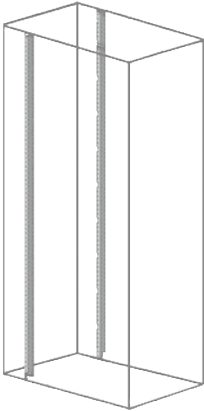
Selection and ordering data

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	① Frame Height: 2000 mm		
	Width in mm	Depth in mm	
	400	400	8PQ1204-4BA01 1 unit
		600	8PQ1204-6BA01 1 unit
		800	8PQ1204-8BA01 1 unit
	600	400	8PQ1206-4BA01 1 unit
		600	8PQ1206-6BA01 1 unit
		800	8PQ1206-8BA01 1 unit
	800	400	8PQ1208-4BA01 1 unit
		600	8PQ1208-6BA01 1 unit
		800	8PQ1208-8BA01 1 unit
	1000	400	8PQ1201-4BA02 1 unit
		600	8PQ1201-6BA02 1 unit
		800	8PQ1201-8BA03 1 unit
	1200	400	8PQ1202-4BA02 1 unit
		600	8PQ1202-6BA02 1 unit
		800	8PQ1202-8BA02 1 unit

Frame and Enclosure

Frame

Main busbar at bottom

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	② Interior side uprights		
	Depth in mm		
	400	8PQ3000-0BA10	1 unit
	600	8PQ3000-3BA10	1 unit
	800	8PQ3000-3BA11	1 unit
	③ Section division		
	Depth in mm		
	400	8PQ3000-0BA10	1 unit
	600	8PQ3000-3BA47	1 unit
	800	8PQ3000-3BA48	1 unit
	④ Exterior intermediate uprights	8PQ3000-1BA43	1 unit
	For fitting		
• Outer covers • Section doors • Modular doors			

Frame and Enclosure

Frame

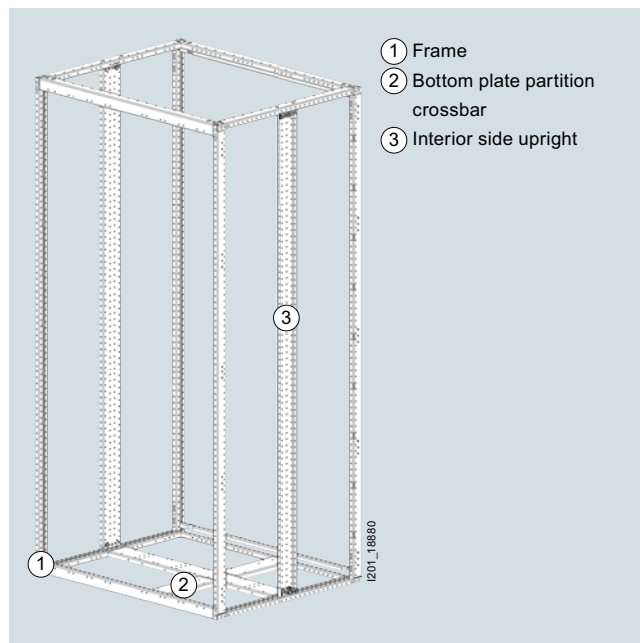
Main busbar at rear

Overview

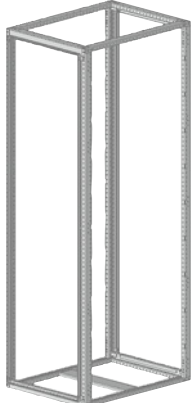
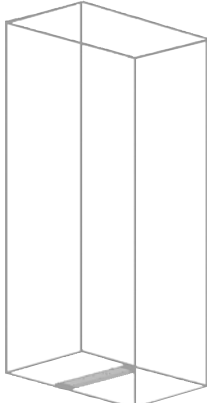
Features

Standardised section widths

- Frame divisions: possible every 200 mm
- Assembly kits: 400, 600 and 800 mm
- Cable compartments: 200, 400 mm
- Vertical busbar: 200, 400 mm



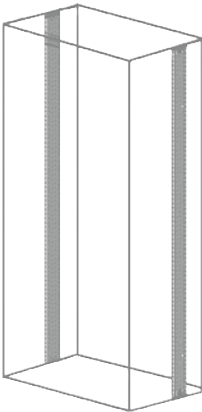
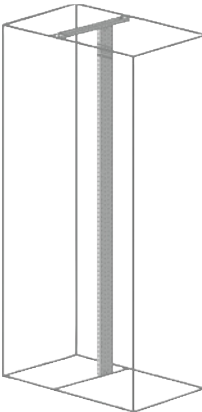
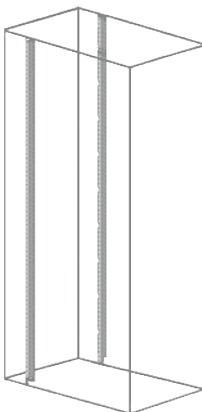
Selection and ordering data

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	① Frame Height: 2000 mm		
	Depth in mm	Width in mm	
	800	400	8PQ1204-8BA01 1 unit
		600	8PQ1206-8BA01 1 unit
		800	8PQ1208-8BA01 1 unit
		1000	8PQ1201-8BA03 1 unit
		1200	8PQ1202-8BA02 1 unit
	② Bottom plate partition crossbars For width 600 to 1200 mm		
	Depth in mm	Quantity	
	800	2 x	8PQ3000-1BA38 1 unit

Frame and Enclosure

Frame

Main busbar at rear

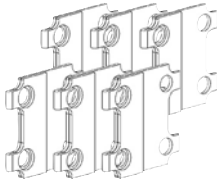
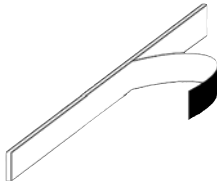
	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	③ Interior side uprights • Equipment height: 1800 mm • For width from 400 to 1200 mm		
	Depth in mm		
	800	8PQ3000-0BA03	1 unit
	Section division		
	Depth in mm		
	800	8PQ3000-1BA37	1 unit
	Exterior intermediate uprights For fitting • Outer covers • Section doors • Modular doors	8PQ3000-1BA43	1 unit

Frame and Enclosure

Frame

Frame accessories

Selection and ordering data

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
	Frame reinforcements - Recommended for frame widths from 1000 mm 1 set = 2 units	8PQ9400-0BA35	1 unit	
	Crossbars 1 set = 2 units Frame width			
	For frame width in mm	Crossbar length in mm		
	400	350	8PQ3000-0BA12	1 unit
	600	550	8PQ3000-0BA71	1 unit
	800	750	8PQ3000-0BA72	1 unit
	1000	950	8PQ3000-0BA84	1/2 units
	1200	1150	8PQ3000-0BA85	1/2 units
	Frame depth without side uprights ③			
	For frame depth in mm	Crossbar length in mm		
	400	300	8PQ3000-0BA10	1 unit
600	500	8PQ3000-1BA24	1/2 units	
800	700	8PQ3000-1BA25	1/2 units	
Frame depth with side uprights ③				
For frame depth in mm	Crossbar length in mm			
600	300	8PQ3000-0BA10	1 unit	
800				
	Universal brackets For mounting expansion elements	8MF1000-2CP	10 units	
	Board coupling kits 1 set = 6 units including fasteners	8PQ1204-4BA05	1 unit	
	Board coupling gasket kits - Scope of delivery: 5.5 m gasket roll - To maintain IP55 degree of protection	8PQ1204-4BA04	1 unit	
 	Self-tapping screws For use with frame and crossbars			
 	Cylinder-head screws			
	External diameter × Length in mm			
	M6 × 10	8PQ9500-0BA34	1 unit	
	M6 × 16	8PQ9500-0BA32	1 unit	
	M6 × 20	8PQ9500-0BA31	1 unit	
	Cap. RAL 7035	8PQ9400-0BA14	1 unit	
 	Countersunk screws			
	External diameter × Length in mm			
	M6 × 12	8PQ9500-1BA07	1 unit	

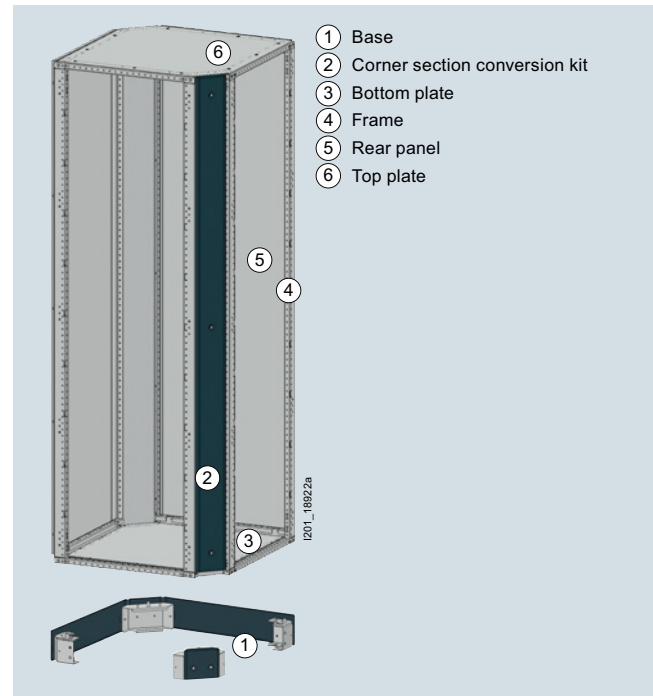
Overview

Features

- Corner section consisting of a standard frame and special conversion kits for corner sections
- The overall length of the unit's front increases by 100 mm in both room axes.
- Incl. copper drawing for the main busbar

Configuration

The overall length of the unit's front increases by 100 mm in both room axes.



Selection and ordering data

A complete configuration comprises a standard frame with identical width and depth dimensions and the corner section conversion kit.

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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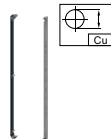
① Base corner pieces



Depth in mm	Height 100 mm		Height 200 mm	
400	8PQ1010-0BA04	1 unit	8PQ1024-4BA01	1 unit
600	8PQ1010-0BA05	1 unit	8PQ1026-6BA01	1 unit
800	8PQ1018-8BA01	1 unit	8PQ1028-8BA01	1 unit

② Corner section conversion kits

Incl. copper drawing



Assembly kit

8PQ1200-0BA03 1 unit

③ Bottom plates



Depth in mm	IP55 Main busbar at top		IP20 Main busbar at bottom	
400	8PQ2304-4BA12	1 unit	8PQ2300-4BA25	1 unit
600	8PQ2306-6BA12	1 unit	8PQ2300-6BA27	1 unit
800	8PQ2308-8BA08	1 unit	8PQ2300-8BA14	1 unit

* You can order this quantity or a multiple thereof.

Frame and Enclosure

Frame

Corner sections

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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④ Frame

Height: 2000 mm



Depth in mm	Width in mm	Frame			
400	400	8PQ1204-4BA01	1 unit		
600	600	8PQ1206-6BA01	1 unit		
800	800	8PQ1208-8BA01	1 unit		

⑤ Rear panels

Two units required for each corner section



Width in mm	IP40		IP55		
400	8PQ2420-4BA02	1 unit	8PQ2420-4BA01	1 unit	
600	8PQ2420-6BA02	1 unit	8PQ2420-6BA01	1 unit	
800	8PQ2420-8BA02	1 unit	8PQ2420-8BA01	1 unit	

⑥ Top plates



Depth in mm	IP40		IP55		IPX1	
400	8PQ2304-4BA10	1 unit	8PQ2304-4BA08	1 unit	8PQ2304-4BA11	1 unit
600	8PQ2306-6BA10	1 unit	8PQ2306-6BA08	1 unit	8PQ2306-6BA11	1 unit
800	8PQ2308-8BA06	1 unit	8PQ2308-8BA05	1 unit	8PQ2308-8BA07	1 unit

Overview

2



Frame and Enclosure

Enclosure

Panelling sections

Selection and ordering data

Configuration	Article No. www.siemens.com/ product?Article No.	PS/ P. unit
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① Base corner pieces with front cover



Height in mm	Width in mm		
100	400	8PQ1014-0BA01	1 unit
	600	8PQ1016-0BA01	1 unit
	800	8PQ1018-0BA01	1 unit
	1000	8PQ1011-0BA01	1 unit
	1200	8PQ1012-0BA01	1 unit



Height in mm	Width in mm		
200	400	8PQ1024-0BA01	1 unit
	600	8PQ1026-0BA01	1 unit
	800	8PQ1028-0BA01	1 unit
	1000	8PQ1021-0BA01	1 unit
	1200	8PQ1022-0BA01	1 unit



Base covers, side

Height in mm	Depth in mm		
100	400	8PQ1010-4BA01	1 unit
	600	8PQ1010-6BA01	1 unit
	800	8PQ1010-8BA01	1 unit



Base reinforcements for transport

Height: 100 mm

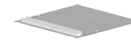
Frame width or depth in mm		
400	8PQ1014-0BA02	1 unit
600	8PQ1016-0BA02	1 unit
800	8PQ1018-0BA02	1 unit
1000	8PQ1011-1BA01	1/2 units
1200	8PQ1012-2BA01	1/2 units

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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② Bottom plates

For a frame depth of 800 mm, the bottom plates with a depth of 400 mm are needed **twice**.

- Main busbar at top



Depth in mm	Width in mm	Quantity	IP55		IP40 cable entry	
400	200		8PQ2302-4BA04	1 unit	--	
	400		8PQ2304-4BA05	1 unit	8PQ2304-4BA06	1 unit
	600		8PQ2306-4BA05	1 unit	8PQ2306-4BA06	1 unit
	800		8PQ2308-4BA05	1 unit	8PQ2308-4BA06	1 unit
	1000		8PQ2301-4BA04	1 unit	--	
600	200		8PQ2302-6BA04	1 unit	--	
	400		8PQ2306-4BA05	1 unit	8PQ2306-4BA06	1 unit
	600		8PQ2306-6BA05	1 unit	8PQ2306-6BA06	1 unit
	800		8PQ2308-6BA05	1 unit	8PQ2308-6BA06	1 unit
800	200	2 x	8PQ2302-4BA04	1 unit	--	
	400	2 x	8PQ2304-4BA05	1 unit	8PQ2304-4BA06	1 unit
	600	2 x	8PQ2306-4BA05	1 unit	8PQ2306-4BA06	1 unit
	800	2 x	8PQ2308-4BA05	1 unit	8PQ2308-4BA06	1 unit
	1000	2 x	8PQ2301-4BA04	1 unit	--	

- Main busbar at bottom



Depth in mm	Width in mm	IP20		
400	400	8PQ2304-4BA14	1 unit	
	600	8PQ2306-4BA10	1 unit	
	800	8PQ2308-4BA13	1 unit	
	1000	8PQ2301-4BA06	1 unit	
	1200	8PQ2302-4BA05	1 unit	
600	400	8PQ2304-6BA11	1 unit	
	600	8PQ2306-6BA16	1 unit	
	800	8PQ2308-6BA13	1 unit	
	1000	8PQ2301-6BA05	1 unit	
	1200	8PQ2302-6BA05	1 unit	
800	400	8PQ2304-8BA05	1 unit	
	600	8PQ2306-8BA05	1 unit	
	800	8PQ2308-8BA10	1 unit	
	1000	8PQ2301-8BA04	1 unit	
	1200	8PQ2302-8BA04	1 unit	

- Main busbar at bottom with cable entry
 - In the rear area **bottom plates with cable entries** are additionally required
 - For widths 1000 and 1200 in each case two **bottom plates with cable entry** corresponding to section width are required



Depth in mm	Width in mm	Depth 400 For cable entry		Depth 400 Cable entry	
800	400	8PQ2304-8BA06	1 unit	8PQ2304-4BA06	1 unit
	600	8PQ2306-8BA06	1 unit	8PQ2306-4BA06	1 unit
	800	8PQ2308-8BA11	1 unit	8PQ2308-4BA06	1 unit
	1000	8PQ2301-8BA05	1 unit	--	
	1200	8PQ2302-8BA05	1 unit	--	

Frame and Enclosure

Enclosure

Panelling sections

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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③ Rear panels



Width in mm	IP40		IP55	
400	8PQ2420-4BA02	1 unit	8PQ2420-4BA01	1 unit
600	8PQ2420-6BA02	1 unit	8PQ2420-6BA01	1 unit
800	8PQ2420-8BA02	1 unit	8PQ2420-8BA01	1 unit
1000	8PQ2420-1BA02	1 unit	8PQ2420-1BA01	1 unit
1200	8PQ2420-2BA02	1 unit	8PQ2420-2BA01	1 unit

④ Side panels

1 set = 2 units



Depth in mm	IP55		IP40 with design strip	
400	8PQ2520-4BA02	1 unit	8PQ2520-4BA01	1 unit
600	8PQ2520-6BA02	1 unit	8PQ2520-6BA01	1 unit
800	8PQ2520-8BA02	1 unit	8PQ2520-8BA01	1 unit

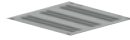
Frame and Enclosure

Enclosure

Panelling sections

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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⑤ Top plates



Depth in mm	Width in mm	IP40		IPX1 upgrade		IP55		IP40 cable entry	
400	400	8PQ2304-4BA02	1 unit	8PQ2304-4BA04	1 unit	8PQ2304-4BA01	1 unit	8PQ2304-4BA03	1 unit
	600	8PQ2306-4BA02	1 unit	8PQ2306-4BA04	1 unit	8PQ2306-4BA01	1 unit	8PQ2306-4BA03	1 unit
	800	8PQ2308-4BA02	1 unit	8PQ2308-4BA04	1 unit	8PQ2308-4BA01	1 unit	8PQ2308-4BA03	1 unit
	1000	8PQ2301-4BA02	1 unit	8PQ2301-4BA03	1 unit	8PQ2301-4BA01	1 unit	--	
	1200	8PQ2302-4BA02	1 unit	8PQ2302-4BA03	1 unit	8PQ2302-4BA01	1 unit	--	
600	400	8PQ2304-6BA02	1 unit	8PQ2304-6BA04	1 unit	8PQ2304-6BA01	1 unit	8PQ2304-6BA03	1 unit
	600	8PQ2306-6BA02	1 unit	8PQ2306-6BA04	1 unit	8PQ2306-6BA01	1 unit	8PQ2306-6BA03	1 unit
	800	8PQ2308-6BA02	1 unit	8PQ2308-6BA04	1 unit	8PQ2308-6BA01	1 unit	8PQ2308-6BA03	1 unit
	1000	8PQ2301-6BA02	1 unit	8PQ2301-6BA03	1 unit	8PQ2301-6BA01	1 unit	--	
	1200	8PQ2302-6BA02	1 unit	8PQ2302-6BA03	1 unit	8PQ2302-6BA01	1 unit	--	
800	400	8PQ2304-8BA02	1 unit	8PQ2304-8BA04	1 unit	8PQ2304-8BA01	1 unit	8PQ2304-8BA03	1 unit
	600	8PQ2306-8BA02	1 unit	8PQ2306-8BA04	1 unit	8PQ2306-8BA01	1 unit	8PQ2306-8BA03	1 unit
	800	8PQ2308-8BA02	1 unit	8PQ2308-8BA04	1 unit	8PQ2308-8BA01	1 unit	8PQ2308-8BA03	1 unit
	1000	8PQ2301-8BA02	1 unit	8PQ2301-8BA03	1 unit	8PQ2301-8BA01	1 unit	--	
	1200	8PQ2302-8BA02	1 unit	8PQ2302-8BA03	1 unit	8PQ2302-8BA01	1 unit	--	

Frame and Enclosure

Enclosure

Panelling sections

Selection and ordering data

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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⑥ Doors with two-way interlocking system



Hinge position	Width in mm	IP40		IP55		IP55 with window	
Left	400	8PQ2197-4BA08	1 unit	8PQ2197-4BA05	1 unit	--	
	600	8PQ2197-6BA06	1 unit	8PQ2197-6BA03	1 unit	8PQ2197-6BA10	1 unit
	800	8PQ2197-8BA06	1 unit	8PQ2197-8BA03	1 unit	8PQ2197-8BA10	1 unit
	1000	8PQ2197-1BA06	1 unit	8PQ2197-1BA03	1 unit	8PQ2197-1BA10	1 unit
Right	400	8PQ2197-4BA11	1 unit	8PQ2197-4BA10	1 unit	--	
	600	8PQ2197-6BA13	1 unit	8PQ2197-6BA12	1 unit	8PQ2197-6BA14	1 unit
	800	8PQ2197-8BA13	1 unit	8PQ2197-8BA12	1 unit	8PQ2197-8BA14	1 unit
	1000	8PQ2197-1BA18	1 unit	8PQ2197-1BA17	1 unit	8PQ2197-1BA20	1 unit

Doors with rotary handle

- Semi-cylindrical profile acc. to DIN 18252/18254, 8 × 45°
- Suitable for installing locks, see [Accessories from page 7/3 onwards](#)
- In area in which untrained persons operate, only in conjunction with internal covers or lock



Hinge position	Width in mm	IP40		IP55		IP55 with window	
Left	400	8PQ2197-4BA06	1 unit	8PQ2197-4BA03	1 unit	--	
	600	8PQ2197-6BA04	1 unit	8PQ2197-6BA01	1 unit	8PQ2197-6BA07	1 unit
	800	8PQ2197-8BA04	1 unit	8PQ2197-8BA01	1 unit	8PQ2197-8BA07	1 unit
	1000	8PQ2197-1BA07	1 unit	8PQ2197-1BA04	1 unit	8PQ2197-1BA11	1 unit
Right	400	8PQ2197-4BA07	1 unit	8PQ2197-4BA04	1 unit	--	
	600	8PQ2197-6BA05	1 unit	8PQ2197-6BA02	1 unit	8PQ2197-6BA08	1 unit
	800	8PQ2197-8BA05	1 unit	8PQ2197-8BA02	1 unit	8PQ2197-8BA08	1 unit
	1000	8PQ2197-1BA08	1 unit	8PQ2197-1BA05	1 unit	8PQ2197-1BA12	1 unit

Outer covers

Covering for cable compartment or vertical busbar



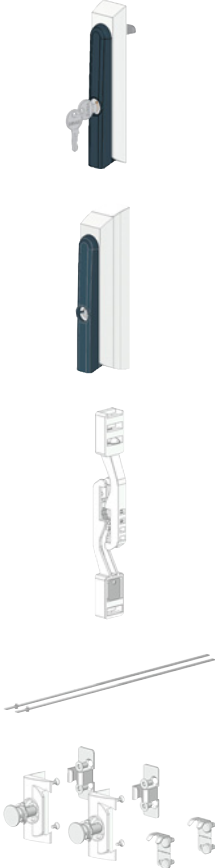
Hinge position	Width in mm	IP40		IP55			
Without hinge	200	8PQ2197-2BA15	1 unit	8PQ2197-2BA14	1 unit		
	400	8PQ2197-4BA02	1 unit	8PQ2197-4BA01	1 unit		

Frame panelling

Only in conjunction with internal covers



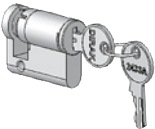
Hinge position	Width in mm	IP30					
Without hinge	600	8PQ2197-6BA11	1 unit				
	800	8PQ2197-8BA11	1 unit				

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Accessories			
	Flat cylinder/two-way interlocking mechanisms		
	Versions		
	• Rotary handles with flat cylinder - identical key type - including key	8PQ9400-0BA07	1 unit
	• Rotary handles with two-way interlocking mechanism	8PQ9400-0BA08	1 unit
	• Coupling bars	8PQ9400-0BA27	1 unit
	• Locking rods	8PQ9400-0BA37	1 unit
	• Bar guides	8PQ9400-0BA36	1 unit

Frame and Enclosure

Enclosure

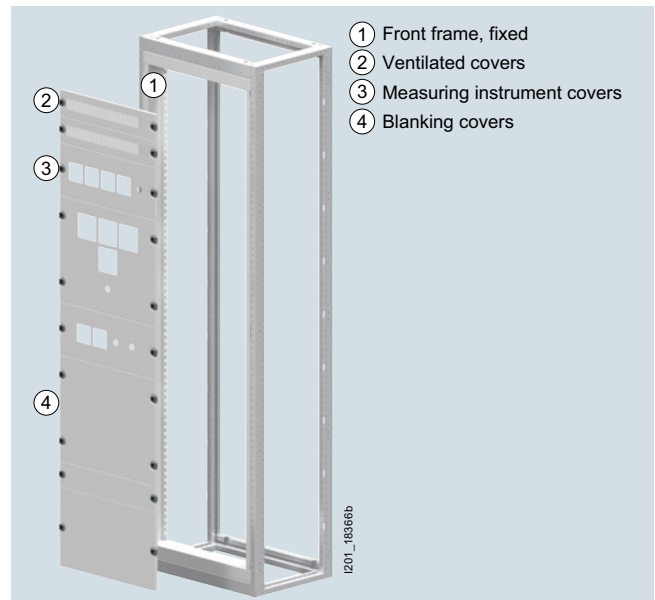
Panelling sections

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	Semi-cylindrical profiles Versions		
	Rotary handles with semi-cylindrical profile	8PQ9400-0BA41	1 unit
	Coupling bars	8PQ9400-0BA28	1 unit
	Locking rods	8PQ9400-0BA38	1 unit
	Bar guides	8PQ9400-0BA36	1 unit
	- Semi-cylindrical profiles - acc. to DIN 18252/18254 - 8 x 45° adjustable - identical key type (key number 333) - including key	8PQ9400-0BA26	1 unit
	Door hinges 1 set = 2 units	8PQ9400-0BA55	1/2 units
	Cubicle keys 3 mm double bit 1 pack = 10 units	8PQ9400-0BA12	1 unit
	Inner door struts - For use with section doors - Height 1975 mm	8PQ2197-0BA10	1 unit
	Cubicle ID plates SIVACON designed by Siemens	8PQ9400-0BA06	1 unit

Overview

Configuration

- Can be combined with section doors and glass doors and also frame panelling
- Internal covers not available in combination with module doors



Selection and ordering data

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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Front frame internal covers

① Without main busbar

Equipment height: 1800 mm

Width in mm	Fixed		Swivel	
600	8PQ2000-6BA04	1 unit	8PQ2000-6BA01	1 unit
800	8PQ2000-8BA04	1 unit	8PQ2000-8BA01	1 unit

Main busbar at top

Equipment height: 1600 mm

Width in mm	Fixed		Swivel	
600	8PQ2000-6BA03	1 unit	8PQ2000-6BA02	1 unit
800	8PQ2000-8BA03	1 unit	8PQ2000-8BA02	1 unit

Covers

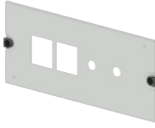
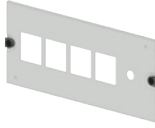
② Covers, ventilated

Height mm	Width mm			
100	600	8PQ2010-6BA02	1 unit	
	800	8PQ2010-8BA02	1 unit	

Frame and Enclosure

Enclosure

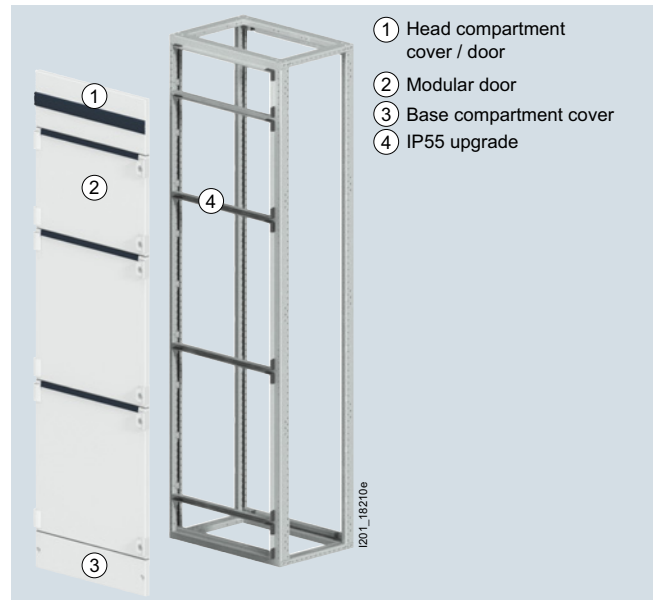
Internal covers

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
③ Measuring instrument covers					
 72 × 72 mm					
 22.5 mm					
Height mm	Width mm	Cut-out 2 measuring instru- ments, 2 selectors		Cut-out 4 measuring instru- ments, 1 selector	
200	600 800	8PQ2020-6BA03 8PQ2020-8BA03	1 unit 1 unit	8PQ2020-6BA02 8PQ2020-8BA02	1 unit 1 unit
 96 × 96 mm					
 22.5 mm					
Height mm	Width mm	Cut-out 2 measuring instru- ments, 2 selectors		Cut-out 4 measuring instru- ments, 1 selector	
400	600 800	8PQ2040-6BA04 8PQ2040-8BA04	1 unit 1 unit	8PQ2040-6BA03 8PQ2040-8BA03	1 unit 1 unit
④ Blanking covers					
					
Height mm	Width mm	Blanking covers			
50 100 150 200 250 300 350 400 500 550 600 650 800	600	8PQ2005-6BA01 8PQ2010-6BA01 8PQ2015-6BA02 8PQ2020-6BA01 8PQ2025-6BA01 8PQ2030-6BA01 8PQ2035-6BA01 8PQ2040-6BA01 8PQ2050-6BA01 8PQ2055-6BA01 8PQ2060-6BA01 8PQ2065-6BA01 8PQ2080-6BA01	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit		
50 100 150 200 250 300 350 400 500 550 600 650 800	800	8PQ2005-8BA01 8PQ2010-8BA01 8PQ2015-8BA02 8PQ2020-8BA01 8PQ2025-8BA01 8PQ2030-8BA01 8PQ2035-8BA01 8PQ2040-8BA01 8PQ2050-8BA01 8PQ2055-8BA01 8PQ2060-8BA01 8PQ2065-8BA01 8PQ2080-8BA01	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit		
Accessories					
		Hinges for cover • hinge position: left / right • 1 pack = 10 units	8GK9120-0KK11	10 units	
		1/4 turn screws • 1 pack = 20 units	8PQ9400-0BA54	1/20 units	

Overview

Configuration

- Modular doors cannot be combined with internal covers
- For load capacity of doors, see [Technical specifications](#) on page 1/5.



Selection and ordering data

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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Panelling for main busbar

① Head compartment covers



Width mm	Height mm	IP4X		IP55 upgrade	
400	225	8PQ2022-4BA01	1 unit	8PQ2022-4BA03	1 unit
600		8PQ2022-6BA01	1 unit	8PQ2022-6BA02	1 unit
800		8PQ2022-8BA01	1 unit	8PQ2022-8BA02	1 unit

Head compartment doors



Width mm	Height mm	IP4X		IP55 upgrade	
400	225	8PQ2022-4BA04	1 unit	8PQ2022-4BA03	1 unit
	725	8PQ2072-4BA02	1 unit	8PQ2070-4BA06	1 unit
600	225	8PQ2022-6BA04	1 unit	8PQ2022-6BA02	1 unit
	725	8PQ2072-6BA01	1 unit	8PQ2070-6BA11	1 unit
800	225	8PQ2022-8BA03	1 unit	8PQ2022-8BA02	1 unit

Frame and Enclosure

Enclosure

Modular doors

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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Compartment panelling

② Modular doors



Width mm	Height mm	IP4X		IP55 upgrade	
400	150	8PQ2015-4BA04	1 unit	8PQ2015-4BA05	1 unit
	200	8PQ2020-4BA01	1 unit	8PQ2020-4BA03	1 unit
	250	8PQ2025-4BA01	1 unit	8PQ2025-4BA02	1 unit
	300	8PQ2030-4BA01	1 unit	8PQ2030-4BA02	1 unit
	350	8PQ2035-4BA01	1 unit	8PQ2035-4BA02	1 unit
	400	8PQ2040-4BA01	1 unit	8PQ2040-4BA03	1 unit
	450	8PQ2045-4BA01	1 unit	8PQ2045-4BA02	1 unit
	500	8PQ2050-4BA01	1 unit	8PQ2050-4BA02	1 unit
	550	8PQ2055-4BA11	1 unit	8PQ2055-4BA07	1 unit
	600	8PQ2060-4BA01	1 unit	8PQ2060-4BA03	1 unit
	650	8PQ2065-4BA01	1 unit	8PQ2065-4BA02	1 unit
	700	8PQ2070-4BA07	1 unit	8PQ2070-4BA08	1 unit
	750	8PQ2072-4BA01	1 unit	8PQ2075-4BA01	1 unit
	800	8PQ2080-4BA01	1 unit	8PQ2080-4BA04	1 unit
600	150	8PQ2015-6BA10	1 unit	8PQ2015-6BA12	1 unit
	200	8PQ2020-6BA14	1 unit	8PQ2020-6BA15	1 unit
	250	8PQ2025-6BA07	1 unit	8PQ2025-6BA08	1 unit
	300	8PQ2030-6BA10	1 unit	8PQ2030-6BA12	1 unit
	350	8PQ2035-6BA12	1 unit	8PQ2035-6BA13	1 unit
	400	8PQ2040-6BA12	1 unit	8PQ2040-6BA13	1 unit
	450	8PQ2045-6BA05	1 unit	8PQ2045-6BA06	1 unit
	500	8PQ2050-6BA03	1 unit	8PQ2050-6BA04	1 unit
	550	8PQ2055-6BA04	1 unit	8PQ2055-6BA06	1 unit
	600	8PQ2060-6BA06	1 unit	8PQ2060-6BA07	1 unit
	650	8PQ2065-6BA03	1 unit	8PQ2065-6BA04	1 unit
	700	8PQ2070-6BA03	1 unit	8PQ2070-6BA04	1 unit
	750	8PQ2075-6BA01	1 unit	8PQ2075-6BA02	1 unit
	800	8PQ2080-6BA03	1 unit	8PQ2080-6BA04	1 unit
800	150	8PQ2015-8BA05	1 unit	8PQ2015-8BA07	1 unit
	200	8PQ2020-8BA07	1 unit	8PQ2020-8BA08	1 unit
	250	8PQ2025-8BA04	1 unit	8PQ2025-8BA05	1 unit
	300	8PQ2030-8BA05	1 unit	8PQ2030-8BA06	1 unit
	350	8PQ2035-8BA06	1 unit	8PQ2035-8BA07	1 unit
	400	8PQ2040-8BA12	1 unit	8PQ2040-8BA13	1 unit
	450	8PQ2045-8BA03	1 unit	8PQ2045-8BA04	1 unit
	500	8PQ2050-8BA03	1 unit	8PQ2050-8BA04	1 unit
	550	8PQ2055-8BA03	1 unit	8PQ2055-8BA06	1 unit
	600	8PQ2060-8BA04	1 unit	8PQ2060-8BA05	1 unit
	650	8PQ2065-8BA03	1 unit	8PQ2065-8BA04	1 unit
	700	8PQ2070-8BA01	1 unit	8PQ2070-8BA02	1 unit
	750	8PQ2075-8BA01	1 unit	8PQ2075-8BA02	1 unit
	800	8PQ2080-8BA03	1 unit	8PQ2080-8BA04	1 unit

Modular covers



Width mm	Height mm	IP4X		IP55 upgrade	
400	50	8PQ2005-4BA03	1 unit	8PQ2005-4BA01	1 unit
	100	8PQ2010-4BA02	1 unit	8PQ2010-4BA01	1 unit
600	50	8PQ2005-6BA04	1 unit	8PQ2005-6BA03	1 unit
	100	8PQ2010-6BA04	1 unit	8PQ2010-6BA03	1 unit
800	50	8PQ2005-8BA04	1 unit	8PQ2005-8BA03	1 unit
	100	8PQ2010-8BA04	1 unit	8PQ2010-8BA03	1 unit

Frame and Enclosure

Enclosure

Modular doors

2

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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Panelling for PE bar

③ Base compartment covers

- Compartment height base compartment = cover height + 25 mm floor clearance



Width mm	Height mm	IP4X		IP55 upgrade	
400	150	8PQ2015-4BA01	1 unit	8PQ2015-4BA03	1 unit
600		8PQ2000-6BA07	1 unit	8PQ2015-6BA13	1 unit
800		8PQ2000-8BA07	1 unit	8PQ2015-8BA08	1 unit

Base compartment doors

- Compartment height base compartment = door height + 25 mm floor clearance



Width mm	Height mm	IP4X		IP55 upgrade	
400	700	8PQ2070-4BA01	1 unit	8PQ2070-4BA05	1 unit
600		8PQ2070-6BA05	1 unit	8PQ2070-6BA10	1 unit

Accessories

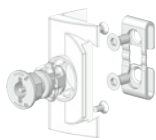


Door hinges

- 1 set = 2 units

8PQ9400-0BA55

1/2 units



Door lock with two-way interlocking mechanism

8PQ9400-0BA40

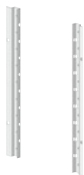
1 unit



ID strips

- 1 pack = 6 units

Width in mm

400
600
8008PQ5000-3BA42
8PQ5000-3BA43
8PQ5000-3BA461/6 units
1/6 units
1 unit

Inner door struts

- 1 pair = 2 units

Height in mm

400
550
600/625
700/725
8008PQ2040-0BA06
8PQ2055-0BA05
8PQ2060-0BA14
8PQ2070-0BA02
8PQ2080-0BA071 unit
1 unit
1 unit
1 unit
1 unit

Cubicle keys

- 3 mm double bit
- 1 pack = 10 units

8PQ9400-0BA12

1 unit



Modular door earthing straps

- 1 pack = 10 units
- Ø = 6 mm²
- Sum of all operating currents of devices installed in door max. 63 A

8PQ9400-0BA15

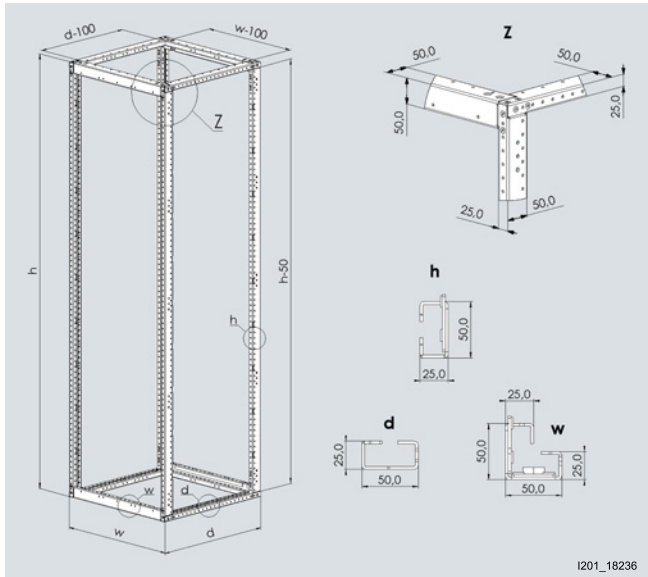
1/10
units

Frame and Enclosure

Mechanical dimensions

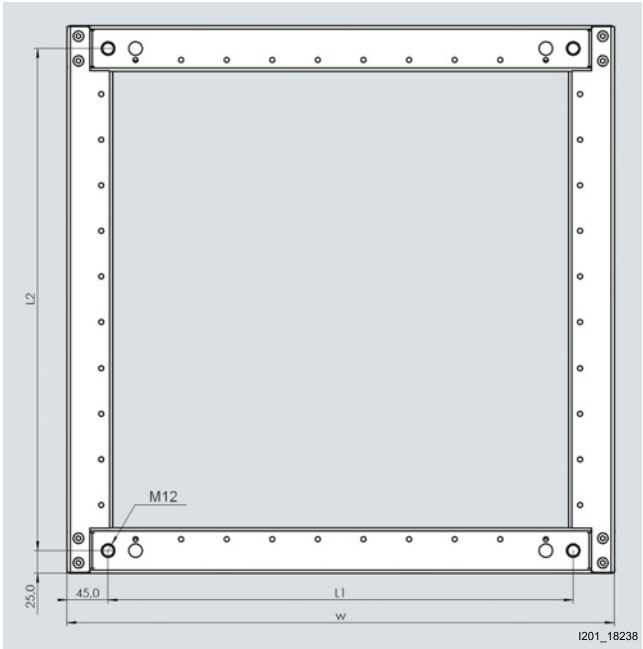
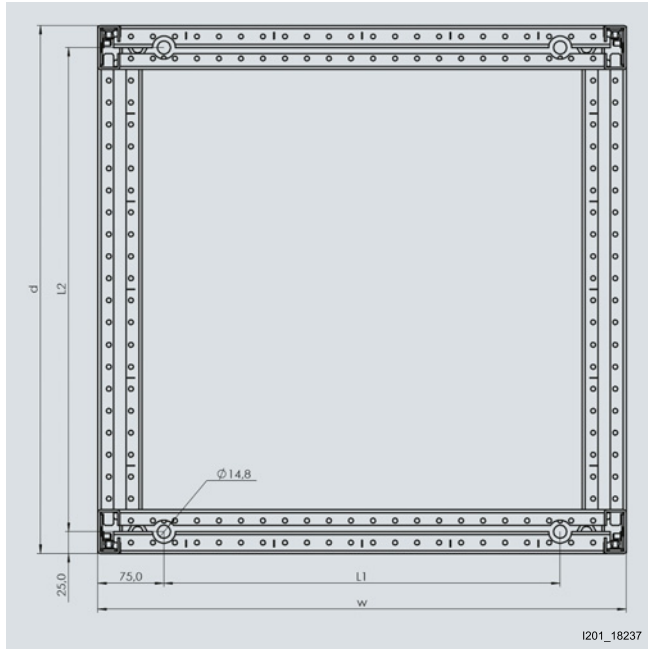
Overview

Frame



w Width mm	d Depth mm	h Height mm
400	400	2000
600	600	
800	800	
1000		
1200		

Floor anchoring of frame without base

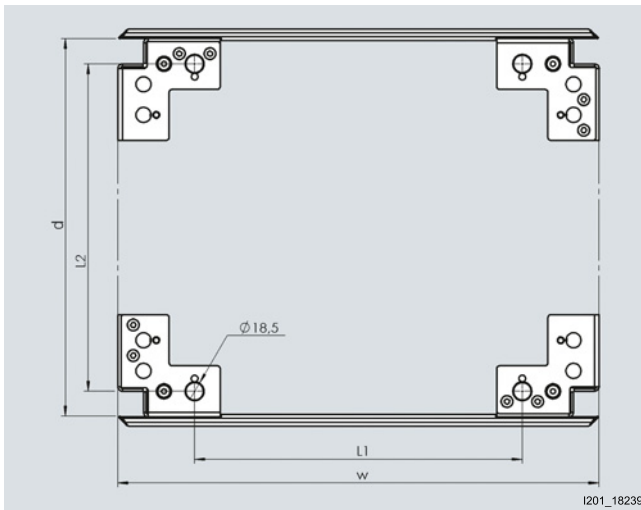


d mm	L2 mm
400	350
600	550
800	750

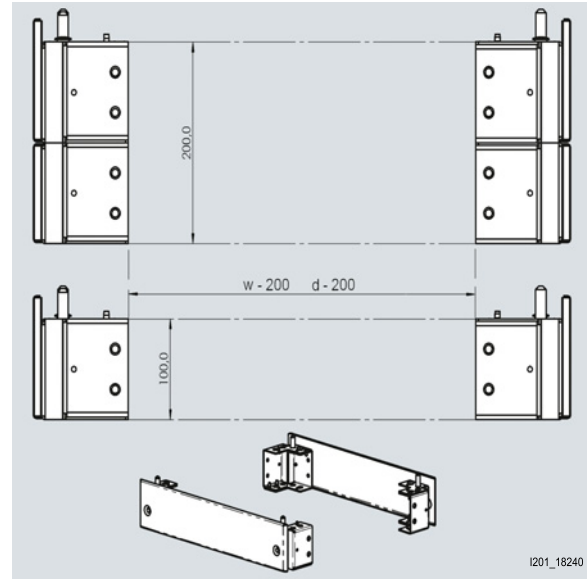
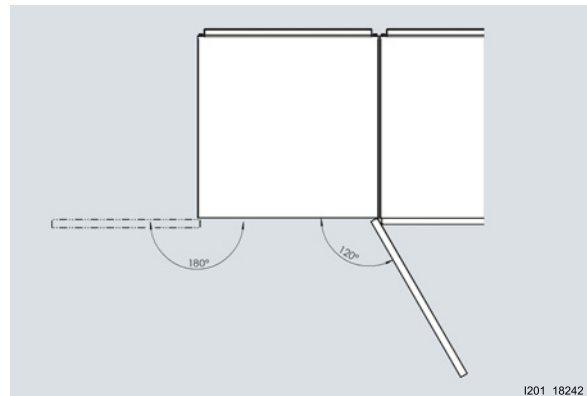
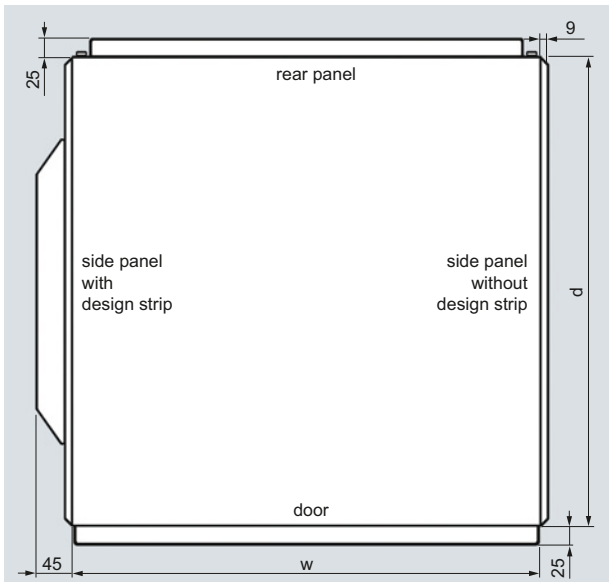
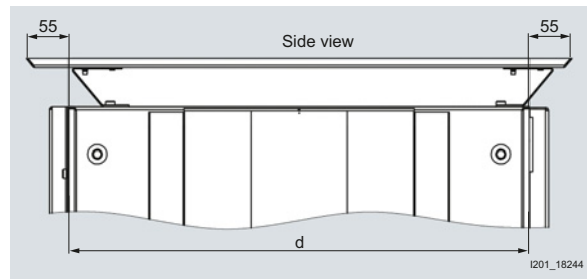
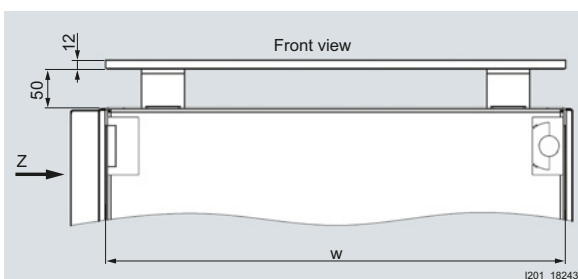
w mm	L1 mm
400	250
600	450
800	650
1000	850
1200	1050

d mm	L1 mm
400	350
600	550
800	750

w mm	L1 mm
400	310
600	510
800	710
1000	910
1200	1110

Base

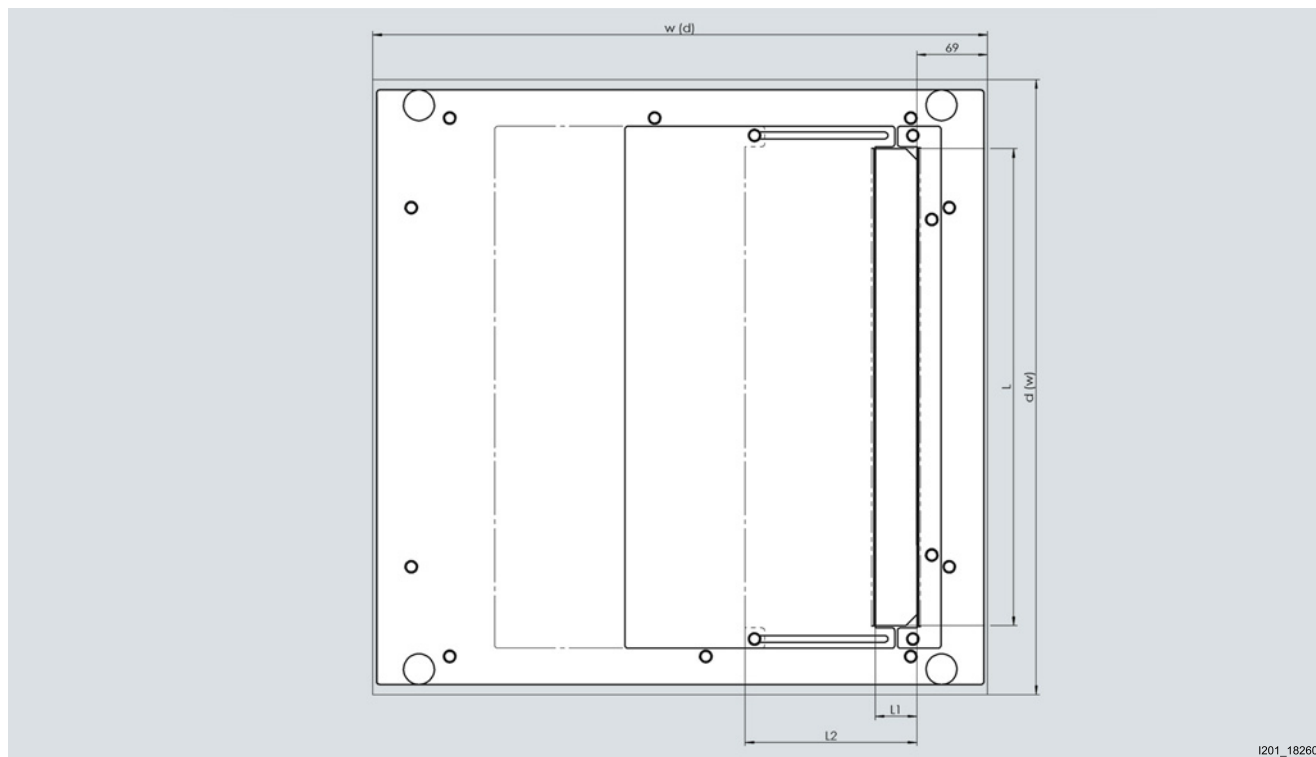
d mm	L2 mm	w mm	L1 mm
400	350	400	250
600	550	600	450
800	750	800	650
		1000	850
		1200	1050

**Door, rear panel and side panel, with and without design strip****Top plate upgraded to IPX1**

Frame and Enclosure

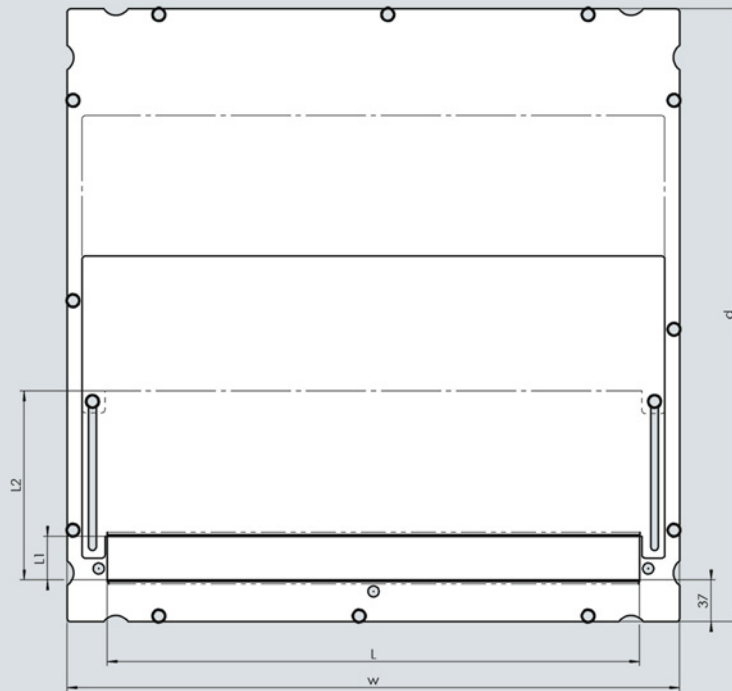
Mechanical dimensions

Top plate with cable entry



I201_18260

Article No.	Depth mm	Width mm	L mm	L1 Min. opening mm	L2 Max. opening mm	Position Cable entry
8PQ2304-4BA03	400	400	265	38	125	
8PQ2306-4BA03		600	465	38	125	
8PQ2308-4BA03		800	665	38	125	
8PQ2304-6BA03	600	400	465	38	125	
8PQ2306-6BA03		600	465	38	165	
8PQ2308-6BA03		800	665	38	165	
8PQ2304-8BA03	800	400	665	38	125	
8PQ2306-8BA03		600	665	38	165	
8PQ2308-8BA03		800	665	38	165	

Bottom plate with cable entry

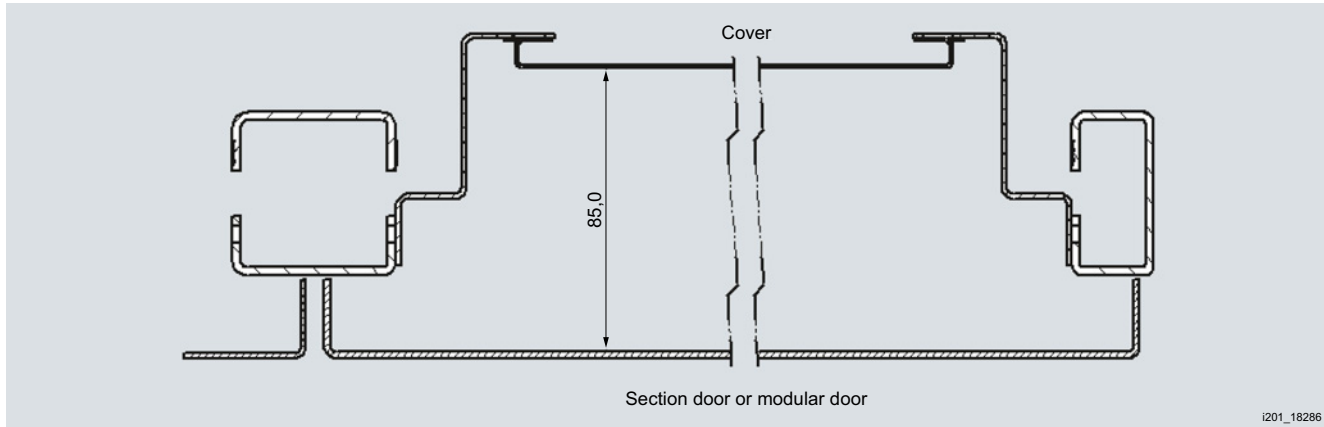
I201_18245

Article No.	Depth mm	Width mm	L mm	L1 Min. opening mm	L2 Max. opening mm	Position Cable entry
8PQ2304-4BA06	400	400	265	38	125	
8PQ2306-4BA06		600	465	38	125	
8PQ2308-4BA06		800	665	38	125	
8PQ2306-4BA06	600	400	465	38	125	
8PQ2306-6BA06		600	465	38	165	
8PQ2308-6BA06		800	665	38	165	

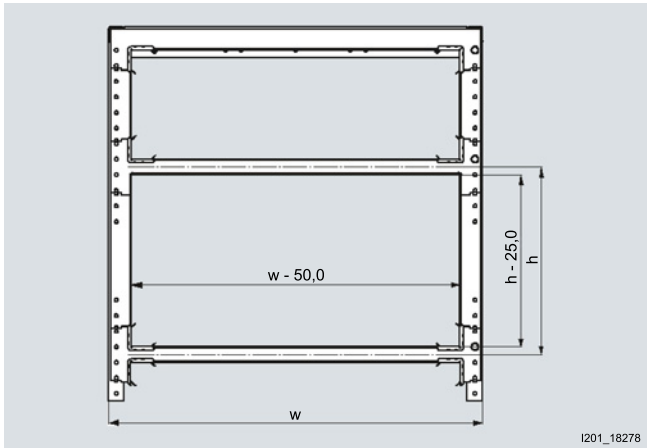
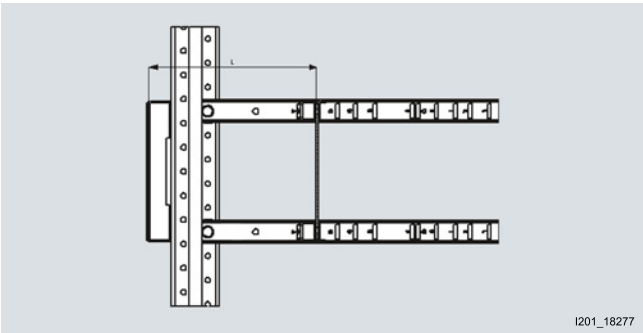
Frame and Enclosure

Mechanical dimensions

Covers



Modular doors



Position	A	B	C	D	E	F	G	H	I	K	L
L in mm	170	190	210	229	259	288	294	313	333	330	368



3/2	Main busbars
3/9	Vertical busbars
3/14	Compact busbars
3/16	Busbar connection fasteners
3/18	Mechanical dimensions

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

Busbar Systems

Main busbars

Overview

Features

- Appropriate scaling of rated currents, matched to standard transformers
- Division of the phases into bars enables installation without the need to drill holes and increased current carrying capacity
- Simplified handling of one or more cubicles

Configuration

- Compatible network configurations TN-C, TN-S, IT and TT

	Type	Positioning	Equipment height mm	Rated current A	Frame depth mm	Rated impulse withstand voltage U_{imp} kv
    	Top	--	1600	Up to 3200	400	8
		Front	1600	Up to 3200	600	12
			1600	Up to 3200	800	12
		On two sides	1600	Up to 4000	800	12
	Rear	--	1800	Up to 3200	800	8

Main busbar at top and bottom

Number of bars per phase	Dimensions mm	Rated current I_n at 35 °C ambient temperature and 500 W power loss per section ¹⁾					
		Section depth 400 mm		Section depth 600 mm		Section depth 800 mm	
		IP ≤ IP41	IP55	IP ≤ IP41	IP55	IP ≤ IP41	IP55
2 	20 × 10 30 × 10	1190 1630	965 1310	1190 1630	965 1310	1190 1630	965 1310
4 	20 × 10 30 × 10 40 × 10 50 × 10	1920 2470 3010 3270	1480 1870 2250 2450	1920 2490 3040 3320	1540 1950 2350 2570	1930 2510 3100 3410	1650 2110 2560 2820
2 × 4 	20 × 10 30 × 10	--	--	--	--	3700 4660	3000 3680

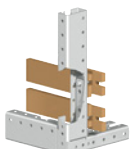
Main busbar at rear

Number of bars per phase	Dimensions mm	Rated current I_n at 35 °C ambient temperature and 500 W power loss per section ¹⁾	
		Section depth 800 mm	
		IP ≤ IP41	IP55
2 	20 × 10 30 × 10	1190 1630	965 1310
4 	20 × 10 30 × 10 40 × 10 50 × 10	1930 2510 3100 3410	1650 2110 2560 2820

¹⁾ These values refer to normal operating conditions and indoor installation in accordance with IEC 61439-1, in particular with reference to an ambient temperature of 35°C (24 h average).

PE bar cross-section depending on the short-circuit current

According to IEC 61439-1, dimensioning of the PE bar cross-section equal to 25 % of the phase conductor cross-section is also permitted.

Number of bars per phase	Dimensions mm	Rated short-time current I_{cw} (1 s current, rms value) kA
2 	20 × 5 30 × 5 40 × 5 30 × 10	65 85 100 100

Busbar Systems

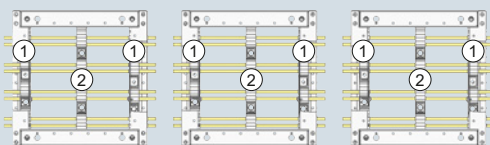
Main busbars

Number of reinforcements as a function of short-circuit currents

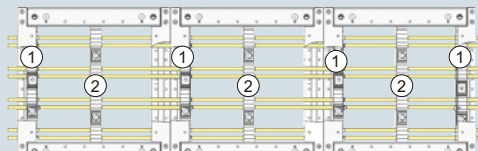
- The number of reinforcements depends on the size of the short-circuit currents and the section widths.
- Refer to the [SIVACON S4](#) manual for a calculation of distances.

Busbar size Number of bars per phase	Dimensions mm	Section width mm	Number of reinforcements as a function of I_{pk} , I_{cw} and section width					
			$I_{cw} = 25 \text{ kA}$ $I_{pk} = 52.5 \text{ kA}$	$I_{cw} = 35 \text{ kA}$ $I_{pk} = 73.5 \text{ kA}$	$I_{cw} = 50 \text{ kA}$ $I_{pk} = 105 \text{ kA}$	$I_{cw} = 65 \text{ kA}$ $I_{pk} = 143 \text{ kA}$	$I_{cw} = 85 \text{ kA}$ $I_{pk} = 187 \text{ kA}$	$I_{cw} = 100 \text{ kA}$ $I_{pk} = 220 \text{ kA}$
2 	20 × 10	350	0	0	--	--	--	--
		400	0	0				
		600	0	0				
		800	1	1				
		850	1	1				
		1000	1	1				
		1200	2	2				
	30 × 10	350	--	0	0			
		400		0	0			
		600		0	1			
		800		1	1			
		850		1	1			
		1000		2	2			
4 	20 × 10	350		0	0	0		
		400		0	0	0		
		600		0	0	1		
		800		1	1	2		
		850		1	1	2		
		1000		2	2	3		
		1200		2	2	3		
	30 × 10	350		0	0	0	0	
		400		0	0	0	0	
		600		0	0	1	1	
		800		1	1	2	2	
		850		1	1	2	2	
		1000		2	2	3	3	
		1200		2	2	3	3	
	40 × 10	350		--	0	0	0	0
		400			0	0	0	0
		600			0	0	1	1
		800			1	1	2	2
		850			1	1	2	2
		1000			1	1	3	3
		1200			2	2	3	4
	50 × 10	350			0	0	0	0
		400			0	0	0	0
		600			0	0	1	1
		800			1	1	2	2
		850			1	1	2	2
		1000			1	1	3	3
2 × 4 ¹⁾ 	20 × 10	350			--	0	0	0
		400				0	0	0
		600				1	1	1
		800				2	2	2
		850				2	2	2
		1000				3	3	3
		1200				4	4	4
	30 × 10	350				0	0	0
		400				0	0	0
		600				1	1	1
		800				2	2	2
		850				2	2	2
		1000				3	3	3
		1200				4	4	4

¹⁾ The number of reinforcements applies to a main busbar system. Since the 3700 A and 4000 A main busbar system is made up of two systems, the number of reinforcements to be ordered must be doubled.



Single-section transport unit

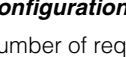


Multi-section transport unit

I201_18205

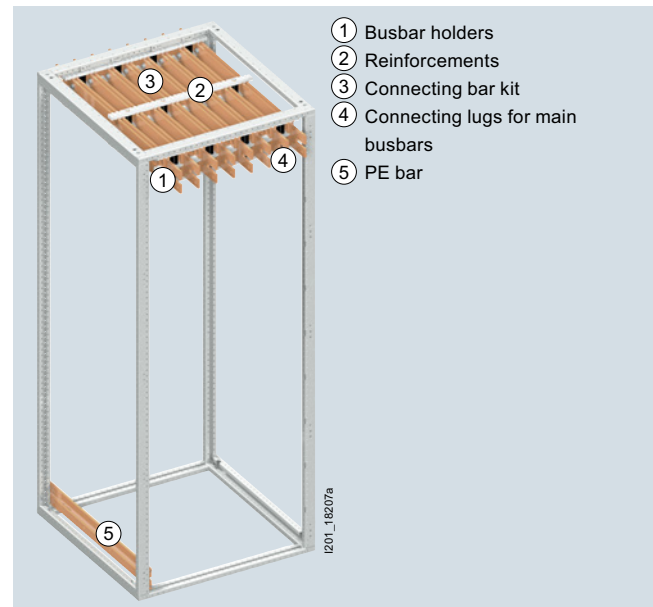
Features

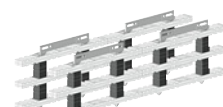
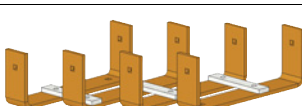
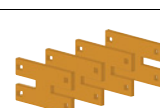
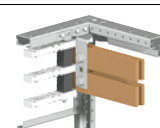
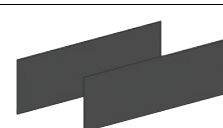
- Compatible busbar profiles

	20 × 10
	30 × 10
	40 × 10
	50 × 10

Configuration

Number of required reinforcements ② as a function of frame widths and rated short-time withstand current.

**Selection and ordering data**

	Configuration	Busbar cross-section mm × mm	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Main busbar at top				
	① Busbar holders - Up to 3200 A - With PE bar connection to frame 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA04	1 unit
	Busbar holders > 3200 A - With PE bar connection to frame 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA60	1 unit
	② Reinforcements	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA37	1 unit
	③ Connecting bar kits - For busbar holders >3200 - Without fasteners	--	8PQ4000-0BA62	1 unit
	④ Connecting lugs - For L1, L2, L3, N or PEN 1 set = 4 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA53 8PQ4000-0BA54 8PQ4000-0BA56 8PQ4000-0BA57	1 unit 1 unit 1 unit 1 unit
	Frame earth PEN - For earthing the frame with PEN systems - One PEN jumper is needed for each frame - Without fasteners 1 pack = 10 units	--	8PQ4000-0BA12	1 unit
	Internal arc barriers - Arcing duration on the main busbar up to 300 ms. - One needed for each side panel 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ9400-0BA21	1/2 units

Busbar Systems

Main busbars

Main busbar at bottom

Features

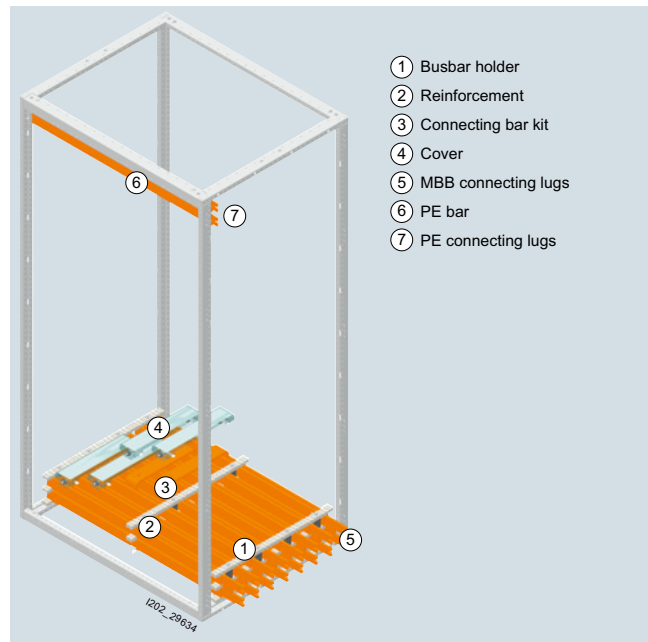
- Compatible busbar profiles



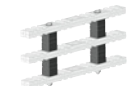
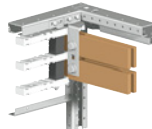
- Up to 3200 A rated current

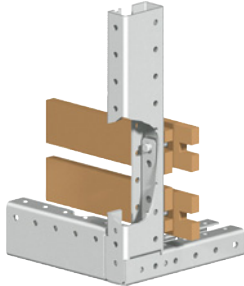
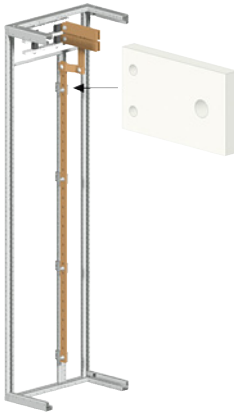
Configuration

- Main busbar at bottom conditionally at least form 2b
- Number of required reinforcements ② as a function of frame widths and rated short-time withstand current.



Selection and ordering data

	Configuration	Busbar cross-section mm × mm	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Main busbar at bottom				
	① Busbar holders - Up to 3200 A - With PE bar connection to frame 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA04	1 unit
	Busbar holders > 3200 A - With PE bar connection to frame 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA60	1 unit
	② Reinforcements	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA37	1 unit
	③ Connecting bar kits - For busbar holders >3200 - Without fasteners	--	8PQ4000-0BA62	1 unit
	④ Covers - For connecting bar kits - One cover per conductor	--	8PQ4000-1BA25	1 unit
 	⑤ Connecting lugs - For L1, L2, L3, N or PEN 1 set = 4 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA53 8PQ4000-0BA54 8PQ4000-0BA56 8PQ4000-0BA57	1 unit 1 unit 1 unit 1 unit
	Frame earth PEN - For earthing the frame with PEN systems - One PEN jumper is needed for each frame - Without fasteners 1 pack = 10 units	--	8PQ4000-0BA12	1 unit
	Upgrade for arcing fault protection - Needed for arcing duration of between 100 ms and 300 ms. - One needed for each side panel 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ9400-0BA21	1/2 units

	Configuration	Busbar cross-section mm × mm	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
PE bar				
	Frame connection 1 pack = 6 units Note The PE bar connection to the frame is included in the holder kit for the main busbar.	--	8PQ4000-0BA82	1 unit
	  Connecting lugs - For PE bar 1 set = 2 units	20 × 5 30 × 5 30 × 10	8PQ4000-0BA52	1 unit
		40 × 5 40 × 10 50 × 10	8PQ4000-0BA67	1 unit
	Holders, insulated 1 set = 4 units		8PQ4000-0BA11	1 unit

Busbar Systems

Main busbars

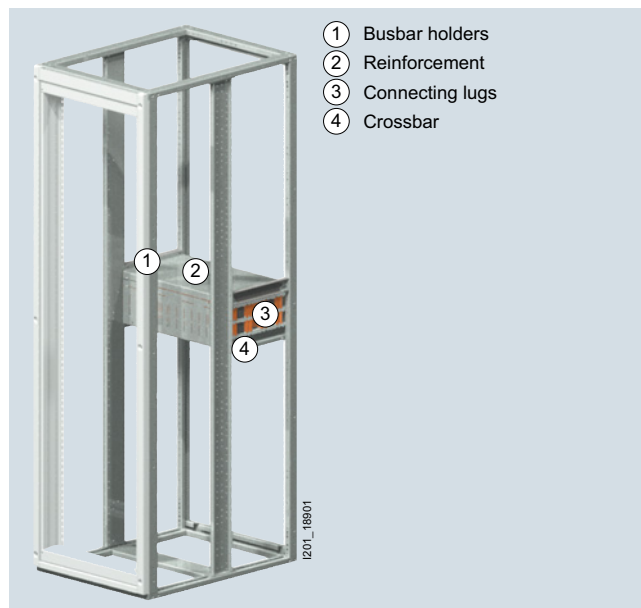
Features

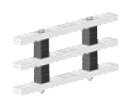
- Compatible busbar profiles

	20 × 10
	30 × 10
	40 × 10
	50 × 10

Configuration

Number of required reinforcements ② as a function of frame widths and rated short-time withstand current.



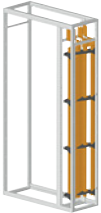
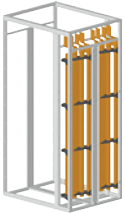
	Configuration	Busbar cross-section mm × mm	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Main busbar at rear				
	① Busbar holders - Up to 3200 A - With PE bar connection to frame 1 set = 2 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA04	1 unit
	② Reinforcements Horizontal bar arrangement	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA37	1 unit
 	③ Connecting lugs - For L1, L2, L3, N or PEN 1 set = 4 units	20 × 10 30 × 10 40 × 10 50 × 10	8PQ4000-0BA53 8PQ4000-0BA54 8PQ4000-0BA56 8PQ4000-0BA57	1 unit 1 unit 1 unit 1 unit
	④ Crossbars - Depth 400 mm 1 set = 2 crossbars	--	8PQ3000-0BA10	1 unit

Overview

Rated currents for vertical distribution busbar, cascaded

The rated short-time withstand current for a vertical distribution busbar system is determined on the basis of the number of bars per phase, cross-section, bar shape and the number of holders. These values refer to normal operating conditions and indoor

installation in accordance with IEC 61439-2, in particular at an ambient temperature of 35°C (24 h average). For different operating conditions, take into account the correction factors according to the configuration manual.

Number of bars per phase	Dimensions mm	Rated current at 35 °C ambient temperature		Number of holders per section and system			
		IP ≤ IP41	IP55	$I_{cw} = 25 \text{ kA}$ $I_{pk} = 52.5 \text{ kA}$	$I_{cw} = 35 \text{ kA}$ $I_{pk} = 73.5 \text{ kA}$	$I_{cw} = 50 \text{ kA}$ $I_{pk} = 105 \text{ kA}$	$I_{cw} = 65 \text{ kA}$ $I_{pk} = 143 \text{ kA}$
1	 30 × 10 40 × 10	910 1100	830 980	4 4	4 4	-- --	-- --
2	 30 × 10 40 × 10	1520 1640	1330 1330	4 4	4 4	4 4	6 6
2 × 2	 30 × 10 40 × 10	3040 3280	2660 2660	-- --	-- --	2 × 4 2 × 4	2 × 4 2 × 4
Profiled busbar	 30 × 30 40 × 30	1280 1510	1060 1210	2 2	3 3	4 4	6 6
2 × profiled busbar	 30 × 30 40 × 30	2560 3020	2120 2420	-- --	-- --	2 × 2 2 × 2	2 × 3 2 × 3

Busbar Systems

Vertical busbars

Rated currents for vertical distribution busbar, non-cascaded

The rated short-time withstand current of a non-cascaded vertical distribution busbar system is determined on the basis of the number of bars per phase, cross-section and number of reinforcements.

These values refer to normal operating conditions and indoor installation in accordance with IEC 60439-2, in particular with reference to an ambient temperature of 35 °C (24 h average). For different operating conditions, take into account the correction factors according to the configuration manual.

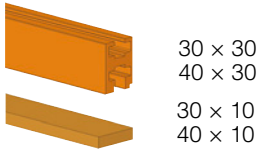
Number of bars per phase	Dimensions mm	Rated current at 35 °C ambient temperature		Number of holders per system					
		IP ≤ IP41	IP55	$I_{cw} = 25 \text{ kA}$ $I_{pk} = 52 \text{ kA}$	$I_{cw} = 35 \text{ kA}$ $I_{pk} = 73 \text{ kA}$	$I_{cw} = 50 \text{ kA}$ $I_{pk} = 105 \text{ kA}$	$I_{cw} = 65 \text{ kA}$ $I_{pk} = 143 \text{ kA}$	$I_{cw} = 85 \text{ kA}$ $I_{pk} = 187 \text{ kA}$	$I_{cw} = 100 \text{ kA}$ $I_{pk} = 220 \text{ kA}$
2	20 × 10	1010	830	2	2	--	--	--	--
	30 × 10	1360	1110	2	2	3	--	--	--
4	20 × 10	1570	1260	2	2	3	4	--	--
	30 × 10	1930	1580	2	2	3	4	4	--
	40 × 10	2300	1880	2	2	2	2	4	4
	50 × 10	2490	2030	2	2	2	2	4	4
2 × 4	20 × 10	3140	2520	2	2	3	4	--	--
	30 × 10	3860	3160	2	2	3	4	4	--
	40 × 10	4600	3760	2	2	2	2	4	4
	50 × 10	4980	4060	2	2	2	2	4	4

Selection and ordering data

Cascaded

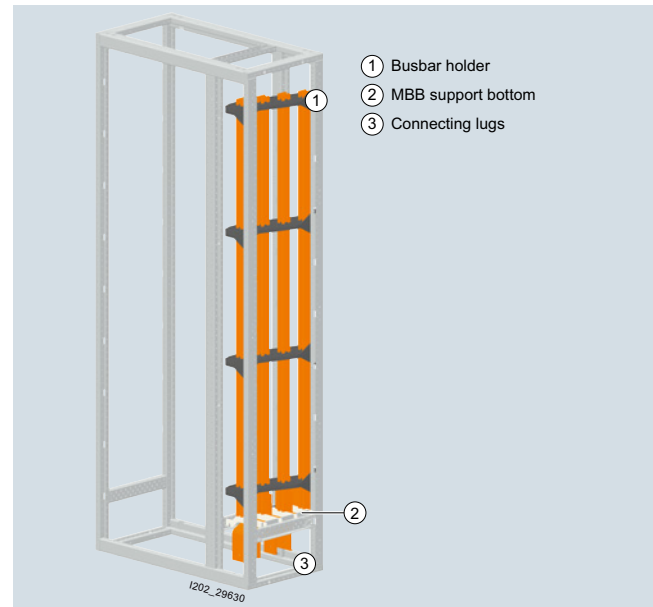
Features

- For mounting on main busbar, top
- Compatible busbar profiles



Configuration

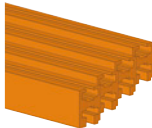
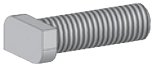
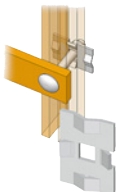
- Number of required reinforcements ① depends on rated short-time withstand current.

**Assembly kits**

	Configuration			Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
Cascaded						
	① Busbar holders					
	Compartment width mm	Busbar dimensions mm × mm				
	200	30 × 30	 Profiled busbar	8PQ4000-0BA32	1 unit	
		30 × 10	 Flat copper			
		40 × 30	 Profiled busbar	8PQ4000-0BA63	1 unit	
40 × 10		 Flat copper				
	② Copper supports			8PQ4000-1BA23	1 unit	
	• For main busbar, bottom					
		③ Connecting lugs				
		• 1 set = 4 units • Without screws, washers and nuts				
	Busbar dimensions mm × mm	Position Vertical busbar	Main busbars	Frame depth mm		
	30 × 30 30 × 10	Right 	Front	400 600, 800	8PQ4000-0BA45 8PQ4000-0BA46	1 unit 1 unit
			Rear	800	8PQ4000-0BA50	1 unit
		Left 	Front	400 600, 800	8PQ4000-0BA73 8PQ4000-0BA72	1 unit 1 unit
			Rear	800	8PQ4000-0BA70	1 unit
	40 × 30 40 × 10	Right 	Front	400 600, 800	8PQ4000-0BA47 8PQ4000-0BA48	1 unit 1 unit
			Rear	800	8PQ4000-0BA51	1 unit
		Left 	Front	400 600, 800	8PQ4000-0BA75 8PQ4000-0BA48	1 unit 1 unit
			Rear	800	8PQ4000-0BA71	1 unit

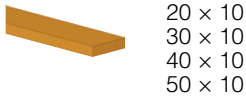
Busbar Systems

Vertical busbars

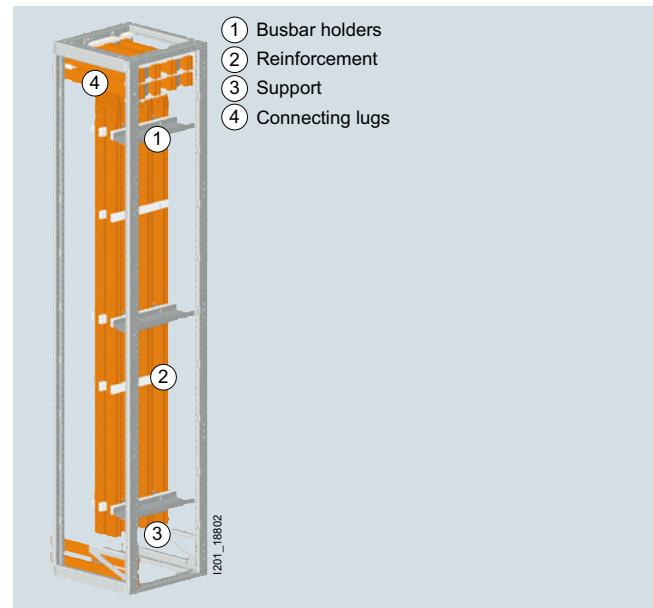
	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	Profiled busbar • 1 set = 4 units		
	Busbar dimensions mm × mm	Length mm	
	30 × 30 40 × 30	1610	1 unit 1 unit
	T-head screw • For use with profiled busbar • 1 pack = 100 units		
	External diameter × Length in mm		
	M10 × 25 M10 × 35	8PQ9500-0BA01 8PQ9500-0BA02	1 unit 1 unit
	Busbar clamps • For use with flat copper connection • For M10 screw • 1 pack = 20 units	8PQ9400-0BA02	1 unit
	Square screws • For use with busbar clamp • 1 pack = 50 units		
	External diameter × Length in mm		
	M10 × 35	8PQ9500-0BA14	1 unit
	M10 × 45	8PQ9500-0BA16	1 unit
	M10 × 55	8PQ9500-1BA36	1 unit
	M10 × 65	8PQ9500-1BA25	1 unit

Non-cascadedFeatures

- For mounting on main busbar, top
- Compatible busbar profiles

Configuration

- Number of required reinforcements ② depends on rated short-time withstand current.



	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Non-cascaded			
	① Busbar holders 1 set = 3 units		
	Compartment width mm	Busbar dimensions mm × mm	
	200	20 × 10 30 × 10 40 × 10 50 × 10	Flat copper
	400	20 × 10 30 × 10 40 × 10 50 × 10	Flat copper
	② Reinforcements		
	Compartment width mm	Busbar dimensions mm × mm	
	--	20 × 10 30 × 10 40 × 10 50 × 10	Flat copper
	③ Supports		
	Compartment width mm		
	200		
	400		
	④ Connecting lugs • 1 set = 4 units • Without screws, washers and nuts		
	Busbar dimensions mm × mm	Position of main busbar	Frame depth mm
	20 × 10	Front	400
	30 × 10	Front	600, 800
		Rear	800
	40 × 10	Front	400
	50 × 10	Front	600, 800
		Rear	800

Busbar Systems

Compact busbars

Overview

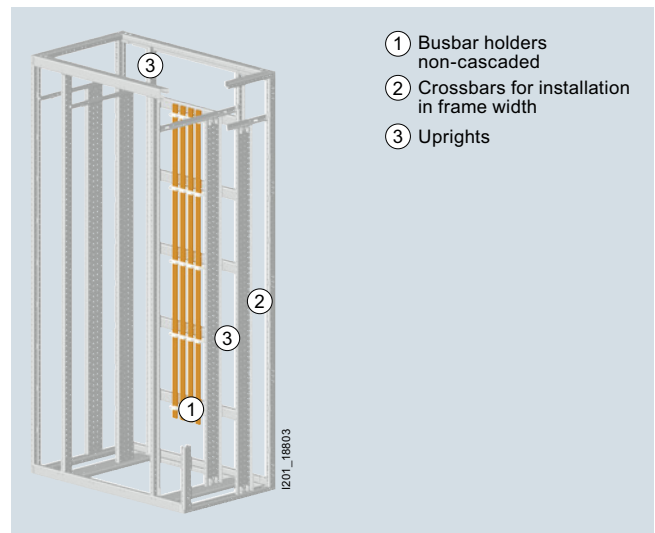
Rated current

Number of bars per phase	Dimensions	Rated current	Holder spacing				
	mm		$I_{cc \text{ eff}} = 5 \text{ kA}$ mm	$I_{cc \text{ eff}} = 10 \text{ kA}$ mm	$I_{cc \text{ eff}} = 15 \text{ kA}$ mm	$I_{cc \text{ eff}} = 20 \text{ kA}$ mm	$I_{cc \text{ eff}} = 25 \text{ kA}$ mm
1	15 × 5	160	600	400	--	--	--
	20 × 5	250	600	600	400	--	--
	30 × 5	400	700	700	450	325	300
	30 × 10	630	600	400	300	250	--

Selection and ordering data

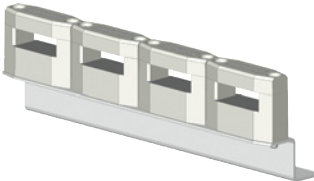
Compact busbar systems, with pole centre distance of 50 mm, can be used in conjunction with the SIKclip rapid wiring assembly system for modular devices.

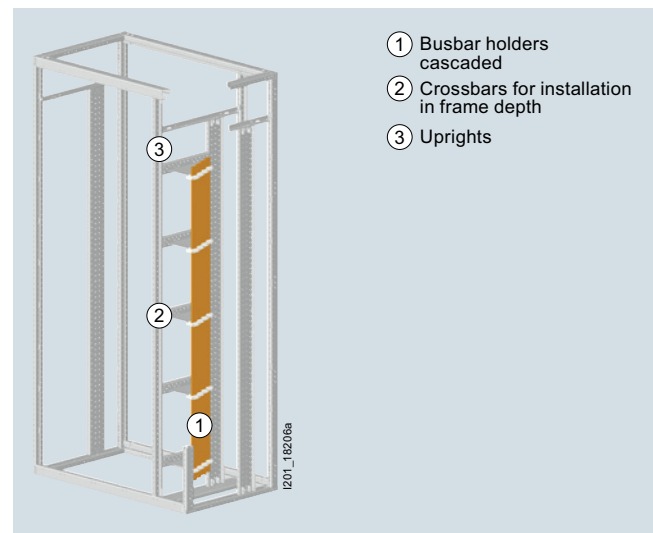
For compact busbar systems, with pole centre distance of 60 mm, a wide range of adapters for SIRIUS and 3VL moulded case circuit breakers is available together with many other accessories.



Compact busbar system, non-cascaded

Compact busbar system with 50 mm pole centre distance

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
Non-cascaded				
	① Linear universal busbar holders			
	• 4-pole • Rectangular profile • Height: 200 mm			
	Busbar dimensions			
	mm x mm			
	15 x 5 20 x 5 30 x 5		8GF5762	1 unit
	30 x 10		8GF5763	1 unit
	② Crossbars			
	1 set = 2 units			
	For frame width in mm	Crossbar length in mm		
	400	350	8PQ3000-0BA12	1 unit
	600	550	8PQ3000-0BA71	1 unit
	800	750	8PQ3000-0BA72	1 unit
	1000	950	8PQ3000-0BA84	1/2 units
1200	1150	8PQ3000-0BA85	1/2 units	



Compact busbar system, cascaded

Compact busbar system with 50 mm pole centre distance

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Cascaded			
	① Linear universal busbar holders • 4-pole • Rectangular profile • Height: 200 mm		
	Busbar dimensions mm × mm		
	15 × 5	8GF5760	1 unit
	20 × 5		
	30 × 5		
	30 × 10	8GF5761	1 unit
	② Crossbars 1 set = 2 units		
	• Frame depth without uprights		
	For frame depth in mm	Crossbar length in mm	
	400	300	8PQ3000-0BA10 1 unit
	600	500	8PQ3000-1BA24 1/2 units
	800	700	8PQ3000-1BA25 1/2 units
	• Frame depth with side uprights		
	For frame depth in mm	Crossbar length in mm	
	600	300	8PQ3000-0BA10 1 unit
	800		
60 mm system			
	Busbar holders • Pole centre distance: 60 mm • Busbar dimensions (mm × mm): 15 × 5, 20 × 5, 30 × 5, 30 × 10 • Width: 20 mm • Arrangement: Non-cascaded		
	Versions		
	3-pole	8US1923-3AA01	10 units
	4-pole	8US1923-4AA00	10 units
	Busbar holder end covers Pole centre distance: 60 mm		
	Versions		
	3-pole	8US1922-1AC00	10 units
	4-pole	8US1922-1AB00	1 unit

Busbar Systems

Busbar connection fasteners

Overview

To ensure the reliable connection of the copper busbars, it is important to select the right fasteners in terms of quality, size, suitability and finish.

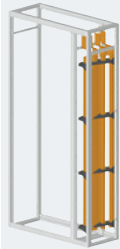
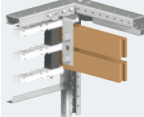
The table below provides an overview of the various copper busbar / fastener combination options, so as to facilitate selection and ordering.

Selection and ordering data

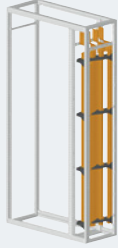
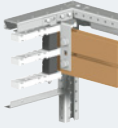
The stated quantity of fasteners applies to a 4-pole arrangement.

Rules for calculation of the screw length for different busbar dimensions:

- Length of screw with M8 threading = busbars profile + 15 mm
- Length of screw with M10, M12 threading = busbars profile + 20 mm

Configuration		Profile	Cross-section mm × mm	Quan- tity	Article No.	Description
Main busbar system with two bars per phase						
Main busbar to:		Profiled busbar 	30 × 30 40 × 30	4	8PQ9500-0BA14	Non-cascaded square screw DIN 603 - M10 x 35
				8	8PQ9500-0BA01	T-head screw M10 x 25
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
		Flat copper 	2 × 30 × 10	4	8PQ9500-0BA14	Non-cascaded square screw DIN 603 - M10 x 35
				8	8PQ9500-1BA36	Non-cascaded square screw DIN 603 - M10 x 55
				8	8PQ9400-0BA02	Busbar clamp
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
	2 × 40 × 10	4	8PQ9500-0BA14	Non-cascaded square screw DIN 603 - M10 x 35		
		8	8PQ9500-1BA25	Non-cascaded square screw DIN 603 - M10 x 65		
		8	8PQ9400-0BA02	Busbar clamp		
		12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10		
		12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10		
			Flat copper 	2 × 20 × 10	12	8PQ9500-0BA14
2 × 40 × 10	12			8PQ9500-0BA60	Clamping washer DIN 6796 - 10	
	12			8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10	
4 × 40 × 10	8		8PQ9500-0BA14	Non-cascaded square screw DIN 603 - M10 x 35		
	4 × 50 × 10		8	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45	
			16	8PQ9500-0BA60	Clamping washer DIN 6796 - 10	
16	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10				
Section-section	L1...3, N (PEN) 	Flat copper 	2 × 20 × 10 2 × 30 × 10	8 8 8	8PQ9500-0BA16 8PQ9500-0BA60 8PQ9500-0BA05	Non-cascaded square screw DIN 603 - M10 x 45 Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10
PEN jumper	PEN (per frame) 	Flat copper 	--	2 1 1 1	8PQ9500-0BA34 8PQ9500-0BA14 8PQ9500-0BA60 8PQ9500-0BA05	Self-tapping screw DIN 7500 - M6 x 10 Non-cascaded square screw DIN 603 - M10 x 35 Clamping washer DIN 6796 - 10 Hexagonal nut ISO 4032 - M10

Busbar connection fasteners

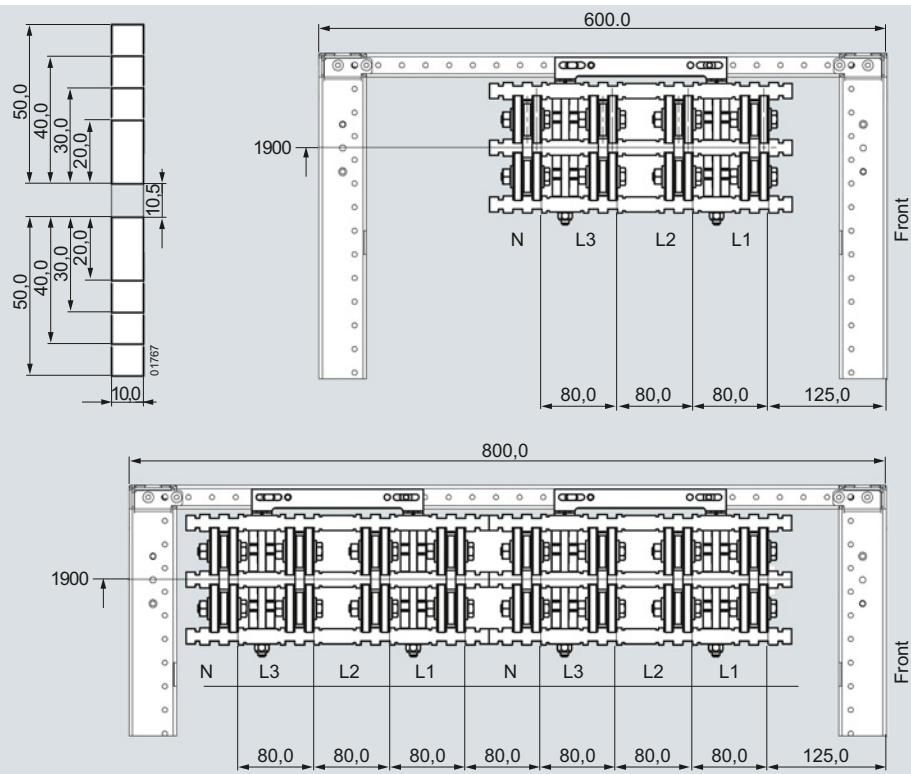
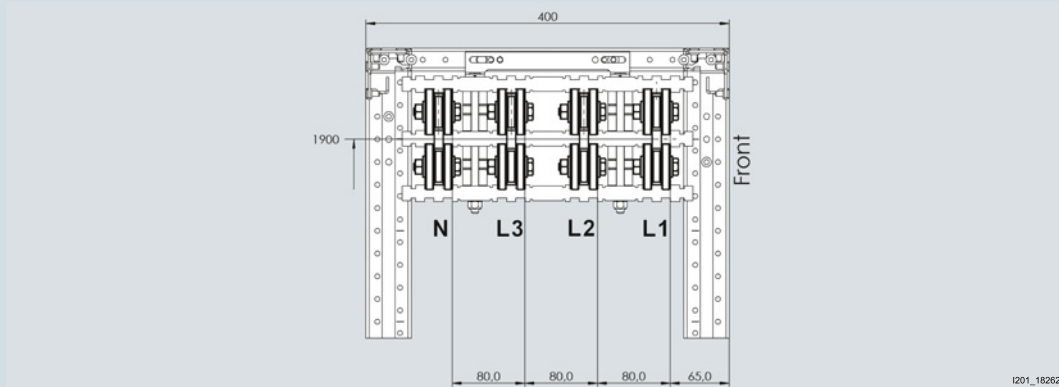
Configuration		Profile	Cross-section mm × mm	Quantity	Article No.	Description
Main busbar system with four busbars per phase						
Main busbar to:	Vertical distribution busbar, cascaded 	Profiled busbar 	30 × 30 40 × 30	4	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45
				8	8PQ9500-0BA01	T-head screw M10 x 25
				8	8PQ9400-0BA02	Busbar clamp
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
		Flat copper 	2 × 30 × 10	4	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45
				8	8PQ9500-1BA36	Non-cascaded square screw DIN 603 - M10 x 55
				8	8PQ9400-0BA02	Busbar clamp
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
		2 × 40 × 10	4	8	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45
				8	8PQ9500-1BA25	Non-cascaded square screw DIN 603 - M10 x 65
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
	Vertical distribution busbar, non-cascaded 	Flat copper 	2 × 20 × 10 2 × 40 × 10	12	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45
				12	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				12	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
		4 × 40 × 10 4 × 50 × 10	16	16	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45
				16	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				16	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
Section-section	L1...3, N (PEN) 	Flat copper 	4 × 20 × 10 4 × 30 × 10	8	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45
				8	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				8	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
		4 × 40 × 10 4 × 50 × 10	16	16	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45
				16	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				16	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10
PEN jumper	PEN (per frame) 	Flat copper 	--	2	8PQ9500-0BA34	Self-tapping screw DIN 7500 - M6 x 10
				1	8PQ9500-0BA16	Non-cascaded square screw DIN 603 - M10 x 45
				1	8PQ9500-0BA60	Clamping washer DIN 6796 - 10
				1	8PQ9500-0BA05	Hexagonal nut ISO 4032 - M10

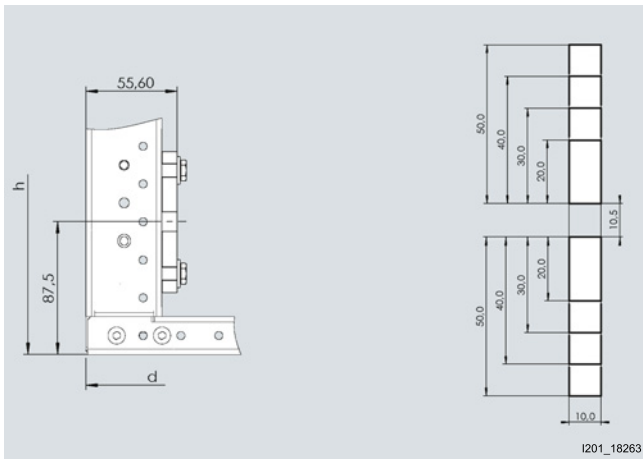
Busbar Systems

Mechanical dimensions

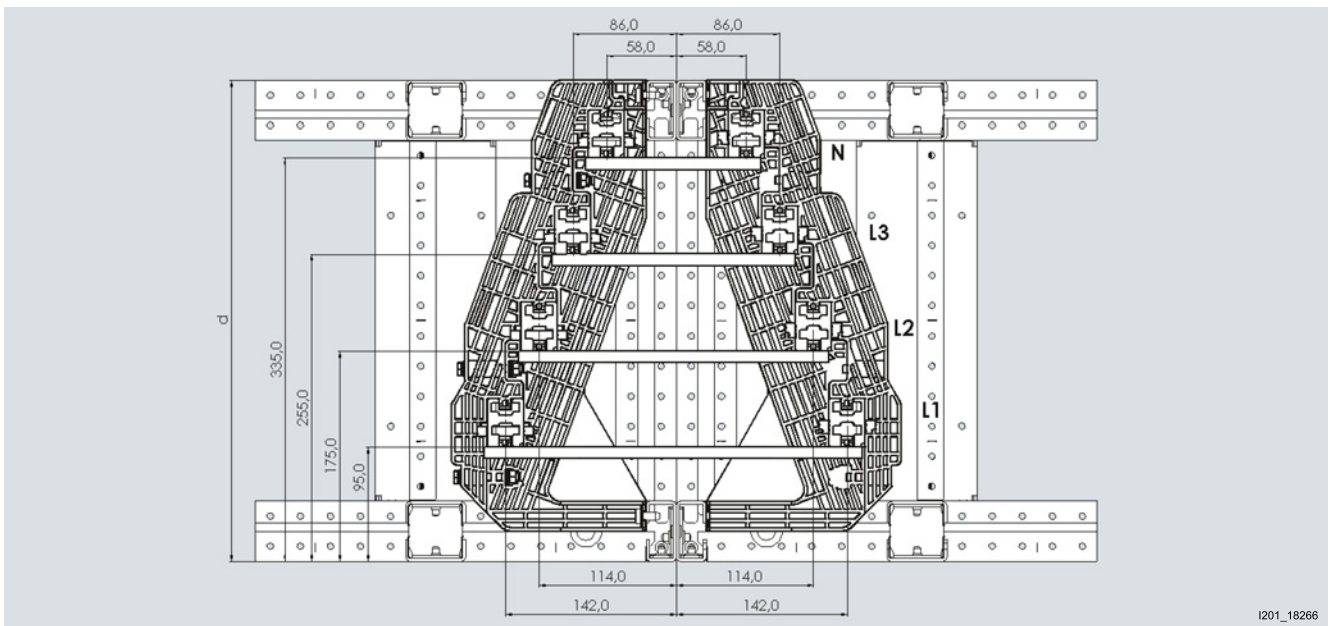
Overview

Main busbar at top

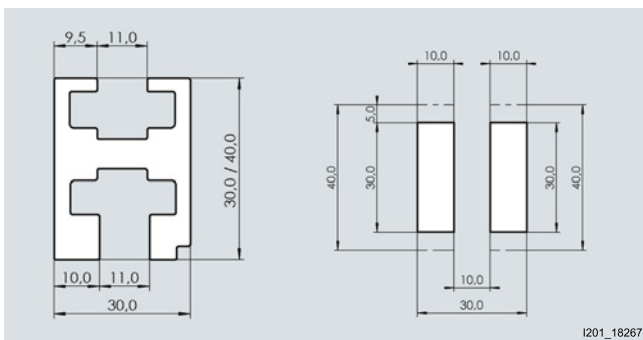


PE bar

I201_18263

Vertical busbar, cascaded

I201_18266

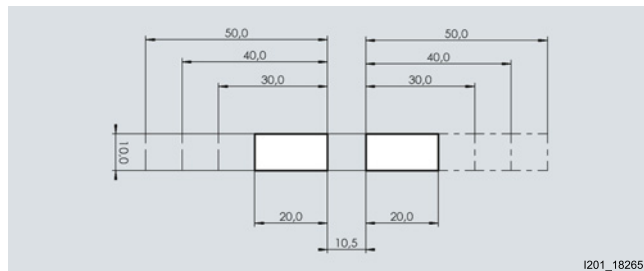
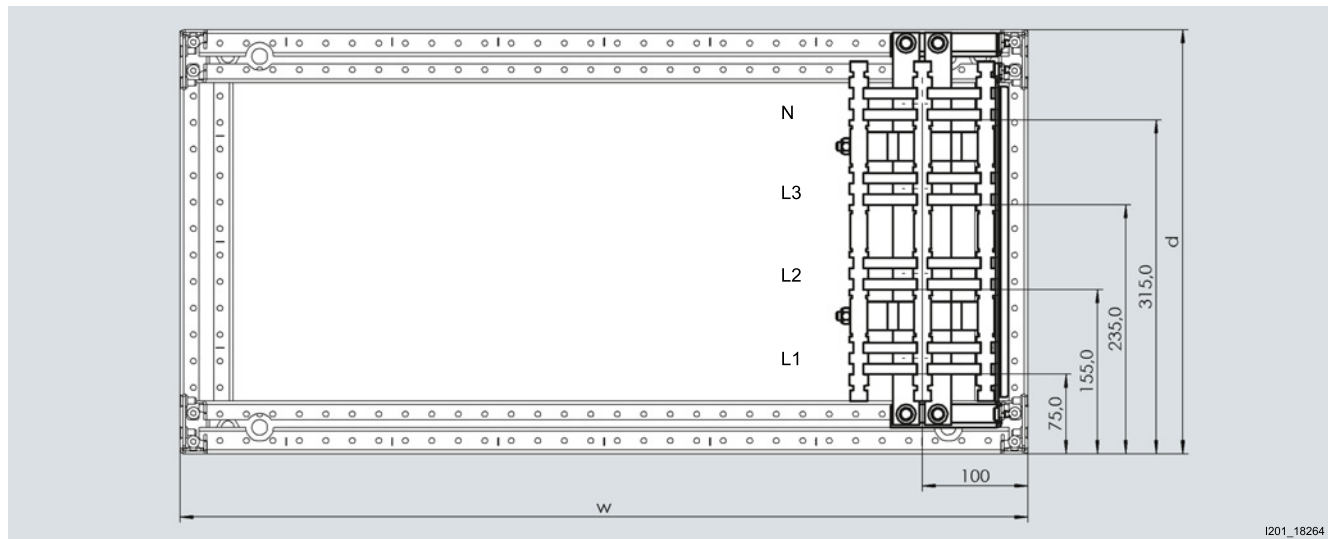


I201_18267

Busbar Systems

Mechanical dimensions

Vertical busbar, non-cascaded





4/2	3WL air circuit breakers
4/12	3VL moulded case circuit breakers
4/26	3VT moulded case circuit breakers
4/28	3K switch disconnectors
4/31	3NP1 fuse switch disconnectors
4/32	3NJ4 in-line fuse switch disconnectors
4/35	3NJ6 in-line switch disconnectors with fuses
4/40	Modular devices
4/41	SIKclip wiring system
4/42	Mounting plates
4/44	19" racks
4/45	Mechanical dimensions

For further technical product information:

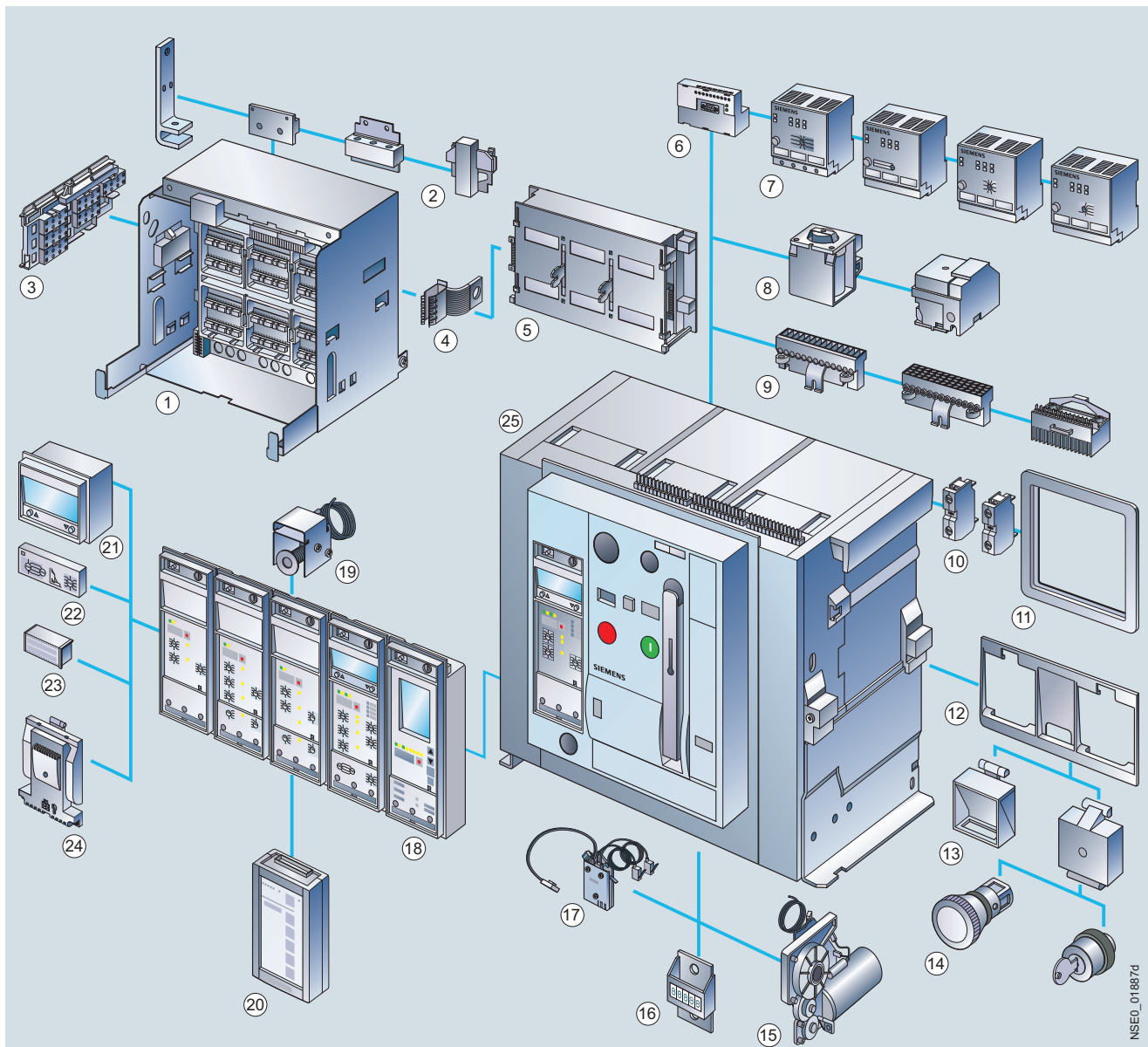
Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
 Application example
 Certificate
 Characteristic
 Download
 FAQ
 Manual
 Product note
 Software archive
 Technical data

Assembly Kits

3WL air circuit breakers

Overview



NSE0_01887d

- | | |
|---|--|
| ① Guide frame | ⑭ EMERGENCY-STOP pushbutton, key operated |
| ② Main circuit connection front, flange, horizontal, vertical | ⑮ Motorized operating mechanism |
| ③ Position signalling switch | ⑯ Operating cycles counters |
| ④ Ground connection, leading | ⑰ Breaker Status Sensor (BSS) |
| ⑤ Shutters | ⑱ Protective device with device holder, Electronic Trip Unit (ETU) |
| ⑥ COM15 PROFIBUS module or COM16 MODBUS module | ⑲ Remote reset solenoid |
| ⑦ External Cubicle BUS modules | ⑳ Breaker Data Adapter (BDA Plus) |
| ⑧ Closing coil, auxiliary release | ㉑ Four-line display |
| ⑨ Auxiliary conductor plug-in system | ㉒ Ground-fault protection module |
| ⑩ Auxiliary switch block | ㉓ Rating plug |
| ⑪ Door sealing frame | ㉔ Measurement function module |
| ⑫ Interlocking set for mechanical ON/OFF | ㉕ Air circuit breaker |
| ⑬ Transparent panel, function insert | |

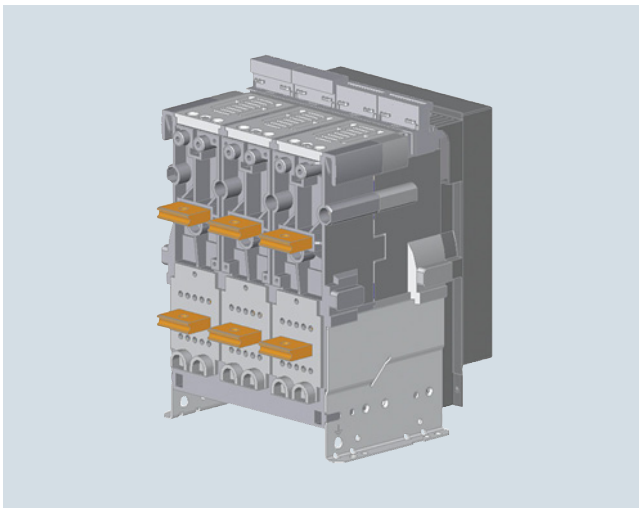
3WL air circuit breakers

Size	I		II		
Type	3WL11		3WL12		
Switching capacity class	N	S	N	S	H
Rated short-circuit breaking capacity					
Rated operating voltage U_e up to 415 V AC					
I_{cu}	kA 55	66	66	80	100
I_{cs}	kA 55	66	66	80	100
I_{cm}	kA 121	145	145	176	220
Rated operating voltage U_e up to 500 V AC					
I_{cu}	kA 55	66	66	80	100
I_{cs}	kA 55	66	66	80	100
I_{cm}	kA 121	145	145	176	220
Rated operating voltage U_e up to 690 V AC					
I_{cu}	kA 42	50	50	75	85
I_{cs}	kA 42	50	50	75	85
I_{cm}	kA 88	105	105	165	187
Rated operating voltage U_e up to 1000 V/1150 V AC					
I_{cu}	kA --	--	--	--	50
I_{cs}	kA --	--	--	--	50
I_{cm}	kA --	--	--	--	105
Rated short-time withstand current I_{cw} of the circuit breakers³⁾					
0.5 s	kA 55	66	66	80	100
1 s	kA 42	50	55	66	80
2 s	kA 29.5	35	39	46	65 ^{1)/70²⁾}
3 s	kA 24	29	32	44	50 ^{1)/65²⁾}
Short-circuit breaking capacity I_{cc} of the non-automatic air circuit breakers					
Up to 500 V AC	kA 55	66	66	80	100
Up to 690 V AC	kA 42	50	50	75	85
Up to 1000 V /1150 V AC	kA --	--	--	--	50 ⁴⁾

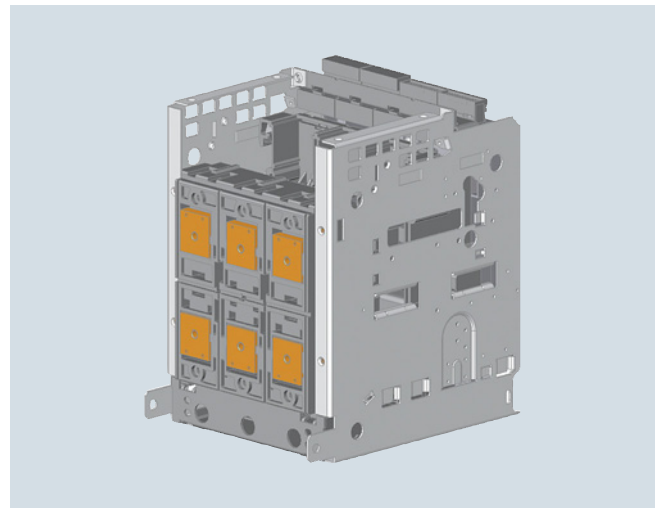
1) Size II with $I_{n \max.} \leq 2500$ A.2) Size II with $I_{n \max.} = 3200$ A and $I_{n \max.} = 4000$ A.3) At a rated voltage of ≥ 690 V the I_{cw} value of the circuit breaker cannot be greater than the I_{cu} value or I_{cs} value at 690 V.4) Rated operating voltage $U_e = 1150$ V.

Size	I			II							
Type	Up to	3WL11 10	3WL11 12	3WL11 16	3WL12 08	3WL12 10	3WL12 12	3WL12 16	3WL12 20	3WL12 25	3WL12 32
Minimum phase size	Unit(s)	1	2	2	1	1	2	2	3	2	3
Busbars, Cu	mm ²	60 × 10	40 × 10	50 × 10	50 × 10	60 × 10	40 × 10	50 × 10	50 × 10	100 × 10	100 × 10
bare or insulated, black											

For further information, see the technical documents on 3WL air circuit breakers



3WL air circuit breaker with horizontal connections for fixed-mounted versions



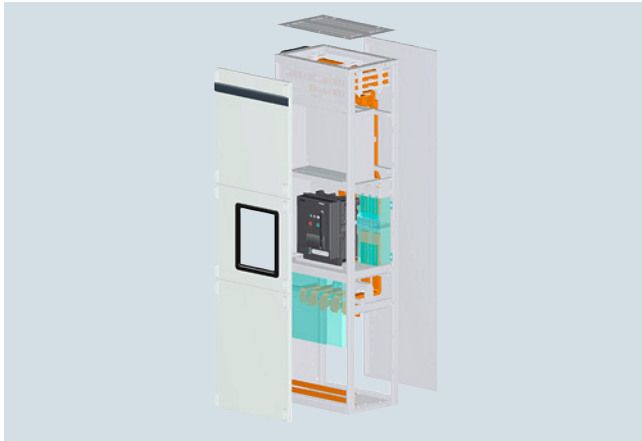
3WL air circuit breaker with flange connections for draw-out versions

Assembly Kits

3WL air circuit breakers

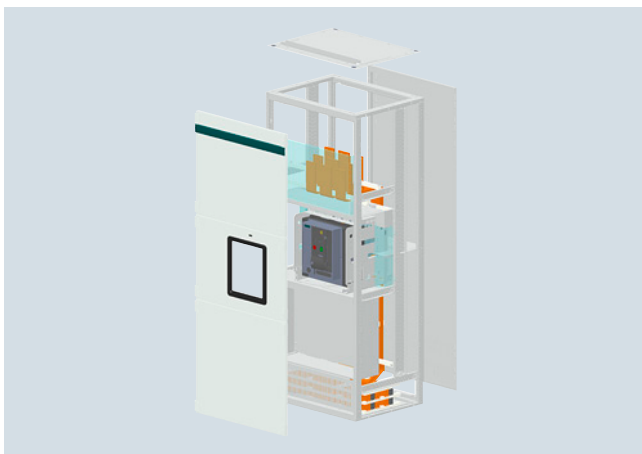
Incoming feeder bays

Main busbar at top



Size	I_n	Rated current I_n ventilated in A							Rated current I_n non-ventilated in A						
		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	1600	1600	1590	1550	1510	1460	1420	1370	1340	1310	1270	1240	1200	1170
	2000	2000	2000	1990	1940	1890	1830	1780	1720	1680	1640	1590	1550	1510	1460
II	2000	2000	2000	2000	2000	2000	2000	2000	1960	1920	1870	1820	1780	1730	1670
	3200	2850	2790	2720	2650	2580	2510	2430	2260	2210	2160	2100	2050	1990	1930
III	4000	4000	4000	4000	4000	3950	3870	3780	3230	3150	3080	3000	2920	2840	2750

Main busbar at bottom



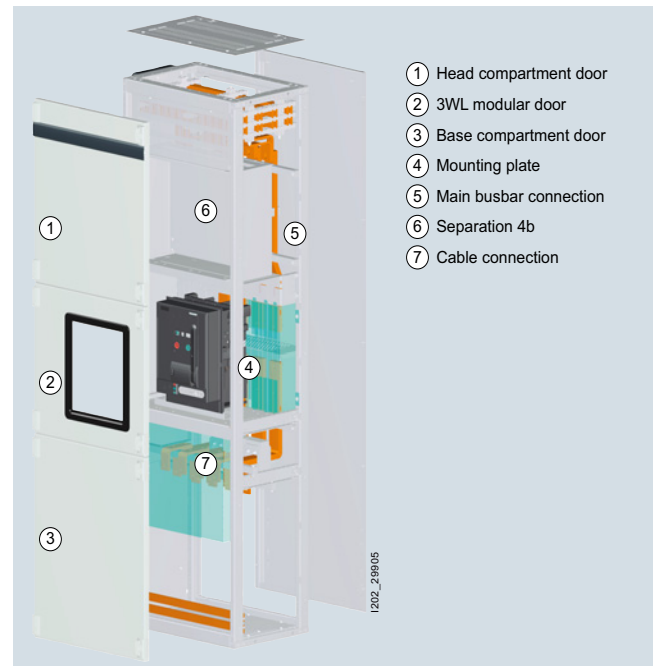
Size	I_n	Rated current I_n ventilated in A							Rated current I_n non-ventilated in A						
		20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C	20 °C	25 °C	30 °C	35 °C	40 °C	45 °C	50 °C
I	1600	1540	1500	1470	1430	1390	1350	1310	1390	1350	1320	1290	1240	1190	1140
	2000	1930	1880	1840	1790	1740	1690	1640	1710	1670	1630	1590	1530	1470	1410
II	2000	2000	2000	2000	2000	1990	1920	1830	2000	1950	1880	1820	1750	1680	1610
	3200	2710	2640	2570	2490	2400	2300	2200	2320	2250	2180	2100	2030	1950	1860

Main busbar at top**Features**

- Combined 3-pole/4-pole assembly kits
- Incl. copper drawings

Configuration

- Separation 4b is recommended

**Selection and ordering data**

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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① Head compartment doors

Size	Width mm	Height mm	Head compartment door	IP55 upgrade	
I	600	675	8PQ2067-6BA01	8PQ2067-6BA02	
II	800	675	8PQ2067-8BA01	8PQ2067-8BA02	
III	1000	675	8PQ2067-1BA01	8PQ2067-1BA02	

② Modular doors

- Door sealing frame 3WL9111-0AP01-0AA0 suitable for IP4X
- Protective cover 3WL9111-0AP02-0AA0 suitable for IP55



Size	Width mm	Height mm	Modular door IP4X	Modular door IP55	IP55 upgrade
I	600	550	8PQ2055-6BA16	8PQ2055-6BA17	8PQ2055-6BA06
II	800	550	8PQ2055-8BA08	8PQ2055-8BA10	8PQ2055-8BA06
III	1000	550	8PQ2055-1BA03	8PQ2055-1BA04	8PQ2055-1BA06

③ Base compartment doors

Size	Width mm	Height mm	Base compartment doors	IP55 upgrade	
I	600	750	8PQ2075-6BA01	8PQ2075-6BA03	
II	800	750	8PQ2075-8BA01	8PQ2075-8BA03	
III	1000	750	8PQ2075-1BA01	8PQ2075-1BA02	

Assembly Kits

3WL air circuit breakers

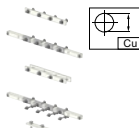
Configuration	Article No. www.siemens.com/product?Article No.
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④ Mounting plate



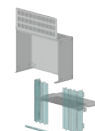
Size	Width mm	Height mm	Mounting plate
I	600	550	8PQ6000-5BA26
II	800	550	8PQ6000-5BA24
III	1000	550	8PQ6000-5BA23

⑤ Main busbar connection



Size	Width mm	Rated current A	Mechanical system
I	600	2000	8PQ6000-6BA75
II	800	3200	8PQ6000-6BA76
III	1000	4000	8PQ6000-5BA33

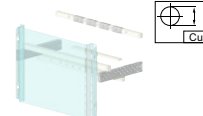
⑥ Separation 4b



Size	Width mm	Depth mm	Position of main busbar	Separation
I	600	400	Top (front)	8PQ5000-4BA28
		600	Top (front)	8PQ5000-4BA30
		800	Top (front)	8PQ5000-4BA31
II	800	600	Top (front)	8PQ5000-4BA32
		800	Top (front)	8PQ5000-4BA33
III	1000	800	Top (double)	8PQ5000-3BA83

⑦ Cable connection

- Practically orientated number of connection points
- Suitable for transformer installation



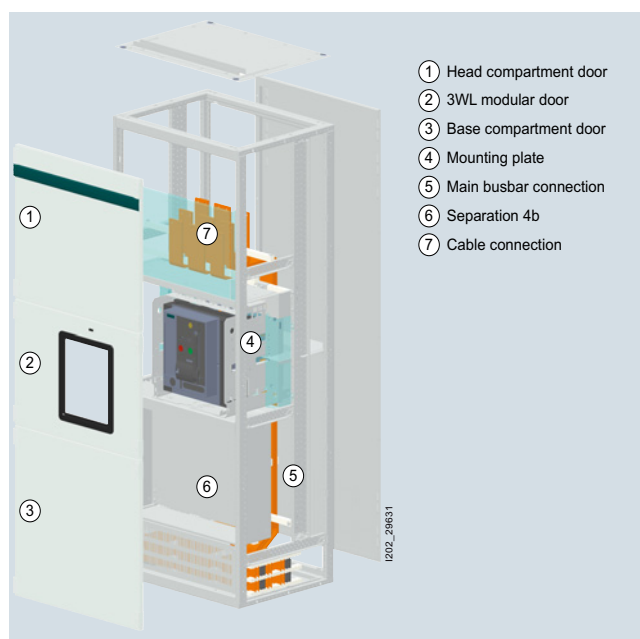
Size	Compartment width mm	Rated current A	Installation type	Mechanical system
I	600	2000	Fixed	8PQ6000-5BA81
			Draw-out	8PQ6000-5BA82
II	800	3200	Fixed	8PQ6000-5BA83
			Draw-out	8PQ6000-5BA83
III	1000	4000	Fixed	8PQ6000-5BA84
			Draw-out	8PQ6000-5BA84

Main busbar at bottom**Features**

- Combined 3-pole/4-pole assembly kits
- Incl. copper drawings

Configuration

- Separation 4b is recommended

**Selection and ordering data**

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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① Head compartment doors

Size	Width mm	Height mm	Head compartment door	IP55 upgrade	
I	600	675	8PQ2067-6BA01	8PQ2067-6BA02	
II	800	675	8PQ2067-8BA01	8PQ2067-8BA02	

② 3WL modular doors

- Door sealing frame 3WL9111-0AP01-0AA0 suitable for IP4X
- Protective cover 3WL9111-0AP02-0AA0 suitable for IP55



Size	Width mm	Height mm	Modular door IP4X	Modular door IP55	IP55 upgrade
I	600	550	8PQ2055-6BA16	8PQ2055-6BA17	8PQ2055-6BA06
II	800	550	8PQ2055-8BA08	8PQ2055-8BA10	8PQ2055-8BA06

③ Base compartment doors

Size	Width mm	Height mm	Base compartment door	IP55 upgrade	
I	600	750	8PQ2075-6BA01	8PQ2075-6BA03	
II	800	750	8PQ2075-8BA01	8PQ2075-8BA03	

Assembly Kits

3WL air circuit breakers

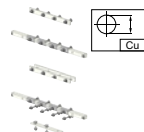
Configuration	Article No. www.siemens.com/ product?Article No.
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④ Mounting plate



Size	Width mm	Height mm	Mounting plate
I	600	550	8PQ6000-5BA26
II	800	550	8PQ6000-5BA24

⑤ Main busbar connection



Size	Width mm	Rated current A	Mechanical system
I	600	2000	8PQ6000-6BA75
II	800	3200	8PQ6000-6BA76

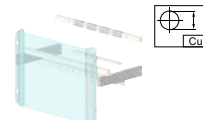
⑥ Separation 4b



Size	Width mm	Depth mm	Position of main busbar	Separation
I	600	400	Bottom (front)	8PQ5000-4BA34
		600	Bottom (front)	8PQ5000-4BA35
		800	Bottom (front)	8PQ5000-4BA36
II	800	600	Bottom (front)	8PQ5000-4BA37
		800	Bottom (front)	8PQ5000-4BA38

⑦ Cable connection

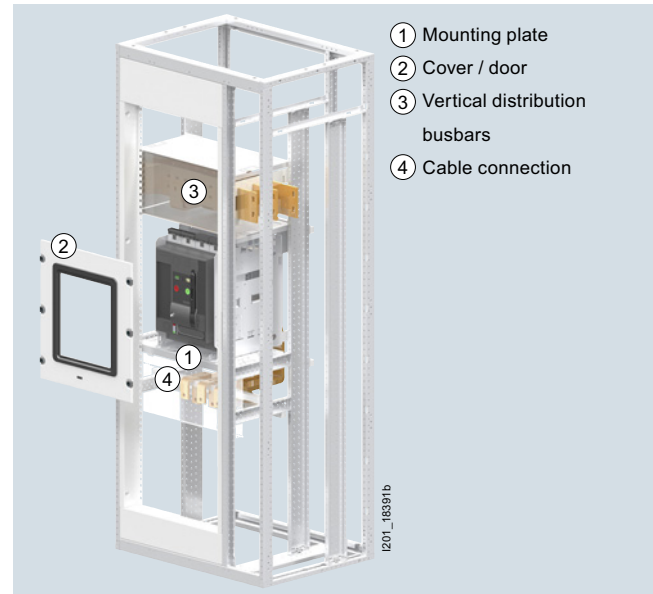
- Practically orientated number of connection points
- Suitable for transformer installation



Size	Compartment width mm	Rated current A	Installation type	Mechanical system
I	600	2000	Fixed	8PQ6000-5BA81
			Draw-out	8PQ6000-5BA82
II	800	3200	Fixed	8PQ6000-5BA83
			Draw-out	8PQ6000-5BA83

Vertical busbar connectionConfiguration

The 3WL 1240 circuit breaker can be installed only in 800 mm deep frames.

**Selection and ordering data**Configuration

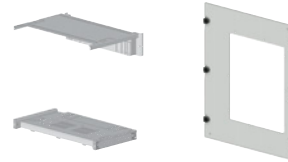
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[www.siemens.com/
product?Article No.](http://www.siemens.com/product?ArticleNo.)

Article No.

[www.siemens.com/
product?Article No.](http://www.siemens.com/product?ArticleNo.)**Draw-out and fixed versions with cover**

- Door sealing frame 3WL9111-0AP01-0AA0 suitable for IP4X



Size	Compartment width mm	No. of poles	Minimum depth mm	Height mm	① Mounting plate	② Cover
I	600	3	600	550	8PQ6000-3BA31	8PQ2055-6BA05
	800	4	600		8PQ6000-3BA31	8PQ2055-6BA07
		3/4	600		8PQ6000-3BA32	8PQ2055-8BA04
II	600	3	600	550	8PQ6000-3BA31	8PQ2055-6BA05
	800	3	600		8PQ6000-3BA32	8PQ2055-8BA07
		4	600		8PQ6000-3BA32	8PQ2055-8BA05

Draw-out and fixed versions with modular door

- Door sealing frame 3WL9111-0AP01-0AA0 suitable for IP4X
- Protective cover 3WL9111-0AP02-0AA0 suitable for IP55



Size	Compartment width mm	No. of poles	Minimum depth mm	Height mm	① Mounting plate	② Modular door IP4X	② Modular door IP55
I	400	3	400	550	8PQ6000-5BA25	8PQ2055-4BA12	--
	600	3/4	400		8PQ6000-5BA26	8PQ2055-6BA16	8PQ2055-6BA17
	800	3/4	600		8PQ6000-5BA24	8PQ2055-8BA08	8PQ2055-8BA10

Assembly Kits

3WL air circuit breakers

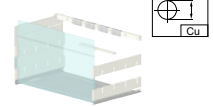
Selection and ordering data

Configuration

 Article No.
[www.siemens.com/
product?Article No.](http://www.siemens.com/product?ArticleNo.)

3WL connecting terminal kit

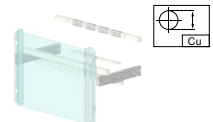
③ Vertical distribution busbars



Size	Enclosure	3WL rated current	Compartment width mm	Installation type	Height		Mechanical system
		A			Above circuit breaker mm	Below circuit breaker mm	
I	Modular door	1600	400 ¹⁾	Fixed	250	300	8PQ6000-5BA48
			600	Draw-out	250	300	8PQ6000-5BA50
				Fixed	250	300	8PQ6000-5BA51
			600	Draw-out	250	300	8PQ6000-5BA52
	Cover	1600	600	Fixed	250	300	8PQ6000-5BA45
				Draw-out	250	300	8PQ6000-5BA45
			800	Fixed	250	300	8PQ6000-5BA46
				Draw-out	250	300	8PQ6000-5BA46
	Modular door	2000	400 ¹⁾	Fixed	300	350	8PQ6000-7BA05
			600	Draw-out	300	350	8PQ6000-7BA06
				Fixed	300	350	8PQ6000-7BA07
			600	Draw-out	300	350	8PQ6000-7BA08
	Cover	2000	600	Fixed	300	350	8PQ6000-7BA03
				Draw-out	300	350	8PQ6000-7BA03
			800	Fixed	300	350	8PQ6000-7BA04
				Draw-out	300	350	8PQ6000-7BA04
II	Modular door	2000	800	Fixed	300	350	8PQ6000-5BA53
				Draw-out	300	350	8PQ6000-5BA53
		3200	800	Fixed	300	350	8PQ6000-5BA53
				Draw-out	300	350	8PQ6000-5BA53
	Cover	2000	800	Fixed	300	350	8PQ6000-5BA47
				Draw-out	300	350	8PQ6000-5BA47
		3200	800	Fixed	300	350	8PQ6000-5BA47
				Draw-out	300	350	8PQ6000-5BA47

④ Cable connection

- To be able to anchor, bend and connect the cables it is necessary to leave enough space for the assembly operations.
- Practically orientated number of connection points
- Suitable for transformer installation



Size	Enclosure	3WL rated current A	Compartment width mm	Installation type	Height mm	Mechanical system
I	Modular door	2000	400 ¹⁾	Fixed	425	8PQ6000-5BA78
				Draw-out	425	8PQ6000-5BA80
		600	Fixed	425	8PQ6000-5BA81	
			Draw-out	425	8PQ6000-5BA82	
	Cover	2000	600	Fixed	250	8PQ6000-5BA75
				Draw-out	250	8PQ6000-5BA75
		800	Fixed	250	8PQ6000-5BA76	
			Draw-out	250	8PQ6000-5BA76	
II	Modular door	2000	800	Fixed	425	8PQ6000-5BA83
				Draw-out	425	8PQ6000-5BA83
		3200	800	Fixed	425	8PQ6000-5BA83
				Draw-out	425	8PQ6000-5BA83
	Cover	2000	800	Fixed	400	8PQ6000-5BA77
				Draw-out	400	8PQ6000-5BA77
		3200	800	Fixed	350	8PQ6000-5BA77
				Draw-out	350	8PQ6000-5BA77

¹⁾ 3-pole corresponding to circuit breaker assembly kit

Configuration

Article No.
[www.siemens.com/
product?Article No.](http://www.siemens.com/product?ArticleNo.)**Accessories****Busbar holders**

1 set = 4 holders



Size	Number of poles	Width in mm	
I	3/4	600	8PQ6000-4BA35
II	3	600	8PQ6000-4BA36
I	3/4	800	8PQ6000-4BA37
II	3/4	800	8PQ6000-4BA38
III	3/4	1000	8PQ6000-4BA40

Busbar connection

For use with SIVACON 8PS



Size	Number of poles	Width in mm	Mechanical system
I	3/4	600	8PQ3000-1BA70
II	3	600	
I	3/4	800	8PQ3000-1BA71
II	3/4	800	
III	3/4	1000	8PQ3000-1BA72

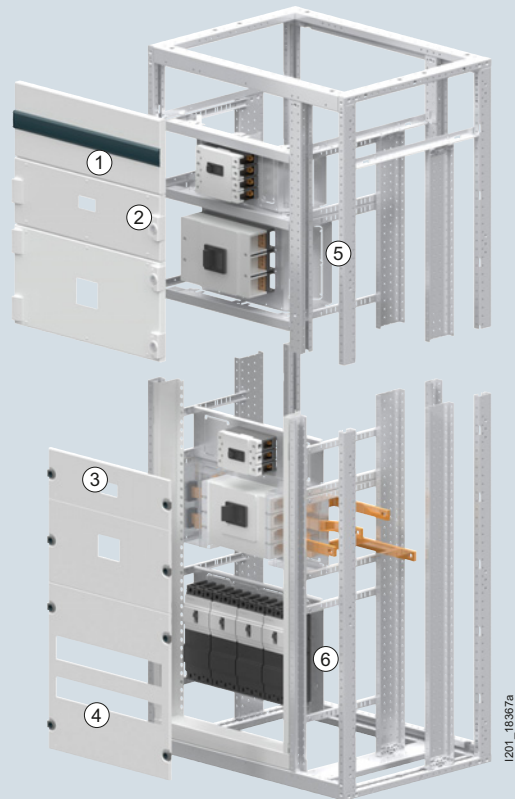
Assembly Kits

3VL Moulded Case Circuit Breakers

General data

Overview

4



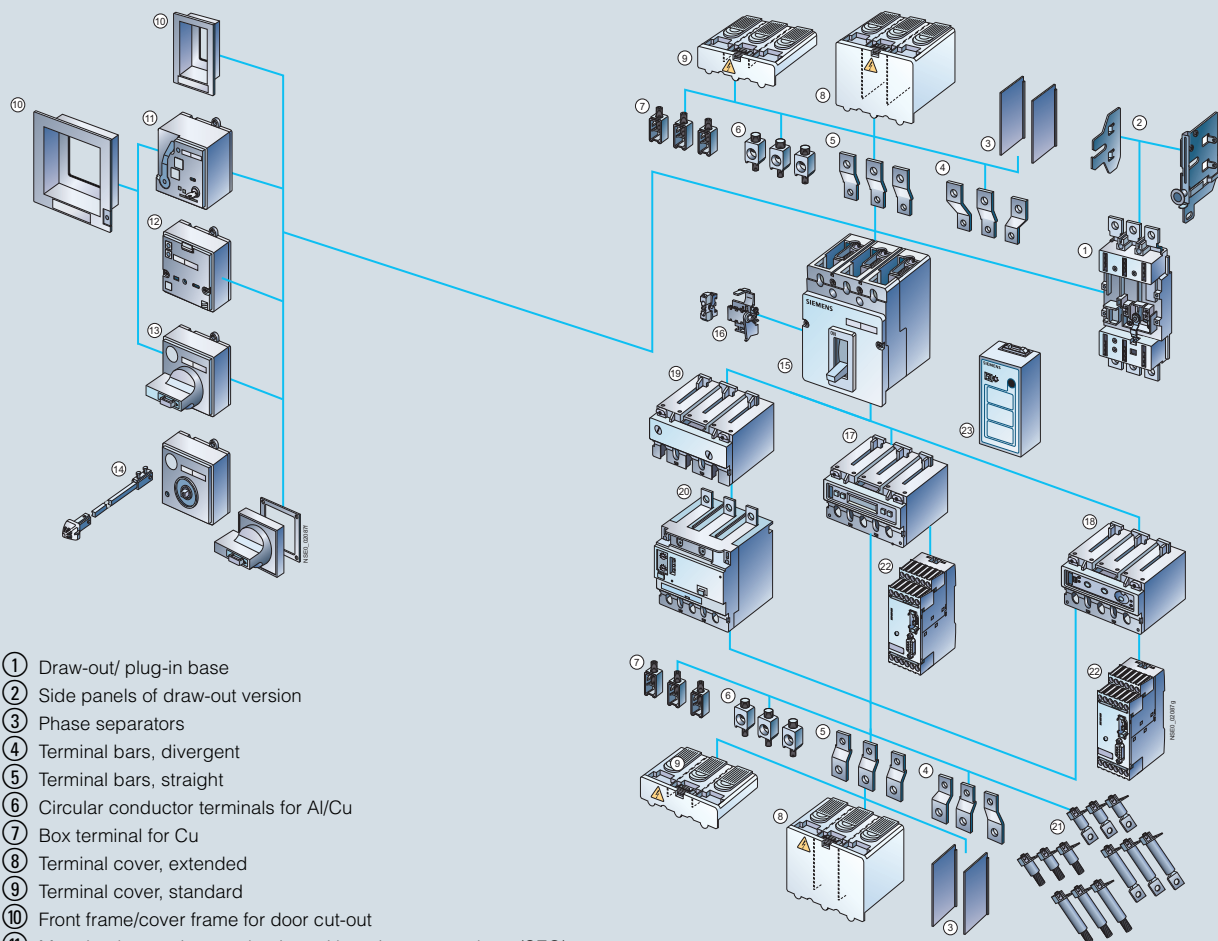
- ① Head compartment cover
- ② Modular door for direct operating mechanism
- ③ Cover for single branch unit
- ④ Cover for multiple branch unit
- ⑤ Assembly kit, horizontal
- ⑥ Assembly kit, vertical

Assembly Kits

3VL Moulded Case Circuit Breakers

General data

4



- ① Draw-out/ plug-in base
- ② Side panels of draw-out version
- ③ Phase separators
- ④ Terminal bars, divergent
- ⑤ Terminal bars, straight
- ⑥ Circular conductor terminals for Al/Cu
- ⑦ Box terminal for Cu
- ⑧ Terminal cover, extended
- ⑨ Terminal cover, standard
- ⑩ Front frame/cover frame for door cut-out
- ⑪ Motorised operating mechanism with spring accumulator (SEO)
- ⑫ Motorised operating mechanism MO
- ⑬ Front-operated rotary operating mechanism
- ⑭ Door-coupling rotary operating mechanism
- ⑮ 3VL moulded case circuit breaker
- ⑯ Internal accessories
- ⑰ Electronic overcurrent release (LCD ETU)
- ⑱ Electronic overcurrent release with communication function
- ⑲ Thermal/magnetic overcurrent release
- ⑳ RCD module
- ㉑ Rear connections – flat and round
- ㉒ COM20/21 communication module to the PROFIBUS DP/MODBUS
- ㉓ Battery power supply with test function for electronic trip units

Assembly Kits

3VL Moulded Case Circuit Breakers

General data

Technical specifications

Type			VL160X	VL160	VL250	VL400	VL630	VL800	VL1250	VL1600
Conductor cross-sections										
Box terminals ¹⁾										
• Single- or multi-wire cable	Only copper	mm ²	2.5 ... 95	2.5 ... 95	25 ... 185	50 ... 240	–	–	–	–
• Flexible wire with sleeve connector		mm ²	2.5 ... 50	2.5 ... 50	25 ... 120	50 ... 240	–	–	–	–
• Flexible busbar		mm	12 × 10	12 × 10	17 × 10	25 × 10	–	–	–	–
Connecting terminal plate for flexible busbar ²⁾			–	–	–	–	2 units 10 × 32	–	–	–
Circular conductor terminal for cable ¹⁾										
• Single- or multi-wire cable	Copper or Al	mm ²	16 ... 70	16 ... 70	25 ... 185	50 ... 300	–	–	–	–
- With terminal cover	Copper or Al	mm ²	16 ... 150	16 ... 150	120 ... 240	--	--	--	--	--
• Flexible wire with sleeve connector		mm ²	10 ... 50	10 ... 50	25 ... 120	50 ... 240	–	–	–	–
Multiple feed-in terminal ¹⁾										
• Single- or multi-wire cable	Copper or Al	mm ²	–	–	–	2 units 50 ... 120	2 units 50 ... 240	3 units 50 ... 240	4 units 50 ... 240	–
- With terminal cover	Copper or Al	mm ²	--	--	--	2 units 70 ... 300	--	--	--	--
• Flexible wire with sleeve connector		mm ²	–	–	–	2 units 50 ... 95	2 units 50 ... 185	3 units 50 ... 185	4 units 50 ... 185	–
• Direct busbar connection	Copper or Al	mm	17 × 7	22 × 7	24 × 7	32 × 10	40 × 10	2 × 40 × 10	2 × 50 × 10	3 × 60 × 10
• Screw type for screwed connection			M6	M6	M8	M8	M6	M8	M8	–

¹⁾ Cross-sections according to IEC 60999.

²⁾ Not for 690 V AC/600 V DC.

Selection and ordering data

Features

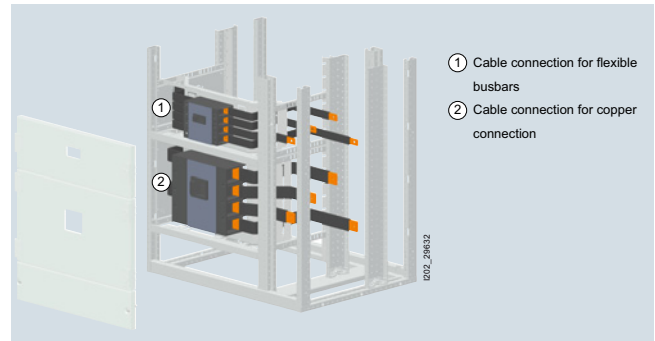
- Several connection points per conductor
- For implementation of form 4a and 4b

Configuration

- Up to 3VL630 connection is made by means of flexible insulated busbars

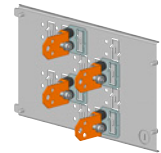


- From 3VL800 copper drawings are available



① Cable connection for flexible busbars

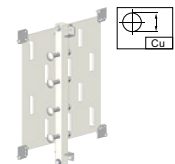
- Form 4a



Circuit breaker	Compartment height in mm	No. of poles	Installation technique	Operating mechanism	Article No. www.siemens.com/product?Article No.
VL250	150	3	Fixed	Direct, front	8PQ6000-7BA55
			Plug-in	Direct, door cpl., motorised	8PQ6000-7BA56
	200	4	Fixed	Direct, front	8PQ6000-7BA57
			Plug-in	Direct, door cpl., motorised	8PQ6000-7BA58
VL400	200	3	Fixed	Direct, front	8PQ6000-7BA51
			Plug-in	Direct, door coupling	8PQ6000-7BA52
	250	4	Fixed	Direct, front, motorised	8PQ6000-7BA53
			Plug-in	Direct, door coupling	8PQ6000-7BA54
VL630	300	3	Fixed	Direct, front, motorised	8PQ6000-7BA36
			Plug-in	Direct, door coupling	8PQ6000-7BA37
	350	4	Fixed	Direct, front, motorised	8PQ6000-7BA38
			Plug-in	Direct, door coupling	8PQ6000-7BA50

② Cable connection for copper connection

- Form 4a



Circuit breaker	Compartment height in mm	No. of poles	Installation technique	Operating mechanism	Article No. www.siemens.com/product?Article No.
VL800	400	4	Fixed	Direct	8PQ6000-7BA30
			Fixed	Direct, door coupling	8PQ6000-7BA31
	500	4	Draw-out	Direct	8PQ6000-7BA34
			Draw-out	Direct	8PQ6000-7BA35
VL1250, VL1600	450	4	Fixed	Direct	8PQ6000-7BA32
			Fixed	Door coupling	8PQ6000-7BA33
	500	4	Draw-out	Direct	8PQ6000-7BA35

Protective bellows

- For use with connecting terminals
- Form 4b



[8PQ9400-0BA71](#)

Assembly Kits

3VL Moulded Case Circuit Breakers

Front cover – horizontal

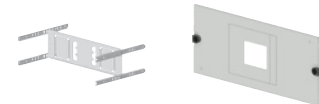
Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- Cover is prepared for a motorised operating mechanism with spring accumulator.

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Fixed



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
VL160X	600	3	Front, rear	Direct, rotary and motorised	150	8PQ6000-4BA88	8PQ2015-6BA21
		4	Front, rear	Direct, rotary and motorised	200	8PQ6000-5BA01	8PQ2020-6BA26
	800	3/4	Front, rear	Direct, rotary and motorised	200	8PQ6000-4BA41	8PQ2020-8BA10
VL160/250	600	3	Front, rear	Direct, rotary and motorised	150	8PQ6000-5BA00	8PQ2015-6BA21
		4	Front, rear	Direct, rotary and motorised	200	8PQ6000-5BA02	8PQ2020-6BA26
	800	3/4	Front, rear	Direct, rotary and motorised	200	8PQ6000-4BA42	8PQ2020-8BA10
VL400	600	3	Front, rear	Direct, rotary and motorised	200	8PQ6000-2BA84	8PQ2020-6BA06
		4	Front, rear	Direct, rotary and motorised	250	8PQ6000-2BA87	8PQ2025-6BA02
	800	3/4	Front, rear	Direct, rotary and motorised	250	8PQ6000-4BA44	8PQ2025-8BA06
VL630	600	3	Front, rear	Direct, rotary and motorised	300	8PQ6000-3BA01	8PQ2030-6BA03
		4	Front, rear	Direct, rotary and motorised	350	8PQ6000-3BA10	8PQ2035-6BA04
	800	3/4	Front, rear	Direct, rotary and motorised	350	8PQ6000-4BA45	8PQ2035-8BA10



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Crossbars	Cover
VL800	800	3/4	Front, rear	Direct, rotary and motorised	400	8PQ6000-4BA46	8PQ2040-8BA21
VL1250	800	3/4	Front, rear	Direct, motorised	450	8PQ6000-4BA47	8PQ2045-8BA05
VL1600	800	3/4	Front, rear	Direct, motorised	450	8PQ6000-4BA48	8PQ2045-8BA05

Assembly Kits

3VL Moulded Case Circuit Breakers

Front cover – horizontal

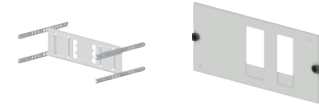
Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- Cover is prepared for a motorised operating mechanism with spring accumulator.

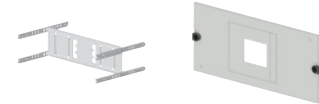
Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Fixed version with RCD



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
VL160X	600	3	Front, rear	Direct	150	8PQ6000-4BA88	8PQ2015-6BA22
		4	Front, rear	Direct	200	8PQ6000-5BA01	8PQ2020-6BA27
	800	3/4	Front, rear	Direct	200	8PQ6000-4BA41	8PQ2020-8BA11
VL160/250	600	3	Front, rear	Direct, rotary, motorised	150	8PQ6000-5BA00	8PQ2015-6BA21
		4	Front, rear	Direct, rotary, motorised	200	8PQ6000-5BA02	8PQ2020-6BA26
	800	3/4	Front, rear	Direct, rotary, motorised	200	8PQ6000-4BA42	8PQ2020-8BA10
VL400	800	4	Front, rear	Direct, rotary, motorised	250	8PQ6000-4BA44	8PQ2025-8BA06

Plug-in version



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
VL160X	600	3	Front, rear	Direct	150	8PQ6000-3BA24	8PQ2015-6BA21
		4	Front, rear	Direct	200	8PQ6000-3BA27	8PQ2020-6BA26
	800	3/4	Front, rear	Direct	200	8PQ6000-4BA43	8PQ2020-8BA10
VL160/250	600	3	Front, rear	Direct, rotary	150	8PQ6000-3BA24	8PQ2015-6BA21
		4	Front, rear	Direct, rotary	200	8PQ6000-3BA27	8PQ2020-6BA26
	800	3/4	Front, rear	Direct, rotary	200	8PQ6000-4BA43	8PQ2020-8BA10
VL400	600	3	Front, rear	Direct, rotary	200	8PQ6000-2BA84	8PQ2020-6BA06
		4	Front, rear	Direct, rotary	250	8PQ6000-2BA87	8PQ2025-6BA02
	800	3/4	Front, rear	Direct, rotary	250	8PQ6000-4BA44	8PQ2025-8BA06
VL630	600	3	Front, rear	Direct, rotary	300	8PQ6000-3BA01	8PQ2030-6BA03
		4	Front, rear	Direct, rotary	350	8PQ6000-3BA10	8PQ2035-6BA04
	800	3/4	Front, rear	Direct, rotary	350	8PQ6000-4BA45	8PQ2035-8BA10

Assembly Kits

3VL Moulded Case Circuit Breakers

Front cover – horizontal

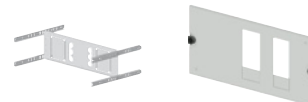
Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- To improve the stability of the kits for VL400 and VL630 in plug-in version it is necessary to fit a reinforcement kit for each branch unit.

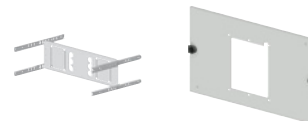
Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Plug-in version with RCD

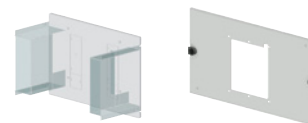


Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
VL160X	600	3	Front, rear	Direct	150	8PQ6000-2BA75	8PQ2015-6BA06
		4	Front, rear	Direct	200	8PQ6000-2BA81	8PQ2020-6BA07
	800	3/4	Front, rear	Direct	200	8PQ6000-4BA43	8PQ2020-8BA11
VL160/250	600	3	Front, rear	Direct, rotary	150	8PQ6000-2BA75	8PQ2015-6BA04
		4	Front, rear	Direct, rotary	200	8PQ6000-2BA81	8PQ2020-6BA05
	800	3/4	Front, rear	Direct, rotary	200	8PQ6000-4BA43	8PQ2020-8BA10
VL400	800	4	Front, rear	Direct, rotary	250	8PQ6000-4BA44	8PQ2025-8BA06

Draw-out



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
VL160/250	600	3/4	Front, rear	Direct, rotary	250	8PQ6000-3BA27	8PQ2020-6BA21
	800	3/4	Front, rear	Direct, rotary	250	8PQ6000-4BA43	8PQ2025-8BA07
VL400	600	3/4	Front, rear	Direct, rotary	300	8PQ6000-2BA87	8PQ2025-6BA11
	800	3/4	Front, rear	Direct, rotary	300	8PQ6000-4BA44	8PQ2030-8BA08
VL630	600	3	Front, rear	Direct, rotary	300	8PQ6000-3BA01	8PQ2030-6BA17
		4	Front, rear	Direct, rotary	350	8PQ6000-3BA10	8PQ2035-6BA17
	800	3/4	Front, rear	Direct, rotary	350	8PQ6000-4BA45	8PQ2035-8BA11



VL800	800	3/4	Front, rear	Direct	500	8PQ6000-4BA56	8PQ2050-8BA05
VL1250	800	3/4	Front, rear	Direct	500	8PQ6000-4BA56	8PQ2050-8BA06
VL1600	800	3/4	Front, rear	Direct	500	8PQ6000-4BA56	8PQ2050-8BA06

Reinforcement, draw-out version



Circuit breaker	No. of poles	Reinforcement
VL400	3/4	8PQ6000-4BA17
VL630	3	8PQ6000-4BA20
VL630	4	8PQ6000-4BA18

Selection and ordering data

Configuration

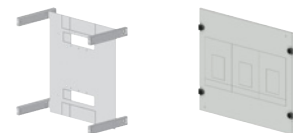
- Cover is prepared for a motorised operating mechanism with spring accumulator.
- For vertical assembly kits that are equipped with a motorised operating mechanism, the adjacent mounting space must be left empty so that the mechanism can be tensioned by hand.

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Fixed



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Mounting plate	Cover
VL160X	600	3	Front, rear	Direct, rotary, motorised	350	1 ... 4	8PQ6000-2BA76	8PQ2035-6BA02
		4	Front, rear	Direct, rotary, motorised	350	1 ... 3	8PQ6000-2BA82	8PQ2035-6BA03
	800	3	Front, rear	Direct, rotary, motorised	350	1 ... 5	8PQ6000-2BA77	8PQ2035-8BA02
		4	Front, rear	Direct, rotary, motorised	350	1 ... 4	8PQ6000-2BA83	8PQ2035-8BA03
VL160/250	600	3	Front, rear	Direct, rotary, motorised	350	1 ... 4	8PQ6000-3BA16	8PQ2035-6BA02
		4	Front, rear	Direct, rotary, motorised	350	1 ... 3	8PQ6000-3BA22	8PQ2035-6BA03
	800	3	Front, rear	Direct, rotary, motorised	350	1 ... 5	8PQ6000-3BA17	8PQ2035-8BA02
		4	Front, rear	Direct, rotary, motorised	350	1 ... 4	8PQ6000-3BA23	8PQ2035-8BA03
VL400	b 600	3	Front, rear	Direct, rotary, motorised	400	1 ... 3	8PQ6000-2BA85	8PQ2040-6BA07
		4	Front, rear	Direct, rotary, motorised	400	1 ... 2	8PQ6000-2BA88	8PQ2040-6BA05
	b 800	3	Front, rear	Direct, rotary, motorised	400	1 ... 4	8PQ6000-2BA86	8PQ2040-8BA08
		4	Front, rear	Direct, rotary, motorised	400	1 ... 3	8PQ6000-3BA00	8PQ2040-8BA07
VL630	b 600	3	Front, rear	Direct, rotary, motorised	400	1 ... 2	8PQ6000-3BA02	8PQ2040-6BA06
		4	Front, rear	Direct, rotary, motorised	400	1	8PQ6000-3BA05	8PQ2040-6BA08
	b 800	3	Front, rear	Direct, rotary, motorised	400	1 ... 3	8PQ6000-3BA03	8PQ2040-8BA06
		4	Front, rear	Direct, rotary, motorised	400	1 ... 2	8PQ6000-3BA06	8PQ2040-8BA05



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Crossbar	Cover
VL800	b 600	3/4	Front, rear	Direct, rotary, motorised	600	1	8PQ6000-3BA07	8PQ2060-6BA02
VL1250	b 600	3/4	Front, rear	Direct, motorised	600	1	8PQ6000-3BA11	8PQ2060-6BA03
VL1600	b 600	3/4	Front, rear	Direct, motorised	700	1	8PQ6000-3BA12	8PQ2070-6BA01

b For front terminal bars, two additional covers, height 100 mm each, are required.
Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

Assembly Kits

3VL Moulded Case Circuit Breakers

Front cover – vertical

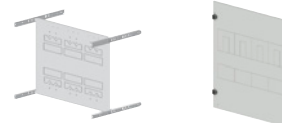
Selection and ordering data

Configuration

- Cover is prepared for a motorised operating mechanism with spring accumulator.
- For vertical assembly kits that are equipped with a motorised operating mechanism, the adjacent mounting space must be left empty so that the mechanism can be tensioned by hand.

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Fixed version with RCD



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Mounting plate	Cover
VL160X	600	3	Front, rear	Direct	500	1 ... 4	8PQ6000-2BA76	8PQ2050-6BA05
		4	Front, rear	Direct	500	1 ... 3	8PQ6000-2BA82	8PQ2050-6BA06
	800	3	Front, rear	Direct	500	1 ... 5	8PQ6000-2BA77	8PQ2050-8BA07
		4	Front, rear	Direct	500	1 ... 4	8PQ6000-2BA83	8PQ2050-8BA08
VL160/250	600	3	Front, rear	Direct, rotary, motorised	500	1 ... 4	8PQ6000-3BA16	8PQ2050-6BA07
		4	Front, rear	Direct, rotary, motorised	500	1 ... 3	8PQ6000-3BA22	8PQ2050-6BA08
	800	3	Front, rear	Direct, rotary, motorised	500	1 ... 5	8PQ6000-3BA17	8PQ2050-8BA10
		4	Front, rear	Direct, rotary, motorised	500	1 ... 4	8PQ6000-3BA23	8PQ2050-8BA11

Plug-in version



Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Mounting plate	Cover
VL160X	a	600	3	Front, rear	Direct, rotary	350	1 ... 4	8PQ6000-3BA25	8PQ2035-6BA02
	a		4	Front, rear	Direct, rotary	350	1 ... 3	8PQ6000-3BA28	8PQ2035-6BA03
	a	800	3	Front, rear	Direct, rotary	350	1 ... 5	8PQ6000-3BA26	8PQ2035-8BA02
	a		4	Front, rear	Direct, rotary	350	1 ... 4	8PQ6000-3BA30	8PQ2035-8BA03
VL160/250	a	600	3	Front, rear	Direct, rotary	350	1 ... 4	8PQ6000-3BA25	8PQ2035-6BA02
	a		4	Front, rear	Direct, rotary	350	1 ... 3	8PQ6000-3BA28	8PQ2035-6BA03
	a	800	3	Front, rear	Direct, rotary	350	1 ... 5	8PQ6000-3BA26	8PQ2035-8BA02
	a		4	Front, rear	Direct, rotary	350	1 ... 4	8PQ6000-3BA30	8PQ2035-8BA03
VL400	b	600	3	Front, rear	Direct, rotary	400	1 ... 3	8PQ6000-2BA85	8PQ2040-6BA07
	b		4	Front, rear	Direct, rotary	400	1 ... 2	8PQ6000-2BA88	8PQ2040-6BA05
	b	800	3	Front, rear	Direct, rotary	400	1 ... 4	8PQ6000-2BA86	8PQ2040-8BA08
	b		4	Front, rear	Direct, rotary	400	1 ... 3	8PQ6000-3BA00	8PQ2040-8BA07
VL630	b	600	3	Front, rear	Direct, rotary	400	1 ... 2	8PQ6000-3BA02	8PQ2040-6BA06
	b		4	Front, rear	Direct, rotary	400	1	8PQ6000-3BA05	8PQ2040-6BA08
	b	800	3	Front, rear	Direct, rotary	400	1 ... 3	8PQ6000-3BA03	8PQ2040-8BA06
	b		4	Front, rear	Direct, rotary	400	1 ... 2	8PQ6000-3BA06	8PQ2040-8BA05

a For front terminal bars, two additional covers, height 50 mm each, are required.
Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

b For front terminal bars, two additional covers, height 100 mm each, are required.
Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

Assembly Kits

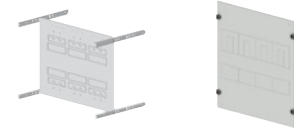
3VL Moulded Case Circuit Breakers

Front cover – vertical

Selection and ordering data

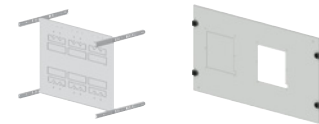
Configuration	Article No. www.siemens.com/ product?Article.No.	Article No. www.siemens.com/ product?Article.No.
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Plug-in version with RCD



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Mounting plate	Cover
VL160X	600	3	Front, rear	Direct	500	1 ... 4	8PQ6000-3BA25	8PQ2050-6BA05
		4	Front, rear	Direct	500	1 ... 3	8PQ6000-3BA28	8PQ2050-6BA06
	800	3	Front, rear	Direct	500	1 ... 5	8PQ6000-3BA26	8PQ2050-8BA07
		4	Front, rear	Direct	500	1 ... 4	8PQ6000-3BA30	8PQ2050-8BA08
VL160/250	600	3	Front, rear	Direct, rotary	500	1 ... 4	8PQ6000-3BA25	8PQ2050-6BA07
		4	Front, rear	Direct, rotary	500	1 ... 3	8PQ6000-3BA28	8PQ2050-6BA08
	800	3	Front, rear	Direct, rotary	500	1 ... 5	8PQ6000-3BA26	8PQ2050-8BA10
		4	Front, rear	Direct, rotary	500	1 ... 4	8PQ6000-3BA30	8PQ2050-8BA11

Draw-out



Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Mounting plate	Cover
VL160/250	a	800	3	Front, rear	Direct, rotary	350	1 ... 3	8PQ6000-3BA26	8PQ2035-8BA08
	a		4	Front, rear	Direct, rotary	350	1 ... 2	8PQ6000-3BA30	8PQ2040-8BA15
VL400	b	600	3/4	Front, rear	Direct, rotary	400	1	8PQ6000-2BA88	8PQ2040-6BA17
	b	800	3	Front, rear	Direct, rotary	400	1 ... 2	8PQ6000-2BA86	8PQ2040-8BA16
	b		4	Front, rear	Direct, rotary	400	1	8PQ6000-3BA00	8PQ2040-8BA17
VL630	b	600	3/4	Front, rear	Direct, rotary	400	1	8PQ6000-3BA05	8PQ2060-6BA12
	b	800	3/4	Front, rear	Direct, rotary	400	1	8PQ6000-3BA06	8PQ2040-8BA20

Draw-out

Minimum section depth: 600 mm



Circuit breaker		Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Mounting plate	Cover
VL800	b	600	3	Front, rear	Direct	600	1	8PQ6000-3BA87	8PQ2060-6BA13
	b		4	Front, rear	Direct	600	1	8PQ6000-3BA88	8PQ2060-6BA14
VL1250/1600	b	600	3	Front, rear	Direct	650	1	8PQ6000-4BA00	8PQ2065-6BA05
	b		4	Front, rear	Direct	650	1	8PQ6000-4BA01	8PQ2065-6BA06

a For front terminal bars, two additional covers, height 50 mm each, are required.
Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

b For front terminal bars, two additional covers, height 100 mm each, are required.
Moreover, extended terminal covers have to be ordered for the respective circuit breaker.

Assembly Kits

3VL Moulded Case Circuit Breakers

Modular door – horizontal

Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- For degree of protection IP55 an upgrade is available
(see "Frame" and "Enclosure" from page 2/2 onwards and "Modular Doors", page 2/23)

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Fixed version with direct operating mechanism



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Modular door
VL160X	600	3	Front, rear	Direct	150	8PQ6000-6BA27	8PQ2015-6BA23
		4	Front, rear	Direct	200	8PQ6000-6BA34	8PQ2020-6BA30
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA41	8PQ2020-8BA15
VL160/250	600	3	Front, rear	Direct	150	8PQ6000-6BA30	8PQ2015-6BA23
		4	Front, rear	Direct	200	8PQ6000-6BA36	8PQ2020-6BA30
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA42	8PQ2020-8BA15
VL400	600	3	Front, rear	Direct	200	8PQ6000-6BA44	8PQ2020-6BA33
		4	Front, rear	Direct	250	8PQ6000-6BA45	8PQ2025-6BA20
	800	3/4	Front, rear	Direct	250	8PQ6000-6BA46	8PQ2025-8BA11
VL630	600	3	Front, rear	Direct	300	8PQ6000-6BA47	8PQ2030-6BA24
		4	Front, rear	Direct	350	8PQ6000-6BA48	8PQ2035-6BA23
	800	3/4	Front, rear	Direct	350	8PQ6000-6BA50	8PQ2035-8BA14



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Crossbar	Cover
VL800	800	3/4	Front, rear	Direct	400	8PQ6000-4BA46	8PQ2040-8BA22
VL1250	800	3/4	Front, rear	Direct	450	8PQ6000-4BA47	8PQ2045-8BA07
VL1600	800	3/4	Front, rear	Direct	450	8PQ6000-4BA48	8PQ2045-8BA07

Assembly Kits

3VL Moulded Case Circuit Breakers

Vertical and horizontal installation

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Fixed version with door-coupling rotary operating mechanism



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Modular door
VL160X	600	3	Front, rear	8UC door coupling, size 1	150	8PQ6000-4BA88	8PQ2015-6BA14
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-5BA01	8PQ2020-6BA16
	800	3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA41	8PQ2020-8BA12
VL160/250	600	3	Front, rear	8UC door coupling, size 1	150	8PQ6000-5BA00	8PQ2015-6BA14
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-5BA02	8PQ2020-6BA16
	800	3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA42	8PQ2020-8BA12
VL400	600	3	Front, rear	8UC door coupling, size 2	200	8PQ6000-2BA84	8PQ2020-6BA20
		4	Front, rear	8UC door coupling, size 2	250	8PQ6000-2BA87	8PQ2025-6BA10
	800	3/4	Front, rear	8UC door coupling, size 2	250	8PQ6000-4BA44	8PQ2025-8BA08
VL630	600	3	Front, rear	8UC door coupling, size 2	300	8PQ6000-3BA01	8PQ2030-6BA15
		4	Front, rear	8UC door coupling, size 2	350	8PQ6000-3BA10	8PQ2035-6BA15
	800	3/4	Front, rear	8UC door coupling, size 2	350	8PQ6000-4BA45	8PQ2035-8BA12



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Crossbar	Modular door
VL800	800	3/4	Front, rear	8UC door coupling, size 2	400	8PQ6000-4BA46	8PQ2035-8BA13
VL1250	800	3/4	Front, rear	8UC door coupling, size 3	450	8PQ6000-4BA47	8PQ2045-8BA06
VL1600	800	3/4	Front, rear	8UC door coupling, size 3	450	8PQ6000-4BA48	8PQ2045-8BA06

Fixed version with RCD



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Modular door
VL160X	600	3	Front, rear	Direct	150	8PQ6000-6BA28	8PQ2015-6BA24
		4	Front, rear	Direct	200	8PQ6000-6BA35	8PQ2020-6BA31
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA41	8PQ2020-8BA16
VL160/250	600	3	Front, rear	Direct	150	8PQ6000-6BA31	8PQ2015-6BA25
		4	Front, rear	Direct	200	8PQ6000-6BA37	8PQ2020-6BA32
		3	Front, rear	8UC door coupling, size 1	150	8PQ6000-5BA00	8PQ2015-6BA16
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-5BA02	8PQ2020-6BA16
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA42	8PQ2020-8BA15
		3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA42	8PQ2020-8BA12
VL400	800	4	Front, rear	Direct	250	8PQ6000-6BA46	8PQ2025-8BA11
		4	Front, rear	8UC door coupling, size 2	250	8PQ6000-4BA44	8PQ2025-8BA08

Assembly Kits

3VL Moulded Case Circuit Breakers

Vertical and horizontal installation

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Plug-in version with direct operating mechanism



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Modular door
VL160X	600	3	Front, rear	Direct	150	8PQ6000-6BA32	8PQ2015-6BA23
		4	Front, rear	Direct	200	8PQ6000-6BA38	8PQ2020-6BA30
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA43	8PQ2020-8BA15
VL160/250	600	3	Front, rear	Direct	150	8PQ6000-6BA32	8PQ2015-6BA24
		4	Front, rear	Direct	200	8PQ6000-6BA38	8PQ2020-6BA30
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA43	8PQ2020-8BA15
VL400	600	3	Front, rear	Direct	200	8PQ6000-6BA44	8PQ2020-6BA33
		4	Front, rear	Direct	250	8PQ6000-6BA45	8PQ2025-6BA20
	800	3/4	Front, rear	Direct	250	8PQ6000-6BA46	8PQ2025-8BA11
VL630	600	3	Front, rear	Direct	300	8PQ6000-6BA47	8PQ2030-6BA24
		4	Front, rear	Direct	350	8PQ6000-6BA48	8PQ2035-6BA23
	800	3/4	Front, rear	Direct	350	8PQ6000-6BA50	8PQ2035-8BA14

Plug-in version with door-coupling rotary operating mechanism



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Modular door
VL160X	600	3	Front, rear	8UC door coupling, size 1	150	8PQ6000-3BA24	8PQ2015-6BA14
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-3BA27	8PQ2020-6BA16
	800	3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA43	8PQ2020-8BA12
VL160/250	600	3	Front, rear	8UC door coupling, size 1	150	8PQ6000-3BA24	8PQ2015-6BA14
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-3BA27	8PQ2020-6BA16
	800	3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA43	8PQ2020-8BA12
VL400	600	3	Front, rear	8UC door coupling, size 2	200	8PQ6000-2BA84	8PQ2020-6BA20
		4	Front, rear	8UC door coupling, size 2	250	8PQ6000-2BA87	8PQ2025-6BA10
	800	3/4	Front, rear	8UC door coupling, size 2	250	8PQ6000-4BA44	8PQ2025-8BA08
VL630	600	3	Front, rear	8UC door coupling, size 2	300	8PQ6000-3BA01	8PQ2030-6BA15
		4	Front, rear	8UC door coupling, size 2	350	8PQ6000-3BA10	8PQ2035-6BA15
	800	3/4	Front, rear	8UC door coupling, size 2	350	8PQ6000-4BA45	8PQ2035-8BA12

Plug-in version with RCD



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Modular door
VL160X	600	3	Front, rear	Direct	150	8PQ6000-6BA33	8PQ2015-6BA24
		4	Front, rear	Direct	200	8PQ6000-6BA40	8PQ2020-6BA31
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA43	8PQ2020-8BA16
VL160/250	600	3	Front, rear	Direct	150	8PQ6000-6BA33	8PQ2015-6BA25
		4	Front, rear	Direct	200	8PQ6000-6BA40	8PQ2020-6BA32
		3	Front, rear	8UC door coupling, size 1	150	8PQ6000-2BA75	8PQ2015-6BA16
		4	Front, rear	8UC door coupling, size 1	200	8PQ6000-2BA81	8PQ2020-6BA17
	800	3/4	Front, rear	Direct	200	8PQ6000-6BA43	8PQ2020-8BA15
		3/4	Front, rear	8UC door coupling, size 1	200	8PQ6000-4BA43	8PQ2020-8BA12
VL400	800	4	Front, rear	Direct	250	8PQ6000-6BA46	8PQ2025-8BA11
		4	Front, rear	8UC door coupling, size 2	250	8PQ6000-4BA44	8PQ2025-8BA08

Selection and ordering data

Configuration

- Extended terminal covers required for front connection.
- For degree of protection IP55 an upgrade is available (see "Frame" and "Enclosure" from page 2/2 onwards and "Modular Doors", page 2/23)

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Fixed version with direct operating mechanism

Circuit breaker	Compartment width	No. of poles	Connection	Operating mechanism	Height	No. of circuit breakers	Mounting plate	Modular door
	mm				mm			
VL630	600	3/4	Front, rear	Direct	600	1	8PQ6000-6BA51	8PQ2060-6BA24
VL800	600	3/4	Front, rear	Direct	800	1	8PQ6000-3BA12	8PQ2080-6BA11
VL1250	600	3/4	Front, rear	Direct	800	1	8PQ6000-3BA11	8PQ2080-6BA11
VL1600	600	3/4	Front, rear	Direct	900	1	8PQ6000-3BA07	8PQ2090-6BA04

Fixed version with door-coupling rotary operating mechanism

Circuit breaker	Compartment width	No. of poles	Connection	Operating mechanism	Height	No. of circuit breakers	Mounting plate	Modular door
	mm				mm			
VL630	400	3/4	Front, rear	8UC door coupling, size 2	550	1	8PQ6000-4BA60	8PQ2055-4BA13
	600	3/4	Rear	8UC door coupling, size 2	400	1	8PQ6000-3BA05	8PQ2040-6BA16
		3/4	Front	8UC door coupling, size 2	600	1	8PQ6000-3BA05	8PQ2060-6BA17
VL800	400	3/4	Front, rear	8UC door coupling, size 2	550	1	8PQ6000-4BA87	8PQ2055-4BA13
	600	3/4	Rear	8UC door coupling, size 2	600	1	8PQ6000-3BA07	8PQ2060-6BA10
		3/4	Front	8UC door coupling, size 2	800	1	8PQ6000-3BA07	8PQ2080-6BA05
VL1250	400	3/4	Front, rear	8UC door coupling, size 3	550	1	8PQ6000-4BA61	8PQ2055-4BA14
	600	3/4	Rear	8UC door coupling, size 3	600	1	8PQ6000-3BA11	8PQ2060-6BA11
		3/4	Front	8UC door coupling, size 3	800	1	8PQ6000-3BA11	8PQ2080-6BA06
VL1600	400	3/4	Front, rear	8UC door coupling, size 3	550	1	8PQ6000-4BA61	8PQ2055-4BA14
	600	3/4	Rear	8UC door coupling, size 3	700	1	8PQ6000-3BA12	8PQ2070-6BA02
		3/4	Front	8UC door coupling, size 3	900	1	8PQ6000-3BA12	8PQ2090-6BA01

Touch protection covers over cable connection

Circuit breaker	Compartment width mm	No. of poles	Height mm	Covers
VL630, VL800, VL1250, VL1600	400	3/4	400	8PQ5000-3BA15



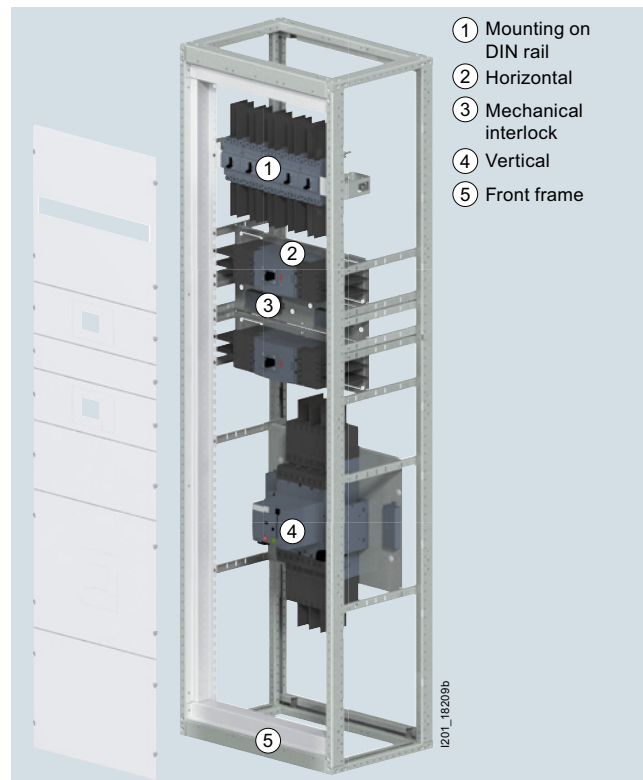
Assembly Kits

3VT moulded case circuit breakers

Overview

Configuration

For voltages > 415 V, additional safety clearances are necessary.



Selection and ordering data

Configuration

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① Mounting on DIN rail



Circuit breaker	Compartment width mm	Operating mechanism	No. of poles	Connection	Height mm	No. of circuit breakers	Mounting plate	Cover
3VT1 (160A)	600	Direct	3	Front	250	1 ... 5	8PQ6000-3BA36	8PQ2025-6BA15
			4	Front	250	1 ... 3	8PQ6000-3BA36	8PQ2025-6BA15
		Motorised	3	Front	250	1 ... 2	8PQ6000-3BA36	8PQ2025-6BA15
			4	Front	250	1 ... 2	8PQ6000-3BA36	8PQ2025-6BA15

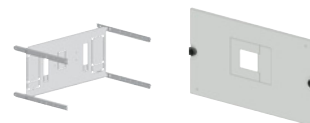
3VT moulded case circuit breakers

Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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Horizontal installation**② Fixed and plug-in version**

Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
3VT1 (160 A)	600 ¹⁾	3/4	Front, rear	Direct	150	8PQ6000-4BA21	8PQ2015-6BA17
3VT2 (250 A)	600	3	Front, rear	Direct, motorised	150	8PQ6000-4BA23	8PQ2015-6BA18
3VT2 (250 A)	600	4	Front, rear	Direct, motorised	200	8PQ6000-4BA24	8PQ2020-6BA22
3VT3 (630 A)	600	3	Front, rear	Direct, motorised	200	8PQ6000-4BA27	8PQ2020-6BA23
3VT3 (630 A)	600	4	Front, rear	Direct, motorised	250	8PQ6000-4BA26	8PQ2025-6BA14

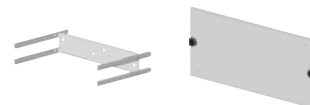
¹⁾ Mounting plate can be used only for fixed version.

② Draw-out version

Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
3VT2 (250 A)	600	3/4	Front, rear	Direct, motorised	250	8PQ6000-4BA22	8PQ2025-6BA13
3VT3 (630 A)	600	3/4	Front, rear	Direct, motorised	300	8PQ6000-4BA25	8PQ2030-6BA20

③ Mechanical interlocks

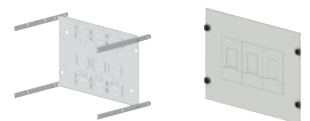
- Assembly kit for mechanical interlock
- Customized interlock (accessory) available for each device type



Circuit breaker	Compartment width mm	Height mm	Mounting plate	Cover
3VT2, 3VT3	600	100	8PQ6000-4BA34	8PQ2010-6BA01

Vertical installation**④ Fixed and plug-in version**

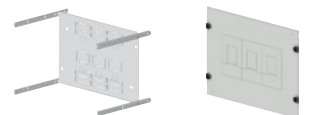
- Front terminal bars and a breaking capacity of 35 kA require two additional covers 150 mm each, phase separators and terminal covers
- Front terminal bars and a breaking capacity of 65 kA require two additional covers 250 mm each, phase separators and terminal covers



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Mounting plate	Cover
3VT2 (250A)	600	3	Front, rear	Direct, motorised	350	1 ... 3	8PQ6000-4BA28	8PQ2035-6BA18
		4	Front, rear	Direct, motorised	350	1 ... 2	8PQ6000-4BA30	8PQ2035-6BA20
3VT3 (630A)	600	3	Front, rear	Direct, motorised	400	1 ... 2	8PQ6000-4BA31	8PQ2040-6BA18
		4	Front, rear	Direct, motorised	400	1 ... 2	8PQ6000-4BA32	8PQ2040-6BA20

④ Draw-out version

- Front terminal bars and a breaking capacity of 35 kA require two additional covers 150 mm each, phase separators and terminal covers
- Front terminal bars and a breaking capacity of 65 kA require two additional covers 250 mm each, phase separators and terminal covers

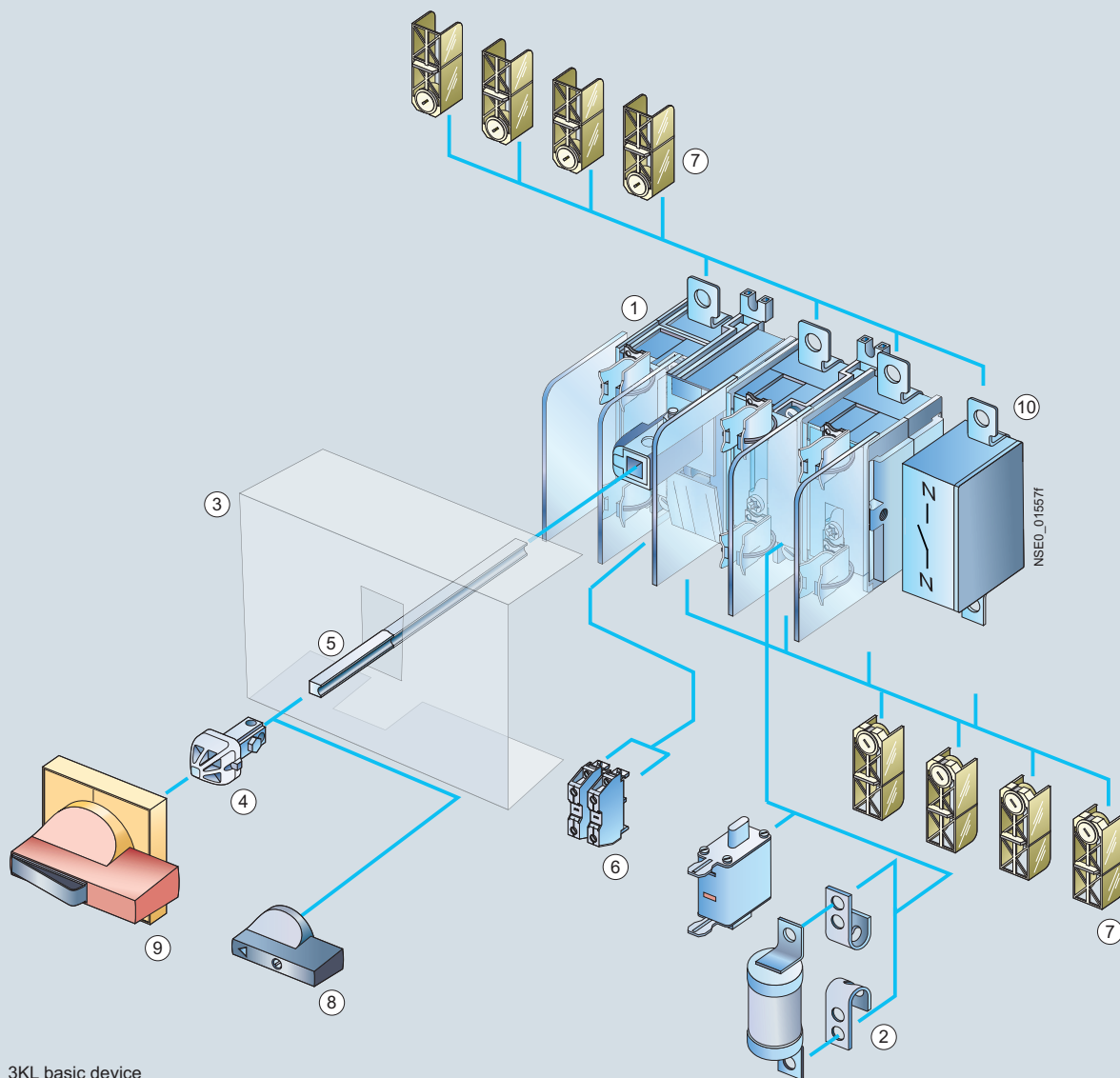


Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	No. of circuit breakers	Mounting plate	Cover
3VT2 (250A)	600	3	Front, rear	Direct, motorised	350	1 ... 2	8PQ6000-4BA28	8PQ2035-6BA18
		4	Front, rear	Direct, motorised	350	1 ... 2	8PQ6000-4BA30	8PQ2035-6BA20
3VT3 (630A)	600	3	Front, rear	Direct, motorised	400	1 ... 2	8PQ6000-4BA31	8PQ2040-6BA18
		4	Front, rear	Direct, motorised	400	1	8PQ6000-4BA33	8PQ2040-6BA21

Assembly Kits

3K switch disconnectors

Overview



- ① 3KL basic device
- ② Fuses, optionally BS 88 or LV HRC fuses
- ③ Terminal cover, IP20 (vertical to operator side)
- ④ Coupling driver
- ⑤ Extension shaft
- ⑥ Standard products from the Siemens 3SB1 range are used as auxiliary switches.

All components from the switch to the actuator are provided with non-interchangeability features.

Optional

- ⑦ Single-pole terminal cover from 63 A to 630 A, IP20 (vertical to operator side)
- ⑧ 8UC9 knob for fixed mounting in standard version (black) or EMERGENCY-STOP version (red), or
- ⑨ 8UC7 door-coupling rotary operating mechanism in standard version (ti-grey) or EMERGENCY-STOP version (red/yellow)
- ⑩ 4th pole (optional)

Technical specifications

Standards		IEC 60947-1, IEC 60947-3, VDE 0660 Part 107					
Type		3KL50	3KL52	3KL53	3KL55 ¹⁾	3KL57 ¹⁾	3KL61 ¹⁾
3KL5, 3KL6							
Rated continuous current I_N for fuse links according to DIN 43620	A Size	63 00 and 000	125 00 and 000	160 00 and 000	250 1 and 2	400 1 and 2	630 3 and 2
Cable lug, max. (multi-wire) conductor size	mm ²	35	70	120	150	2 × 150 or 1 × 240	2 × 240
Tightening torque Connecting screws	Nm	6 ... 7.5 M6	7 ... 10 M6	18 ... 22 M8	35 ... 45 M10	35 ... 45 M10	56 M12

¹⁾ Technical specifications for CSA approval upon request.

3KA711							
Rated continuous current I_N	A	32	45	63	80	100	125
Cable lug, max. (multi-wire) conductor size	mm ²	50	50	50	50	50	50
Busbar size	mm ²	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3	16 × 3
3KA712							
Rated continuous current I_N	A	160	200	250	--	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	120	120	120	--	--	--
Busbar size	mm ²	20 × 5	20 × 5	20 × 5	--	--	--
3KA713							
Rated continuous current I_N	A	315	400	--	--	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	2 × 150	2 × 150	--	--	--	--
Busbar size	mm ²	2 × 25 × 5	2 × 25 × 5	--	--	--	--
3KA714							
Rated continuous current I_N	A	630	--	--	--	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	2 × 185	--	--	--	--	--
Busbar size	mm ²	2 × 32 × 6	--	--	--	--	--
3KA715							
Rated continuous current I_N	A	800	1000	1250	1600	2000	2500
Cable lug, max. (multi-wire) conductor size	mm ²	2 × 240	--	--	--	--	--
Busbar size	mm ²	2 × 50 × 5	2 × 50 × 6	2 × 50 × 8	3 × 50 × 8	3 × 50 × 12	4 × 50 × 12
3KA716							
Rated continuous current I_N	A	1600	2000	2500	3150	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	--	--	--	--	--	--
Busbar size	mm ²	2 × 80 × 10	2 × 80 × 10	3 × 80 × 10	3 × 100 × 10	--	--
3KL711							
Rated continuous current I_N	A	32	45	63	80	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	25	25	25	25	--	--
Busbar size	mm ²	12 × 3	12 × 3	12 × 3	12 × 3	--	--
3KL712							
Rated continuous current I_N	A	100	125	160	--	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	70	70	70	--	--	--
Busbar size	mm ²	16 × 4	16 × 4	16 × 4	--	--	--
3KL713							
Rated continuous current I_N	A	200	250	--	--	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	120	120	--	--	--	--
Busbar size	mm ²	25 × 4	25 × 4	--	--	--	--
3KL714							
Rated continuous current I_N	A	315	400	--	--	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	240	240	--	--	--	--
Busbar size	mm ²	32 × 5	32 × 5	--	--	--	--
3KL715							
Rated continuous current I_N	A	630	800	--	--	--	--
Cable lug, max. (multi-wire) conductor size	mm ²	2 × 185	2 × 185	--	--	--	--
Busbar size	mm ²	2 × 40 × 6	2 × 40 × 6	--	--	--	--

Assembly Kits

3K switch disconnectors

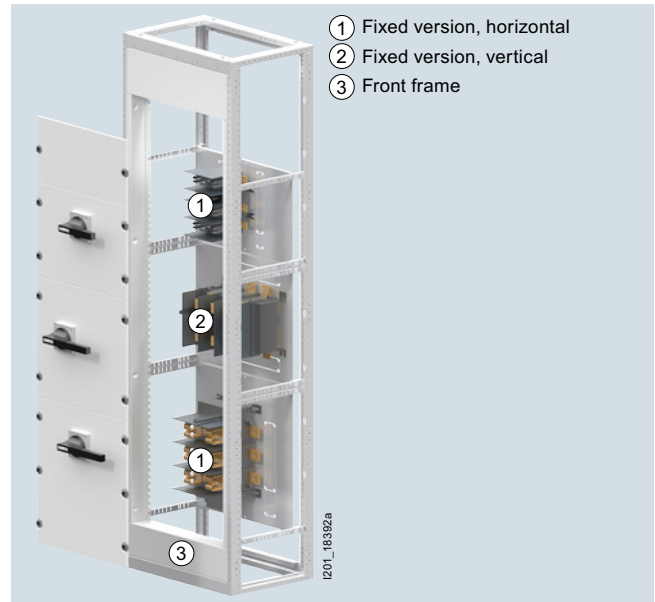
Selection and ordering data

General description

Cover prepared for door-coupling rotary operating mechanism

Configuration

In addition the terminal covers of the devices are required.

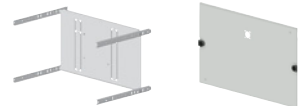


Configuration

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① Fixed version, horizontal



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
3KL50/3KL52	600	3/4	Front, rear	Door-coupling rotary operating mechanism	300	8PQ6000-2BA65	8PQ2030-6BA06
3KL55/3KL57	600	3/4	Front, rear	Door-coupling rotary operating mechanism	350	8PQ6000-2BA71	8PQ2035-6BA08
3KL61	600	3/4	Front, rear	Door-coupling rotary operating mechanism	550	8PQ6000-2BA50	8PQ2055-6BA02
3KL711/3KA711	600	3/4	Front, rear	Door-coupling rotary operating mechanism	200	8PQ6000-2BA52	8PQ2020-6BA10
3KL712/3KA712	600	3/4	Front, rear	Door-coupling rotary operating mechanism	250	8PQ6000-2BA55	8PQ2025-6BA03
3KL713/3KA713	600	3/4	Front, rear	Door-coupling rotary operating mechanism	300	8PQ6000-2BA58	8PQ2030-6BA04
3KL714/3KA714	600	3/4	Front, rear	Door-coupling rotary operating mechanism	350	8PQ6000-2BA62	8PQ2035-6BA06
3KL715/3KA715 a	600	3/4	Front, rear	Door-coupling rotary operating mechanism	450	8PQ6000-2BA67	8PQ2045-6BA02

② Fixed version, vertical



Circuit breaker	Compartment width mm	No. of poles	Connection	Operating mechanism	Height mm	Mounting plate	Cover
3KL50/3KL52	600	3/4	Front, rear	Door-coupling rotary operating mechanism	250	8PQ6000-2BA66	8PQ2025-6BA05
3KL55/3KL57	600	3/4	Front, rear	Door-coupling rotary operating mechanism	350	8PQ6000-2BA72	8PQ2035-6BA10
3KL61	600	3	Front, rear	Door-coupling rotary operating mechanism	450	8PQ6000-2BA51	8PQ2045-6BA01
3KL711/3KA711	600	3/4	Front, rear	Door-coupling rotary operating mechanism	200	8PQ6000-2BA53	8PQ2020-6BA11
	800	3/4	Front, rear	Door-coupling rotary operating mechanism	200	8PQ6000-2BA54	8PQ2020-8BA04
3KL712/3KA712	600	3/4	Front, rear	Door-coupling rotary operating mechanism	250	8PQ6000-2BA56	8PQ2025-6BA04
	800	3/4	Front, rear	Door-coupling rotary operating mechanism	250	8PQ6000-2BA57	8PQ2025-8BA02
3KL713/3KA713	600	3/4	Front, rear	Door-coupling rotary operating mechanism	300	8PQ6000-2BA60	8PQ2030-6BA05
	800	3/4	Front, rear	Door-coupling rotary operating mechanism	300	8PQ6000-2BA61	8PQ2030-8BA02
3KL714/3KA714	600	3/4	Front, rear	Door-coupling rotary operating mechanism	350	8PQ6000-2BA63	8PQ2035-6BA07
	800	3/4	Front, rear	Door-coupling rotary operating mechanism	350	8PQ6000-2BA64	8PQ2035-8BA04
3KL715/3KA715 b	600	3/4	Front, rear	Door-coupling rotary operating mechanism	450	8PQ6000-2BA68	8PQ2045-6BA03
	800	3/4	Front, rear	Door-coupling rotary operating mechanism	450	8PQ6000-2BA70	8PQ2045-8BA01

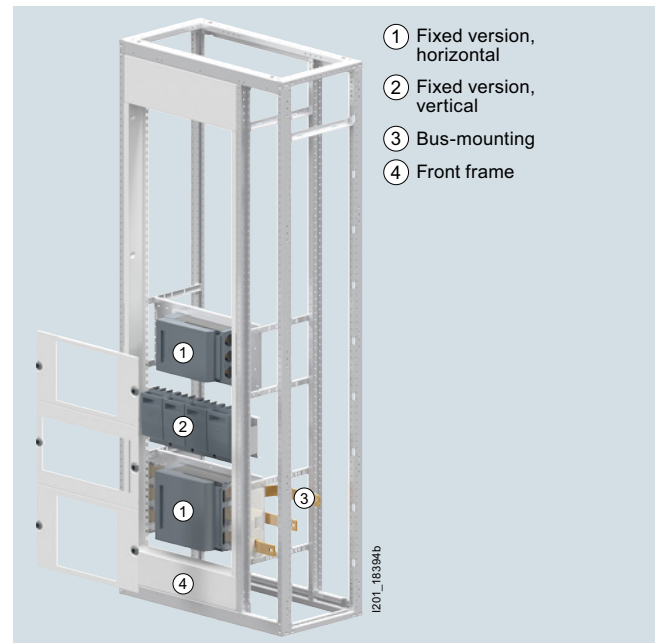
a Due to the size of its handle, the 1250A/50 kA 3KA715 disconnector requires an additional 200 mm cover.

b Due to the size of its handle, the 3KA715 disconnector can be installed only in versions up to 1250A/35 kA.

Selection and ordering data

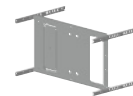
Configuration

You can find fuse links in [Catalogue LV 10, Chapter "Fuse Systems"](#).

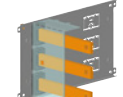
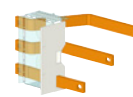


Configuration	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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① Fixed version, horizontal

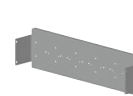


Circuit breaker	Compartment width mm	No. of poles	Height mm	Mounting plate	Cover
3NP1143	600	3	250	8PQ6000-3BA75	8PQ2025-6BA16
3NP1153	600	3	250	8PQ6000-3BA75	8PQ2025-6BA17
3NP1163	600	3	300	8PQ6000-3BA77	8PQ2030-6BA22

Busbars

Circuit breaker	Compartment width mm	No. of poles	Height mm	Vertical distribution busbar, cascaded	Cable connection form 3
3NP1143	600	3	250	8PQ6000-5BA68	8PQ6000-5BA72
3NP1153	600	3	250	8PQ6000-5BA70	8PQ6000-5BA73
3NP1163	600	3	300	8PQ6000-5BA71	8PQ6000-5BA74

② Fixed version, vertical



Circuit breaker	Compartment width mm	No. of poles	Height mm	No. of circuit breakers	Mounting plate	Cover
3NP1123	600	3	250	1 ... 4	8PQ6000-3BA78	8PQ2025-6BA18
	800	3	250	1 ... 6	8PQ6000-3BA82	8PQ2025-8BA10
3NP1133	600	3	300	1 ... 4	8PQ6000-3BA78	8PQ2030-6BA23
	800	3	300	1 ... 5	8PQ6000-3BA82	8PQ2030-8BA11

Assembly Kits

3NJ4 in-line fuse switch disconnectors

Overview

Standards		IEC 60947-1, IEC 60947-3, VDE 0660 Part 107			
Type		3NJ410	3NJ412	3NJ413	3NJ414
Conventional thermal current					
In free air with gG fuses, I_{th}	A	160	250	400	630
For fuse links and isolating blades					
gG according to IEC 60269, I_n	Size	00	1	2	3
Rated operating voltage U_e At 40 Hz ...60 Hz AC	A	160	250	400	630
Rated operating voltage U_e At 40 Hz ...60 Hz AC	V	690	690	690	690
Rated insulation voltage U_i	V	800	1000	1000	1000
Rated impulse withstand voltage U_{imp}	kV	8	12	12	12
Rated conditional short-circuit current with fuses, at 500 V AC					
With gG fuse (rms value)	kA	80/120	120	120	120
Max. permissible power loss per fuse link	W	12	32	45	48
Rated short-time withstand current I_{cw} rms value	kA	--	14.5	14.5	14.5
Capacitive switching capacity	kvar	--	105 ... 115	155 ... 185	250 ...300
Permissible ambient temperature	°C	-25 ... +55, > 35 °C with derating factors			
Mechanical endurance , operating cycles		1400	1400	800	800
Electrical endurance , operating cycles		200	200	200	200
Degree of protection					
With closed handle insert, with side cover and clamps		IP30	IP30	IP30	IP30
With open handle insert		IP10	IP10	IP10	IP10
Power dissipated from main current lines at I_{th}	W	18	23	54	115
Main conductor connection					
Connecting screws					
Flat rails	mm	M8	M10	M12	M12
Cable lug, max. (multi-wire) conductor size	mm ²	20	30	30	30
		95	240	240	240
Tightening torque	Nm	12 ... 15	30 ... 35	35 ... 40	35 ... 40
Bracket/V clamps	mm ²	1.5 ... 70	25 ... 300	25 ... 300	25 ... 300
Fastening screws					
Required tightening torque for installation on busbars	Nm	M8	M12	M12	M12
		16 ... 18	35 ... 40	35 ... 40	35 ... 40

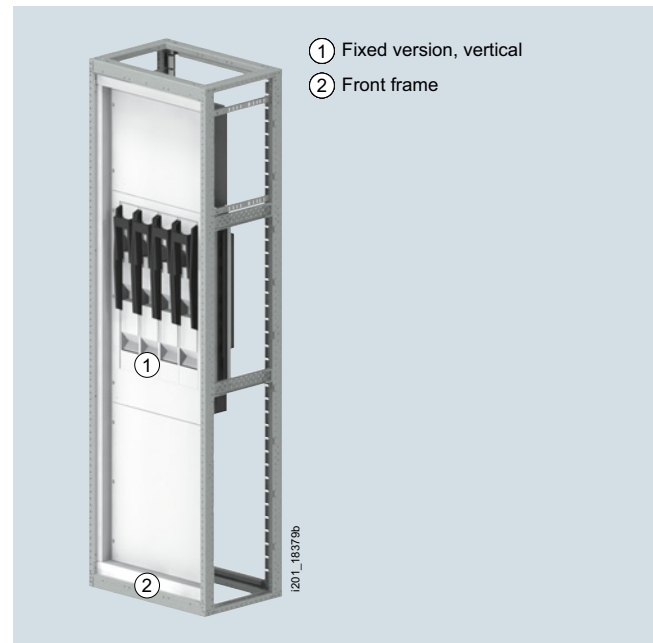
Selection and ordering data

General description

- Adjustable-depth mounting plate
- Cut-outs prepared for direct operating mechanism
- Two busbar holders needed per assembly kit.

Configuration

- Two busbar holders are required per assembly kit
- You can find fuse links in [Catalogue LV 10, Chapter "Fuse Systems"](#).



Configuration	Article No. www.siemens.com/ product?Article No.	Quan- tity	Article No. www.siemens.com/ product?Article No.	Article No. www.siemens.com/ product?Article No.
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① Fixed version with cover

- For installation behind section door
- In combination with the swivel front frame, the maximum possible number of components is reduced by -1



Circuit breaker	Compartment width mm	No. of poles	Installation technique	Height mm	Circuit breakers per kit	Mounting plate		Busbar holder	Cover
3NJ4, size 1, 2, 3	600	3	Fixed	800	1 ... 4	8PQ6000-2BA48	2 ×	3NJ5974-0AB	8PQ2000-6BA06
3NJ4, size 1, 2, 3	800	3	Fixed	800	1 ... 6	8PQ6000-2BA48	2 ×	3NJ5974-0AB	8PQ2000-8BA06

Fixed version with modular door

- Operation through the door
- Degree of protection: IP 30



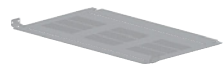
Circuit breaker	Compartment width mm	No. of poles	Installation technique	Height mm	Circuit breakers per kit	Mounting plate		Busbar holder	Modular door
3NJ4, size 1, 2, 3	600	3	Fixed	800	1 ... 4	8PQ6000-2BA48	2 ×	3NJ5974-0AB	8PQ2080-6BA10
3NJ4, size 1, 2, 3	800	3	Fixed	800	1 ... 6	8PQ6000-2BA48	2 ×	3NJ5974-0AB	8PQ2080-8BA05

Blanking covers

Panel cut-out	Width mm	Blanking covers			
3NJ4, size 00	50	3NJ4912-2AA00			
3NJ4, size 1, 2, 3	100	3NJ4912-2BA00			

Assembly Kits

3NJ4 in-line fuse switch disconnectors

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Separation			
	Form 3b		
	• For cable connection at the bottom horizontal partition + crossbar required		
	Width		
	mm		
	600	8PQ5000-1BA70	1 unit
	800	8PQ5000-1BA71	1 unit
Horizontal separation			
	Compartment width		
	mm		
	400	8PQ5000-3BA44	1 unit
	600	8PQ5000-2BA61	1 unit
	800	8PQ5000-2BA62	1 unit
Crossbars		8PQ5000-2BA63	1/2 units
• Equipment height in mm: 25			
			

4

3NJ6 in-line switch disconnectors with fuses

Technical specifications

Main devices of sizes 00 and 1

Size		00								1				
In-line switch disconnectors with fuses type 3NJ62...	LV HRC			...02-3 ...02-4		...03-1 ...04-1 ...04-2		...03-3 ...03-4		...12-3 ...12-4		...13-1 ...14-1 ...14-2		...13-3 ...13-4
	BS	...43-3	...53-3	...62-3 ...62-4				...63-3 ...63-4		...72-3 ...72-4		...74-1 ...74-2		...73-3 ...73-4
Switching capacity		H	H	H		S		H		H		S		H
Rated insulation voltage U_i	V	1000												
Rated impulse voltage U_{imp}	V	8000												
Rated operating current I_e	A	63	100	160	-	160	125	160	125	250				
For LV HRC fuse links acc. to IEC 60269		-	-	00 and 000						1				
For BS fuse links acc. to BS 88		A3	A3	00T ¹⁾						B2				
Rated operating voltage U_e														
• At 50/60Hz rated frequency	V	690		--	--	500	690	500	690	690				
• At DC	V	--	--	230	440	--	--	--	--	230	440	-	-	
Utilisation category		AC23B		DC23B	DC21B	AC22B		AC23B		DC23B	DC21B	AC22B	AC23B	
Rated conditional short-circuit current														
• Short-circuit resistance (actual value)	kA	100		60		100		100		60		100		
• Short-circuit making capacity (actual value)	kA	66		60		55		66		60		55	66	
Rated making capacity														
• $\cos \varphi = 0.65$	A	--	--	--	--	480	375	--	--	--	--	750	--	
• $\cos \varphi = 0.45$	A	630	1000	--	--	--	--	--	--	--	--	--	--	
• $\cos \varphi = 0.35$	A	--	--	--	--	--	--	1600	1250	--	--	--	2500	
Rated breaking capacity														
• $\cos \varphi = 0.65$	A	--	--	--	--	480	375	--	--	--	--	750	--	
• $\cos \varphi = 0.45$	A	504	800	--	--	--	--	--	--	--	--	--	--	
• $\cos \varphi = 0.35$	A	--	--	--	--	--	--	1280	1000	--	--	--	2000	
Operating life														
Operating cycles total		2000		1600		1600								
• Electrical (690 V, $\cos \varphi = 0.65$)		300		200		200								
Power dissipated (no fuse links)	W	7	17	43		78								
Permissible ambient temperature	°C	-5...+55												
Permissible operating position		Horizontal and vertical with bottom connection												
Connection type		Main conductor connection												
Cable lug connection														
• Conductor cross-section (Al/Cu, solid or stranded) according to DIN 46235 (Cu) and DIN 46239 (Al)	mm ²	1x 10-95 2x 16-70								1x 25-240 2x 25-70				
• Screw dimensions		M8								M12				
• Tightening torque	Nm	15								30				
Clamp connection														
• Conductor size (Al/Cu), rm	mm ²	1x 10-50								1x 16-185				
• Conductor size (Al/Cu), re	mm ²	1x 10-50								1x 16-150				
• Conductor size (Al/Cu), sm	mm ²	1x 16-95								1x 35-240				
• Conductor size (Al/Cu), se	mm ²	1x 16-95								1x 35-300				
• Tightening torque required	Nm	15								25				

¹⁾ The fuse is available from Lawson Fuses (UK) and does not correspond to BS 88.

Assembly Kits

3NJ6 in-line switch disconnectors with fuses

Main devices of sizes 2 and 3

Size		2				3			
In-line switch disconnectors with fuses type 3NJ62...	LV	...22-3	...23-1	...23-3	...32-3	...33-1	...33-3		
	HRC	...22-4	...24-1	...23-4	...32-4	...34-1	...33-4		
			...24-2			...34-2			
	BS	...82-3		...83-3	...92-3	...94-1	...93-3		
		...82-4		...83-4	...92-4	...94-2	...93-4		
							...33-3		
							...33-4		
Switching capacity		H	S	H	H	S	H		
Rated insulation voltage U_i	V	1000							
Rated impulse voltage U_{imp}	V	8000							
Rated operating current I_e	A	400				630		500	630
• For fuse links according to IEC 60269/ BS88								500	500
For fuse links according to IEC 60269		2 and 1				3 and 2			
For BS fuse links acc. to BS 88		B4				3T ¹⁾			
Rated operating voltage U_o									
• At 50/60Hz rated frequency		V	--	--	690	230	440	500	690
• At DC		V	230	440	--	--	--	--	--
Utilisation category		DC23B	DC21B	AC22B	AC23B	DC23B	DC21B	AC22B	AC23B
Rated conditional short-circuit current									
• Short-circuit resistance (actual value)		kA	60	100	60	100	66	55	66
• Short-circuit making capacity (actual value)		kA	60	55	66	60	55	66	66
Rated making capacity									
• $\cos \phi = 0.65$		A	--	--	1200	--	--	1890	1500
• $\cos \phi = 0.45$		A	--	--	--	--	--	--	--
• $\cos \phi = 0.35$		A	--	--	4000	--	--	--	6300
Rated breaking capacity									
• $\cos \phi = 0.65$		A	--	--	1200	--	--	1890	1500
• $\cos \phi = 0.45$		A	--	--	--	--	--	--	--
• $\cos \phi = 0.35$		A	--	--	3200	--	--	--	5040
Operating life									
Operating cycles total			1000			1000			
• Electrical (690 V, $\cos \phi = 0.65$)			200			200			
Power dissipated (no fuse links)	W		158			357			
Permissible ambient temperature	°C		-5...+55						
Permissible operating position			Horizontal and vertical with bottom connection						
Degree of protection (in operating conditions)			IP41						
Connection type			Main conductor connection						
Cable lug connection									
Conductor size	mm ²		1x 25-300			1x 25-300			
• Al/Cu, solid or stranded according to DIN 46235 (Cu) and DIN 46239 (Al)			2x 25-240			2x 25-240			
• Screw dimensions			2x M12			2x M12			
• Tightening torque	Nm		30			30			
Clamp connection									
• Conductor size (Al/Cu), rm		mm ²	2x 16-185			2x 16-185			
• Conductor size (Al/Cu), re		mm ²	2x 16-150			2x 16-150			
• Conductor size (Al/Cu), sm		mm ²	2x 35-240			2x 35-240			
• Conductor size (Al/Cu), se		mm ²	2x 35-300			2x 35-300			
• Tightening torque required		Nm	25			25			

¹⁾ The fuse is available from Lawson Fuses (UK) and does not correspond to BS 88.

3NJ6 in-line switch disconnectors with fuses

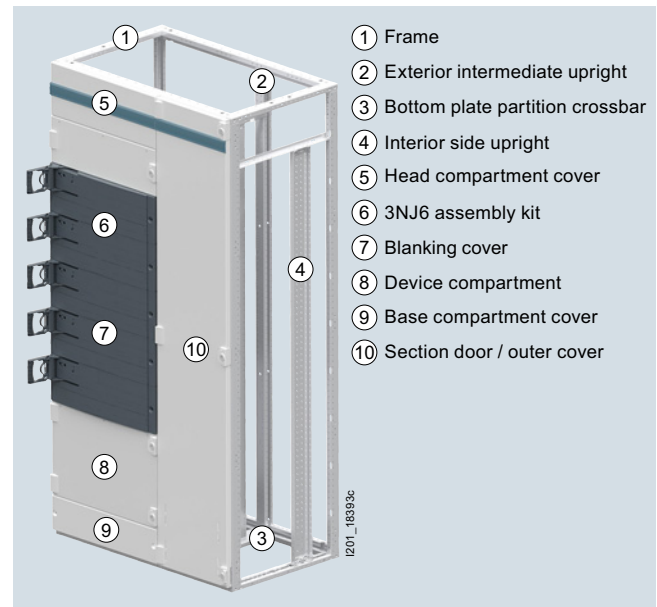
Selection and ordering data

Features

- Suitable for 3- and 4-pole busbar arrangement
- Degree of protection IP40
- Plug-in in-line switch disconnectors

Configuration

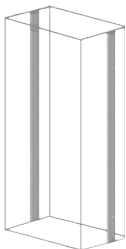
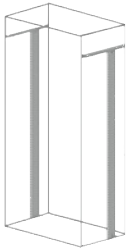
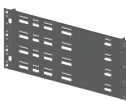
- You can find fuse links in [Catalogue LV 10, Chapter "Fuse Systems"](#).
- Due to the design of the devices separation 2b already creates form 3b.



Configuration			Article No. www.siemens.com/product?Article No.	PS*/ P. unit
	① Frame Height 2000 mm			
	Width mm	Depth mm		
	1000	400	8PQ1201-4BA02	1 unit
		600	8PQ1201-6BA02	1 unit
		800	8PQ1201-8BA03	1 unit
	1200	400	8PQ1202-4BA02	1 unit
		600	8PQ1202-6BA02	1 unit
		800	8PQ1202-8BA02	1 unit
	② Exterior intermediate uprights For fitting • Outer covers • Section doors • Modular doors		8PQ3000-1BA43	1 unit
	② Bottom plate partition crossbars For width 600 to 1200 mm			
	Depth in mm	Quantity		
	400	1 ×	8PQ3000-1BA38	1 unit
	600	1 ×	8PQ3000-1BA40	1 unit
	800	2 ×	8PQ3000-1BA38	1 unit

Assembly Kits

3NJ6 in-line switch disconnectors with fuses

Configuration			Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	④ Interior side uprights, without main busbar - For width from 400 to 1200 mm - For depth from 600 to 800 mm			
	Depth in mm			
	600 800		8PQ3000-0BA03	1 unit
	④ Interior side uprights, with main busbar at top For width from 800 to 1200 mm			
	Depth in mm			
	400 600 800		8PQ3000-0BA65 8PQ3000-0BA01 8PQ3000-0BA02	1 unit 1 unit 1 unit
	⑤ Head compartment covers			
	Height mm	Width mm		
	225	600	8PQ2022-6BA01	1 unit
 	⑥ Assembly kits for 3NJ6 in-line switch disconnectors with fuses Assembly kit without busbar copper			
	Height mm	Width mm		
	1600	600	8PQ3000-1BA48	1 unit
	Busbar covers - Mounting height 200 mm 8 units required per 3NJ6 assembly kit		3NJ6916-4EA00	1 unit
	⑦ Blanking covers Mounting height 50 mm		3NJ6900-4CB00	1 unit

3NJ6 in-line switch disconnectors with fuses

Configuration			Article No. www.siemens.com/ product?Article No.	PS/ P. unit
	⑧ Device compartments			
	Height mm	Width mm		
	200 400	600	8PQ3000-1BA50 8PQ3000-1BA51	1 unit 1 unit
	⑨ Base compartment covers, IP 4X			
	Height mm	Width mm		
	175	600	8PQ2000-6BA07	1 unit
	⑩ Section doors – doors with two-way interlocking system			
	Hinge position	Width mm		
	Left	400 600	8PQ2197-4BA08 8PQ2197-6BA06	1 unit 1 unit
	Right	400 600	8PQ2197-4BA11 8PQ2197-6BA13	1 unit 1 unit
	⑩ Section doors – doors for semi-cylindrical profile Semi-cylindrical profile acc. to DIN 18252/18254, 8 × 45°			
	Hinge position	Width mm		
	Left	400 600	8PQ2197-4BA06 8PQ2197-6BA04	1 unit 1 unit
	Right	400 600	8PQ2197-4BA07 8PQ2197-6BA05	1 unit 1 unit
Separation				
	Form 2b, equipment compartment Separation from the main busbar			
	Position of main busbar	Frame depth mm	Width mm	
	Top, front	400 600 800	600	8PQ3000-1BA44 8PQ3000-1BA45 8PQ3000-1BA46
	Top, both sides	800	600	8PQ3000-1BA47
	Form 2b, cable compartment			
	Position of main busbar	Frame depth mm	Width mm	
	Top, front	400 600 800	400	8PQ3000-0BA67 8PQ3000-0BA52 8PQ3000-0BA55
		400 600 800	600	8PQ3000-0BA68 8PQ3000-0BA53 8PQ3000-0BA56
	Top, both sides	800	400 600	8PQ3000-0BA58 8PQ3000-0BA60
	Form 4b, terminal covers			
	- Terminal covers - For 2/3-pole devices - Only for 4th pole		3NJ6923-1DA00 3NJ6904-1DA00	1 unit 1 unit

Assembly Kits

Modular devices

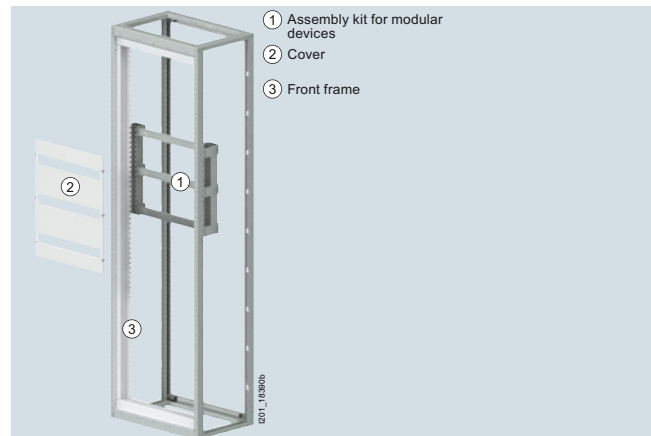
Selection and ordering data

Features

- Adjustable-depth multi-profile rail, 35 mm
- SIKclip snaps onto rear

Configuration

- One mounting plate ① for every row



Configuration

Article No. www.siemens.com/product?Article.No.

Article No. www.siemens.com/product?Article.No.

Modular devices with cover

Width mm	Rows × MW	Row centre distance mm	Height mm	Quantity	① Mounting plate	② Cover
600	1 × 24	150	150	1 ×	8PQ6000-3BA36	8PQ2015-6BA07
600	1 × 24	200	200	1 ×	8PQ6000-3BA36	8PQ2020-6BA12
800	1 × 35	150	150	1 ×	8PQ6000-3BA37	8PQ2015-8BA03
800	1 × 35	200	200	1 ×	8PQ6000-3BA37	8PQ2020-8BA05

Width mm	Rows × MW	Row centre distance mm	Height mm	Quantity	① Mounting plate	② Cover
600	2 × 24	150	300	2 ×	8PQ6000-3BA36	8PQ2030-6BA07
600	2 × 24	200	400	2 ×	8PQ6000-3BA36	8PQ2040-6BA10
800	2 × 35	150	300	2 ×	8PQ6000-3BA37	8PQ2030-8BA03
800	2 × 35	200	400	2 ×	8PQ6000-3BA37	8PQ2040-8BA10

Width mm	Rows × MW	Row centre distance mm	Height mm	Quantity	① Mounting plate	② Cover
600	3 × 24	150	450	3 ×	8PQ6000-3BA36	8PQ2045-6BA04
600	3 × 24	200	600	3 ×	8PQ6000-3BA36	8PQ2060-6BA04
800	3 × 35	150	450	3 ×	8PQ6000-3BA37	8PQ2045-8BA02
800	3 × 35	200	600	3 ×	8PQ6000-3BA37	8PQ2060-8BA02

Modular devices with modular door

Width mm	Rows × MW	Row centre distance mm	Height mm	Quantity	Mounting plate	Modular door
600	1 × 24	200	200	1 ×	8PQ6000-6BA52	8PQ2020-6BA28
800	1 × 35	200	200	1 ×	8PQ6000-6BA53	8PQ2020-8BA14

Supports for raceway fastening

Width mm	Supports
600	8PQ6000-0BA16
800	

Blanking strips

Colour RAL 7035 (light grey)

Versions	
For 12 MW (1 MW = 18 mm)	8GK9910-0KK00
1 m long without pressure-relief joint, to cut to length	8GK9910-0KK01

Technical specifications

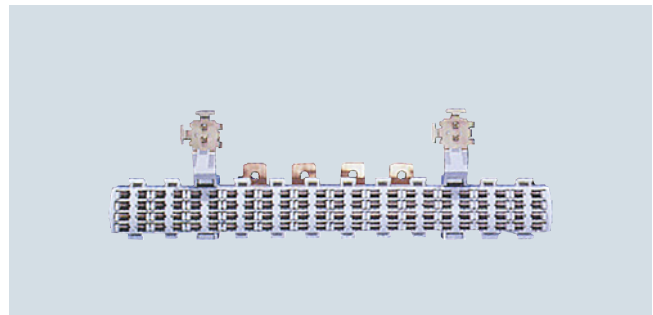
Max. rated operating current I_n	250 A at 40 °C ambient temperature
Max. rated output current I_n	63 A at 40 °C ambient temperature
Rated operating voltage U_n	AC 400 V
Rated insulation voltage	660 V AC
Test voltage	2.5 kV, 50 Hz
Degree of protection	IP20
Connecting conductors	40 A (6 mm ²), 63 A (10 mm ²)
Type of connecting conductor	H07VK
Colour	RAL 7035
Operating temperature	-5 °C to +60 °C
Applicable standards	EN 60947-1, EN 60439-3

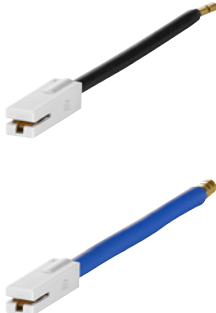
Selection and ordering data

General description

SIKclip is a quick wiring system simplifying the connection of flush-mounted circuit breakers.

- For direct mounting on the rear vertical Cu busbar.
- Fixing with clips onto the back of the DIN rail (top hat rail).



	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit		
	SIKclip wiring system				
	Modular width (MW)				
	12	5ST2520	1 unit		
	24	5ST2521	1 unit		
36	5ST2522	1 unit			
	Connecting conductors				
	Cross-section	Length	Colour		
	6 mm ²	120 mm	Black Blue	5ST2523 5ST2524	10 units 10 units
		220 mm	Black Blue	5ST2527 5ST2528	10 units 10 units
	10 mm ²	120 mm	Black Blue	5ST2525 5ST2526	10 units 10 units
		220 mm	Black Blue	5ST2530 5ST2531	10 units 10 units
	Push-in connectors				
			5ST2532	20 units	
	Brackets				
	• For anchoring to bar of DIN rail • 1 pair = 2 units				
			5ST2533	2 units	

* You can order this quantity or a multiple thereof.

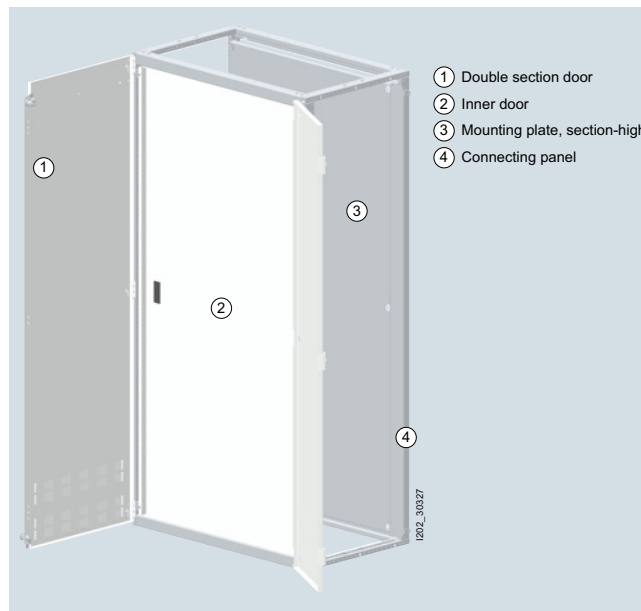
Assembly Kits

Mounting plates

Overview

Features

- Double section door in combination with inner door and section-high mounting plates



Selection and ordering data

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
---------------	--	-----------------	--	-----------------

① Double section doors - double-bit keys

Width mm	Division mm	IP40		IP55	
1000	600 + 400	8PQ2197-1BA14	1 unit	8PQ2197-1BA13	1 unit
1200	600 + 600	8PQ2197-2BA11	1 unit	8PQ2197-2BA10	1 unit

Double section doors - semi-cylindrical profile

Width mm	Division mm	IP40		IP55	
1000	600 + 400	8PQ2197-1BA16	1 unit	8PQ2197-1BA15	1 unit
1200	600 + 600	8PQ2197-2BA13	1 unit	8PQ2197-2BA12	1 unit

② Inner doors

- Suitable for installation behind section doors
- Cannot be combined with front frame
- Prepared for installation of inner door struts on the rear
- One kit 8PQ2080-0BA07 (2 x 700 mm) each can be fitted at top and bottom

Width mm	Height mm	Inner door		Inner door strut 700 mm high	
600	1900	8PQ2000-6BA05	1 unit	8PQ2080-0BA07	1 unit
800		8PQ2000-8BA05	1 unit	8PQ2080-0BA07	1 unit
1000		8PQ2000-1BA01	1 unit	8PQ2080-0BA07	1 unit

Mounting plates

Configuration	Article No. www.siemens.com/ product?Article No.	PS/ P. unit	Article No. www.siemens.com/ product?Article No.	PS/ P. unit
---------------	--	----------------	--	----------------

③ Mounting plates, section-high

- Reinforced version for heavy load

Height mm	Width mm	2 mm		3 mm	
1600	400	8PQ3000-0BA33	1 unit	--	
	600	8PQ3000-0BA35	1 unit	--	
	800	8PQ3000-0BA37	1 unit	8PQ3000-2BA81	1 unit
	1000	8PQ3000-1BA06	1 unit	8PQ3000-2BA55	1 unit
	1200	8PQ3000-1BA07	1 unit	8PQ3000-2BA57	1 unit
1900	400	8PQ3000-0BA32	1 unit	--	
	600	8PQ3000-0BA34	1 unit	--	
	800	8PQ3000-0BA36	1 unit	8PQ3000-2BA80	1 unit
	1000	8PQ3000-1BA04	1 unit	8PQ3000-2BA56	1 unit
	1200	8PQ3000-1BA05	1 unit	8PQ3000-2BA58	1 unit

④ Connecting panels

- Connects two adjacent mounting plates

Height mm	Connecting panel	
1600	8PQ3000-1BA10	1 unit
1900	8PQ3000-1BA08	1 unit

Modular mounting plates

- For use with device support plates for free assembly

Width mm	Height mm	Mounting plate	
400	150	8PQ3000-2BA60	1 unit
	200	8PQ3000-2BA17	1 unit
	300	8PQ3000-2BA66	1 unit
	400	8PQ3000-2BA18	1 unit
	600	8PQ3000-2BA21	1 unit
	800	8PQ3000-2BA23	1 unit
600	150	8PQ3000-2BA62	1 unit
	200	8PQ3000-1BA56	1 unit
	300	8PQ3000-2BA51	1 unit
	400	8PQ3000-1BA61	1 unit
	600	8PQ3000-1BA65	1 unit
	800	8PQ3000-1BA26	1 unit
800	150	8PQ3000-2BA64	1 unit
	200	8PQ3000-1BA58	1 unit
	300	8PQ3000-2BA53	1 unit
	400	8PQ3000-1BA63	1 unit
	600	8PQ3000-1BA67	1 unit
	800	8PQ3000-1BA28	1 unit

Assembly Kits

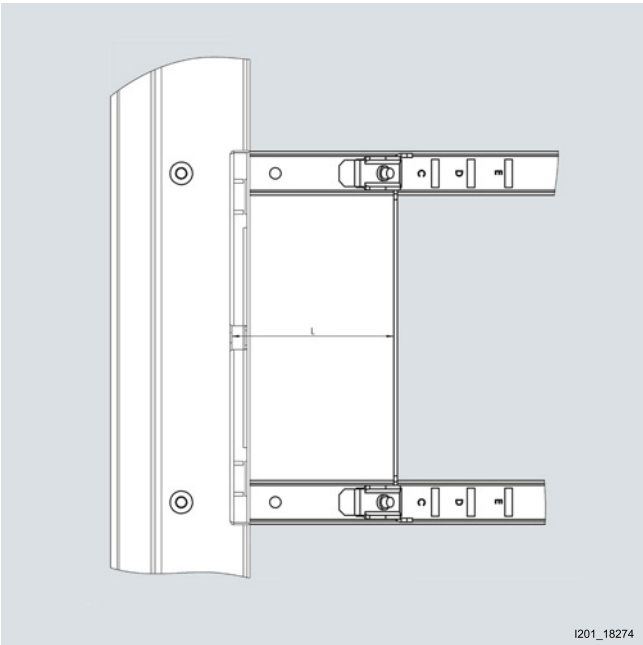
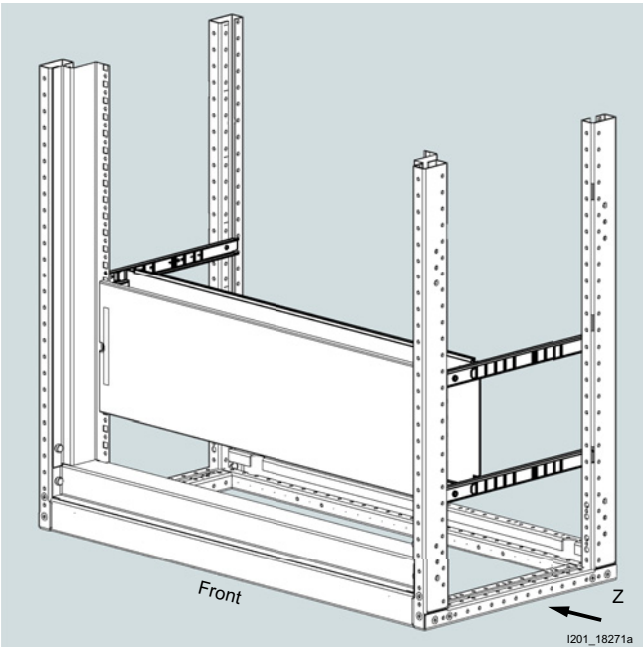
19" racks

Selection and ordering data

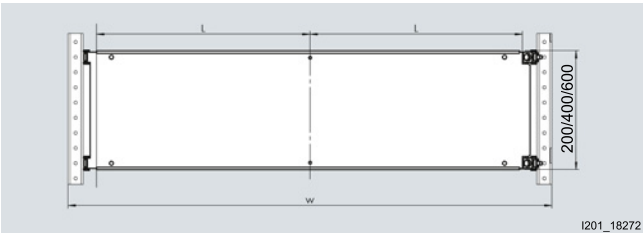
	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	Mounting frame for 19" rack • Number of module heights (HE): 39 • 1 module height (HE) = 44.45 mm. • Swivel frame for left and right hinge position • The maximum weight of the equipment that can be installed is 160 kg.		
	Frame width mm	Installation type	Mounting kits for 19" rack
	600 800	Fixed Swivel	8PQ3000-1BA11 8PQ3000-1BA12
	Fan draw-out units • Power 45 W • Voltage 230 V • Series LE 019	8MR2190-1A	1 unit

Overview

Modular mounting plates



Position	A	B	C	D	E	F	G	H	I	K	L
L in mm	86	106	126	145	175	204	210	229	249	264	284

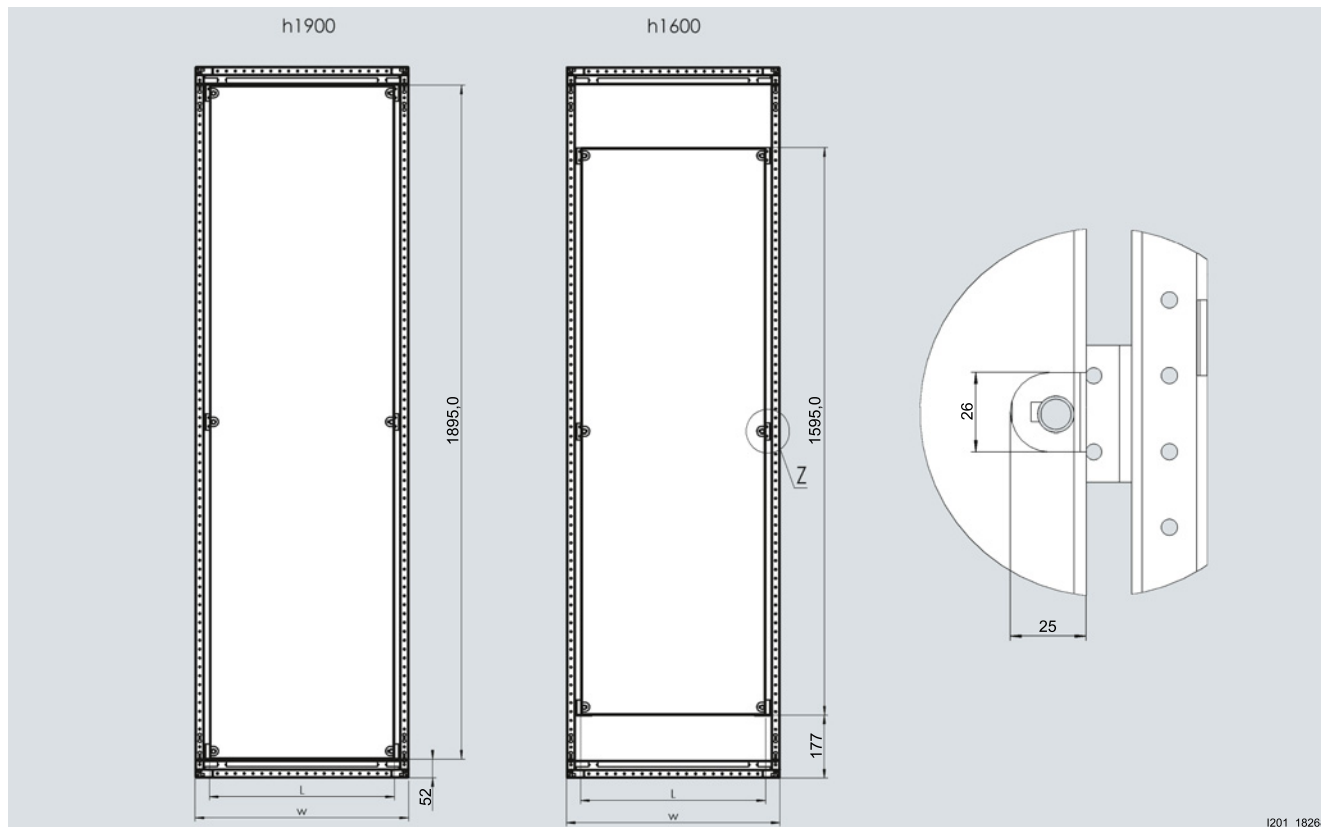


w in mm	400	600	800
L in mm	153	253	353

Assembly Kits

Mechanical dimensions

Mounting plates



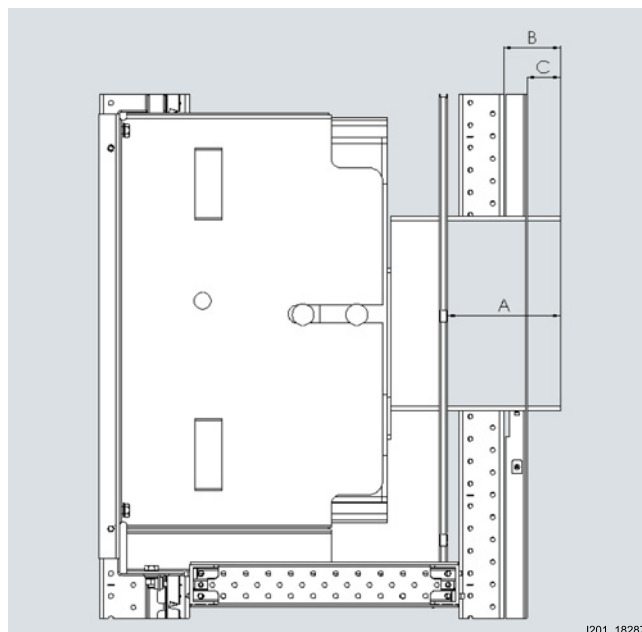
I201_18268

w mm	L mm
400	320
600	520
800	720
1200	1120

3VL moulded case circuit breaker with motorised operating mechanism

Dimensions for equipment combinations made up of circuit breaker, plug-in base or draw-out frame and motorised operating mechanism.

Equipment mounting plate installed in the deepest mounting position. For rear terminal bars, the use of rear vertical partitions is limited.



I201_18267

Type	Dimensions when set to ON ¹⁾		
	A, above the cover mm	B, above the cubicle mm	C, above the section door mm
VL 160-250	50	-12	-37
VL 400	72	10	-14
VL 630	111	48	23
VL 800	105	43	18
VL 1250/1600	126	62	37

¹⁾ Note: In sectioning position, the dimensions increase from 27 to 32 mm. Take into account the additional space needed when using padlocks.

Internal Separation



5/2	Introduction
5/4	Main busbars
5/7	Vertical busbars
5/9	3WL air circuit breakers
5/11	3VL, 3VT, 3K, 3NP modular kits
5/15	3VL rear connection
5/20	Mechanical dimensions

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
Application example
Certificate
Characteristic
Download
FAQ
Manual
Product note
Software archive
Technical data

Internal Separation

Introduction

Overview

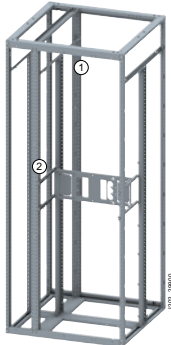
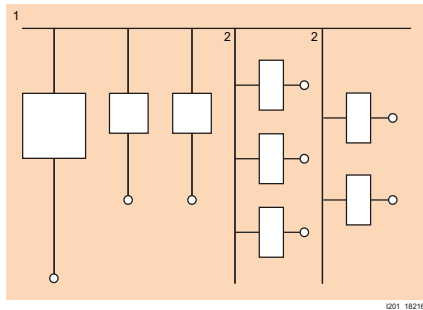
Features

Internal separation is achieved with partitions, covers and device enclosures. Enclosed protected compartments are thus created. Internal separation results in a higher level of safety for people and equipment.

Benefits

- Reduction of possible hazards during connection, scheduled maintenance and extraordinary maintenance operations
- Attenuation of the consequences of local faults and faster resumption of regular operation
- Protection against contact between live parts belonging to adjacent functional units

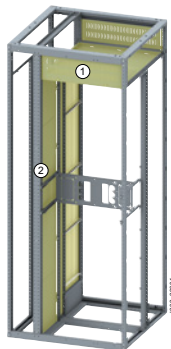
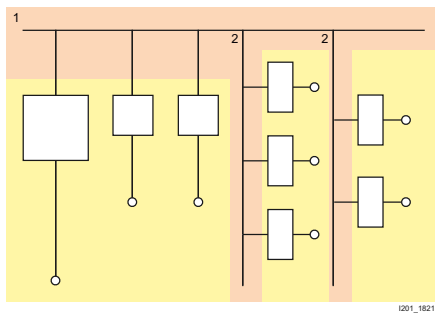
Form 1



Outgoing feeder panel

- No internal separation

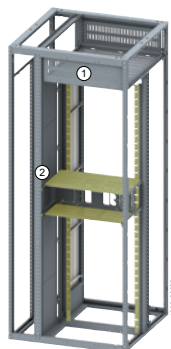
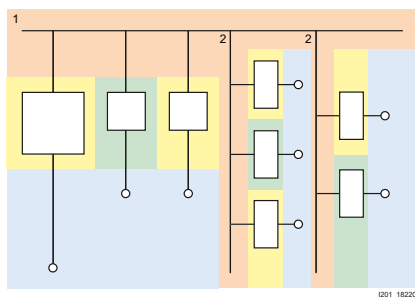
Form 2b



Outgoing feeder panel

- + Separation of the main busbar and the vertical busbar

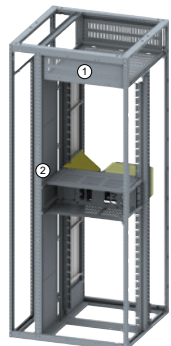
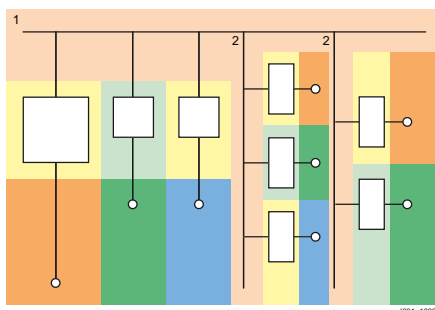
Form 3b



Outgoing feeder panel

- Separation of the main busbar and the vertical busbar
- + Separation of device compartments

Form 4b



Outgoing feeder panel

- Separation of the main busbar and the vertical busbar
- Separation of devices
- + Separation of connection points



Functional units



Connection point

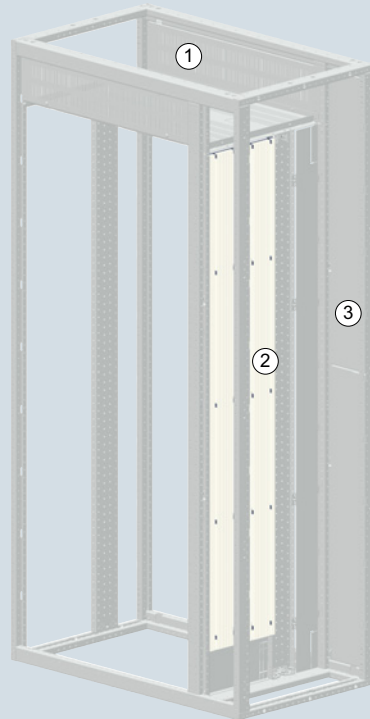


Main busbars

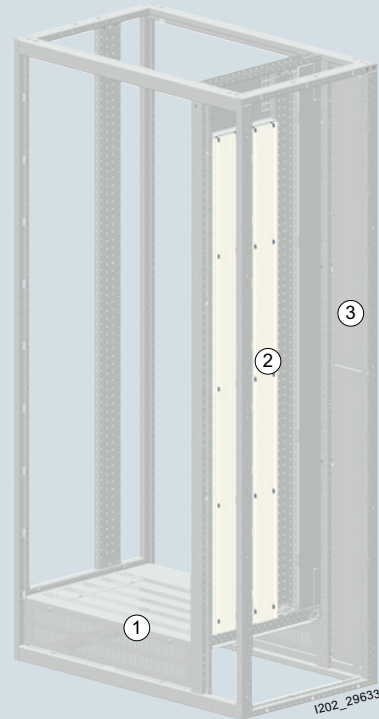


Vertical busbar

Main busbar, top



Main busbar, bottom



- ① Separation, main busbar
- ② Separation, vertical busbar
- ③ Touch protection cover, vertical busbar

Features

- Separations vertical busbar ② contain openings for cable routing
- With main busbar at bottom form 2b is mandatory
- Sophisticated ventilation concept

Internal Separation

Main busbars

Configuration

One unit per frame division corresponding to the relative dimensions for equipment compartment or cable compartment.

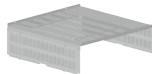
Selection and ordering data

Separation form 2b, main busbar

Configuration				Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
① Main busbar at top • Height: 225 mm					
	Frame depth mm	Position of main busbar	Compartment width mm	Separation	
	400	Top	200	8PQ3000-1BA52	1 unit
			350	8PQ3000-2BA68	1 unit
			400	8PQ3000-0BA67	1 unit
			600	8PQ3000-0BA68	1 unit
			800	8PQ3000-0BA70	1 unit
			850	8PQ3000-2BA70	1 unit
			1000	8PQ3000-1BA13	1 unit
			1200	8PQ3000-1BA15	1 unit
	600	Top	200	8PQ3000-1BA53	1 unit
			350	8PQ3000-2BA71	1 unit
			400	8PQ3000-0BA52	1 unit
			600	8PQ3000-0BA53	1 unit
			800	8PQ3000-0BA54	1 unit
			850	8PQ3000-2BA72	1 unit
			1000	8PQ3000-1BA14	1 unit
			1200	8PQ3000-1BA16	1 unit
	800	Top front/rear	200	8PQ3000-1BA54	1 unit
			350	8PQ3000-2BA73	1 unit
			400	8PQ3000-0BA55	1 unit
			600	8PQ3000-0BA56	1 unit
			800	8PQ3000-0BA57	1 unit
			850	8PQ3000-2BA74	1 unit
			1000	8PQ3000-1BA17	1 unit
			1200	8PQ3000-1BA18	1 unit
	800	Top	200	8PQ3000-1BA55	1 unit
			350	8PQ3000-2BA75	1 unit
			400	8PQ3000-0BA58	1 unit
			600	8PQ3000-0BA60	1 unit
			800	8PQ3000-0BA61	1 unit
			850	8PQ3000-2BA76	1 unit
			1000	8PQ3000-1BA20	1 unit
			1200	8PQ3000-1BA21	1 unit

Internal Separation

Main busbars

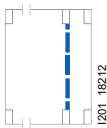
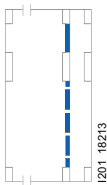
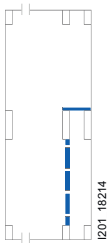
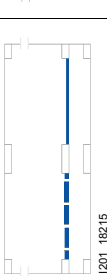
Configuration				Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Main busbar at bottom					
					
	Frame depth mm	Position of main busbar	Frame width mm	Separation	
	400	Bottom	350	8PQ3000-3BA13	1 unit
			400	8PQ3000-3BA14	1 unit
			600	8PQ3000-3BA15	1 unit
			800	8PQ3000-3BA16	1 unit
			850	8PQ3000-3BA17	1 unit
			1000	8PQ3000-3BA18	1 unit
			1200	8PQ3000-3BA20	1 unit
	600	Bottom	350	8PQ3000-3BA22	1 unit
			400	8PQ3000-3BA23	1 unit
			600	8PQ3000-3BA24	1 unit
			800	8PQ3000-3BA25	1 unit
			850	8PQ3000-3BA26	1 unit
			1000	8PQ3000-3BA27	1 unit
			1200	8PQ3000-3BA28	1 unit
	800	Bottom front for cable entry	350	8PQ3000-3BA40	1 unit
			400	8PQ3000-3BA41	1 unit
			600	8PQ3000-3BA42	1 unit
			800	8PQ3000-3BA43	1 unit
			850	8PQ3000-3BA44	1 unit
			1000	8PQ3000-3BA45	1 unit
			1200	8PQ3000-3BA46	1 unit
	800	Bottom double	350	8PQ3000-3BA31	1 unit
			400	8PQ3000-3BA32	1 unit
			600	8PQ3000-3BA33	1 unit
			800	8PQ3000-3BA34	1 unit
			850	8PQ3000-3BA35	1 unit
			1000	8PQ3000-3BA36	1 unit
			1200	8PQ3000-3BA37	1 unit

Internal Separation

Main busbars

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit		
	Main busbar at rear • Height: 250 mm				
	Frame depth mm	Position of main busbar	Compartment width mm	Separation	
	800	Rear	350	8PQ3000-2BA77	1 unit
			400	8PQ3000-0BA78	1 unit
			600	8PQ3000-0BA80	1 unit
			800	8PQ3000-0BA81	1 unit
			850	8PQ3000-2BA78	1 unit
			1000	8PQ3000-1BA22	1 unit
			1200	8PQ3000-1BA23	1 unit
	Main busbar at rear • With horizontal separations				
	Frame depth mm	Position of main busbar	Frame width mm	Separation	
	800	Rear	400	8PQ5000-4BA24	1 unit
			600	8PQ5000-4BA25	1 unit
			800	8PQ5000-4BA26	1 unit
			1000	8PQ5000-4BA27	1 unit

Selection and ordering data

Configuration					Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
② Vertical busbar, form 2b						
	Position of main busbar	Positioning	Frame depth mm	Compartment width mm		
 	Top	--	400	--	8PQ4000-0BA05	1 unit
			600	--	8PQ4000-0BA07	1 unit
	Top	On two sides	800		8PQ4000-0BA64	1 unit
 	Top	Front/rear	800	200	8PQ4000-0BA02	1 unit
				400	8PQ4000-0BA01	1 unit
	Without	--	400	--	8PQ4000-0BA06	1 unit
			600	--	8PQ4000-0BA03	1 unit
			800	--	8PQ4000-0BA76	1 unit

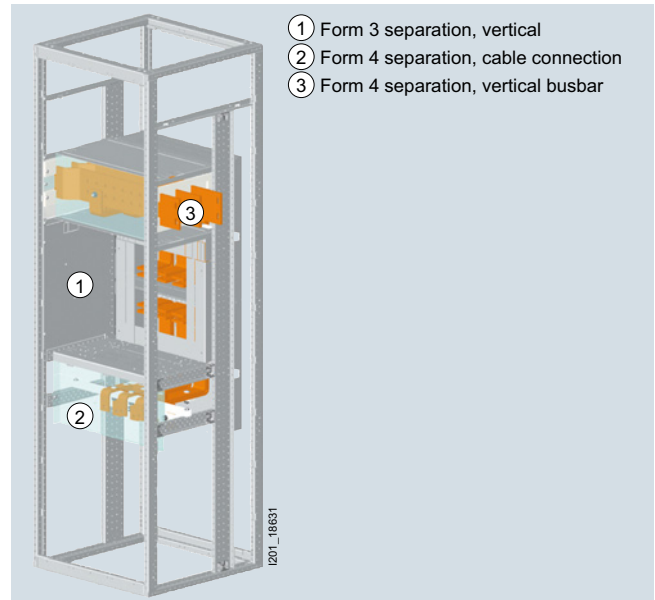
Internal Separation

Vertical busbars

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	③ Touch protection covers, vertical busbar • Height 1900 mm • Not for use with frame depth 400 mm		
	Compartment width mm		
	200	8PQ3000-2BA50	1 unit
	400	8PQ3000-0BA51	1 unit
	④ Vertical separation between sections • Height 1900 mm • With removable pre-sectioning units for main busbar, top		
	Frame depth mm	Quantity	
	400	1 ×	8PQ3000-0BA15 1 unit
	600	1 ×	8PQ3000-0BA16 1 unit
	800	2 ×	8PQ3000-0BA15 1 unit

Overview

The separation kit for 3WL circuit breakers ensures rear and side separation.



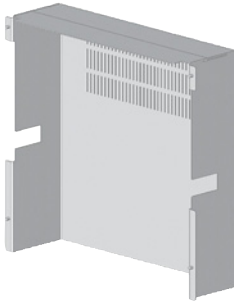
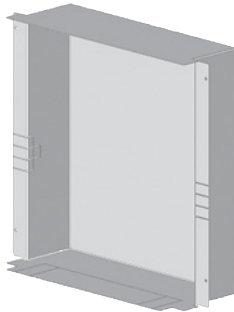
Cubicle with busbar connections and form 4b separation.

Selection and ordering data

Configuration				Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
① Form 3 separation, vertical Module height: 550 mm					
Size	Modular cover at the front	Compartment width mm	Installation type		
I	Door	400	Fixed/draw-out	8PQ5000-3BA82	1 unit
		600	Fixed/draw-out	8PQ5000-3BA82	1 unit
	Cover	600	Fixed	8PQ5000-0BA08	1 unit
			Draw-out	8PQ5000-0BA07	1 unit
		800	Fixed	8PQ5000-1BA65	1 unit
			Draw-out	8PQ5000-1BA66	1 unit
II	Door	600	Draw-out	8PQ5000-3BA82	1 unit
		800	Fixed/draw-out	8PQ5000-3BA81	1 unit
	Cover	600	Fixed	8PQ5000-0BA13	1 unit
			Draw-out	8PQ5000-0BA12	1 unit
		800	Fixed	8PQ5000-0BA11	1 unit
			Draw-out	8PQ5000-0BA10	1 unit
Note					
The separations cannot be used for 3WL1240.					

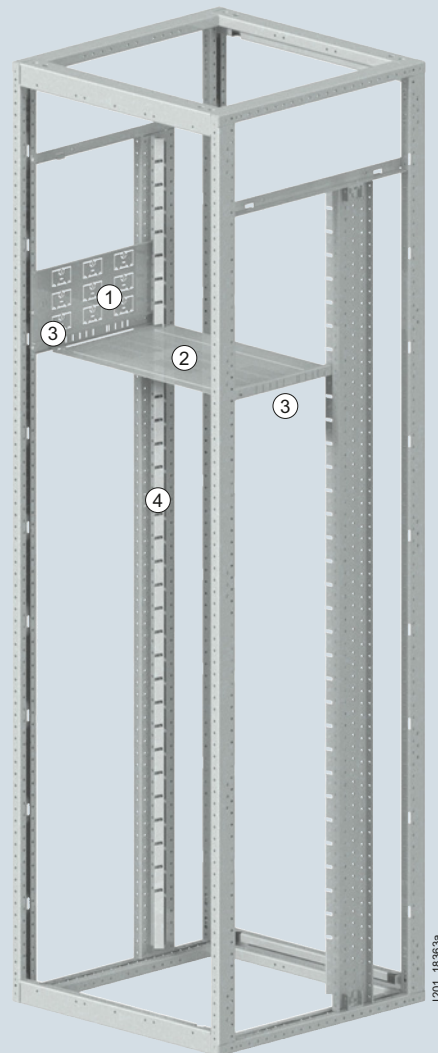
Internal Separation

3WL air circuit breakers

Configuration						Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
	② Form 4 separation, cable connection Installation type: Fixed version and draw-out version							
	Size	Modular cover at the front	Compartment width mm	Section depth mm	Mounting height Above circuit breaker mm Below circuit breaker mm			
	I	Door	400 600	400	250	300	8PQ5000-3BA84	1 unit
				600/800			8PQ5000-4BA00	1 unit
				400			8PQ5000-3BA86	1 unit
				600/800			8PQ5000-4BA01	1 unit
		Cover	600 800	600/800			8PQ5000-0BA30	1 unit
				600/800			8PQ5000-1BA68	1 unit
	II	Door	800	600/800	350	400	8PQ5000-4BA02	1 unit
		Cover	800	600/800			8PQ5000-0BA38	1 unit
	③ Form 4 separation, vertical busbars Installation type: Fixed version and draw-out version							
	Size	Modular cover at the front	Compartment width mm	Section depth mm	Mounting height Above circuit breaker mm Below circuit breaker mm			
	I	Door	400 600	400	250	300	8PQ5000-3BA84	1 unit
				600/800			8PQ5000-3BA85	1 unit
				400			8PQ5000-3BA86	1 unit
				600/800			8PQ5000-3BA87	1 unit
		Cover	600 800	600/800			8PQ5000-0BA14	1 unit
				600/800			8PQ5000-1BA67	1 unit
	II	Door	800	600/800	300	350	8PQ5000-3BA88	1 unit
		Cover	800	600/800			8PQ5000-0BA21	1 unit

Overview**Features**

- Modular system for 3VL, 3VT, 3K and 3NP
- Separation 3b

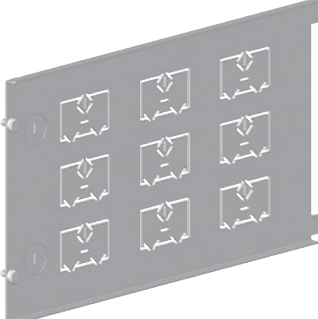
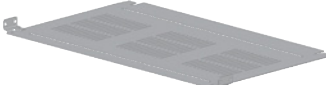


- ① Separation on the side
- ② Horizontal separation
- ③ Support rails
- ④ Plug-in rails

Internal Separation

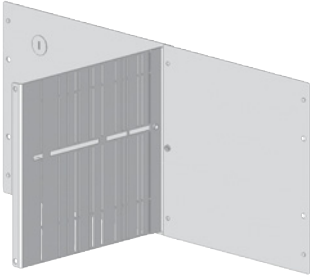
3VL, 3VT, 3K, 3NP modular kits

Selection and ordering data

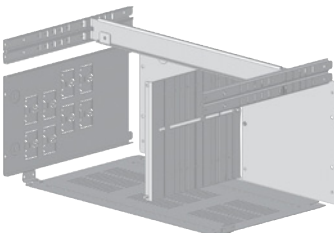
	Configuration	Article No. www.siemens.com/ product?Article No.	PS/ P. unit
	① Side separation - Kit version: Support rails - Suitable for connection terminals		
	Mounting height	Branch current	
	mm	A	
	100	--	8PQ5000-2BA27 1 unit
	150	--	8PQ5000-2BA28 1 unit
	200	≤ 250	8PQ5000-2BA30 1 unit
		≥ 400	8PQ5000-2BA31 1 unit
	250	≤ 250	8PQ5000-2BA32 1 unit
		≥ 400	8PQ5000-2BA33 1 unit
	300	≤ 250	8PQ5000-2BA34 1 unit
		≥ 400	8PQ5000-2BA35 1 unit
	350	--	8PQ5000-2BA36 1 unit
	400	--	8PQ5000-2BA37 1 unit
	450	--	8PQ5000-2BA38 1 unit
	500	--	8PQ5000-2BA40 1 unit
	550	--	8PQ5000-2BA41 1 unit
	600	--	8PQ5000-2BA42 1 unit
	650	--	8PQ5000-2BA43 1 unit
	700	--	8PQ5000-2BA44 1 unit
	800	--	8PQ5000-2BA45 1 unit
	② Horizontal separation		
	Compartment width		
	mm		
	400		8PQ5000-3BA44 1 unit
	600		8PQ5000-2BA61 1 unit
	800		8PQ5000-2BA62 1 unit
	③ Crossbars Equipment height in mm: 25	8PQ5000-2BA63	1/2 units
	④ Plug-in rails		
	Equipment height	Busbar system	
	mm		
	1600	Top	8PQ3000-0BA82 1 unit
	1800	Rear or without	8PQ3000-0BA83 1 unit

Internal Separation

3VL, 3VT, 3K, 3NP modular kits

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
 ⑤ Rear vertical separation Not applicable for frame depth 400			
Compartment width mm	Mounting height mm		
600	50	8PQ5000-2BA51	1 unit
	100	8PQ5000-2BA52	1 unit
	150	8PQ5000-2BA53	1 unit
	200	8PQ5000-2BA54	1 unit
	250	8PQ5000-2BA55	1 unit
	300	8PQ5000-2BA56	1 unit
	350	8PQ5000-2BA57	1 unit
	450	8PQ5000-2BA58	1 unit
	550	8PQ5000-2BA60	1 unit
800	50	8PQ5000-2BA67	1 unit
	100	8PQ5000-2BA68	1 unit
	200	8PQ5000-2BA70	1 unit
	250	8PQ5000-2BA71	1 unit
	350	8PQ5000-2BA72	1 unit
	400	8PQ5000-2BA73	1 unit
	450	8PQ5000-2BA74	1 unit

3VL moulded case circuit breakers

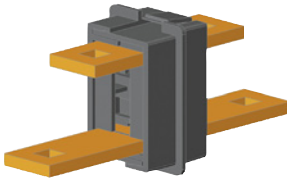
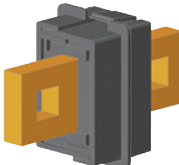
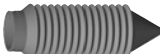


⑤ Draw-out version, form 4a								
Compartment width mm	Frame depth mm	Circuit breaker	No. of poles	Module height mm	Cable connection			
600	400	VL 160/250	3/4	250	Front	8PQ5000-1BA76	1 unit	
		VL400	3/4	300	Front	8PQ5000-1BA77	1 unit	
	600, 800	VL 160/250	3/4	250	Front, rear	8PQ5000-1BA82	1 unit	
		VL400	3/4	300	Front, rear	8PQ5000-1BA84	1 unit	
		VL630	3/4	1)	Front, rear			
	800	400	VL 160/250	3/4	250	Front	8PQ5000-2BA75	1 unit
VL400			3/4	300	Front	8PQ5000-2BA76	1 unit	
600, 800		VL 160/250	3/4	250	Front, rear	8PQ5000-2BA80	1 unit	
		VL400	3/4	300	Front, rear	8PQ5000-2BA86	1 unit	
		VL630 to VL 1600	3/4	1)				

¹⁾ Select separations according to the dimensions from modular separation kits for vertical side and/or rear.

Internal Separation

3VL, 3VT, 3K, 3NP modular kits

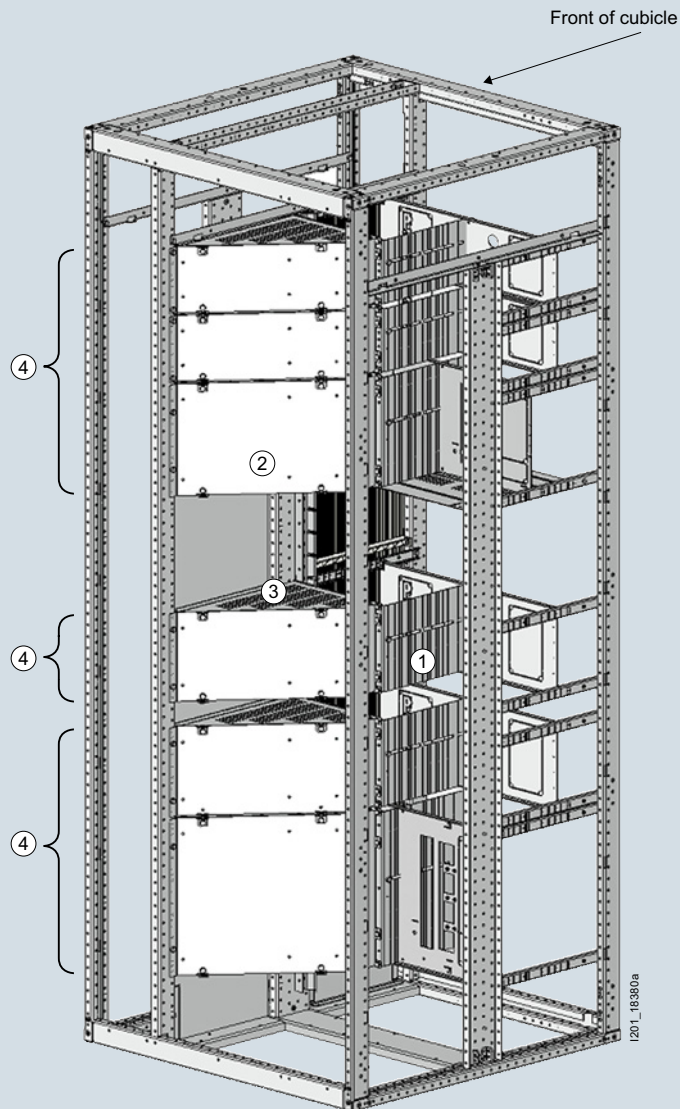
	Configuration			Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Accessories					
	Connecting terminals xa • Upgrade for separation 3b to 4a.				
	Package contents	Rated current I_n A	Busbar mm × mm		
	4 units	--	None	8PQ5000-0BA05	1 unit
	2 units	250	2 × 25 × 5	8PQ5000-0BA72	1 unit
	4 units	400 630	1 × 30 × 10 1 × 40 × 10	8PQ5000-0BA73 8PQ5000-0BA74	1 unit 1 unit
	Protective bellows xb • Upgrade from 4b in combination with connecting terminals			8PQ9400-0BA71	4 units

Overview**Features**

- Modular system for rear device connection
- Connection is made by means of flexible insulated busbars

Configuration

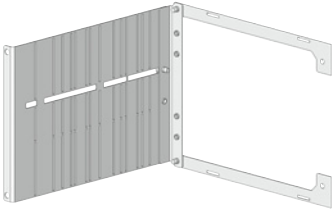
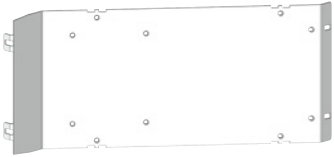
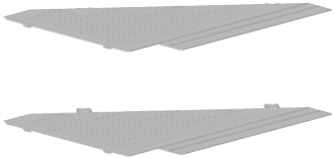
- One basic module ① and vertical separation ② required for each separation kit
- Horizontal separation ③ forms top and bottom termination and is required once for each sub-segment.

Selection and ordering data

- ① Basic module
- ② Vertical separation
- ③ Horizontal separation
- ④ Sub-segments

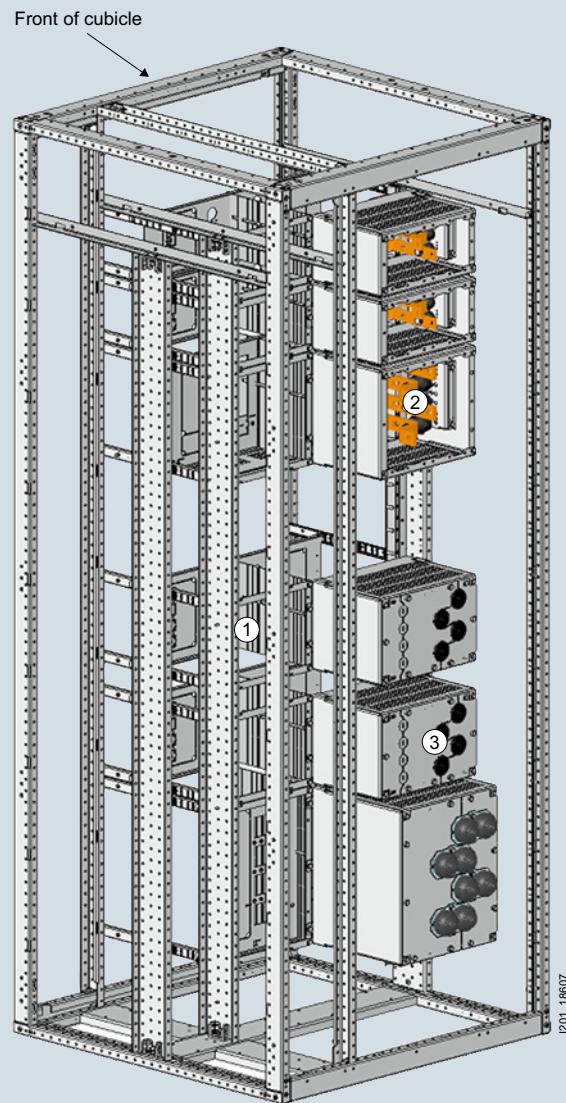
Internal Separation

3VL rear connection

	Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	① Basic modules			
	Compartment width mm	Module height mm		
	600	150	8PQ5000-3BA65	1 unit
		200	8PQ5000-3BA66	1 unit
		250	8PQ5000-3BA67	1 unit
		300	8PQ5000-3BA68	1 unit
		350	8PQ5000-3BA70	1 unit
		400	8PQ5000-4BA03	1 unit
	800	200	8PQ5000-3BA77	1 unit
		250	8PQ5000-3BA78	1 unit
		350	8PQ5000-3BA80	1 unit
		400	8PQ5000-4BA04	1 unit
		450	8PQ5000-4BA05	1 unit
	② Vertical separation			
	Compartment width mm	Module height mm		
	600	150	8PQ5000-3BA52	1 unit
		200	8PQ5000-3BA53	1 unit
		250	8PQ5000-3BA54	1 unit
		300	8PQ5000-3BA55	1 unit
		350	8PQ5000-3BA56	1 unit
		400	8PQ5000-4BA06	1 unit
	800	200	8PQ5000-3BA58	1 unit
		250	8PQ5000-3BA60	1 unit
		350	8PQ5000-3BA61	1 unit
		400	8PQ5000-4BA07	1 unit
		450	8PQ5000-4BA08	1 unit
	③ Horizontal separation			
	• Forms the top and bottom terminations • Required 1 x for each sub-segment • 1 set = 2 units			
	Compartment width mm			
	600		8PQ5000-3BA63	1 unit
	800		8PQ5000-3BA64	1 unit

Configuration

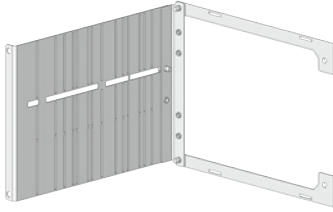
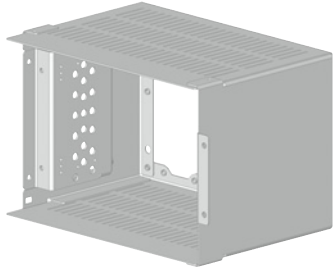
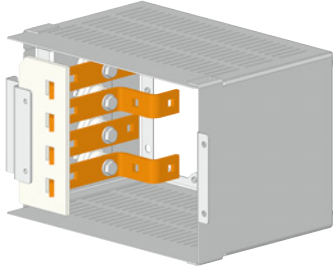
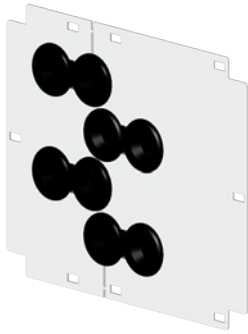
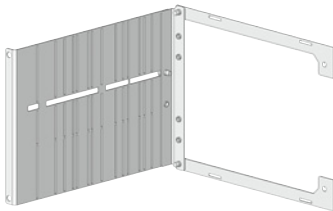
For circuit breaker sizes as from VL400, a cable connection panel must be additionally planned on the rear.

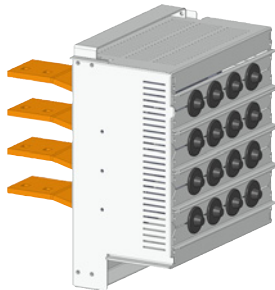
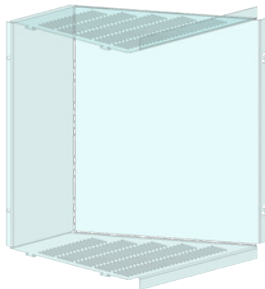
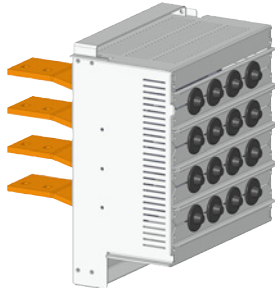


- ① Basic module, rear connection
- ② Cable connection compartment
- ③ Cover plate for cable connection compartment

Internal Separation

3VL rear connection

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit		
	① Basic modules				
	Compartment width mm	Module height mm			
	600	150	8PQ5000-3BA65	1 unit	
		200	8PQ5000-3BA66	1 unit	
		250	8PQ5000-3BA67	1 unit	
		300	8PQ5000-3BA68	1 unit	
		350	8PQ5000-3BA70	1 unit	
	800	200	8PQ5000-3BA77	1 unit	
		250	8PQ5000-3BA78	1 unit	
		350	8PQ5000-3BA80	1 unit	
	② Cable connection compartments				
	• Cables are connected via 8WH terminal blocks; see Catalogue LV 52				
	• Kit prepared for mounting of DIN rails				
	• Not included in scope of supply				
	Versions	No. of poles	Module height mm		
	VL160X, VL160	3	150	8PQ6000-5BA13	1 unit
	VL160X, VL160	4	200/250 ¹⁾	8PQ6000-5BA14	1 unit
	1) Height of compartment for draw-out version. The height of the cable connection compartment does not change and is the same for the fixed version and the plug-in version.				
		Cable connecting bars made of copper			
		Versions	No. of poles	Module height mm	
VL250		3	150	8PQ6000-5BA15	1 unit
		4	200/250 ¹⁾	8PQ6000-5BA17	1 unit
VL400		3	200	8PQ6000-5BA18	1 unit
		4	250/300 ¹⁾	8PQ6000-5BA20	1 unit
VL630		3	300	8PQ6000-5BA21	1 unit
		4	350	8PQ6000-5BA22	1 unit
1) Height of compartment for draw-out version. The height of the cable connection compartment does not change and is the same for the fixed version and the plug-in version.					
		③ Cover plates			
	Versions	No. of poles	Module height mm		
	VL160X, VL160, VL250	3	150	8PQ5000-3BA71	1 unit
	VL160X, VL160, VL250	4	200	8PQ5000-3BA72	1 unit
	VL400	3	200	8PQ5000-3BA73	1 unit
		4	250	8PQ5000-3BA74	1 unit
	VL630	3	300	8PQ5000-3BA75	1 unit
		4	350	8PQ5000-3BA76	1 unit
		① Basic modules, fixed version			
		Compartment width mm	Module height mm		
600		350	8PQ5000-3BA70	1 unit	
		400	8PQ5000-4BA03	1 unit	
800		400	8PQ5000-4BA04	1 unit	
		450	8PQ5000-4BA05	1 unit	

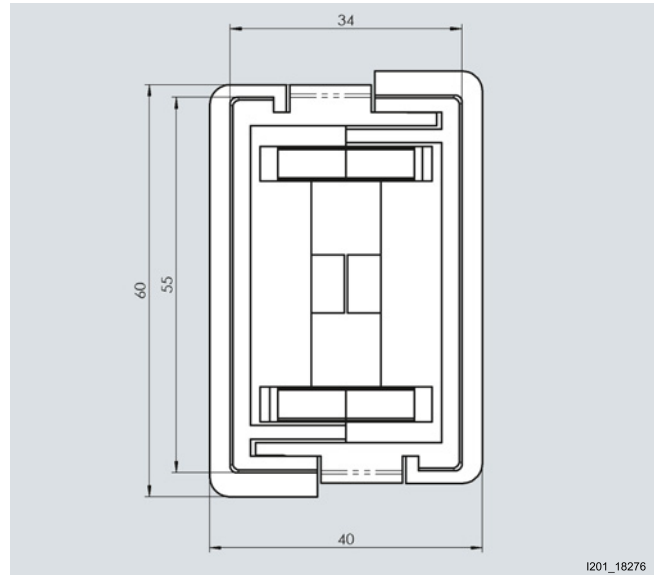
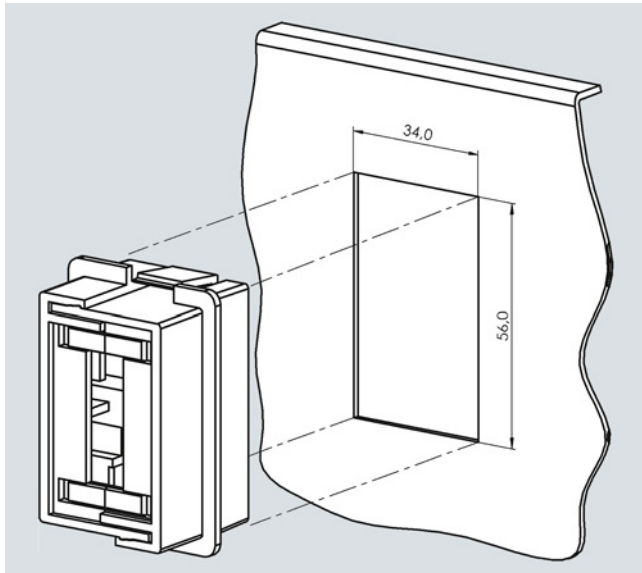
	Configuration				Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
	② Connection modules, complete, fixed version						
	Compartment width mm	Circuit breaker	No. of poles	Operating mechanism type	Height mm		
	600	VL800	3	Direct	350	8PQ6000-5BA87	1 unit
				Motor/door coupling	350	8PQ6000-5BA88	1 unit
				Rotary	350	8PQ6000-6BA00	1 unit
	800	VL800	4	Direct	400	8PQ6000-6BA25	1 unit
				Motor/door coupling	400	8PQ6000-6BA26	1 unit
				Rotary	400	8PQ6000-6BA24	1 unit
		VL1250	3/4	Direct	450	8PQ6000-6BA01	1 unit
				Motor/door coupling	450	8PQ6000-6BA02	1 unit
VL1600				3/4	Direct	450	8PQ6000-6BA03
Motor/door coupling	450	8PQ6000-6BA04	1 unit				
	① Basic modules, draw-out version						
	Compartment width mm		Module height mm				
	800		500		8PQ5000-4BA10	1 unit	
	② Connection modules, complete, draw-out version						
	Compartment width mm	Circuit breaker	No. of poles	Operating mechanism type	Height mm		
	800	VL800 VL1250 VL1600	3/4	Direct	500	8PQ6000-6BA05	1 unit
	Cable entries 1 pack = 20 units				8PQ9400-0BA16	1/20 units	

Internal Separation

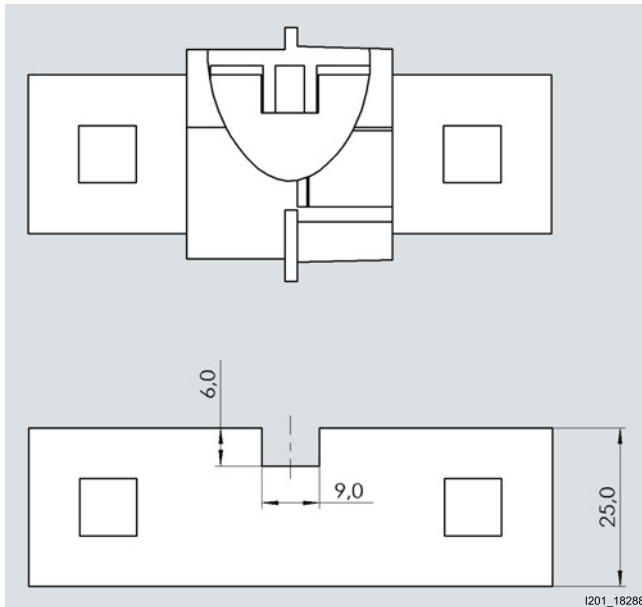
Mechanical dimensions

Overview

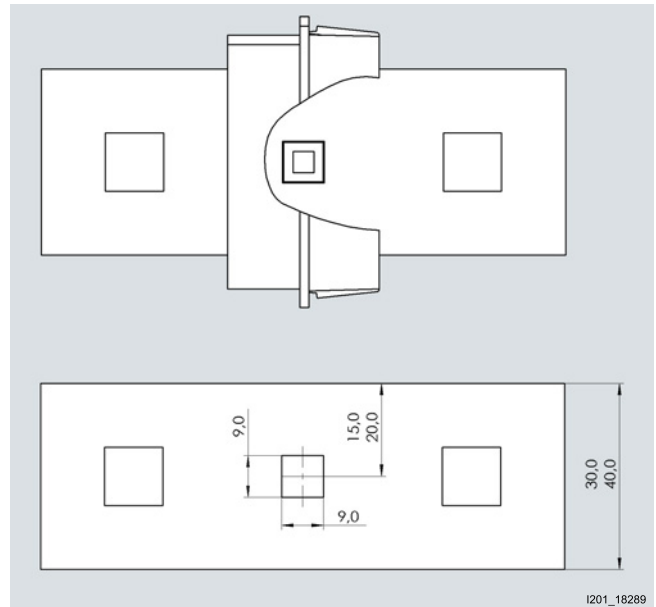
Connecting terminals



I201_18276

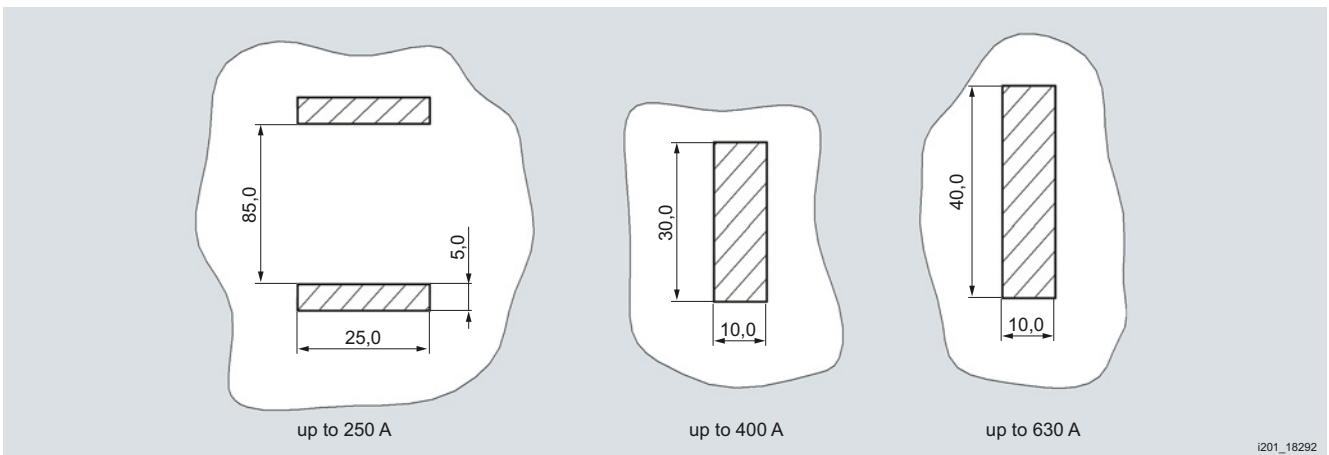


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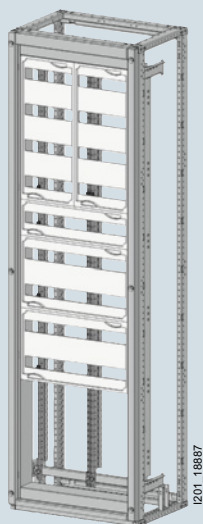
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Busbar arrangement



I201_18292

ALPHA Modular Installation System



6/2	Frame 8GK4 system
6/4 6/10	Enclosure Panelling sections Mechanical dimensions
6/14 6/14 6/15 6/16 6/17 6/18 6/20 6/20 6/22	Assembly kits for unequipped distribution boards Modular devices Terminal blocks Empty sections Mounting plates 3NP1 fuse switch disconnectors 3VA moulded case circuit breakers NEW , 3VL moulded case circuit breakers, 3VT, 3KA switch disconnectors 3NJ4 in-line fuse switch disconnectors Bus-mounting fuse bases Accessories

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
 Application example
 Certificate
 Characteristic
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 Manual
 Product note
 Software archive
 Technical data

ALPHA Modular Installation System

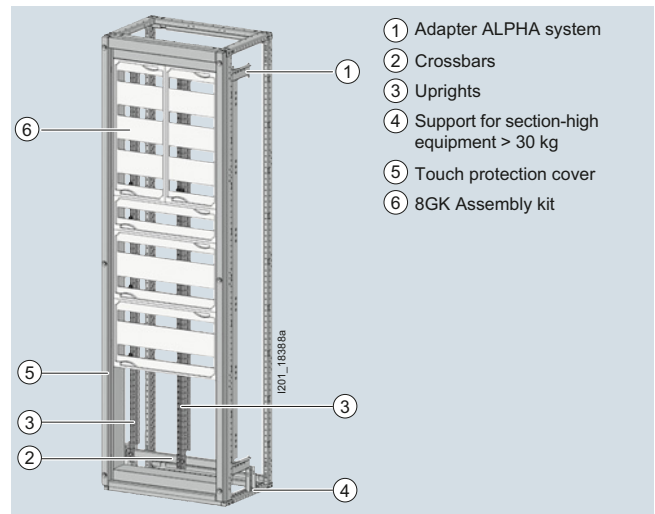
Frame

8GK4 system

Overview

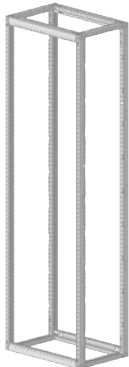
Configuration

- Heights 1650 for sections with main busbar at top
- Heights 1800 for sections without main busbar



Configuration for cubicles without main busbar

Selection and ordering data

Configuration			Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	Frame Height: 2000 mm			
	Width mm	Depth mm		
	350	400 600 800	8PQ1200-4BA15 8PQ1200-6BA14 8PQ1200-8BA01	1 unit 1 unit 1 unit
	600	400 600 800	8PQ1206-4BA01 8PQ1206-6BA01 8PQ1206-8BA01	1 unit 1 unit 1 unit
	850	400 600 800	8PQ1200-4BA16 8PQ1200-6BA15 8PQ1200-8BA02	1 unit 1 unit 1 unit
			8PQ3000-1BA74	1 unit
				
				
	② Crossbars 1 set = 2 units			
	Height mm	Frame width mm	Width 8GK mm	
--	350	250	8PQ3000-1BA76	1 unit
--	600	500	8PQ3000-1BA78	1 unit
--	850	750	8PQ3000-1BA80	1 unit

ALPHA Modular Installation System

Frame

8GK4 system

	Configuration			Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
	③ Uprights 1 set = 2 units					
	Height mm	Frame width mm	Width 8GK mm			
	1650 1800	--	--			
	8PQ3000-2BA88 8PQ3000-1BA82	1 unit 1 unit				
	④ Supports • 1 set = 2 units • For section-high equipment > 30 kg					
	Height mm	Frame width mm	Width 8GK mm			
	1800	--	--			
	8PQ3000-1BA75	1 unit				
 	⑤ Touch protection covers • For section doors					
	Height mm	Frame width mm	Width 8GK mm			
	1650	350 600 850	--			
	1800	350 600 850	--			
	• For frame panelling					
	Height mm	Frame width mm	Width 8GK mm			
	1650	350 600 850	--			
	1800	350 600 850	--			
	8PQ3000-2BA82 8PQ3000-2BA83 8PQ3000-2BA84					1 unit 1 unit 1 unit
	8PQ3000-1BA83 8PQ3000-1BA84 8PQ3000-1BA85					1 unit 1 unit 1 unit

⑥ Frame panelling or optionally doors, [see panelling sections on page 6/4.](#)

ALPHA Modular Installation System

Enclosure

Panelling sections

Overview



ALPHA Modular Installation System

Enclosure

Panelling sections

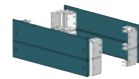
Selection and ordering data

Configuration	Article No. www.siemens.com/ product?Article No.	PS/ P. unit
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① Base corner pieces with front cover



Height in mm	Width in mm	Height 100 mm	
100	350	8PQ1010-0BA01	1 unit
	600	8PQ1016-0BA01	1 unit
	850	8PQ1010-0BA02	1 unit



Height in mm	Width in mm	Height 200 mm	
200	350	8PQ1020-0BA01	1 unit
	600	8PQ1026-0BA01	1 unit
	850	8PQ1020-0BA02	1 unit



Base reinforcements for transport

Height: 100 mm

Width in mm	Depth in mm	Height 100 mm	
350	--	8PQ1010-0BA06	1 unit
600	--	8PQ1016-0BA02	1 unit
850	--	8PQ1010-0BA07	1 unit
--	400	8PQ1014-0BA02	1 unit
--	600	8PQ1016-0BA02	1 unit
--	800	8PQ1018-0BA02	1 unit



Base covers, lateral

Height: 100 mm

Depth in mm	Height 100 mm	
400	8PQ1010-4BA01	1 unit
600	8PQ1010-6BA01	1 unit
800	8PQ1010-8BA01	1 unit

ALPHA Modular Installation System

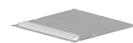
Enclosure

Panelling sections

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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② Bottom plates

For 800 mm deep frames, order **two** 400 mm deep bottom plates in the corresponding width.



Depth in mm	Width in mm	IP55		IP40 cable entry	
400	350	8PQ2300-4BA16	1 unit	8PQ2300-4BA18	1 unit
	600	8PQ2306-4BA05	1 unit	8PQ2306-4BA06	1 unit
	850	8PQ2300-4BA17	1 unit	8PQ2300-4BA20	1 unit
600	350	8PQ2300-6BA20	1 unit	8PQ2300-6BA22	1 unit
	600	8PQ2306-6BA05	1 unit	8PQ2306-6BA06	1 unit
	850	8PQ2300-6BA21	1 unit	8PQ2300-6BA23	1 unit

② Bottom plates for main busbar, bottom



Depth in mm	Width in mm	IP20			
400	350	8PQ2300-4BA23	1 unit	---	
	600	8PQ2306-4BA10	1 unit	---	
	850	8PQ2300-4BA24	1 unit	---	
600	350	8PQ2300-6BA25	1 unit	---	
	600	8PQ2306-6BA16	1 unit	---	
	850	8PQ2300-6BA26	1 unit	---	
800	350	8PQ2300-8BA10	1 unit	---	
	600	8PQ2306-8BA05	1 unit	---	
	850	8PQ2300-8BA11	1 unit	---	

② Bottom plates for main busbar, bottom with cable entry

- Bottom plates for cable entry cover the front area of the main busbar
- In the rear area **bottom plates with cable entries** are additionally required



Depth in mm	Width in mm	Depth 400 For cable entry		Depth 400 Cable entry	
400	350	8PQ2300-8BA12	1 unit	8PQ2300-4BA18	1 unit
	600	8PQ2306-8BA06	1 unit	8PQ2306-4BA06	1 unit
	850	8PQ2300-8BA13	1 unit	8PQ2300-4BA20	1 unit

③ Rear panels



Width in mm	IP40		IP55	
350	8PQ2420-0BA01	1 unit	8PQ2420-0BA03	1 unit
600	8PQ2420-6BA02	1 unit	8PQ2420-6BA01	1 unit
850	8PQ2420-0BA02	1 unit	8PQ2420-0BA04	1 unit

④ Side panels

1 set = 2 units



Depth in mm	IP40 with design strip		IP55	
400	8PQ2520-4BA01	1 unit	8PQ2520-4BA02	1 unit
600	8PQ2520-6BA01	1 unit	8PQ2520-6BA02	1 unit
800	8PQ2520-8BA01	1 unit	8PQ2520-8BA02	1 unit

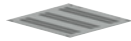
ALPHA Modular Installation System

Enclosure

Panelling sections

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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⑤ Top plates



Depth in mm	Width in mm	IP40		IPX1 upgrade		IP55		IP40 with cable entry	
400	350	8PQ2300-4BA06	1 unit	8PQ2300-4BA11	1 unit	8PQ2300-4BA04	1 unit	8PQ2300-4BA14	1 unit
	600	8PQ2306-4BA02	1 unit	8PQ2306-4BA04	1 unit	8PQ2306-4BA01	1 unit	8PQ2306-4BA03	1 unit
	850	8PQ2300-4BA07	1 unit	8PQ2300-4BA12	1 unit	8PQ2300-4BA05	1 unit	8PQ2300-4BA15	1 unit
600	350	8PQ2300-6BA13	1 unit	8PQ2300-6BA15	1 unit	8PQ2300-6BA11	1 unit	8PQ2300-6BA17	1 unit
	600	8PQ2306-6BA02	1 unit	8PQ2306-6BA04	1 unit	8PQ2306-6BA01	1 unit	8PQ2306-6BA03	1 unit
	850	8PQ2300-6BA14	1 unit	8PQ2300-6BA16	1 unit	8PQ2300-6BA12	1 unit	8PQ2300-6BA18	1 unit
800	350	8PQ2300-8BA03	1 unit	8PQ2300-8BA05	1 unit	8PQ2300-8BA01	1 unit	8PQ2300-8BA07	1 unit
	600	8PQ2306-8BA02	1 unit	8PQ2306-8BA04	1 unit	8PQ2306-8BA01	1 unit	8PQ2306-8BA03	1 unit
	850	8PQ2300-8BA04	1 unit	8PQ2300-8BA06	1 unit	8PQ2300-8BA02	1 unit	8PQ2300-8BA08	1 unit

Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
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⑥ Doors with two-way interlocking system



Hinge position	Width in mm	IP40		IP55		IP55, with window	
Left	350	8PQ2197-0BA03	1 unit	8PQ2197-0BA06	1 unit	--	
	600	8PQ2197-6BA06	1 unit	8PQ2197-6BA03	1 unit	8PQ2197-6BA10	1 unit
	850	8PQ2197-0BA04	1 unit	8PQ2197-0BA07	1 unit	8PQ2197-0BA01	1 unit
Right	350	8PQ2197-0BA16	1 unit	8PQ2197-0BA18	1 unit	--	
	600	8PQ2197-6BA13	1 unit	8PQ2197-6BA12	1 unit	8PQ2197-6BA14	1 unit
	850	8PQ2197-0BA17	1 unit	8PQ2197-0BA20	1 unit	8PQ2197-0BA21	1 unit

Doors for semi-cylindrical profile

- Semi-cylindrical profile acc. to DIN 18252/18254
- 8 × 45°



Hinge position	Width in mm	IP40		IP55		IP55, with window	
Left	350	8PQ2197-0BA34	1 unit	8PQ2197-0BA31	1 unit	--	
	600	8PQ2197-6BA04	1 unit	8PQ2197-6BA01	1 unit	8PQ2197-6BA07	1 unit
	850	8PQ2197-0BA35	1 unit	8PQ2197-0BA32	1 unit	8PQ2197-0BA33	1 unit
Right	350	8PQ2197-0BA40	1 unit	8PQ2197-0BA36	1 unit	--	
	600	8PQ2197-6BA05	1 unit	8PQ2197-6BA02	1 unit	8PQ2197-6BA08	1 unit
	850	8PQ2197-0BA41	1 unit	8PQ2197-0BA37	1 unit	8PQ2197-0BA38	1 unit

① Frame panelling

- Degree of protection IP30
- Cannot be combined with doors

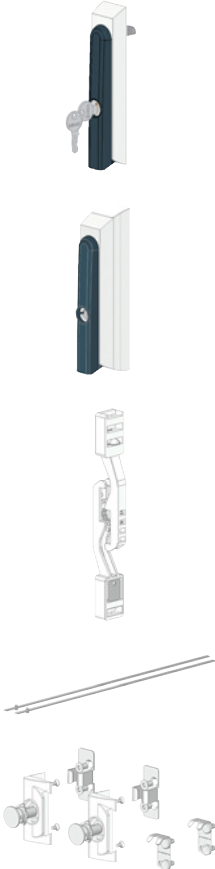


Hinge position	Width in mm	IP30			
--	350	8PQ2197-0BA11	1 unit		
	600	8PQ2197-6BA11	1 unit		
	800	8PQ2197-8BA11	1 unit		

ALPHA Modular Installation System

Enclosure

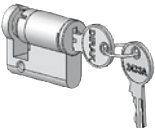
Panelling sections

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Accessories			
	Flat cylinder/two-way interlocking mechanisms Versions		
	• Rotary handles with flat cylinder - identical key type - including key	8PQ9400-0BA07	1 unit
	• Rotary handles with two-way interlocking mechanism	8PQ9400-0BA08	1 unit
	• Coupling bars	8PQ9400-0BA27	1 unit
	• Locking rods	8PQ9400-0BA37	1 unit
	• Bar guides	8PQ9400-0BA36	1 unit

ALPHA Modular Installation System

Enclosure

Panelling sections

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	Semi-cylindrical profiles		
	Versions		
	• Rotary handles with semi-cylindrical profile	8PQ9400-0BA41	1 unit
	• Coupling bars	8PQ9400-0BA28	1 unit
	• Locking rods	8PQ9400-0BA38	1 unit
	• Bar guides	8PQ9400-0BA36	1 unit
	- Semi-cylindrical profile - acc. to DIN 18252/18254 - 8 x 45° adjustable - identical key type - further lock systems (RONIS, VW) on request - including key	8PQ9400-0BA26	1 unit
	Door hinges 1 set = 2 units	8PQ9400-0BA55	1/2 units
	Cubicle keys • 3 mm double bit • 1 pack = 10 units	8PQ9400-0BA12	1 unit
	Inner door struts • For use with section doors • 1 pair = 2 units • Height 1975 mm	8PQ2197-0BA10	1 unit
	Cubicle ID plates SIVACON designed by Siemens	8PQ9400-0BA06	1 unit

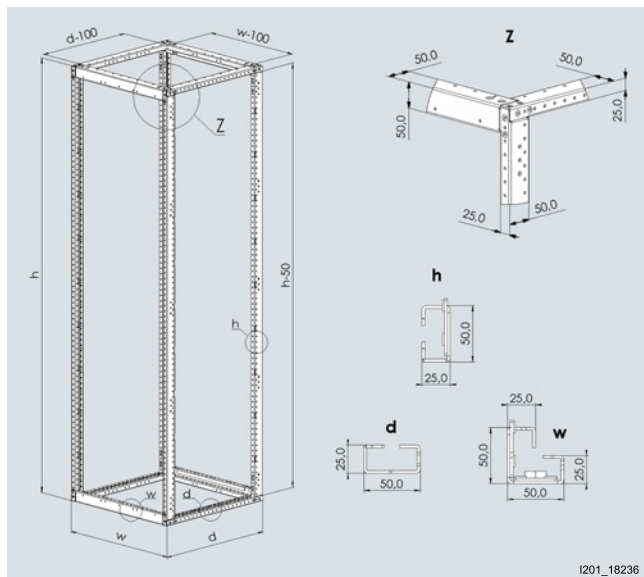
ALPHA Modular Installation System

Enclosure

Mechanical dimensions

Overview

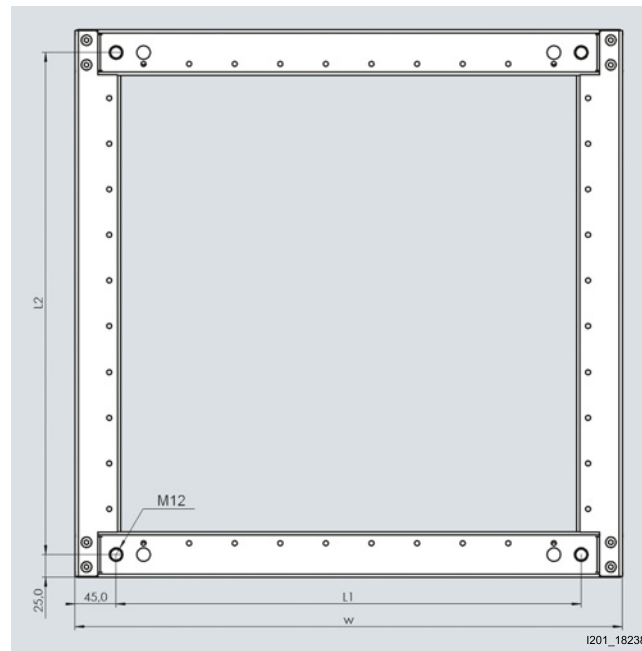
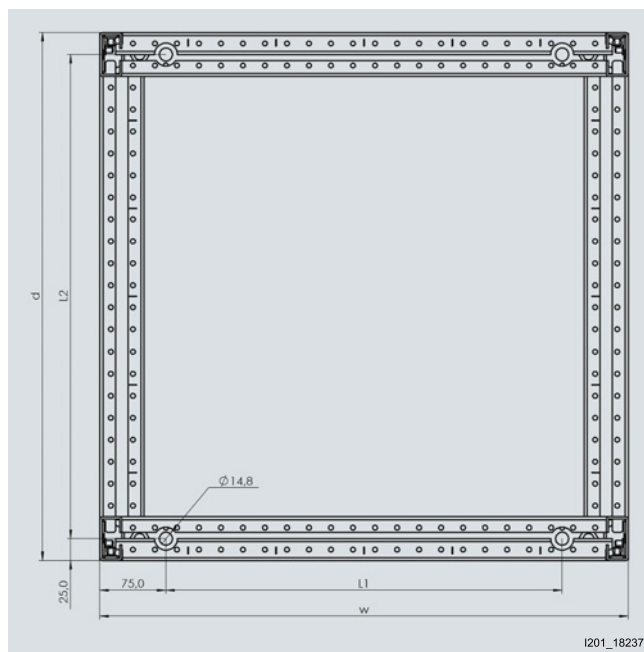
Frame



w Width mm	d Depth mm	h Height mm
350	400	2000
600	600	
850	800	

6

Floor anchoring of frame without base



d mm	L2 mm
400	350
600	550
800	750

w mm	L1 mm
350	200
600	450
850	700

d mm	L1 mm
400	350
600	550
800	750

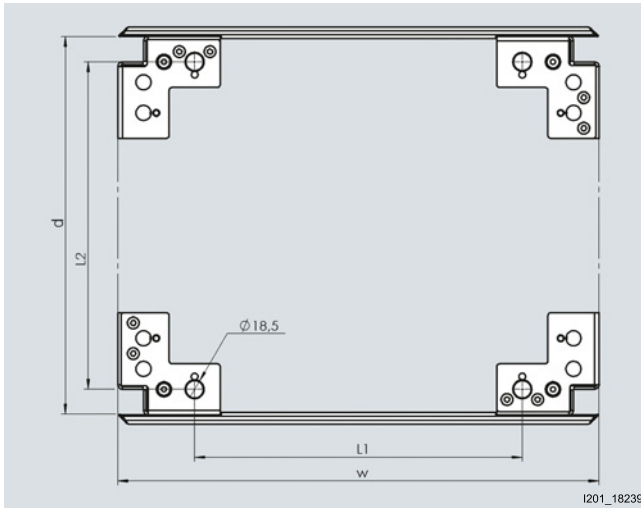
w mm	L1 mm
350	260
600	510
850	760

ALPHA Modular Installation System

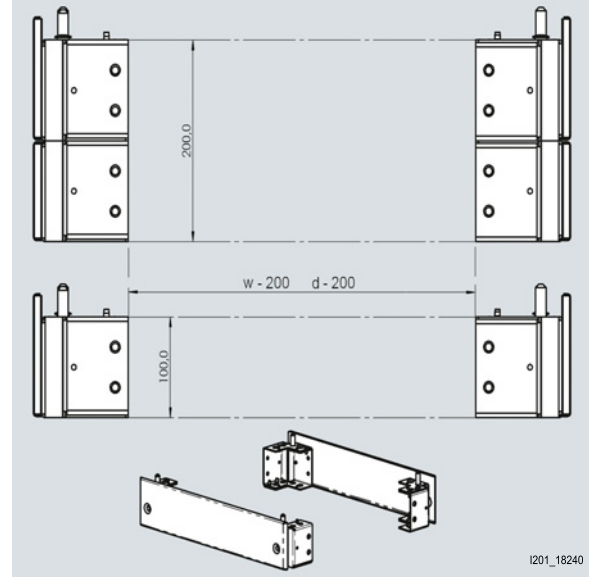
Enclosure

Mechanical dimensions

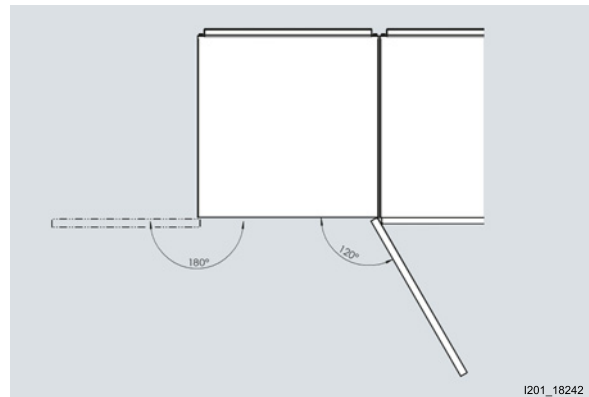
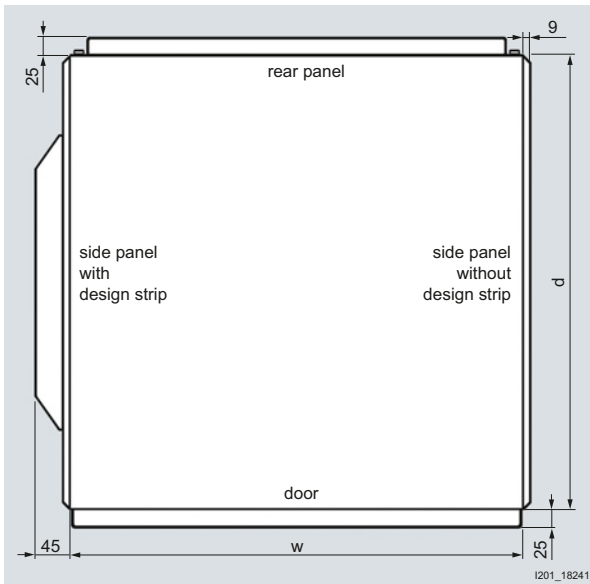
Base



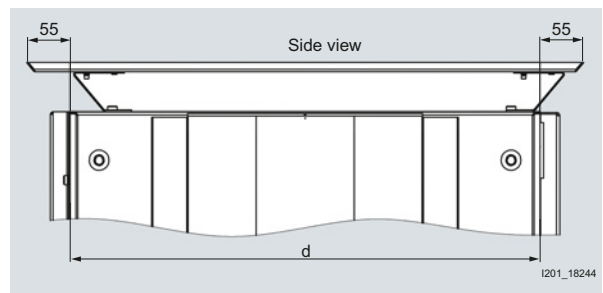
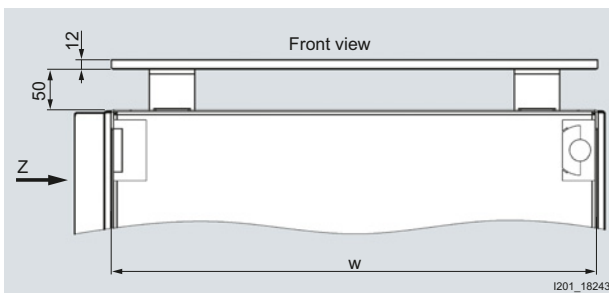
d mm	L2 mm	w mm	L1 mm
400	350	350	200
600	550	600	450
800	750	850	700



Door, rear panel and side panel, with and without design strip



Top plate upgraded to IPX1

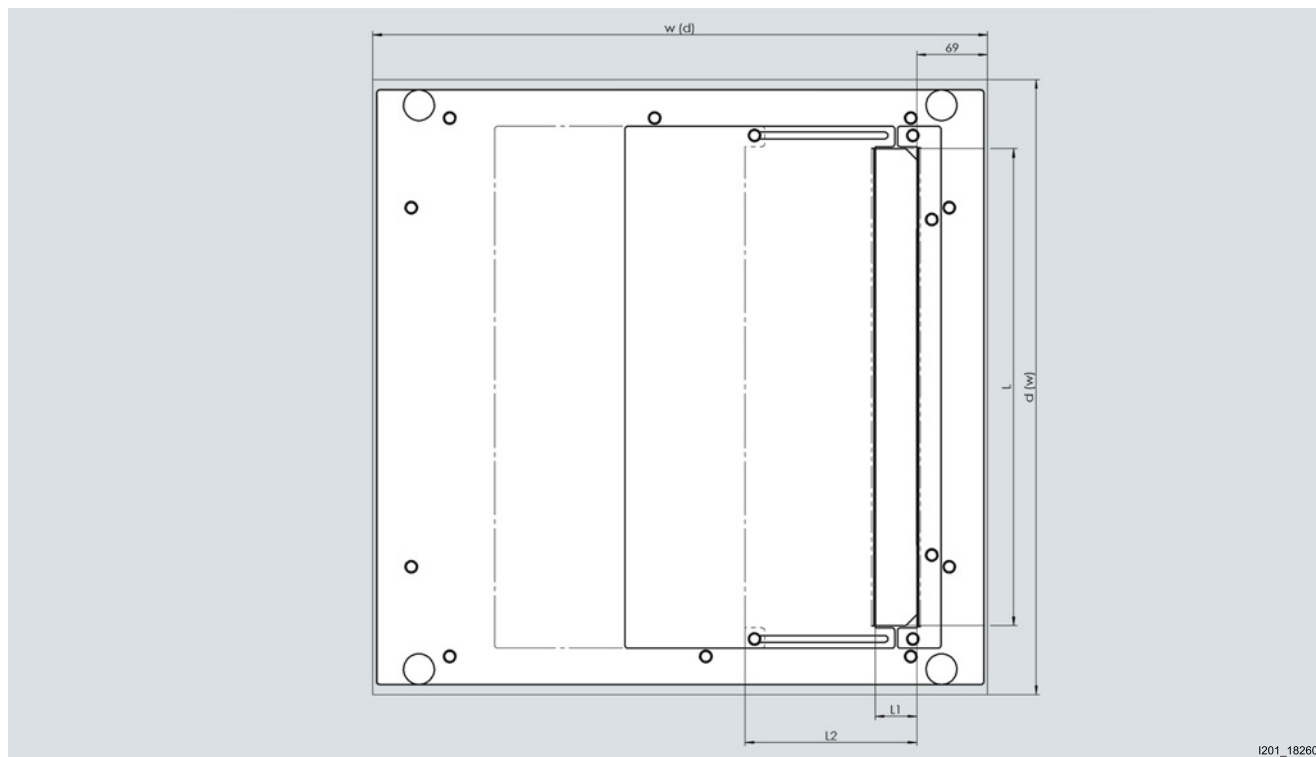


ALPHA Modular Installation System

Enclosure

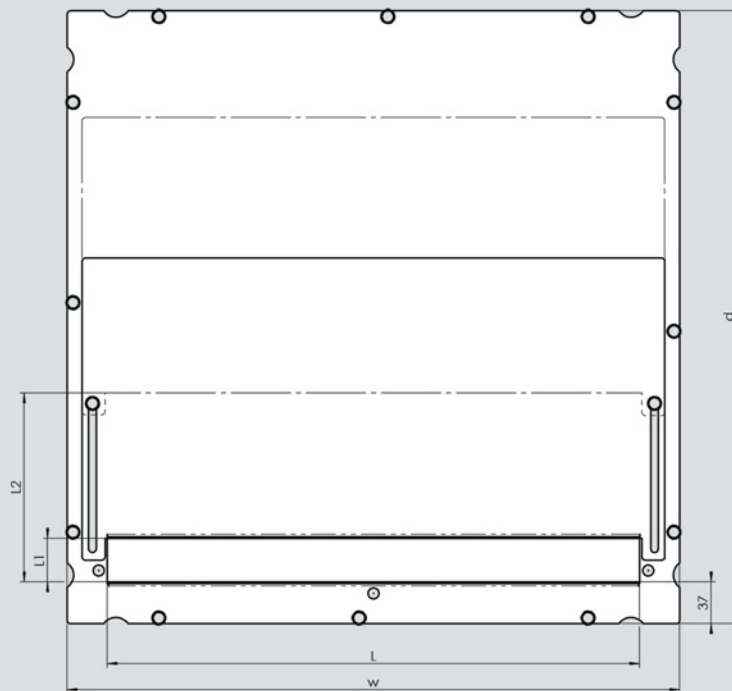
Mechanical dimensions

Top plate with cable entry



I201_18260

Article No.	Depth mm	Width mm	L mm	L1 Min. opening mm	L2 Max. opening mm	Position Cable entry
8PQ2300-4BA14	400	350	265	38	125	
8PQ2306-4BA03		600	465	38	125	
8PQ2300-4BA15		850	665	38	125	
8PQ2300-6BA17	600	350	715	38	125	
8PQ2306-6BA03		600	465	38	165	
8PQ2300-6BA18		850	715	38	165	
8PQ2300-8BA07	800	350	665	38	125	
8PQ2306-8BA03		600	665	38	165	
8PQ2300-8BA08		850	715	38	165	

Bottom plate with cable entry

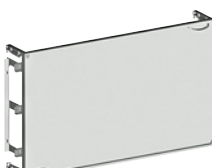
I201_18245

Article No.	Depth mm	Width mm	L mm	L1 Min. opening mm	L2 Max. opening mm	Position Cable entry
8PQ2300-4BA15	400	350	265	38	125	
8PQ2306-4BA06		600	465	38	125	
8PQ2300-4BA20		850	715	38	125	
8PQ2300-4BA22	600	350	465	38	125	
8PQ2306-6BA06		600	465	38	165	
8PQ2300-6BA23		850	715	38	165	

ALPHA Modular Installation System

Assembly kits for unequipped distribution boards

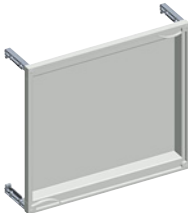
Selection and ordering data

Configuration				Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Assembly kits, for modular devices • Row centre distance 150 mm, without N/PE bar • Assembly kits for individual and project-related assembly, comprising: mounting plates, front cover with supports, screws and fasteners • Section size grid dimensions H x W (mm): 150 x 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports					
	External dimensions in mm		Rows/MW		
	Height	Width			
	150	250 500 750	1/12 1/24 1/36	8GK4351-1KK12 8GK4351-1KK22 8GK4351-1KK32	1 unit 1 unit 1 unit
8GK4351-1KK12					
	300	250 500 750	2/24 2/48 2/72	8GK4351-2KK12 8GK4351-2KK22 8GK4351-2KK32	1 unit 1 unit 1 unit
8GK4351-2KK12					
	450	250 500 750	3/36 3/72 3/108	8GK4351-3KK12 8GK4351-3KK22 8GK4351-3KK32	1 unit 1 unit 1 unit
8GK4351-3KK12					
	600	250 500 750	4/48 4/96 4/144	8GK4351-4KK12 8GK4351-4KK22 8GK4351-4KK32	1 unit 1 unit 1 unit
8GK4351-4KK12					
Note					
• In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10). • The assembly kits with a width of 250 mm come with 7.5 mm DIN rails. • The assembly kits with widths of 500/750 mm come with 15 mm DIN rails.					
Assembly kits for horizontal terminal blocks • Terminal blocks with graded design, separate • With closed front cover • Assembly kits for individual and project-related assembly, comprising: mounting plates, front cover with supports, screws and fasteners • Section size grid dimensions H x W (mm): 150 x 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports					
	External dimensions in mm				
	Height	Width			
8GK4401-3KK32	150	250		8GK4401-1KK12	1 unit
	300	250 500 750		8GK4401-2KK12 8GK4401-2KK22 8GK4401-2KK32	1 unit 1 unit 1 unit
450		250 500 750		8GK4401-3KK12 8GK4401-3KK22 8GK4401-3KK32	1 unit 1 unit 1 unit
Note					
• In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10).					

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit		
 8GK4402-4KK12	Assembly kits for vertical terminal blocks • Terminal blocks, separate • With closed front cover • Assembly kits for individual and project-related assembly, comprising: mounting plates, front cover with supports, screws and fasteners • Section size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports				
	External dimensions in mm				
	Height	Width			
	300	250 500 750	8GK4402-2KK12 8GK4402-2KK22 8GK4402-2KK32	1 unit 1 unit 1 unit	
	450	250 500 750	8GK4402-3KK12 8GK4402-3KK22 8GK4402-3KK32	1 unit 1 unit 1 unit	
600	250 500 750	8GK4402-4KK12 8GK4402-4KK22 8GK4402-4KK32	1 unit 1 unit 1 unit		
Note					
• In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10).					
 8GK4500-2KK20	Front cover assembly kit, for measuring instruments		8GK4500-2KK20	1 unit	
 8GK4501-4KK12	Assembly kits for empty sections • Gray • Assembly kits for individual and project-related assembly, comprising: front cover including supports, screws and mounting accessories • Section size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports				
	External dimensions in mm				
	Height	Width			
	75	250 500	8GK4501-0KK12 8GK4501-0KK22	1 unit 1 unit	
		250 500 750	8GK4501-1KK12 8GK4501-1KK22 8GK4501-1KK32	1 unit 1 unit 1 unit	
	300	250 500 750	8GK4501-2KK12 8GK4501-2KK22 8GK4501-2KK32	1 unit 1 unit 1 unit	
		450	250 500 750	8GK4501-3KK12 8GK4501-3KK22 8GK4501-3KK32	1 unit 1 unit 1 unit
			600	250 500 750	8GK4501-4KK12 8GK4501-4KK22 8GK4501-4KK32
	750			250 500 750	8GK4501-5KK12 8GK4501-5KK22 8GK4501-5KK32
		Note			
		In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10).			

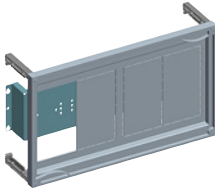
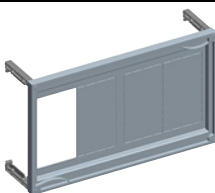
ALPHA Modular Installation System

Assembly kits for unequipped distribution boards

Configuration			Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
 8GK4501-3KK23	Assembly kits for empty sections with deep-drawn cover, 40 mm - Assembly kits for individual and project-related assembly, comprising: front cover including supports, screws and mounting accessories - Section size grid dimensions H x W (mm): 150 x 250 - The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports			
	External dimensions in mm			
	Height	Width		
	300	250 500 750		8GK4501-2KK13 8GK4501-2KK23 8GK4501-2KK33
	450	250 500 750		8GK4501-3KK13 8GK4501-3KK23 8GK4501-3KK33
Note - In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10). - The cover 8GK9912-0KK00 is additionally required for mounting size 000 fuse switch disconnectors (see page 17.3/21 in Catalogue LV 10).				
 8GK4451-4KK12	Assembly kits with mounting plates - With closed front cover - Assembly kits for individual and project-related assembly, comprising: mounting plate, front cover including supports, mounting brackets (depth-adjustable), screws and mounting accessories - Section size grid dimensions H x W (mm): 150 x 250 - The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports			
	External kit dimensions in mm		Mounting plate dimensions in mm	
	Height	Width	Height	Width
	300	250 500 750	245	207.5 457.5 707.5
	450	250 500 750	395	207.5 457.5 707.5
600	250 500 750	545	207.5 457.5 707.5	
Note - In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10) - If the mounting plate is fitted so that it extends over several cubicle widths, no upright can be placed in the middle.				
 8GK9533-0KK10	Cubicle-high mounting plates - With fixing screws - Senzimir-galvanised sheet steel - For mounting on uprights or rear panel - No covers possible			
	Cubicle interior dimensions in mm		Mounting plate dimensions in mm	
	Height	Width	Height	Width
	1800	250 500 750	1680	242 492 742
		1000 1250		992 1242
Note One mounting plate as wide as the cubicle is always required for mounting on the rear panel.				

ALPHA Modular Installation System

Assembly kits for unequipped distribution boards

Configuration				Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
 8GK4550-2KK22	Assembly kits for 3NP1 fuse switch disconnectors for mounting on support plate • Assembly kits for individual and project-related assembly, comprising: Support plate, front cover including supports, moulded-plastic cover, screws and mounting accessories • Section size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports					
	No. of assembly kits of size	Fuse switch disconnectors	Height in mm	Width in mm		
	2 × 00/000	2 × 3NP1123... / 3NP1 133...	300	250	8GK4550-2KK12	1 unit
	4 × 00/000	4 × 3NP1123... / 3NP1 133...		500	8GK4550-2KK22	1 unit
	1 × 1	1 × 3NP1143...	450	250	8GK4550-3KK12	1 unit
	2 × 1	2 × 3NP1143...		500	8GK4550-3KK22	1 unit
	1 × 2	1 × 3NP1153...	450	250	8GK4551-3KK12	1 unit
	1 × 3	1 × 3NP1163...		500	8GK4551-3KK22	1 unit
	Accessories					
	• Cover 3NP1123... size 000 (required for size 000 fuse switch disconnectors only)			8GK9912-0KK00	1 unit	
Note						
• In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10) • The cover 8GK9912-0KK00 is additionally required for mounting size 000 fuse switch disconnectors (see page 17.3/21 in Catalogue LV 10).						
 8GK4650-2KK12	Assembly kits, for 3NP1 fuse switch disconnectors for mounting on busbars • Assembly kits for individual and project-related assembly, comprising: front cover including supports, moulded-plastic cover, screws and mounting accessories • Section size grid dimensions H × W (mm): 150 × 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports					
	Note					
	The copper busbar and the busbar holders must be ordered separately (see page 17.4/22 in Catalogue LV 10).					
	No. of assembly kits of size	Fuse switch disconnectors	Height in mm	Width in mm		
	2 × 00/000	2 × 3NP1123 ... / 3NP1133...	300	250	8GK4650-2KK12	1 unit
	4 × 00/000	4 × 3NP1123 ... / 3NP1133...		500	8GK4650-2KK22	1 unit
	2 × 00/000	2 × 3NP1123 ... / 3NP1133...	450	250	8GK4650-3KK12	1 unit
	4 × 00/000	4 × 3NP1123 ... / 3NP1133...		500	8GK4650-3KK22	1 unit
	1 × 1	1 × 3NP1143...	450	250	8GK4651-3KK12	1 unit
	2 × 1	2 × 3NP1143...		500	8GK4651-3KK22	1 unit
	1 × 2	1 × 3NP1153...		250	8GK4652-3KK12	1 unit
	Accessories					
	• Cover 3NP1123 ... size 000 (required for size 000 fuse switch disconnectors only)			8GK9912-0KK00	1 unit	
	• Busbar holders - 40 mm, 5-pole - 60 mm, 3-pole			8GK9650-0KK00 8GK9711-0KK03	1 unit 1 unit	
	Note					
• In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10). • The cover 8GK9912-0KK00 is additionally required for mounting size 000 fuse switch disconnectors (see page 17.3/21 in Catalogue LV 10).						

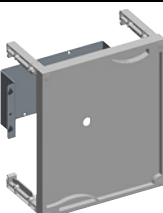
ALPHA Modular Installation System

Assembly kits for unequipped distribution boards

Configuration					Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
	Assembly kits, for 3VA10.. and 3VA11.. moulded case circuit breakers (100 A/160 A) <i>NEW</i>						
	External dimensions in mm						
	Height	Width	Possible circuit breakers	Operating mechanism	RCD		
	450	250	1	--	--	8GK4730-2KK12	1 unit
				Motor	--	8GK4734-2KK12	1 unit
				Motor	Infeed side	8GK4734-3KK12	1 unit
				--	Infeed side	8GK4731-3KK12	1 unit
	500	3	--	--	8GK4730-2KK22	1 unit	
			Motor	--	8GK4734-2KK22	1 unit	
			Motor	Infeed side	8GK4734-3KK22	1 unit	
--			Infeed side	8GK4731-3KK22	1 unit		
Note							
• In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see chapter 17.3 in Catalogue LV 10).							
	Assembly kits, for 3VA20.. and 3VA22.. moulded case circuit breakers (100 A/160 A/250 A) <i>NEW</i>						
	External dimensions in mm						
	Height	Width	Possible circuit breakers	Operating mechanism	RCD		
	450	250	1	--	--	8GK4730-3KK10	1 unit
		500	3	--	--	8GK4730-3KK20	1 unit
	600	250	1	Motor	Infeed side	8GK4736-4KK12	1 unit
				--	Infeed side	8GK4735-4KK12	1 unit
		500	3	Motor	Infeed side	8GK4736-4KK22	1 unit
				--	Infeed side	8GK4735-4KK22	1 unit
	Note						
• In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see chapter 17.3 in Catalogue LV 10).							

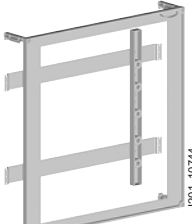
ALPHA Modular Installation System

Assembly kits for unequipped distribution boards

Configuration			Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
Assembly kits for 3VL moulded case circuit breakers and 3VT switch disconnectors - Assembly kits for individual and project-related assembly, comprising: Support plate, front cover including supports, screws and mounting accessories - Section size grid dimensions H x W (mm): 150 x 250 - The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports					
 8GK4704-4KK13  8GK4721-3KK10	Versions	External dimensions in mm			
		Height	Width		
	3- and 4-pole , 3VL moulded case circuit breakers - 1 x 3VL160/3VL160X - 1 x 3VL160X, 1 x 3VL160, 1 x 3VL250 - 1 x 3VL400	300 450 600	250	8GK4701-2KK12 8GK4701-3KK12 8GK4702-4KK12	1 unit 1 unit 1 unit
	3-pole, 3VL moulded case circuit breakers - 1 x 3VL630 - 1 x 3VL800	600	250	8GK4703-4KK13 8GK4704-4KK15	1 unit 1 unit
	3-pole/4-pole, 3VL moulded case circuit breakers - 1 x 3VL630 - 1 x 3VL800 - 1 x 3VL1250/1600	600	500	8GK4704-4KK13 8GK4704-4KK25 8GK4705-4KK25	1 unit 1 unit 1 unit
	3-pole and 4-pole, 3VT switch disconnectors - 2 x 3VT 1 - 1 x 3VT 2 - 1 x 3VT 3	300 450 600	250	8GK4710-2KK10 8GK4710-3KK10 8GK4710-4KK10	1 unit 1 unit 1 unit
	- For installation with mounted RCD module - 1 x 3VL160X + RCD - 1 x 3VL160/3VL250 + RCD - 1 x 3VL400 + RCD	450 750	250 250	8GK4720-3KK10 8GK4721-3KK10 8GK4720-5KK10	1 unit 1 unit 1 unit
	- For installation with rotary front operating mechanism - 1 x 3VL160X/VL160/VL250 - 1 x 3VL400 - 1 x 3VL630 3-pole - 1 x 3VL630 4-pole	450 600	250 500	8GK4722-3KK10 8GK4722-4KK10 8GK4723-4KK10 8GK4721-4KK20	1 unit 1 unit 1 unit 1 unit
Note					
In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10).					
Assembly kits for 3KA switch disconnectors on support plate - Section size grid dimensions H x W (mm): 150 x 250 - The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports					
 8GK4707-3KK17	Type	Height in mm	Width in mm		
	1 x 3KA 50/51/52/53 (3-pole units only) 1 x 3KA 55/57/58	300	250 500	8GK4707-3KK17 8GK4707-4KK27	1 unit 1 unit
	Note				
	In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10).				

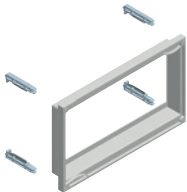
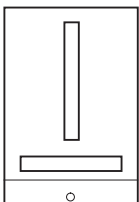
ALPHA Modular Installation System

Assembly kits for unequipped distribution boards

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Assembly kits, for 3NJ4 in-line fuse switch disconnectors - Assembly kits for individual and project-related assembly, comprising: front cover for empty sections including supports, busbar holders on support plate, screws and mounting accessories - Section size grid dimensions H x W (mm): 150 x 250 - The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports - Note: Values specified below in parentheses apply to in-line units with fixing claws			
Versions		External dimensions in mm	
		Height	Width
 8GK4751-4KK33	- Pole centre distance of 100 mm, with busbar holder - 4 (3) x 3NJ4, size 00 - 9 (8) x 3NJ4, size 00 - 14 (13) x 3NJ4, size 00	600	250 500 750
			8GK4751-4KK13 8GK4751-4KK23 8GK4751-4KK33
			1 unit 1 unit 1 unit
 3NJ4912-2CA00	- Blanking covers - Size 00	299	50
			3NJ4912-2CA00
			1 unit
 8GK4752-5KK35	- Pole centre distance of 185 mm, with busbar holder - 2 x 3NJ4, size 1-3 - 4 x 3NJ4, size 1-3 - 7 x 3NJ4, size 1-3	750 750 750	250 500 750
			8GK4752-5KK15 8GK4752-5KK25 8GK4752-5KK35
			1 unit 1 unit 1 unit
 3NJ4912-2.A00	- Blanking covers - Size 00 - Sizes 1-3	699 699	50 100
			3NJ4912-2AA00 3NJ4912-2BA00
			1 unit 1 unit
Note			
- Max. rated current of 630 A! - In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10). - The copper busbar must be ordered separately. - The kits for sizes 1-3 can only be installed in a depth of 320 mm. - If the assembly kits are fully equipped, an incoming feeder bay is required. - If mounting the in-line fuse switch disconnectors with 3NJ4 911-3AA00 busbar terminals, the assembly kits cannot be fully equipped.			
Assembly kits, for bus-mounting fuse bases, for mounting on busbar systems 3-pole - Pole centre distance 60 mm 7 x NEOZED D02 - Assembly kits for individual and project-related assembly, comprising: front cover including supports, busbar holders for bus-mounting fuse bases, screws and mounting accessories - Section size grid dimensions H x W (mm): 150 x 250 - The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports			
External dimensions in mm			
		Height	Width
 8GK4801-3KK12		300	250
		450	250
			8GK4801-2KK12 8GK4801-3KK12
			1 unit 1 unit
Note			
- Busbar holder not included in scope of supply - In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10). - The copper busbar must be ordered separately (see chapter 17.5 in Catalogue LV 10).			

ALPHA Modular Installation System

Assembly kits for unequipped distribution boards

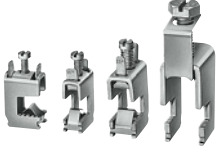
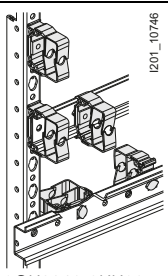
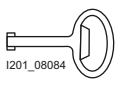
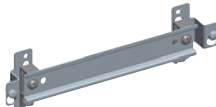
Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit	
	Assembly kits, for busbar-adaptable devices, SR60 • Pole centre distance of 60 mm • Assembly kits for individual and project-related assembly, comprising: deep-drawn front cover with supports • Section size grid dimensions H x W (mm): 150 x 250 • The front cover is sealable as standard and the quick-acting locking connections facilitate fast and reliable attachment to the supports			
	External dimensions in mm			
	Height	Width		
	300	250	8GK4801-2KK13	1 unit
		500	8GK4801-2KK23	1 unit
750		8GK4801-2KK33	1 unit	
450	250	8GK4801-3KK13	1 unit	
	500	8GK4801-3KK23	1 unit	
	750	8GK4801-3KK33	1 unit	
Note				
• Busbar holder (8GK9711-0KK03) not included in scope of supply • For configuration of 8GK4 assembly kits for the SR60 busbar system, 60 mm, see page 6/14. • In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10). • The copper busbar and the busbar holders must be ordered separately (see chapter 17 in Catalogue LV 10).				
	Supports for blanking cover		8US1922-2EA00	4 units
8US1922-2EA00				
	Blanking covers		8US1922-2EB00	2 units
8US1922-2EB00				
	8GE assembly kits for meter mounting • For meter mounting (not standardised, 375 mm) • Assembly kits for individual and project-related assembly, not standardised, only for internal measurements, comprising: meter support plate with all-round partitions, screws and mounting accessories • Assembly kit dimensions H x W (mm): 450 x 250 • Section size grid dimensions H x W (mm): 150 x 250		8GE3713-4	1 unit
	Note			
	• In order to mount the assembly kits in unequipped distribution boards, 2 uprights are required for every assembly kit. These must be ordered separately (see page 17.5/7 in Catalogue LV 10).			
8GE3713-4				

ALPHA Modular Installation System

Accessories

Selection and ordering data

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
For assembly kits			
 8GK9650-0KK00  8GK9711-0KK03	Busbar holders with matching support plate Versions		
	1-pole - For copper busbars, 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm	5SH3540	1 unit
	3-pole - Pole centre distance of 60 mm - For copper busbars, 12 × 5 (10) mm, 20 × 5 (10) mm, 30 × 5 (10) mm - For bus-mounting fuse bases and switch disconnectors used together with assembly kits (mounting directly on the uprights)	8GK9711-0KK03	1 unit
	4-pole - Pole centre distance of 60 mm - For copper busbars, 12 × 5 (10) mm, 30 × 5 (10) mm - Interior mounting - Width: 20 mm	8US1923-4AA00	10 units
	5-pole - Pole centre distance of 40 mm - For copper busbars, 12 × 5 (10) mm - and for mounting 3NP fuse switch disconnectors - Height 300 mm	8GK9650-0KK00	1 unit
 8GK973.	Copper busbars Versions		
	- Cu cross-section 12 × 5 mm, current 250 A - Length 250 - Length 500 - Length 750 - Length 1000 - Length 1250	8GK9731-0KK10 8GK9731-0KK20 8GK9731-0KK30 8GK9731-0KK40 8GK9731-0KK50	5 units 5 units 5 units 5 units 5 units
	- Cu cross-section 20 × 5 mm, current 320 A - Length 250 - Length 500 - Length 750 - Length 1000 - Length 1250	8GK9733-0KK10 8GK9733-0KK20 8GK9733-0KK30 8GK9733-0KK40 8GK9733-0KK50	5 units 5 units 5 units 5 units 5 units
	- Cu cross-section 30 × 5 mm, current 450 A - Length 250 - Length 500 - Length 750 - Length 1000 - Length 1250	8GK9735-0KK10 8GK9735-0KK20 8GK9735-0KK30 8GK9735-0KK40 8GK9735-0KK50	5 units 5 units 5 units 5 units 5 units
	- Cu cross-section 30 × 10 mm, current 630 A - Length 250 - Length 500 - Length 750 - Length 1000 - Length 1250	8GK9736-0KK10 8GK9736-0KK20 8GK9736-0KK30 8GK9736-0KK40 8GK9736-0KK50	5 units 5 units 5 units 5 units 5 units
	Supports for front cover - Long version - Material plastic 1 set = 4 supports	8GK9910-0KK30	5 sets
	N/PE bars as plug-in terminal for mounting on uprights at a 30° inclination Versions		
	With 6 screw terminals from 2.5 to 16 mm² and 21 plug-in terminals from 1.5 to 4 mm²	8GK9910-0KK11	1 unit
	With 6 screw terminals from 2.5 to 16 mm² and 21 plug-in terminals from 1.5 to 4 mm² for PE bar, and one neutral bar with 2 screw terminals from 2.5 to 16 mm² and 10 plug-in terminals each from 1.5 to 4 mm²	8GK9910-0KK12	1 unit

Configuration		Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
 8US1921-2AA00	Terminals for circular conductors Versions • Busbar thickness 5 mm - Conductor cross-section 1.5 ... 16 mm² - Conductor cross-section 1.5 ... 35 mm² - Conductor cross-section 16 ... 70 mm² - Conductor cross-section 16 ... 120 mm² • Busbar thickness 10 mm - Conductor cross-section 1.5 ... 16 mm² - Conductor cross-section 1.5 ... 35 mm² - Conductor cross-section 16 ... 70 mm² - Conductor cross-section 16 ... 120 mm²	8US1921-2AA00 8US1921-2AB00 8US1921-2AD00 8US1921-2AC00 8US1921-2BA00 8US1921-2BB00 8US1921-2BD00 8US1921-2BC00	100 units 50 units 50 units 50 units 100 units 50 units 50 units 50 units
	Blanking strips Colour RAL 7035 (light grey) Versions • For 12 MW (1 MW = 18 mm) • Length 1 m without pressure-relief joint, to cut to length	8GK9910-0KK00 8GK9910-0KK01	10 units 1 unit
	 8GK9920-0KK31 Connecting kits, IP43/IP55 • For side-by-side mounting of enclosures • Comprising: - Screws - Washers - Nuts - 10 m roll of sealing tape Note A bushing flange is required for electrical connection	8GK9920-0KK31	1 unit
 8GK9910-0KK80	Cable holders For DIN rails	8GK9910-0KK80	200 units
 8GD9 290	Spare keys For double-bit locking mechanism	8GD9290	1 unit
 8GK9910-0KK34	Extra-deep brackets For recessed installation of DIN rails	8GK9910-0KK34	1 set
 8GK9910-0KK26	Quick-lock screws • Material plastic • Colour RAL 7035	8GK9910-0KK26	20 units
 8GK9910-0KK27	Assembly tools • For supports • Short and long versions • With ergonomic handle	8GK9910-0KK27	1 unit
 8GK9910-0KK35	DIN rails, lowered Width 250 mm 500 mm 750 mm	8GK9910-0KK35 8GK9910-0KK40 8GK9910-0KK41	1 unit 1 set 1 set

ALPHA Modular Installation System

Notes

Accessories



7/2	Fasteners
7/2	Frame
7/2	Flat copper connection
7/2	Electrical connections
7/3	Accessories
7/3	Mechanical accessory parts
7/3	Tools

For further technical product information:

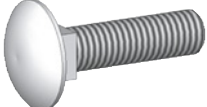
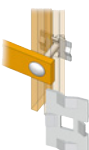
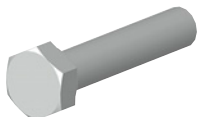
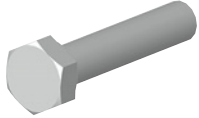
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Accessories

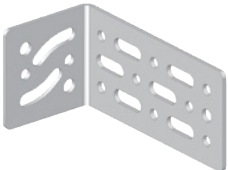
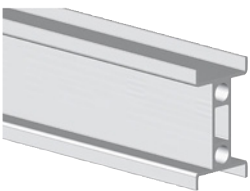
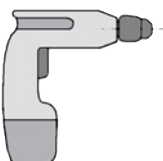
Fasteners

Selection and ordering data

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
Frame			
	Self-tapping screws For use with frame and crossbars		
	Cylinder-head screws		
	External diameter × Length in mm		
	M6 × 10	8PQ9500-0BA34	1 unit
	M6 × 16	8PQ9500-0BA32	1 unit
	M6 × 20	8PQ9500-0BA31	1 unit
	Cap, RAL 7035	8PQ9400-0BA14	1 unit
	Countersunk screws		
	External diameter × Length in mm		
	M6 × 12	8PQ9500-1BA07	1 unit
Flat copper connection			
	Square screws DIN 603 1 pack = 50 units		
	External diameter × Length in mm		
	M10 × 35	8PQ9500-0BA14	1 unit
	M10 × 45	8PQ9500-0BA16	1 unit
	M10 × 55	8PQ9500-1BA36	1 unit
	M10 × 65	8PQ9500-1BA25	1 unit
	Busbar clamps 1 pack = 20 units	8PQ9400-0BA02	1 unit
Electrical connections			
	Hexagon-head screws ISO 4017 • Continuous thread • 1 pack = 50 units		
	External diameter × Length in mm		
	M8 × 25	8PQ9500-0BA77	1 unit
	M8 × 35	8PQ9500-0BA78	1 unit
	M12 × 40	8PQ9500-0BA88	1 unit
	Hexagon-head screws ISO 4014 • With shank • 1 pack = 50 units		
	External diameter × Length in mm		
	M12 × 50	8PQ9500-0BA64	1 unit
	M12 × 60	8PQ9500-1BA02	1 unit
	M12 × 80	8PQ9500-1BA51	1 unit
	Hexagonal nuts ISO 4032 1 pack = 50 units		
	External diameter		
	M8	8PQ9500-0BA07	1 unit
	M10	8PQ9500-0BA05	1 unit
	M12	8PQ9500-0BA04	1 unit
	Clamping washers DIN 6796 1 pack = 50 units		
	Screw type		
	M8	8PQ9500-0BA58	1 unit
	M10	8PQ9500-0BA60	1 unit
	M12	8PQ9500-0BA61	1 unit
	Washers DIN 125 1 pack = 50 units		
	For screw type		
	M8	8PQ9500-0BA70	1 unit
	M10	8PQ9500-0BA67	1 unit
	M12	8PQ9500-1BA33	1 unit
	Lock washers BN208012 1 pack = 50 units		
	For screw type		
	M8	8PQ9500-0BA48	1 unit
	M10	8PQ9500-0BA50	1 unit
	M12	8PQ9500-0BA51	1 unit

Mechanical accessory parts

Selection and ordering data

	Configuration	Article No. www.siemens.com/ product?Article No.	PS*/ P. unit
	Universal mounting brackets 1 pack = 10 units	8PQ9400-0BA01	1 unit
	Cable brackets • C profile, 30 mm • 1 set = 5 units • 1 pack = 5 units		
	Depth in mm		
	400, 600, 800	8PQ3000-0BA38	1 unit
	Width in mm		
	350	8PQ3000-0BA38	1 unit
	400	8PQ3000-0BA41	1 unit
	600	8PQ3000-0BA42	1 unit
	800	8PQ3000-0BA43	1 unit
	Cable brackets • C profile, 30 mm • 1 set = 5 units • 1 pack = 5 units		
	Depth in mm		
	400, 600, 800	8PQ3000-0BA38	1 unit
	Width in mm		
	350	8PQ3000-0BA38	1 unit
	400	8PQ3000-0BA41	1 unit
	600	8PQ3000-0BA42	1 unit
	800	8PQ3000-0BA43	1 unit
	Cable bracket fastenings 1 pack = 10 units	8PQ3000-0BA73	1 unit
	Multi-profile rails • H profile = 35 mm • Length = 1600 mm • Made of aluminium	8PQ9600-0BA01	1 unit
	Lifting eyebolts 1 set = 4 units	8PQ9400-0BA11	1 unit
	Lifting brackets 1 set = 2 units		
	Frame width in mm		
	800	8PQ3000-1BA01	1 unit
	850	8PQ3000-2BA38	1 unit
	1000	8PQ3000-1BA02	1/2 units
	1200	8PQ3000-1BA03	1/2 units
Tools			
	Bits for screwdriver		
	External diameter × Length in mm	Package contents	
	M6 × 50	5 units	8PQ9400-0BA05 1 unit
	M6 × 200	2 units	8PQ9400-0BA10 1 unit
 T30			

Accessories

Notes

SIVACON 8MF/8MR System Lighting



8/2	Compact/slimline lights
8/4	LED lights

For further technical product information:

Siemens Industry Online Support:
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→ Entry type:
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SIVACON 8MF/8MR System Lighting

Compact/slimline lights

Overview



Slimline light with motion detector

Cubicle lighting

The cubicle light is specifically suitable for operation in switch-gear and controlgear cubicles.

In the case of lights with a SCHUKO socket outlet, the outlet is incorporated with an on/off switch or motion detector in the plastic enclosure.

The flat slimline light with motion detector or on/off switch is ideal for operation in cubicles and enclosures with a high density of built-in electrical/electronic components.

All lights are fitted with environmentally friendly energy-saving lamps.

Rating of energy-saving lamps	Rating of conventional incandescent lamps
9 W	60 W
11 W	75 W
20 W	100 W

Spare lamp: Osram SPD1411-2B (100 W)

Socket outlets

Socket outlets are mounted on 35 mm support rails and connected without screws by way of three clamping terminals (for stranded and solid wires 0.5 ... 2.5 mm²)

The maximum operational voltage is 250 V. The enclosure is light-gray UL94 V-Q plastic.

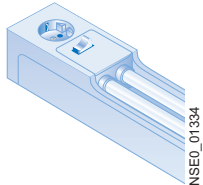
The slimline light is also available with country-specific socket outlets.

Plug-on mounts

If a cubicle light is provided with a plug-on mount, it remains immune to vibration and can be removed at any later time without tools.

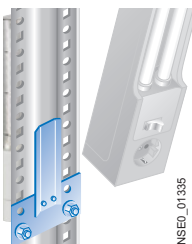
If fitted between two plug-on mounts, the cubicle light is fixed statically to the cubicle frame. The cubicle light can only be fitted to the cubicle frame by using plug-on mounts.

Selection and ordering data

Configuration	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
Cubicle lighting						
 8MF4900	Compact lights (355 x 65 x 70 mm) without cover					
	• 230 V, 50 Hz, 11 W (Germany)					
	• 120 V, 60 Hz, 9 W (Germany)					
	• 240 V, 50 Hz, 11 W					
	With cover					
	• 230 V, 50 Hz, 11 W					
	With 3 m cable					
	• 230 V, 50 Hz, 11 W					
	With 3 m cable (orange-coloured)					
	• 230 V, 50 Hz, 11 W					
 8MF4902	Spare parts for compact lights					
	• Spare light 230V					
	• Spare light 120V					
	• Cover					
	Dual lights (396 x 67 x 100 mm) 220 ... 240 V AC, 50-60 Hz, 20 W					
	• With motion detector					
	• With on/off switch					
	• As hand-held lamp					

SIVACON 8MF/8MR System Lighting

Compact/slimline lights

	Configuration	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
	Slimline lights (345 x 91 x 40 mm) 230 V, 50/60 Hz, 11 W with pushbutton (On/Off)						
	• With socket outlet D, without magnet		8MF5900-1A	1	1 unit	181	0.466
	• With socket outlet D, with magnet (approx. 50 N)		8MF5900	1	1 unit	181	0.600
	• With socket outlet D, with magnet (approx. 30 N)		8MF5900-1C	1	1 unit	181	0.536
	• Without socket outlet, without magnet		8MF5900-2A	1	1 unit	181	0.433
	• Without socket outlet D, with magnet (approx. 50 N)		8MF5900-1B	1	1 unit	181	0.641
	• Without socket outlet D, with magnet (approx. 30 N)		8MF5900-2B	1	1 unit	181	0.500
8MF5900-1A							
	230 V, 50/60 Hz, 11 W with motion detector						
	• With socket outlet D, without magnet		8MF5910-1A	1	1 unit	181	0.400
	• With socket outlet D, with magnet (approx. 50 N)		8MF5910	1	1 unit	181	0.689
	• With socket outlet D, with magnet (approx. 30 N)		8MF5910-1C	1	1 unit	181	0.500
	• Without socket outlet, without magnet		8MF5910-2A	1	1 unit	181	0.456
	• Without socket outlet D, with magnet (approx. 50 N)		8MF5910-1B	1	1 unit	181	0.600
	• Without socket outlet D, with magnet (approx. 30 N)		8MF5910-2B	1	1 unit	181	0.500
8MF5910-1A							
	24 ... 48 V DC, 11 W, with pushbutton (On/Off)						
	• Without socket outlet, without magnet		8MF5900-3A	1	1 unit	181	0.481
	• Without socket outlet, with magnet (approx. 30 N)		8MF5900-3B	1	1 unit	181	0.562
	24 ... 48 V DC, 11 W, with motion detector						
	• Without socket outlet, without magnet		8MF5910-3A	1	1 unit	181	0.500
	• Without socket outlet, with magnet (approx. 30 N)		8MF5910-3B	1	1 unit	181	0.500
Socket outlets							
	Socket outlets with fuse						
	• VDE		8MF9300	1	3 units	180	0.500
	• CEBEC		8MF9301	1	3 units	181	0.142
	Socket outlets without fuse						
	• VDE		8MF9305	1	1 unit	181	0.134
Plug-on mounts							
	Plug-on mounts						
	• For fitting the compact light		8MF4903	1	3 units	181	0.100
8MF4903							
Position switches							
	Position switches for fitting as door contact for use with 50 mm hole spacing						
	• 1 NO + 1 NC		8MF1000-2VL	1	1 unit	180	0.200
	• 1 NO + 2 NC		8MF1000-2VR	1	1 unit	180	0.200
8MF1000-2V.							

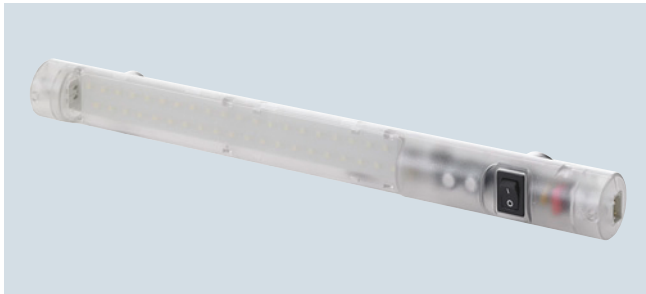
More information

For more information, see Catalogue LV 50 "SIVACON System Cubicles, System Lighting and System Air-Conditioning" or visit: www.siemens.com/industrymall.

SIVACON 8MF/8MR System Lighting

LED lights

Overview



LED light with on/off switch and magnetic fixing

The LED lights with on/off switch are particularly suitable for operation in cubicles and enclosures with a high density of built-in electrical/electronic components.

Thanks to the use of LED technology, these lights have a very long useful life.

By means of magnetic fixing, they can be fastened anywhere in steel cubicles without installation effort.

A version with screw fixing is also available.

Connection is made using a socket on the lamp (switch side). Another lamp can be connected using a connector (non-switch side). Up to 10 lights can be connected in series in this way.

Features

		Technical specifications
Power consumption, max.	W	5
		Light output corresponds to that of a 75 W incandescent lamp
Operating life		
• At 20 °C	h	60000
Connection		
• General		2-pin plug-in connection with lock
• AC version		Max. 2.5 A/240 V AC, colour: white
• DC version		Max. 2.5 A/60 V DC, colour: blue
Dimensions		
Length	mm	351
Light diameter	mm	32
Mounting width		
• Light with magnetic fixing	mm	34
• Light with screw fixing	mm	52
Permissible ambient temperature		
• Operation	°C	-30 ... +60
• Storage	°C	-40 ... +85
Degree of protection		IP20
Insulation class		II (protective insulation)

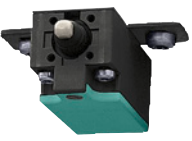
Note:

Delivery does not include plugs, sockets and cables for electrical connection. These must be ordered separately.
[See accessories on next page.](#)

Selection and ordering data

Configuration	DT	Article No. www.siemens.com/product?ArticleNo.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
LED lights with pushbutton (On/Off)						
Magnetic fixing						
• 100 ... 240 V AC, 50 Hz /60 Hz		8MR2200-1A	1	1 unit	181	0.190
						
8MR2200-1A						
• 24 ... 48 V DC		8MR2201-1A	1	1 unit	181	0.141
						
8MR2201-1A						
Screw fixing						
• 100 ... 240 V AC, 50 Hz /60 Hz		8MR2200-1B	1	1 unit	181	0.182
• 24 ... 48 V DC		8MR2201-1B	1	1 unit	181	0.137
						
8MR2200-1B						

Accessories

Configuration		DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx.	kg	
Individual plugs or sockets									
 8MR2210-1A	AC socket for input side, white For connecting an LED light (switch side)		8MR2210-1A	1	10 units	181	0.010		
	AC plug for output side, white For transmission to another LED light		8MR2210-2A	1	10 units	181	0.010		
	DC socket for input side, blue For connecting an LED light (switch side)		8MR2210-3A	1	10 units	181	0.010		
	DC plug for output side, blue For transmission to another LED light		8MR2210-4A	1	10 units	181	0.010		
	Note: Plugs and sockets are also separately available for self-assembling cables that deviate from standard lengths.								
Cables									
 8MR2210-1B	Connecting cables with socket and open end, each 2 m long For connecting a lamp (switch side)								
	• AC connecting cable 2 x 1.5 mm ² with socket, VDE		8MR2210-1B	1	5 units	181	0.197		
	• AC connecting cable AWG 16 with socket, UL		8MR2210-2B	1	5 units	181	0.225		
	• DC connecting cable 2 x 1.5 mm ² with socket, VDE		8MR2210-3B	1	5 units	181	0.195		
	• DC connecting cable AWG 16 with socket, UL		8MR2210-4B	1	5 units	181	0.175		
 8MR2210-1C	Extension cables for cascading, each 1 m long, with socket and plug								
	• AC light plastic-sheathed cable 2 x 1.5 mm ² with socket and plug, VDE		8MR2210-1C	1	5 units	181	0.117		
	• AC light plastic-sheathed cable AWG 16 with socket and plug, UL		8MR2210-2C	1	5 units	181	0.105		
	 8MR2210-3C	• DC light plastic-sheathed cable 2 x 1.5 mm ² with socket and plug, VDE		8MR2210-3C	1	5 units	181	0.105	
		• DC light plastic-sheathed cable AWG 16 with socket and plug, UL		8MR2210-4C	1	5 units	181	0.105	
Position switches									
 8MF4310/8MF4311	Position switches for fitting as door contact for use with 50 mm hole spacing								
	• 1 NO + 1 NC		8MF1000-2VL	1	1 unit	180	0.200		
	• 1 NO + 2 NC		8MF1000-2VR	1	1 unit	180	0.200		

More information

For more information, see Catalogue LV 50 "SIVACON System Cubicles, System Lighting and System Air-Conditioning" or visit: www.siemens.com/industrymall.

SIVACON 8MF/8MR System Lighting

Notes

SIVACON 8MR System Air-Conditioning



9/2	Introduction
9/5	Filter fans
9/8	Air-conditioning/cooling units
9/9	Heat exchangers
9/10	Heaters
9/11	Fan heaters
9/13	Thermostats, hygrometers, hygrotherms, switching modules

For further technical product information:

Siemens Industry Online Support:
www.siemens.com/lowvoltage/product-support

→ Entry type:
 Application example
 Certificate
 Characteristic
 Download
 FAQ
 Manual
 Product note
 Software archive
 Technical data

SIVACON 8MR System Air-Conditioning

Introduction

Overview

	Control supply voltage or voltage for switching capacity			
	24/48 V DC	115 V AC	230 V AC	400/440 V AC
8MR system air-conditioning				
Filter fans				
Standard filter fans, IP54 or IP55				
• With or without additional EMC protection	○	✓	✓	--
• Cooling capacity 8 W/K ... 282 W/K	○	✓	✓	--
• Air rate 25 m³/h ... 845 m³/h	○	✓	✓	--
• Size 92 × 92 mm to 292 × 292 mm	○	✓	✓	--
• Colour RAL 7035 or RAL 7032	○	✓	✓	--
Roof filter fans, IP44				
• Cooling capacity 113 W/K ... 242 W/K	--	✓	✓	--
• Air rate 350 m³/h ... 690 m³/h	--	✓	✓	--
• Size 430 × 430 mm to 470 × 470 mm	--	✓	✓	--
• Colour RAL 7035 or RAL 7032	--	✓	✓	--
Air-conditioning/cooling units				
For door and side-panel mounting (recessed)				
• 380 ... 5800 W	--	--	✓	✓
For roof mounting				
• 410 ... 3850 W	--	--	✓	✓
Heat exchangers				
Standard				
• Air/air (at $\Delta T = 20$ K)	--	✓	✓	--
For side panel and door mounting				
• 700 ... 1900 W	--	✓	✓	--
Heaters optionally without or with thermostat				
• 10 W ... 150 W	✓	✓	✓	--
Fan heaters optionally without or with thermostat				
• 100 W ... 1200 W	✓	✓	✓	--
• Setting ranges 0 ... +60 °C, +32 ... +140 °F	✓	✓	✓	--
Thermostats, hygrostats, hygrotherms, switching modules				
Thermostats, optionally NC, NO, CO contacts				
• Setting ranges -10... +80 °C	--	✓	✓	--
• Switching capacities up to 16 A	✓	✓	✓	--
Hygrostats, CO contacts	✓	✓	✓	--
• 40 ... 95 % relative air humidity	✓	✓	--	--
Hygrotherms, optionally NC, NO, CO contacts				
• Setting ranges 0 ... 60 °C, +32 ... +140 °F	--	✓	✓	--
• 50 ... 90 % relative air humidity	--	✓	✓	--
• Switching capacities 6 (1) A ... 8 (1.6) A	✓	✓	✓	--
• Switching modules 16 A	✓	--	--	--

✓ Available or possible

-- Not available or not possible

○ On request

The figures in brackets indicate inductive switching capacities.

Benefits

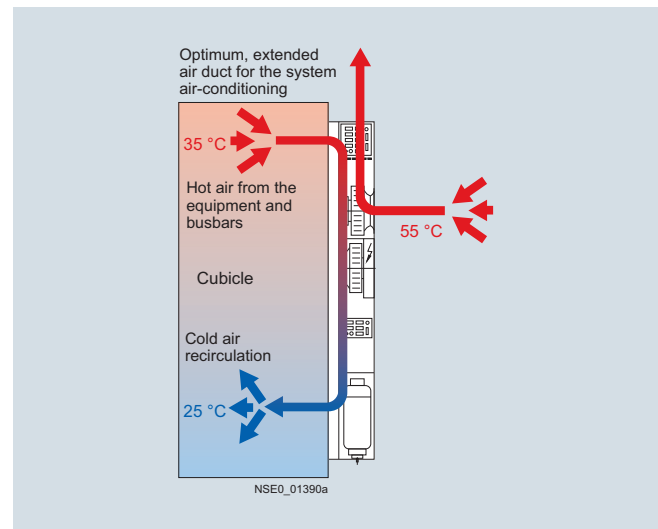
Installing air-conditioning equipment in SIVACON sicube 8MF cubicle systems ensures high fault tolerance for switchgear and controlgear assemblies and consequently a high level of availability of machines and plants.

Applications

In cubicles, depending on the immediate surroundings (e.g. presence of hot, cold or moist air etc.), there may be a tendency for the switchgear to overheat or for mould to form. In such cases the cubicles should be air-conditioned. The following air-conditioning equipment is available for this purpose:

- Filter fans
- Air-conditioning/cooling units
- Air/air heat exchangers
- Heaters/thermostats

When selecting the individual air-conditioning units, the following factors must be taken into account: ambient temperature, power dissipated from the devices installed, maximum admissible temperatures of the devices, and heat dissipated via the cubicle. In addition, the required degree of protection must also be taken into account.



System air-conditioning – optimum air flow

More information

For more information, see www.siemens.com/industrymall.

SIVACON 8MR System Air-Conditioning

Introduction

Configuring guide

	Calculation	Graphical representation or determination
Step 1: Dimensions		
Determine the cubicle's height, width and depth		
Step 2: Installation type		
Determine the cubicle's installation types in compliance with VDE 0660 T500	Legend for formulas below: A Cubicle area in m^2 W Width in m H Height in m D Depth in m	The diagrams below illustrate the installation types in the top view
• Single enclosure free-standing on all sides	$A = 1.8 \times H \times (W + D) + 1.4 \times W \times D$	
• Single enclosure for wall mounting	$A = 1.4 \times W \times (H + D) + 1.8 \times D \times H$	
• Start and end enclosures, free-standing	$A = 1.4 \times D \times (H + W) + 1.8 \times W \times H$	
• Start and end enclosures for wall mounting	$A = 1.4 \times H \times (W + D) + 1.4 \times W \times D$	
• Middle enclosure, free-standing	$A = 1.8 \times W \times H + 1.4 \times W \times D + D \times H$	
• Middle enclosure for wall mounting	$A = 1.4 \times W \times (H + D) + D \times H$	
• Middle enclosure for wall mounting with covered roof surfaces	$A = 1.4 \times W \times H + 0.7 \times W \times D + D \times H$	
	Example: cubicle, free-standing on all sides, 2000 mm high, 800 mm wide, 600 mm deep. $A = 1.8 \text{ m} \times 2.0 \text{ m} \times (0.8 \text{ m} + 0.6 \text{ m}) + 1.4 \text{ m} \times 0.8 \text{ m} \times 0.6 \text{ m} = 5.712 \text{ m}^2$ Accordingly, the cubicle has an area of 5.712 m^2 .	
Step 3: Cubicle material		
Determine the cubicle's material and its coefficient of heat transmission k in W/m^2K	Varnished sheet steel: $k = 5.5 \text{ W/m}^2K$ Stainless sheet steel: $k = 4.5 \text{ W/m}^2K$ Aluminium: $k = 12 \text{ W/m}^2K$ Aluminium, double-walled: $k = 4.5 \text{ W/m}^2K$ Polyester: $k = 3.5 \text{ W/m}^2K$	
Step 4: Temperature difference		
Determine the required difference between interior and exterior temperature	$\Delta T = T_i - T_u$ Legend for formula: ΔT Temperature difference in K (Kelvin) T_i Interior temperature in $^{\circ}C$ T_u Exterior temperature in $^{\circ}C$	
Step 5A: Heating output		
If heating is required, determine the necessary heating output either according to the adjacent formula or from the diagram on the extreme right Note: If power loss P_V (intrinsic heating) is constant, it must be deducted from the calculated heating output	$P_H = A \times k \times \Delta T$ Legend for formula: P_H Required heating output in W A Cubicle area in m^2 k Coefficient of heat transmission in W/m^2K ΔT Temperature difference in K Example: Cubicle area $A = 5.712 \text{ m}^2$, coefficient of heat transmission $k = 5.5 \text{ W/m}^2K$, temperature difference = 15 K $P_H = 5.712 \text{ m}^2 \times 5.5 \text{ W/m}^2K \times 15 \text{ K} = 471.24 \text{ W}$ A heater with a 500 W heating output is required. When installed outdoors, the calculated heating output must be doubled.	Select required heating output from diagram:
Step 5B: Cooling capacity		
If cooling is required, determine the necessary cooling capacity either according to the adjacent formula or from the diagram on the extreme right Note on the air constant f : The altitude at the place of use (above mean sea level) determines the air constant f . Decreasing barometric pressure or air density with rising altitude is taken into consideration via the air constant. f (0 ... 100 m) = 3.1 m^3K/Wh f (100 ... 250 m) = 3.2 m^3K/Wh f (250 ... 500 m) = 3.3 m^3K/Wh f (500 ... 750 m) = 3.4 m^3K/Wh f (750 ... 1 000 m) = 3.5 m^3K/Wh	$V = f \times P_V / \Delta T$ Legend for formula: V Required volume flow in m^3/h f Air constant in m^3K/Wh (see bottom left) P_V Power loss in W ΔT Temperature difference in K Example: installed power loss = 600 W, temperature difference = 15 K, installation altitude = 400 m above mean sea level $V = 3.3 \text{ m}^3K/Wh \times 600 \text{ W} / 15 \text{ K} = 132 \text{ m}^3/h$ A fan with 160 m^3/h air output is required.	Select required cooling output from diagram:

Overview

Filter fans are the most cost-effective method - after heat dissipation through the surface of a cubicle and/or ventilation fins in the switchgear enclosures - for dissipating heat from the cubicle.

However, the temperature reached inside the board is higher than ambient temperature.

Standard filter fans optionally in EMC version

When filter fans are used for air-conditioning, the cubicle must have openings which allow electromagnetic radiation to pass in and out unobstructed. Filter fans in EMC version offer additional protection when higher requirements are imposed on electromagnetic compatibility.

Filter fan versions

The following filter fans are available on request:

- Standard filter fan IP54, colour RAL 7035/7032
- Standard filter fan IP55, colour RAL 7035/7032
- Standard filter fan EMC, colour RAL 7035/7032, IP54
- Standard filter fan EMC, colour RAL 7035/7032, IP55

Note:

For all standard filter fans the useful cooling capacity and air flow-rate are reduced by an average of approx. 30% in combinations of filter fan/outlet filter/filter mat, and for roof filter fans by approx. 40 %.

Selection and ordering data

Filter fans

	Degree of protection	Size	Air flow-rate through free intake at 50 Hz m³/h	Cut-out mm	Voltage V	Power rating at 50 Hz W	Colour RAL	DT	Article No. www.siemens.com/product?ArticleNo.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
Filter fans 50/60 Hz except 8MR6 402-2LV41													
 8MR6 411-5LV10	IP54	1	25	92 × 92	AC 115	12	7035		8MR6411-5LV10	1	1 unit	181	0.330
					AC 230	12	7032		8MR6423-2LV10	1	1 unit	181	0.519
					AC 230	12	7035		8MR6423-5LV10	1	1 unit	181	0.330
		2	63	125 × 125	AC 115	20	7035		8MR6411-5LV25	1	1 unit	181	0.800
					AC 230	20	7032		8MR6423-2LV25	1	1 unit	181	0.800
					AC 230	20	7035		8MR6423-5LV25	1	1 unit	181	0.800
	IP54	3	115	177 × 177	AC 115	20	7035		8MR6411-5LV30	1	1 unit	181	1.030
					AC 230	20	7035		8MR6423-5LV30	1	1 unit	181	1.027
		4	160	223 × 223	AC 115	18	7035		8MR6411-5LV45	1	1 unit	181	1.373
					AC 230	18	7032		8MR6423-2LV45	1	1 unit	181	1.362
					AC 230	18	7035		8MR6423-5LV45	1	1 unit	181	1.375
					24 DC	16	7032		8MR6402-2LV41	1	1 unit	181	1.676
 8MR6 511-5LV10	IP55	6	580	292 × 292	AC 115	43	7035		8MR6411-5LV41	1	1 unit	181	1.823
					AC 230	45	7032		8MR6423-2LV41	1	1 unit	181	1.840
					AC 230	45	7035		8MR6423-5LV41	1	1 unit	181	1.840
					AC 115	64	7035		8MR6411-5LV60	1	1 unit	181	3.400
					AC 230	64	7032		8MR6423-2LV60	1	1 unit	181	3.436
					AC 230	64	7035		8MR6423-5LV60	1	1 unit	181	3.400
		930	292 × 292	292 × 292	AC 115	115	7035		8MR6411-5LV80	1	1 unit	181	4.600
					AC 230	135	7035		8MR6423-5LV80	1	1 unit	181	4.600
		2	58	125 × 125	AC 115	20	7035		8MR6511-5LV25	1	1 unit	181	0.814
					AC 230	20	7035		8MR6523-5LV25	1	1 unit	181	0.800
					AC 115	20	7035		8MR6511-5LV30	1	1 unit	181	0.875
					AC 230	20	7035		8MR6523-5LV30	1	1 unit	181	1.093
					AC 115	18	7035		8MR6511-5LV45	1	1 unit	181	1.448
					AC 230	18	7035		8MR6523-5LV45	1	1 unit	181	1.444
		230	223 × 223	223 × 223	AC 115	43	7035		8MR6511-5LV41	1	1 unit	181	1.840
					AC 230	45	7035		8MR6423-5LV41	1	1 unit	181	1.840
		6	531	292 × 292	AC 115	64	7035		8MR6511-5LV60	1	1 unit	181	1.840
					AC 230	64	7035		8MR6523-5LV60	1	1 unit	181	3.557
					AC 115	115	7035		8MR6511-5LV80	1	1 unit	181	4.600
					AC 230	135	7035		8MR6523-5LV80	1	1 unit	181	4.766

SIVACON 8MR System Air-Conditioning

Filter fans

	Degree of protection	Size	Air flow-rate through free intake at 50 Hz	Cut-out	Voltage	Power rating at 50 Hz	Colour	DT	Article No. www.siemens.com/product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx.												
			m ³ /h	mm	V	W	RAL						kg												
	EMC filter fans IP54																								
	IP54	3	115	177 × 177	AC 115 AC 230	20 20	7035 7035	8MR6411-6LV30 8MR6423-6LV30 8MR6411-6LV45 8MR6423-6LV45 8MR6411-6LV41 8MR6423-6LV41	1	1 unit	181	1.030													
		4	160	223 × 223	AC 115 AC 230	18 18	7035 7035						1	1 unit	181	1.087									
	250	223 × 223	AC 115 AC 230	43 45	7035 7035	1	1 unit										181	1.400							
																			1	1 unit	181	1.400			
																							1	1 unit	181
1																									
	EMC filter fans IP55																								
	IP55	3	105	177 × 177	AC 115 AC 230	20 20	7035 7035	8MR6511-6LV30 8MR6523-6LV30 8MR6511-6LV45 8MR6523-6LV45 8MR6511-6LV41 8MR6523-6LV41	1	1 unit	181	1.030													
		4	147	223 × 223	AC 115 AC 230	18 18	7035 7035						1	1 unit	181	1.131									
	230	223 × 223	AC 115 AC 230	43 45	7035 7035	1	1 unit										181	1.400							
																			1	1 unit	181	1.400			
																							1	1 unit	181
1																									

Outlet filters

	Size	Dimensions Cut-out	External dimensions W × H	Mounting depth	Cover grille height	Colour RAL	DT	Article No. www.siemens.com/product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
Outlet filters IP54												
	1	92 × 92	105 × 105	12	4.5	7032 7035		8MR6400-2GV10	1	1 unit	181	0.060
								8MR6400-5GV10	1	1 unit	181	0.066
	2	125 × 125	148 × 148	23	5.5	7032 7035		8MR6400-2GV25	1	1 unit	181	0.170
								8MR6400-5GV25	1	1 unit	181	0.168
	3	177 × 177	204 × 204	26	6	7035		8MR6400-5GV30	1	1 unit	181	0.323
	4	223 × 223	250 × 250	32	6	7032 7035		8MR6400-2GV45	1	1 unit	181	0.500
								8MR6400-5GV45	1	1 unit	181	0.500
	6	292 × 292	323 × 323	33	6.5	7032 7035		8MR6400-2GV67	1	1 unit	181	0.800
								8MR6400-5GV67	1	1 unit	181	0.825
Outlet filters IP55												
	2	125 × 125	148 × 148	23	5.5	7035		8MR6500-5GV25	1	1 unit	181	0.194
	3	177 × 177	204 × 204	26	6	7035		8MR6500-5GV30	1	1 unit	181	0.363
	4	223 × 223	250 × 250	32	6	7035		8MR6500-5GV45	1	1 unit	181	0.572
	6	292 × 292	323 × 323	33	6.5	7035		8MR6500-5GV67	1	1 unit	181	0.949
EMC outlet filters IP54												
	3	177 × 177	204 × 204	26	6	7035		8MR6400-6GV30	1	1 unit	181	0.392
	4	223 × 223	250 × 250	32	6	7035		8MR6400-6GV45	1	1 unit	181	0.583
	EMC outlet filters IP55											
	3	177 × 177	204 × 204	26	6	7035		8MR6500-6GV30	1	1 unit	181	0.350
	4	223 × 223	250 × 250	32	6	7035		8MR6500-6GV45	1	1 unit	181	0.500

SIVACON 8MR System Air-Conditioning

Filter fans

Filter mats

	Size	Dimensions W × H mm	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
	Filter mats for filter fans or outlet filters for IP54							
	1	89 × 89		8MR6000-0AM10	1	5 units	181	0.050
	2	118 × 118		8MR6000-0AM25	1	5 units	181	0.004
	3	171 × 171		8MR6000-0AM30	1	5 units	181	0.032
	4	216 × 216		8MR6000-0AM45	1	5 units	181	0.011
	6	283 × 283		8MR6000-0AM67	1	5 units	181	0.020

8MR6 000-0AM10

Roof filter fans

	Air flow-rate through free intake at 50 Hz m ³ /h	Dimensions Cut-out mm	External dimensions W × H × D mm	Voltage V	Power rating W	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
	Roof filter fans IP44 for 50/60 Hz, colour RAL 7035										
	405	345 × 265	420 × 340 × 108	115	40/45		8MR6311-5DL40	1	1 unit	181	7.520
				230	40/45		8MR6323-5DL40	1	1 unit	181	7.527
	690	345 × 265	420 × 340 × 108	115	100/130		8MR6311-5DL42	1	1 unit	181	8.200
	Roof outlet filters IP44, colour RAL 7035										
	Without fan	345 × 265	420 × 340 × 83	--	--		8MR6000-5DE40	1	1 unit	181	4.379

8MR6 323-5DL40

8MR6 000-5DE40

19" fan draw-out units

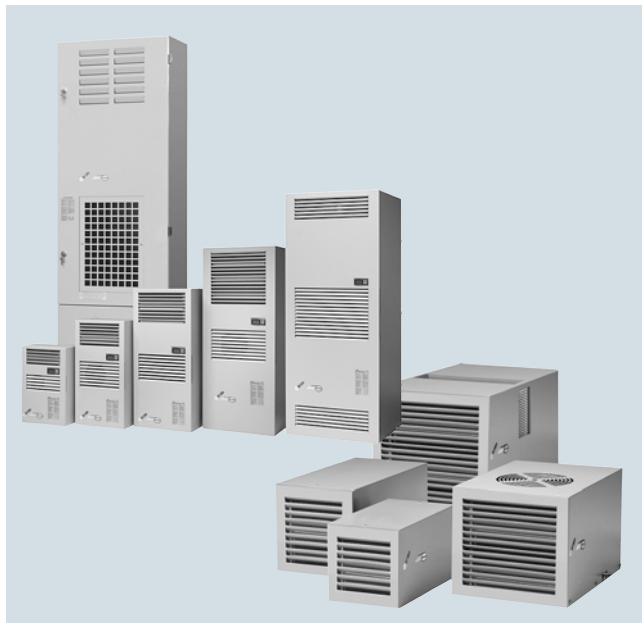
	Power W	Voltage V	Series	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
	45	230	LE 019		8MR2190-1A	1	1 unit	181	3.300

8MR2190-1A

SIVACON 8MR System Air-Conditioning

Air-conditioning/cooling units

Overview



8MR6 cooling units:
top left for door or side panel mounting, bottom right for roof mounting

Where ambient temperatures are higher than the admissible device temperatures, air-conditioners must be used. All the units operate with CFC-free refrigerants. Air-conditioners dehumidify the air inside the cubicle.

Cooling units for door, side panel or roof mounting

Two separate cooling circuits ensure that no ambient air enters the cubicle. High-performance radial fans provide for effective air circulation inside the cubicle.

Intelligent standard electronic components with maximum customer benefits:

- Simple temperature control with an integrated thermostat
- Test mode
- Temperature limits
- Start-up delay
- Door contact function
- Fault indicator contact
- On-site diagnostics
- UL approval
- CE approval

Versions

Air-conditioning/cooling units are available in the following versions:

- For side panel and door mounting
- For roof mounting

Selection and ordering data

Cooling units for door or side panel mounting, degree of protection IP54 inside/IP34 outside, colour RAL 7035

	Cooling capacity	Rated power	Dimensions W × H × D	Air flow-rate inside/outside	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx.
	W	W	mm	m ³ /h						kg
	Cooling units for 230 V, 50/60 Hz¹⁾									
	380	280	285 × 460 × 180	280/280		8MR6423-5EG04	1	1 unit	181	19.000
	640	400	360 × 606 × 212	330/570		8MR6423-5EG06	1	1 unit	181	27.000
	820	440	348 × 783 × 215	330/570		8MR6423-5EG08	1	1 unit	181	30.000
	1050 ²⁾	570	348 × 783 × 215	570/860		8MR6423-5SK10	1	1 unit	181	42.000
	1550 ²⁾	880	400 × 950 × 233	570/1050		8MR6423-5SK15	1	1 unit	181	42.000
	2050 ²⁾	1080	400 × 1265 × 236	860/1050		8MR6423-5SK20	1	1 unit	181	64.000
8MR6 423-5SK20	Cooling units for 400 V, 50/60 Hz¹⁾									
	2900	1220	500 × 1270 × 336	860/1450		8MR6440-5EG30	1	1 unit	181	86.000
	1780	1780	500 × 1270 × 336	1450/1450		8MR6440-5EG40	1	1 unit	181	88.000
	5800	2340	600 × 2000 × 380	1450/2900		8MR6440-5EG60	1	1 unit	181	156.000

¹⁾ Top mounting and complete installation in the cubicle possible.

²⁾ Partial installation in the cubicle possible.

Cooling units for roof mounting, degree of protection IP54 inside/IP34 outside, colour RAL 7035

	Cooling capacity	Rated power	Dimensions W × H × D	Air flow-rate inside/outside	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx.
	W	W	mm	m ³ /h						kg
	Cooling units for 230 V, 50/60 Hz									
	410	270	259 × 264 × 486	235/330		8MR6423-5DE04	1	1 unit	181	21.500
	820	510	340 × 340 × 600	330/570		8MR6423-5DE08	1	1 unit	181	37.700
	1150	550	401 × 415 × 567	570/1010		8MR6423-5DE12	1	1 unit	181	46.000
	1550	810	401 × 415 × 567	860/1820		8MR6423-5DE15	1	1 unit	181	43.000
	2050	1190	401 × 415 × 567	1050/1820		8MR6423-5DE20	1	1 unit	181	56.000
	Cooling units for 400 V, 50/60 Hz									
	2900	1210	492 × 496 × 797	860/3410		8MR6440-5DE30	1	1 unit	181	88.000
	3850	1630	492 × 496 × 797	1450/3410		8MR6440-5DE40	1	1 unit	181	90.000

Overview



80 W/K heat exchanger

Air-air principle

Heat exchangers working according to the air-air principle use two fully separate air circuits: an internal and an external circuit. A fan draws in cold air from the exterior. A second fan then directs the warmed cubicle air past a large-area finned partition element, which passes the heat to the external circuit.

Note:

The units are suitable for top mounting and complete installation in the cubicle.

Selection and ordering data

Standard air-air heat exchangers, degree of protection IP54, colour RAL 7035

	Thermal capacity	Rated power	Dimensions W × H × D	Air flow-rate inside/outside	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx.
	W/K	W	mm	m ³ /h						kg
	Heat exchangers for 230 V, 50/60 Hz									
	36	140	316 × 771 × 93	570/570		8MR6423-5ML36	1	1 unit	181	7.000
	80	240	317 × 1260 × 108	1050/1050		8MR6423-5ML80	1	1 unit	181	25.000

8MR6 423-5ML80

SIVACON 8MR System Air-Conditioning

Heaters

Overview



Small semiconductor heater, 8MR2131-0A

Cubicle heaters are used to prevent malfunctions caused by condensation formation and corrosion phenomena as well as to maintain a minimum interior temperature.

The plastic enclosure is designed such that the surface temperatures on the touchable side areas are kept very low.

The heaters are designed for uninterrupted duty.

All units are also available in UL-approved versions and for special voltages.

Selection and ordering data

Configuration		DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
Heaters							
	Heaters, UL-approved, with PTC thermistor 120 ... 240 V AC/DC • 15W • 30 W • 45 W • 60 W • 75 W • 100 W • 150 W		8MR2130-1A	1	2 units	181	0.251
			8MR2130-3A	1	2 units	181	0.254
			8MR2130-4A	1	1 unit	181	0.258
			8MR2130-6A	1	1 unit	181	0.450
			8MR2130-7A	1	1 unit	181	0.453
			8MR2130-0A	1	1 unit	181	0.458
			8MR2130-5A	1	1 unit	181	0.673
	Semiconductor heaters without thermostat, degree of protection IP20, UL-approved, compact design 120 ... 240 V AC/DC • 50 W • 100 W • 150 W		8MR2131-4A	1	1 unit	181	0.290
			8MR2131-0A	1	1 unit	181	0.350
			8MR2131-5A	1	1 unit	181	0.482
	Semiconductor heaters with thermostat, degree of protection IP20, compact design 120 ... 240 V AC/DC • 50 W, 15 °C • 50 W, 25 °C • 100 W, 15 °C • 100 W, 25 °C • 150 W, 15 °C • 150 W, 25 °C		8MR2132-1A	1	1 unit	181	0.329
			8MR2132-1AB	1	1 unit	181	0.300
			8MR2132-0A	1	1 unit	181	0.362
			8MR2132-0AB	1	1 unit	181	0.310
			8MR2132-5A	1	1 unit	181	0.497
			8MR2132-5AB	1	1 unit	181	0.498
	Small semiconductor heater 12 ... 30 V AC/DC • 30 W Screw fastener for small semiconductor heaters		8MR2110-3BA	1	1 unit	181	0.161
			8MR2110-1BB	1	1 unit	181	0.014
	Semiconductor heaters 12 ... 30 V AC/DC • 15 W • 30 W • 45 W		8MR2130-1BA	1	1 unit	181	0.253
			8MR2130-3BA	1	1 unit	181	0.256
			8MR2130-4BA	1	1 unit	181	0.252

Overview



Fan heaters with integrated thermostat or hygrostat

Where higher heating outputs (from 150 W) are required, fan heaters are used.

The integrated fans provide for better air circulation and hereby achieve a more even air temperature distribution in the cubicle.

All units are also available in UL-approved versions and for special voltages.

Selection and ordering data

Configuration	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
Fan heaters						
Fan heaters in standard version						
UL-approved						
 8MR2140-0A	• Without fan					
	- 230 V AC, 100 W					
	- 230 V AC, 150 W					
	- 230 V AC, 200 W					
	- 230 V AC, 300 W					
	- 230 V AC, 400 W					
 8MR2140-0B	• With fan					
	- 230 V AC, 100 W					
	- 230 V AC, 150 W					
	- 230 V AC, 200 W					
	- 230 V AC, 300 W					
	- 230 V AC, 400 W					
 8MR2122-4A	• Compact fan heaters					
	• With fan, UL-certified					
	- 230 V AC, 250 W					
	- 230 V AC, 400 W					
	- 120 V AC, 250 W					
	- 120 V AC, 400 W					
	• With fan					
	- 24 V DC, 250 W					
	- 48 V DC, 250 W					
	- 48 V DC, 400 W					
		8MR2140-0A	1	1 unit	181	0.400
		8MR2140-1A	1	1 unit	181	0.400
		8MR2140-2A	1	1 unit	181	0.500
		8MR2140-3A	1	1 unit	181	0.500
		8MR2140-4A	1	1 unit	181	0.500
		8MR2140-0B	1	1 unit	181	0.550
		8MR2140-1B	1	1 unit	181	0.552
		8MR2140-2B	1	1 unit	181	0.900
		8MR2140-3B	1	1 unit	181	0.900
		8MR2140-4B	1	1 unit	181	0.900
		8MR2122-4A	1	1 unit	181	1.226
		8MR2122-8A	1	1 unit	181	1.486
		8MR2122-4B	1	1 unit	181	1.100
		8MR2122-8B	1	1 unit	181	1.400
		8MR2122-4AB	1	1 unit	181	1.100
		8MR2122-4AC	1	1 unit	181	1.100
		8MR2122-8AA	1	1 unit	181	1.370

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Fan heaters

Configuration	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
Fan heaters with integrated thermostat or hygrostat 230 V AC, 950 W						
 8MR2150-0A		8MR2150-0A 8MR2150-0BA	1 1	1 unit 1 unit	181 181	1.400 1.400
 8MR2150-0C		8MR2150-0C 8MR2150-0CA	1 1	1 unit 1 unit	181 181	1.450 1.450
Semiconductor fan heaters						
Fan heaters UL-approved						
 8MR2150-5AA		8MR2150-2C 8MR2150-5A 8MR2140-3C 8MR2150-4A 8MR2140-5C 8MR2150-5AA 8MR2140-3D 8MR2150-4AA 8MR2140-5D	1 1 1 1 1 1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit 1 unit	181 181 181 181 181 181 181 181 181 181	0.361 0.622 1.100 0.633 1.100 0.526 1.100 0.536 1.100
 8MR2150-5B		8MR2150-2D 8MR2150-5B 8MR2150-4B 8MR2150-5AB 8MR2150-4AB	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit	181 181 181 181 181	0.300 0.530 0.630 0.530 0.540
PTC fan heaters for wall mounting UL-approved, 1200 W, clip fastener for 35 mm DIN rail or screw fastener (M6)						
 8MR2151-3A (Illustration similar)		8MR2150-3A 8MR2150-3B 8MR2151-3A 8MR2151-3B	1 1 1 1	1 unit 1 unit 1 unit 1 unit	181 181 181 181	1.250 1.250 1.550 1.245
PTC fan heaters for anchoring to the base UL-approved, 1200 W, screw fastener (M5)						
 8MR2151-2A (Illustration similar)		8MR2150-2A 8MR2150-2B 8MR2151-2A 8MR2151-2B	1 1 1 1	1 unit 1 unit 1 unit 1 unit	181 181 181 181	13.965 1.369 1.309 1.284

Overview



Tamper-proof thermostat, NC contact

Thermostats

Thermostats (NC, NO or CO contacts) are used to control the operation of cooling units, filter fans and heat exchangers, as well as to trigger signals in case of excessive temperatures.

Hygrostats

Hygrostats are used to regulate heaters/fan heaters so that the temperature increase raises the dew point from a critical humidity of 65% in cubicles and enclosures with built-in electrical and electronic components. This prevents condensation on structural parts and electronic components.

Hygrotherms

Hygrotherms monitor both temperature and relative humidity in cubicles and enclosures with built-in electrical/electronic components and switch on a heater or fan upon reaching the selected values (temperature or relative humidity). This prevents condensation on structural parts and electronic components.

Switching modules

Switching modules are electronic relays for the switching of high-power DC devices.

Thermostats, hygrostats or hygrotherms can be connected to operate the switching modules.

Note:

The switching capacity values quoted in brackets refer to inductive loads.

Selection and ordering data

Configuration	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
Thermostats						
Small thermostats						
UL-approved, max. switching capacity 250 V AC, 10 (2 A)						
 8MR2170-2BA	• NC contact					
	- Temperature range 0 ... +60 °C	8MR2170-2BA	1	5 units	181	0.055
	- Temperature range -10 ... +50 °C	8MR2170-1CA	1	5 units	181	0.055
 8MR2170-2BB	- Temperature range +20 ... +80 °C	8MR2170-1DA	1	5 units	181	0.055
	• NO contact					
	- Temperature range 0 ... +60 °C	8MR2170-2BB	1	5 units	181	0.056
 8MR2170-2BB	- Temperature range -10 ... +50 °C	8MR2170-1CB	1	5 units	181	0.055
	- Temperature range +20 ... +80 °C	8MR2170-1DB	1	5 units	181	0.055
Tamper-proof thermostats						
UL-approved, max. switching capacity 250 V AC, 5 (1.6 A)						
 8MR2171-1BA	• NC contact					
	- Temperature range 15 °C / 59 °F (5 °C / 41 °F)	8MR2171-1BA	1	5 units	181	0.035
	- Temperature range 25 °C / 77 °F (15 °C / 59 °F)	8MR2171-2BA	1	5 units	181	0.023
 8MR2171-1BA	• NO contact					
	- Temperature range 50 °C / 122 °F (40 °C / 104 °F)	8MR2171-1BB	1	5 units	181	0.023
	- Temperature range 60 °C / 140 °F (50 °C / 122 °F)	8MR2171-2BB	1	5 units	181	0.023
 8MR2171-1BA	- Temperature range 35 °C / 95 °F (25 °C / 77 °F)	8MR2171-3BB	1	5 units	181	0.029

SIVACON 8MR System Air-Conditioning

Thermostats, hygrostats, hygrotherms, switching modules

	Configuration	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
	Mechanical thermostats UL-approved • CO contact +5 ... +60 °C, max. switching capacity 250 V AC, 10 (4 A) • CO contact -20 ... +30 °C, max. switching capacity 250 V AC, 10 (4 A)		8MR2170-1A 8MR2170-1B	1 2 units 1 1 unit	181 181	0.075 0.074	
	Electronic thermostats • CO contact -20 ... +60 °C, max. switching capacity 230 V AC, 8 (1.6 A) • CO contact -4 ... +140 °F, max. switching capacity 120 V AC, 8 (1.6 A) • CO contact (inverted) -20 ... +60 °C, max. switching capacity 230 V AC, 8 (1.6 A) • CO contact, 0 ... +60 °C, max. switching capacity 24 V DC, 16 A		8MR2170-1GA 8MR2170-1GB 8MR2170-1GC 8MR2170-2A	1 1 unit 1 1 unit 1 1 unit	181 181 181	0.079 0.068 0.079 0.076	
	Twin thermostats • NO and NO contacts, 0 ... +60 °C, max. switching capacity 250 V AC, 10 (2 A) • NC and NO contacts, 0 ... +60 °C, max. switching capacity 250 V AC, 10 (2 A)		8MR2170-1EA 8MR2170-1E	1 1 unit 1 2 units	181 181	0.105 0.105	
	Twin thermostats (tamper-proof) • NC contact, 15 °C/59 °F (5 °C/41 °F) and NO contact, 50 °C/122 °F (40 °C/104 °F) max. switching capacity 250 V AC, 5 (1.6 A) • NC contact, 25 °C/77 °F (15 °C/ 59 °F) and NO contact, 60 °C/140 °F (50 °C/122 °F) max. switching capacity 250 V AC, 5 (1.6 A) or 30 W DC • NO contact, 50 °C/122 °F (40 °C/104 °F) and NO contact, 60 °C/140 °F (50 °C/122 °F) max. switching capacity 250 V AC, 5 (1.6 A)		8MR2172-1A 8MR2172-2A 8MR2172-1AB	1 3 units 1 3 units 1 3 units	181 181 181	0.053 0.040 0.040	
Hygrostats							
Hygrostats are used to regulate heaters/fan heaters so that the temperature increase raises the dew point							
	Mechanical hygrostats • UL-approved CO contact, 230 V AC, 35 ... 95 % relative air humidity Max. switching capacity 250 V AC, 5 (0.2 A) or 20 W AC Min. switching capacity 20 V AC/DC, 100 mA		8MR2170-1C	1 1 unit	181	0.065	
	Electronic hygrostats • 230 V AC 40 ... 90 % relative air humidity Max. switching capacity 240 V AC, 8 (1.6 A) • 120 V AC 40 ... 90 % relative air humidity Max. switching capacity 120 V AC, 8 (1.6 A)		8MR2170-1AF 8MR2170-2AF	1 1 unit 1 1 unit	181 181	0.080 0.700	
	• 230 V AC 65 % relative air humidity Max. switching capacity 240 V AC, 8 (1.6 A) • 120 V AC 65 % relative air humidity Max. switching capacity 120 V AC, 8 (1.6 A)		8MR2170-1BF 8MR2170-2BF	1 1 unit 1 1 unit	181 181	0.075 0.700	

SIVACON 8MR System Air-Conditioning

Thermostats, hygrostats, hygotherms, switching modules

Configuration	DT	Article No. www.siemens.com/ product?Article No.	PU (UNIT, SET, M)	PS*/ P. unit	PG	Weight per PE approx. kg
Hygotherms						
 8MR2170-4F	Electronic hygotherms					
	UL-approved, 50 ... 90 % relative air humidity, for simultaneously monitoring both temperature and relative humidity in cubicles and enclosures with electronic components, CO contact • 100 ... 240 V AC, +32 to +140 °F, max. switching capacity NC contact: 120 V AC, 6 A (1 A), Max. switching capacity of NO contacts: 120 V AC, 8 (1.6 A) • 100 ... 240 V AC, 0 ... +60 °C, max. switching capacity NC contact: 100 ... 240 V AC, 6 (1) A, Max. switching capacity of NO contacts: 100 to 240 V AC, 8 (1.6) A					
		8MR2170-4F	1	1 unit	181	0.020
		8MR2170-4E	1	1 unit	181	0.116
Switching modules						
 8MR2180-1A	Switching modules					
	Electronic relay for switching high-power DC devices from thermostats, hygrostats or hygotherms • 24 V DC, 16 A • 48 V DC, 16 A					
		8MR2180-1A	1	1 unit	181	0.085
		8MR2180-1B	1	1 unit	181	0.085

More information

For more information, see www.siemens.com/industrymall.

SIVACON 8MR System Air-Conditioning

Notes



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Appendix

Glossary

Overview

Ambient conditions / Degrees of protection

The climate and external ambient conditions (natural impurities, toxic chemically active substances, small animals) may have severe repercussions on the functionality of electrical systems. The effect depends on the climatic protection of the room in which the system is installed.

In the presence of high concentrations of toxic substances it is advisable to adopt appropriate measures to reduce them, for example:

- Intake of air from an area with a lower pollution level
- Exposing the area to a mild overpressure (e.g. introducing non polluted air into the system)
- Climate control of the room where the system is installed (reducing the temperature, relative humidity of the air < 60%, possible installation of a purifying filter)
- Attenuation of overheating (overdimensioning of electrical equipment and components such as main busbars and distribution busbars)

Ambient conditions	Class	Classification of ambient conditions with the relative limit values (defined according to IEC 60721-3-3)		Measures
Climatic	3K4	Minimum temperature of the air	- 5 °C ¹⁾	--
		Maximum temperature of the air	+ 40 °C + 35 °C (24 h average) ²⁾	--
		Minimum relative humidity of the air	5 %	--
		Maximum relative humidity of the air	95 %	--
		Minimum absolute humidity of the air	1 g/m ₃	--
		Maximum absolute humidity of the air	29 g/m ₃	--
		Temperature variation rate	0.5 °C / min	--
		Minimum air pressure	70 kPa	--
		Maximum air pressure	106 kPa	--
		Solar radiation	700 W/m ²	--
		Thermal radiation	--	--
		Movement of the air	1.0 m/s	--
		Condensate formation	Possible	Provide heating, if frequent approx. 1 per day for 2 hours
		Matter deposited by the wind	No	--
Other ambient climatic conditions	3Z1	Thermal radiation is negligible		
	3Z7	Water drops as defined in standard IEC 60068-2-18		IPX1
	3Z9	Water spray as defined in standard IEC 60068-2-18		IPX4
	3Z10	Water jets as defined in standard IEC 60068-2-18		IPX5
Biological	3B2	Flora	Mould formation	
		Fauna	Presence of rodents and other harmful animals, other than termites	IP4X, including protection for technical floors
Chemically active substances	3C3	Marine salt	Salt mist ≤ 2 mg/dm ² average value	
		Sulphurous anhydride SO ₂	5.0 mg/m ³ (2 ppm)	
		Hydrogen sulphide H ₂ S	3.0 mg/m ³ (2 ppm)	
		Chlorine Cl ₂	0.3 mg/m ³ (0.1 ppm)	
		Hydrogen chloride HCl	1.0 mg/m ³ (0.7 ppm)	
		Hydrofluoric acid HF	0.1 mg/m ³ (0.06 ppm)	
		Ammonia NH ₃	10.0 mg/m ³ (14.3 ppm)	
		Ozone O ₃	0.1 mg/m ³ (0.05 ppm)	
		Nitrogen oxide NO _x	3.0 mg/m ³ (1.66 ppm)	
Mechanically active substances	3S1	Sand in the air	--	< IP5X
		Dust (matter in suspension)	0.01 mg/m ³	
		Dust (matter deposited)	0.4 mg/(m ² × h)	
	3S3	Sand in the air	300 mg/m ³	≥ IP5X
		Dust (matter in suspension)	0.4 mg/m ³	
		Dust (matter deposited)	15 mg/(m ² × h)	

¹⁾ According to standard IEC 60721-3-3 the minimum admissible air temperature is + 5° C

²⁾ Higher values can be admitted on request (see dimensioning tables)

Overview

Trademarks

All product designations may be registered trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes may violate the rights of the owner.

Amendments

Unless stated otherwise on the individual pages of this catalog, we reserve the right to make changes, in particular to the specified values, measurements and weights.

Dimensions

All dimensions are in mm.

Illustrations

The illustrations are not binding.

Technical specifications

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

Further technical information is available at www.siemens.com/lowvoltage/product-support

- under "Entry type":
 - Application example
 - Certificate
 - Characteristic
 - Download
 - FAQ
 - Manual
 - Product note
 - Software archive
 - Technical data

Configurators can be found under www.siemens.com/lowvoltage/configurators

Assembly, operation and maintenance

Always heed the operating instructions and notices on individual products during assembly, operation and maintenance.

Symbols

In the table below, you will find all symbols concerning connections that can occur in this catalog. In combination with orange highlighting, these identify special selection criteria.

Connections	
	Screw connection
	Ring cable lug connection
	Spring-loaded terminals

Appendix

Ordering notes

Logistics

General

With regard to delivery service, communications and environmental protection, our logistics service ensures "quality from the moment of ordering right through to delivery". By designing our infrastructure according to customer requirements and implementing electronic order processing, we have successfully optimized our logistics processes.

We are proud of our personal consulting service, on-time deliveries and 1-day transport within Germany.

To this end, we supply preferred types marked with ► ex works.

We regard the DIN ISO 9001 certification and consistent quality checks as an integral part of our services.

Electronic order processing is fast, cost-efficient and error-free. Please contact us if you want to benefit from these advantages.

Packaging, packing units

The packaging in which our equipment is dispatched provides protection against dust and mechanical damage during transport, thus ensuring that all our products arrive in perfect condition.

We select our packaging for maximum environmental compatibility and reusability (e.g. crumpled paper for protection during transport in packages up to 32 kg) and, in particular, with a view to reducing waste.

With our multi-unit and reusable packaging, we offer you specific types of packaging that are both kind to the environment and tailored to your requirements:

Your advantages at a glance:

- Lower ordering costs.
- Cost savings through same-material type packaging: Low/no disposal costs.
- Reduced time and cost thanks to short unpacking times.
- "Just-in-time" delivery directly to the production line helps reduce stock: Cost savings through reduction of storage areas.
- Fast assembly thanks to supply in sets.
- Standard Euro boxes - corresponding to the Euro pallet modular system - suitable for most conveyor systems.
- Active contribution to environmental protection.

Unless stated otherwise in the "Selection and ordering data" of this catalog, our products are supplied individually packed.

For small parts/accessories, we offer you cost-effective packaging units as standard packs containing more than one item, e.g. 5, 10, 50 or 100 units. It is essential that whole number multiples of these quantities be ordered to ensure satisfactory quality of the products and problem-free order processing.

The products are delivered in a neutral carton. The label includes warning notices, the CE marking, and device descriptions in English and German.

In addition to the Article No. (MLFB) and the number of items in the packaging, the order number for operating instructions (Instr.-Order-No.) is also specified.

They can be obtained from your local Siemens representative (you will find a list at www.siemens.com/automation/partner).

Most device Article No.'s can be obtained by means of the EAN barcode to simplify ordering and storage logistics.

The associated master data, too, is available from your local Siemens representative.

Overview

Ordering special versions

When ordering products that differ from the standard versions listed in the catalog, "**-Z**" must be added to the Article No. indicated and the required features must be specified using alphanumeric order codes or plain text.

Ordering very small quantities

When very small orders are placed, the costs associated with order processing are greater than the order value. We therefore recommend that you combine several small orders. Where this is not possible, we regret that we are obliged to make a small processing charge: for orders with a net goods value of less than € 250 we charge a € 20 supplement to cover our order processing and invoicing costs.

Explanations of Selection and Ordering Data

Delivery time class (DT)

DT	Meaning
►	Preferred type
A	Two working days
B	One week
C	Three weeks
D	Six weeks
X	On request

Preferred types are device types that can be delivered immediately ex works, i.e. they are dispatched within 24 hours.

If ordered in normal quantities, the products are usually delivered within the specified delivery times, calculated from the date we receive your order.

In exceptional cases, delivery times may vary from those specified.

The delivery times are valid ex works from Siemens AG (products ready for dispatch).

Shipping times depend on the destination and the method of shipping. The standard shipping time for Germany is one day.

The specified delivery times are correct at the time of going to print and are subject to constant optimization. Up-to-date information can be found at www.siemens.com/industrymall.

Price units (PU)

The price unit defines the number of units, sets or meters to which the specified price and weight apply.

PS/P. unit (packaging size/packaging unit)

The packaging size/packaging unit defines the number, e.g. of units, sets or meters, contained within outer packaging:

- The **first digit** in the PS/P. unit column (packaging size/packaging unit) indicates the minimum order quantity. You can only order this specified quantity or a multiple thereof.
- The **second digit** in the PS/P. unit column (packaging size/packaging unit) specifies the number of units contained within the outer packaging (e.g. in a carton). You must order this quantity or a multiple thereof if you want the items to be delivered in discrete packaging quantities.

Examples:

PS/P. unit	Meaning
1 unit	You can order one item or a multiple thereof.
5 units	Five units are packed in a bag, for example. Because the bags cannot be opened, you can only order a multiple of the quantity contained in the bag: 5, 10, 15, 20 etc.
5/100 units	One carton contains (for example) 20 bags, each containing 5 units, i.e. a total of 100 units. If only cartons are available for delivery, you need to order a multiple of the carton quantity: 100, 200, 300, etc. Ordering a quantity of 220 units would result in the following delivery: two cartons, each containing 100 units (= 200 units) and 4 bags, each containing 5 units (= 20 units).
1 set	A set comprises a defined number of different parts.

Price group (PG)

Each product is allocated to a price group.

Weight

The defined weight is the net weight in kg and refers to the price unit (PU).

Examples

DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS/P. unit	PG	Weight per PU approx. kg	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS/P. unit	PG
►	3NW7013		1	1/12 units	017	0.076		8HP2021		1	1 unit	046
DT:	Preferred type						PU:	One unit (on which price is based)				
PU:	One unit (on which price is based)						PS/P. unit:	1 = minimum order quantity				
PS/P. unit:	1 = minimum order quantity / 12 = quantity per carton						PG:	046				
PG:	017											
Weight per PU	76 g, always given in kg											

Note:

The article numbers shown here are examples only. They are not necessarily included in this catalog, nor is it essential that their specifications regarding selection and ordering data be up to date. When ordering, always use the selection and ordering data.

Appendix

Further documentation

Low-voltage power distribution and electrical installation technology on the WWW



We regard product support to be just as important as the products and systems themselves.

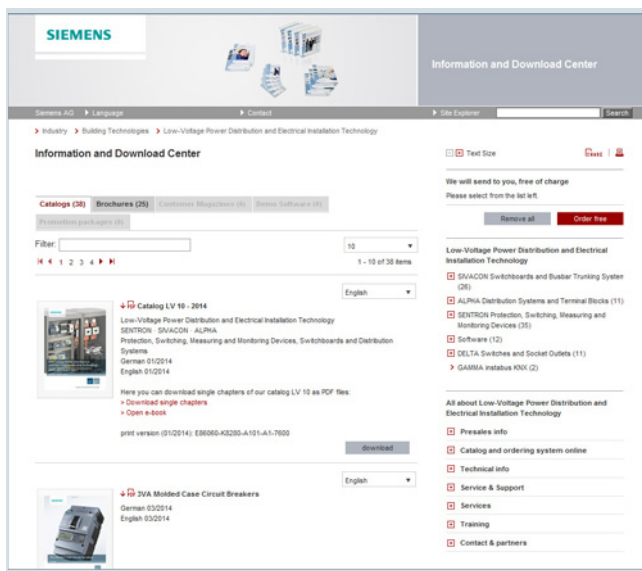
Visit our website for a comprehensive offering of support for low-voltage power distribution and electrical installation products, such as:

- Overview of the entire product portfolio
- Keeping up to date via newsletters, podcasts, blogs and Twitter
- Access to interesting videos on YouTube
- Contact with partners around the world
- Operating instructions and manuals for direct download

and much more - all conveniently and easily accessible.

www.siemens.com/lowvoltage

Information and Download Center

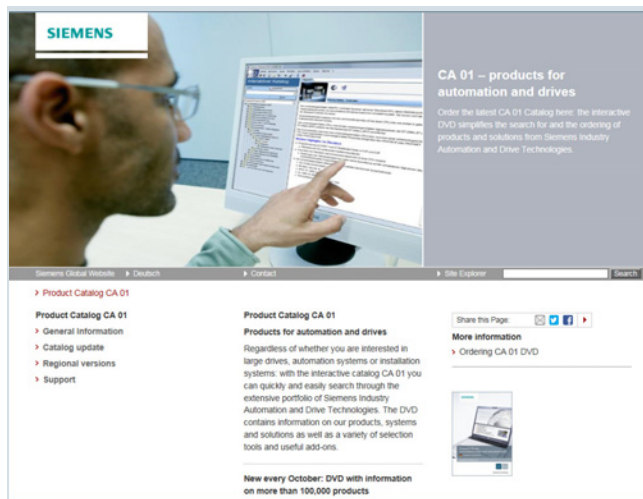


You will find regularly updated information material such as catalogs, customer magazines, brochures and trial versions of software for low-voltage power distribution and electrical installations on the Internet at

www.siemens.com/lowvoltage/infomaterial

Here you can order your copy of the available documentation or download it in common file formats (PDF, ZIP).

Product selection using the interactive catalog CA 01



Detailed information together with user-friendly interactive functions:

The interactive catalog CA 01 with more than 80,000 products provides a comprehensive overview of the product range from Siemens Industry.

You can find everything you need here for solving automation, switching, installation and drive technology tasks. All information is provided over a user interface that is both user-friendly and intuitive.

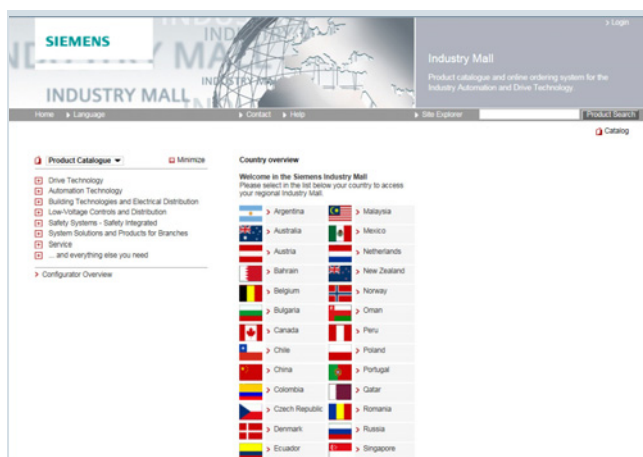
After selecting the product of your choice you can order at the press of a button, by fax or by online link.

Information about the interactive catalog CA 01 can be found on the Internet at:

www.siemens.com/automation/ca01

or on DVD.

Industry Mall



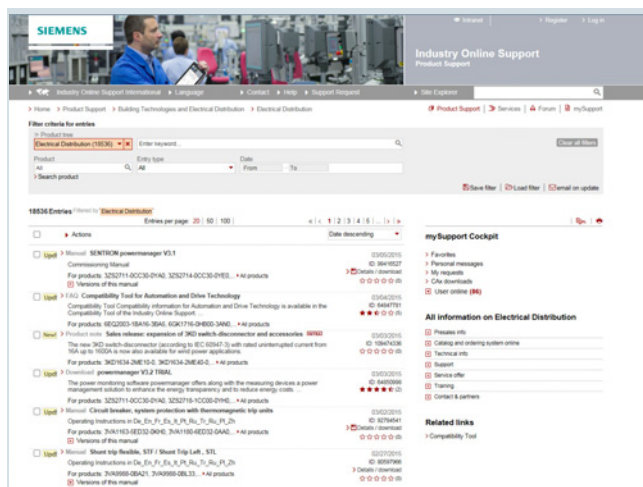
The Industry Mall – for online information, product selection and ordering:

- Detailed information including product data, illustrations, certificates and CAx data
- Simple configuring of systems
- Possible to request individualized quotations
- Availability check
- Online ordering facility
- Order tracking/order overview
- Fast access to relevant training offers and services

You can find the Industry Mall on the Internet at

www.siemens.com/industrymall

Industry Online Support



Comprehensive support – at any time, whatever your location

- FAQs, sample applications, information about successor products and product news
- Prompt assistance with technical queries
- Discussions and best practice sharing with other users in the forum
- Provision of high-quality product data for your planning programs
- Faster access to information – with helpful filter and folder functions in mySupport
- Automatic notification service to keep you up to date with the latest information about topics of interest to you

To find the link to Siemens Industry Online Support, go to

www.siemens.com/lowvoltage/product-support

Appendix

Further documentation

Industry Online Support App



Android:



Main functions at a glance

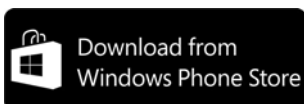
- Scanning of product codes (EAN/QR and data matrix codes) with direct display of all technical information on the product, including graphic data (CAx data).
- Delivery of product information or entries by e-mail, so that the information can immediately be processed at the workplace.
- Submission of queries to Technical Support (Support Requests). With photo function for transmitting detailed information.
- Contents and interfaces available in six languages (German, English, French, Italian, Spanish and Chinese) – including option of temporary switchover to English.
- Offline cache function for all favorites stored in "mySupport". These entries can also be retrieved without network reception.
- Import of PDF documents into a library (e.g. iBooks or similar).
- An overview of the main functions can be found at

www.siemens.com/lowvoltage/support-app

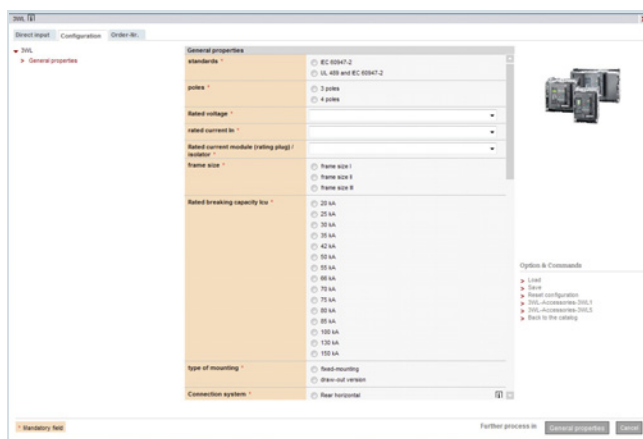
Apple iOS:



Windows:



Product configurator



Find the right product faster using intuitive product selection

- Complete selection of products and systems based on technical characteristics or application requirements
- Simple, intuitive operation
- Option to save the configuration and order lists in a file format of your choice (txt, pdf, xls, csv)
- Direct transfer of the order list into the shopping cart of the Siemens Industry Mall
- Fast access to product data, diagrams, certificates and CAx data for the selected product and system configuration
- Available in multiple languages for use by customers anywhere in the world

The configurators are available online in the Siemens Industry Mall and offline in Catalog CA01. A product selection process could hardly be made any clearer, faster or easier.

You can find our configurators at the following website:

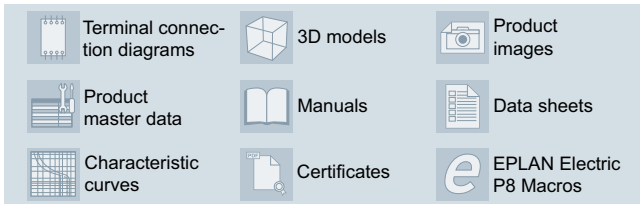
www.siemens.com/lowvoltage/configurators

Appendix

Further documentation

CAx Download Manager

The 12 CAx data types are listed below:



The CAx Download Manager can supply you with all the necessary CAx file types for the products of your choice for use in all common CAE and CAD systems. The data contained in the files is continuously updated. The whole process involves only four selection steps and is free of charge. All your selected files are packed into a zip file which you can download for further use.

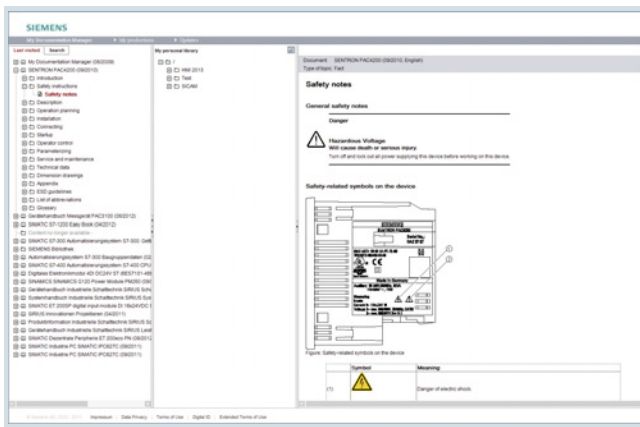
This service will cut the time it takes you to integrate product data into your CAE and CAD system by up to 80 %.

Siemens makes available up to 12 file types to support your mechanical (CAD) and electrical (CAE) planning processes for you to download at any time of the day.

Time savings of up to 80 % with universal product data for your CAE and CAD systems

- No manual data collection necessary
- Universal manufacturer data for all common CAE and CAD systems
- Standardized documentation is simple to generate
- Choice of different languages for system commissioning anywhere in the world

My Documentation Manager



In "mySupport" you can compile individual documentation for your project by dragging and dropping

In accordance with directives*, the documentation is part of the plant and requires certification, thus giving the purchaser the right to full plant documentation.

To support you in this, a manual configurator has been developed with which you can put together individual and standard-compliant documentation – fully in accordance with the relevant project-specific requirements.

You can thus select the chapters relevant to the respective project from the available manuals of the installed Siemens components. FAQs, certificates, data sheets and your own content can also be incorporated. This means that the documentation is perfectly tailored to your individual needs, making information easier to locate.

User-friendly compilation of project-specific documentation

- Compile and structure manuals, data sheets, FAQs and certificates simply by dragging and dropping
- Insert personalized content via the Notes function
- Further processing possible thanks to selectable export formats (pdf, xml, rtf)
- After generating the documentation, automatic translation into the desired language is possible
- Always up-to-the minute thanks to the Update function

You can find "My Documentation Manager" on the Internet at

www.siemens.com/lowvoltage/mdm

* e.g. Low Voltage Directive 2006/95/EC and EC Machinery Directive 2006/42/EC

Overview

The quality management system of our EM LP Business Unit complies with the international standard EN ISO 9001.

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

Appendix

Standards and approvals

Overview

Certificates

An overview, updated on a daily basis, of our products certified in accordance with CE, UL, CSA, FM, shipping authorizations etc. for products in the areas of low-voltage power distribution, electrical installation technology and industrial controls as well as additional technical documentation can be found on the Internet at

www.siemens.com/lowvoltage/certificates

The screenshot shows the Siemens Industry Online Support website. The main navigation bar includes links for Intranet, Register, Log in, and Site Explorer. The breadcrumb trail indicates the path: Home > Product Support > Building Technologies and Electrical Distribution > Electrical Distribution. The filter criteria for entries are set to 'Electrical Distribution (2251)' and 'Certificate (2251)'. The list of entries shows details for various certificates, including Shipping Approval, Declaration of Conformity, and General Product Approval. The right sidebar contains the 'mySupport Cockpit' with links to Favorites, Personal messages, My requests, CAx downloads (0), and User online (59). Below this, there is a section for 'All information on Electrical Distribution' with links to Presales info, Catalog and ordering system online, Technical info, Support, Service offer, and Training.

In the **Entry list** you can **filter the view** in order to quickly find comprehensive information on the following subjects:

- Product or search term
- Date
- Type of certificate (general product approval, test certificates, shipping approval, ...)
- Certificate (confirmations, UL, VDE,...)
- Approval office (TÜV, VDE, UL, ...)
- Country

The screenshot shows the Siemens Industry Online Support website with a different filter. The filter criteria are set to 'Electrical Distribution (285)' and 'Certificate (285)'. The list of entries shows details for various certificates, including General Product Approval, CB-Testreport, and VDE Marks Approval. The right sidebar contains the 'mySupport Cockpit' with links to Favorites, Personal messages, My requests, CAx downloads (0), and User online (59). Below this, there is a section for 'All information on Electrical Distribution' with links to Presales info, Catalog and ordering system online, Technical info, Support, Service offer, and Training.

Approval requirements valid in different countries

Siemens low-voltage switchgear and controlgear are designed, manufactured and tested according to the relevant German standards (DIN and VDE), IEC publications and European standards (EN) as well as CSA and UL standards. The standards assigned to the single devices are stated in the relevant parts of this catalog.

In addition to the pertinent VDE, EN and IEC standards, the requirements of the various regulations valid in other countries have also been taken into account in the design of the equipment in some cases, in order that the devices can be deployed globally as far as possible.

In some countries an approval is required for certain low-voltage switchgear and controlgear components. Depending on the market requirements, these devices have been submitted for approval to the authorized testing institutes.

In some cases, CSA for Canada and UL for the USA only approve special versions. Such special versions are listed separately from the standard versions in the relevant parts of this catalog.

For this equipment, there are sometimes limits with regard to the maximum permissible voltages, currents and rated outputs or special approvals and, in some cases, special identification may be required.

For use on board ships, the specifications of the marine classification societies must also be observed. In some cases, they require type tests of the components to be approved.

www.siemens.com/lowvoltage/certificates

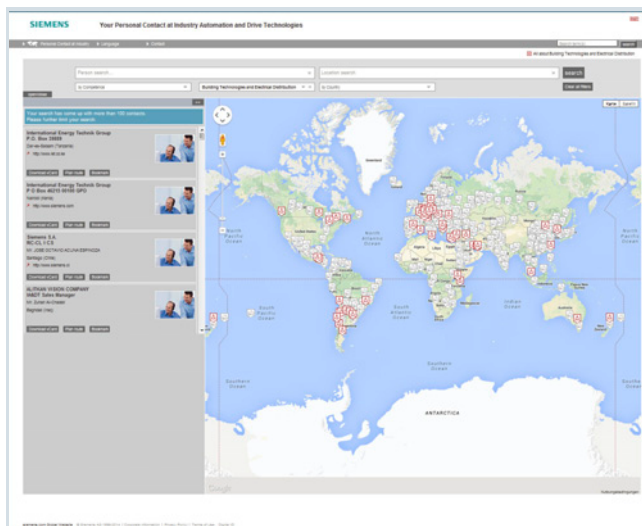
If you have any questions concerning UL/CSA approvals, contact Technical Support:

www.siemens.com/lowvoltage/contact

Appendix

Siemens contacts

Contact partners at Siemens Low-Voltage Power Distribution and Electrical Installation Technology



At Siemens Low-Voltage Power Distribution and Electrical Installation Technology, more than 85 000 people are resolutely pursuing the same goal:

Long-term improvement of your competitive ability.

We are committed to this goal. Thanks to our dedication, we are continually setting new standards. In all industries – worldwide.

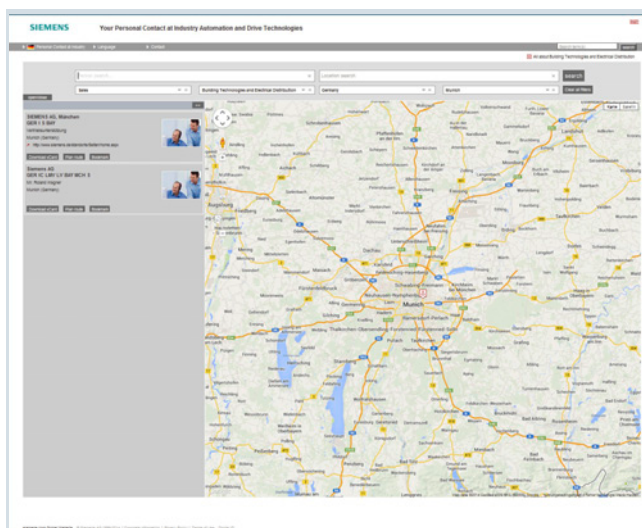
At your service, locally, around the globe: Partners for consulting, sales, training, service, support, spare parts ... on the entire Siemens range of Low-Voltage Power Distribution and Electrical Installation Technology.

Your personal contact can be found in our Contact Database at

www.siemens.com/lowvoltage/contact

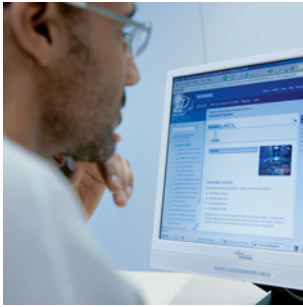
You start by selecting a

- competence,
- product or branch,
- country,
- city.



Unrivalled complete range of services

Online Support



Our comprehensive online information platform covers every aspect of our Service & Support and is available whenever, wherever.

More detailed information is available at
www.siemens.com/lowvoltage/product-support

Field Service



Siemens Field Service offers support with all aspects of maintenance – so that the availability of your machines and plants is assured whatever the case.

More detailed information is available at
www.siemens.com/lowvoltage/contact

Technical Support



The competent consulting service for technical issues with a broad range of customer-oriented services for all our products and systems.

More detailed information is available at
www.siemens.com/lowvoltage/contact

Spare Parts



Plants and systems in all industries worldwide are expected to meet ever higher levels of availability.

We can help you rule out unexpected stoppages: with a global network and optimum logistics chains.

More detailed information is available at
www.siemens.com/lowvoltage/contact

Training



Extend your lead – with practice-related know-how straight from the manufacturer.

More detailed information is available at
www.siemens.com/lowvoltage/training

Specification texts

You can obtain qualified, free support to help you produce specifications for technically equipping non-residential and industrial buildings at

www.siemens.com/specifications

Appendix

Comprehensive support from A to Z

Overview

Product information	
Website	Fast and targeted information on low-voltage power distribution: www.siemens.com/lowvoltage
Newsletter	Always up to date about our trend-setting products and systems: www.siemens.com/lowvoltage/newsletter
Product information/product & system selection	
Information and Download Centre	Current catalogues, customer magazines, brochures, demo software and promotion packages: www.siemens.com/lowvoltage/infomaterial
Industry Mall	Comprehensive information and order platform for the Siemens Industry cart: www.siemens.com/lowvoltage/mall
CA 01	The interactive catalog on DVD for automation and drive technology and low-voltage power distribution and electrical installation products
Product & system engineering	
SIMARIS planning tools	Support in planning and configuring the electrical power distribution: www.siemens.com/simaris
SIMARIS ConFfiguration Basic planning and configuration tool	Assists in generating offers and configuring ALPHA distribution boards and SIVACON S4 power distribution boards www.siemens.com/scfb
Product documentation	
Siemens Industry Online Support	Comprehensive technical information - from planning to configuration and operation: www.siemens.com/lowvoltage/product-support
Product configurator	Selection of products and systems based on technical characteristics or application requirements: www.siemens.com/lowvoltage/configurators
CAX Download Manager	Collation of CAX data types for standard CAE and CAD systems: www.siemens.com/lowvoltage/cax
My Documentation Manager	Compilation of project-specific documentation: www.siemens.com/lowvoltage/mdm
Image database	Collection of product photos and graphics such as dimensional drawings and internal circuit diagrams: www.siemens.com/lowvoltage/picturedb
Product training	
SITRAIN Portal	Comprehensive training programme about our products, systems and engineering tools: www.siemens.com/lowvoltage/training
Product hotline	
Technical Support:	Support in all technical queries regarding our products: E-mail: support.automation@siemens.com www.siemens.com/lowvoltage/contact

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8GK4	6/14 ... 21	N	N
8GK91	2/22	N	N
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8GK971	6/17, 6/22	N	N
8GK973	6/22	N	N
8GK99	4/40, 6/17, 6/22 ... 23	N	N
8MF1			
8MF1	2/10, 8/3, 8/5	N	N
8MF4			
8MF4	8/2 ... 3	N	N
8MF5			
8MF590	8/3	N	N
8MF5910	8/3	N	N
8MF5910-1	8/3	N	N
8MF5910-2	8/3	N	N
8MF5910-3A	8/3	EAR99	N
8MF5910-3B	8/3	N	N
8MF9			
8MF9	8/3	N	N
8MR20			
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8MR2140-2A	9/11	EAR99	N
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8PQ3000-0BA8	2/10, 3/14, 5/6, 5/12, 7/3	N	N
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8PQ4000-0BA75	3/11	N	N
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8PQ4000-0BA78	3/13	N	N
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8PQ6000-5BA15	5/18	N	N
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8PQ9			
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8PQ9400-0BA1	2/10, 2/20, 2/25, 5/19, 6/9, 7/2 ... 3	N	N
8PQ9400-0BA2	2/19 ... 20, 3/5 ... 6, 6/8 ... 9	N	N
8PQ9400-0BA3	2/10, 2/19 ... 20, 6/8 ... 9	N	N
8PQ9400-0BA4	2/20, 2/25, 6/9	N	N
8PQ9400-0BA5	2/20, 2/22, 2/25, 6/9	N	N
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8US1921-2AB	6/23	N	N
8US1921-2AC	6/23	N	N
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8US1921-2BC	6/23	N	N
8US1921-2BD	6/23	N	N
8US1922	3/15, 6/21	N	N
8US1923	3/15, 6/22	N	N

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Appendix

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Overview

By using this catalog you can acquire hardware and software products described therein from Siemens AG subject to the following terms. 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 of Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following terms apply exclusively for orders placed with Siemens AG.

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The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches only apply to devices for export.

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You will find

- an exact explanation of the metal factor
- the text of the Comprehensive Terms and Conditions of Sale and Delivery of Siemens AG

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AL	Number of the <u>German Export List</u> Products marked other than "N" require an export license. In the case of software products, the export designations of the relevant data medium must also be generally adhered to. Goods labeled with an "AL" not equal to "N" are subject to European or German export authorization when being exported out of the EU.
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Interactive Catalog on DVD		<i>Catalog</i>
Products for Automation and Drives, Low-Voltage Power Distribution and Electrical Installation Technology		CA 01
Building Control		
GAMMA Building Control		ET G1
Drive Systems		
SINAMICS G130 Drive Converter Chassis Units		D 11
SINAMICS G150 Drive Converter Cabinet Units		
SINAMICS GM150, SINAMICS SM150 Medium-Voltage Converters		D 12
SINAMICS PERFECT HARMONY GH180 Medium-Voltage Air-Cooled Drives		D 15.1
Germany Edition		
SINAMICS G180		D 18.1
Converters – Compact Units, Cabinet Systems, Cabinet Units Air-Cooled and Liquid-Cooled		
SINAMICS S120 Chassis Format Units and Cabinet Modules		D 21.3
SINAMICS S150 Converter Cabinet Units		
SINAMICS DCM DC Converter, Control Module		D 23.1
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SINAMICS Inverters for Single-Axis Drives and SIMOTICS Motors		D 31
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MICROMASTER 420/430/440 Inverters		DA 51.2
MICROMASTER 411/COMBIMASTER 411		DA 51.3
SIMODRIVE 611 universal and POSMO		DA 65.4
<i>Note: Additional catalogs on the SINAMICS drive system and SIMOTICS motors with SINUMERIK and SIMOTION can be found under Motion Control</i>		
<u>Low-Voltage Three-Phase-Motors</u>		
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SIMOGEAR Gearboxes with adapter		MD 50.11
<u>Mechanical Driving Machines</u>		
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FLENDER SIP Standard industrial planetary gear units		MD 31.1
Process Instrumentation and Analytics		
Field Instruments for Process Automation		FI 01
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Standards-Compliant Components for Photovoltaic Plants		LV 11
Electrical Components for the Railway Industry		LV 12
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Components for Industrial Control Panels according to UL Standards		LV 16
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3VT Molded Case Circuit Breakers up to 1600 A		LV 36
<i>Digital: SIVACON System Cubicles, System Lighting and System Air-Conditioning</i>		LV 50
<i>Digital: ALPHA Distribution Systems</i>		LV 51
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SIVACON S4 Power Distribution Boards		LV 56
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<i>Digital: DELTA Switches and Socket Outlets</i>		ET D1
Motion Control		
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Equipment for Machine Tools		
SINUMERIK 808		NC 81.1
Equipment for Machine Tools		
SINUMERIK 828		NC 82
Equipment for Machine Tools		
SIMOTION, SINAMICS S120 & SIMOTICS		PM 21
Equipment for Production Machines		
Drive and Control Components for Cranes		CR 1
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Industrial Communication		IK PI
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SIRIUS Industrial Controls		IC 10

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