

Contents

5SJ4 Branch Circuit Protectors



5SJ4 Page

Selection and ordering data

- 1-pole up to 63A 16/4

General data	16/3
Tripping characteristics	16/2
Dimension Drawings	16/23
Technical data	16/5

5SY4 Supplementary Protectors



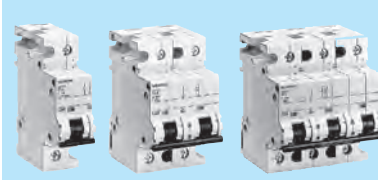
5SY4 Page

Selection and ordering data

- 1-pole, 1-pole+ N, and 2-pole up to 63A 16/8
- 3-pole, 3-pole + N, and 4-pole up to 63A 16/9
- Additional components 16/12
- Accessories 16/14

General data	16/6
Tripping characteristics	16/2
Dimension Drawings	16/23
Technical data	16/21

5SP Supplementary Protectors



5SP4 Page

Selection and ordering data

- 1-pole, 2-pole, 3-pole and 4-pole up to 125A 16/10
- Additional components 16/12
- Accessories 16/15

General data	16/6
Tripping characteristics	16/2
Dimension Drawings	16/23
Technical data	16/21

AC/DC Product Range 5SY5 Supplementary Protectors



5SY5 Page

Selection and ordering data

- 1-pole and 2-pole up to 63A 16/11
- Additional components 16/12
- Accessories 16/14

General data	16/6
Tripping characteristics	16/2
Dimension Drawings	16/23
Technical data	16/21

5SX2 Supplementary Protectors



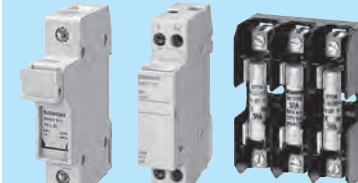
5SX2 Page

Selection and ordering data

- 1-pole and 2-pole up to 63A 16/16
- 3-pole up to 63A 16/17
- Additional components 16/18
- Accessories 16/19

General data	16/6
Tripping Characteristics	16/2
Dimension Drawings	16/23
Technical data	16/21

3NW7 Cylindrical Fuse Holders



3NW7 and 3NC10 Page

Selection and ordering data

- 3NW7** 16/25
 - 1-, 1+N, 2- and 3-, 3+N and 4-poles up to 100 A
- 3NC10** 16/28
 - 1-, 2- & 3-pole up to 30 A

General data	16/24, 16/28
Dimension Drawings	16/27, 16/28
Technical Data	16/26, 16/28

Control Circuit Protection

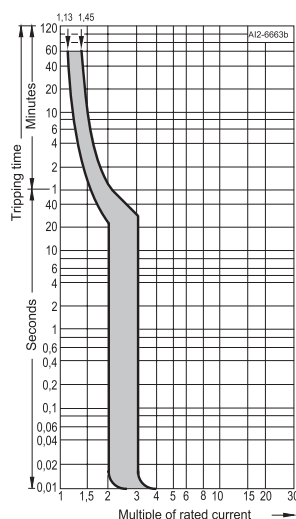
General Data

Trip characteristics

Tripping characteristics acc. to EN 60 898

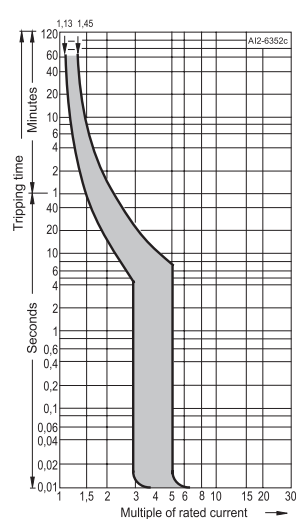
Tripping characteristic A, -5

Type A characteristic is designed to protect very sensitive circuits such as semiconductors. Magnetic trip point - 2 to 3 times I_n rating. Thermal trip point - 1.13 to 1.45 protector rating.



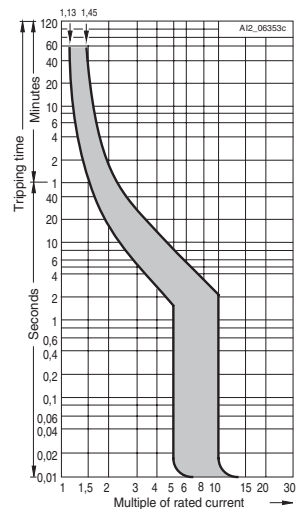
Tripping characteristic B, -6

Type B characteristic designed for European residential circuit protection. This characteristic can also be used for protection of computers and electronic equipment. Magnetic trip point - 3 to 5 times I_n rating. Thermal trip point - 1.13 to 1.45 protector rating.



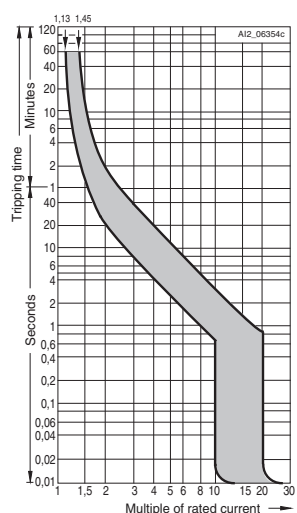
Tripping characteristic C, -7

Type C characteristic is for general device protection in control circuits. Magnetic trip point - 5 to 10 times I_n rating. Thermal trip point - 1.13 to 1.45 protector rating.



Tripping characteristic D, -8

Type D characteristic is designed for high inrush loads. Magnetic trip point - 10 to 20 times I_n rating. Thermal trip point - 1.13 to 1.45 protector rating.



For different ambient temperatures, the current values of the delayed tripping operation change by approximately 5% per 10°K temperature difference. Specifically they increase for temperatures below 25°C (5SJ41), 30°C (5SP, 5SX, 5SY) and decrease for temperatures above 25°C (5SJ41), 30°C (5SP, 5SX, 5SY).

For DC voltages the maximum current values of the instantaneous tripping operation increase by a factor of 1.2.

If more than one electrical circuit is loaded in a series of miniature circuit breakers or supplementary protectors, the resulting increase in ambient temperature affects the characteristic curve. In this case an additional correction factor found in the following table must be used.

Number	1	2 - 3	4 - 6	> 7
Correction factor K	1.00	0.90	0.88	0.85

Control Circuit Protection

General Data

5SX, 5SY and 5SP supplementary protectors

Application

Siemens' UL 1077 Supplementary Protectors are designed to provide additional protection along with a branch circuit protection device. Since our Supplementary protectors are made to trip faster than a standard UL 489 Circuit Breaker they are able to provide additional protection for more sensitive devices inside the panel. Supplementary protectors can be used in a number of industrial applications such as to provide selectivity for multiple motor control circuits on the secondary side of a control transformer or power supply by allowing the user to quickly find the problem circuit should a fault occur without having to shut down all of the other control circuits. Supplementary protectors may also be used as a local disconnecting means inside the panel when a branch circuit protection device is already present.

Always remember to follow the National Electric Code when wiring your panel for applications within the United States.

Design

Supplementary protectors are equipped with a delayed overload/time-dependent thermal release (thermal bimetal) for low overcurrents and with an instantaneous electromagnetic release for high overload and short-circuit currents.

The special contact materials used guarantee a long service life and offer a high degree of protection against contact welding.

Mode of operation

Thanks to the extremely fast contact separation in cases of failures and the rapid quenching of the arc consequently generated in the arcing chamber, supplementary protectors assure a safe and current-limiting off-switching.

The permissible limit- I^2t -values of the energy limitation class 3 specified in EN 60 898 are generally undercut. This guarantees an excellent selectivity towards upstream overcurrent protection devices.

Features

- High rated breaking capacity of up to 10,000 A acc. to EN 60 898 / up to 15 kA acc. to EN 60 947-2
- Excellent current limiting and selectivity characteristics
- Tripping characteristic A, B, C and D
- Terminals offer protection against contact with fingers or the back of the hand acc. to the German accident prevention regulations VBG 4/ BGV A2
- Combined terminals enable a simultaneous connection of busbars and feeder cables
- Uniform components that can be quickly mounted individually, thanks to their snap-on technique
- The handle locking device effectively prevents any unauthorized operation of the handle

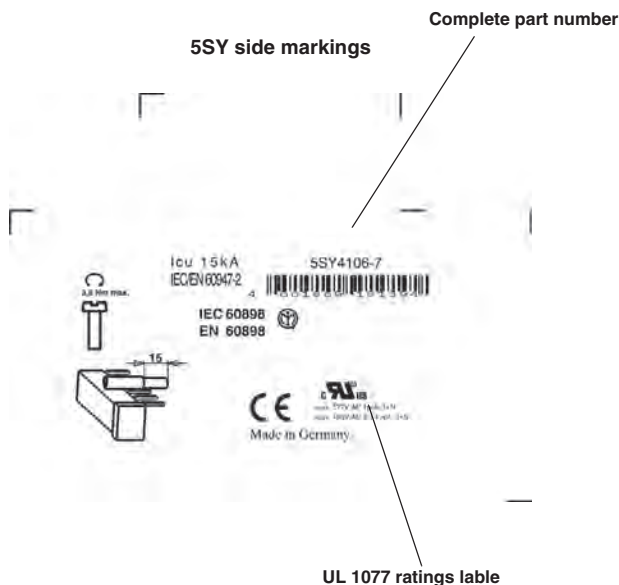
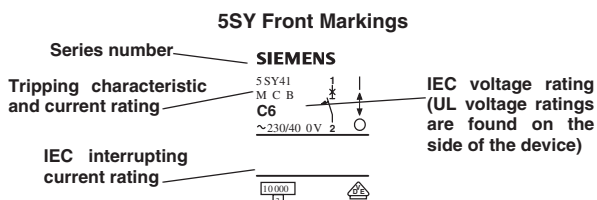
Features of 5SY

- Rapid connection of the feeder cable in front of the busbar
- Identical terminals at both sides for an optional infeed from the top or the bottom
- No tool required for mounting or dismounting
- Supports a fast and comfortable removal from the assembly
- Separate switch position indication

Features of 5SP4

- Disconnection characteristics acc. to EN 60947-3 (DIN VDE 0660 Part 107)
- Main switch characteristics acc. to EN 60 204-1
- Can be screwed onto bases
- Separate switch position indication

Device markings

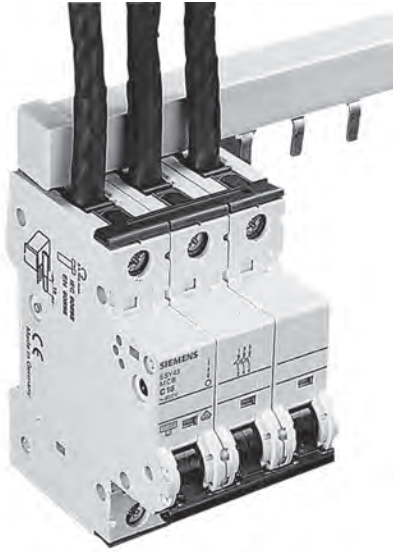


Control Circuit Protection

New 5SY4 Supplementary Protectors

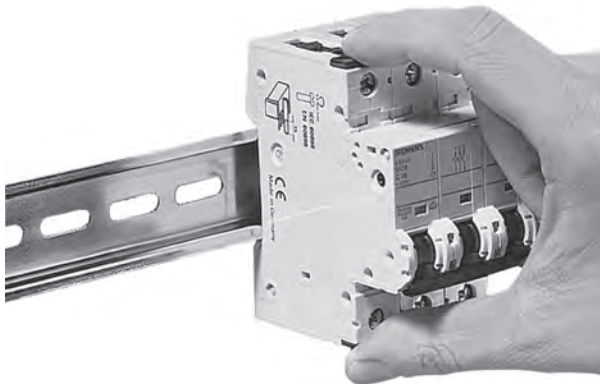
Overview

Features of 5SY supplementary protectors



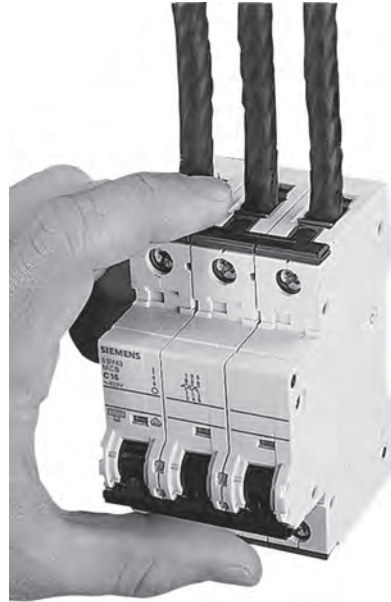
Easier, faster, enlarged wiring space

- Identical top and bottom terminals
- Connection of incoming cables vis-à-vis of the busbar
- Enlarged and easily accessible wiring space for the feeder cables
- Comfortable insertion of the incoming cables into the terminal
- Defined, visible and controllable connection of the feeder cables
- Universal infeed with top and bottom busbar mounting options.



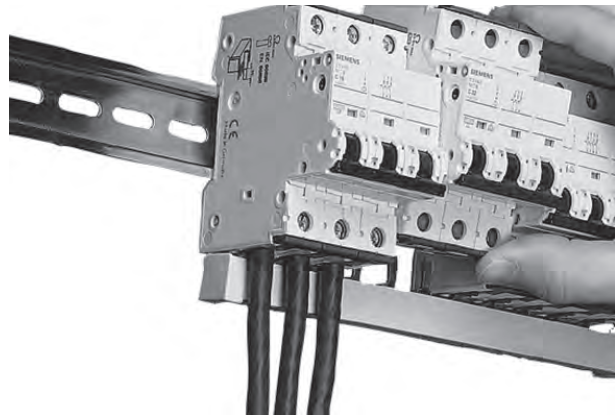
Flexible and no use of tools required

- Manually operable quick-assembly and disassembly systems requiring no use of tools
- Fast assembly and disassembly of the 5SY supplementary protectors to and from the standard mounting rail acc. to DIN EN 60175
- All devices can be easily and comfortably replaced at any time.



Protection against contact with clear advantages

- Integrated movable terminal covers located at the feeder cable input section
- The terminals are completely closed when screws are fully tightened
- Effective protection against contact, also when the device is fully grabbed



Removal from the assembly

Thanks to the combination of the various features stated above, 5SY supplementary protectors can be easily and rapidly removed from the assembly when circuits need to be changed - with these devices, removal of the busbar is no longer necessary.

Control Circuit Protection

5SY4 Supplementary Protectors

5SY4 70 mm mounting depth

Features

All 5SY4 designs have been approved acc. to **UL 1077 and CSA 22.2 No. 235-M 89** and can therefore be used as "supplementary protectors" for applications of up to 277 V AC (1-pole and 1-pole + N designs) and 480 V AC (2-pole, 3-pole, 3-pole + N and 4-pole designs).

Selection and ordering data

	I_n	MW	Characteristic A		Characteristic B		Characteristic C		Characteristic D		Weight 1 item kg	Pack. unit Items
			Order No.	List Price \$ 1 item	Order No.	List Price \$ 1 item	Order No.	List Price \$ 1 item	Order No.	List Price \$ 1 item		
 1-pole 1 2	A											
	0.3	1	—	—	—	—	5SY4 114-7	58.00	5SY4 114-8	58.00	0.165	12
	0.5	—	—	—	—	—	5SY4 105-7	58.00	5SY4 105-8	58.00		
	1	—	5SY4 101-5	58.00	—	—	5SY4 101-7	58.00	5SY4 101-8	58.00		
	1.6	—	5SY4 115-5	58.00	—	—	5SY4 115-7	58.00	5SY4 115-8	58.00		
	2	—	5SY4 102-5	58.00	—	—	5SY4 102-7	58.00	5SY4 102-8	58.00		
	3	—	5SY4 103-5	58.00	—	—	5SY4 103-7	58.00	5SY4 103-8	58.00		
	4	—	5SY4 104-5	58.00	—	—	5SY4 104-7	58.00	5SY4 104-8	58.00		
	5	—	—	—	—	—	5SY4 111-7	58.00	—	—		
	6	—	5SY4 106-5	58.00	5SY4 106-6	58.00	5SY4 106-7	58.00	5SY4 106-8	58.00		
	8	—	5SY4 108-5	58.00	—	—	5SY4 108-7	58.00	5SY4 108-8	58.00		
	10	—	5SY4 110-5	58.00	5SY4 110-6	58.00	5SY4 110-7	58.00	5SY4 110-8	58.00		
	13	—	5SY4 113-5	58.00	5SY4 113-6	58.00	5SY4 113-7	58.00	5SY4 113-8	58.00		
	15	—	—	—	—	—	5SY4 118-7	58.00	—	—		
	16	—	5SY4 116-5	58.00	5SY4 116-6	58.00	5SY4 116-7	58.00	5SY4 116-8	58.00		
	20	—	5SY4 120-5	58.00	5SY4 120-6	58.00	5SY4 120-7	58.00	5SY4 120-8	58.00		
	25	—	5SY4 125-5	58.00	5SY4 125-6	58.00	5SY4 125-7	58.00	5SY4 125-8	58.00		
	30	—	—	—	—	—	5SY4 130-7	58.00	—	—		
	32	—	5SY4 132-5	58.00	5SY4 132-6	58.00	5SY4 132-7	58.00	5SY4 132-8	58.00		
	35	—	—	—	—	—	5SY4 135-7	62.00	—	—		
	40	—	5SY4 140-5	62.00	5SY4 140-6	62.00	5SY4 140-7	62.00	5SY4 140-8	62.00		
	45	—	—	—	—	—	5SY4 145-7	64.00	—	—		
	50	—	5SY4 150-5	66.00	5SY4 150-6	66.00	5SY4 150-7	66.00	5SY4 150-8	66.00		
	60	—	—	—	—	—	5SY4 160-7	70.00	—	—		
	63	—	5SY4 163-5	70.00	5SY4 163-6	70.00	5SY4 163-7	70.00	5SY4 163-8	70.00		
 1-pole + N 1 2 N	0.3	2	—	—	—	—	5SY4 514-7	116.00	5SY4 514-8	116.00	0.330	6
	0.5	—	—	—	—	—	5SY4 505-7	116.00	5SY4 505-8	116.00		
	1	—	5SY4 501-5	116.00	—	—	5SY4 501-7	116.00	5SY4 501-8	116.00		
	1.6	—	5SY4 515-5	116.00	—	—	5SY4 515-7	116.00	5SY4 515-8	116.00		
	2	—	5SY4 502-5	116.00	—	—	5SY4 502-7	116.00	5SY4 502-8	116.00		
	3	—	5SY4 503-5	116.00	—	—	5SY4 503-7	116.00	5SY4 503-8	116.00		
	4	—	5SY4 504-5	116.00	—	—	5SY4 504-7	116.00	5SY4 504-8	116.00		
	6	—	5SY4 506-5	116.00	5SY4 506-6	116.00	5SY4 506-7	116.00	5SY4 506-8	116.00		
	8	—	5SY4 508-5	116.00	—	—	5SY4 508-7	116.00	5SY4 508-8	116.00		
	10	—	5SY4 510-5	116.00	5SY4 510-6	136.00	5SY4 510-7	116.00	5SY4 510-8	116.00		
	13	—	5SY4 513-5	116.00	5SY4 513-6	136.00	5SY4 513-7	116.00	5SY4 513-8	116.00		
	16	—	5SY4 516-5	116.00	5SY4 516-6	136.00	5SY4 516-7	116.00	5SY4 516-8	116.00		
	20	—	5SY4 520-5	116.00	5SY4 520-6	136.00	5SY4 520-7	116.00	5SY4 520-8	116.00		
	25	—	5SY4 525-5	116.00	5SY4 525-6	116.00	5SY4 525-7	116.00	5SY4 525-8	116.00		
	32	—	5SY4 532-5	116.00	5SY4 532-6	116.00	5SY4 532-7	116.00	5SY4 532-8	116.00		
	40	—	5SY4 540-5	124.00	5SY4 540-6	124.00	5SY4 540-7	124.00	5SY4 540-8	124.00		
	50	—	5SY4 550-5	132.00	5SY4 550-6	132.00	5SY4 550-7	132.00	5SY4 550-8	132.00		
	63	—	5SY4 563-5	140.00	5SY4 563-6	140.00	5SY4 563-7	140.00	5SY4 563-8	140.00		
 2-pole 1 2 3 4	0.3	2	—	—	—	—	5SY4 214-7	133.00	5SY4 214-8	133.00	0.330	6
	0.5	—	—	—	—	—	5SY4 205-7	133.00	5SY4 205-8	133.00		
	1	—	5SY4 201-5	133.00	—	—	5SY4 201-7	133.00	5SY4 201-8	133.00		
	1.6	—	5SY4 215-5	133.00	—	—	5SY4 215-7	133.00	5SY4 215-8	133.00		
	2	—	5SY4 202-5	133.00	—	—	5SY4 202-7	133.00	5SY4 202-8	133.00		
	3	—	5SY4 203-5	133.00	—	—	5SY4 203-7	133.00	5SY4 203-8	133.00		
	4	—	5SY4 204-5	133.00	—	—	5SY4 204-7	133.00	5SY4 204-8	133.00		
	5	—	—	—	—	—	5SY4 211-7	133.00	—	—		
	6	—	5SY4 206-5	133.00	5SY4 206-6	133.00	5SY4 206-7	133.00	5SY4 206-8	133.00		
	8	—	5SY4 208-5	133.00	—	—	5SY4 208-7	133.00	5SY4 208-8	133.00		
	10	—	5SY4 210-5	133.00	5SY4 210-6	133.00	5SY4 210-7	133.00	5SY4 210-8	133.00		
	13	—	5SY4 213-5	133.00	5SY4 213-6	133.00	5SY4 213-7	133.00	5SY4 213-8	133.00		
	15	—	—	—	—	—	5SY4 218-7	133.00	—	—		
	16	—	5SY4 216-5	133.00	5SY4 216-6	133.00	5SY4 216-7	133.00	5SY4 216-8	133.00		
	20	—	5SY4 220-5	133.00	5SY4 220-6	133.00	5SY4 220-7	133.00	5SY4 220-8	133.00		
	25	—	5SY4 225-5	133.00	5SY4 225-6	133.00	5SY4 225-7	133.00	5SY4 225-8	133.00		
	30	—	—	—	—	—	5SY4 230-7	133.00	—	—		
	32	—	5SY4 232-5	133.00	5SY4 232-6	133.00	5SY4 232-7	133.00	5SY4 232-8	133.00		
	35	—	—	—	—	—	5SY4 235-7	141.00	—	—		
	40	—	5SY4 240-5	141.00	5SY4 240-6	141.00	5SY4 240-7	141.00	5SY4 240-8	141.00		
	45	—	—	—	—	—	5SY4 245-7	145.00	—	—		
	50	—	5SY4 250-5	149.00	5SY4 250-6	149.00	5SY4 250-7	149.00	5SY4 250-8	149.00		
	60	—	—	—	—	—	5SY4 260-7	157.00	—	—		
	63	—	5SY4 263-5	157.00	5SY4 263-6	157.00	5SY4 263-7	157.00	5SY4 263-8	157.00		

1 MW = modular width
of 18 mm Depth 70
mm = device mounting
depth of 70 mm

Control Circuit Protection

5SY4 Supplementary Protectors

5SY4 70 mm mounting depth

Selection and ordering data

All 5SY4 designs have been approved acc. to **UL 1077 and CSA 22.2 No. 235-M 89** and can therefore be used as "supplementary protectors" for applications of up to 277 V AC (1-pole and 1-pole + N designs) and 480 V AC (2-pole, 3-pole, 3-pole + N and 4-pole designs).

	I_n	MW	Characteristic A		Characteristic B		Characteristic C		Characteristic D		Weight 1 item kg	Pack. unit Items
			Order No.	List Price \$ 1 item	Order No.	List Price \$ 1 item	Order No.	List Price \$ 1 item	Order No.	List Price \$ 1 item		
 3-pole 	A											
	0.3	—	—	—	—	—	5SY4 314-7	191.00	5SY4 314-8	191.00	0.495	4
	0.5	—	—	—	—	—	5SY4 305-7	191.00	5SY4 305-8	191.00		
	1	3	5SY4 301-5	191.00	—	191.00	5SY4 301-7	191.00	5SY4 301-8	191.00		
	1.6	—	5SY4 315-5	191.00	—	191.00	5SY4 315-7	191.00	5SY4 315-8	191.00		
	2	—	5SY4 302-5	191.00	—	191.00	5SY4 302-7	191.00	5SY4 302-8	191.00		
	3	—	5SY4 303-5	191.00	—	191.00	5SY4 303-7	191.00	5SY4 303-8	191.00		
	4	—	5SY4 304-5	191.00	—	191.00	5SY4 304-7	191.00	5SY4 304-8	191.00		
	5	—	—	—	—	—	5SY4 311-7	—	—	—		
	6	—	5SY4 306-5	191.00	5SY4 306-6	191.00	5SY4 306-7	191.00	5SY4 306-8	191.00		
	8	—	5SY4 308-5	191.00	—	—	5SY4 308-7	191.00	5SY4 308-8	191.00		
	10	—	5SY4 310-5	191.00	5SY4 310-6	191.00	5SY4 310-7	191.00	5SY4 310-8	191.00		
	13	—	5SY4 313-5	191.00	5SY4 313-6	191.00	5SY4 313-7	191.00	5SY4 313-8	191.00		
	15	—	—	—	—	—	5SY4 318-7	—	—	—		
	16	—	5SY4 316-5	191.00	5SY4 316-6	191.00	5SY4 316-7	191.00	5SY4 316-8	191.00		
	20	—	5SY4 320-5	191.00	5SY4 320-6	191.00	5SY4 320-7	191.00	5SY4 320-8	191.00		
	25	—	5SY4 325-5	191.00	5SY4 325-6	191.00	5SY4 325-7	191.00	5SY4 325-8	191.00		
	30	—	—	—	—	—	5SY4 330-7	—	—	—		
	32	—	5SY4 332-5	191.00	5SY4 332-6	191.00	5SY4 332-7	191.00	5SY4 332-8	191.00		
	35	—	—	—	—	—	5SY4 335-7	203.00	—	—		
	40	—	5SY4 340-5	203.00	5SY4 340-6	203.00	5SY4 340-7	203.00	5SY4 340-8	203.00		
	45	—	—	—	—	—	5SY4 345-7	209.00	—	—		
	50	—	5SY4 350-5	215.00	5SY4 350-6	215.00	5SY4 350-7	215.00	5SY4 350-8	215.00		
	60	—	—	—	—	—	5SY4 360-7	227.00	—	—		
	63	—	5SY4 363-5	227.00	5SY4 363-6	227.00	5SY4 363-7	227.00	5SY4 363-8	227.00		
 3-pole + N 	0.3	—	—	—	—	—	5SY4 614-7	276.00	5SY4 614-8	276.00	0.660	3
	0.5	—	—	—	—	—	5SY4 605-7	276.00	5SY4 605-8	276.00		
	1	4	5SY4 601-5	276.00	—	—	5SY4 601-7	276.00	5SY4 601-8	276.00		
	1.6	—	5SY4 615-5	276.00	—	—	5SY4 615-7	276.00	5SY4 615-8	276.00		
	2	—	5SY4 602-5	276.00	—	—	5SY4 602-7	276.00	5SY4 602-8	276.00		
	3	—	5SY4 603-5	276.00	—	—	5SY4 603-7	276.00	5SY4 603-8	276.00		
	4	—	5SY4 604-5	276.00	—	—	5SY4 604-7	276.00	5SY4 604-8	276.00		
	6	—	5SY4 606-5	276.00	5SY4 606-6	276.00	5SY4 606-7	276.00	5SY4 606-8	276.00		
	8	—	5SY4 608-5	276.00	—	—	5SY4 608-7	276.00	5SY4 608-8	276.00		
	10	—	5SY4 610-5	276.00	5SY4 610-6	276.00	5SY4 610-7	276.00	5SY4 610-8	276.00		
	13	—	5SY4 613-5	276.00	5SY4 613-6	276.00	5SY4 613-7	276.00	5SY4 613-8	276.00		
	16	—	5SY4 616-5	276.00	5SY4 616-6	276.00	5SY4 616-7	276.00	5SY4 616-8	276.00		
	20	—	5SY4 620-5	276.00	5SY4 620-6	276.00	5SY4 620-7	276.00	5SY4 620-8	276.00		
	25	—	5SY4 625-5	276.00	5SY4 625-6	276.00	5SY4 625-7	276.00	5SY4 625-8	276.00		
	32	—	5SY4 632-5	276.00	5SY4 632-6	276.00	5SY4 632-7	276.00	5SY4 632-8	276.00		
	40	—	5SY4 640-5	292.00	5SY4 640-6	292.00	5SY4 640-7	292.00	5SY4 640-8	292.00		
	50	—	5SY4 650-5	308.00	5SY4 650-6	308.00	5SY4 650-7	308.00	5SY4 650-8	308.00		
	63	—	5SY4 663-5	324.00	5SY4 663-6	324.00	5SY4 663-7	324.00	5SY4 663-8	324.00		
 4-pole 	0.3	—	—	—	—	—	5SY4 414-7	301.00	5SY4 414-8	301.00	0.660	3
	0.5	—	—	—	—	—	5SY4 405-7	301.00	5SY4 405-8	301.00		
	1	4	5SY4 401-5	301.00	—	—	5SY4 401-7	301.00	5SY4 401-8	301.00		
	1.6	—	5SY4 415-5	301.00	—	—	5SY4 415-7	301.00	5SY4 415-8	301.00		
	2	—	5SY4 402-5	301.00	—	—	5SY4 402-7	301.00	5SY4 402-8	301.00		
	3	—	5SY4 403-5	301.00	—	—	5SY4 403-7	301.00	5SY4 403-8	301.00		
	4	—	5SY4 404-5	301.00	—	—	5SY4 404-7	301.00	5SY4 404-8	301.00		
	6	—	5SY4 406-5	301.00	5SY4 406-6	301.00	5SY4 406-7	301.00	5SY4 406-8	301.00		
	8	—	5SY4 408-5	301.00	—	—	5SY4 408-7	301.00	5SY4 408-8	301.00		
	10	—	5SY4 410-5	301.00	5SY4 410-6	301.00	5SY4 410-7	301.00	5SY4 410-8	301.00		
	13	—	5SY4 413-5	301.00	5SY4 413-6	301.00	5SY4 413-7	301.00	5SY4 413-8	301.00		
	16	—	5SY4 416-5	301.00	5SY4 416-6	301.00	5SY4 416-7	301.00	5SY4 416-8	301.00		
	20	—	5SY4 420-5	301.00	5SY4 420-6	301.00	5SY4 420-7	301.00	5SY4 420-8	301.00		
	25	—	5SY4 425-5	301.00	5SY4 425-6	301.00	5SY4 425-7	301.00	5SY4 425-8	301.00		
	32	—	5SY4 432-5	301.00	5SY4 432-6	301.00	5SY4 432-7	301.00	5SY4 432-8	301.00		
	40	—	5SY4 440-5	317.00	5SY4 440-6	317.00	5SY4 440-7	317.00	5SY4 440-8	317.00		
	50	—	5SY4 450-5	333.00	5SY4 450-6	333.00	5SY4 450-7	333.00	5SY4 450-8	333.00		
	63	—	5SY4 463-5	349.00	5SY4 463-6	349.00	5SY4 463-7	349.00	5SY4 463-8	349.00		

1 MW = modular
width of 18 mm
Depth 70 mm =
device mounting

Control Circuit Protection

Supplementary Protectors

Additional components for 5SY4, 5SY5 and 5SP4 supplementary protectors

Features

- UL Recognized to UL 1077 (5ST3 010, 011, 012, 020, 021 & 022)
- Individual retrofitting possible
- Assembly via factory-fitted clips
- Short-circuit protection via supplementary protectors of characteristic B or C and $I_n = 6\text{ A}$ or 6 A gL fuses
- Low output versions in accordance with EN 61131-2 for controlling PLCs

Design

Auxiliary switches (AS) and fault signal contacts (FC) (5ST30.0, 5ST30.1, 5ST30.2)

- Min. contact load: 50 mA, 24 V
- Max. contact load:
NO contacts:
2 A, 400 V AC, AC-14
6 A, 230 V AC, AC-14
1 A, 220 V DC, DC-13
1 A, 110 V DC, DC-13
3 A, 60 V DC, DC-13
6 A, 24 V DC, DC-13
NC contacts:
2 A, 400 V AC, AC-13
6 A, 230 V AC, AC-13
1 A, 220 V DC, DC-13
1 A, 110 V DC, DC-13
3 A, 60 V DC, DC-13
6 A, 24 V DC, DC-13
- Connectable to *instabus EIB* and AS-Interface bus via binary inputs

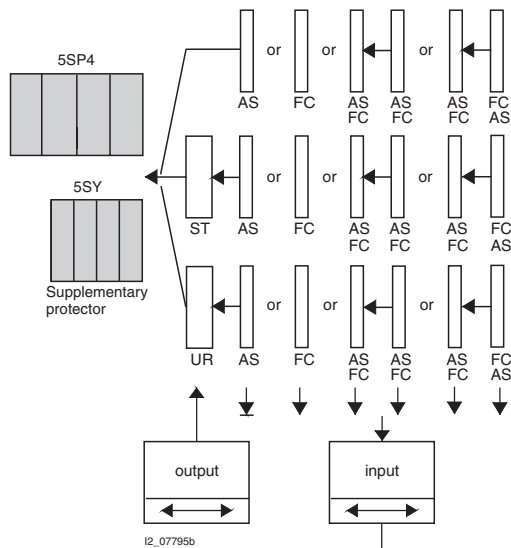
Auxilliary switches (AS) with low output (5ST3013, 5ST3014, 5ST3015)

- Area of application: 1mA / 5 V DC to 50 mA / 30 V DC

Application

Indication of the supplementary protectors' switching state:

- AS: ON/OFF
- FC: tripped



Selection and ordering data

		MW	Order No.	List Price \$ 1 item	Price group	Weight 1 item kg	Pack. unit Items
	Auxiliary switches (AS) for 5SY4, 5SY5, 5SP4 supplementary protectors						
		1 NO + 1 NC, low output ¹⁾	0.5	5ST3 010 5ST3 013	68.00 69.00	0.050	1
		2 NO, low output ¹⁾		5ST3 011 5ST3 014	34.00 69.00		
		2 NC, low output ¹⁾		5ST3 012 5ST3 015	34.00 69.00		
	Fault signal contacts (FC) for 5SY4, 5SY5, 5SP4 supplementary protectors						
		1 NO + 1 NC	0.5	5ST3 020	54.00	0.050	1
		2 NO		5ST3 021	54.00		
		2 NC		5ST3 022	54.00		

¹⁾UL/CSA pending

Control Circuit Protection Supplementary Protectors

Additional components for 5SY4, 5SY5 and 5SP4 supplementary protectors

Features

Shunt trips

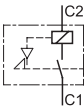
- Response limits acc. to DIN VDE 0660 Part 100, 7.2.1.4

- Suitable for voltages:
110 to 415 V AC, 110 V AC,
24 to 48 V AC/DC

Application

Remote tripping of the supplementary protectors

Selection and ordering data

MW		Order No.	List Price \$ 1 item	Price group	Weight 1 item kg	Pack. unit Items
	Shunt trips (ST) for 5SY4, 5SY5, 5SP4 supplementary protectors 1)					
		110-415 V AC 1	5ST3 030	105.00	027	0.098 1
		24-48 V AC/DC 1	5ST3 031	105.00	027	

Features

Undervoltage releases

- Response limits acc. to DIN VDE 0660 Part 100, 7.2.1.3

- Suitable for voltages:
230 V AC
110 V DC
24 V DC
- Connectable to *instabus EIB* and AS-Interface bus via binary inputs.

Application

- Applicable as remote trip in an EMERGENCY-OFF loop
- Assures disconnection of the control circuit acc. to EN 60 204
- In cases of interrupted or insufficient voltage, the undervoltage release trips the supplementary protector or prevents it from switching on.

Selection and ordering data

MW		Order No.	List Price \$ 1 item	Price group	Weight 1 item kg	Pack. unit Items
	Undervoltage releases (UR) for 5SY4, 5SY5, 5SP4 supplementary protectors 1)					
		230 V AC 1	5ST3 040	153.00	027	0.115 1
		110 V DC	5ST3 041	153.00	027	
		24 V DC	5ST3 042	153.00	027	
		230 V AC 1	5ST3 043	154.00	027	
		110 V DC	5ST3 044	116.00	027	
		24 V DC	5ST3 045	188.00	027	

1) Without UL 1077 or CSA 22.2 No. 235-M 89

Control Circuit Protection

Supplementary Protector Accessories

Accessories for 5SY supplementary protectors

Features

Busbar system ¹⁾

- Acc. to DIN 57 606 and DIN 57 659
- Load for one-side/central infeed:
65 A/120 A for 16 mm²
- Pin-type connections
- Single and multi-phase
- Cu: 16 mm² and fully insulated
- Lug spacing: 18 mm
- No additional connection terminal required for stranded connections up to 35 mm²
- Excellent accessibility of the feeder cables
- Busbars do not comply with UL1077

Selection and ordering data

	Length mm	Order No.	List Price \$ 1 item	Price group	Weight 1 item kg	Pack. unit Items
Accessories for 5SY4, 5SY5 miniature circuit-breakers						
	Busbars 16mm ²					
	Fully insulated:					
	1-phase	214	5ST3 700	13.00	027	0.040 50
	1-phase + AS		5ST3 702	16.00	027	
	2-phase		5ST3 704	25.00	027	0.060 25
	2-phase + AS		5ST3 706	31.00	027	
	3-phase		5ST3 708	37.00	027	0.100 25
	3-phase + AS		5ST3 711	46.00	027	
	3 × (1-phase + AS)		5ST3 713	46.00	027	
	4-phase		5ST3 715	58.00	027	0.150 20
	3-phase, for a 5SM3 4-pole RCCB module with 8 miniature circuit-breakers:					
	3/N + 8 connections		5ST3 717	37.00	027	0.150 25
	Without end caps:					
	1-phase	1016	5ST3 701	36.00	027	0.190 50
	1-phase + AS		5ST3 703	48.00	027	
	2-phase		5ST3 705	99.00	027	0.290 20
	2-phase + AS		5ST3 707	124.00	027	
	3-phase		5ST3 710	149.00	027	0.430 20
	3-phase + AS		5ST3 712	187.00	027	
	3 × (1-phase + AS)		5ST3 714	184.00	027	
	4-phase		5ST3 716	228.00	027	0.700 15
	End caps					
	for lateral insulation of cut-to-length busbars					
	1- phase		5ST3 748	1.70	027	0.001 10
	2- and 3-phase		5ST3 750	1.90	027	0.001 10
	4-phase		5ST3 718	31.00	027	0.001 10

1) Without UL 1077 or CSA 22.2, No. 235-M 89

Control Circuit Protection

Supplementary Protectors Accessories

Accessories for 5SY and 5SP supplementary protectors

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

Selection and ordering data

		Order No.	List Price \$	Weight 1 item kg	Pack. unit Items
Accessories for 5SY4, 5SY5, 5SP4 supplementary protectors					
  	Handle locking device applicable with all types of poles; sealable against unintended on- and off-switching; padlock with a shackle of max. 3 mm	5ST3 801	24.00	0.007	1
	Terminal cover applicable with all types of poles; as an additional cover for screw openings; prevents removal of the device from the standard mounting rail; sealable	5ST3 800	5.00	0.001	10
	Padlock for handle locking device 5ST3 801	5ST3 802	36.00	0.027	1
	Locking mechanism consisting of 5ST3 801 handle locking device and 5ST3 802 padlock	5ST3 803	60.00	0.027	1 set

Selection and ordering data

		Order No.	List Price \$	Weight 1 item kg	Pack. unit Set
	Inscription labels (white) for 5SY4, 5SY5, 5SP4 miniature circuit-breakers 15 x 9 mm, 3 frames containing 44 labels each, attachable to the lower casing collar • Self-adhesive	5ST2 173	115.00	0.038	1