# Contactors for Switching Motors



3RT contactors, 3-pole - Size S00 to S3

#### Selection and ordering data













3RT201.-1A

3RT201. -2A. . .

3RT2028-1N...

3RT2025-2B...

3RT2035-1A...

3RT2045-1A...

Frame	Amp Rating	js	Single HP rat	-phase tings	!	Three HP ra	-phase tings			Auxilia	. ,	Screw Terminals	Spring-Loaded Terminals 1)	Weight approx.
Size	AC3	AC1	115V	208V	230V	208V	230V	460V	575V	NO	NC	Order No.	Order No.	kg
3RT 3-pc	ole co	ntacto	rs											
	6	18	0.25	0.5	0.75	1.5	2	3	5	1	0	3RT2015-1□●●1	3RT2015-2□●●1	
										0	1	3RT2015-1□●●2	3RT2015-2□●●2	
	9	22	0.33	1	1	2	3	5	7.5	1	0	3RT2016-1□●●1	3RT2016-2□●●1	
000										0	1	3RT2016-1□●●2	3RT2016-2□●●2	0.24/0.29
S00	12	22	0.5	1.5	2	3	3	7.5	10	1	0	3RT2017-1□●●1	3RT2017-2□●●1	0.24/0.29
										0	1	3RT2017-1□●●2	3RT2017-2□●●2	
	16	22	1	2	2	3	5	10	10	1	0	3RT2018-1□●●1	3RT2018-2□●●1	
										0	1	3RT2018-1□●●2	3RT2018-2□●●2	
	9	40	1	1	1	2	3	5	7.5	1	1	3RT2023-1□●●0	3RT2023-2□●●0	
	12	40	1	2	2	3	3	7.5	10	1	1	3RT2024-1□●●0	3RT2024-2□●●0	
S0	17	40	1	2	3	5	5	10	15	1	1	3RT2025-1□●●0	3RT2025-2□●●0	0.42/0.60
30	25	40	2	3	3	7.5	7.5	15	20	1	1	3RT2026-1□●●0	3RT2026-2□●●0	0.42/0.60
	32	50	2	5	5	10	10	20	25	1	1	3RT2027-1□●●0	3RT2027-2□●●0	
	38	50	3	5	5	10	10	25	25	1	1	3RT2028-1□●●0	3RT2028-2□●●0	
	40	60	3	5	7.5	10	15	30	40	1	1	3RT2035-1□●●0	3RT2035-3 □●●0	
S2	50	70	3	7.5	10	15	15	40	50	1	1	3RT2036-1□●●0	3RT2036-3 □●●0	0.99/1.121
52	65	80	5	10	10	20	20	50	50	1	1	3RT2037-1□●●0	3RT2037-3□●●0	0.99/1.121
	<b>80</b> <sup>2)</sup>	90	5	10	15	20	25	50	60	1	1	3RT2038-1□●●0	3RT2038-3 □●●0	
	80	125	7.5	10	15	25	30	60	60	1	1	3RT2045-1□●●0	3RT2045-3 □●●0	
S3	95	130	10	10	20	30	30	75	75	1	1	3RT2046-1□●●0	3RT2046-3 □●●0	1.8/2.8
	110	130	10	10	20	30	40	75	100	1	1	3RT2047-1□●●0	3RT2047-3 □●●0	
												П		

Size S2 & S3 only: Replace "B" with "K" for 24VDC coil only Size S0-S3 only: UC Electronic with integrated varistor

A B N AC Coil = A DC Coil = B UC Coil = N

NEMA	Amp	Single-phase HP ratings	!	Three- HP rat	-phase tings			Auxilia conta	,	Screw Terminals with AC coil	Screw Terminals with 24 VDC coil	Weight approx.
Slze	Ratings	115V	230V	208V	230V	460V	575V	NO	NC	Order No.	Order No.	kg
NEMA L	abeled Con	tactors										
0	18	1	2	3	3	5	5	1	0	3RT2018-1A●●1-0UA0	3RT2018-1BB41-0UA0	0.28
1	27	2	3	7.5	7.5	10	10	1	1	3RT2027-1A●●0-0UA0	3RT2027-1BB40-0UA0	0.42
2	45	3	7.5	10	15	25	25	1	1	3RT2036-1A●●0-0UA0	3RT2036-1NB30-0UA0	0.986/1.121
3	90	7.5	15	25	30	50	50	1	1	3RT2046-1A●●0-0UA0	3RT2046-1NB30-0UA0	1.8 / 2.8

Note: Ring lug terminals are also available in size S00 & S0 contactors, except contactors with communication interface or UC coil. Change the 8th digit of the order number to a "4", e. g. 3RT2015-4AK61.

For further coil voltages, see page 2/51. For auxiliaries and accessories, see page 2/68-2/85. For spare parts, see page 2/96-2/101. For technical data, see page 2/123-2/144. For description, see page 2/106-2/107. For int. circuit diagrams, see page 2/192-2/199. For dimension drawings, see page 2/211-2/214.

AC Coil Selection for 3RT201 through 3RT204							
●●Coil Code	C2 <sup>3)</sup>	<b>H2</b> <sup>4)</sup>	K6	P6	U6	V6	T6
60 Hz	24 V	48 V	120 V	240 V	277 V	480 V	600 V
50 Hz	24 V	48 V	110 V	220 V	_	_	_

DC Coil Sele	ction fo	r 3RT201	& 3RT202	(for 3R	T203 & 3R	T204 see	UC)
●●Coil Code	<b>A4</b> <sup>5)</sup>	B4	W4	E4	F4	G4	M4
DC	12 V	24 V	48 V	60 V	110 V	125 V	220 V

UC Coil Selection for 3RT202				UC Coil Selection for 3RT203 & 3RT204			
●●Coil Code	B3	F3	P3 <sup>5)</sup>	••	В3	F3	<b>P3</b> <sup>6)</sup>
UC	21-28V	95-130V	200-280V		20-33V	83-155V	175-280V

<sup>3)</sup> Use Code **B0** for 3RT201, S00

<sup>1)</sup> All terminals are spring loaded on frame sizes S00 & S0. Only the coil terminals are spring loaded on frame sizes S2 & S3.

<sup>2)</sup> Max UL FLA = 65A at 460V

<sup>4)</sup> Use Code **H0** for 3RT201, S00

<sup>5) 3</sup>RT201 and 3RT202 only

<sup>6)</sup> at upper limit = 1.1 x U<sub>S</sub>

# **Control Circuit Protection**

## **Industrial Control Product Catalog 2021**

#### contents

## 5SJ4 Branch Circuit **Protectors**



5SJ4	Page
Selection and ordering data	
<ul> <li>1-pole up to 63A</li> </ul>	16/4
<ul><li>1-pole, 2-pole,</li></ul>	16/5
3-pole, 240VAC	
<ul><li>1-pole, 2-pole,</li></ul>	16/6
3-pole, 480Y/277VAC	
<ul> <li>Additional components</li> </ul>	16/7
General data	16/3
Tripping characteristics	16/2
Dimension drawings	16/10
Technical data	16/8

## 5SY4 Supplementary **Protectors**



5514	Page
Selection and ordering	data
• 1-pole, 1-pole+ N, and	
2-pole up to 63A	16/13
• 3-pole, 3-pole + N, and	
4-pole up to 63A	16/14
<ul> <li>Additional components</li> </ul>	16/19
<ul> <li>Accessories</li> </ul>	16/21
General data	16/11,16/22
Tripping characteristics	16/2
Dimension drawings	16/25

EGV/

Technical data

**5SY5** 

16/2

16/25

16/23

## 5SY6 Supplementary **Protectors**



5SY6	Page
Selection and ordering data	
<ul> <li>1-pole, 1-pole+ N, and</li> </ul>	
2-pole up to 63A	16/15
• 3-pole, 3-pole + N, and	
4-pole up to 63A	16/16
<ul> <li>Additional components</li> </ul>	16/19
<ul> <li>Accessories</li> </ul>	16/21

General data 16/11, 16/22 Tripping characteristics 16/2 Dimension drawings 16/25 Technical data 16/23

### **5SP Supplementary Protectors**



5SP4		Page
Selection and ordering 1-pole, 2-pole, 3-pole and 4-pole up to 125A Additional components Accessories		16/17 16/19 16/21
General data	16/11,	16/22

Tripping characteristics

Dimension drawings

Technical data

# AC/DC Product Range 5SY5 Supplementary Protectors

16/23

Page

16/2

16/25

16/23



	0
Selection and ordering data	
<ul> <li>1-pole, 2-pole up to 63A</li> </ul>	16/18
<ul> <li>Additional components</li> </ul>	16/17
<ul> <li>Accessories</li> </ul>	16/21
General data	16/11

Tripping characteristics

Dimension drawings

Technical data

## **3NW7 Cylindrical Fuse** Holders



3NW7 and 3NC10	Page
Selection and ordering data	
3NW7	
<ul> <li>1-, 1+N, 2- and 3-, 3+N</li> </ul>	
and 4-poles up to 100 A	16/27
3NC1038	
• 1-, 2- & 3-pole up to 30 A	16/30

General data	16/26, 16/30
Dimension drawings	16/29, 16/30
Technical data	16/28, 16/30

## General Data

#### 5SY and 5SP supplementary protection

#### 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 virtually 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 virtually prevents any unauthorized operation of the handle

#### Features of 5SY

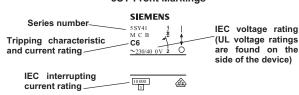
- Rapid connection of the feeder cable in front of the busbar
- Identical terminals at both sides for an optional infeed from the top or the bottom
- No tool required for mounting or dismounting
- Supports a fast and comfortable removal from the assembly
- Trip indication

#### Features of 5SP4

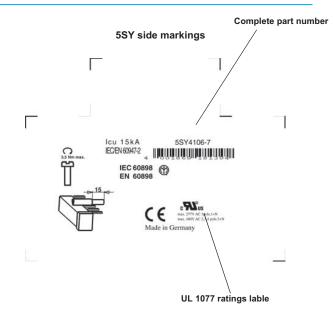
- Disconnection characteristics acc. to EN 60947-3 (DIN VDE 0660 Part 107)
- Main switch characteristics acc. to EN 60 204-1
- Can be screwed onto bases
- Separate switch position indication.

#### Device markings

#### 5SY Front Markings



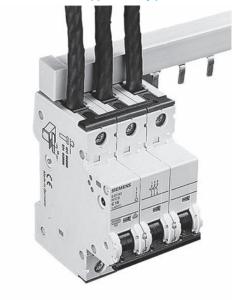




## 5SY4 Supplementary Protection

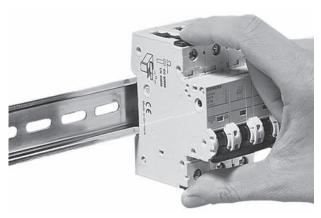
#### Overview

#### Features of 5SY supplementary protectors



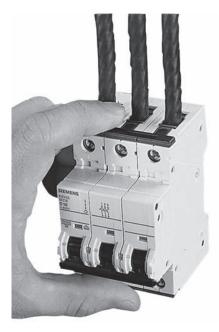
#### Easier, faster, enlarged wiring space

- 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.



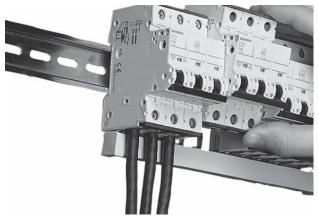
#### Flexible and no use of tools required

- Manually operable quick-assembly and disassembly systems requiring no use of tools
- Fast assembly and disassembly of 5SY supplementary protectors to and from the standard mounting rail.
- 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
- 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.

## Supplementary Protection, AC/DC Product Range

## 5SY5 70 mm mounting depth

#### Features

All 5SY5 designs have been certified to **UL 1077** and can therefore be used as "supplementary protectors" for applications up to 277 VAC or 250 VDC (1-pole) and 480 VAC or 500 VDC (2-pole).

#### Selection and ordering data

		$I_{n}$	MW <sup>1)</sup>	Characteristic B Order No.	List Price \$		ist Price \$	Weight 1 item	
		Α			1 item	1	item	kg	
9	1-pole *1	0.3 0.5 1 1.6 2 3 4 6 8	1	- - - - 5SY5 102-6 - - 5SY5 106-6 - 5SY5 110-6 5SY5 113-6		5SY5 114-7 5SY5 105-7 5SY5 101-7 5SY5 101-7 5SY5 102-7 5SY5 103-7 5SY5 106-7 5SY5 108-7 5SY5 110-7 5SY5 113-7		0.147	
	2 male	16 20 25 32 <sup>1)</sup> 40 50 63		5SY5 116-6 5SY5 120-6 5SY5 125-6 5SY5 132-6 5SY5 140-6 5SY5 150-6 5SY5 163-6		5SY5 116-7 5SY5 120-7 5SY5 125-7 5SY5 132-7 5SY5 140-7 5SY5 150-7 5SY5 163-7			
9 9	2-pole *1*3 	0.3 0.5 1 1.6 2 3 4 6 8 10 13 16 20 25 32 40 50 63	2			5SY5 214-7 5SY5 205-7 5SY5 201-7 5SY5 201-7 5SY5 202-7 5SY5 203-7 5SY5 206-7 5SY5 208-7 5SY5 210-7 5SY5 210-7 5SY5 216-7 5SY5 216-7 5SY5 220-7 5SY5 225-7 5SY5 232-7 5SY5 240-7 5SY5 250-7 5SY5 250-7 5SY5 250-7 5SY5 250-7		0.304	

<sup>1)</sup> MW = modular width of 18 mm.

Depth = 70 mm.