

SIEMENS

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Low-Voltage Power Distribution and Electrical Installation Technology

Residual Current Protective Devices /
Arc Fault Detection Devices (AFDDs)

Catalog
Extract
LV 10

Edition
10/2020

[siemens.com/lowvoltage](https://www.siemens.com/lowvoltage)

Making sure power makes its way

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

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

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

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Catalog LV 10 · 10/2020

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

Technical data

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

All illustrations are not binding.

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Low-Voltage Power Distribution and Electrical Installation Technology

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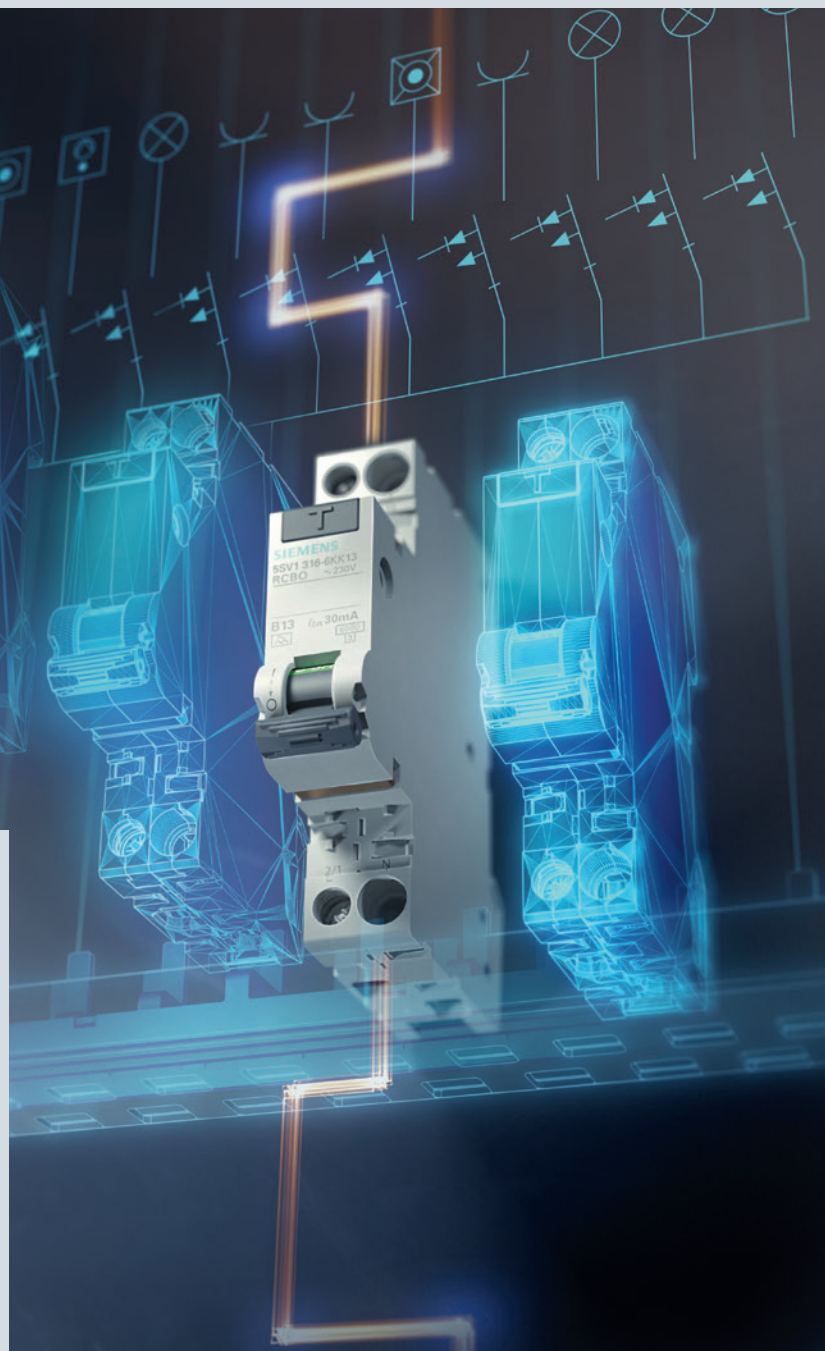
More safety for humans, plants and assets

The number of electrical consumers in residential homes and commercial buildings has increased dramatically in recent decades.

Modern appliances often have quite different characteristics in terms of current consumption than earlier equipment due, for example, to the use of frequency converters in washing machines, or switched-mode power supply units in TVs, PCs or LED lights.

There are also decentralized power generators like photovoltaic systems or charging devices for electric vehicles.

All of this requires new protection strategies for electrical installations. This also includes appropriate residual current protection devices or residual current circuit breakers that will cut the current immediately and safely in the event of a fault.



Residual Current Protective Devices / Arc Fault Detection Devices (AFDDs)

All the information you need	4/2
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A multitude of additional information ...

Information + ordering

All the important things at a glance

Information to get you started

For information about residual current protective devices / arc fault detection devices, please visit our websites

www.siemens.com/rccb

www.siemens.com/protection-concept

Contact persons in your region

We are there when you need us

You can find your local contacts at

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Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

- Technical basic information – SENTRON protection concept ([109767456](#))
- Technology primer – Residual current protective devices ([109482301](#))

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

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

Our video range

Siemens YouTube channel

- Residual current protective devices (general)
bit.ly/2kKQhCj

Everything you need for your order

Refer to the Industry Mall for an overview of your products

- Residual current protective devices / arc fault detection devices sie.ag/2m55Y7j

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

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

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

www.siemens.com/lowvoltage/cax

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual – Residual current protective devices / arc fault detection devices (45303255)

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You can find further information on services at

www.siemens.com/service-catalog

Training and tutorials

Our training courses can be found at

www.siemens.com/sitrain-lowvoltage

- Protection concept (WT-LVBPC)
- 5SM6 arc fault detection devices (WT-LVBAFDD)

Technical overview – Residual current protective devices / arc fault detection devices



The fast way to get you to our online services

This page provides you with comprehensive information and links on residual current protective devices / arc fault detection devices

www.siemens.com/lowvoltage/product-support (109769082)

System overview

Basic devices and accessories

Basic units



5SV3 RCCBs



5SM3 RCCBs



5SM2 RC units



5SU1 RCBOs



5SV1 RCBOs

5SM6 and 5SV6
arc fault detection devices

4

Electrical accessories



Auxiliary switches (AS)

Fault signal contacts
(FC)Auxiliary switches and
fault signal contacts
(AS+FC)

Shunt trips (ST)

Undervoltage releases
(UR)Remote controlled (RC)
mechanisms

Mechanical accessories



Locking devices



Handle couplers



Touch protection



Wall enclosures

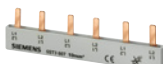
Molded-plastic
enclosures

Terminal covers

Busbars and accessories



Compact busbars



Standard busbars



Terminals



Touch protection



End caps

RCCB protective socket outlets

In molded-plastic
enclosureFor mounting
on device box

Note:

You will find a detailed range of accessories with the basic units and in the Accessories section.

Introduction

Residual current protective devices

4

Selection criteria

Equipment,
power,
environmental
conditions

Design

RCCBs

RCBOs

RC units

Number of pole

1P+N

2P

3P

3P+N

4P

Rated current I_n

0.3 ... 125 A

Types and waveform

							
Type AC		■	—	—	—	—	—
Type A		■	■	■	■	—	—
Type F		■	■	■	■	■	—
Type B		■	■	■	■	■	■
Type B+		■	■	■	■	■	■

Version

SIGRES	With active condensation protection for use in severe ambient conditions
[G] / [K]	Super-resistant, 10 ms short-term delayed devices with increased immunity to false triggering due to transient disruptions
[S]	As an upstream group switch for selective shutdown against downstream RCCBs
500 V	With their creep and air distances designed for power grids up to 500 V alternating voltage
50 ... 400 Hz	Meet the triggering conditions up to 400 Hz due to low decrease in sensitivity with increasing frequency

Protection objective,
equipment
directives
VDE 0100-410,
VDE 0100-530,
VDE 0100-7xx,
VDS 3501,
Shutdown
conditions
according to
VDE 0100-410

Rated residual current $I_{\Delta n}$ (Protection objective)

Additional protection $I_{\Delta n} \leq 30$ mA

Error protection $I_{\Delta n} > 30$ mA

Fire protection $I_{\Delta n} \leq 300$ mA

Characteristic CB (for residual current operated circuit breakers)

A

B

C

D

RCCBs


5SV

Types		Instantaneous	SIGRES, instantaneous	Short-time delayed [G]
Type AC		■	–	■
Type A		■	■	■
Type F		–	–	–
Type B / Type B+		–	–	–
Surge current withstand capability 8/20 μs				
Type A	kA	>1	>1	>3
Type F	kA	–	–	>3
Type B / Type B+	kA	–	–	–
Minimum operational voltage for test function operation				
30-mA devices	V AC		195	
Non-30-mA devices	V AC		100	
24 V devices	V AC		20	
Terminal conductor cross-sections				
1-wire	Solid/stranded	mm ²	0.75 ... 35	
	Finely stranded with end sleeve	mm ²	0.75 ... 25	
	Finely stranded without end sleeve	mm ²	1 ... 35	
2-wire, same cross-section, same conductor type	Solid/stranded	mm ²	0.75 ... 10	
	Finely stranded with end sleeve	mm ²	0.75 ... 4	
	Finely stranded without end sleeve	mm ²	1 ... 4	
1-wire + busbar (pin thickness 1.5 mm)	Solid/stranded	mm ²	10 ... 25	
	Finely stranded with non-insulated end sleeve	mm ²	6 ... 25	
	Finely stranded with insulated end sleeve	mm ²	6 ... 16	
Terminal tightening torque	Nm		2.5... 3.5	
Poles				
Number of poles			1P+N 3P+N	
Rated voltage U _n	V AC		24 ... 125 230 400 500	
Operating frequency	Hz		50 50 ... 400 50/60	
Standards				
IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008, ÖVE/ÖNORM E 8601				
Rated residual current I _{Δn}	mA		10, 30, 100, 300, 500, 1000	
Rated current I _n	A		16 ... 80	
Rated breaking capacity I _{cn}	kA		–	
Connection			N right N left	
Service life	Average number of switching cycles		>10000	
Test button Test cycles			Half-yearly ¹⁾ SIGRES annually ²⁾	
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors	
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe	
Temperatures	Storage temperature	°C	–40 ... +75 °C	
	Ambient temperature	°C	–25 ... +45, marked with	
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95% rel. air humidity)	
CFC and silicone-free			■	
Mains connection			Top bottom SIGRES on top only	
Overvoltage category Pollution degree			III 2	
More information				
Catalog LV 10 – 10/2020			See page 4/14	

¹⁾ Extension to annual test interval under certain conditions

²⁾ Extension to four-yearly test interval under certain conditions



5SV

SEQUENCE 5SV3

5SM3

Super resistant [K]	Selective [S]	SIGRES, selective [S]	SIGRES, super-resistant [K]	SIGRES, Selective [S]	Instantaneous	Selective [S]
–	–	–	–	–	■	■
■	■	■	–	–	■	■
■	■	–	–	–	–	–
–	–	–	■	■	–	–
>3	>5	>5	–	–	>1	>5
>3	–	–	–	–	–	–
–	–	–	>3	>5	–	–
195	195	195	195	195	195	195
100	100	100	–	–	–	–
20	20	20	–	–	–	–
0.75 ... 35	0.75 ... 35	0.75 ... 35	0.75 ... 35	0.75 ... 35	1.5 ... 50 (2 MW) 2.5 ... 50 (4 MW)	1.5 ... 50 (2 MW) 2.5 ... 50 (4 MW)
0.75 ... 25	0.75 ... 25	0.75 ... 25	0.75 ... 25	0.75 ... 25	–	–
1 ... 35	1 ... 35	1 ... 35	1 ... 35	1 ... 35	–	–
0.75 ... 10	0.75 ... 10	0.75 ... 10	0.75 ... 10	0.75 ... 10	–	–
0.75 ... 4	0.75 ... 4	0.75 ... 4	0.75 ... 4	0.75 ... 4	–	–
1 ... 4	1 ... 4	1 ... 4	1 ... 4	1 ... 4	–	–
10 ... 25	10 ... 25	10 ... 25	0.75 ... 35	0.75 ... 35	–	–
6 ... 25	6 ... 25	6 ... 25	0.75 ... 25	0.75 ... 25	–	–
6 ... 16	6 ... 16	6 ... 16	1 ... 35	1 ... 35	–	–
2.5... 3.5	2.5... 3.5	2.5... 3.5	2.5 ... 3.0	2.5 ... 3.0	3.0... 3.5	3.0... 3.5
1P+N 3P+N	1P+N 3P+N	1P+N 3P+N	1P+N 3P+N	1P+N 3P+N	1P+N 3P+N	1P+N 3P+N
24 ... 125 230 400 500	24 ... 125 230 400 500	24 ... 125 230 400 500	230 400	230 400	230 400	230 400
50/60	50/60	50/60	50/60	50/60	50	50
IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008,ÖVE/ÖNORM E 8601	IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008,ÖVE/ÖNORM E 8601	IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008,ÖVE/ÖNORM E 8601	IEC/EN 62423 (VDE 0664-40), IEC/EN 61543 (VDE 0664-30), DIN VDE 0664-400 (Type B+ only)	IEC/EN 62423 (VDE 0664-40), IEC/EN 61543 (VDE 0664-30), DIN VDE 0664-400 (Type B+ only)	IEC/EN 61008-1 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)	IEC/EN 61008-1 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)
10, 30, 100, 300, 500, 1000	10, 30, 100, 300, 500, 1000	10, 30, 100, 300, 500, 1000	30, 300, 500	30, 300, 500	30, 100, 300, 500	30, 100, 300, 500
16 ... 80	16 ... 80	16 ... 80	16 ... 80	16 ... 80	100 ... 125	100 ... 125
–	–	–	–	–	–	–
N right N left	N right N left	N right N left	N right	N right	N right	N right
>10000	>10000	>10000	>10000	>10000	>10 000	>10 000
Half-yearly ¹⁾ SIGRES annually ²⁾	Half-yearly ¹⁾ SIGRES annually ²⁾	Half-yearly ¹⁾ SIGRES annually ²⁾	Annually ²⁾	Annually ²⁾	Half-yearly	Half-yearly
IP20, if the distribution board is installed, with connected conductors	IP20, if the distribution board is installed, with connected conductors	IP20, if the distribution board is installed, with connected conductors	IP20, if the distribution board is installed, with connected conductors	IP20, if the distribution board is installed, with connected conductors	IP20, if the distribution board is installed, with connected conductors	IP20, if the distribution board is installed, with connected conductors
Finger and back-of-hand safe	Finger and back-of-hand safe	Finger and back-of-hand safe	Finger and back-of-hand safe	Finger and back-of-hand safe	Finger and back-of-hand safe	Finger and back-of-hand safe
-40 ... +75 °C	-40 ... +75 °C	-40 ... +75 °C	-40 ... +75 °C	-40 ... +75 °C	-40 ... +75 °C	-40 ... +75 °C
-25 ... +45, marked with ☼	-25 ... +45, marked with ☼	-25 ... +45, marked with ☼	-25 ... +45, marked with ☼	-25 ... +45, marked with ☼	-25 ... +45, marked with ☼	-25 ... +45, marked with ☼
28 cycles (55 °C; 95% rel. air humidity)	28 cycles (55 °C; 95% rel. air humidity)	28 cycles (55 °C; 95% rel. air humidity)	28 cycles (55 °C; 95% rel. air humidity)	28 cycles (55 °C; 95% rel. air humidity)	28 cycles (55 °C; 95% rel. air humidity)	28 cycles (55 °C; 95% rel. air humidity)
■	■	■	■	■	■	■
Top bottom SIGRES on top only	Top bottom SIGRES on top only	Top bottom SIGRES on top only	Top bottom	Top bottom	Top bottom	Top bottom
III 2	III 2	III 2	III 2	III 2	III 2	III 2
See page 4/14	See page 4/14	See page 4/14	See page 4/26	See page 4/26	See page 4/30	See page 4/30

RC units



5SM2 (0.3 ... 63 A)

Types		Instantaneous
Type AC		■
Type A		■
Type F		–
Surge current withstand capability 8/20 μs		
Type A	kA	>1
Type F	kA	–
Minimum operational voltage for test equipment		
30-mA devices	V AC	195
Non-30-mA devices	V AC	100
Terminal conductor cross-sections		
Solid/stranded	mm ²	1.0 ... 25
Terminal tightening torque	Nm	2.5 ... 3.0
Poles		
Number of poles		2P 3P 4P
Rated voltage U _n	V AC	230 400
Operating frequency	Hz	50 50/60
Standards		
IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)		
Rated residual current I _{Δn}	mA	10, 30, 100, 300, 500, 1000
Rated current I _n	A	0.3 ... 63
Service life	Average number of switching cycles	>10000
Test button Test cycles		half-yearly ¹⁾
Degree of protection	Acc. to EN 60529 (VDE 0470-1)	IP20, if the distribution board is installed, with connected conductors
Touch protection	Acc. to EN 50274 (VDE 0660-514)	Finger and back-of-hand safe
Temperatures	Storage temperature	–40 ... +75 °C
	Ambient temperature	–25 ... +45, marked with
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles (55 °C; 95% rel. air humidity)
CFC and silicone-free		■
Mains connection		Top bottom
Overvoltage category Pollution degree		III 2
More information		
Catalog LV 10 – 10/2020		See page 4/32

¹⁾ Extension to annual test interval under certain conditions



5SM2 (0.3 ... 63 A)

5SM2 (80 ... 100 A)

Super resistant [K]	Selective [S]	Instantaneous	Selective [S]
■	■	■	■
■	■	■	■
■	–	–	–
>3	>5	>1	>5
>3	–	–	–
195		195	
100		100	
1.0 ... 25		6.0 ... 50	
2.5 ... 3.0	2.5 ... 3.0	2.5 ... 3.0	2.5 ... 3.0
2P 3P 4P		2P 4P	
230 400		230 400	
50 50/60		50 50/60	
IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)		IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40)	
30	300, 500, 1000	30, 300	300, 1000
0.3 ... 63	0.3 ... 63	80 ... 100	80 ... 100
>10000	>10000	>10000	>10000
half-yearly ¹⁾	half-yearly ¹⁾	half-yearly ¹⁾	half-yearly ¹⁾
IP20, if the distribution board is installed, with connected conductors		IP20, if the distribution board is installed, with connected conductors	
Finger and back-of-hand safe		Finger and back-of-hand safe	
-40 ... +75 °C		-40 ... +75 °C	
-25 ... +45, marked with		-25 ... +45, marked with	
28 cycles (55 °C; 95% rel. air humidity)		28 cycles (55 °C; 95% rel. air humidity)	
■		■	
Top bottom		Top bottom	
III 2		III 2	
See page 4/32		See page 4/32	

RCBOs



5SU1 (up to 40 A)

Types		Instantaneous	Short-time delayed / Super resistant	Selective [S]
Type AC		■	■	—
Type A		■	■	■
Type B		—	—	—
Type B+		—	—	—
Type F		—	■	—
Surge current withstand capability 8/20 μs 8/20 μs				
Type A	kA	>1	>3	>5
Type F	kA	—	>3	—
Minimum voltage for operation of the test equipment				
30-mA devices	AC V		195	
Non-30-mA devices	AC V		100	
Terminal conductor cross-sections				
1 conductor at front + busbar at rear	Solid/stranded	mm ²	0.75 ... 35	
	Finely stranded with end sleeve	mm ²	0.75 ... 25	
	Finely stranded without end sleeve	mm ²	1 ... 25	
2 conductors at rear	Solid/stranded	mm ²	0.75 ... 6	
	Finely stranded with non-insulated end sleeve	mm ²	0.75 ... 4	
	Finely stranded with insulated end sleeve	mm ²	0.75 ... 4	
	Finely stranded without end sleeve	mm ²	1 ... 4	
Terminal tightening torque	Nm		2.5 ... 3.0	
Poles				
Number of poles			1P+N 2P	
Rated voltage U _n	AC V		110 230	
Operating frequency	Hz		50 50/60	
Standards				
		IEC/DIN EN 61009-1 (VDE 0664-20), IEC/DIN EN 61009-2-1 (VDE 0664-21), IEC/DIN EN 61543 (VDE 0664-30), IEC/DIN EN 62423 (VDE 0664-40)		
Rated residual current I _{Δn}	mA		10, 30, 100, 300	
Rated current I _n	A		6 ... 40	
Rated breaking capacity I _{cn}	kA		4.5 6 10	
Connection			N right N left	
Service life	Average number of switching cycles		>10000	
Test button Test cycles			Half-yearly ¹⁾	
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, if the distribution board is installed, with connected conductors	
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe	
Temperatures	Storage temperature	°C	-40 ... +75 °C	
	Ambient temperature	°C	-25 ... +45, marked with	
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95% rel. air humidity)	
CFC and silicone-free			■	
Mains connection			Top bottom	
Energy limitation class			3	
Overvoltage category Pollution degree			III 2	

More information

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[See page 4/42](#)¹⁾ Extension to annual test interval under certain conditions



5SV1



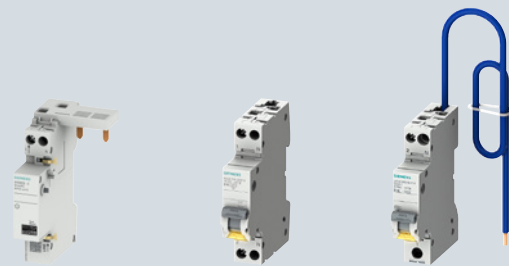
5SU1 (125 A)



5SU1 (100 A, 125 A)

Instantaneous	Short-time delayed / Super resistant	Instantaneous	Short-time delayed / Super resistant	Short-time delayed / Super resistant	Selective [S]
■	—	■	■	—	—
■	■	■	■	—	—
—	—	—	—	■	■
—	—	—	—	■	■
—	■	—	—	—	—
>1	>3	>1	>3	>3	>5
—	>3	—	—	—	—
195		195		195	
100		100		100	
0.75 ... 16		25 ... 50		20 ... 50	
0.75 ... 10		25 ... 35		25 ... 35	
0.75 ... 16		—		—	
0.75 ... 4		—		—	
0.75 ... 2.5		—		—	
0.75 ... 1.5		—		—	
0.75 ... 4		—		—	
1.2 ... 2.0		3.0 ... 3.5		3.0 ... 3.5	
1P+N		2P 4P		4P	
230		230 400		400 430	
50 50/60		50 50/60		50/60	
IEC/DIN EN 61009-1 (VDE 0664-20), IEC/DIN EN 61009-2-1 (VDE 0664-21), IEC/DIN EN 61543 (VDE 0664-30), IEC/DIN EN 62423 (VDE 0664-40)		IEC/DIN EN 61009-1 (VDE 0664-20), IEC/DIN EN 61009-2-1 (VDE 0664-21), IEC/DIN EN 61543 (VDE 0664-30), IEC/DIN EN 62423 (VDE 0664-40)		IEC/DIN EN 61009-1 (VDE 0664-20), IEC/DIN EN 61009-2-1 (VDE 0664-21), IEC/DIN EN 61543 (VDE 0664-30), IEC/DIN EN 62423 (VDE 0664-40)	
30, 300		30, 300, 1000		30, 300	
2 ... 16		125		100, 125	
4.5 6		10		10	
N right		N right N left		N right N left	
>10 000		>10000		>10000	
Half-yearly ¹⁾		Half-yearly ¹⁾		Half-yearly ¹⁾	
IP20, if the distribution board is installed, with connected conductors		IP20, if the distribution board is installed, with connected conductors		IP20, if the distribution board is installed, with connected conductors	
Finger and back-of-hand safe		Finger and back-of-hand safe		Finger and back-of-hand safe	
-40 ... +75 °C		-40 ... +75 °C		-40 ... +75 °C	
-25 ... +45, marked with		-25 ... +45, marked with		-25 ... +45, marked with	
28 cycles (55 °C; 95% rel. air humidity)		28 cycles (55 °C; 95% rel. air humidity)		28 cycles (55 °C; 95% rel. air humidity)	
■		■		■	
Top bottom		Top bottom		Top bottom	
3		3		3	
III 2		III 2		III 2	
See page 4/48		See page 4/42		See page 4/47	

Arc fault detection devices (AFDD)



5SM6

5SV6

5SV6....KP..

Poles			5SM6	5SV6	5SV6....KP..
Number of poles			2P	1P+N	1P+N
Rated voltage U_n	V AC		230	230	230
Operating frequency	Hz		50	50	50
Terminal conductor cross-sections					
Solid and stranded	mm ²		0.75 ... 16	0.75 ... 16	0.75 ... 16 (top) 0.75 ... 35 (bottom)
Finely stranded with end sleeve	mm ²		0.75 ... 10	0.75 ... 10	0.75 ... 10 (top) 0.75 ... 25 (bottom)
Terminal tightening torque	Nm		2.0 ... 2.5	1.2 ... 2.0	1.2 ... 2.0 (top) 2.5 ... 3.5 (bottom)
Standards			IEC/EN 62606	IEC/EN 62606	IEC/EN 62606
Rated current I_n	A		Up to 16/40 A	6 ... 40	6 ... 40
Service life	Average number of switching cycles		>10000	>10000	>10000
Mounting position			Any	Any	Any
Degree of protection	Acc. to EN 60529 (VDE 0470-1)		IP20, with connected conductors		
Touch protection	Acc. to EN 50274 (VDE 0660-514)		Finger and back-of-hand safe		
Temperatures	Storage temperature	°C	-40 ... +75 °C		
	Ambient temperature	°C	-25 ... +45, marked with		
Resistance to climate	Acc. to IEC 60068-2-30		28 cycles (55 °C; 95% rel. air humidity)		
CFC and silicone-free			■	■	■
Mains connection			Bottom	Top bottom	Bottom
Overvoltage category Pollution degree			III 2	III 2	III 2
Tripping in the event of overvoltage	V		>275	>285	>285
More information					
Catalog LV 10 – 10/2020			See page 4/50	See page 4/51	See page 4/51

5SV RCCBs

Type A, 1P+N (2 MW)

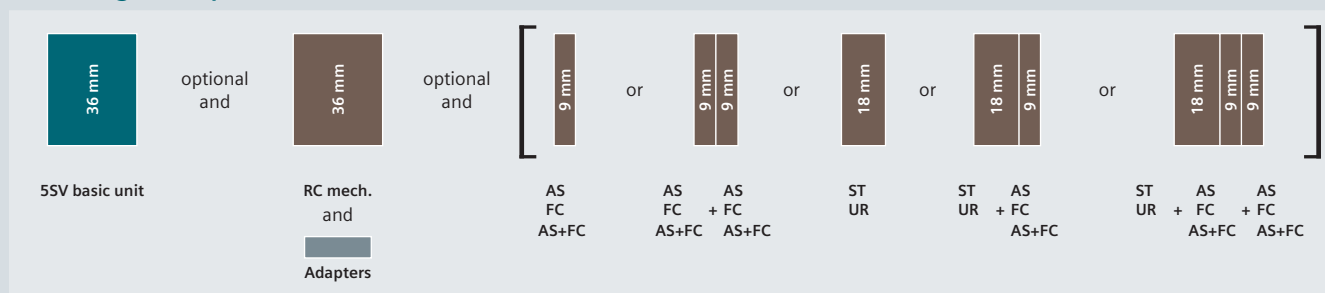
N connection	Instantaneous			Instantaneous (only available in Belgium) ²⁾
	24 ... 125 V AC	230 V AC		230 V AC
	Right	Right	Left	Right
				

I _{Δn}	I _n	Thermal overload protection ¹⁾	Bulk packaging (36 units)				
Type A							
10 mA	16 A	—	—	—	5SV3111-6	5SV3111-6KL	—
30 mA	16 A	—	—	5SV3311-6KK13	5SV3311-6	5SV3311-6KL	—
		—	■	—	5SV3311-6GV01	—	—
	25 A	—	—	5SV3312-6KK13	5SV3312-6	5SV3312-6KL	5SV3312-6BA
		—	■	—	5SV3312-6GV01	—	—
	40 A	—	—	5SV3314-6KK13	5SV3314-6	5SV3314-6KL	5SV3314-6BA
		—	■	—	5SV3314-6GV01	—	—
		■	—	—	5SV3314-6LA	—	—
	63 A	—	—	5SV3316-6KK13	5SV3316-6	5SV3316-6KL	5SV3316-6BA
80 A	—	—	—	5SV3317-6	5SV3317-6KL	—	
100 mA	25 A	—	—	—	5SV3412-6	5SV3412-6KL	5SV3612-6BA
	40 A	—	—	—	5SV3414-6	5SV3414-6KL	5SV3614-6BA
	63 A	—	—	—	5SV3416-6	5SV3416-6KL	5SV3616-6BA
	80 A	—	—	—	5SV3417-6	5SV3417-6KL	—
300 mA	25 A	—	—	—	5SV3612-6	5SV3612-6KL	—
	40 A	—	—	—	5SV3614-6	5SV3614-6KL	—
	63 A	—	—	—	5SV3616-6	5SV3616-6KL	—
	80 A	—	—	—	5SV3617-6	5SV3617-6KL	—

¹⁾ Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

²⁾ These products cannot be used in France according to NF C 15-100. Product complies with the specifications of the Belgian market only. (Simultaneous tripping of the 3 poles and the N conductor.) Available for the export market only.

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

SIGRES, instantaneous	Short-time delayed [G]	Super resistant [K]	Selective [S]	
230 V AC	230 V AC	230 V AC	230 V AC	
Right	Right	Right	Right	Left
				
–	–	–	–	–
5SV3311-6KK12	–	–	–	–
–	–	–	–	–
5SV3312-6KK12	–	5SV3312-6KK01	–	–
–	–	–	–	–
5SV3314-6KK12	–	5SV3314-6KK01	–	–
–	–	–	–	–
–	5SV3314-6LA01	–	–	–
5SV3316-6KK12	–	5SV3316-6KK01	–	–
–	–	5SV3317-6KK01	–	–
–	–	–	–	–
–	–	–	–	–
–	–	–	5SV3416-8	–
–	–	–	–	–
–	–	5SV3612-6KK01	5SV3612-8	–
–	–	5SV3614-6KK01	5SV3614-8	5SV3614-8KL
–	–	5SV3616-6KK01	5SV3616-8	5SV3616-8KL
–	–	5SV3617-6KK01	5SV3617-8	–

4

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

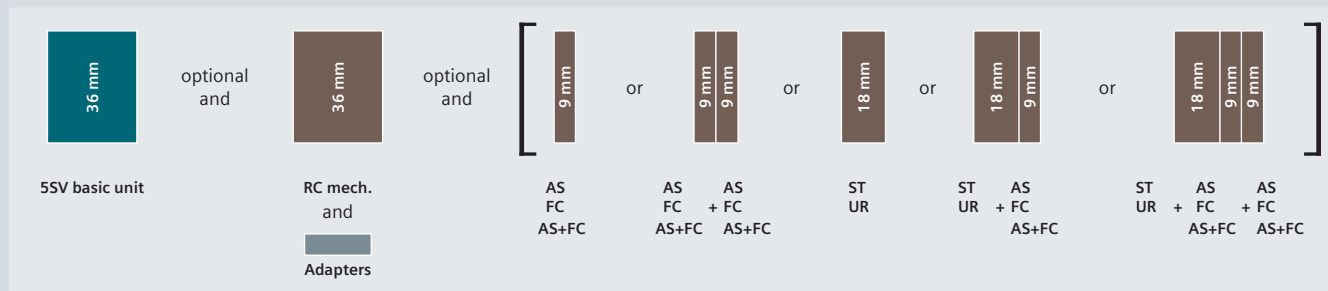
Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-6

5SV RCCBs

Type F, 1P+N (2 MW)

		Super resistant [K] 230 V AC	Selective [S] 230 V AC
N connection		Right	Right
			
$I_{\Delta n}$	I_n		
Type F			
30 mA	25 A	5SV3312-3	–
	40 A	5SV3314-3	–
	63 A	5SV3316-3	–
	80 A	5SV3317-3	–
300 mA	25 A	5SV3612-3	–
	40 A	5SV3614-3	5SV3614-7
	63 A	5SV3616-3	–
	80 A	5SV3617-3	5SV3617-7

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-6

5SV RCCBs

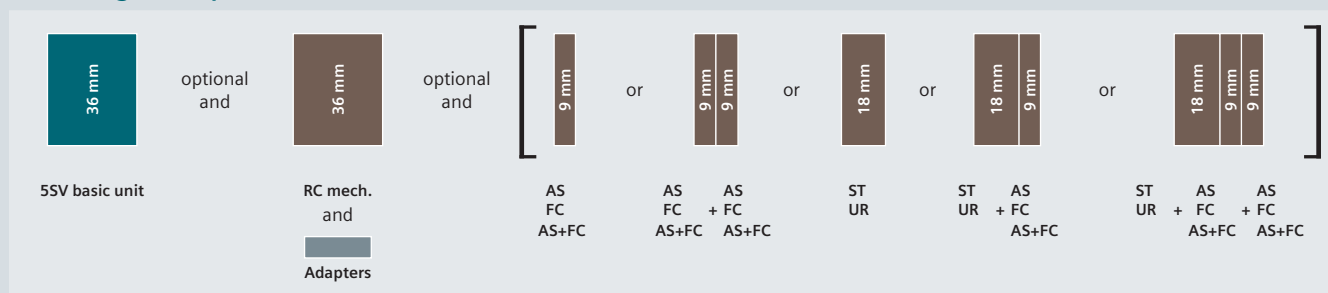
Type AC, 1P+N (2 MW)

N connection	Instantaneous 230 V AC		24 ... 125 V AC	Short-time delayed [G] 230 V AC
	Right	Left	Right	Right
				

I _{Δn}	I _n	Thermal overload protection ¹⁾	Bulk packaging (36 units)				
Type AC							
10 mA	16 A	—	—	5SV4111-0	5SV4111-0KL	—	—
30 mA	16 A	—	—	5SV4311-0	5SV4311-0KL	5SV4311-0KK13	—
	25 A	—	—	5SV4312-0	5SV4312-0KL	5SV4312-0KK13	—
		—	■	5SV4312-0GV01	—	—	—
	40 A	—	—	5SV4314-0	5SV4314-0KL	5SV4314-0KK13	5SV4314-0LA01
		—	■	5SV4314-0GV01	5SV4314-0GV02	—	
		■	—	5SV4314-0LA	—	—	
	63 A	—	—	5SV4316-0	5SV4316-0KL	5SV4316-0KK13	—
80 A	—	—	5SV4317-0	5SV4317-0KL	—	—	
100 mA	25 A	—	—	5SV4412-0	—	—	—
	40 A	—	—	5SV4414-0	5SV4414-0KL	—	—
	63 A	—	—	5SV4416-0	5SV4416-0KL	—	—
	80 A	—	—	5SV4417-0	—	—	—
300 mA	25 A	—	—	5SV4612-0	5SV4612-0KL	—	—
	40 A	—	—	5SV4614-0	5SV4614-0KL	—	—
	63 A	—	—	5SV4616-0	5SV4616-0KL	—	—
	80 A	—	—	5SV4617-0	5SV4617-0KL	—	—

¹⁾ Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-6

5SV RCCBs

Type A, 3P+N (4 MW)

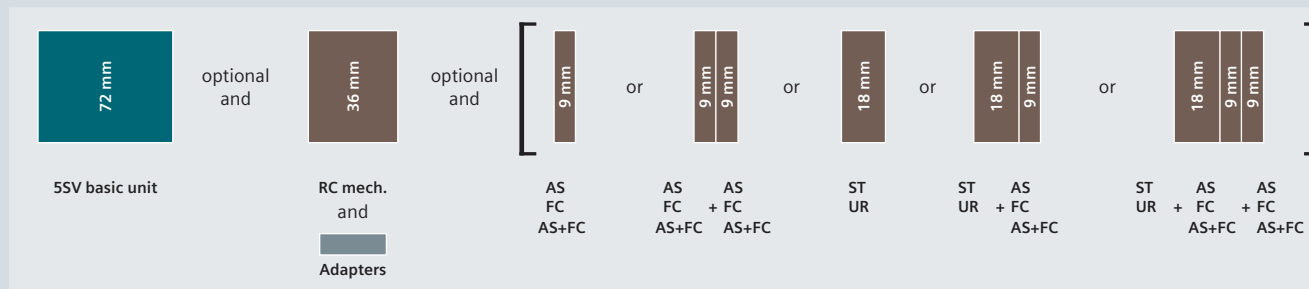


I _{Δn}	I _n	Thermal overload protection ¹⁾	Bulk packaging (18 units)				
Type A							
30 mA	25 A	—	—	5SV3342-6	5SV3342-6KL	5SV3342-6KK03	5SV3352-6
		—	■	5SV3342-6GV01	—	—	—
	40 A	—	—	5SV3344-6	5SV3344-6KL	5SV3344-6KK03	5SV3354-6
		—	■	5SV3344-6GV01	5SV3344-6GV02	—	—
	63 A	■	—	5SV3344-6LA	—	—	—
		—	—	5SV3346-6	5SV3346-6KL	—	5SV3356-6
		—	■	5SV3346-6GV01	—	—	—
		■	—	5SV3346-6LA	—	—	—
	80 A	—	—	5SV3347-6	5SV3347-6KL	—	5SV3357-6
	100 mA	25 A	—	—	5SV3442-6	—	—
40 A		—	—	5SV3444-6	—	—	—
		■	—	5SV3444-6LA	—	—	—
63 A		—	—	5SV3446-6	—	—	—
		■	—	5SV3446-6LA	—	—	—
80 A		—	—	5SV3447-6	—	—	—
300 mA	25 A	—	—	5SV3642-6	5SV3642-6KL	—	5SV3652-6
	40 A	—	—	5SV3644-6	5SV3644-6KL	—	5SV3654-6
		■	—	—	—	—	—
	63 A	—	—	5SV3646-6	5SV3646-6KL	—	5SV3656-6
		■	—	—	—	—	—
	80 A	—	—	5SV3647-6	5SV3647-6KL	—	5SV3657-6
500 mA	25 A	—	—	5SV3742-6	—	—	—
	40 A	—	—	5SV3744-6	—	—	—
	63 A	—	—	5SV3746-6	5SV3746-6KL	—	—
		—	■	5SV3746-6GV01	—	—	—
	80 A	—	—	5SV3747-6	—	—	—
1000 mA	63 A	—	—	—	—	—	—

¹⁾ Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

²⁾ These products cannot be used in France according to NF C 15-100. Product complies with the specifications of the Belgian market only. (Simultaneous tripping of the 3 poles and the N conductor.) Available for the export market only.

Mounting concept



AS Auxiliary switch
 FC Fault signal contact
 AS+FC Auxiliary switch and fault signal contact

See page 4/54
 See page 4/56
 See page 4/58

ST Shunt trips
 UR Undervoltage release
 RC mech. Remote controlled mechanism

See page 4/59
 See page 4/60
 See page 4/61

Instantaneous (only available in Belgium) ²⁾ 400 V AC	SIGRES, instantaneous 400 V AC	Short-time delayed [G] 400 V AC	Super resistant [K] 400 V AC	Selective [S] 400 V AC		SIGRES, Selective [S] 400 V AC
Right	Right	Right	Right	Right	Left	Right
						
5SV3342-6BA	5SV3342-6KK12	–	5SV3342-6KK01	–	–	–
–	–	–	–	–	–	–
5SV3344-6BA	5SV3344-6KK12	5SV3344-6LB01	5SV3344-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3344-6LA01	–	–	–	–
5SV3346-6BA	5SV3346-6KK12	5SV3346-6LB01	5SV3346-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3346-6LA01	–	–	–	–
–	5SV3347-6KK12	5SV3347-6LB01	5SV3347-6KK01	–	–	–
–	–	–	–	–	–	–
–	–	5SV3444-6LB01	–	5SV3444-8	–	–
–	–	5SV3444-6LA01	–	5SV3444-8LA	–	–
–	–	5SV3446-6LB01	–	5SV3446-8	–	–
–	–	5SV3446-6LA01	–	5SV3446-8LA	–	–
–	–	–	–	–	–	–
5SV3642-6BA	5SV3642-6KK12	–	5SV3642-6KK01	5SV3642-8	–	–
5SV3644-6BA	5SV3644-6KK12	–	5SV3644-6KK01	5SV3644-8	–	–
–	–	–	–	5SV3644-8LA	–	–
5SV3646-6BA	5SV3646-6KK12	–	5SV3646-6KK01	5SV3646-8	5SV3646-8KL	5SV3646-8KK12
–	–	–	–	5SV3646-8LA	–	–
–	5SV3647-6KK12	–	5SV3647-6KK01	5SV3647-8	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	–	–	–
–	–	–	–	5SV3846-8	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism 4 MW		Article No.
		5ST3820-6

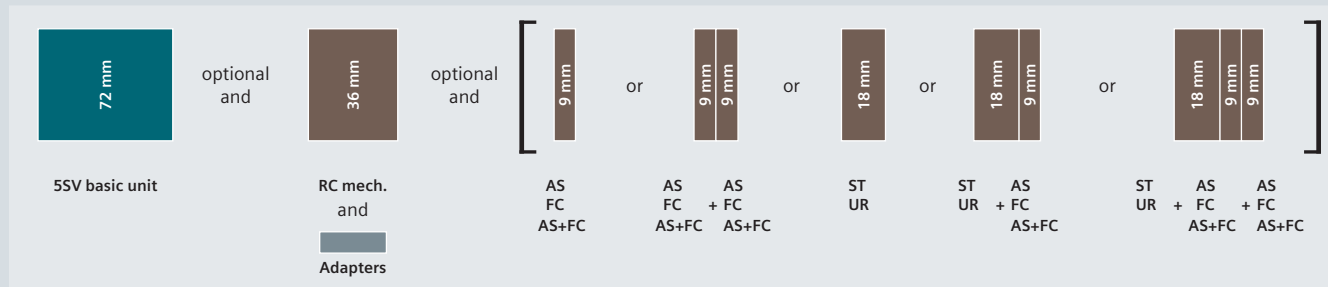
5SV RCCBs

Type F, 3P+N (4 MW)

N connection	Super resistant [K] 400 V AC	Selective [S] 400 V AC
	Right	Right
		

$I_{\Delta n}$	I_n		
Type F			
30 mA	25 A	5SV3342-3	—
	40 A	5SV3344-3	—
	63 A	5SV3346-3	—
	80 A	5SV3347-3	—
300 mA	25 A	5SV3642-3	—
	40 A	5SV3644-3	5SV3644-7
	63 A	5SV3646-3	—
	80 A	5SV3647-3	5SV3647-7

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard For low power For low power (with diode)	5ST3010 5ST3013 5ST3013-0XX01
2 NO contacts	Standard For low power	5ST3011 5ST3014
2 NC contacts	Standard For low power	5ST3012 5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
4 MW		5ST3820-6

5SV RCCBs

Type AC, 3P+N (4 MW)

N connection

Instantaneous
400 V AC

Right



Left



Short-time delayed [G]
400 V AC

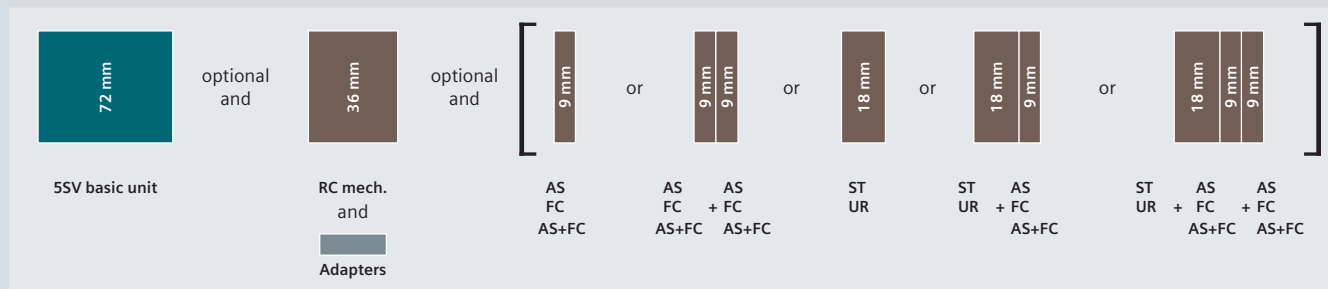
Right



$I_{\Delta n}$	I_n	Thermal overload protection ¹⁾	Bulk packaging (18 units)			
Type AC						
30 mA	25 A	—	—	5SV4342-0	5SV4342-OKL	—
		—	■	5SV4342-0GV01	—	—
	40 A	—	—	5SV4344-0	5SV4344-OKL	5SV4344-OLA01
		—	■	5SV4344-0GV01	—	—
	63 A	—	—	5SV4344-OLA	—	—
		■	—	5SV4344-OLA	—	—
100 mA	25 A	—	—	5SV4346-0	5SV4346-OKL	5SV4346-OLA01
		■	—	5SV4346-OLA	—	—
	40 A	—	—	5SV4347-0	5SV4347-OKL	—
		—	—	5SV4442-0	—	—
	63 A	—	—	5SV4444-0	—	5SV4444-OLA01
		■	—	5SV4444-OLA	—	—
300 mA	25 A	—	—	5SV4446-0	—	5SV4446-OLA01
		■	—	5SV4446-OLA	—	—
	40 A	—	—	5SV4447-0	—	—
		—	—	5SV4642-0	5SV4642-OKL	—
	63 A	—	—	5SV4644-0	5SV4644-OKL	—
		—	—	5SV4646-0	5SV4646-OKL	—
500 mA	25 A	—	—	5SV4647-0	5SV4647-OKL	—
		—	—	5SV4742-0	—	—
	40 A	—	—	5SV4744-0	—	—
		—	—	5SV4746-0	—	—
	63 A	—	—	5SV4747-0	—	—
		—	—	5SV4747-0	—	—

¹⁾ Thermal overload protection according to ÖVE/ÖNORM E 8001 possible up to rated current of the RCCB (40 A, 63 A).

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
4 MW		5ST3820-6

5SV3 RCCBs (SIQUENCE)

Type B, 1P+N (4 MW)

N connection

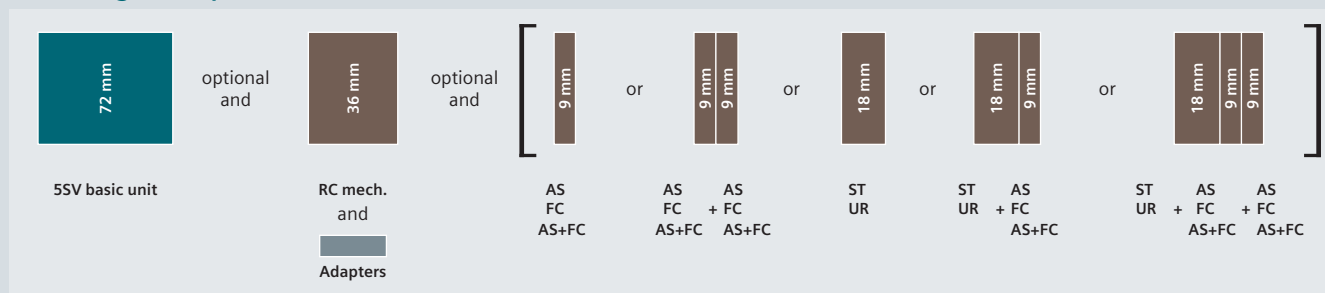
SIGRES, super resistant [K]
230 V AC

Right



$I_{\Delta n}$	I_n	Bulk packaging (18 units)	
Type B			
30 mA	16 A	—	5SV3321-4
	25 A	—	5SV3322-4
	40 A	—	5SV3324-4
		■	5SV3324-4GV01
	63 A	—	5SV3326-4
300 mA	16 A	—	5SV3621-4
	25 A	—	5SV3622-4
	40 A	—	5SV3624-4
	63 A	—	5SV3626-4

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
4 MW		5ST3820-6

5SV3 RCCBs (SIQUENCE)

Type B and B +, 3P+N (4 MW)

N connection

SIGRES, super resistant [K]
230 ... 400 V AC

Right



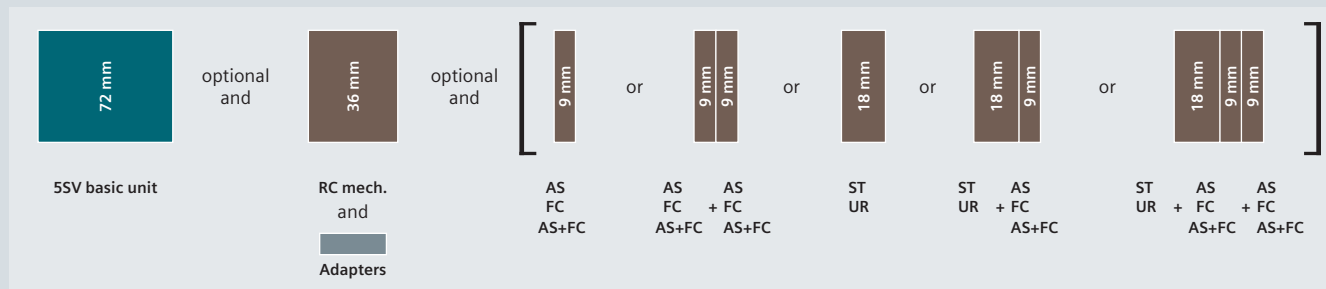
SIGRES, selective [S]
230 ... 400 V AC

Right



$I_{\Delta n}$	I_n	Bulk packaging (18 units)		
Type B				
30 mA	25 A	–	5SV3342-4	–
		■	5SV3342-4GV01	–
	40 A	–	5SV3344-4	–
		■	5SV3344-4GV01	–
	63 A	–	5SV3346-4	–
		■	5SV3346-4GV01	–
80 A	–	5SV3347-4	–	
300 mA	25 A	–	5SV3642-4	–
		■	5SV3642-4GV01	–
	40 A	–	5SV3644-4	–
		■	5SV3644-4GV01	–
	63 A	–	5SV3646-4	5SV3646-5
		■	5SV3646-4GV01	–
80 A	–	5SV3647-4	5SV3647-5	
500 mA	25 A	–	5SV3742-4	–
	40 A	–	5SV3744-4	–
	63 A	–	5SV3746-4	5SV3746-5
	80 A	–	5SV3747-4	5SV3747-5
Type B+				
30 mA	25 A	–	5SV3342-4KK14	–
	40 A	–	5SV3344-4KK14	–
	63 A	–	5SV3346-4KK14	–
	80 A	–	5SV3347-4KK14	–
300 mA	25 A	–	5SV3642-4KK14	–
	40 A	–	5SV3644-4KK14	–
	63 A	–	5SV3646-4KK14	5SV3646-5KK14
	80 A	–	5SV3647-4KK14	5SV3647-5KK14

Mounting concept



AS	Auxiliary switch	See page 4/54
FC	Fault signal contact	See page 4/56
AS+FC	Auxiliary switch and fault signal contact	See page 4/58
ST	Shunt trips	See page 4/59
UR	Undervoltage release	See page 4/60
RC mech.	Remote controlled mechanism	See page 4/61

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
4 MW		5ST3820-6

5SM3 RCCBs

Type A and AC, 1P+N (2 MW), high-current

N connection

Instantaneous
230 V AC

Right



$I_{\Delta n}$	I_n	
Type A		
30 mA	100 A	5SM3318-6KK
	125 A	5SM3315-6KK
100 mA	100 A	5SM3418-6KK
	125 A	5SM3415-6KK
300 mA	100 A	5SM3618-6KK
	125 A	5SM3615-6KK
Type AC		
30 mA	100 A	5SM3318-0KK
	125 A	5SM3315-0KK
100 mA	100 A	5SM3418-0KK
	125 A	5SM3415-0KK
300 mA	100 A	5SM3618-0KK
	125 A	5SM3615-0KK

Type A and AC, 3P+N (4 MW), high-current



$I_{\Delta n}$	I_n		
Type A			
30 mA	100 A	5SM3348-6	–
	125 A	5SM3345-6	–
100 mA	100 A	5SM3448-6	–
	125 A	5SM3445-6	–
300 mA	100 A	5SM3648-6	5SM3648-8
	125 A	5SM3645-6	5SM3645-8
500 mA	100 A	5SM3748-6	–
	125 A	5SM3745-6	5SM3745-8
Type AC			
30 mA	100 A	5SM3348-0	–
	125 A	5SM3345-0	–
100 mA	100 A	5SM3448-0	–
	125 A	5SM3445-0	–
300 mA	100 A	5SM3648-0	5SM3648-2
	125 A	5SM3645-0	–
500 mA	100 A	5SM3748-0	–
	125 A	5SM3745-0	–

5SM2 RC units

Type A, F and AC, 2-pole

For 5SY miniature circuit breakers ¹⁾
230 V AC

Version
Mounting width

Instantaneous

Super resistant [K]

Selective [S]

2 MW

2 MW

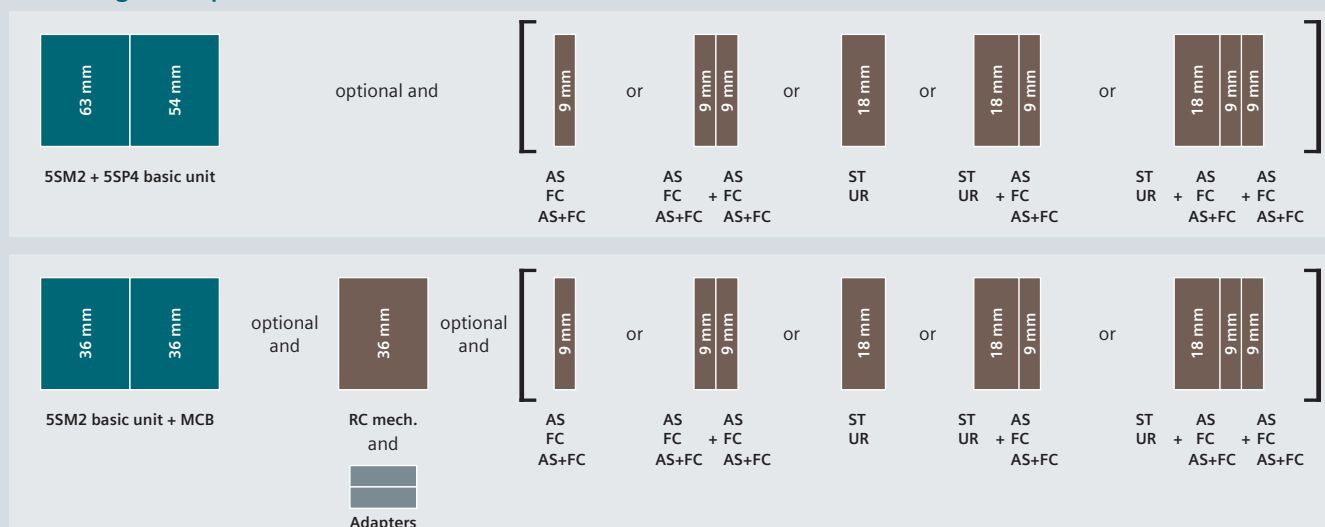
2 MW



$I_{\Delta n}$	I_n			
Type A				
10 mA	0.3 ... 16 A	5SM2121-6	–	–
30 mA	0.3 ... 40 A	5SM2322-6	5SM2322-6KK01	–
	0.3 ... 63 A	5SM2325-6	5SM2325-6KK01	–
	80 ... 100 A	–	–	–
100 mA	0.3 ... 63 A	5SM2425-6	–	–
300 mA	0.3 ... 40 A	5SM2622-6	–	5SM2622-8
	0.3 ... 63 A	5SM2625-6	–	5SM2625-8
	80 ... 100 A	–	–	–
500 mA	0.3 ... 63 A	5SM2725-6	–	–
1000 mA	0.3 ... 40 A	–	–	5SM2822-8
	0.3 ... 63 A	–	–	5SM2825-8
	80 ... 100 A	–	–	–
Type F				
30 mA	0.3 ... 40 A	–	5SM2322-3	–
	0.3 ... 63 A	–	5SM2325-3	–
Type AC				
10 mA	0.3 ... 40 A	5SM2121-0	–	–
30 mA	0.3 ... 40 A	5SM2322-0	–	–
	0.3 ... 63 A	5SM2325-0	–	–
	80 ... 100 A	–	–	–
	0.3 ... 40 A	5SM2622-0	–	5SM2622-2
300 mA	0.3 ... 63 A	5SM2625-0	–	5SM2625-2
	80 ... 100 A	–	–	–
500 mA	0.3 ... 63 A	5SM2725-0	–	–
1000 mA	0.3 ... 63 A	5SM2825-0	–	–

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



MCB Miniature circuit breaker [See page 3/1](#)

AS Auxiliary switch [See page 4/54](#)

FC Fault signal contact [See page 4/56](#)

AS+FC Auxiliary switch and

fault signal contact [See page 4/58](#)

ST Shunt trips [See page 4/59](#)

UR Undervoltage release [See page 4/60](#)

RC mech. Remote controlled mechanism [See page 4/61](#)

For 5SL4 miniature circuit breakers 230 V AC		For 5SP4 miniature circuit breakers (B and C characteristics) 230 V AC	
Instantaneous	Selective [S]	Instantaneous	Selective [S]
2 MW	2 MW	3.5 MW	3.5 MW
			
–	–	–	–
5SM2323-6	–	–	–
5SM2326-6	–	–	–
–	–	5SM2327-6	–
–	–	–	–
5SM2623-6	5SM2623-8	–	–
5SM2626-6	5SM2626-8	–	–
–	–	5SM2627-6	5SM2627-8
–	–	–	–
–	–	–	–
–	–	–	5SM2827-8
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–
5SM2323-0	–	–	–
5SM2326-0	–	–	–
–	–	5SM2327-0	–
5SM2623-0	5SM2623-2	–	–
5SM2626-0	5SM2626-2	–	–
–	–	5SM2627-0	–
–	–	–	–
–	–	–	–

Accessories

Auxiliary switches (AS)		Article No.	Undervoltage releases (UR)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010	With integrated auxiliary switch	230 V AC	5ST3040
	For low power	5ST3013		110 V DC	5ST3041
	For low power (with diode)	5ST3013-0XX01		24 V DC	5ST3042
2 NO contacts	Standard	5ST3011	Without integrated auxiliary switch	230 V AC	5ST3043
	For low power	5ST3014		110 V DC	5ST3044
2 NC contacts	Standard	5ST3012		24 V DC	5ST3045
	For low power	5ST3015			
1 CO contact	Standard	5ST3016	Remote controlled (RC) mechanisms		Article No.
Fault signal contacts (FC)		Article No.	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
1 NO contact + 1 NC contact		5ST3020		177 ... 270 V AC	5ST3056
2 NO contacts		5ST3021	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
2 NC contacts		5ST3022		177 ... 270 V AC	5ST3058
Auxiliary switches and fault signal contacts (AS+FC)		Article No.	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
1 CO contact (AS) + 1 CO contact (FC)		5ST3062	Adapter for RC mechanism		Article No.
Shunt trips (ST)		Article No.	5SM2 with 5SY (2P)		5ST3820-3 + 5ST3820-1
110 ... 415 V AC, 110 ... 220 V DC		5ST3030	5SM2 with 5SL (2P)		5ST3820-3 + 5ST3820-6
24 ... 48 V AC/DC		5ST3031			
12 V DC		5ST3031-0XX01			

5SM2 RC units

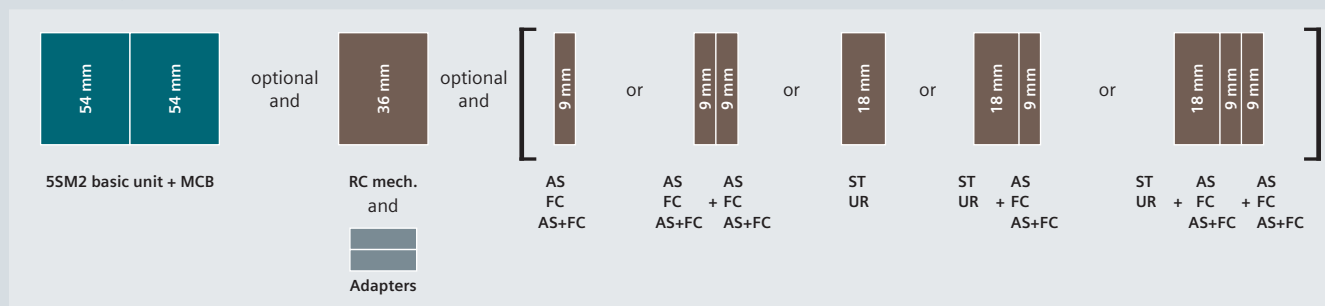
Type A and AC, 3-pole

Version Mounting width	For 5SY miniature circuit breakers ¹⁾ 400 V AC			For 5SL4 miniature circuit breakers 400 V AC	
	Instantaneous 3 MW	Super resistant [K] 3 MW	Selective [S] 3 MW	Instantaneous 3 MW	Selective [S] 3 MW
					

$I_{\Delta n}$	I_n					
Type A						
30 mA	0.3 ... 40 A	5SM2332-6	5SM2332-6KK01	–	5SM2333-6	–
	0.3 ... 63 A	5SM2335-6	5SM2335-6KK01	–	5SM2336-6	–
100 mA	0.3 ... 63 A	5SM2435-6	–	–	–	–
300 mA	0.3 ... 40 A	5SM2632-6	–	–	5SM2633-6	–
	0.3 ... 63 A	5SM2635-6	–	5SM2635-8	5SM2636-6	5SM2636-8
500 mA	0.3 ... 63 A	5SM2735-6	–	5SM2735-8	–	–
1000 mA	0.3 ... 40 A	–	–	5SM2832-8	–	–
	0.3 ... 63 A	–	–	5SM2835-8	–	–
Type AC						
30 mA	0.3 ... 40 A	5SM2332-0	–	–	5SM2333-0	–
	0.3 ... 63 A	5SM2335-0	–	–	5SM2336-0	–
300 mA	0.3 ... 40 A	5SM2632-0	–	–	5SM2633-0	–
	0.3 ... 63 A	5SM2635-0	–	–	5SM2636-0	–
500 mA	0.3 ... 63 A	5SM2735-0	–	–	–	–

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



MCB Miniature circuit breaker [See page 3/1](#)
 AS Auxiliary switch [See page 4/54](#)
 FC Fault signal contact [See page 4/56](#)
 AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)

ST Shunt trips [See page 4/59](#)
 UR Undervoltage release [See page 4/60](#)
 RC mech. Remote controlled mechanism [See page 4/61](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
5SM2 with 5SY (3P)		5ST3820-3 + 5ST3820-2
5SM2 with 5SL (3P)		5ST3820-3 + 5ST3820-7

5SM2 RC units

Type A and AC, 4-pole

For 5SY miniature circuit breakers¹⁾
400 V AC

Version
Mounting width

Instantaneous

Super resistant [K]

Selective [S]

3 MW

3 MW

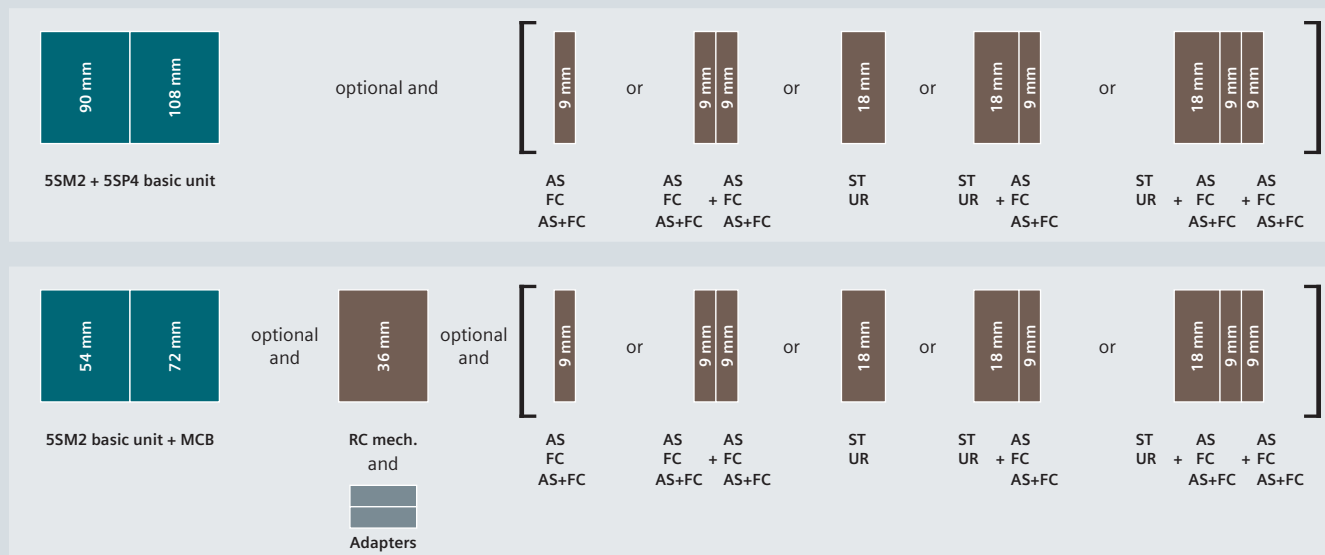
3 MW



$I_{\Delta n}$	I_n			
Type A				
30 mA	0.3 ... 40 A	5SM2342-6	5SM2342-6KK01	—
	0.3 ... 63 A	5SM2345-6	5SM2345-6KK01	—
	80 ... 100 A	—	—	—
100 mA	0.3 ... 63 A	5SM2445-6	—	—
300 mA	0.3 ... 40 A	5SM2642-6	—	—
	0.3 ... 63 A	5SM2645-6	—	5SM2645-8
	80 ... 100 A	—	—	—
500 mA	0.3 ... 63 A	5SM2745-6	—	5SM2745-8
1000 mA	0.3 ... 40 A	—	—	5SM2842-8
	0.3 ... 63 A	—	—	5SM2845-8
	80 ... 100 A	—	—	—
Type AC				
30 mA	0.3 ... 40 A	5SM2342-0	—	—
	0.3 ... 63 A	5SM2345-0	—	—
	80 ... 100 A	—	—	—
300 mA	0.3 ... 40 A	5SM2642-0	—	—
	0.3 ... 63 A	5SM2645-0	—	5SM2645-2
	80 ... 100 A	—	—	—
500 mA	0.3 ... 63 A	5SM2745-0	—	—
1000 mA	0.3 ... 63 A	—	—	5SM2845-2

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



MCB Miniature circuit breaker [See page 3/1](#)
AS Auxiliary switch [See page 4/54](#)
FC Fault signal contact [See page 4/56](#)

AS+FC Auxiliary switch and
fault signal contact [See page 4/58](#)
ST Shunt trips [See page 4/59](#)

UR Undervoltage release [See page 4/60](#)
RC mech. Remote controlled mechanism [See page 4/61](#)

For 5SL4 miniature circuit breakers 400 V AC		For 5SP4 miniature circuit breakers (B and C characteristics) 400 V AC	
Instantaneous	Selective [S]	Instantaneous	Selective [S]
3 MW	3 MW	5 MW	5 MW
			
5SM2343-6	–	–	–
5SM2346-6	–	–	–
–	–	5SM2347-6	–
–	–	–	–
5SM2643-6	–	–	–
5SM2646-6	5SM2646-8	–	–
–	–	5SM2647-6	5SM2647-8
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	5SM2847-8
5SM2343-0	–	–	–
5SM2346-0	–	–	–
–	–	5SM2347-0	–
5SM2643-0	–	–	–
5SM2646-0	5SM2646-2	–	–
–	–	5SM2647-0	–
–	–	–	–
–	–	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Remote controlled (RC) mechanisms		Article No.
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
5SM2 with 5SY (4P)		5ST3820-3 + 5ST3820-2
5SM2 with 5SL (4P)		5ST3820-3 + 5ST3820-7

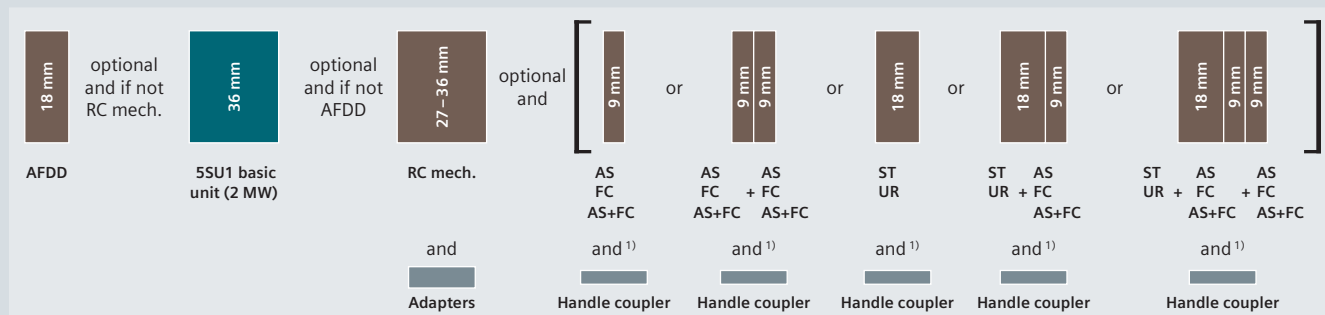
5SU1 RCBOs

Type A, 1P+N

	Instantaneous 230 V AC		
Mounting width	2 MW	2 MW	2 MW
Short-circuit breaking capacity	4.5 kA	4.5 kA	6 kA
N connection	Right	Left	Right
			

$I_{\Delta n}$	I_n	Bulk packaging (36 units)	Characteristic C	C	Characteristic B	C
Type A						
10 mA	6 A	—	—	—	—	—
	10 A	—	—	—	—	—
	13 A	—	—	—	—	—
	16 A	—	—	—	—	—
30 mA	6 A	—	5SU1353-7KK06	5SU1353-7KL06	5SU1356-6KK06	5SU1356-7KK06
		■	—	—	5SU1356-6GV06	5SU1356-7GV06
	8 A	—	5SU1353-7KK08	—	—	5SU1356-7KK08
	10 A	—	5SU1353-7KK10	5SU1353-7KL10	5SU1356-6KK10	5SU1356-7KK10
		■	—	—	5SU1356-6GV10	5SU1356-7GV10
	13 A	—	5SU1353-7KK13	—	5SU1356-6KK13	5SU1356-7KK13
	16 A	—	5SU1353-7KK16	5SU1353-7KL16	5SU1356-6KK16	5SU1356-7KK16
		■	—	—	5SU1356-6GV16	5SU1356-7GV16
	20 A	—	5SU1353-7KK20	5SU1353-7KL20	5SU1356-6KK20	5SU1356-7KK20
	25 A	—	5SU1353-7KK25	5SU1353-7KL25	5SU1356-6KK25	5SU1356-7KK25
	32 A	—	5SU1353-7KK32	5SU1353-7KL32	5SU1356-6KK32	5SU1356-7KK32
	40 A	—	5SU1353-7KK40	5SU1353-7KL40	5SU1356-6KK40	5SU1356-7KK40
300 mA	6 A	—	5SU1653-7KK06	—	5SU1656-6KK06	5SU1656-7KK06
	10 A	—	5SU1653-7KK10	—	5SU1656-6KK10	5SU1656-7KK10
	13 A	—	5SU1653-7KK13	—	5SU1656-6KK13	5SU1656-7KK13
	16 A	—	5SU1653-7KK16	—	5SU1656-6KK16	5SU1656-7KK16
	20 A	—	5SU1653-7KK20	—	5SU1656-6KK20	5SU1656-7KK20
	25 A	—	5SU1653-7KK25	—	5SU1656-6KK25	5SU1656-7KK25
	32 A	—	5SU1653-7KK32	—	5SU1656-6KK32	5SU1656-7KK32
	40 A	—	5SU1653-7KK40	—	5SU1656-6KK40	5SU1656-7KK40

Mounting concept



¹⁾ Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD Arc fault detection device
 AS Auxiliary switch
 FC Fault signal contact
 AS+FC Auxiliary switch and fault signal contact

[See page 4/50](#)
[See page 4/54](#)
[See page 4/56](#)
[See page 4/58](#)

ST Shunt trips
 UR Undervoltage release
 RC mech. Remote controlled mechanism

[See page 4/59](#)
[See page 4/60](#)
[See page 4/61](#)

Instantaneous 230 V AC		Short-time delayed [G], Super resistant [K] 230 V AC	
2 MW		2 MW	
10 kA		10 kA	
Right		Right	
			
Characteristic B	C	Characteristic B	C
5SU1154-6KK06	5SU1154-7KK06	–	–
5SU1154-6KK10	5SU1154-7KK10	–	–
5SU1154-6KK13	5SU1154-7KK13	–	–
5SU1154-6KK16	5SU1154-7KK16	–	–
5SU1354-6KK06	5SU1354-7KK06	–	–
5SU1354-6GV06	5SU1354-7GV06	–	–
–	5SU1354-7KK08	–	–
5SU1354-6KK10	5SU1354-7KK10	5SU1354-6LB10	5SU1354-7LB10
5SU1354-6GV10	5SU1354-7GV10	–	–
5SU1354-6KK13	5SU1354-7KK13	5SU1354-6LB13	5SU1354-7LB13
5SU1354-6KK16	5SU1354-7KK16	5SU1354-6LB16	5SU1354-7LB16
5SU1354-6GV16	5SU1354-7GV16	–	–
5SU1354-6KK20	5SU1354-7KK20	5SU1354-6LB20	5SU1354-7LB20
5SU1354-6KK25	5SU1354-7KK25	5SU1354-6LB25	5SU1354-7LB25
5SU1354-6KK32	5SU1354-7KK32	5SU1354-6LB32	5SU1354-7LB32
5SU1354-6KK40	5SU1354-7KK40	5SU1354-6LB40	5SU1354-7LB40
5SU1654-6KK06	5SU1654-7KK06	–	–
5SU1654-6KK10	5SU1654-7KK10	–	–
5SU1654-6KK13	5SU1654-7KK13	–	–
5SU1654-6KK16	5SU1654-7KK16	–	–
5SU1654-6KK20	5SU1654-7KK20	–	–
5SU1654-6KK25	5SU1654-7KK25	–	–
5SU1654-6KK32	5SU1654-7KK32	–	–
5SU1654-6KK40	5SU1654-7KK40	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		Article No.
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
Power	177 ... 270 V AC	5ST3056
	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
Power with ARD	177 ... 270 V AC	5ST3058
	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Power with ext. function		5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units	I _n up to 16 A	5SM6021-2
	I _n up to 40 A	5SM6024-2

5SU1 RCBOs

Type F, 1P+N

Mounting width
Short-circuit breaking capacity
N connection

Super resistant [K]
230 V AC

2 MW

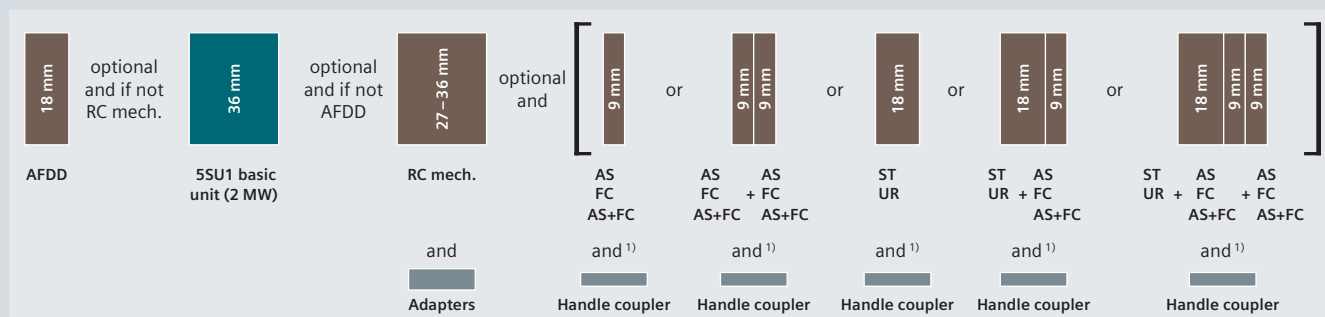
10 kA

Right



$I_{\Delta n}$	I_n	Characteristic	
		B	C
Type F			
30 mA	6 A	5SU1354-3KK06	5SU1354-4KK06
	10 A	5SU1354-3KK10	5SU1354-4KK10
	13 A	5SU1354-3KK13	5SU1354-4KK13
	16 A	5SU1354-3KK16	5SU1354-4KK16
	20 A	5SU1354-3KK20	5SU1354-4KK20
	25 A	5SU1354-3KK25	5SU1354-4KK25
	32 A	5SU1354-3KK32	5SU1354-4KK32
	40 A	5SU1354-3KK40	5SU1354-4KK40

Mounting concept



¹⁾ Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD Arc fault detection device [See page 4/50](#)
 AS Auxiliary switch [See page 4/54](#)
 FC Fault signal contact [See page 4/56](#)
 AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)

ST Shunt trips [See page 4/59](#)
 UR Undervoltage release [See page 4/60](#)
 RC mech. Remote controlled mechanism [See page 4/61](#)

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		Article No.
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units	I _n up to 16 A	5SM6021-2
	I _n up to 40 A	5SM6024-2

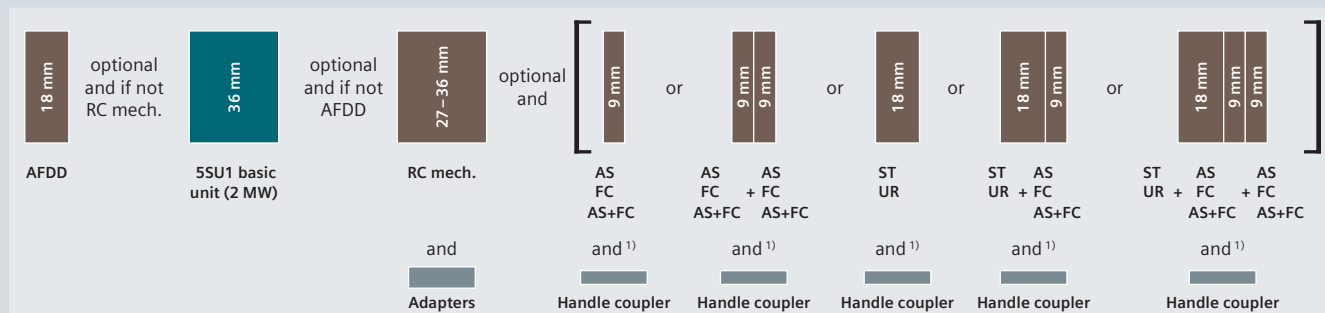
5SU1 RCBOs

Type AC, 1P+N

Mounting width Short-circuit breaking capacity N connection	Instantaneous 230 V AC		
	2 MW 4.5 kA Right	2 MW 4.5 kA Left	2 MW 6 kA Right
			

$I_{\Delta n}$	I_n	Bulk packaging (36 units)	Characteristic C	C	Characteristic B	C
Type AC						
30 mA	6 A	—	5SU1353-1KK06	5SU1353-1KL06	5SU1356-0KK06	5SU1356-1KK06
	8 A	—	5SU1353-1KK08	—	—	5SU1356-1KK08
	10 A	—	5SU1353-1KK10	5SU1353-1KL10	5SU1356-0KK10	5SU1356-1KK10
		■	5SU1353-1GV10	—	—	—
	13 A	—	5SU1353-1KK13	5SU1353-1KL13	5SU1356-0KK13	5SU1356-1KK13
	16 A	—	5SU1353-1KK16	5SU1353-1KL16	5SU1356-0KK16	5SU1356-1KK16
		■	5SU1353-1GV16	—	—	5SU1356-1GV16
	20 A	—	5SU1353-1KK20	5SU1353-1KL20	5SU1356-0KK20	5SU1356-1KK20
	25 A	—	5SU1353-1KK25	5SU1353-1KL25	5SU1356-0KK25	5SU1356-1KK25
	32 A	—	5SU1353-1KK32	5SU1353-1KL32	5SU1356-0KK32	5SU1356-1KK32
100 mA	40 A	—	5SU1353-1KK40	5SU1353-1KL40	5SU1356-0KK40	5SU1356-1KK40
	6 A	—	—	—	—	—
	10 A	—	—	—	—	—
	13 A	—	—	—	—	—
	16 A	—	—	—	—	—
	20 A	—	—	—	—	—
	25 A	—	—	—	—	—
	32 A	—	—	—	—	—
300 mA	40 A	—	—	—	—	—
	6 A	—	5SU1653-1KK06	5SU1653-1KL06	5SU1656-0KK06	5SU1656-1KK06
	10 A	—	5SU1653-1KK10	5SU1653-1KL10	5SU1656-0KK10	5SU1656-1KK10
	13 A	—	5SU1653-1KK13	5SU1653-1KL16	5SU1656-0KK13	5SU1656-1KK13
	16 A	—	5SU1653-1KK16	—	5SU1656-0KK16	5SU1656-1KK16
		■	5SU1653-1GV16	—	—	—
	20 A	—	5SU1653-1KK20	5SU1653-1KL20	5SU1656-0KK20	5SU1656-1KK20
	25 A	—	5SU1653-1KK25	5SU1653-1KL25	5SU1656-0KK25	5SU1656-1KK25
	32 A	—	5SU1653-1KK32	5SU1653-1KL32	5SU1656-0KK32	5SU1656-1KK32
	40 A	—	5SU1653-1KK40	5SU1653-1KL40	5SU1656-0KK40	5SU1656-1KK40

Mounting concept



¹⁾ Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.

AFDD Arc fault detection device [See page 4/50](#)
 AS Auxiliary switch [See page 4/54](#)
 FC Fault signal contact [See page 4/56](#)
 AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)

ST Shunt trips [See page 4/59](#)
 UR Undervoltage release [See page 4/60](#)
 RC mech. Remote controlled mechanism [See page 4/61](#)

Instantaneous 230 V AC		Short-time delayed [G], Super resistant [K] 230 V AC	
2 MW		2 MW	
10 kA		10 kA	
Right		Right	
			
Characteristic		Characteristic	
B	C	B	C
5SU1354-0KK06	5SU1354-1KK06	–	–
–	5SU1354-1KK08	–	–
5SU1354-0KK10	5SU1354-1KK10	5SU1354-0LB10	5SU1354-1LB10
–	–	–	–
5SU1354-0KK13	5SU1354-1KK13	5SU1354-0LB13	5SU1354-1LB13
5SU1354-0KK16	5SU1354-1KK16	5SU1354-0LB16	5SU1354-1LB16
–	–	–	–
5SU1354-0KK20	5SU1354-1KK20	5SU1354-0LB20	5SU1354-1LB20
5SU1354-0KK25	5SU1354-1KK25	5SU1354-0LB25	5SU1354-1LB25
5SU1354-0KK32	5SU1354-1KK32	5SU1354-0LB32	5SU1354-1LB32
5SU1354-0KK40	5SU1354-1KK40	5SU1354-0LB40	5SU1354-1LB40
–	5SU1454-1KK06	–	–
–	5SU1454-1KK10	–	–
–	5SU1454-1KK13	–	–
–	5SU1454-1KK16	–	–
–	5SU1454-1KK20	–	–
–	5SU1454-1KK25	–	–
–	5SU1454-1KK32	–	–
–	5SU1454-1KK40	–	–
5SU1654-0KK06	5SU1654-1KK06	–	–
5SU1654-0KK10	5SU1654-1KK10	–	–
5SU1654-0KK13	5SU1654-1KK13	–	–
5SU1654-0KK16	5SU1654-1KK16	–	–
–	–	–	–
5SU1654-0KK20	5SU1654-1KK20	–	–
5SU1654-0KK25	5SU1654-1KK25	–	–
5SU1654-0KK32	5SU1654-1KK32	–	–
5SU1654-0KK40	5SU1654-1KK40	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact +	Standard	5ST3010
1 NC contact	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		Article No.
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
	177 ... 270 V AC	5ST3055
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3056
	177 ... 270 V AC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3059
	177 ... 270 V AC	5ST3060
Power with ext. function		12 ... 30 V AC, 12 ... 48 V DC
Adapter for RC mechanism		Article No.
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units	I _n up to 16 A	5SM6021-2
	I _n up to 40 A	5SM6024-2

5SU1 RCBOs

Type A and AC, 2-pole

Mounting width
Short-circuit breaking capacity

Instantaneous
110 V AC

3 MW

10 kA



230 V AC

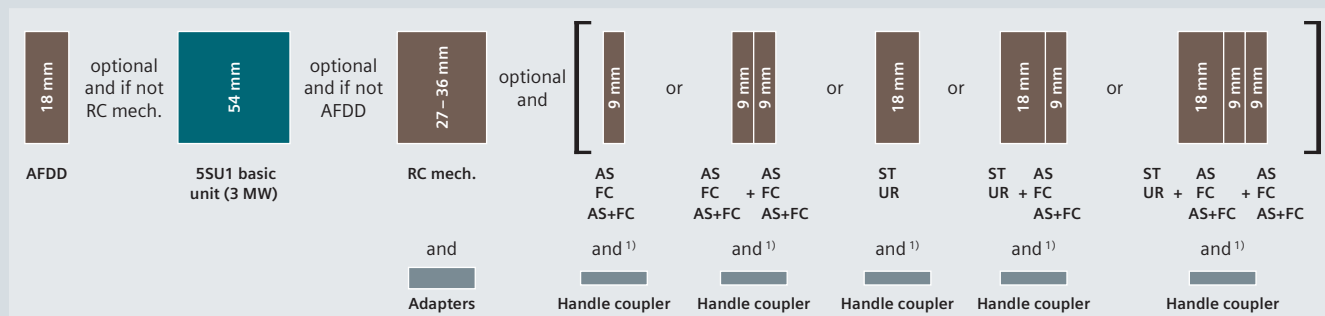
3 MW

10 kA

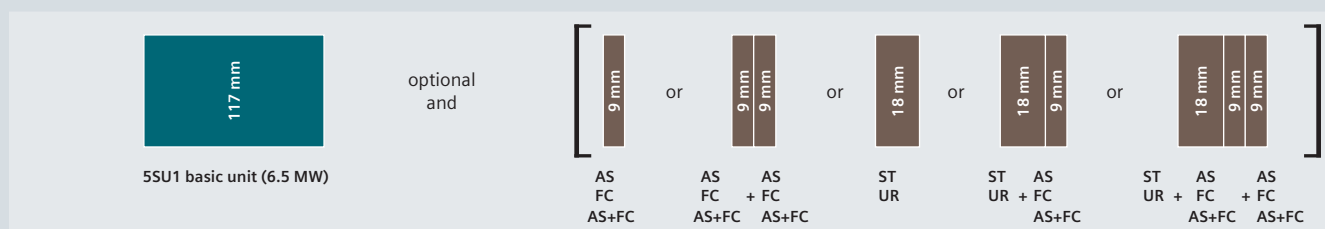


$I_{\Delta n}$	I_n	Characteristic		Characteristic
		B	C	B
Type A				
30 mA	6 A	5SU1324-6KX06	5SU1324-7KX06	5SU1324-6FA06
	10 A	5SU1324-6KX10	5SU1324-7KX10	5SU1324-6FA10
	13 A	5SU1324-6KX13	5SU1324-7KX13	5SU1324-6FA13
	16 A	5SU1324-6KX16	5SU1324-7KX16	5SU1324-6FA16
	20 A	5SU1324-6KX20	5SU1324-7KX20	5SU1324-6FA20
	25 A	5SU1324-6KX25	5SU1324-7KX25	5SU1324-6FA25
	32 A	5SU1324-6KX32	5SU1324-7KX32	5SU1324-6FA32
	40 A	5SU1324-6KX40	5SU1324-7KX40	5SU1324-6FA40
	125 A	—	—	—
300 mA	125 A	—	—	—
Type AC				
30 mA	125 A	—	—	—
300 mA	125 A	—	—	—

Mounting concept



¹⁾ Handle couplers are required for direct attachment of the components to the 5SU1. No handle coupler is required for attaching the components to the RC mech.



AFDD Arc fault detection device

See page 4/50

AS+FC Auxiliary switch and

See page 4/58

UR Undervoltage release

See page 4/60

AS Auxiliary switch

See page 4/54

FC Fault signal contact

See page 4/59

RC mech. Remote controlled mechanism

See page 4/61

ST Shunt trips

		Selective [S] 230 V AC		
6.5 MW 10 kA		6.5 MW 10 kA		
				
C	Characteristic B	C	Characteristic B	C
5SU1324-7FA06	–	–	–	–
5SU1324-7FA10	–	–	–	–
5SU1324-7FA13	–	–	–	–
5SU1324-7FA16	–	–	–	–
5SU1324-7FA20	–	–	–	–
5SU1324-7FA25	–	–	–	–
5SU1324-7FA32	–	–	–	–
5SU1324-7FA40	–	–	–	–
–	5SU1324-6KK82	5SU1324-7KK82	–	–
–	5SU1624-6KK82	5SU1624-7KK82	5SU1624-6WK82	5SU1624-7WK82
–	5SU1324-0KK82	5SU1324-1KK82	–	–
–	5SU1624-0KK82	5SU1624-1KK82	–	–

4

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01

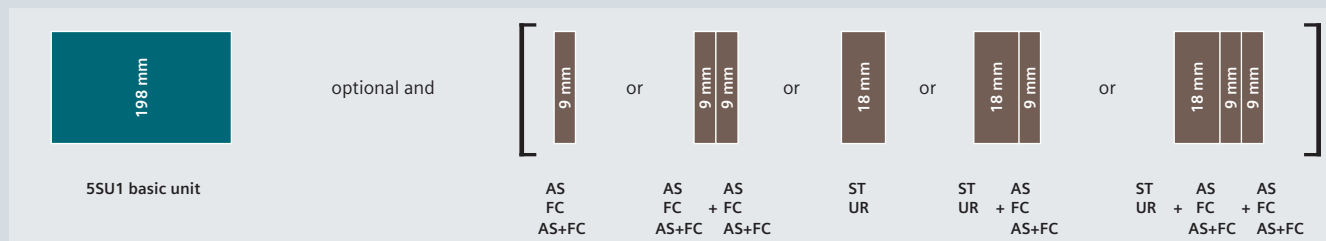
Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045
Handle couplers for AS, FC, AS+FC, ST and UR		Article No.
1 set = 5 units		5ST3805-1
Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
Power	177 ... 270 V AC	5ST3056
	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with ext. function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
2 MW		5ST3820-5
Arc fault detection devices (AFDD)		Article No.
For 5SU1 basic units (3 MW)	I _n up to 16 A	5SM6021-2
	I _n up to 40 A	5SM6024-2

5SU1 RCBOs

Type A and AC, 4-pole

		Instantaneous 400 V AC		Selective [S] 400 V AC	
Mounting width		11 MW		11 MW	
Short-circuit breaking capacity		10 kA		10 kA	
					
I_n	Characteristic		Characteristic		
	B	C	B	C	
125 A	5SU1344-6KK82	5SU1344-7KK82	–	–	
125 A	5SU1644-6KK82	5SU1644-7KK82	5SU1644-6WK82	5SU1644-7WK82	
125 A	–	–	5SU1844-6WK82	5SU1844-7WK82	
125 A	5SU1344-0KK82	5SU1344-1KK82	–	–	
125 A	5SU1644-0KK82	5SU1644-1KK82	–	–	

Mounting concept



AS Auxiliary switch
FC Fault signal contact
AS+FC Auxiliary switch and fault signal contact

[See page 4/54](#)
[See page 4/56](#)
[See page 4/58](#)

ST Shunt trips
UR Undervoltage release

[See page 4/59](#)
[See page 4/60](#)

Type B and B+, 4-pole

Mounting width Short-circuit breaking capacity		Super resistant [K]		480 V AC		Selective [S]	
		400 V AC				400 V AC	
		11 MW 10 kA		11 MW 10 kA		11 MW 10 kA	
							
$I_{\Delta n}$	I_n	Characteristic		Characteristic		Characteristic	
		C	D	C		C	D
Type B							
30 mA	100 A	5SU1374-7AK81	5SU1374-8AK81	–		–	–
	125 A	5SU1374-7AK82	–	–		–	–
300 mA	100 A	5SU1674-7AK81	5SU1674-8AK81	5SU1674-7CK81		–	5SU1674-8BK81
	125 A	5SU1674-7AK82	–	5SU1674-7CK82		5SU1674-7BK82	–
Type B+							
30 mA	100 A	5SU1374-7DK81	5SU1374-8DK81	–		–	–
	125 A	5SU1374-7DK82	–	–		–	–
300 mA	100 A	5SU1674-7DK81	5SU1674-8DK81	5SU1674-7FK81		–	5SU1674-8EK81
	125 A	5SU1674-7DK82	–	5SU1674-7FK82		5SU1674-7EK82	–

4

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022

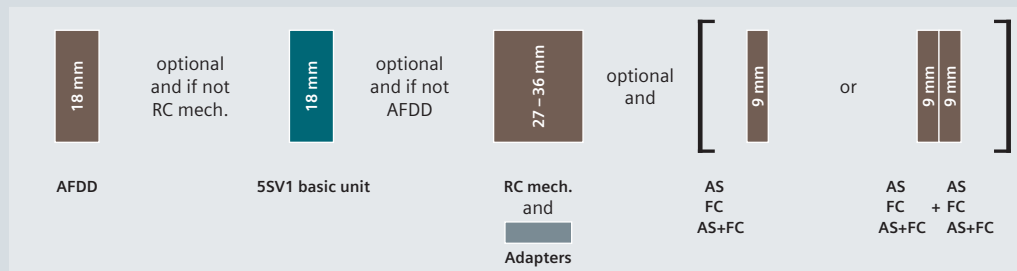
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062
Shunt trips (ST)		Article No.
110 ... 415 V AC, 110 ... 220 V DC		5ST3030
24 ... 48 V AC/DC		5ST3031
12 V DC		5ST3031-0XX01
Undervoltage releases (UR)		Article No.
With integrated auxiliary switch	230 V AC	5ST3040
	110 V DC	5ST3041
	24 V DC	5ST3042
Without integrated auxiliary switch	230 V AC	5ST3043
	110 V DC	5ST3044
	24 V DC	5ST3045

5SV1 RCBOs

Type A, 1P+N

			Instantaneous				Short-time delayed [G], Super resistant [K] new	
			230 V AC				230 V AC	
Mounting width			1 MW		1 MW		1 MW	
Short-circuit breaking capacity			4.5 kA		6 kA		6 kA	
N connection			Right		Right		Right	
								
$I_{\Delta n}$	I_n	Bulk packaging (12 units)	Characteristic		Characteristic		Characteristic	
Type A			B	C	B	C	B	C
30 mA	2 A	—	—	5SV1313-7KK02	—	5SV1316-7KK02	—	—
	4 A	—	—	5SV1313-7KK04	—	5SV1316-7KK04	—	—
	6 A	—	5SV1313-6KK06	5SV1313-7KK06	5SV1316-6KK06	5SV1316-7KK06	5SV1316-6LK06	5SV1316-7LK06
		■	—	—	5SV1316-6GV06	5SV1316-7GV06	—	—
	10 A	—	5SV1313-6KK10	5SV1313-7KK10	5SV1316-6KK10	5SV1316-7KK10	5SV1316-6LK10	5SV1316-7LK10
		■	—	—	5SV1316-6GV10	5SV1316-7GV10	—	—
	13 A	—	5SV1313-6KK13	5SV1313-7KK13	5SV1316-6KK13	5SV1316-7KK13	5SV1316-6LK13	5SV1316-7LK13
		■	—	—	5SV1316-6GV13	5SV1316-7GV13	—	—
300 mA new	16 A	—	5SV1313-6KK16	5SV1313-7KK16	5SV1316-6KK16	5SV1316-7KK16	5SV1316-6LK16	5SV1316-7LK16
		■	—	—	5SV1316-6GV16	5SV1316-7GV16	—	—
	2 A	—	—	5SV1613-7KK02	—	5SV1616-7KK02	—	—
	4 A	—	—	5SV1613-7KK04	—	5SV1616-7KK04	—	—
	6 A	—	5SV1613-6KK06	5SV1613-7KK06	5SV1616-6KK06	5SV1616-7KK06	—	—
	10 A	—	5SV1613-6KK10	5SV1613-7KK10	5SV1616-6KK10	5SV1616-7KK10	—	—
	13 A	—	5SV1613-6KK13	5SV1613-7KK13	5SV1616-6KK13	5SV1616-7KK13	—	—
	16 A	—	5SV1613-6KK16	5SV1613-7KK16	5SV1616-6KK16	5SV1616-7KK16	—	—

Mounting concept



AFDD Arc fault detection device [See page 4/50](#)
 AS Auxiliary switch [See page 4/54](#)
 FC Fault signal contact [See page 4/56](#)

AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)
 RC mech. Remote controlled mechanism [See page 4/61](#)

Type F and AC, 1P+N

			Instantaneous 230 V AC			Super resistant [K] new 230 V AC	
Mounting width			1 MW	1 MW		1 MW	
Short-circuit breaking capacity			4.5 kA	6 kA		6 kA	
N connection			Right	Right		Right	
							
$I_{\Delta n}$	I_n	Bulk packaging (12 units)	Characteristic C	Characteristic B	Characteristic C	Characteristic B	Characteristic C
Type F							
30 mA	6 A		–	–	–	5SV1316-3KK06	5SV1316-4KK06
	10 A		–	–	–	5SV1316-3KK10	5SV1316-4KK10
	13 A		–	–	–	5SV1316-3KK13	5SV1316-4KK13
	16 A		–	–	–	5SV1316-3KK16	5SV1316-4KK16
Type AC							
30 mA	2 A	–	5SV1313-1KK02	–	5SV1316-1KK02	–	–
	4 A	–	5SV1313-1KK04	–	5SV1316-1KK04	–	–
	6 A	–	5SV1313-1KK06	5SV1316-0KK06	5SV1316-1KK06	–	–
	10 A	–	5SV1313-1KK10	5SV1316-0KK10	5SV1316-1KK10	–	–
		■	5SV1313-1GV10	–	5SV1316-1GV10	–	–
	13 A	–	5SV1313-1KK13	5SV1316-0KK13	5SV1316-1KK13	–	–
	16 A	–	5SV1313-1KK16	5SV1316-0KK16	5SV1316-1KK16	–	–
		■	5SV1313-1GV16	–	5SV1316-1GV16	–	–
300 mA new	2 A	–	5SV1613-1KK02	–	5SV1616-1KK02	–	–
	4 A	–	5SV1613-1KK04	–	5SV1616-1KK04	–	–
	6 A	–	5SV1613-1KK06	5SV1616-0KK06	5SV1616-1KK06	–	–
	10 A	–	5SV1613-1KK10	5SV1616-0KK10	5SV1616-1KK10	–	–
	13 A	–	5SV1613-1KK13	5SV1616-0KK13	5SV1616-1KK13	–	–
	16 A	–	5SV1613-1KK16	5SV1616-0KK16	5SV1616-1KK16	–	–

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

Remote controlled (RC) mechanisms		Article No.
Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053
	177 ... 270 V AC	5ST3054
Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055
	177 ... 270 V AC	5ST3056
Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057
	177 ... 270 V AC	5ST3058
Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070
Adapter for RC mechanism		Article No.
1 MW		5ST3820-6
Arc fault detection devices (AFDD)		Article No.
For 5SV1 basic units	I_n up to 16 A	5SM6011-2

5SM6 arc fault detection devices

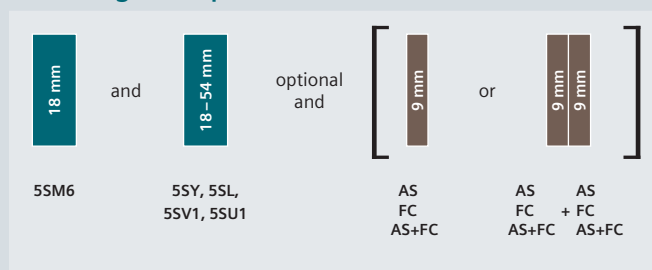
For combination with an MCB or RCBO



For combination with basic units			Rated current I_n	
Width of basic unit	Miniature circuit breakers	RCBO		
1 MW	5SL60 (no KL types)	5SV1	Up to 16 A	5SM6011-2
			Up to 40 A	5SM6014-2
2 MW	5SY ¹⁾ , 5SL4 (only 1+N devices)	5SU1 (2 MW, 3 MW)	Up to 16 A	5SM6021-2
			Up to 40 A	5SM6024-2

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



AS Auxiliary switch [See page 4/54](#)
 FC Fault signal contact [See page 4/56](#)
 AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)

The mounting concept shown is only one example of how devices and accessories can be combined.

Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

See suitable busbars, [page 4/64 onwards](#)

See suitable terminals and end caps, [page 4/64 onwards](#)

5SV6 arc fault detection devices

With integrated miniature circuit breaker

Mounting width

1 MW



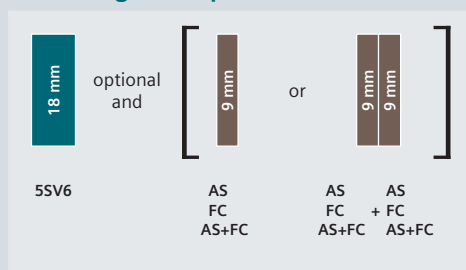
1 MW pigtail



Rated current I _n	Bulk packaging (12 units)	Characteristic		Characteristic	
		B	C	B	C
6 A	–	5SV6016-6KK06	5SV6016-7KK06	5SV6016-6KP06 new	5SV6016-7KP06 new
	■	5SV6016-6GV06	5SV6016-7GV06	–	–
10 A	–	5SV6016-6KK10	5SV6016-7KK10	5SV6016-6KP10 new	5SV6016-7KP10 new
	■	5SV6016-6GV10	5SV6016-7GV10	–	–
13 A	–	5SV6016-6KK13	5SV6016-7KK13	5SV6016-6KP13 new	5SV6016-7KP13 new
	■	5SV6016-6GV13	–	–	–
16 A	–	5SV6016-6KK16	5SV6016-7KK16	5SV6016-6KP16 new	5SV6016-7KP16 new
	■	5SV6016-6GV16	5SV6016-7GV16	–	–
20 A	–	5SV6016-6KK20	5SV6016-7KK20	5SV6016-6KP20 new	5SV6016-7KP20 new
25 A	–	5SV6016-6KK25	5SV6016-7KK25	5SV6016-6KP25 new	5SV6016-7KP25 new
	■	5SV6016-6GV25	–	–	–
32 A	–	5SV6016-6KK32	5SV6016-7KK32	5SV6016-6KP32 new	5SV6016-7KP32 new
40 A	–	5SV6016-6KK40	5SV6016-7KK40	5SV6016-6KP40 new	5SV6016-7KP40 new

4

Mounting concept



AS Auxiliary switch [See page 4/54](#)
FC Fault signal contact [See page 4/56](#)
AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)

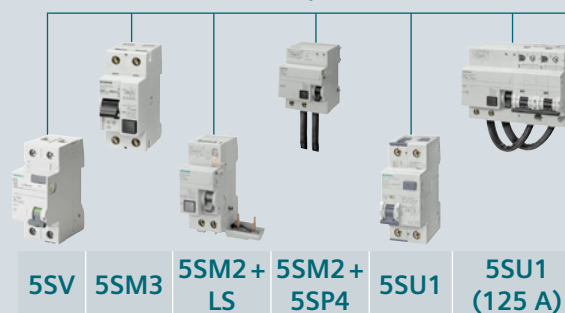
Accessories

Auxiliary switches (AS)		Article No.
1 NO contact + 1 NC contact	Standard	5ST3010
	For low power	5ST3013
	For low power (with diode)	5ST3013-0XX01
2 NO contacts	Standard	5ST3011
	For low power	5ST3014
2 NC contacts	Standard	5ST3012
	For low power	5ST3015
1 CO contact	Standard	5ST3016
Fault signal contacts (FC)		Article No.
1 NO contact + 1 NC contact		5ST3020
2 NO contacts		5ST3021
2 NC contacts		5ST3022
Auxiliary switches and fault signal contacts (AS+FC)		Article No.
1 CO contact (AS) + 1 CO contact (FC)		5ST3062

See suitable busbars, [page 4/64 onwards](#)
See suitable terminals and end caps, [page 4/64 onwards](#)

Overview of modular system

Residual current protective devices



4

5SM6 arc fault detection devices			Article No.						
	Rated current up to 16 A	Standard	5SM6021-2	–	–	–	–	■	–
		For compact devices 1P+N in 1 MW	5SM6011-2	–	–	–	–	–	–
	Rated current up to 40 A	Standard	5SM6024-2	–	–	–	–	■	–
		For compact devices 1P+N in 1 MW	5SM6014-2	–	–	–	–	–	–
Auxiliary switches (AS)			Article No.						
	1 NO contact + 1 NC contact	Standard	5ST3010	■	–	■	■	■	■
		For low power	5ST3013	■	–	■	■	■	■
		For low power (with diode)	5ST3013-0XX01	■	–	■	■	■	■
	2 NO contacts	Standard	5ST3011	■	–	■	■	■	■
		For low power	5ST3014	■	–	■	■	■	■
	2 NC contacts	Standard	5ST3012	■	–	■	■	■	■
		For low power	5ST3015	■	–	■	■	■	■
	1 CO contact	Standard	5ST3016	■	–	■	■	■	■
Fault signal contacts (FC)			Article No.						
	1 NO contact + 1 NC contact		5ST3020	■	–	■	■	■	■
	2 NO contacts		5ST3021	■	–	■	■	■	■
	2 NC contacts		5ST3022	■	–	■	■	■	■
Auxiliary switches and fault signal contacts (AS+FC)			Article No.						
	1 CO contact (AS) + 1 CO contact (FC)	Standard	5ST3062	■	–	■	■	■	■
Shunt trips (ST)			Article No.						
	110 ... 415 V AC, 110 ... 220 V DC		5ST3030	■	–	■	■	■	■
	24 ... 48 V AC/DC		5ST3031	■	–	■	■	■	■
	12 V DC		5ST3031-0XX01	■	–	■	■	■	■
Undervoltage releases (UR)			Article No.						
	With integrated auxiliary switch	230 V AC	5ST3040	■	–	■	■	■	■
		110 V DC	5ST3041	■	–	■	■	■	■
		24 V DC	5ST3042	■	–	■	■	■	■
	Without integrated auxiliary switch	230 V AC	5ST3043	■	–	■	■	■	■
		110 V DC	5ST3044	■	–	■	■	■	■
		24 V DC	5ST3045	■	–	■	■	■	■
Remote controlled (RC) mechanisms			Article No.						
	Basic	12 ... 30 V AC, 12 ... 48 V DC	5ST3053	–	–	–	–	■	–
		177 ... 270 V AC	5ST3054	–	–	–	–	■	–
	Power	12 ... 30 V AC, 12 ... 48 V DC	5ST3055	■	–	■	–	■	–
		177 ... 270 V AC	5ST3056	■	–	■	–	■	–
	Power with ARD	12 ... 30 V AC, 12 ... 48 V DC	5ST3057	■	–	■	–	■	–
		177 ... 270 V AC	5ST3058	■	–	■	–	■	–
	Power with extended function	12 ... 30 V AC, 12 ... 48 V DC	5ST3070	■	–	■	–	■	–
Standard busbars			Article No.						
	Cannot be cut		5ST36..	■	–	■	■	■	■
	Can be cut		5ST37..	■	–	■	■	■	■
Compact busbars			Article No.						
	Cannot be cut		5ST36..	■	–	–	–	–	–
	Can be cut		5ST37..	■	–	–	–	–	–

from page 4/18

■ Suitable for all versions

□ Suitable for some versions

Switching devices

from page 5/6

Electrical accessories

Auxiliary switches (AS)



- Signals contact point of the mounted device
- Version for the switching of small currents and voltages for the control of programmable control systems (PLCs) according to EN 61131-2
- Test button enables the testing of control circuits without the need to switch the mounted device

For combination with basic units						Contacts	Version	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBOs	Arc fault detection devices	ON/OFF switches				
Auxiliary switches (AS)									
–	–	5SM3 (3P+N, 100/125 A)	–	–	–	1 NO contact + 1 NC contact	Standard	0.5 MW	5SW3330
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	5TL1, 5TE8	1 NO contact + 1 NC contact	Standard	0.5 MW	5ST3010
							For low power	0.5 MW	5ST3013
							For low power (with diode)	0.5 MW	5ST3013-0XX01
						2 NO contacts	Standard	0.5 MW	5ST3011
							For low power	0.5 MW	5ST3014
						2 NC contacts	Standard	0.5 MW	5ST3012
							For low power	0.5 MW	5ST3015
						1 CO contact	Standard	0.5 MW	5ST3016
Auxiliary switches (AS) with TEST button									
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	5TL1, 5TE8	1 NO contact + 1 NC contact	Standard	0.5 MW	5ST3010-2
							For low power	0.5 MW	5ST3013-2
						2 NO contacts	Standard	0.5 MW	5ST3011-2
							For low power	0.5 MW	5ST3014-2
						2 NC contacts	Standard	0.5 MW	5ST3012-2
							For low power	0.5 MW	5ST3015-2

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

Further technical specifications		5ST3010, 5ST3010-2, 5ST3011, 5ST3011-2, 5ST3012, 5ST3012-2, 5ST3016	5ST3013, 5ST3014, 5ST3015, 5ST3013-0XX01	5ST3013-2 5ST3014-2 5ST3015-2
Standards				
Standards		IEC/EN	IEC/EN 62019, IEC/EN 60947-5-1	
		UL, CSA	UL 1077, CSA C22.2 No. 235	
Contacts				
Minimum contact load		50 mA, 24 V	1 mA, 5 V DC	5 mA, 5 V DC
Maximum contact load		–	100 mA, 30 V DC	30 mA, 30 V DC
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13	6 A	–	
	400 V AC, AC-14	2 A	–	
	24 V DC, DC-13	6 A	–	
	60 V DC, DC-13	3 A	–	
	110 V DC, DC-13	1 A	–	
	220 V DC, DC-13	1 A	–	
Service life, on average, with rated load		20 000 actuations		
Safety				
Short-circuit protection		Miniature circuit breakers or gG 6 A fuse		
Connections				
Conductor cross-sections		0.5 ... 2.5 mm² (AWG 22 ... 14)		
Terminals	Max. tightening torque	0.5 Nm [4.5 lb-in]		
Environmental conditions				
Permissible ambient temperature		–25 ... +55 °C		
Permissible storage temperature		–40 ... +75 °C		
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles		
Mounting position		Any		
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s²		
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s²		

Electrical accessories

Fault signal contacts (FC)



- Signals the automatic tripping of the protective device in the event of a fault, such as an overload or a short circuit
- If the fault signal contact is activated, the contact position does not change if the in-built protective device is tripped manually
- Version with TEST and RESET buttons enables the testing of control circuits without the need to trip the protective device
- Red RESET button in the operating handle indicates automatic shutdown of the mounted protective device

For combination with basic units					Contacts	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBO	Arc fault detection devices			
Fault signal contacts (FC)							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 NO contact + 1 NC contact	0.5 MW	5ST3020
					2 NO contacts	0.5 MW	5ST3021
					2 NC contacts	0.5 MW	5ST3022
Fault signal contacts (FC) with Test and Reset buttons							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 NO contact + 1 NC contact	0.5 MW	5ST3020-2
					2 NO contacts	0.5 MW	5ST3021-2
					2 NC contacts	0.5 MW	5ST3022-2

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST3020, 5ST3020-2
5ST3021, 5ST3021-2
5ST3022, 5ST3022-2

Standards		
Standards	IEC/EN UL, CSA	IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235
Contacts		
Minimum contact load		50 mA, 24 V
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13 400 V AC, AC-14 24 V DC, DC-13 60 V DC, DC-13 110 V DC, DC-13 220 V DC, DC-13	6 A 2 A 6 A 3 A 1 A 1 A
Service life, on average, with rated load		20 000 actuations
Safety		
Short-circuit protection		Miniature circuit breakers or gG 6 A fuse
Connections		
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.5 Nm [4.5 lb-in]
Environmental conditions		
Permissible ambient temperature		-25 ... +55 °C
Permissible storage temperature		-40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²

Electrical accessories

Auxiliary switches and fault signal contacts (AS+FC)



- Combine the properties of both switches in a width of only 0.5 MW (9 mm)
- Signal contact point of the mounted device
- Signal the automatic tripping of the protective device in the event of a fault, such as an overload, short circuit or residual current
- If the fault signal contact is activated, the contact position does not change if the in-built protective device is tripped manually

For combination with basic units					Contacts	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	Device protection switches	RCCBs	RCBO	Arc fault detection devices			
Auxiliary switches and fault signal contacts (AS+FC)							
5SL, 5SY, 5SP4	5SY17	5SV	5SU1 ¹⁾ , 5SV1	5SV6	1 CO contact (AS) + 1 CO contact (FC)	0.5 MW	5ST3062

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST3062

Standards		
Standards	IEC/EN UL, CSA	IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235
Contacts		
Minimum contact load		50 mA, 24 V
Maximum contact load		–
Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1	230 V AC, AC-13 400 V AC, AC-14	6 A 2 A
Contact load according to IEC/EN 62019 (acc. to IEC/EN 60947-5-1)	24 V DC, DC-13 60 V DC, DC-13 110 V DC, DC-13 220 V DC, DC-13	3 A (3 A) 3 A (1 A) 0.5 A (0.5 A) 0.5 A (0.3 A)
Service life, on average, with rated load		20 000 actuations
Safety		
Short-circuit protection		Miniature circuit breakers or gG 6 A fuse
Connections		
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.5 Nm [4.5 lb-in]
Environmental conditions		
Permissible ambient temperature		–25 ... +55 °C
Permissible storage temperature		–40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²



Shunt trips (ST)

- For remote-controlled tripping of the mounted device

For combination with basic units			Rated voltage U_n	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	RCCBs	RCBO			
Shunt trips (ST)					
5SL4, 5SY, 5SP4	5SV	5SU1 ¹⁾	110 ... 415 V AC, 110 ... 220 V DC	1 MW	5ST3030
			AC/24 ... 48 V DC	1 MW	5ST3031
			12 V DC new	1 MW	5ST3031-0XX01

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

Further technical specifications		5ST3030	5ST3031	5ST3031-0XX01
Standards				
Standards	IEC/EN	EN 60947-1		
Supply				
Primary operating range		0.7 ... 1.1 × U _n		
Rated frequency f _n		50 ... 60 Hz		–
Contacts				
Minimum contact load		50 mA, 24 V		1 mA, 5 V
Tripping operations		Max. 2000		
Service life, on average, with rated load		Actuations	20000	
Safety				
Short-circuit protection		Miniature circuit breakers B/C 6 A or fuse gG 6 A		
Connections				
Conductor cross-sections		0.5 ... 2.5 mm² (AWG 22 ... 14)		
Terminals	Max. tightening torque	0.8 Nm [6.8 lb-in]		
Environmental conditions				
Permissible ambient temperature		–25 ... +55 °C		–40 ... +70 °C
Permissible storage temperature		–40 ... +75 °C		
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles		
Mounting position		Any		
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s²		
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s²		

Electrical accessories

Undervoltage releases (UR)



- Integrated, for example, in EMERGENCY-OFF loops
- Ensure that the mounted device trips in the event of an emergency, guaranteeing disconnection of the control circuit according to EN 60204.
- Trip the mounted device if the voltage is interrupted or too low, i.e. prevents activation of the mounted device

For combination with basic units			Rated voltage U _n	Width (1 MW = 18 mm)	Article No.
Miniature circuit breakers	RCCBs	RCBO			
With integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 ¹⁾	230 V AC	1 MW	5ST3040
			110 V DC	1 MW	5ST3041
			24 V DC	1 MW	5ST3042
Without integrated auxiliary switch					
5SL4, 5SY, 5SP4	5SV	5SU1 ¹⁾	230 V AC	1 MW	5ST3043
			110 V DC	1 MW	5ST3044
			24 V DC	1 MW	5ST3045

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST304.

Standards		
Standards	IEC/EN	EN 60947-1
Supply		
Primary operating range		0.85 ... 1.1 × U_n
Rated frequency f_n		50/60 Hz
Contacts		
Minimum contact load		50 mA, 24 V
Tripping operations		Max. 2000
Service life, on average, with rated load	Actuations	20000
Safety		
Short-circuit protection		Miniature circuit breakers B/C 6 A or fuse gG 6 A
Connections		
Conductor cross-sections		0.5 ... 2.5 mm ² (AWG 22 ... 14)
Terminals	Max. tightening torque	0.8 Nm [6.8 lb-in]
Environmental conditions		
Permissible ambient temperature		−25 ... +55 °C
Permissible storage temperature		−40 ... +75 °C
Resistance to climate	Acc. to IEC 60068-2-30	28 cycles
Mounting position		Any
Shock at 11 ms half-sine	Acc. to IEC 60068-2-27	50 m/s ²
Vibration resistance at 10 ... 150 Hz	Acc. to IEC 60068-2-6	50 m/s ²



5ST3 remote controlled (RC) mechanisms

- For operating facilities that are extensive or not continuously staffed
- Allow direct and immediate access to the plant even if it is remote or in a location that is hard to reach
- Permit fast restarts following a fault
- Version with ARD with automatic restart
- Versions with ARD and Power with integrated auxiliary switches and fault signal contacts

Remote controlled type	Display	Ambient temperature	Vibration and shock requirements	Rated voltage U_n	Width (1 MW = 18 mm)	Article No.
Basic	–	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	1.5 MW	5ST3053
				177 ... 270 V AC	2 MW	5ST3054
Power	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3055
				177 ... 270 V AC	2 MW	5ST3056
Power with ARD	LED	–25 °C ... +45 °C	–	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3057
				177 ... 270 V AC	2 MW	5ST3058
Power with extended function	LED	–40 °C ... +70 °C	Acc. to EN 61373 / EN 50155 "1B"	12 ... 30 V AC, 12 ... 48 V DC	2 MW	5ST3070

Further technical specifications		5ST3053	5ST3054	5ST3055	5ST3056	5ST3057	5ST3058	5ST3070
Standards								
Standards		EN 50557 (VDE 0640-20)						
Supply								
Rated frequency f _n		50 ... 60 Hz						
Rated power dissipation on standby		≤1 VA						
Contacts								
Service life, on average, with rated load		Actuations	10000					
Number of remote switching operations per minute		2						
Number of automatic reclose attempts		–				3	–	
Cable length in the control circuit		≤1500 m						
Sliding selector with locking device		–	■					
Integrated auxiliary switches		–		1CO; 2 A; 250 V				
Integrated fault signal contacts		–		1CO; 2 A; 250 V				
Connections								
Conductor cross-sections		0.5 ... 1.5 mm² (AWG 14 ... 30)						
Terminal tightening torque		0.2 ... 0.25 Nm (2.0 lb-in)						
Environmental conditions								
Permissible storage temperature		–40 ... +55 °C						–40 ... +70 °C
Degree of protection		IP20						
Pollution degree for overvoltage category		3/II						

Suitable adapters for combination with basic units



Basic units	Mounting width							Adapters
	1 MW	2 MW	3 MW	4 MW	2-pole	3-pole	4-pole	
5SU1	–	■	■	–	–	–	–	5ST3820-5
5SV1	■	–	–	–	–	–	–	5ST3820-6
5SV3	–	■	–	■	–	–	–	5ST3820-6
5SM2 with 5SY	–	–	–	–	■	–	–	5ST3820-3 + 5ST3820-1
	–	–	–	–	–	■	■	5ST3820-3 + 5ST3820-2
5SM2 with 5SL	–	–	–	–	■	–	–	5ST3820-3 + 5ST3820-6
	–	–	–	–	–	■	■	5ST3820-3 + 5ST3820-7

Mechanical accessories

Handle couplers for additional components



- Necessary for mounting the additional components auxiliary switches, fault signal contacts, shunt trips and undervoltage releases onto the 5SU1 RCBO
- 1 set = 5 units

Article No.

5ST3805-1

Handle locking devices

- To prevent undesired mechanical ON/OFF switching
- Sealable and lockable
- For padlock with 3 ... 6 mm shackle



Version

For 5SV RCCBs, 5SV1 RCBOs, 5SV6 arc fault detection devices

Article No.

5ST3806

For 5SU1 RCBOs

5ST3801-1



Locking device

- For 5SV RCCBs, 5SV1 RCBOs, 5SV6 arc fault detection devices

Comprising:

5ST3806 handle locking device and 5ST3802 padlock

Article No.

5ST3807

Padlock

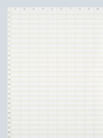


- For 5ST3801 and 5ST3806 handle locking devices and remote operating mechanisms 5ST3054 ... 58, 5ST3070

Article No.

5ST3802

Device labels



- For adhesive attachment
- For modular installation devices, such as 5SY, 5SL, 5TL1

Versions

15 mm x 6 mm, white (WIN 098)

Article No.

8WH8210-0AA35

15 mm x 6 mm, yellow (WIN 099)

8WH8210-0AA36

Covers for connection terminals



- For 5SV3 and 5SV4 residual current operated circuit breakers, sealable (2 units in plastic bag)

Mounting width

2 MW

Article No.

5SW3010

4 MW

5SW3008

Terminal covers, gray



- For surface mounting, IP40 degree of protection
- Sealable
- Can be used with 35 mm DIN rail

For width up to

2.5 MW

Article No.

5SW3004

4.5 MW

5SW3005

Wall enclosures, gray



- For flush mounting, IP40 degree of protection
- Can be used with 35 mm DIN rail

For width up to

2.5 MW

Article No.

5SW3006

4.5 MW

5SW3007

RCCB protective socket outlets

Acc. to VDE 0664

Covers		
	• Can be assembled as mini-distribution board • Suitable for all devices • Cover parts prepared for rail mounting of conventional label caps	
	Comprising:	Article No.
	End plates	5ST2134
	Angled profile	5ST2135
	Flat profile as alternative	5ST2136

RCCB protective socket outlets in molded-plastic enclosures			
	• Equipped with RCCB and flush-mounted SCHUKO® socket outlet • IP54 degree of protection		
	Rated residual current $I_{\Delta n}$	Rated current I_n	Article No.
	10 mA	16 A	5SZ9206
	30 mA	16 A	5SZ9216

Standard busbars

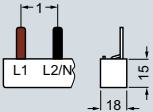
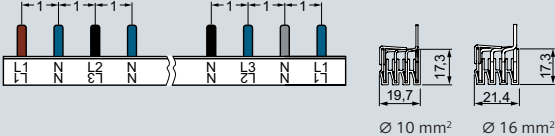
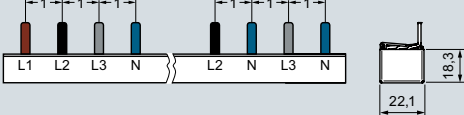
5ST36, fixed lengths, cannot be cut



Pin spacings in MW (1 MW = 18 mm)		Application	Number of MWs	Length	Conductor cross-section	
					10 mm ²	16 mm ²
Two-phase / single-phase + N					Article No.	Article No.
Ø 10 mm² Ø 16 mm²		For 6× 2MW devices (2P)	12 MW	210 mm	5ST3608	5ST3638
Three-phase, for MCBs with RCCB					Article No.	Article No.
Ø 10 mm² Ø 16 mm²		For 8 MCBs 1P with 1 RCCB 3P+N, N right	12 MW	210 mm	5ST3624	5ST3654
Ø 10 mm² Ø 16 mm²		For 8 MCBs 1P with 1 RCCB 3P+N, N left	11 MW	192 mm	5ST3667	5ST3668
Four-phase / three-phase + N					Article No.	Article No.
Ø 10 mm² Ø 16 mm²		For 6× 2MW devices (1P+N)	12 MW	215 mm	5ST3623	5ST3653



5ST37, schneidbar

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section	
					10 mm ²	16 mm ²
Two-phase / single-phase + N					Article No.	Article No.
	For 2 MW units (2P / 1+N)	12 MW	214 mm	■	5ST3734	5ST3704
		56 MW	1016 mm	—	5ST3735	5ST3705
Four-phase / three-phase + N, for MCBs with RCCB					Article No.	Article No.
	For MCBs 2P with 1 RCCB 1P+N	56 MW	1000 mm	—	5ST3770-2	5ST3770-3
	For 6 MCBs 1P+N with 1 RCCB 4P+N right	16 MW	292 mm	■	5ST3770-4	5ST3770-5

4

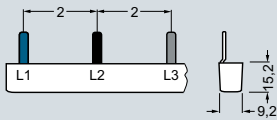
Accessories for busbars 5ST36 and 5ST37

End caps for 5ST37		
	Version	Article No.
	For two-phase and three-phase busbars	5ST3750
	For 4-phase busbars	5ST3718

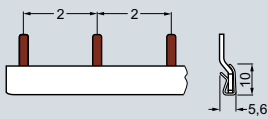
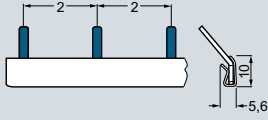
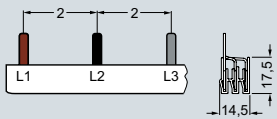
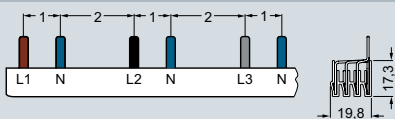
Standard busbars

5ST36 and 5ST37

Fixed lengths, cannot be cut, for devices with add-on 5SM6 arc fault detection devices

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	Endkappen inkl.	Color	Conductor cross-section 10 mm ²	Article No.
Three-phase 	For 5SM601	12 MW	210 mm	–	Gray		5ST3615-1

Can be cut, for devices with add-on 5SM6 arc fault detection devices

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	Endkappen inkl.	Color	Conductor cross-section 10 mm ²	Article No.
Single-phase, straight 	For 5SM601.	56 MW	1000 mm	–	Gray Blue		5ST3764-1 5ST3765-2
Single-phase, angled 45° 	For 5SM601.	56 MW	1000 mm	–	Blue		5ST3765-1
Two-phase / single-phase + N 	For 5SM602. (1P+N)	56 MW	1000 mm	–	Gray		5ST3735-1
Three-phase 	For 5SM601.	60 MW	1050 mm	–	Gray		5ST3740-1
Four-phase / three-phase + N 	For 5SM602.	52 MW	950 mm	–	Gray		5ST3746-1



Can be cut, for devices with add-on 5SM6 arc fault detection devices and infeed via RCCB

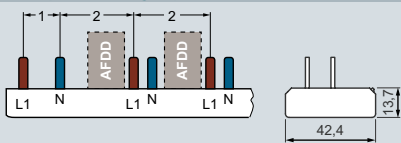
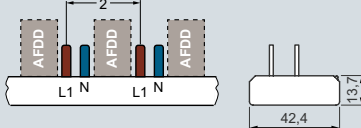
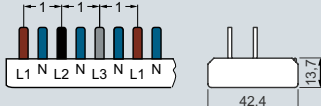
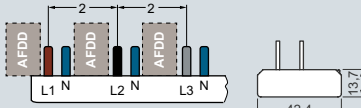
Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Color	Conductor cross-section 16 mm ²
Two-phase / single-phase + N						Article No.
	For RCCB 2P N-right and 5 AFDD (5SM601.) + compact device	12 MW	214 mm	■	Gray	5ST3772

Accessories

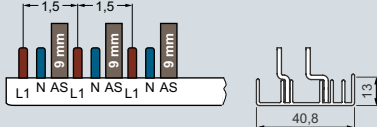
Terminals for infeed at side		Article No.
For conductors up to 25 mm ²	Short	5ST3768
	Short, IP20	5ST3771-2
	Long	5ST3771-1
End caps		Article No.
For single-phase busbars	Gray	5ST3766
	Blue	5ST3767
For two- and three-phase busbars		5ST3750
For four-phase busbars		5ST3718
Touch protection		Article No.
For free connections, yellow (RAL 1004) 5 × 1 pin		5ST3655

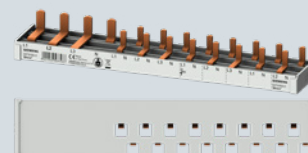
Compact busbars

5ST36, fixed lengths, cannot be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm ²
Two-phase / single-phase + N, for infeed via RCCB					
	For 1 x RCCB 1P+N and 5 x compact devices equipped with 5SM6 arc fault detection device	12 MW	216 mm	■	Article No. 5ST3685-0
Two-phase / single-phase + N					
	For compact devices	6 MW	113 mm	■	Article No. 5ST3674-6 new
		9 MW	166 mm	■	5ST3674-7 new
		12 MW	218 mm	■	5ST3674-0
	For 6 compact devices equipped with 5SM6 arc fault detection device	12 MW	200 mm	■	5ST3676-0
Four-phase / three-phase + N					
	For compact devices	6 MW	113 mm	■	Article No. 5ST3673-6 new
		9 MW	166 mm	■	5ST3673-7 new
		12 MW	218 mm	■	5ST3673-0
		14 MW	254 mm	■	5ST3673-4 new
	For 6 compact devices equipped with 5SM6 arc fault detection device	11 MW	200 mm	■	5ST3675-0

5ST37, can be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm ²
Two-phase / single-phase + N, for infeed via RCCB					
	For 1 x RCCB 1P+N and 10 x compact devices	12 MW	215 mm	■	Article No. 5ST3784-0
	For 1 x RCCB 1P+N (RCCB N left only) and 10 x compact devices	12 MW	215 mm	■	5ST3784-0KL
Two-phase / single-phase + N					
	For compact devices	60 MW	1060 mm	■	Article No. 5ST3774-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	—	5ST3776-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	—	5ST3778-0



5ST37, can be cut

Pin spacings in MW (1 MW = 18 mm)	Application	Number of MWs	Length	End caps included	Conductor cross-section 10 mm ²
Two-phase / single-phase + N					
	For compact devices equipped with 5SM6 arc fault detection device and auxiliary switch	58.5 MW	1036 mm	–	Article No. 5ST3780-0
	For 2 MW units (MCBs or RCBOs) with 5SM6 arc fault detection device and auxiliary switch	54 MW	956 mm	–	5ST3786-0
Four-phase / three-phase + N, for infeed via RCCB					
	For 1 × RCCB 3P+N and 8 × compact devices	12 MW	216 mm	■	Article No. 5ST3783-0
	For 1 × RCCB 3P+N (RCCB N left only) and 8 × compact devices	12 MW	216 mm	■	5ST3783-0KL
Four-phase / three-phase + N					
	For compact devices	60 MW	1060 mm	–	Article No. 5ST3773-0
	For compact devices equipped with 5SM6 arc fault detection device	59 MW	1042 mm	–	5ST3775-0
	For compact devices equipped with auxiliary switch	59.5 MW	1055 mm	–	5ST3777-0

Accessories for 5ST3 compact busbars, versions that can and cannot be cut

Touch protection for 5ST3				
	Version	Color		Article No.
	For free connections, for pins L1, N	Yellow (RAL1004)		5ST3655
	For pins L2 / L3	Yellow (RAL1004)		5ST3655-0HG
End caps for 5ST3				
	Version	Color		Article No.
	For two-phase and four-phase busbars	Gray		5ST3788-0
Terminals, short, IP20				
	Version	For conductors	Infeed	Article No.
	Infeed terminal for connection of larger cross section	Up to 25 mm²	Lateral	5ST3771-2

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- for other supplies of hard- and software the „International Terms & Conditions for Products“¹⁾ supplemented by „Software Licensing Conditions“¹⁾

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

Illustrations are not binding.

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Catalog LV 10

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Protection, Switching, Measuring and
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LV 14 Power Monitoring Made Simple SENTRON

E86060-K1814-A101-A7-7600



LV 18 Air Circuit Breakers and Molded Case Circuit Breakers with UL Certification SENTRON

PDF (E86060-K8280-E347-A5-7600)



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