



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)

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A multitude of additional information ...

Information + ordering



Information to get you started

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

www.siemens.com/rccb

www.siemens.com/protection-concept



Contact persons in your region

We are there when you need us

You can find your local contacts at

www.siemens.com/lowvoltage/contact



Your product in detail

The Siemens Industry Online Support portal provides comprehensive information

www.siemens.com/lowvoltage/product-support

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

The relevant tender specifications can be found at

www.siemens.com/lowvoltage/tenderspecifications

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



Our video range

Siemens YouTube channel

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



Refer to the Industry Mall for an overview of your products

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

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

www.siemens.com/product?Article No.

... can be found in our online services

Commissioning + operation

Your product in detail

The Siemens Industry Online Support portal provides detailed technical information

www.siemens.com/lowvoltage/product-support

- Operating instructions
- Characteristic curves
- Certificates

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

www.siemens.com/lowvoltage/cax

The fast track to the experts

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

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

We offer a comprehensive portfolio of services.

You can find your local contacts at

www.siemens.com/lowvoltage/contact

You can find further information on services at

www.siemens.com/service-catalog

Manuals

Manuals are available for downloading in Siemens Industry Online Support at

www.siemens.com/lowvoltage/manuals

- Configuration manual – Residual current protective devices / arc fault detection devices ([45303255](https://www.siemens.com/lowvoltage/manuals))

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)



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

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

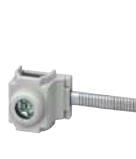
Busbars and accessories



Compact busbars



Standard busbars



Terminals



Touch protection



End caps

RCCB protective socket outlets



In molded-plastic enclosure



For 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

Selection criteria

Equipment, power, environmental conditions

Design

RCCBs
RCBOs
RC units

Number of pole

1P+N
2P
3P
3P+N
4P

Rated current I_n

0.3 ... 125 A

Types and waveform



| Type | AC | A | F | B | B+ | 6 mA | 10 mA | Other |
|---------|----|---|---|---|----|------|-------|-------|
| Type AC | ■ | - | - | - | - | - | - | - |
| Type A | ■ | ■ | ■ | ■ | ■ | - | - | - |
| Type F | ■ | ■ | ■ | ■ | ■ | ■ | ■ | - |
| Type B | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |
| Type B+ | ■ | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

Version

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

Protection objective, equipment directives
VDE 0100-410,
VDE 0100-530,
VDE 0100-7xx,
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 | | | SIQUENCE 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 | |
| | 100 | | - | | - | |
| | 20 | | - | | - | |
| | 0.75 ... 35 | | 0.75 ... 35 | | 1.5 ... 50 (2 MW) 2.5 ... 50 (4 MW) | |
| | 0.75 ... 25 | | 0.75 ... 25 | | - | |
| | 1 ... 35 | | 1 ... 35 | | - | |
| | 0.75 ... 10 | | 0.75 ... 10 | | - | |
| | 0.75 ... 4 | | 0.75 ... 4 | | - | |
| | 1 ... 4 | | 1 ... 4 | | - | |
| | 10 ... 25 | | 0.75 ... 35 | | - | |
| | 6 ... 25 | | 0.75 ... 25 | | - | |
| | 6 ... 16 | | 1 ... 35 | | - | |
| | 2.5... 3.5 | | 2.5 ... 3.0 | | 3.0... 3.5 | |
| | 1P+N 3P+N | | 1P+N 3P+N | | 1P+N 3P+N | |
| | 24 ... 125 230 400 500 | | 230 400 | | 230 400 | |
| | 50/60 | | 50/60 | | 50 | |
| | IEC/EN 61008 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40), ÖVE EN 61008, ÖVE/ÖNORM E 8601 | | IEC/EN 62423 (VDE 0664-40), IEC/EN 61543 (VDE 0664-30), DIN VDE 0664-400 (Type B+ only) | | IEC/EN 61008-1 (VDE 0664-10), IEC/EN 61008-2-1 (VDE 0664-11), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) | |
| | 10, 30, 100, 300, 500, 1000 | | 30, 300, 500 | | 30, 100, 300, 500 | |
| | 16 ... 80 | | 16 ... 80 | | 100 ... 125 | |
| | - | | - | | - | |
| | N right N left | | N right | | N right | |
| | >10000 | | >10000 | | >10 000 | |
| | Half-yearly ¹⁾ SIGRES annually ²⁾ | | Annually ²⁾ | | Half-yearly | |
| | IP20, if the distribution board is installed, with connected conductors | | 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 SIGRES on top only | | Top bottom | | Top bottom | |
| | III 2 | | III 2 | | III 2 | |
| | See page 4/14 | | See page 4/26 | | See page 4/30 | |

RC units



5SM2 (0.3 ... 63 A)

| Types | | Instantaneous |
|--|------------------------------------|---|
| Type AC | | ■ |
| Type A | | ■ |
| Type F | | – |
| Surge current withstand capability 8/20 μs | | |
| Type A | kA | >1 |
| Type F | kA | – |
| Minimum operational voltage for test equipment | | |
| 30-mA devices | V AC | 195 |
| Non-30-mA devices | V AC | 100 |
| Terminal conductor cross-sections | | |
| Solid/stranded | mm ² | 1.0 ... 25 |
| Terminal tightening torque | Nm | 2.5 ... 3.0 |
| Poles | | |
| Number of poles | | 2P 3P 4P |
| Rated voltage U _n | V AC | 230 400 |
| Operating frequency | Hz | 50 50/60 |
| Standards | | |
| IEC/EN 61009-1 (VDE 0664-20), IEC/EN 61009-2-1 (VDE 0664-21), IEC/EN 61543 (VDE 0664-30), IEC/EN 62423 (VDE 0664-40) | | |
| Rated residual current I _{Δn} | mA | 10, 30, 100, 300, 500, 1000 |
| Rated current I _n | A | 0.3 ... 63 |
| Service life | Average number of switching cycles | >10000 |
| Test button Test cycles | | half-yearly ¹⁾ |
| Degree of protection | Acc. to EN 60529 (VDE 0470-1) | IP20, if the distribution board is installed, with connected conductors |
| Touch protection | Acc. to EN 50274 (VDE 0660-514) | Finger and back-of-hand safe |
| Temperatures | Storage temperature | °C -40 ... +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 |
| 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)

| 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 |
| 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 | | | |
| Catalog LV 10 – 10/2020 | | | 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

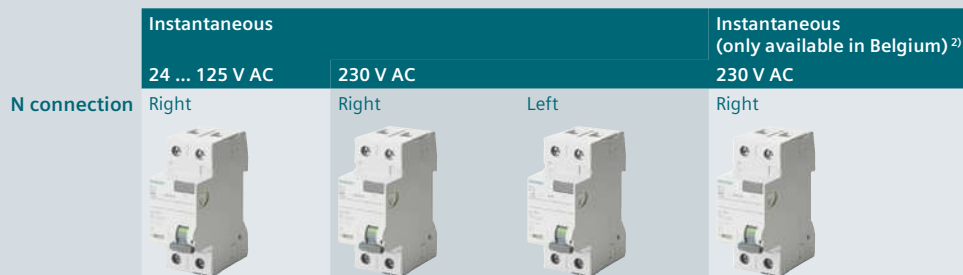
5SV6

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 | -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 | | 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)

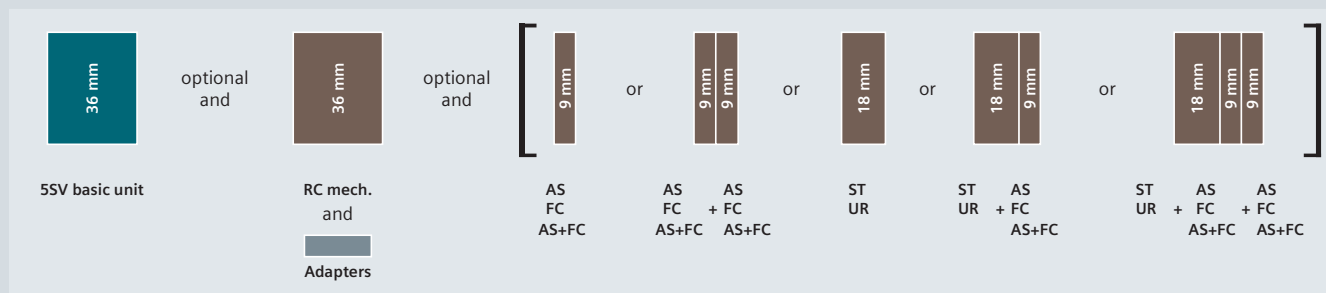


| $I_{\Delta n}$ | I_n | Thermal overload protection ¹⁾ | Bulk packaging (36 units) | Instantaneous | | Instantaneous (only available in Belgium) ²⁾ |
|----------------|-------|---|---------------------------|-----------------|---------------|---|
| | | | | 24 ... 125 V AC | 230 V AC | 230 V AC |
| Type A | | | | | | |
| 10 mA | 16 A | – | – | – | 5SV3111-6 | 5SV3111-6KL |
| 30 mA | 16 A | – | – | 5SV3311-6KK13 | 5SV3311-6 | 5SV3311-6KL |
| | | – | ■ | – | 5SV3311-6GV01 | – |
| | 25 A | – | – | 5SV3312-6KK13 | 5SV3312-6 | 5SV3312-6KL |
| | | – | ■ | – | 5SV3312-6GV01 | – |
| | 40 A | – | – | 5SV3314-6KK13 | 5SV3314-6 | 5SV3314-6KL |
| | | – | ■ | – | 5SV3314-6GV01 | – |
| | | ■ | – | – | 5SV3314-6LA | – |
| | 63 A | – | – | 5SV3316-6KK13 | 5SV3316-6 | 5SV3316-6KL |
| | 80 A | – | – | – | 5SV3317-6 | 5SV3317-6KL |
| 100 mA | 25 A | – | – | – | 5SV3412-6 | 5SV3412-6KL |
| | 40 A | – | – | – | 5SV3414-6 | 5SV3414-6KL |
| | 63 A | – | – | – | 5SV3416-6 | 5SV3416-6KL |
| | 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 | – |

Accessories

| Auxiliary switches (AS) | | Article No. | Undervoltage releases (UR) | | Article No. |
|---|----------------------------|---------------|--|--------------------------------|-------------|
| 1 NO contact + | Standard | 5ST3010 | With integrated | 230 V AC | 5ST3040 |
| 1 NC contact | For low power | 5ST3013 | auxiliary switch | 110 V DC | 5ST3041 |
| | For low power (with diode) | 5ST3013-0XX01 | | 24 V DC | 5ST3042 |
| 2 NO contacts | Standard | 5ST3011 | Without integrated | 230 V AC | 5ST3043 |
| | For low power | 5ST3014 | auxiliary switch | 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 | 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. | | 2 MW | 5ST3820-6 | |
| 110 ... 415 V AC, 110 ... 220 V DC | 5ST3030 | | | | |
| 24 ... 48 V AC/DC | 5ST3031 | | | | |
| 12 V DC | 5ST3031-0XX01 | | | | |

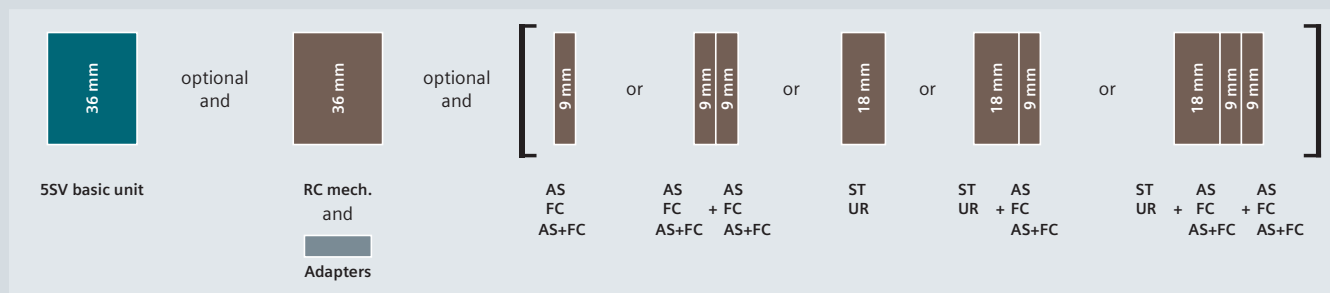
5SV RCCBs

Type F, 1P+N (2 MW)



| $I_{\Delta n}$ | I_n | | |
|----------------|-------|-----------|-----------|
| Type F | | | |
| 30 mA | 25 A | 5SV3312-3 | – |
| | 40 A | 5SV3314-3 | – |
| | 63 A | 5SV3316-3 | – |
| | 80 A | 5SV3317-3 | – |
| 300 mA | 25 A | 5SV3612-3 | – |
| | 40 A | 5SV3614-3 | 5SV3614-7 |
| | 63 A | 5SV3616-3 | – |
| | 80 A | 5SV3617-3 | 5SV3617-7 |

Mounting concept



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

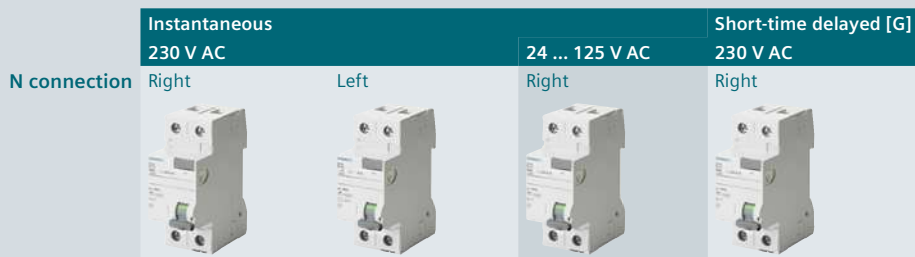
Accessories

| 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

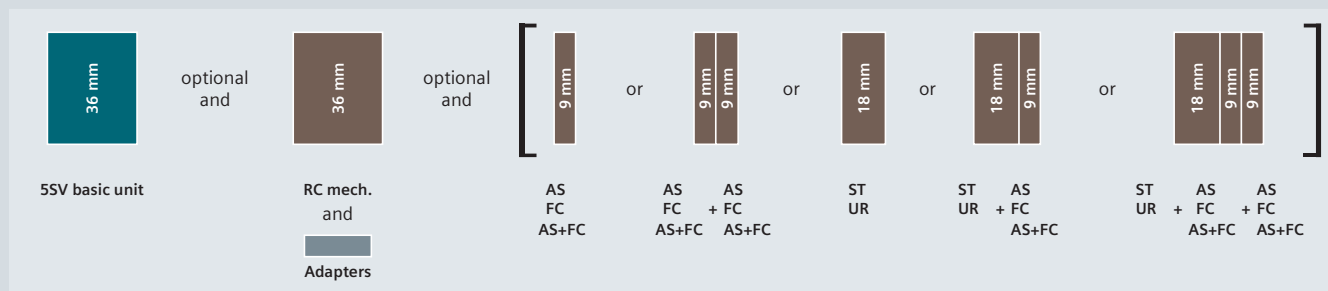
Type AC, 1P+N (2 MW)



| $I_{\Delta n}$ | I_n | Thermal overload protection ¹⁾ | Bulk packaging (36 units) | Instantaneous 230 V AC | | Short-time delayed [G] 230 V AC | |
|----------------|-------|---|---------------------------|------------------------|---------------|---------------------------------|---------------|
| | | | | Right | Left | Right | Right |
| Type AC | | | | | | | |
| 10 mA | 16 A | – | – | 5SV4111-0 | 5SV4111-OKL | – | – |
| 30 mA | 16 A | – | – | 5SV4311-0 | 5SV4311-OKL | 5SV4311-OKK13 | – |
| | 25 A | – | – | 5SV4312-0 | 5SV4312-OKL | 5SV4312-OKK13 | – |
| | | – | ■ | – | 5SV4312-0GV01 | – | – |
| | 40 A | – | – | 5SV4314-0 | 5SV4314-OKL | 5SV4314-OKK13 | 5SV4314-OLA01 |
| | | – | ■ | – | 5SV4314-0GV01 | 5SV4314-0GV02 | – |
| – | | ■ | – | 5SV4314-OLA | – | – | – |
| 63 A | – | – | – | 5SV4316-0 | 5SV4316-OKL | 5SV4316-OKK13 | – |
| | 80 A | – | – | 5SV4317-0 | 5SV4317-OKL | – | – |
| 100 mA | 25 A | – | – | 5SV4412-0 | – | – | – |
| | 40 A | – | – | 5SV4414-0 | 5SV4414-OKL | – | – |
| | 63 A | – | – | 5SV4416-0 | 5SV4416-OKL | – | – |
| | 80 A | – | – | 5SV4417-0 | – | – | – |
| 300 mA | 25 A | – | – | 5SV4612-0 | 5SV4612-OKL | – | – |
| | 40 A | – | – | 5SV4614-0 | 5SV4614-OKL | – | – |
| | 63 A | – | – | 5SV4616-0 | 5SV4616-OKL | – | – |
| | 80 A | – | – | 5SV4617-0 | 5SV4617-OKL | – | – |

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

Mounting concept



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

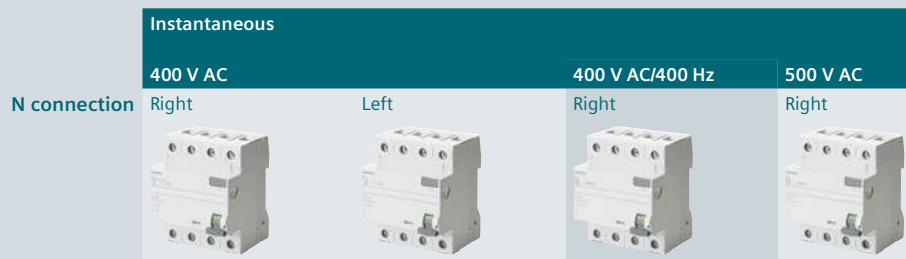
Accessories

| 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)

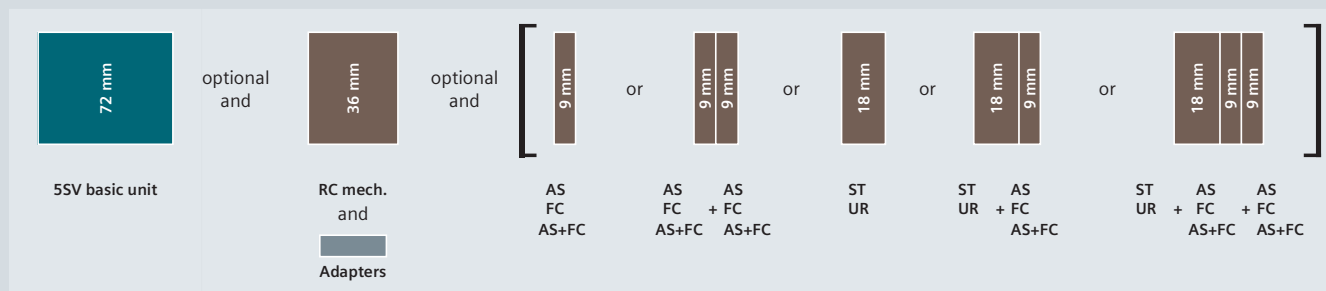


| $I_{\Delta n}$ | I_n | Thermal overload protection ¹⁾ | Bulk packaging (18 units) | 400 V AC Right | 400 V AC/400 Hz Right | 500 V AC Right | |
|----------------|--------|---|---------------------------|----------------|-----------------------|----------------|-----------|
| Type A | 30 mA | 25 A | – | 5SV3342-6 | 5SV3342-6KL | 5SV3342-6KK03 | 5SV3352-6 |
| | | – | ■ | 5SV3342-6GV01 | – | – | – |
| | 40 A | – | – | 5SV3344-6 | 5SV3344-6KL | 5SV3344-6KK03 | 5SV3354-6 |
| | | – | ■ | 5SV3344-6GV01 | 5SV3344-6GV02 | – | – |
| | | ■ | – | 5SV3344-6LA | – | – | – |
| | 63 A | – | – | 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 | – | – |

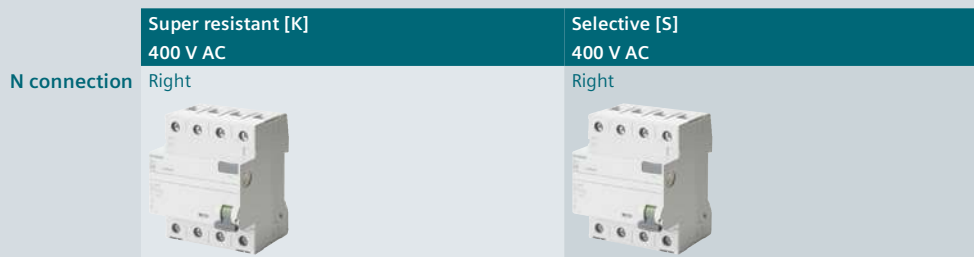
Accessories

| Auxiliary switches (AS) | Article No. |
|--|---|
| 1 NO contact + 1 NC contact | Standard 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 110 V DC 24 V DC |
| | 5ST3040 5ST3041 5ST3042 |
| Without integrated auxiliary switch | 230 V AC 110 V DC 24 V DC |
| | 5ST3043 5ST3044 5ST3045 |
| Remote controlled (RC) mechanisms | Article No. |
| Power | 12 ... 30 V AC, 12 ... 48 V DC 177 ... 270 V AC |
| | 5ST3055 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC 177 ... 270 V AC |
| | 5ST3057 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC |
| | 5ST3070 |
| Adapter for RC mechanism | Article No. |
| 4 MW | 5ST3820-6 |

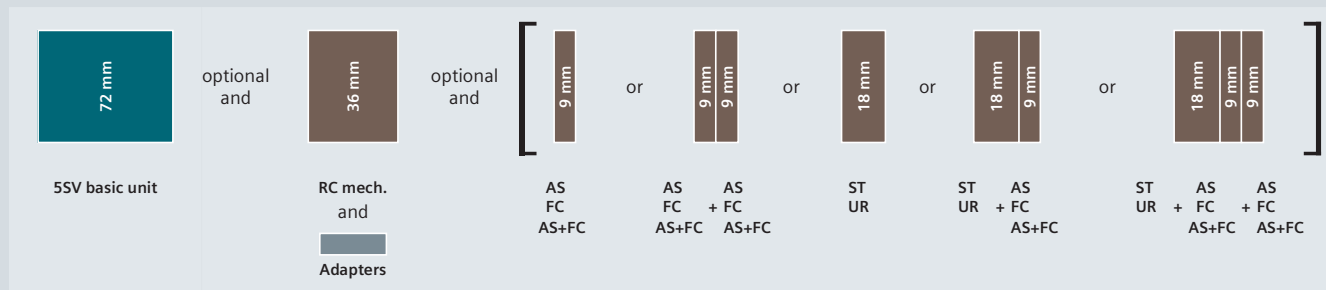
5SV RCCBs

Type F, 3P+N (4 MW)



| $I_{\Delta n}$ | I_n | Super resistant [K] 400 V AC | Selective [S] 400 V AC |
|----------------|-------|---------------------------------|---------------------------|
| 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](#)

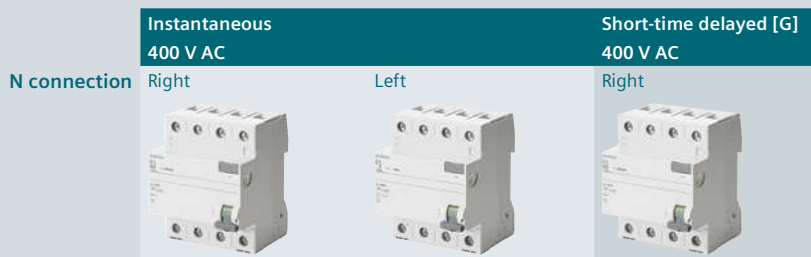
Accessories

| Auxiliary switches (AS) | | Article No. |
|--|----------------------------|---------------|
| 1 NO contact + 1 NC contact | Standard | 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 |

5SV RCCBs

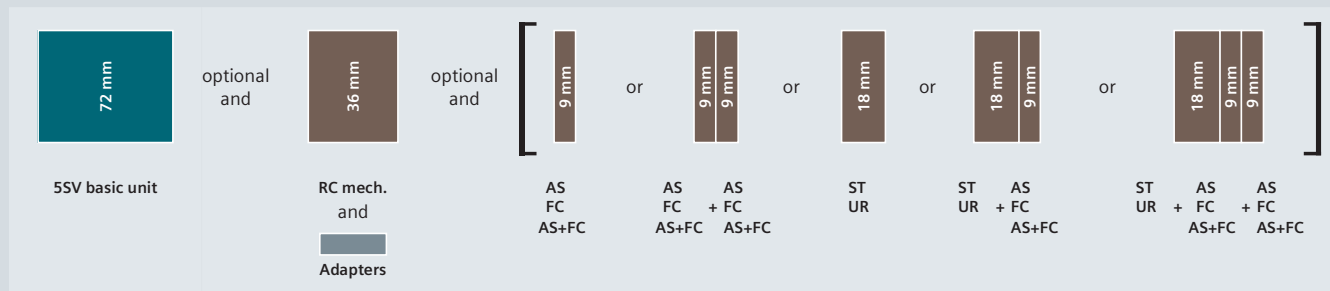
Type AC, 3P+N (4 MW)



| $I_{\Delta n}$ | I_n | Thermal overload protection ¹⁾ | Bulk packaging (18 units) | Instantaneous 400 V AC | Short-time delayed [G] 400 V AC | |
|----------------|-------|---|---------------------------|------------------------|---------------------------------|---------------|
| Type AC | | | | | | |
| 30 mA | 25 A | – | – | 5SV4342-0 | 5SV4342-0KL | |
| | | – | ■ | 5SV4342-0GV01 | – | |
| | 40 A | – | – | 5SV4344-0 | 5SV4344-0KL | 5SV4344-0LA01 |
| | | – | ■ | 5SV4344-0GV01 | – | – |
| | 63 A | – | – | 5SV4346-0 | 5SV4346-0KL | 5SV4346-0LA01 |
| | | – | ■ | 5SV4346-0LA | – | – |
| 80 A | – | – | 5SV4347-0 | 5SV4347-0KL | – | |
| 100 mA | 25 A | – | – | 5SV4442-0 | – | – |
| | | – | ■ | 5SV4442-0LA | – | 5SV4442-0LA01 |
| | 40 A | – | – | 5SV4444-0 | – | 5SV4444-0LA01 |
| | | – | ■ | 5SV4444-0LA | – | – |
| 63 A | – | – | 5SV4446-0 | – | 5SV4446-0LA01 | |
| | – | ■ | 5SV4446-0LA | – | – | |
| 300 mA | 25 A | – | – | 5SV4642-0 | 5SV4642-0KL | – |
| | | – | ■ | 5SV4642-0LA | – | – |
| | 40 A | – | – | 5SV4644-0 | 5SV4644-0KL | – |
| | | – | ■ | 5SV4644-0LA | – | – |
| 63 A | – | – | 5SV4646-0 | 5SV4646-0KL | – | |
| | – | ■ | 5SV4646-0LA | – | – | |
| 500 mA | 25 A | – | – | 5SV4742-0 | – | – |
| | | – | ■ | 5SV4742-0LA | – | – |
| | 40 A | – | – | 5SV4744-0 | – | – |
| | | – | ■ | 5SV4744-0LA | – | – |
| 63 A | – | – | 5SV4746-0 | – | – | |
| | – | ■ | 5SV4746-0LA | – | – | |
| 80 A | – | – | 5SV4747-0 | – | – | |
| | – | ■ | 5SV4747-0LA | – | – | |

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 |

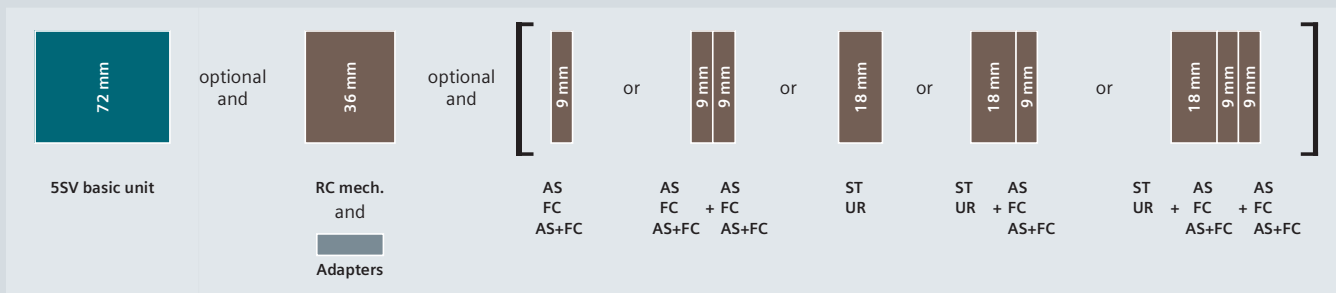
5SV3 RCCBs (SIQUENCE)

Type B, 1P+N (4 MW)



| $I_{\Delta n}$ | 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. | Undervoltage releases (UR) | | Article No. |
|---|----------------------------|---------------|--|--------------------------------|--------------------|
| 1 NO contact + | Standard | 5ST3010 | With integrated | 230 V AC | 5ST3040 |
| 1 NC contact | For low power | 5ST3013 | auxiliary switch | 110 V DC | 5ST3041 |
| | For low power (with diode) | 5ST3013-0XX01 | | 24 V DC | 5ST3042 |
| 2 NO contacts | Standard | 5ST3011 | Without integrated | 230 V AC | 5ST3043 |
| | For low power | 5ST3014 | auxiliary switch | 110 V DC | 5ST3044 |
| 2 NC contacts | Standard | 5ST3012 | | 24 V DC | 5ST3045 |
| | For low power | 5ST3015 | Remote controlled (RC) mechanisms | | Article No. |
| 1 CO contact | Standard | 5ST3016 | Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| Fault signal contacts (FC) | | | | 177 ... 270 V AC | 5ST3056 |
| 1 NO contact + 1 NC contact | | 5ST3020 | Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| 2 NO contacts | | 5ST3021 | | 177 ... 270 V AC | 5ST3058 |
| 2 NC contacts | | 5ST3022 | Power with extended | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| Auxiliary switches and fault signal contacts (AS+FC) | | | | function | |
| 1 CO contact (AS) + 1 CO contact (FC) | | 5ST3062 | Adapter for RC mechanism | | Article No. |
| Shunt trips (ST) | | | 4 MW | | 5ST3820-6 |
| | | | | | |
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 | | | |
| 24 ... 48 V AC/DC | | 5ST3031 | | | |
| 12 V DC | | 5ST3031-0XX01 | | | |

5SV3 RCCBs (SIQUENCE)

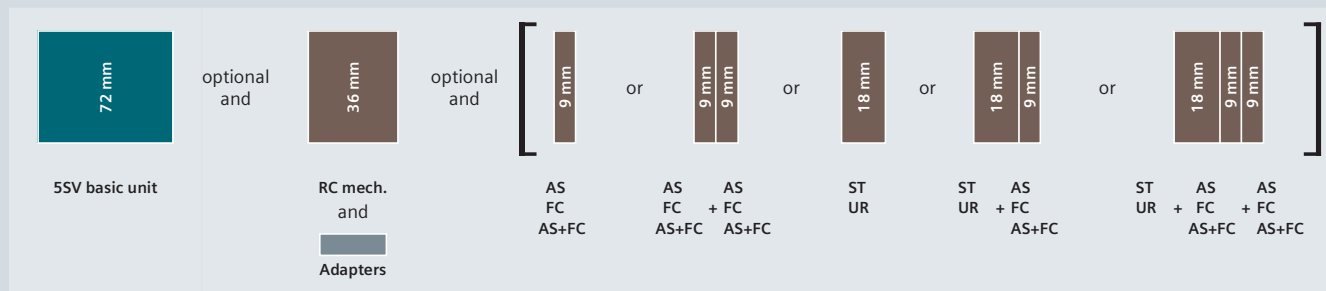
Type B and B+, 3P+N (4 MW)

N connection



| $I_{\Delta n}$ | 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 | |
| | | ■ | 5SV3646-4GV01 | |
| | 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 | |
| | 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



| $I_{\Delta n}$ | 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 breakers¹⁾
230 V AC

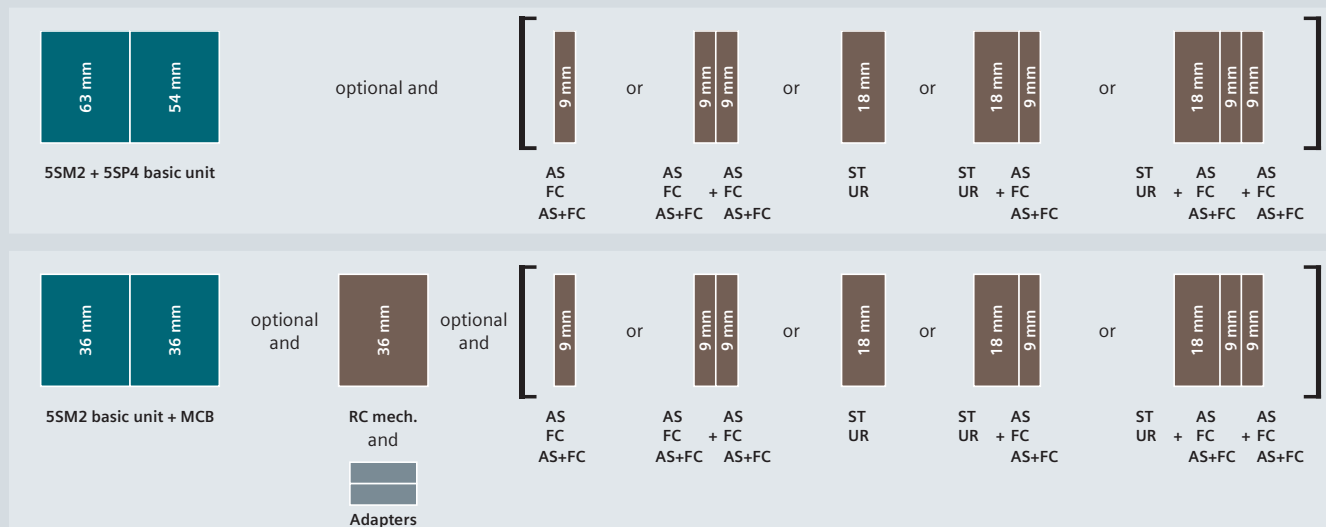
Version Instantaneous Super resistant [K] Selective [S]
Mounting width 2 MW 2 MW 2 MW







| $I_{\Delta n}$ | I_n | Instantaneous | Super resistant [K] | Selective [S] |
|----------------|--------------|---------------|---------------------|---------------|
| 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 | – |
| 100 mA | 80 ... 100 A | – | – | – |
| | 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 | – | – | – |
| 300 mA | 0.3 ... 40 A | 5SM2622-0 | – | 5SM2622-2 |
| | 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+FC Auxiliary switch and fault signal contact [See page 4/58](#) UR Undervoltage release [See page 4/60](#)
AS Auxiliary switch [See page 4/54](#) AS+FC Auxiliary switch and fault signal contact [See page 4/58](#) RC mech. Remote controlled mechanism [See page 4/61](#)
FC Fault signal contact [See page 4/56](#) ST Shunt trips [See page 4/59](#)

| 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 | Remote controlled (RC) mechanisms | | Article No. |
| 1 CO contact | Standard | 5ST3016 | Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| Fault signal contacts (FC) | | Article No. | | 177 ... 270 V AC | 5ST3056 |
| 1 NO contact + 1 NC contact | | 5ST3020 | Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| 2 NO contacts | | 5ST3021 | | 177 ... 270 V AC | 5ST3058 |
| 2 NC contacts | | 5ST3022 | Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| Auxiliary switches and fault signal contacts (AS+FC) | | Article No. | Adapter for RC mechanism | | Article No. |
| 1 CO contact (AS) + 1 CO contact (FC) | | 5ST3062 | 5SM2 with 5SY (2P) | | 5ST3820-3 + 5ST3820-1 |
| Shunt trips (ST) | | Article No. | 5SM2 with 5SL (2P) | | 5ST3820-3 + 5ST3820-6 |
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 | | | |
| 24 ... 48 V AC/DC | | 5ST3031 | | | |
| 12 V DC | | 5ST3031-0XX01 | | | |

5SM2 RC units

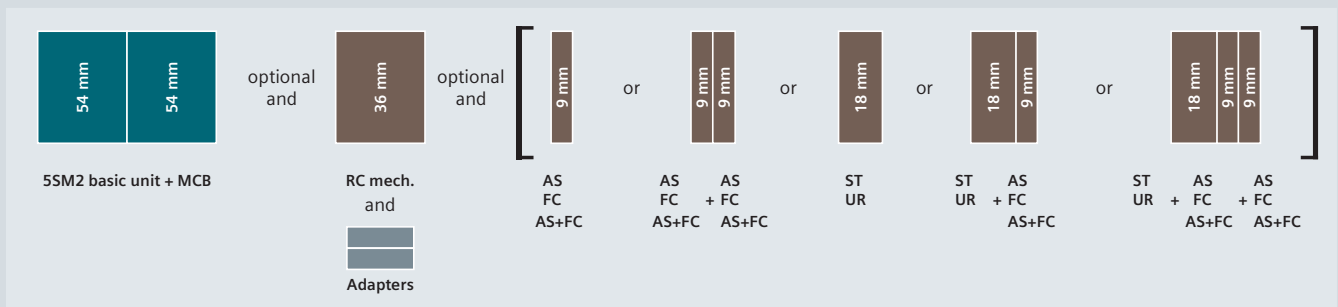
Type A and AC, 3-pole

| 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 | For 5SY miniature circuit breakers ¹⁾ 400 V AC | | | For 5SL4 miniature circuit breakers 400 V AC | |
|----------------|--------------|--|---------------|-----------|---|-----------|
| 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 | – | – | – | – |
| | 0.3 ... 40 A | 5SM2632-6 | – | – | 5SM2633-6 | – |
| 300 mA | 0.3 ... 63 A | 5SM2635-6 | – | 5SM2635-8 | 5SM2636-6 | 5SM2636-8 |
| | 0.3 ... 40 A | 5SM2735-6 | – | 5SM2735-8 | – | – |
| 500 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
- AS Auxiliary switch
- FC Fault signal contact
- AS+FC Auxiliary switch and fault signal contact

- See page 3/1
- 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

Accessories

| Auxiliary switches (AS) | | Article No. | Undervoltage releases (UR) | | Article No. |
|--|----------------------------|---------------|-----------------------------------|--------------------------------|--------------------------|
| 1 NO contact + | Standard | 5ST3010 | With integrated | 230 V AC | 5ST3040 |
| 1 NC contact | For low power | 5ST3013 | auxiliary switch | 110 V DC | 5ST3041 |
| | For low power (with diode) | 5ST3013-0XX01 | | 24 V DC | 5ST3042 |
| 2 NO contacts | Standard | 5ST3011 | Without integrated | 230 V AC | 5ST3043 |
| | For low power | 5ST3014 | auxiliary switch | 110 V DC | 5ST3044 |
| 2 NC contacts | Standard | 5ST3012 | | 24 V DC | 5ST3045 |
| | For low power | 5ST3015 | | | |
| 1 CO contact | Standard | 5ST3016 | | | |
| Fault signal contacts (FC) | | Article No. | Remote controlled (RC) mechanisms | | Article No. |
| 1 NO contact + 1 NC contact | | 5ST3020 | Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| 2 NO contacts | | 5ST3021 | | 177 ... 270 V AC | 5ST3056 |
| 2 NC contacts | | 5ST3022 | Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| | | | | 177 ... 270 V AC | 5ST3058 |
| Auxiliary switches and fault signal contacts (AS+FC) | | Article No. | Power with extended | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| 1 CO contact (AS) + 1 CO contact (FC) | | 5ST3062 | function | | |
| Shunt trips (ST) | | Article No. | Adapter for RC mechanism | | Article No. |
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 | 5SM2 with 5SY (3P) | | 5ST3820-3 + 5ST3820-2 |
| 24 ... 48 V AC/DC | | 5ST3031 | | | |
| 12 V DC | | 5ST3031-0XX01 | 5SM2 with 5SL (3P) | | 5ST3820-3 + 5ST3820-7 |

5SM2 RC units

Type A and AC, 4-pole

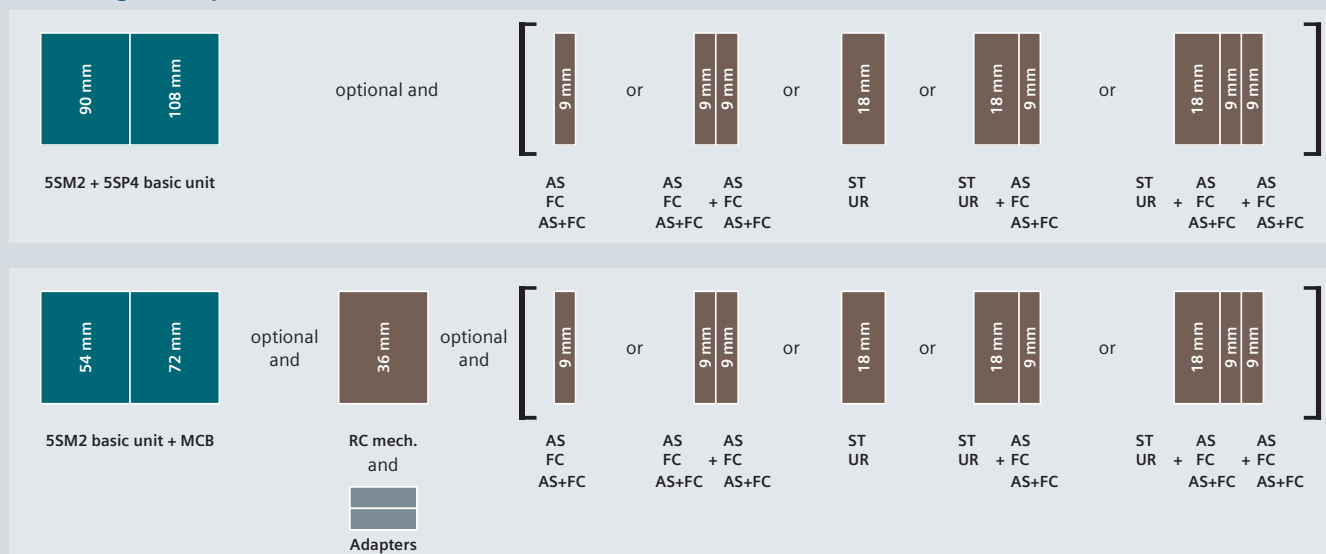
For 5SY miniature circuit breakers¹⁾
400 V AC

| Version | Instantaneous | Super resistant [K] | Selective [S] |
|----------------|---|--|---|
| Mounting width | 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 | – |
| 500 mA | 80 ... 100 A | – | – | – |
| | 0.3 ... 63 A | 5SM2745-6 | – | 5SM2745-8 |
| | 1000 mA | 0.3 ... 40 A | – | – |
| 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 | – | – | 5SM2845-2 |

¹⁾ but not for 5SY5 or 5SY8

Mounting concept



MCB Miniature circuit breaker [See page 3/1](#) AS+FC Auxiliary switch and fault signal contact [See page 4/58](#)
 AS Auxiliary switch [See page 4/54](#) ST Shunt trips [See page 4/59](#)
 FC Fault signal contact [See page 4/56](#) 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 + 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 110 V DC 24 V DC | 5ST3040 5ST3041 5ST3042 |
| Without integrated auxiliary switch | 230 V AC 110 V DC 24 V DC | 5ST3043 5ST3044 5ST3045 |
| Remote controlled (RC) mechanisms | Article No. | |
| Power | 12 ... 30 V AC, 12 ... 48 V DC 177 ... 270 V AC | 5ST3055 5ST3056 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC 177 ... 270 V AC | 5ST3057 5ST3058 |
| Power with extended function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| Adapter for RC mechanism | Article No. | |
| 5SM2 with 5SY (4P) | 5ST3820-3 + 5ST3820-2 | |
| 5SM2 with 5SL (4P) | 5ST3820-3 + 5ST3820-7 | |

5SU1 RCBOs

Type A, 1P+N

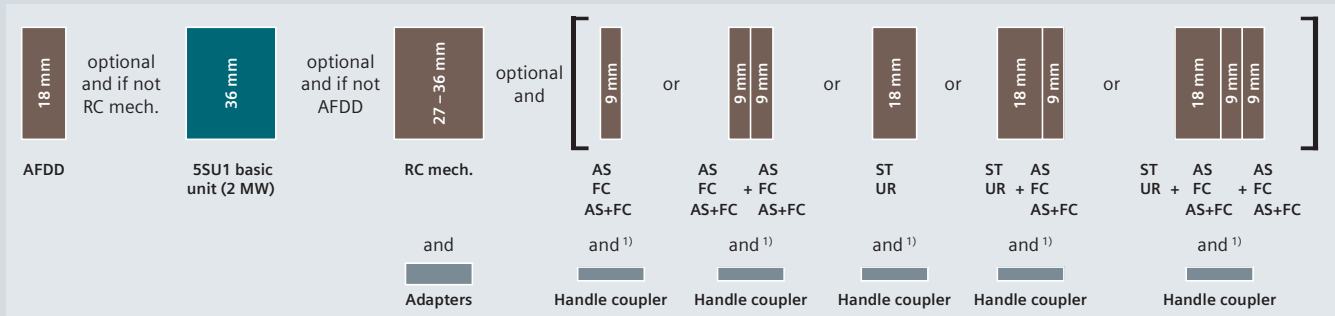
| Mounting width | Instantaneous 230 V AC | | |
|---------------------------------|------------------------|--------|-------|
| | 2 MW | 2 MW | 2 MW |
| Short-circuit breaking capacity | 4.5 kA | 4.5 kA | 6 kA |
| N connection | Right | Left | Right |



4



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

Mounting concept



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

- AFDD Arc fault detection device [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 |
| 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. | Undervoltage releases (UR) | | Article No. |
|--|----------------------------|---------------|---|--------------------------------|-------------|
| 1 NO contact + | Standard | 5ST3010 | With integrated | 230 V AC | 5ST3040 |
| 1 NC contact | For low power | 5ST3013 | auxiliary switch | 110 V DC | 5ST3041 |
| | For low power (with diode) | 5ST3013-0XX01 | | 24 V DC | 5ST3042 |
| 2 NO contacts | Standard | 5ST3011 | Without integrated | 230 V AC | 5ST3043 |
| | For low power | 5ST3014 | auxiliary switch | 110 V DC | 5ST3044 |
| 2 NC contacts | Standard | 5ST3012 | | 24 V DC | 5ST3045 |
| | For low power | 5ST3015 | Handle couplers for AS, FC, AS+FC, ST and UR | | |
| 1 CO contact | Standard | 5ST3016 | 1 set = 5 units | | 5ST3805-1 |
| Fault signal contacts (FC) | | Article No. | Remote controlled (RC) mechanisms | | |
| 1 NO contact + 1 NC contact | | 5ST3020 | Basic | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3053 |
| 2 NO contacts | | 5ST3021 | | 177 ... 270 V AC | 5ST3054 |
| 2 NC contacts | | 5ST3022 | Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | | | | 177 ... 270 V AC | 5ST3056 |
| Auxiliary switches and fault signal contacts (AS+FC) | | Article No. | Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3057 |
| 1 CO contact (AS) + 1 CO contact (FC) | | 5ST3062 | | 177 ... 270 V AC | 5ST3058 |
| Shunt trips (ST) | | Article No. | Power with ext. function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 | Adapter for RC mechanism | | |
| 24 ... 48 V AC/DC | | 5ST3031 | 2 MW | | 5ST3820-5 |
| 12 V DC | | 5ST3031-0XX01 | Arc fault detection devices (AFDD) | | |
| | | | For 5SU1 basic units | I_n up to 16 A | 5SM6021-2 |
| | | | | I_n up to 40 A | 5SM6024-2 |

5SU1 RCBOs

Type F, 1P+N

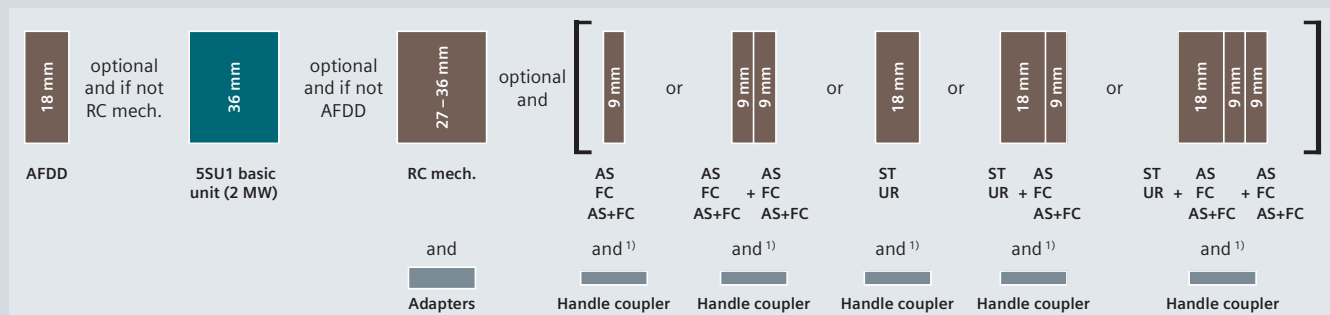
| | |
|--|----------------------------|
| | Super resistant [K] |
| | 230 V AC |
| Mounting width | 2 MW |
| Short-circuit breaking capacity | 10 kA |
| N connection | Right |



4

| $I_{\Delta n}$ | 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

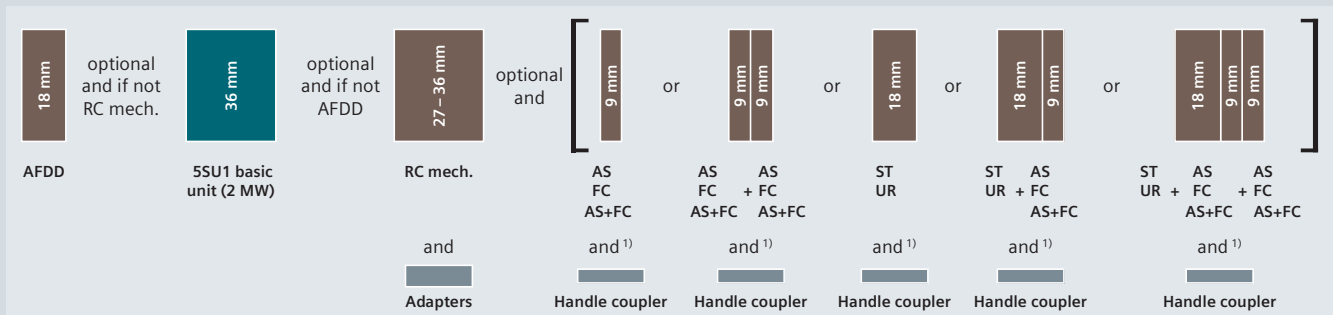
Type AC, 1P+N

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





| I _{Δn} | I _n | Bulk packaging (36 units) | Characteristic C | | Characteristic B | |
|-----------------|----------------|------------------------------|------------------|---------------|------------------|---------------|
| | | | C | C | 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 |
| 40 A | – | 5SU1353-1KK40 | 5SU1353-1KL40 | 5SU1356-0KK40 | 5SU1356-1KK40 | |
| 100 mA | 6 A | – | – | – | – | – |
| | 10 A | – | – | – | – | – |
| | 13 A | – | – | – | – | – |
| | 16 A | – | – | – | – | – |
| | 20 A | – | – | – | – | – |
| | 25 A | – | – | – | – | – |
| | 32 A | – | – | – | – | – |
| 300 mA | 6 A | – | 5SU1653-1KK06 | 5SU1653-1KL06 | 5SU1656-0KK06 | 5SU1656-1KK06 |
| | 10 A | – | 5SU1653-1KK10 | 5SU1653-1KL10 | 5SU1656-0KK10 | 5SU1656-1KK10 |
| | 13 A | – | 5SU1653-1KK13 | 5SU1653-1KL16 | 5SU1656-0KK13 | 5SU1656-1KK13 |
| | 16 A | – | 5SU1653-1KK16 | – | 5SU1656-0KK16 | 5SU1656-1KK16 |
| | | ■ | 5SU1653-1GV16 | – | – | – |
| | 20 A | – | 5SU1653-1KK20 | 5SU1653-1KL20 | 5SU1656-0KK20 | 5SU1656-1KK20 |
| | 25 A | – | 5SU1653-1KK25 | 5SU1653-1KL25 | 5SU1656-0KK25 | 5SU1656-1KK25 |
| | 32 A | – | 5SU1653-1KK32 | 5SU1653-1KL32 | 5SU1656-0KK32 | 5SU1656-1KK32 |
| 40 A | – | 5SU1653-1KK40 | 5SU1653-1KL40 | 5SU1656-0KK40 | 5SU1656-1KK40 | |

Mounting concept



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

| | | | | | |
|-------|---|-------------------------------|----------|-----------------------------|-------------------------------|
| AFDD | Arc fault detection device | See page 4/50 | ST | Shunt trips | See page 4/59 |
| AS | Auxiliary switch | See page 4/54 | UR | Undervoltage release | See page 4/60 |
| FC | Fault signal contact | See page 4/56 | RC mech. | Remote controlled mechanism | See page 4/61 |
| AS+FC | Auxiliary switch and fault signal contact | See page 4/58 | | | |

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

Accessories

| Auxiliary switches (AS) | | Article No. |
|--|---|-------------------------------------|
| 1 NO contact + 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 |
| 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 | 5ST3056 |
| Power | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3055 |
| | 177 ... 270 V AC | 5ST3057 |
| Power with ARD | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3058 |
| | 177 ... 270 V AC | 5ST3059 |
| Power with ext. function | 12 ... 30 V AC, 12 ... 48 V DC | 5ST3070 |
| Adapter for RC mechanism | | Article No. |
| 2 MW | | 5ST3820-5 |
| Arc fault detection devices (AFDD) | | Article No. |
| For 5SU1 basic units | I_n up to 16 A | 5SM6021-2 |
| | I_n up to 40 A | 5SM6024-2 |

5SU1 RCBOs

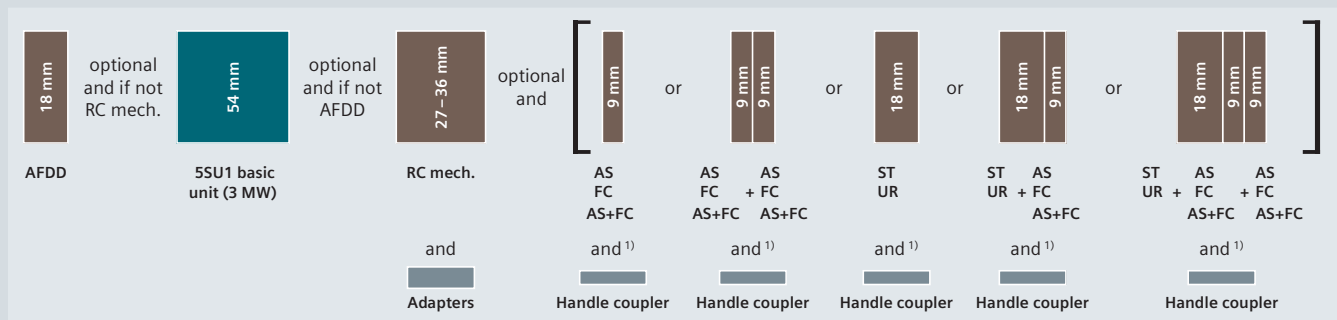
Type A and AC, 2-pole

| Mounting width | Instantaneous | |
|---------------------------------|---------------|----------|
| | 110 V AC | 230 V AC |
| Short-circuit breaking capacity | 3 MW | 3 MW |
| | 10 kA | 10 kA |

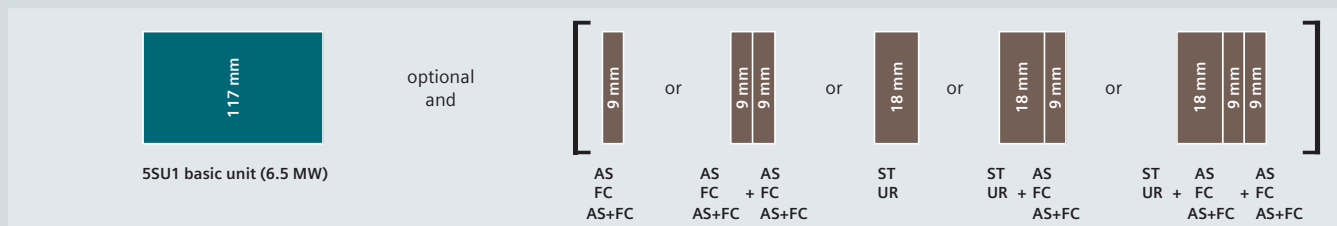


| $I_{\Delta n}$ | I_n | Characteristic | | Characteristic |
|----------------|-------|----------------|---------------|----------------|
| | | B | C | B |
| Type A | | | | |
| 30 mA | 6 A | 5SU1324-6KX06 | 5SU1324-7KX06 | 5SU1324-6FA06 |
| | 10 A | 5SU1324-6KX10 | 5SU1324-7KX10 | 5SU1324-6FA10 |
| | 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 | – | – | – |
| | 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 fault signal contact [See page 4/58](#) UR Undervoltage release [See page 4/60](#)
AS Auxiliary switch [See page 4/54](#) FC Fault signal contact [See page 4/56](#) ST Shunt trips [See page 4/59](#) RC mech. Remote controlled mechanism [See page 4/61](#)

| | | Selective [S] | |
|---|------------------|--|------------------|
| | | 230 V AC | |
| 6.5 MW 10 kA | | 6.5 MW 10 kA | |
|  | |  | |
| C | Characteristic B | C | Characteristic B |
| 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 |
| – | 5SU1324-0KK82 | 5SU1324-1KK82 | – |
| – | 5SU1624-0KK82 | 5SU1624-1KK82 | – |

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 |
| Power with ARD | 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

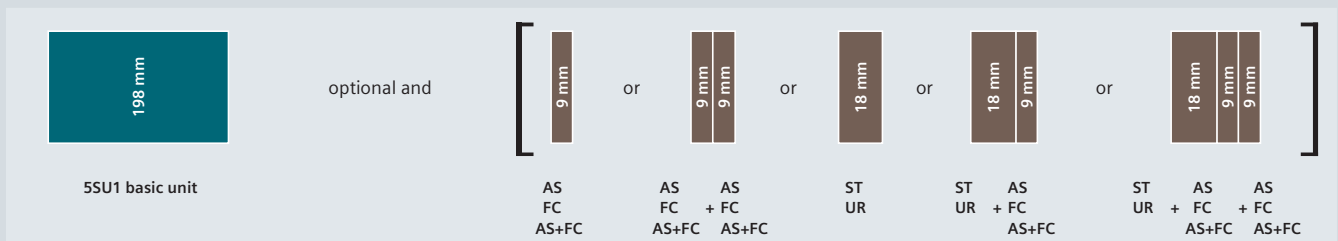
Type A and AC, 4-pole

| Mounting width Short-circuit breaking capacity | Instantaneous 400 V AC | Selective [S] 400 V AC |
|---|---------------------------|---------------------------|
| | 11 MW 10 kA | 11 MW 10 kA |



| $I_{\Delta n}$ | I_n | Characteristic | | Characteristic | |
|----------------|-------|----------------|---------------|----------------|---------------|
| | | B | C | B | C |
| Type A | | | | | |
| 30 mA | 125 A | 5SU1344-6KK82 | 5SU1344-7KK82 | – | – |
| 300 mA | 125 A | 5SU1644-6KK82 | 5SU1644-7KK82 | 5SU1644-6WK82 | 5SU1644-7WK82 |
| 1000 mA | 125 A | – | – | 5SU1844-6WK82 | 5SU1844-7WK82 |
| Type AC | | | | | |
| 30 mA | 125 A | 5SU1344-0KK82 | 5SU1344-1KK82 | – | – |
| 300 mA | 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 [See page 4/59](#)
 UR Undervoltage release [See page 4/60](#)

Type B and B+, 4-pole

| | | Super resistant [K] | | Selective [S] | |
|---------------------------------|-------|---|---------------|---|---------------|
| | | 400 V AC | | 480 V AC | |
| Mounting width | 11 MW | | | | |
| | 10 kA | | | | |
| Short-circuit breaking capacity | |  | |  | |
| $I_{\Delta n}$ | I_n | Characteristic | | Characteristic | |
| | | C | D | 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 |

Accessories

| Auxiliary switches (AS) | | Article No. | Auxiliary switches and fault signal contacts (AS+FC) | | Article No. |
|-----------------------------------|----------------------------|--------------------|--|----------|--------------------|
| 1 NO contact + 1 NC contact | Standard | 5ST3010 | 1 CO contact (AS) + 1 CO contact (FC) | | 5ST3062 |
| | For low power | 5ST3013 | Shunt trips (ST) | | Article No. |
| | For low power (with diode) | 5ST3013-0XX01 | 110 ... 415 V AC, 110 ... 220 V DC | | 5ST3030 |
| 2 NO contacts | Standard | 5ST3011 | 24 ... 48 V AC/DC | | 5ST3031 |
| | For low power | 5ST3014 | 12 V DC | | 5ST3031-0XX01 |
| 2 NC contacts | Standard | 5ST3012 | Undervoltage releases (UR) | | Article No. |
| | For low power | 5ST3015 | With integrated auxiliary switch | 230 V AC | 5ST3040 |
| 1 CO contact | Standard | 5ST3016 | | 110 V DC | 5ST3041 |
| | | | | 24 V DC | 5ST3042 |
| | | | Without integrated auxiliary switch | 230 V AC | 5ST3043 |
| Fault signal contacts (FC) | | Article No. | | 110 V DC | 5ST3044 |
| 1 NO contact + 1 NC contact | | 5ST3020 | | 24 V DC | 5ST3045 |
| 2 NO contacts | | 5ST3021 | | | |
| 2 NC contacts | | 5ST3022 | | | |

5SV1 RCBOs

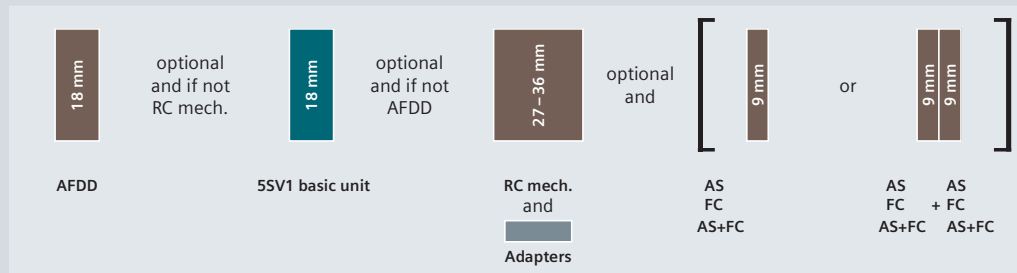
Type A, 1P+N

| | 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 _{Δn} | I _n | Bulk packaging (12 units) | Characteristic | | Characteristic | | Characteristic | |
|-------------------|----------------|------------------------------|----------------|---------------|----------------|---------------|----------------|---------------|
| | | | B | C | B | C | B | C |
| Type A | | | | | | | | |
| 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 | – | – |
| 16 A | – | 5SV1313-6KK16 | 5SV1313-7KK16 | 5SV1316-6KK16 | 5SV1316-7KK16 | 5SV1316-6LK16 | 5SV1316-7LK16 | |
| | ■ | – | – | 5SV1316-6GV16 | 5SV1316-7GV16 | – | – | |
| 300 mA new | 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

| Mounting width | Instantaneous 230 V AC | | Super resistant [K] new |
|---------------------------------|---|---|---|
| | 1 MW | 1 MW | 230 V AC |
| 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 | |
|-------------------|-------|------------------------------|----------------|---------------|---------------|----------------|---------------|
| | | | C | B | C | B | 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

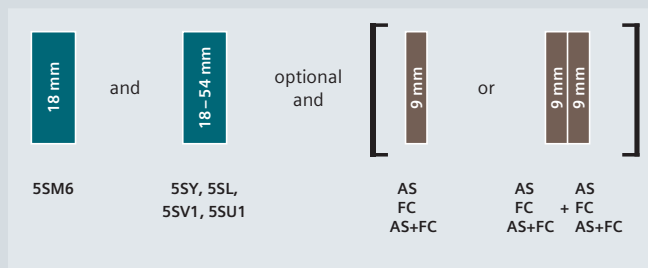
For combination with an MCB or RCBO



| 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

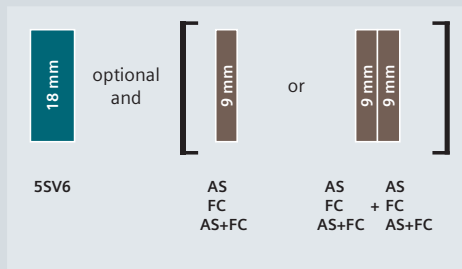
With integrated miniature circuit breaker



| Rated current I_n | Bulk packaging (12 units) | Characteristic | | Characteristic | |
|---------------------|---------------------------|--------------------------------|--------------------------------|--------------------------|--------------------------|
| | | B | C | B | C |
| 6 A | – ■ | 5SV6016-6KK06 5SV6016-6GV06 | 5SV6016-7KK06 5SV6016-7GV06 | 5SV6016-6KP06 new | 5SV6016-7KP06 new |
| 10 A | – ■ | 5SV6016-6KK10 5SV6016-6GV10 | 5SV6016-7KK10 5SV6016-7GV10 | 5SV6016-6KP10 new | 5SV6016-7KP10 new |
| 13 A | – ■ | 5SV6016-6KK13 5SV6016-6GV13 | 5SV6016-7KK13 – | 5SV6016-6KP13 new | 5SV6016-7KP13 new |
| 16 A | – ■ | 5SV6016-6KK16 5SV6016-6GV16 | 5SV6016-7KK16 5SV6016-7GV16 | 5SV6016-6KP16 new | 5SV6016-7KP16 new |
| 20 A | – | 5SV6016-6KK20 | 5SV6016-7KK20 | 5SV6016-6KP20 new | 5SV6016-7KP20 new |
| 25 A | – ■ | 5SV6016-6KK25 5SV6016-6GV25 | 5SV6016-7KK25 – | 5SV6016-6KP25 new | 5SV6016-7KP25 new |
| 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](#)

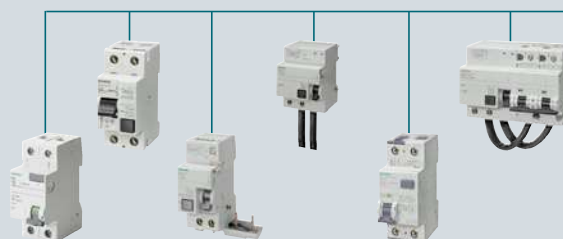
Accessories

| 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



5SV 5SM3 5SM2+LS 5SM2+5SP4 5SU1 5SU1 (125 A)

4

| | | | Article No. | 5SV | 5SM3 | 5SM2+LS | 5SM2+5SP4 | 5SU1 | 5SU1 (125 A) |
|---|-------------------------------------|----------------------------------|---------------|-----|------|---------|-----------|------|--------------|
| 5SM6 arc fault detection devices | | | | | | | | | |
|  | Rated current up to 16 A | Standard | 5SM6021-2 | - | - | - | - | ■ | - |
| | | For compact devices 1P+N in 1 MW | 5SM6011-2 | - | - | - | - | - | - |
| | Rated current up to 40 A | Standard | 5SM6024-2 | - | - | - | - | ■ | - |
| | | For compact devices 1P+N in 1 MW | 5SM6014-2 | - | - | - | - | - | - |
| 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

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

| | | 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 UL, CSA | IEC/EN 62019, IEC/EN 60947-5-1 UL 1077, CSA C22.2 No. 235 | | |
| Contacts | | | | |
| Minimum contact load | | 50 mA, 24 V | 1 mA, 5 V DC | 5 mA, 5 V DC |
| Maximum contact load | | – | 100 mA, 30 V DC | 30 mA, 30 V DC |
| Contact load according to IEC/EN 62019 and IEC/EN 60947-5-1 | 230 V AC, AC-13 | 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 mm ² (AWG 22 ... 14) | | |
| Terminals | Max. tightening torque | 0.5 Nm [4.5 lb-in] | | |
| Environmental conditions | | | | |
| Permissible ambient temperature | | –25 ... +55 °C | | |
| Permissible storage temperature | | –40 ... +75 °C | | |
| Resistance to climate | Acc. to IEC 60068-2-30 | 28 cycles | | |
| Mounting position | | Any | | |
| Shock at 11 ms half-sine | Acc. to IEC 60068-2-27 | 50 m/s ² | | |
| Vibration resistance at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | 50 m/s ² | | |

Electrical accessories



Fault signal contacts (FC)

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

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

¹⁾ Handle coupler 5ST3805-1 required

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

Further technical specifications

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

Electrical accessories



Auxiliary switches and fault signal contacts (AS+FC)

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

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

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST3062

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



Shunt 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

| | 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 mm ² (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/s ² |
| Vibration resistance at 10 ... 150 Hz | Acc. to IEC 60068-2-6 | | 50 m/s ² |

Electrical accessories



Undervoltage releases (UR)

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

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

¹⁾ Handle coupler 5ST3805-1 required

Further technical specifications

5ST304.

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



5ST3 remote controlled (RC) mechanisms

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

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

| Further technical specifications | 5ST3053 | 5ST3054 | 5ST3055 | 5ST3056 | 5ST3057 | 5ST3058 | 5ST3070 |
|--|---|---------|-----------------|---------|---------|----------------|---------|
| Standards | | | | | | | |
| 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 mm ² (AWG 14 ... 30) | | | | | | |
| Terminal tightening torque | 0.2 ... 0.25 Nm (2.0 lb-in) | | | | | | |
| Environmental conditions | | | | | | | |
| Permissible storage temperature | –40 ... +55 °C | | | | | –40 ... +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 | | | | |
|---|--|---------------------|-------------|-------------|
|  | <ul style="list-style-type: none"> • 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 | | | | |
|  | <ul style="list-style-type: none"> • 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 <p>Ø 10 mm² Ø 16 mm²</p> | For 6× 2MW devices (2P) | 12 MW | 210 mm | Article No. 5ST3608 | Article No. 5ST3638 |
| Three-phase, for MCBs with RCCB <p>Ø 10 mm² Ø 16 mm²</p> | For 8 MCBs 1P with 1 RCCB 3P+N, N right | 12 MW | 210 mm | Article No. 5ST3624 | Article No. 5ST3654 |
| <p>Ø 10 mm² Ø 16 mm²</p> | For 8 MCBs 1P with 1 RCCB 3P+N, N left | 11 MW | 192 mm | Article No. 5ST3667 | Article No. 5ST3668 |
| Four-phase / three-phase + N <p>Ø 10 mm² Ø 16 mm²</p> | For 6× 2MW devices (1P+N) | 12 MW | 215 mm | Article No. 5ST3623 | Article No. 5ST3653 |

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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 |
| | | 16 MW | 292 mm | ■ | 5ST3770-4 | 5ST3770-5 |
| | For 6 MCBs 1P+N with 1 RCCB 4P+N right | | | | | |

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

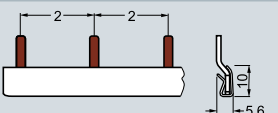
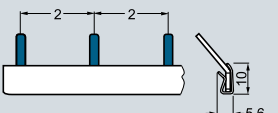
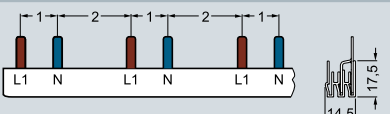
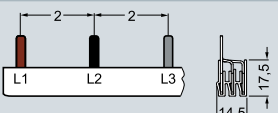
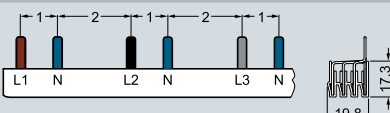
5ST36 and 5ST37

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 |

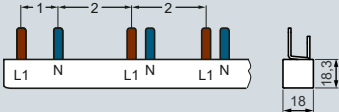
4

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 Article No. |
|---|---|---------------|--------|-------------------|-------|--|
| Two-phase / single-phase + N  | For RCCB 2P N-right and 5 AFDD (5SM601.) + compact device | 12 MW | 214 mm | ■ | Gray | 5ST3772 |

4

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) 5x 1 pin | | 5ST3655 |

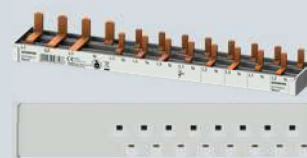
Compact busbars

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 1x RCCB 3P+N and 8x compact devices | 12 MW | 216 mm | ■ | Article No. 5ST3783-0 |
| | For 1x RCCB 3P+N (RCCB N left only) and 8x 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 |

4

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

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

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