

SIEMENS



Industrial Controls

SIRIUS Classic

SIRIUS

Catalog
Add-On
IC 10 AO

Edition
2016

Related catalogs

Industrial Controls SIRIUS

IC 10



PDF (E86060-K1010-A101-A6-7600)

Low-Voltage Power Distribution and Electrical Installation Technology

LV 10

SETRON • SIVACON • ALPHA
Protection, Switching, Measuring and Monitoring
Devices, Switchboards and Distribution Systems
print (E86060-K8280-A101-A3-7600)



Safety Integrated

Safety Technology for
Factory Automation

SI 10



E86060-K7010-A101-A3-7600

Industrial Communication SIMATIC NET

IK PI



E86060-K6710-A101-B8-7600

SIMATIC

Products for
Totally Integrated Automation

ST 70



E86060-K4670-A101-B5-7600

SIMOTICS Low-Voltage Motors

Type series 1LE1, 1MB1 and 1PC1
Frame sizes 71 to 315
Power range 0.18 to 200 kW

D 81.1



E86060-K5581-A111-A8-7600

SITRAIN

Training for Industry

ITC



Only available in German
E86060-K6850-A101-C4

Miscellaneous

Products for Automation and Drives

CA 01

Interactive Catalog, DVD



E86060-D4001-A510-D6-7600

Industry Mall

Information and Ordering Platform
in the Internet:


www.siemens.com/industrymall

Information and Download Center

Digital versions of the catalogs are available
in the Internet


www.siemens.com/sirius/catalogs

Response E-mail

Please send your comments and suggestions
for improvement to

catalogs.industry@siemens.com

(include the catalog name in the subject field)



Trademarks

All product designations may be registered trademarks or product names of Siemens AG or other supplying companies. Third parties using these trademarks or product names for their own purposes may infringe upon the rights of the trademark owners.

Further information about industrial controls:
www.siemens.com/sirius

Technical Assistance

Expert technical assistance
for Industrial controls:
Tel.: +49 (911) 895-5900
Fax: +49 (911) 895-5907

E-Mail: technical-assistance@siemens.com



Industrial Controls

SIRIUS



Catalog IC 10 AO · 2016

Supersedes:
Catalog IC 10 AO · 2015

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

www.siemens.com/industrymall

The products contained in this catalog can also be found in the Interactive Catalog CA 01.

Article No.: E86060-D4001-A510-D5-7600.

Please contact your local Siemens branch.

© Siemens AG 2015



The products and systems described in this catalog are manufactured/distributed under application of a certified quality management system in accordance with EN ISO 9001 (for the Certified Registration Nos. see www.siemens.com/system-certificates/cp). The certificate is recognized by all IQNet countries.

Introduction	1
Industrial Communication	2
Switching Devices – Contactors and Contactor Assemblies – for Switching Motors	3
Switching Devices – Contactors and Contactor Assemblies – Special Applications	4
Switching Devices – Contactors and Contactor Assemblies – Contactor Relays and Relays	5
Switching Devices – Soft Starters and Solid-State Switching Devices	6
Protection Equipment	7
Load Feeders and Motor Starters for Use in the Control Cabinet	8
Motor Starters for Use in the Field, High Degree of Protection	9
Monitoring and Control Devices	10
Safety Technology	11
Position and Safety Switches	12
Commanding and Signaling Devices	13
Parameterization, Configuration and Visualization with SIRIUS	14
Products for Specific Requirements	15
Appendix	16

Switching Devices – Contactors and Contactor Assemblies – for Switching Motors

**NEW**

Click on the Article No. in the catalog PDF to access it in the Industry Mall and get all related information.

Article-No.
3RA1943-2C
3RA1943-2B
3RA1953-2B
3RA1953-2N

Or directly in the Internet, e. g.
[www.siemens.com/
product?3RA1943-2C](http://www.siemens.com/product?3RA1943-2C)

Price groups

PG 41B, 41E, 41H, 42D

3/2

Introduction**Power contactors for switching motors**

3/5 General data

3/11 SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

3/26 SIRIUS 3RT12 vacuum contactors, 3-pole, 110 ... 250 kW

3/28 Accessories for 3RT1 contactors

3/49 Spare parts for 3RT1 contactors

Coupling contactors

3/54 SIRIUS 3RT10 coupling contactors (interface), 3-pole, 3 ... 11 kW

Contactor assemblies3RA13, 3RA14 contactor assemblies

3/58 SIRIUS 3RA13 reversing contactor assemblies

3/66 SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

Switching Devices – Contactors and Contactor Assemblies

Introduction

Overview



Size	S00			S0				S2			
Type	3RT101			3RT102				3RT103			
3RT10 contactors											
Type	3RT1015	3RT1016	3RT1017	3RT1023	3RT1024	3RT1025	3RT1026	3RT1034	3RT1035	3RT1036	
AC, DC operation	(p. 3/14, 3/18)			(p. 3/15, 3/19)				(p. 3/16, 3/20)			
AC-3											
$I_e/AC-3/400\text{ V}$	A	7	9	12	9	12	17	25	32	40	50
400 V	kW	3	4	5.5	4	5.5	7.5	11	15	18.5	22
230 V	kW	2.2	3	3	3	3	4	5.5	7.5	11	15
500 V	kW	3.5	4.5	5.5	4.5	7.5	10	11	18.5	22	30
690 V	3RT10/3RT12 kW	4	5.5	5.5	5.5	7.5	11	11	18.5	22	22
1 000 V	3RT10/3RT12 kW	--	--	--	--	--	--	--	--	--	--
AC-4 (at $I_a = 6 \times I_e$)											
400 V	3RT10/3RT12 kW	3	4	4	4	5.5	7.5	7.5	15	18.5	22
400 V	kW	1.15	2	2	2	2.6	3.5	4.4	8.2	9.5	12.6
(200 000 operating cycles)											
AC-1 (40 °C, ≤ 690 V)											
I_e	3RT10/3RT12 A	18	22	22	40	40	40	40	50	60	60
3RT14 AC-1 contactors											
Type					--				--		
$I_e/AC-1/40\text{ °C}/\leq 690\text{ V}$	A				--				--		
Accessories for contactors											
Auxiliary switch blocks	On front Lateral	3RH1911 --		(p. 3/34) (p. 3/38)	3RH1921 3RH1921		(p. 3/34) (p. 3/38)		3RH1921 3RH1921	(p. 3/34) (p. 3/38)	
Terminal covers		--			--				3RT1936-4EA2	(p. 3/46)	
Box terminal blocks		--			--				--		
Surge suppressors		3RT1916		(p. 3/42)	3RT1926		(p. 3/42)		3RT1926/36	(p. 3/43)	
3RU1 and 3RB2 overload relays (Protection Equipment → Overload Relays)											
3RU11 , thermal, CLASS 10		3RU1116	0.1 ... 12 A	(Chap. 7)	3RU1126	1.8 ... 25 A	(Chap. 7)		3RU1136	5.5 ... 50 A	(Chap. 7)
3RB20/21 , electronic, CLASS 5, 10, 20 and 30		3RB2016 3RB2116	0.1 ... 12 A	(Chap. 7)	3RB2026 3RB2126	3 ... 25 A	(Chap. 7)		3RB2036 3RB2136	6 ... 50 A	(Chap. 7)
3RB22/23 , electronic, CLASS 5, 10, 20 and 30		3RB2.83 + 3RB2906	10 ... 100 A	(Chap. 7)	3RB2.83 + 3RB2906	10 ... 100 A	(Chap. 7)		3RB2.83 + 3RB2906	10 ... 100 A	(Chap. 7)
3RV10 motor starter protectors (Protection Equipment → Motor Starter Protectors)											
Type		3RV1011	0.18 ... 12 A	(Chap. 5)	3RV1021	9 ... 25 A	(Chap. 7)		3RV1031	22 ... 50 A	(Chap. 7)
Link modules		3RA1911		(Chap. 5)	3RA1921		(Chap. 7)		3RA1931		(Chap. 7)
3RA13 reversing contactor assemblies											
Complete units	Type	3RA1315	3RA1316	3RA1317		3RA1324	3RA1325	3RA1326	3RA1334	3RA1335	3RA1336
		(p. 3/59)				(p. 3/60)			(p. 3/61)		
400 V	kW	3	4	5.5		5.5	7.5	11	15	18.5	22
Assembly kits/wiring modules		3RA1913-2A		(p. 3/64)	3RA1923-2A		(p. 3/64)		3RA1933-2A		(p. 3/64)
Mechanical interlocks		3RA1912-2H		(p. 3/65)	3RA1924-1A/-2B		(p. 3/63)		3RA1924-1A/-2B		(p. 3/63)
3RA14 contactor assemblies for star-delta (wye-delta) starting											
Complete units	Type	3RA1415	3RA1416		3RA1423	3RA1425		3RA1434	3RA1435	3RA1436	
		(p. 3/68)			(p. 3/69)			(p. 3/70)	(p. 3/71)		
400 V	kW	5.5	7.5		11	15/18.5		22/30	37	45	
Assembly kits/wiring modules		3RA1913-2B		(p. 3/73)	3RA1923-2B		(p. 3/73)	3RA1933-2B/-2C		(p. 3/73)	



S3
3RT1.4



S6
3RT1.5



S10
3RT1.6



S12
3RT1.7

3RT10 contactors • 3RT12 vacuum contactors

3RT1044 (p. 3/17, 3/21)	3RT1045	3RT1046	3RT1054 (p. 3/22)	3RT1055	3RT1056	3RT1064 (p. 3/22)	3RT1065	3RT1066	3RT1075 (p. 3/22)	3RT1076
						3RT1264 (p. 3/27)	3RT1265	3RT1266	3RT1275 (p. 3/27)	3RT1276

65	80	95	115	150	185	225	265	300	400	500
30	37	45	55	75	90	110	132	160	200	250
18.5	22	22	37	45	55	55	75	90	132	160
37	45	55	75	90	110	160	160	200	250	355
45	55	55	110	132	160	200	250	250	400	400/500
30	37	37	75	90	90	90/315	132/355	132/400	250/560	250/710

30	37	45	55	75	90	110	132	160	200	250
15.1	17.9	22	29	38	45	54/78	66/93	71/112	84/140	98/161

100	120	120	160	185	215	275/330	330	330	430/610	610
------------	------------	------------	------------	------------	------------	----------------	------------	------------	----------------	------------

3RT14 AC-1 contactors

3RT1446	(Chap. 4)	3RT1456	(Chap. 4)	3RT1466	(Chap. 4)	3RT1476	(Chap. 4)
140		275		400		690	

Accessories for contactors

3RH1921	(p. 3/34)	3RH1921	(p. 3/34)
3RH1921	(p. 3/38)	3RH1921	(p. 3/38)
3RT1946-4EA1/2	(p. 3/46)	3RT1956-4EA1/2/3	(p. 3/46)
--		3RT1955/56-4G	(p. 3/46)
3RT1926/36	(p. 3/43)	3RT1956-1C (RC element)	(p. 3/43)
		3RT1956-1C (RC element)	(p. 3/43)

3RU1 and 3RB2 overload relays (Protection Equipment → Overload Relays)

3RU1146	18 ... 100 A	(Chap. 7)	--	--	--
3RB2046	12.5 ... 100 A	(Chap. 7)	3RB2056	50 ... 200 A	(Chap. 7)
3RB2146			3RB2156		
3RB2.83 + 3RB2906	10 ... 100 A	(Chap. 7)	3RB2.83 + 3RB2956	20 ... 200 A	(Chap. 7)
			3RB2.83 + 3RB2966	63 ... 630 A	(Chap. 7)

3RV10 motor starter protectors (Protection Equipment → Motor Starter Protectors)

3RV1041	45 ... 100 A	(Chap. 7)	3RV1063	40 ... 200 A	(Chap. 7)	3RV1073	160 ... 400 A	(Chap. 7)	3RV1083	252 ... 630 A
3RA1941		(Chap. 7)	--			--			--	

3RA13 reversing contactor assemblies

3RA1344 (p. 3/62)	3RA1345	3RA1346	--	--	--
30	37	45	55	75	90
3RA1943-2A	(p. 3/64)	3RA1953-2A	(p. 3/64)	3RA1963-2A	(p. 3/64)
3RA1924-1A/-2B	(p. 3/63)	3RA1954-2A	(p. 3/63)	3RA1954-2A	(p. 3/63)
				3RA1973-2A	(p. 3/64)

3RA14 contactor assemblies for star-delta (wye-delta) starting

3RA1444 (p. 3/72)	3RA1445	--	--	--	--
55	75	--	--	--	--
3RA1943-2B/-2C	(p. 3/73)	3RA1953-2B	(p. 3/73)	3RA1963-2B	(p. 3/73)
		3RA1973-2B	(p. 3/73)	3RA1973-2B	(p. 3/73)

Switching Devices – Contactors and Contactor Assemblies

Introduction

Note:

For safety characteristics for contactors, see Chapter 16, "Appendix" → "Standards and Approvals" → "Overview".

Connection methods

The contactors are available with screw terminals (box terminals or flat connectors) or with spring-type terminals.



Screw terminals



Spring-type terminals

The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Application

Use of 3RT1 contactors with IE3 motors

Note:

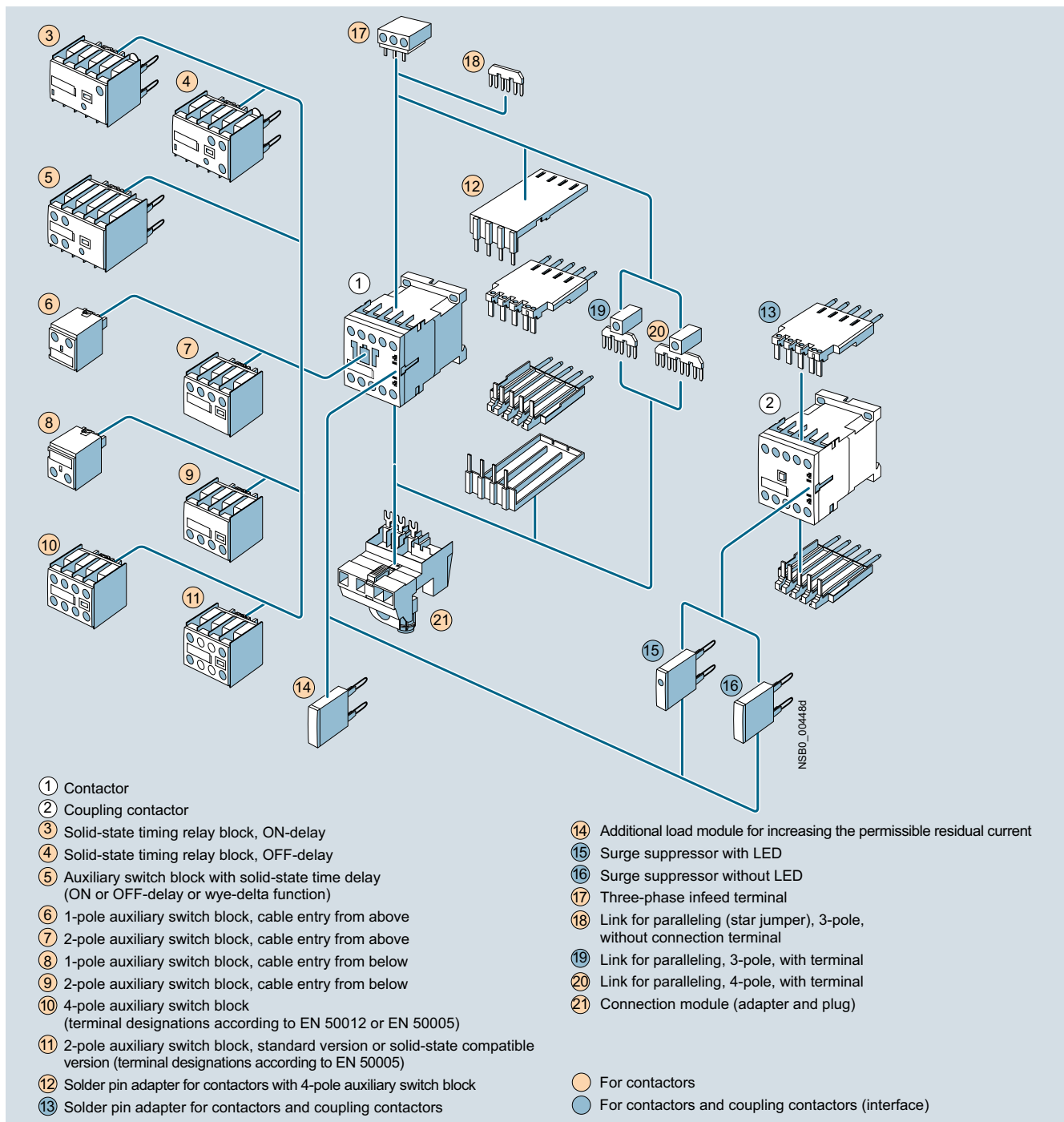
3RT1 power contactors in sizes S00 to S2 are not specially optimized for use with IE3 motors. In this case, use 3RT2 series power contactors, see Catalog IC 10 · 2016.

For the use of size S3 to S12 power contactors in conjunction with highly energy-efficient IE3 motors, please observe the information on dimensioning and configuring, see Configuration Manual "SIRIUS Industrial controls with IE3 motors", <https://support.industry.siemens.com/cs/ww/en/view/94770820>.

Overview

The SIRIUS family of controls

The SIRIUS modular system with its components for the switching, starting, protection and monitoring of motors and industrial systems stands for the fast, flexible and space-saving construction of control cabinets.

**3RT1 contactors and coupling contactors
S00 with mountable accessories**

For accessories, see pages 3/34 to 3/48.

For reversing contactor assemblies, see page 3/59.

Assembly kit for reversing contactor assemblies (mech. interlocking, wiring modules), see page 3/65.

For mountable overload relays, see Chapter 7, "Protection Equipment" → "Overload Relays".

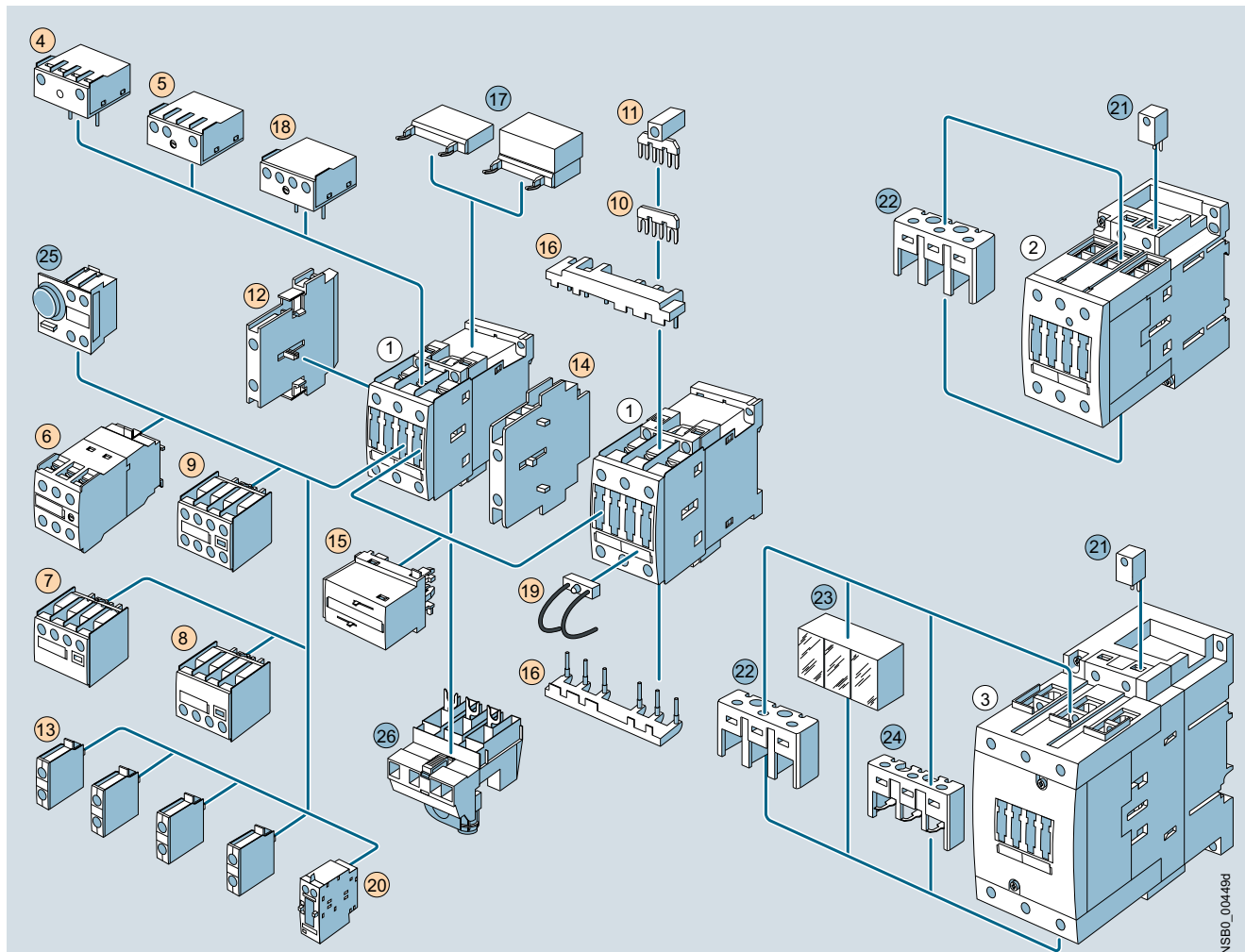
For fuseless load feeders, see Chapter 8, "Load Feeders and Motor Starters" → "3RA Fuseless Load Feeders".

Power Contactors for Switching Motors

General data

3RT1 contactors

Sizes S0 to S3 with mountable accessories



- ① Contactor, size S0
- ② Contactor, size S2
- ③ Contactor, size S3

For sizes S0 to S3:

- ④ Solid-state timing relay block ON-delay
- ⑤ Solid-state timing relay block, OFF-delay
- ⑥ Auxiliary switch block, solid-state time-delay (ON or OFF-delay or wye-delta function)
- ⑦ 2-pole auxiliary switch block, cable entry from above
- ⑧ 2-pole auxiliary switch block, cable entry from below
- ⑨ 4-pole auxiliary switch block (terminal designations according to EN 50012 or EN 50005)
- ⑩ Link for paralleling (star jumper), 3-pole, without terminal
- ⑪ Link for paralleling, 3-pole, with terminal
- ⑫ 2-pole auxiliary switch block, laterally mountable left or right (terminal designations according to EN 50012 or EN 50005)
- ⑬ Single-pole auxiliary switch block (up to 4 can be snapped on)
- ⑭ Mechanical interlock, laterally mountable
- ⑮ Mechanical interlock, mountable to the front
- ⑯ Wiring connectors on the top and bottom (reversing duty)
- ⑰ Surge suppressors (varistor, RC element, diode assembly), can be mounted on the top or bottom (different for S0 and S2/S3)

- ⑱ Coupling link (interface) for mounting directly onto contactor coil
- ⑲ LED module for indicating contactor operation

Only for size S0:

- ⑳ Pneumatic delay block
- ㉑ Connection module (adapter and connector)

Only for sizes S0 and S2:

- ㉒ Mechanical latching block

Only for sizes S2 to S3:

- ㉓ Coil repeat terminal for making contactor assemblies
- ㉔ Terminal cover for box terminal

Only for sizes S3:

- ㉕ Terminal cover for cable lug and bar connection
- ㉖ Auxiliary conductor terminal, 3-pole

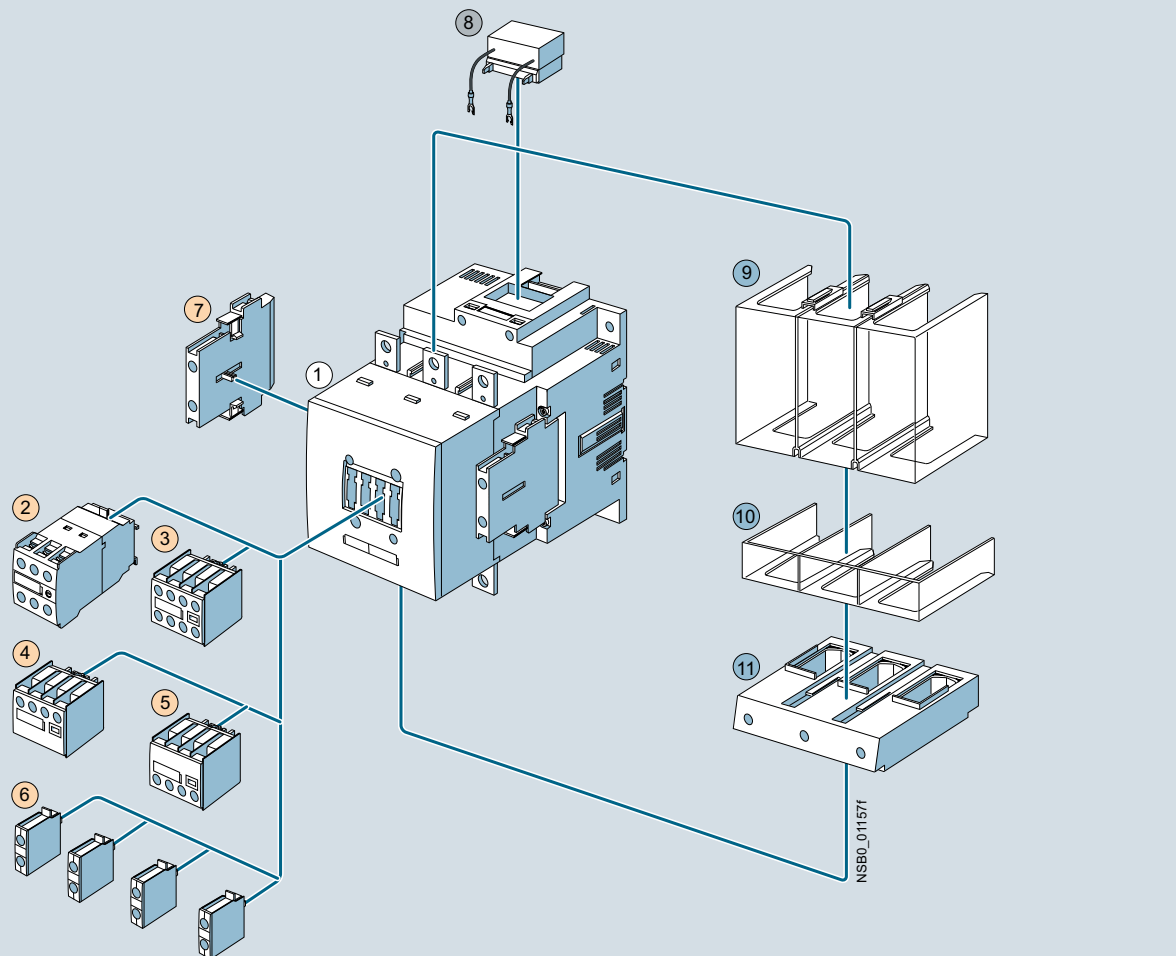
○ Accessories identical for sizes S0 to S3

● Accessories differ according to size

For accessories, see pages 3/34 to 3/48.

For reversing contactor assemblies, see pages 3/60 to 3/62.

3RT1 contactors
Sizes S6 to S12 with mountable accessories
(illustration for basic unit)



- ① 3RT10 and 3RT14 air-break contactors, sizes S6, S10 and S12
- ② Auxiliary switch block, solid-state time-delay (ON or OFF-delay or Star-delta (wye-delta) starting)
- ③ 4-pole auxiliary switch block (terminal designations according to EN 50012 or EN 50005)
- ④ 2-pole auxiliary switch block, cable entry from above
- ⑤ 2-pole auxiliary switch block, cable entry from below
- ⑥ Single-pole auxiliary switch block (up to 4 can be snapped on)
- ⑦ 2-pole auxiliary switch block, laterally mountable left or right (terminal designations according to EN 50012 or EN 50005) (identical for S0 to S12)
- ⑧ Surge suppressor (RC element) for plugging into top of withdrawable coil
- ⑨ Terminal cover for cable lug and busbar connection, different for sizes S6 and S10/S12
- ⑩ Terminal cover for box terminal, different for sizes S6 and S10/S12
- ⑪ Box terminal block, different for sizes S6 and S10/S12
- Accessories identical for sizes S0 to S12
- Accessories identical for sizes S6 to S12
- Accessories differ according to size

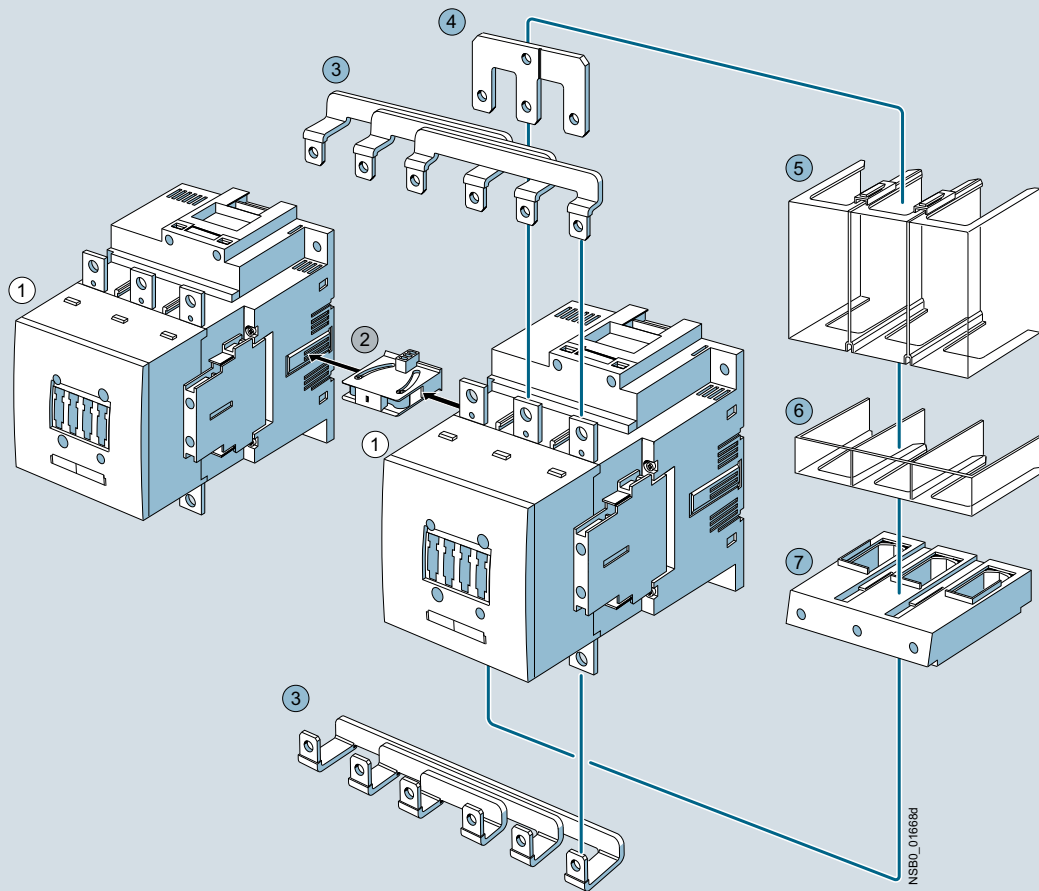
For accessories, see pages 3/34 to 3/48.

For mountable overload relays, see Chapter 7, "Protection Equipment" → "Overload Relays".

Power Contactors for Switching Motors

General data

3RA1 contactor assemblies, 3RT1 contactors Size S6 with accessories



- ① 3RT10 and 3RT14 air-break contactor, size S6
- ② Mechanical interlock, laterally mountable
- ③ Wiring modules on the top and bottom, 3RA1953-2A
- ④ Link for paralleling (star jumper), 3-pole, with through-hole, 3RT1956-4BA31
- ⑤ Terminal cover for cable lug and bar connection different for sizes S6 and S10/S12
- ⑥ Terminal cover for box terminal different for sizes S6 and S10/S12
- ⑦ Box terminal block, different for sizes S6 and S10/S12

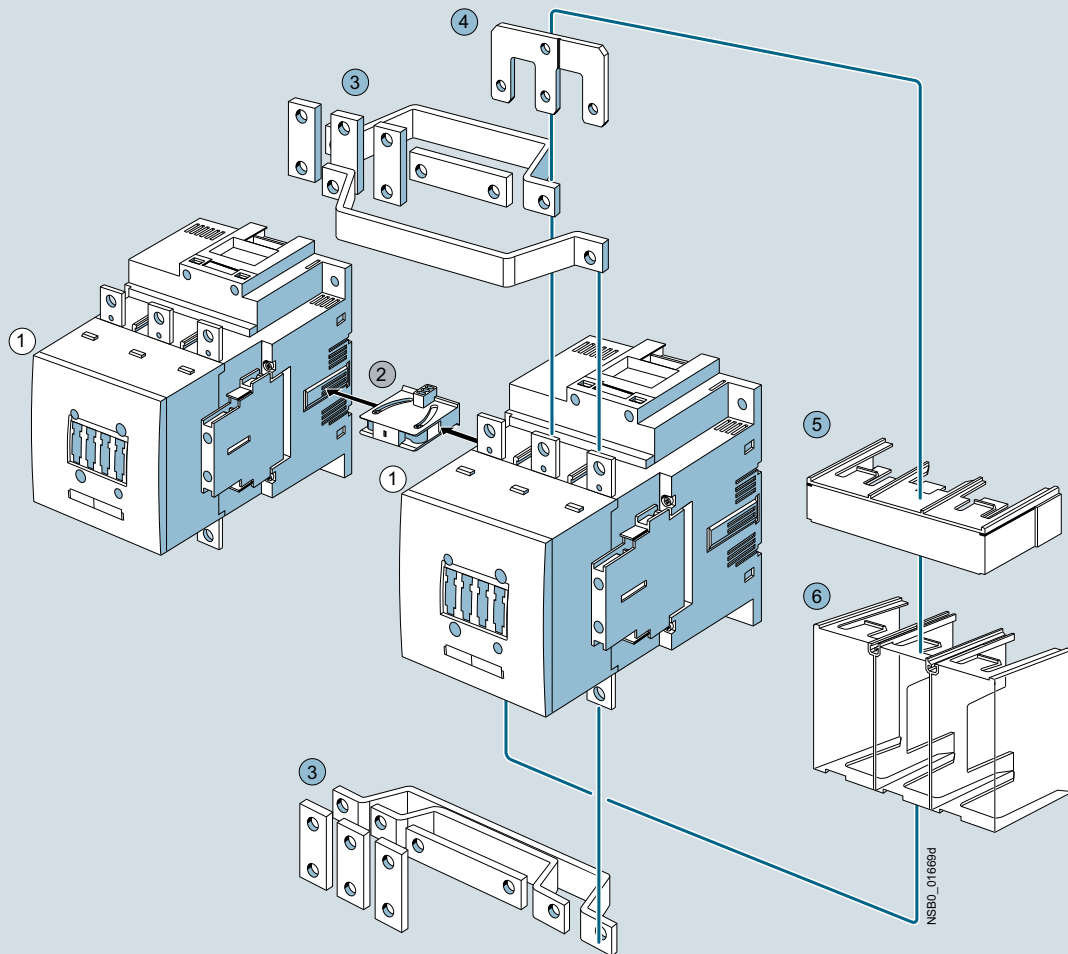
- Accessories identical for sizes S6 to S12
- Accessories differ according to size

For accessories, see pages 3/34 to 3/48.

For components for reversing contactor assemblies, see pages 3/63 to 3/65.

For mountable overload relays, see Chapter 7, "Protection Equipment" → "Overload Relays".

3RA1 contactor assemblies, 3RT1 contactors
Sizes S6, S10 and S12 with accessories



① 3RT10 and 3RT14 air-break contactor, sizes S6, S10 and S12 or 3RT12 vacuum contactor, sizes S10 and S12

② Mechanical interlock, laterally mountable

③ Wiring modules on the top and bottom, 3RA19

④ Link for paralleling (star jumper), 3-pole, with through-hole, 3RT1956-4BA31

⑤ Terminal cover for box terminal, different for sizes S6 and S10/S12

⑥ Terminal cover for cable lug and busbar connection, different for sizes S6 and S10/S12

○ Accessories identical for sizes S6 to S12

● Accessories different according to size

For accessories, see pages 3/63 to 3/65 and 3/34 to 3/48.

For components for reversing contactor assemblies, see pages 3/63 to 3/65.

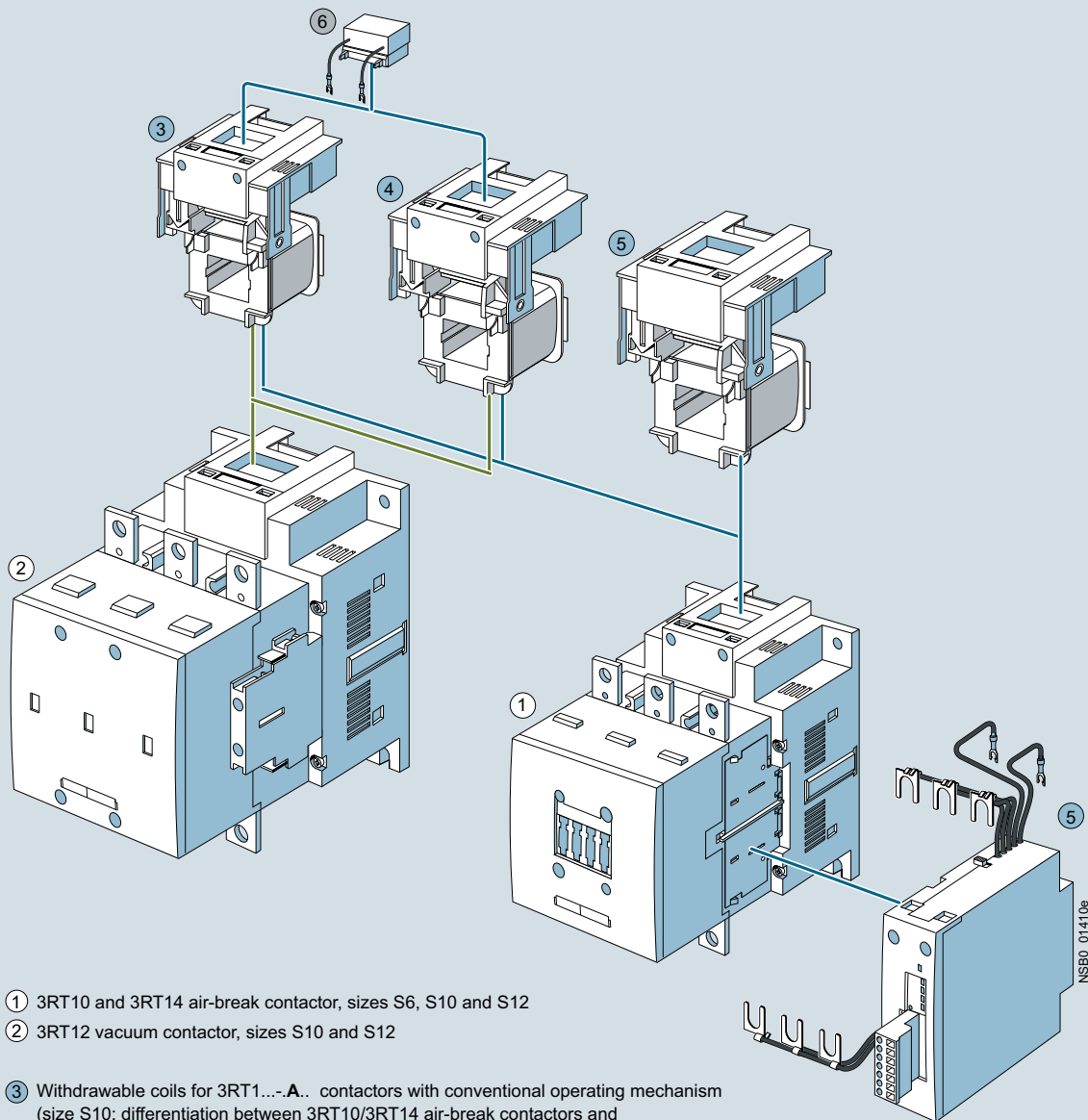
For mountable overload relays, see Chapter 7, "Protection Equipment" → "Overload Relays".

Power Contactors for Switching Motors

General data

3RT1 contactors

Sizes S6 to S12 with accessories



- ① 3RT10 and 3RT14 air-break contactor, sizes S6, S10 and S12
- ② 3RT12 vacuum contactor, sizes S10 and S12
- ③ Withdrawable coils for 3RT1...-A.. contactors with conventional operating mechanism
(size S10: differentiation between 3RT10/3RT14 air-break contactors and 3RT12 vacuum contactors)
(size S12: the same for air-break and vacuum contactors)
- ④ Withdrawable coils for 3RT1...-N.. contactors with solid-state operating mechanism.
(size S10: differentiation between 3RT10/3RT14 air-break contactors and 3RT12 vacuum contactors)
(size S12: the same for air-break and vacuum contactors)
- ⑤ Withdrawable coils and laterally mountable module (plug-on) for 3RT1...-P.. air-break contactors with solid-state operating mechanism and remaining lifetime indicator
- ⑥ Surge suppressor (RC element), plug-mountable on withdrawable coils
 - 3RT1...-A.. with conventional operating mechanism
 - 3RT1...-N.. with solid-state operating mechanism

- Accessories identical for sizes S6 to S12
- Accessories different according to size

For surge suppressors, see page 3/43.

For withdrawable coils, see pages 3/51 and 3/52.

For mountable overload relays, see Chapter 7, "Protection Equipment" → "Overload Relays".

Overview

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1,
IEC 60947-5-1, EN 60947-5-1 (auxiliary switches)

The 3RT1 contactors are suitable for use in any climate. They are finger-safe according to EN 50274.

Connection methods

The 3RT1 contactors are available with screw terminals (box terminals) or spring-type terminals.

The size S3 contactors have removable box terminals for the main conductor connections. This permits connection of ring terminal lugs or busbars.

Contact reliability

If voltages ≤ 110 V and currents ≤ 100 mA are to be switched, the auxiliary contacts of the 3RT1 contactor or 3RH11 contactor relay should be used as they guarantee a high level of contact reliability.

These auxiliary contacts are particularly suitable for solid-state circuits with currents ≥ 1 mA at a voltage ≥ 17 V.

Short-circuit protection of the contactors

For short-circuit protection of contactors without overload relays, see [Technical specifications](#). For short-circuit protection of the contactors with overload relay, see [Configuration Manual "SIRIUS Configuration"](#):

<https://support.industry.siemens.com/cs/ww/en/view/40625241>

To assemble fuseless motor feeders you must select combinations of motor starter protector/circuit breaker and contactor as explained in the section on fuseless load feeders.

Motor protection

3RU11 thermal overload relays or 3RB20/3RB21 electronic overload relays can be fitted to the 3RT1 contactors for protection against overload. The overload relays must be ordered separately.

Ratings of three-phase motors

The quoted rating (in kW) refers to the output power on the motor shaft (according to the nameplate).

Surge suppression

3RT1 contactors can be retrofitted with RC elements, varistors, diodes or diode assemblies (assembly of diode and Zener diode for short break times) for damping opening surges in the coil.

Note:

The OFF-delay of the NO contact and the ON-delay of the NC contact are increased if the contactor coils are attenuated against voltage peaks (noise suppression diode 6 to 10 times; diode assembly 2 to 6 times, varistor +2 to 5 ms).

Sizes S00 to S3, up to 45 kW

Auxiliary contact complement

Size S00 contactors have an auxiliary contact integrated in the basic unit. The basic units of sizes S0 to S3 are delivered only with the main contacts and can be extended with auxiliary switch blocks.

For sizes S0 to S3, complete units with mounted auxiliary switch blocks 2 NO + 2 NC are available (terminal designation according to EN 50012); the auxiliary switch block can be removed (for more information, see [Accessories, page 3/28](#)).

Note:

Auxiliary contact complement according to SUVA: Contactors with permanently mounted auxiliary switch block 2 NO + 2 NC are available for safety applications according to SUVA.

Surge suppression

The surge suppressors are plugged onto the front of size S00 contactors. Space is provided for them next to a snap-on auxiliary switch block.

For size S0 to S3 contactors, varistors and RC elements can be snapped on either on the top or directly below the coil terminals. Diode assemblies are available in 2 different versions on account of their polarity. Depending on the application they can be connected either only at the bottom (assembly with motor starter protector/circuit breaker) or only at the top (assembly with overload relay).

The plug-in direction of the diodes and diode assemblies is specified by coding.

Exceptions:

3RT1926-1T.00 and 3RT1936-1T.00,

in this case the plug-in direction is marked with "+" and "-".

Coupling contactors are supplied either without overvoltage damping or with a varistor or diode connected as standard, according to the version.

Sizes S6 to S12, > 45 to 250 kW

- 3RT10, contactors for switching motors
- 3RT12, vacuum contactors for switching motors
- 3RT14, contactors for AC-1 applications (see [Chapter 4](#))

Operating mechanism types

Two types of solenoid operation are available:

- Conventional operating mechanisms
- Solid-state operating mechanism (with 3 performance levels)

Control supply voltage

The contactors can be operated with an AC/DC operating mechanism (50 to 60 Hz) as well as with DC.

Withdrawable coils

For simple coil replacement, e.g. if the application is replaced, the solenoid coil can be pulled out upwards after the release mechanism has been actuated and can be replaced by any other coil of the same size.

Auxiliary contact complement

Contactor sizes S6 to S12 are supplied with mounted auxiliary switch blocks.

For detailed information about the fitting of auxiliary switches, see [Accessories, page 3/28](#).

- 3RT10 and 3RT14 contactors:
Auxiliary contacts mounted laterally and on front
- 3RT12 vacuum contactors:
Auxiliary contacts mounted laterally

Contactors with conventional operating mechanism

3RT1...-A version

The solenoid coil is switched directly on and off with the control supply voltage U_s by way of terminals A1/A2.

Multi-voltage range for the control supply voltage U_s :

Just one coil covers several closely adjacent control supply voltages which are used worldwide, e.g. 110–115–120–127 V AC/DC or 220–230–240 V AC/DC. Allowance is also made for a coil operating range of 0.8 times the lower ($U_{s\min}$) and 1.1 times the upper ($U_{s\max}$) rated control supply voltage within which the contactor switches reliably and no thermal overload occurs.

Power Contactors for Switching Motors

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

Contactors with solid-state operating mechanism

The solenoid coil is supplied selectively with the power required for reliable switching and holding by upstream control electronics.

- Wide voltage range for the control supply voltage U_s : Compared with the conventional operating mechanism, the solid-state operating mechanism covers an even broader range of control supply voltages used worldwide within one coil version. For example, the coil for 200 to 277 V AC/DC ($U_{s\ min}$ to $U_{s\ max}$) covers the voltages 200–208–220–230–240–254–277 V used worldwide.
- Extended operating range 0.7 to $1.25 \times U_s$: The wide range for the rated control supply voltage and the additionally allowed coil operating range of $0.8 \times U_{s\ min}$ to $1.1 \times U_{s\ max}$ results in an extended coil operating range of at least 0.7 to $1.25 \times U_s$, within which the contactors will operate reliably, for the most common control supply voltages of 24, 110 and 230 V.
- Bridging temporary voltage dips: Control voltage failures dipping to 0 V (at A1/A2) are bridged for up to approx. 25 ms to avoid unintentional tripping.
- Defined ON and OFF thresholds: For voltages above $0.8 \times U_{s\ min}$ the electronics will reliably switch the contactor ON, and for voltages below the value $0.5 \times U_{s\ min}$ it is reliably switched OFF. The hysteresis in the switching thresholds prevents the main contacts from chattering as well as increased wear or welding when operated in weak, unstable networks. This also prevents thermal overloading of the contactor coil if the voltage applied is too low (contactor does not close properly and is continuously operated with overexcitation).
- Low control power consumption when closing and in the closed state.

Electromagnetic compatibility (EMC)

The contactors with solid-state operating mechanism conform to the requirements for operation in industrial plants:

- Interference immunity
 - Burst (IEC 61000-4-4): 4 kV
 - Surge (IEC 61000-4-5): 4 kV
 - Electrostatic discharge, ESD (IEC 61000-4-2): 8/15 kV
 - Electromagnetic field (IEC 61000-4-3): 10 V/m
- Emitted interference
 - Limit value class A according to EN 55011

Note:

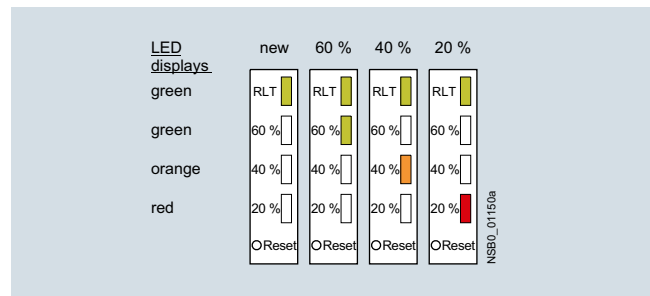
In connection with converters, the control cables must be routed separately from the load cables to the converter.

Indication of remaining lifetime (RLT)

Main contactor contacts are working parts which therefore must be replaced in good time when the end of their service life has been reached. The degree of contact erosion and thus the electrical endurance (= number of operating cycles) depends on the loading, utilization category, operating mode, etc. Up to now, routine checks or visual inspections by the maintenance personnel were needed in order to gain an insight into the state of the main contacts. The remaining lifetime indication function now takes over this task. It does not count the number of operating cycles – which does not provide information about contact erosion – but instead electronically identifies, evaluates and stores the actual progress of erosion of each one of the three main contacts, and outputs a warning when specified limits are reached. The stored data are not lost even if the control supply voltage for A1/A2 fails. After replacement of the main contacts, measurement of the remaining lifetime must be reset using the "RESET" button (hold down RESET button for about 2 s using a pen or similar tool).

Advantages:

- Signaling through relay contact when remaining lifetime is 20 %, i.e. contact material wear is 80 %
- Additional visual display of various levels of erosion by means of LEDs on the laterally mounted solid-state module when remaining lifetime is 60 % (green), 40 % (orange) and 20 % (red)

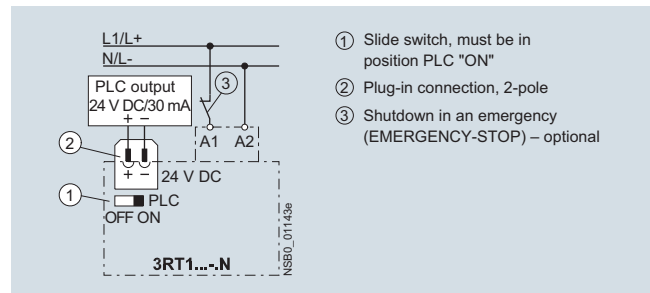


- Early warning to replace contacts
- Optimum utilization of contact material
- Visual inspection of the condition of contacts no longer necessary
- Reduction of ongoing operating costs
- Optimum planning of maintenance measures
- Avoidance of unforeseen plant downtimes

3RT1...-N version: for 24 V DC PLC output

2 control options

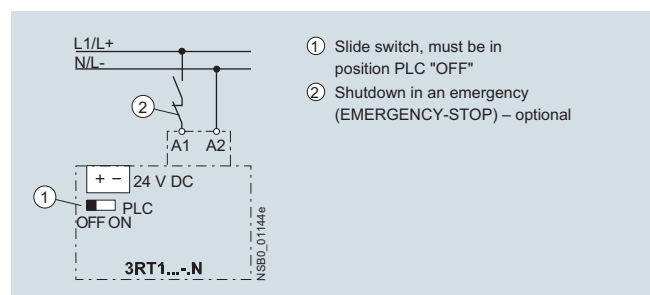
- Control without a coupling link directly through a 24 V DC/≥ 30 mA PLC output (IEC 61131-2). Connection by means of 2-pole plug-in connection. The screwless spring-type connection is part of the scope of supply. The control supply voltage which supplies the solenoid operating mechanism must be connected to A1/A2.



Note:

Before start up, the slide switch for PLC operation must be moved to the "PLC ON" position (setting ex works: "PLC OFF").

- Conventional control by applying the control supply voltage at A1/A2 through a switching contact.

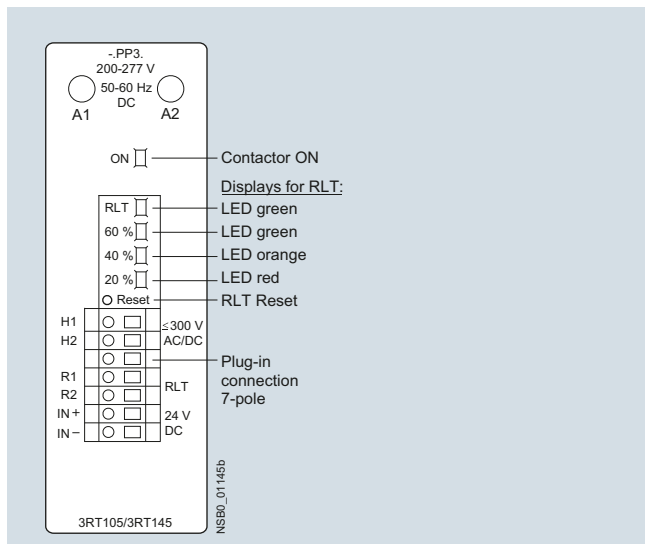


Note:

The slide switch must be in the "PLC OFF" position (= setting ex works).

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

3RT1...-P version: For 24 V DC PLC output or PLC relay output, with remaining lifetime indicator (RLT)

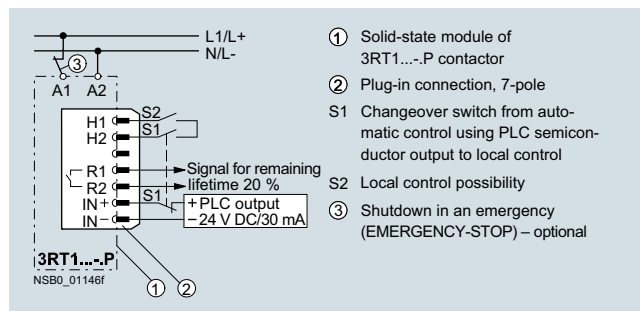


To supply the solenoid and the remaining lifetime indicator with power, the control supply voltage U_s must be connected to terminals A1/A2 of the laterally mounted electronic module. The control inputs of the contactor are connected to a 7-pole plug-in connection; the screwless spring-type connection is part of the scope of supply.

- The "Remaining Lifetime RLT" status signal is available at terminals R1/R2 through a floating relay contact (hard gold-plated, enclosed) and can be input to SIMOCODE, PLC or other devices for processing, for example. Permissible current-carrying capacity of the R1/R2 relay output:
 - $I_e/AC-15/24$ to 230 V: 3 A
 - $I_e/DC-13/24$ V: 1 A
- LED displays
The following states are indicated by means of LEDs on the laterally mounted solid-state module:
 - Contactor ON (energized state): green LED ("ON")
 - Indication of remaining lifetime

2 control options

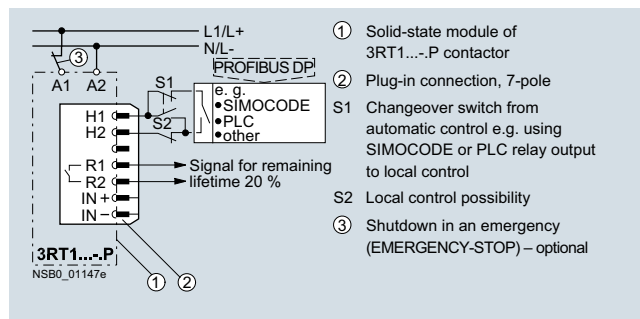
- Contactor control without a coupling link directly through a 24 V DC/≥ 30 mA PLC output (IEC 61131-2) by way of terminals IN+/IN-.



- ① Solid-state module of 3RT1...-P contactor
- ② Plug-in connection, 7-pole
- S1 Changeover switch from automatic control using PLC semiconductor output to local control
- S2 Local control possibility
- ③ Shutdown in an emergency (EMERGENCY-STOP) – optional

Possibility of switching from automatic control to local control by way of terminals H1/H2, i.e. automatic control through PLC or SIMOCODE/PROFIBUS DP can be deactivated e.g. at start-up or in the event of a fault and the contactor can be controlled manually.

- Contactor control through relay outputs at connections H1/H2, e.g. by
 - PLC or
 - SIMOCODE



- ① Solid-state module of 3RT1...-P contactor
- ② Plug-in connection, 7-pole
- S1 Changeover switch from automatic control e.g. using SIMOCODE or PLC relay output to local control
- S2 Local control possibility
- ③ Shutdown in an emergency (EMERGENCY-STOP) – optional

Contact loading: U_s /approx. 5 mA

When operated through SIMOCODE, a communication link to PROFIBUS DP is also provided.

Article No. scheme

Digit of the article No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th
SIRIUS power contactors	□ □ □	□	□	□	□	-	□	□	□	□	-	□	□	□
1st generation			1											
Device type (e.g. 0 = 3-pole motor contactor, 3 = 4-pole AC-1 contactor)				□										
Size of the contactor (3 = S2, 4 = S3, 5 = S6, etc.)					□									
Power dependent on size (e.g. 45 = 37 kW)						□								
Connection type (1 = screw, 2 = spring)							□							
Operating range / solenoid coil circuit (e.g. A = AC standard / without)								□						
Rated control supply voltage (e.g. P0 = 230 V, 50 Hz)									□	□				
Auxiliary switches (e.g. S3: 0 = without auxiliary switches)											□			
Special version												□	□	□
Example	3	R	T	1	0	4	5	-	1	A	P	0	0	

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the catalog and in the Industry Mall.

Power Contactors for Switching Motors

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

Selection and ordering data

AC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT101.-1AP04-3MA0

3RT101.-2AP04-3MA0

3RT101.-1A...

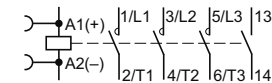
3RT101.-2A...

Rated data		Auxiliary contacts		Rated control supply voltage U_s at 50/60 Hz	DT	Screw terminals	DT	Spring-type terminals	
AC-2 and AC-3, T_U : Up to 60 °C	AC-1, T_U : 40 °C	Ident. No.	Version			Article No.	Price per PU	Article No.	Price per PU
Operation al current I_e up to 400 V	Operation al current I_e up to 690 V		NO NC	V AC					
Rating ¹⁾ of three-phase motors at 50 Hz and 400 V									
A	kW	A							

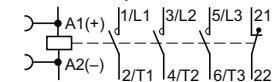
For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S00²⁾

- With auxiliary contact 1 NO, Ident. No. 10

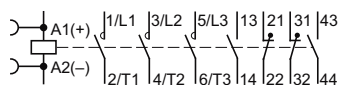


- With auxiliary contact 1 NC, Ident. No. 01



7	9	12	18	22	24	230	10	01	1	1	1	24	110	230	3RT1015-1AB01	3RT1015-1AF01	3RT1015-1AP01	3RT1015-2AB01	3RT1015-2AF01	3RT1015-2AP01
3	4	5.5	3	4	5.5	3	10	01	1	1	1	24	110	230	3RT1015-1AB02	3RT1015-1AF02	3RT1015-1AP02	3RT1015-2AB02	3RT1015-2AF02	3RT1015-2AP02
3	4	5.5	3	4	5.5	3	10	01	1	1	1	24	110	230	3RT1016-1AB01	3RT1016-1AF01	3RT1016-1AP01	3RT1016-2AB01	3RT1016-2AF01	3RT1016-2AP01
3	4	5.5	3	4	5.5	3	10	01	1	1	1	24	110	230	3RT1016-1AB02	3RT1016-1AF02	3RT1016-1AP02	3RT1016-2AB02	3RT1016-2AF02	3RT1016-2AP02
3	4	5.5	3	4	5.5	3	10	01	1	1	1	24	110	230	3RT1017-1AB01	3RT1017-1AF01	3RT1017-1AP01	3RT1017-2AB01	3RT1017-2AF01	3RT1017-2AP01
3	4	5.5	3	4	5.5	3	10	01	1	1	1	24	110	230	3RT1017-1AB02	3RT1017-1AF02	3RT1017-1AP02	B 3RT1017-2AB02	3RT1017-2AF02	3RT1017-2AP02

With permanently mounted auxiliary switch block for safety applications according to SUVA



7	9	12	18	22	230	2	2	230	3RT1015-1AP04-3MA0	B	3RT1015-2AP04-3MA0
3	4	5.5	3	4	5.5	3	2	2	3RT1016-1AP04-3MA0	B	3RT1016-2AP04-3MA0
3	4	5.5	3	4	5.5	3	2	2	3RT1017-1AP04-3MA0	B	3RT1017-2AP04-3MA0

Other voltages according to page 3/25 on request.
 For accessories, see page 3/34 onwards.
 For spare parts, see page 3/49 onwards.
 Multi-unit/reusable packaging available on request.

1) Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.
 2) For size S00: Coil operating range at 50 Hz: 0.8 to 1.1 × U_s , at 60 Hz: 0.85 to 1.1 × U_s .

AC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT102.-1A.04



3RT102.-1AL24-3MA0



3RT102.-1A.00

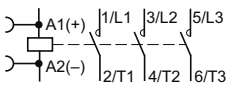


3RT102.-3A.00

Rated data		Auxiliary contacts	Rated control supply voltage	DT	Screw terminals	DT	Spring-type terminals
AC-2 and AC-3, T _{ij} : Up to 60 °C	AC-1, T _{ij} : 40 °C	Ident. No. Version	U _s at 50 Hz		Article No.	Price per PU	Article No. Price per PU
Operation al current I _e up to	Operation al current I _e up to	NO NC	V AC				
400 V	690 V						
A	A						
	400 V						
	kW						

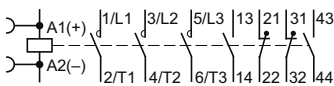
Screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S0



9	4	40 ¹⁾	--	--	--	24 110 230	▶ 3RT1023-1AB00 ▶ 3RT1023-1AF00 ▶ 3RT1023-1AP00	B B ▶	3RT1023-3AB00 3RT1023-3AF00 3RT1023-3AP00
12	5.5	40 ¹⁾	--	--	--	24 110 230	▶ 3RT1024-1AB00 ▶ 3RT1024-1AF00 ▶ 3RT1024-1AP00	B B ▶	3RT1024-3AB00 3RT1024-3AF00 3RT1024-3AP00
17	7.5	40 ¹⁾	--	--	--	24 110 230	▶ 3RT1025-1AB00 ▶ 3RT1025-1AF00 ▶ 3RT1025-1AP00	B B ▶	3RT1025-3AB00 3RT1025-3AF00 3RT1025-3AP00
25	11	40 ¹⁾	--	--	--	24 110 230	▶ 3RT1026-1AB00 ▶ 3RT1026-1AF00 ▶ 3RT1026-1AP00	B B ▶	3RT1026-3AB00 3RT1026-3AF00 3RT1026-3AP00

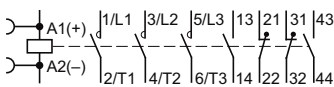
With mounted auxiliary switch block (removable)²⁾



9	4	40 ³⁾	22	2	2	24 110 230	▶ 3RT1023-1AB04 ▶ 3RT1023-1AF04 ▶ 3RT1023-1AP04	-- -- --	-- -- --
12	5.5	40 ³⁾	22	2	2	24 110 230	▶ 3RT1024-1AB04 ▶ 3RT1024-1AF04 ▶ 3RT1024-1AP04	-- -- --	-- -- --
17	7.5	40 ³⁾	22	2	2	24 110 230	▶ 3RT1025-1AB04 ▶ 3RT1025-1AF04 ▶ 3RT1025-1AP04	-- -- --	-- -- --
25	11	40 ³⁾	22	2	2	24 110 230	▶ 3RT1026-1AB04 ▶ 3RT1026-1AF04 ▶ 3RT1026-1AP04	-- -- --	-- -- --

With permanently mounted auxiliary switch block for safety applications according to SUVA

At 50/60 Hz V AC



12	5.5	40 ¹⁾	22	2	2	230	B	3RT1024-1AL24-3MA0	--
17	7.5	40 ¹⁾	22	2	2	230	A	3RT1025-1AL24-3MA0	--
25	11	40 ¹⁾	22	2	2	230	A	3RT1026-1AL24-3MA0	--

Other voltages according to page 3/25 on request.
 For accessories, see page 3/34 onwards.
 For spare parts, see page 3/49 onwards.

Multi-unit/reusable packaging available on request.

- 1) Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.
- 2) Article No. for the auxiliary switch block (removable): 3RH1921-1HA22 (2 NO + 2 NC according to EN 50012; 22).
- 3) Minimum conductor cross-section 10 mm².

Power Contactors for Switching Motors

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

AC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT103.-1A.04



3RT103.-1A.00

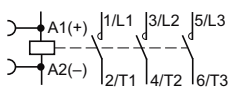


3RT103.-3A.00

Rated data		Auxiliary contacts	Rated control supply voltage	DT	Screw terminals	DT	Spring-type terminals
AC-2 and AC-3, T_U : Up to 60 °C	AC-1, T_U : 40 °C	Ident. No. Version	U_s at 50 Hz		Article No. Price per PU		for coil terminals Price per PU
Operational current I_e up to	Rating ¹⁾ of three-phase motors at 50 Hz and	NO NC					
500 V	400 V						
A	kW		V AC				

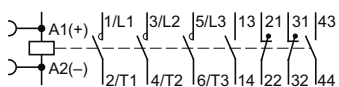
Screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S2



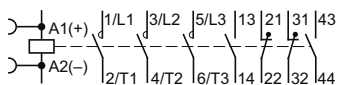
32	15	50	--	--	--	24 110 230	▶ 3RT1034-1AB00 ▶ 3RT1034-1AF00 ▶ 3RT1034-1AP00	B B ▶	3RT1034-3AB00 3RT1034-3AF00 3RT1034-3AP00
40	18.5	60	--	--	--	24 110 230	▶ 3RT1035-1AB00 ▶ 3RT1035-1AF00 ▶ 3RT1035-1AP00	B B ▶	3RT1035-3AB00 3RT1035-3AF00 3RT1035-3AP00
50	22	60	--	--	--	24 110 230	▶ 3RT1036-1AB00 ▶ 3RT1036-1AF00 ▶ 3RT1036-1AP00	B B ▶	3RT1036-3AB00 3RT1036-3AF00 3RT1036-3AP00

With mounted auxiliary switch block (removable)²⁾



32	15	50	22	2	2	24 110 230	▶ 3RT1034-1AB04 ▶ 3RT1034-1AF04 ▶ 3RT1034-1AP04	-- -- ▶	-- -- --
40	18.5	60	22	2	2	24 110 230	▶ 3RT1035-1AB04 ▶ 3RT1035-1AF04 ▶ 3RT1035-1AP04	-- -- ▶	-- -- --
50	22	60	22	2	2	24 110 230	▶ 3RT1036-1AB04 ▶ 3RT1036-1AF04 ▶ 3RT1036-1AP04	-- -- ▶	-- -- --

With permanently mounted auxiliary switch block for safety applications according to SUVA



32	15	50	22	2	2	230	B	3RT1034-1AP04-3MA0	--
40	18.5	60	22	2	2	230	B	3RT1035-1AP04-3MA0	--
50	22	60	22	2	2	230	B	3RT1036-1AP04-3MA0	--

Other voltages according to page 3/25 on request.
 For accessories, see page 3/34 onwards.
 For spare parts, see page 3/49 onwards.

For multi-unit packaging and reusable packaging, see Catalog IC 10, Chapter 16, "Appendix" → "Ordering Notes".

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.

²⁾ Article No. for the auxiliary switch block (removable): 3RH1921-1HA22 (2 NO + 2 NC acc. to EN 50012; Ident. No. 22).

AC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT104.-1A.04



3RT104.-1A.00

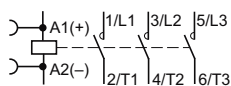


3RT104.-3A.00

Rated data			Auxiliary contacts		Rated control supply voltage	DT	Screw terminals	DT	Spring-type terminals for coil terminals	
AC-2 and AC-3, T _U : Up to 60 °C	AC-1, T _U : 40 °C	Operation al current I _e up to	Ident. No.	Version	U _s at 50 Hz		Article No.	Price per PU	Article No.	Price per PU
500 V	690 V	Rating ¹⁾ of three-phase motors at 50 Hz and 400 V		NO NC	V AC					
A	A	kW								

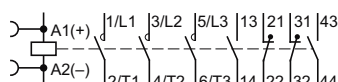
For screw fixing and snap-on mounting onto TH 35 and TH 75 standard mounting rails

Size S3



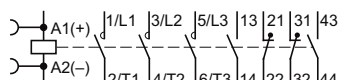
65	30	100	--	--	--	24 110 230	▶ 3RT1044-1AB00 ▶ 3RT1044-1AF00 ▶ 3RT1044-1AP00	B B ▶	3RT1044-3AB00 3RT1044-3AF00 3RT1044-3AP00
80	37	120	--	--	--	24 110 230	▶ 3RT1045-1AB00 ▶ 3RT1045-1AF00 ▶ 3RT1045-1AP00	B B ▶	3RT1045-3AB00 3RT1045-3AF00 3RT1045-3AP00
95	45	120	--	--	--	24 110 230	▶ 3RT1046-1AB00 ▶ 3RT1046-1AF00 ▶ 3RT1046-1AP00	B B ▶	3RT1046-3AB00 3RT1046-3AF00 3RT1046-3AP00

With mounted auxiliary switch block (removable)²⁾



65	30	100	22	2	2	24 110 230	▶ 3RT1044-1AB04 ▶ 3RT1044-1AF04 ▶ 3RT1044-1AP04	-- -- --	-- -- --
80	37	120	22	2	2	24 110 230	▶ 3RT1045-1AB04 ▶ 3RT1045-1AF04 ▶ 3RT1045-1AP04	B -- --	-- -- --
95	45	120	22	2	2	24 110 230	▶ 3RT1046-1AB04 ▶ 3RT1046-1AF04 ▶ 3RT1046-1AP04	B -- --	-- -- --

With permanently mounted auxiliary switch block for safety applications according to SUVA



65	30	100	22	2	2	230	▶ 3RT1044-1AP04-3MA0	--	--
80	37	120	22	2	2	230	B ▶ 3RT1045-1AP04-3MA0	--	--
95	45	120	22	2	2	230	▶ 3RT1046-1AP04-3MA0	--	--

Other voltages according to page 3/25 on request.
 For accessories, see page 3/34 onwards.
 For spare parts, see page 3/49 onwards.

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.
²⁾ Article No. for the auxiliary switch block (removable): 3RH1921-1HA22 (2 NO + 2 NC acc. to EN 50012; Ident. No. 22).

Power Contactors for Switching Motors

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

DC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT101.-1BB44-3MA0



3RT101.-2BB44-3MA0



3RT101.-1B...



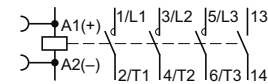
3RT101.-2B...

Rated data		Auxiliary contacts	Rated control supply voltage U_s	DT	Screw terminals	DT	Spring-type terminals
AC-2 and AC-3, T_U : Up to 60 °C	AC-1, T_U : 40 °C	Ident. No. Version			Article No. Price per PU		Article No. Price per PU
Operation al current I_e up to 400 V	Operation al current I_e up to 690 V	NO NC	V DC				
Rating ¹⁾ of three-phase motors at 50 Hz and 400 V							
400 V							
kW							

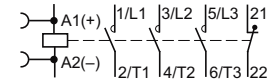
Screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S00

- With auxiliary contact 1 NO, Ident. No. 10



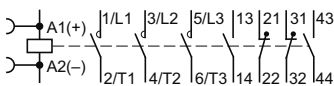
- With auxiliary contact 1 NC, Ident. No. 01



7	3	18	10	1	--	24	▶	3RT1015-1BB41	▶	3RT1015-2BB41
						220	A	3RT1015-1BM41	B	3RT1015-2BM41
			01	--	1	24	▶	3RT1015-1BB42	▶	3RT1015-2BB42
						220	B	3RT1015-1BM42		3RT1015-2BM42
9	4	22	10	1	--	24	▶	3RT1016-1BB41	▶	3RT1016-2BB41
						220	B	3RT1016-1BM41		--
			01	--	1	24	▶	3RT1016-1BB42	▶	3RT1016-2BB42
						220	B	3RT1016-1BM42		--
12	5.5	22	10	1	--	24	▶	3RT1017-1BB41	▶	3RT1017-2BB41
						220	B	3RT1017-1BM41		--
			01	--	1	24	▶	3RT1017-1BB42	▶	3RT1017-2BB42
						220	B	3RT1017-1BM42		--

With permanently mounted auxiliary switch block for safety applications according to SUVA

Terminal designations according to EN 50012



7	3	18	22	2	2	24	▶	3RT1015-1BB44-3MA0	B	3RT1015-2BB44-3MA0
						24	▶ <td>3RT1016-1BB44-3MA0 <td>A <td>3RT1016-2BB44-3MA0</td> </td></td>	3RT1016-1BB44-3MA0 <td>A <td>3RT1016-2BB44-3MA0</td> </td>	A <td>3RT1016-2BB44-3MA0</td>	3RT1016-2BB44-3MA0
9	4	22	22	2	2	24	▶ <td>3RT1017-1BB44-3MA0 <td>B <td>3RT1017-2BB44-3MA0</td> </td></td>	3RT1017-1BB44-3MA0 <td>B <td>3RT1017-2BB44-3MA0</td> </td>	B <td>3RT1017-2BB44-3MA0</td>	3RT1017-2BB44-3MA0

Other voltages according to page 3/25 on request.
 For accessories, see page 3/34 onwards.
 For spare parts, see page 3/49 onwards.

Multi-unit/reusable packaging available on request.

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.

DC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT102.-3B.44



3RT102.-1BB44-3MA0



3RT102.-1B.40

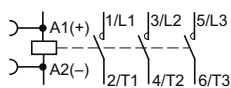


3RT102.-3B.40

Rated data		Auxiliary contacts		Rated control supply voltage U_s	DT	Screw terminals		DT	Spring-type terminals for coil terminals	
AC-2 and AC-3, T_U : Up to 60 °C	Operation al current I_e up to	AC-1, T_U : 40 °C	Operation al current I_e up to			Ident. No.	Version		Article No.	Price per PU
400 V	400 V	690 V								
A	kW	A								

Screw fixing and snap-on mounting onto TH 35 standard mounting rail

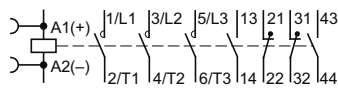
Size S0



9	4	40 ¹⁾	--	--	--	24 220	▶ 3RT1023-1BB40 ▶ 3RT1023-1BM40	▶ 3RT1023-3BB40 ▶ --
12	5.5	40 ¹⁾	--	--	--	24 220	▶ 3RT1024-1BB40 ▶ 3RT1024-1BM40	▶ 3RT1024-3BB40 ▶ 3RT1024-3BM40
17	7.5	40 ¹⁾	--	--	--	24 220	▶ 3RT1025-1BB40 ▶ 3RT1025-1BM40	▶ 3RT1025-3BB40 ▶ --
25	11	40 ¹⁾	--	--	--	24 220	▶ 3RT1026-1BB40 ▶ 3RT1026-1BM40	▶ 3RT1026-3BB40 ▶ 3RT1026-3BM40

With mounted auxiliary switch block (removable)²⁾

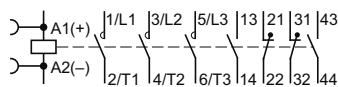
Terminal designations according to EN 50012



9	4	40 ³⁾	22	2	2	24 220	▶ 3RT1023-1BB44 ▶ 3RT1023-1BM44	▶ -- ▶ --
12	5.5	40 ³⁾	22	2	2	24 220	▶ 3RT1024-1BB44 ▶ 3RT1024-1BM44	▶ -- ▶ --
17	7.5	40 ³⁾	22	2	2	24 220	▶ 3RT1025-1BB44 ▶ 3RT1025-1BM44	▶ -- ▶ --
25	11	40 ³⁾	22	2	2	24 220	▶ 3RT1026-1BB44 ▶ 3RT1026-1BM44	▶ -- ▶ --

With permanently mounted auxiliary switch block for safety applications according to SUVA

Terminal designations according to EN 50012



12	5.5	40 ¹⁾	22	2	2	24	A 3RT1024-1BB44-3MA0	▶ --
17	7.5	40 ¹⁾	22	2	2	24	A 3RT1025-1BB44-3MA0	▶ --
25	11	40 ¹⁾	22	2	2	24	A 3RT1026-1BB44-3MA0	▶ --

Other voltages according to page 3/25 on request.
 For accessories, see page 3/34 onwards.
 For spare parts, see page 3/49 onwards.

Multi-unit/reusable packaging available on request.

- 1) Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.
- 2) Article No. for the auxiliary switch block (removable): 3RH1921-1HA22 (2 NO + 2 NC according to EN 50012; 22E).
- 3) Minimum conductor cross-section 10 mm².

Power Contactors for Switching Motors

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

DC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT103.-1B.44



3RT103.-1B.40



3RT103.-3B.40

Rated data		Auxiliary contacts	Rated control supply voltage U_s	DT	Screw terminals	DT	Spring-type terminals for coil terminals	
AC-2 and AC-3, T_U : Up to 60 °C	AC-1, T_U : 40 °C	Ident. No.			Article No.	Price per PU	Article No.	Price per PU
Operation al current I_e up to	Operation al current I_e up to	Version						
500 V	690 V	NO NC	V DC					
A	A							
	400 V							
	kW							

Screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S2

Rated current I_e [A]	Rated power P_n [kW]	Rated voltage U_n [V]	Ident. No.	Version	Control voltage U_s [V DC]	DT	Article No.	DT	Article No.
32	15	50	--	--	24	B	3RT1034-1BB40	B	3RT1034-3BB40
					220	B	3RT1034-1BM40	B	3RT1034-3BM40
40	18.5	60	--	--	24	B	3RT1035-1BB40	B	3RT1035-3BB40
					220	B	3RT1035-1BM40	B	3RT1035-3BM40
50	22	60	--	--	24	B	3RT1036-1BB40	B	3RT1036-3BB40
					220	B	3RT1036-1BM40	B	3RT1036-3BM40

With mounted auxiliary switch block (removable)²⁾

Rated current I_e [A]	Rated power P_n [kW]	Rated voltage U_n [V]	Ident. No.	Version	Control voltage U_s [V DC]	DT	Article No.	DT	Article No.
32	15	50	22	2	24	B	3RT1034-1BB44	--	--
					220	B	3RT1034-1BM44	--	--
40	18.5	60	22	2	24	B	3RT1035-1BB44	--	--
					220	B	3RT1035-1BM44	--	--
50	22	60	22	2	24	B	3RT1036-1BB44	--	--
					220	B	3RT1036-1BM44	--	--

With permanently mounted auxiliary switch block for safety applications according to SUVA

Rated current I_e [A]	Rated power P_n [kW]	Rated voltage U_n [V]	Ident. No.	Version	Control voltage U_s [V DC]	DT	Article No.	DT	Article No.
32	15	50	22	2	24	B	3RT1034-1BB44-3MA0	--	--
40	18.5	60	22	2	24	B	3RT1035-1BB44-3MA0	--	--
50	22	60	22	2	24	B	3RT1036-1BB44-3MA0	--	--

Other voltages according to page 3/25 on request.
 For accessories, see page 3/34 onwards.
 For spare parts, see page 3/49 onwards.

For multi-unit packaging and reusable packaging, see Catalog IC 10, Chapter 16, "Appendix" → "Ordering Notes".

1) Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.
 2) Article No. for the auxiliary switch block (removable): 3RH1921-1HA22 (2 NO + 2 NC acc. to EN 50012; Ident. No. 22).

Power Contactors for Switching Motors

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

DC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT104.-1B.44



3RT104.-1B.40

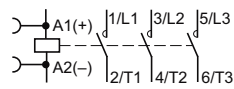


3RT104.-3B.40

Rated data		Auxiliary contacts		Rated control supply voltage U_s	DT	Screw terminals	DT	Spring-type terminals for coil terminals	
AC-2 and AC-3, T_U : Up to 60 °C	AC-1, T_U : 40 °C	Ident. No.	Version			Article No.	Price per PU	Article No.	Price per PU
Operational current I_e up to 500 V	Operational current I_e up to 690 V								
Rating ¹⁾ of three-phase motors at 50 Hz and 400 V									
A	A								

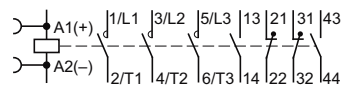
For screw fixing and snap-on mounting onto TH 35 and TH 75 standard mounting rails

Size S3



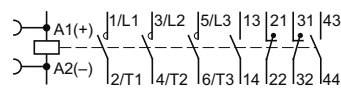
65	30	100	--	--	--	24 220	▶	3RT1044-1BB40 3RT1044-1BM40	▶	3RT1044-3BB40 3RT1044-3BM40
80	37	120	--	--	--	24 220	▶	3RT1045-1BB40 3RT1045-1BM40	▶	3RT1045-3BB40 3RT1045-3BM40
95	45	120	--	--	--	24 220	▶	3RT1046-1BB40 3RT1046-1BM40	▶	3RT1046-3BB40 3RT1046-3BM40

With mounted auxiliary switch block (removable)²⁾



65	30	100	22	2	2	24 220	▶	3RT1044-1BB44 3RT1044-1BM44	▶	--
80	37	120	22	2	2	24 220	▶	3RT1045-1BB44 3RT1045-1BM44	▶	--
95	45	120	22	2	2	24 220	▶	3RT1046-1BB44 3RT1046-1BM44	▶	--

With permanently mounted auxiliary switch block for safety applications according to SUVA



65	30	100	22	2	2	24	▶	3RT1044-1BB44-3MA0	▶	--
80	37	120	22	2	2	24	▶	3RT1045-1BB44-3MA0	▶	--
95	45	120	22	2	2	24	▶	3RT1046-1BB44-3MA0	▶	--

Other voltages according to page 3/25 on request.
 For accessories, see page 3/34 onwards.
 For spare parts, see page 3/49 onwards.

- 1) Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.
- 2) Article No. for the auxiliary switch block (removable): 3RH1921-1HA22 (2 NO + 2 NC acc. to EN 50012; Ident. No. 22).

Power Contactors for Switching Motors

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

AC/DC operation (50 Hz to 60 Hz, DC)

- Withdrawable coils with integrated coil switch (varistor)
- Auxiliary and control conductors: Screw or spring-type terminals
- Main conductors: Busbar connections, for 3RT1054 (55 kW) box terminals¹⁾



3RT1. 5.



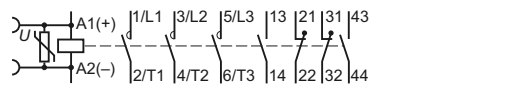
3RT1. 6.



3RT1. 7.

Size	Rated data					Auxiliary contacts, lateral	Rated control supply voltage U_s	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	AC-2 and AC-3, T_U : Up to 60 °C					AC-1, T_U : 40 °C							
	Operational current I_e up to	Ratings ²⁾ of three-phase motors at 50 Hz and				Operational current I_e up to		Version					
	500 V	230 V	400 V	500 V	690 V	690 V							
	A	kW	kW	kW	kW	A		NO NC	V AC/DC				

Conventional operating mechanisms



Size	Conventional operating mechanisms								Screw terminals					
	115	150	185	225	265	300	400	500	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
S6	115	37	55	75	110	160	2	2	110 ... 127 220 ... 240	▶ 3RT1054-1AF36 ▶ 3RT1054-1AP36		1 1	1 unit 1 unit	41B 41B
	150	45	75	90	132	185	2	2	110 ... 127 220 ... 240	▶ 3RT1055-6AF36 ▶ 3RT1055-6AP36		1 1	1 unit 1 unit	41B 41B
	185	55	90	110	160	215	2	2	110 ... 127 220 ... 240	▶ 3RT1056-6AF36 ▶ 3RT1056-6AP36		1 1	1 unit 1 unit	41B 41B
S10	225	55	110	160	200	275	2	2	110 ... 127 220 ... 240	▶ 3RT1064-6AF36 ▶ 3RT1064-6AP36		1 1	1 unit 1 unit	41B 41B
	265	75	132	160	250	330	2	2	110 ... 127 220 ... 240	▶ 3RT1065-6AF36 ▶ 3RT1065-6AP36		1 1	1 unit 1 unit	41B 41B
	300	90	160	200	250	330	2	2	110 ... 127 220 ... 240	▶ 3RT1066-6AF36 ▶ 3RT1066-6AP36		1 1	1 unit 1 unit	41B 41B
S12	400	132	200	250	400	430	2	2	110 ... 127 220 ... 240	▶ 3RT1075-6AF36 ▶ 3RT1075-6AP36		1 1	1 unit 1 unit	41B 41B
	500	160	250	355	400	610	2	2	110 ... 127 220 ... 240	▶ 3RT1076-6AF36 ▶ 3RT1076-6AP36		1 1	1 unit 1 unit	41B 41B
											Spring-type terminals for coil and auxiliary switch terminals			
S6	115	37	55	75	110	160	2	2	110 ... 127 220 ... 240	B 3RT1054-3AF36 B 3RT1054-3AP36		1 1	1 unit 1 unit	41B 41B
	150	45	75	90	132	185	2	2	110 ... 127 220 ... 240	B 3RT1055-2AF36 B 3RT1055-2AP36		1 1	1 unit 1 unit	41B 41B
	185	55	90	110	160	215	2	2	110 ... 127 220 ... 240	B 3RT1056-2AF36 B 3RT1056-2AP36		1 1	1 unit 1 unit	41B 41B
S10	225	55	110	160	200	275	2	2	110 ... 127 220 ... 240	B 3RT1064-2AF36 B 3RT1064-2AP36		1 1	1 unit 1 unit	41B 41B
	265	75	132	160	250	330	2	2	110 ... 127 220 ... 240	B 3RT1065-2AF36 B 3RT1065-2AP36		1 1	1 unit 1 unit	41B 41B
	300	90	160	200	250	330	2	2	110 ... 127 220 ... 240	B 3RT1066-2AF36 B 3RT1066-2AP36		1 1	1 unit 1 unit	41B 41B
S12	400	132	200	250	400	430	2	2	110 ... 127 220 ... 240	B 3RT1075-2AF36 B 3RT1075-2AP36		1 1	1 unit 1 unit	41B 41B
	500	160	250	355	400	610	2	2	110 ... 127 220 ... 240	B 3RT1076-2AF36 B 3RT1076-2AP36		1 1	1 unit 1 unit	41B 41B

Other voltages according to page 3/25 on request.
For accessories, see page 3/34 onwards.
For spare parts, see page 3/49 onwards.

¹⁾ Alternatively the 3RT1054-1 contactor (55 kW) can be supplied with busbar connections instead of box terminals. Without additional price. In the 8th Position of the Article No. in the case of screw terminals, the "1" must be replaced with "6", e.g. 3RT1054-6A.36; for spring-type terminals, the "3" must be replaced with "2", e.g. 3RT1054-2A.36.

²⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

AC/DC operation (50 Hz to 60 Hz, DC)

- Withdrawable coils with integrated coil switch (varistor)
- Auxiliary and control conductors: Screw or spring-type terminals
- Main conductors: Busbar connections, for 3RT1054 (55 kW) box terminals¹⁾



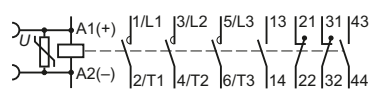
3RT1. 5.

3RT1. 6.

3RT1. 7.

Size	Rated data					AC-1, T _u : 40 °C	Auxiliary contacts, lateral		Rated control supply voltage U _s	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	AC-2 and AC-3, T _u : Up to 60 °C						Version								
	Operation al current I _e up to	Ratings ²⁾ of three-phase motors at 50 Hz and				Operation al current I _e up to	NO NC								
	500 V	230 V	400 V	500 V	690 V	690 V									
	A	kW	kW	kW	kW	A			V AC/DC						

Solid-state operating mechanisms · for 24 V DC PLC output



										Screw terminals				
S6	115	37	55	75	110	160	2	2	96 ... 127 200 ... 277	A	3RT1054-1NF36 3RT1054-1NP36	1	1 unit	41B
	150	45	75	90	132	185	2	2	96 ... 127 200 ... 277	A	3RT1055-6NF36 3RT1055-6NP36	1	1 unit	41B
	185	55	90	110	160	215	2	2	96 ... 127 200 ... 277	A	3RT1056-6NF36 3RT1056-6NP36	1	1 unit	41B
S10	225	55	110	160	200	275	2	2	96 ... 127 200 ... 277	A	3RT1064-6NF36 3RT1064-6NP36	1	1 unit	41B
	265	75	132	160	250	330	2	2	96 ... 127 200 ... 277	A	3RT1065-6NF36 3RT1065-6NP36	1	1 unit	41B
	300	90	160	200	250	330	2	2	96 ... 127 200 ... 277	B	3RT1066-6NF36 3RT1066-6NP36	1	1 unit	41B
S12	400	132	200	250	400	430	2	2	96 ... 127 200 ... 277	A	3RT1075-6NF36 3RT1075-6NP36	1	1 unit	41B
	500	160	250	355	400	610	2	2	96 ... 127 200 ... 277	A	3RT1076-6NF36 3RT1076-6NP36	1	1 unit	41B
										Spring-type terminals				
S6	115	37	55	75	110	160	2	2	96 ... 127 200 ... 277	B	3RT1054-3NF36 3RT1054-3NP36	1	1 unit	41B
	150	45	75	90	132	185	2	2	96 ... 127 200 ... 277	B	3RT1055-2NF36 3RT1055-2NP36	1	1 unit	41B
	185	55	90	110	160	215	2	2	96 ... 127 200 ... 277	B	3RT1056-2NF36 3RT1056-2NP36	1	1 unit	41B
S10	225	55	110	160	200	275	2	2	96 ... 127 200 ... 277	B	3RT1064-2NF36 3RT1064-2NP36	1	1 unit	41B
	265	75	132	160	250	330	2	2	96 ... 127 200 ... 277	B	3RT1065-2NF36 3RT1065-2NP36	1	1 unit	41B
	300	90	160	200	250	330	2	2	96 ... 127 200 ... 277	B	3RT1066-2NF36 3RT1066-2NP36	1	1 unit	41B
S12	400	132	200	250	400	430	2	2	96 ... 127 200 ... 277	B	3RT1075-2NF36 3RT1075-2NP36	1	1 unit	41B
	500	160	250	355	400	610	2	2	96 ... 127 200 ... 277	B	3RT1076-2NF36 3RT1076-2NP36	1	1 unit	41B

Other voltages according to page 3/25 on request.
For accessories, see page 3/34 onwards.
For spare parts, see page 3/49 onwards.

¹⁾ Alternatively the 3RT1054-1 contactor (55 kW) can be supplied with busbar connections instead of box terminals. Without additional price. In the 8th Position of the Article No. in the case of screw terminals, the "1" must be replaced with "6", e.g. 3RT1054-6A.36; for spring-type terminals, the "3" must be replaced with "2", e.g. 3RT1054-2A.36.
²⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.

Power Contactors for Switching Motors

SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW

AC/DC operation (50 Hz to 60 Hz, DC)

- Withdrawable coils with integrated coil switch (varistor)
- Auxiliary and control conductors: Screw terminals
- Main conductors: Busbar connections, for 3RT1054 (55 kW) box terminals¹⁾
- Indication of remaining lifetime (RLT)



3RT1056-6P..

Size	Rated data AC-2 and AC-3, T_U : Up to 60 °C	AC-1, T_U : 40 °C	Auxiliary contacts, lateral	Rated control supply voltage U_s	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
	Operation al current I_e up to	Operational current I_e up to	Version			Article No.	Price per PU		
	500 V A	230 V kW	400 V kW	500 V kW	690 V kW	690 V A			
			NO	NC	V AC/DC				

Solid-state operating mechanisms - for 24 V DC PLC output - with RLT

	A1(+)	1/L1	3/L2	5/L3	13	21	A2(-)	2/T1	4/T2	6/T3	14	22										
S6	115												110	160	1	1	96 ... 127 200 ... 277	B	3RT1054-1PF35	1	1 unit	41B
													160	215	1	1	96 ... 127 200 ... 277	B	3RT1054-1PP35	1	1 unit	41B
	150	45	75	90	132	185	1	1	96 ... 127 200 ... 277	B	3RT1055-6PF35	1	1 unit	41B			96 ... 127 200 ... 277	B	3RT1055-6PP35	1	1 unit	41B
S10	185	55	90	110	160	215	1	1	96 ... 127 200 ... 277	B	3RT1056-6PF35	1	1 unit	41B			96 ... 127 200 ... 277	B	3RT1056-6PP35	1	1 unit	41B
	225	55	110	160	200	275	1	1	96 ... 127 200 ... 277	B	3RT1064-6PF35	1	1 unit	41B			96 ... 127 200 ... 277	B	3RT1064-6PP35	1	1 unit	41B
	265	75	132	160	250	330	1	1	96 ... 127 200 ... 277	B	3RT1065-6PF35	1	1 unit	41B			96 ... 127 200 ... 277	B	3RT1065-6PP35	1	1 unit	41B
S12	300	90	160	200	250	330	1	1	96 ... 127 200 ... 277	B	3RT1066-6PF35	1	1 unit	41B			96 ... 127 200 ... 277	B	3RT1066-6PP35	1	1 unit	41B
	400	132	200	250	400	430	1	1	96 ... 127 200 ... 277	B	3RT1075-6PF35	1	1 unit	41B			96 ... 127 200 ... 277	B	3RT1075-6PP35	1	1 unit	41B
	500	160	250	355	400	610	1	1	96 ... 127 200 ... 277	B	3RT1076-6PF35	1	1 unit	41B			96 ... 127 200 ... 277	B	3RT1076-6PP35	1	1 unit	41B

Other voltages according to page 3/25 on request.

For accessories, see page 3/34 onwards.

For spare parts, see page 3/49 onwards.

- ¹⁾ Alternatively the 3RT1054-1 contactor (55 kW) can be supplied with busbar connections instead of box terminals. Without additional price. In the 8th position of the article number, the "1" must be replaced with "6", e.g. 3RT1054-6....
- ²⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.

Options

Rated control supply voltages possible on request (change of the 10th and 11th positions of the Article No.)

Rated control supply voltage U_s	Contactor type	3RT101	3RT102, 3RT103, 3RT104	3RT144	3RT131, 3RT151	3RT132 ... 3RT134, 3RT152, 3RT153	3RT1617, 3RT1627, 3RT1647
	Size	S00	S0, S2, S3	S3	S00	S0, S2, S3	S00, S0, S3

Sizes S2 and S3

AC operation

Solenoid coils for 50 Hz¹⁾

24 V AC	B0	B0	B0	B0	B0	B0	B0
42 V AC	D0	D0	D0	D0	D0	--	--
48 V AC	H0	H0	H0	H0	H0	--	--
110 V AC	F0	F0	F0	F0	F0	F0	F0
230 V AC	P0	P0	P0	P0	P0	P0	P0
240 V AC	U0	U0	U0	U0	U0	U0	U0
400 V AC	V0	V0	V0	V0	V0	V0	V0

Solenoid coils for 50 and 60 Hz¹⁾

24 V AC	B0	C2	C2	B0	C2	C2	C2
42 V AC	D0	D2	D2	D0	D2	--	--
48 V AC	H0	H2	H2	H0	H2	--	--
110 V AC	F0	G2	G2	F0	G2	G2	G2
220 V AC	N2	N2	N2	N2	N2	N2	N2
230 V AC	P0	L2	L2	P0	L2	L2	L2
240 V AC	P2	P2	P2	P2	P2	P2	P2

Solenoid coils (for USA and Canada²⁾)

50 Hz	60 Hz						
110 V AC	120 V AC	K6	K6	K6	K6	K6	K6
220 V AC	240 V AC	P6	P6	P6	P6	P6	P6

Solenoid coils (for Japan)

50/60 Hz ³⁾	60 Hz ⁴⁾						
100 V AC	110 V AC	G6	G6	G6	G6	G6	G6
200 V AC	220 V AC	N6	N6	N6	N6	N6	N6
400 V AC	440 V AC	R6	R6	R6	R6	R6	R6

DC operation

12 V DC	A4	--	--	A4	--	--	--
24 V DC	B4	B4	B4	B4	B4	--	--
42 V DC	D4	D4	D4	D4	D4	--	--
48 V DC	W4	W4	W4	W4	--	--	--
60 V DC	E4	E4	E4	--	--	--	--
110 V DC	F4	F4	F4	F4	F4	--	--
125 V DC	G4	G4	G4	G4	G4	--	--
220 V DC	M4	M4	M4	M4	M4	--	--
230 V DC	P4	P4	P4	P4	--	--	--

Examples

AC operation	3RT1034-1AP00	Contactors with screw terminals; with solenoid coil for 50 Hz for rated control supply voltage 230 V AC
	3RT1034-1AG20	Contactors with screw terminals; with solenoid coil for 50/60 Hz for rated control supply voltage 110 V AC
DC operation	3RT1034-3BB40	Contactors with spring-type terminals; for rated control supply voltage 24 V DC
	3RT1034-3BG40	Contactors with spring-type terminals; for rated control supply voltage 125 V DC

Rated control supply voltage U_s	Contactor type	3RT1.5.-.A 3RT1.6.-.A 3RT1.7.-.A	Rated control supply voltage U_s	Contactor type	3RT1.5.-.N 3RT1.6.-.N 3RT1.7.-.N	3RT1.5.-.P 3RT1.6.-.P 3RT1.7.-.P
$U_{s \min} \dots U_{s \max}^{5)}$	Size	S6, S10, S12	$U_{s \min} \dots U_{s \max}^{5)}$	Size	S6, S10, S12	S6, S10, S12

Sizes S6 to S12

AC/DC operation (AC 50 ... 60 Hz, DC)

Conventional operating mechanisms

23 ... 26 V AC/DC	B3	21 ... 27.3 V AC/DC	B3	--
42 ... 48 V AC/DC	D3	96 ... 127 V AC/DC	F3	F3
110 ... 127 V AC/DC	F3	200 ... 277 V AC/DC	P3	P3
200 ... 220 V AC/DC	M3			
220 ... 240 V AC/DC	P3			
240 ... 277 V AC/DC	U3			
380 ... 420 V AC/DC	V3			
440 ... 480 V AC/DC	R3			
500 ... 550 V AC/DC	S3			
575 ... 600 V AC/DC	T3			

Solid-state operating mechanisms

¹⁾ Coil operating range:
at 50 Hz: 0.8 to $1.1 \times U_s$
at 60 Hz: 0.85 to $1.1 \times U_s$.

²⁾ Coil operating range (sizes S2 and S3):
at 50 Hz and 60 Hz: 0.8 to $1.1 \times U_s$.

³⁾ Coil operating range (sizes S2 and S3):
at 50 Hz: 0.8 to $1.1 \times U_s$
at 60 Hz: 0.85 to $1.1 \times U_s$.

⁴⁾ Coil operating range:
at 60 Hz: 0.8 to $1.1 \times U_s$.

⁵⁾ Operating range:
 0.8 to $1.1 \times U_{s \min}$ to $1.1 \times U_{s \max}$.

Power Contactors for Switching Motors

SIRIUS 3RT12 vacuum contactors, 3-pole, 110 ... 250 kW

Overview

AC/DC operation

The contactors can be operated with AC (50 to 60 Hz) as well as with DC.

Operating mechanism types

Two types of solenoid operation are available:

- Conventional operating mechanism, version 3RT12...A
- Solid-state operating mechanism, version 3RT12...N

Withdrawable coils

For simple coil replacement, e.g. if the application is replaced, the solenoid coil can be pulled out upwards after the release mechanism has been actuated and can be replaced by any other coil of the same size.

Vacuum interrupters

In contrast with the 3RT10 contactors – the main contacts operate in air under atmospheric conditions – the contact gaps of the 3RT12 vacuum contactors are contained in hermetically enclosed vacuum interrupters. Neither arcs nor arcing gases are produced. The particular benefit of 3RT12 vacuum contactors, however, is that their electrical endurance is at least twice as long as that of 3RT10 contactors. They are therefore particularly well suited to frequent switching in jogging/mixed operation, e.g. in crane control systems.

Note:

Vacuum contactors are basically unsuitable for switching DC voltage.

Auxiliary contact complement

The contactors can be fitted with up to 8 lateral auxiliary contacts (identical auxiliary switch blocks from S2 to S12). Of these, no more than 4 are permitted to be NC contacts.

Selection and ordering data

AC/DC operation (AC 50 to 60 Hz, DC)

- Withdrawable coils with integrated coil switch (varistor)
- Auxiliary and control conductors: Screw terminals
- Main conductors: Busbar connections



3RT126.

3RT127.

Size	Rated data					AC-1, T _v : 40 °C	Auxiliary contacts, lateral		Rated control supply voltage U _s	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
	AC-2 and AC-3, T _v : Up to 60 °C										⊕			
	Operational current I _e up to	Ratings ¹⁾ of three-phase motors at 50 Hz and				Operational current I _e up to					Article No.	Price per PU		
	1000 V	230 V	400 V	500 V	690 V	1000 V								
	A	kW	kW	kW	kW	A	NO	NC	V AC/DC					

Conventional operating mechanisms

S10	225	55	110	160	200	330	2	2	110 ... 127 220 ... 240	A	3RT1264-6AF36 3RT1264-6AP36	1	1 unit	41B
	265	75	132	160	250	330	2	2	110 ... 127 220 ... 240	A	3RT1265-6AF36 3RT1265-6AP36	1	1 unit	41B
	300	90	160	200	250	330	2	2	110 ... 127 220 ... 240	A	3RT1266-6AF36 3RT1266-6AP36	1	1 unit	41B
S12	400	132	200	250	400	610	2	2	110 ... 127 220 ... 240	A	3RT1275-6AF36 3RT1275-6AP36	1	1 unit	41B
	500	160	250	355	500	610	2	2	110 ... 127 220 ... 240	A	3RT1276-6AF36 3RT1276-6AP36	1	1 unit	41B

Solid-state operating mechanisms · for 24 V DC PLC output

S10	225	55	110	160	200	330	2	2	96 ... 127 200 ... 277	B	3RT1264-6NF36 3RT1264-6NP36	1	1 unit	41B
	265	75	132	160	250	330	2	2	96 ... 127 200 ... 277	B	3RT1265-6NF36 3RT1265-6NP36	1	1 unit	41B
	300	90	160	200	250	330	2	2	96 ... 127 200 ... 277	B	3RT1266-6NF36 3RT1266-6NP36	1	1 unit	41B
S12	400	132	200	250	400	610	2	2	96 ... 127 200 ... 277	B	3RT1275-6NF36 3RT1275-6NP36	1	1 unit	41B
	500	160	250	355	500	610	2	2	96 ... 127 200 ... 277	B	3RT1276-6NF36 3RT1276-6NP36	1	1 unit	41B

Other voltages according to page 3/25 on request.
For accessories, see page 3/34 onwards.
For spare parts, see page 3/49 onwards.

For other 335 kW and 450 kW vacuum contactors (Type 3TF68/3TF69), see Catalog IC 10, Chapter 3.

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be switched must be considered when selecting the units.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

General data

Overview

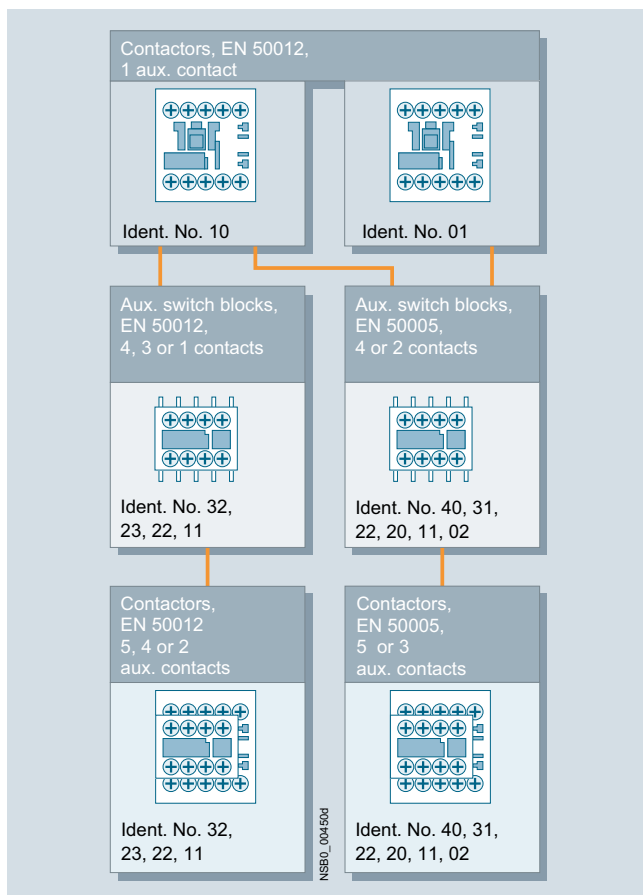
Snap-on auxiliary switch blocks

Various auxiliary switch blocks can be added to the 3RT1 basic units depending on the application:

Size S00

Terminal designations according to EN 50005 or EN 50012.

Size S00 contactors have an auxiliary contact integrated in the basic unit.



4-pole auxiliary switch blocks 3RT1 (S00)

Contactors with an NO contact as auxiliary contact (screw or spring-type terminals), Ident. No. 10, can be expanded into contactors with 2, 4 or 5 auxiliary contacts according to EN 50012 using auxiliary switch blocks. The Ident. Nos. 11, 22, 23 and 32 on the auxiliary switch blocks apply to the complete contactors. These auxiliary switch blocks cannot be combined with contactors which have an NC contact in the basic unit (Ident. No. 01) as they are coded.

All contactors of size S00 with one auxiliary contact (Ident. Nos. 10 or 01) and contactors with 4 main contacts can be expanded into contactors with 3 or 5 auxiliary contacts using auxiliary switch blocks with the Ident. Nos. 40 to 02 (in the case of contactors with 4 main contacts: 2 or 4 auxiliary contacts) according to EN 50005.

The Ident. Nos. on the auxiliary switch blocks only apply to the attached auxiliary switches.

Single or 2-pole auxiliary switch blocks with only one connection option from above or below are provided for easy and clearly arranged wiring, especially for the installation of feeders. These auxiliary switch blocks are offered only with screw terminals.

The solid-state compatible 3RH1911-1NF. auxiliary switch blocks for contactors of size S00 include 2 enclosed contacts. They are suitable in particular for switching small voltages and currents (hard gold-plated contacts) and for operation in dusty atmospheres. The NC auxiliary contacts are not mirror contacts.

All the previously mentioned auxiliary switch variants can be snap-fitted onto the front of the contactor. The auxiliary switch block has a centrally positioned release lever for disassembly.

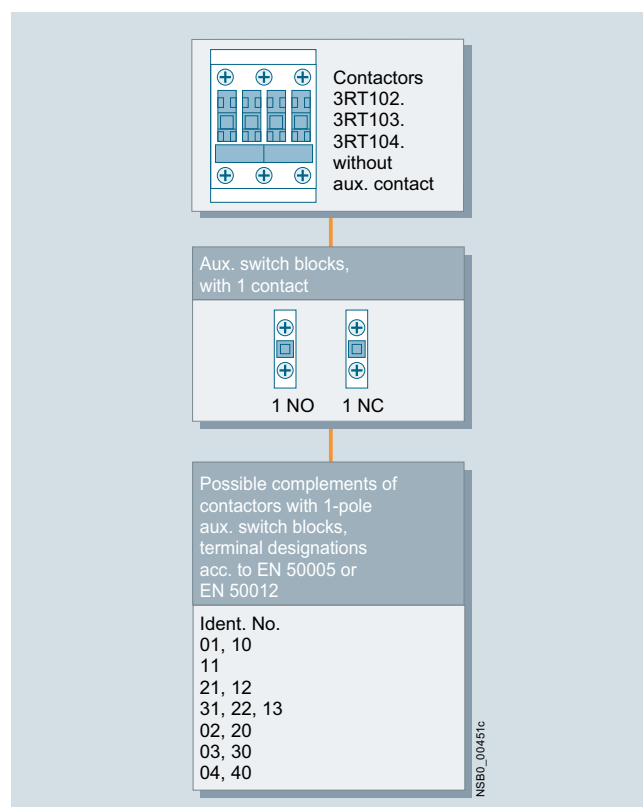
Sizes S0 to S12

Terminal designations according to EN 50005 or EN 50012.

One 4-pole or up to four single-pole auxiliary switch blocks (screw or spring-type connections) can be snapped on. When the contactors are switched on, the NC contacts are opened first and then the NO contacts are closed.

Also available are 2-pole auxiliary switch blocks (screw terminals) for cable entry from above or below in the design of a quad block (feeder auxiliary switch).

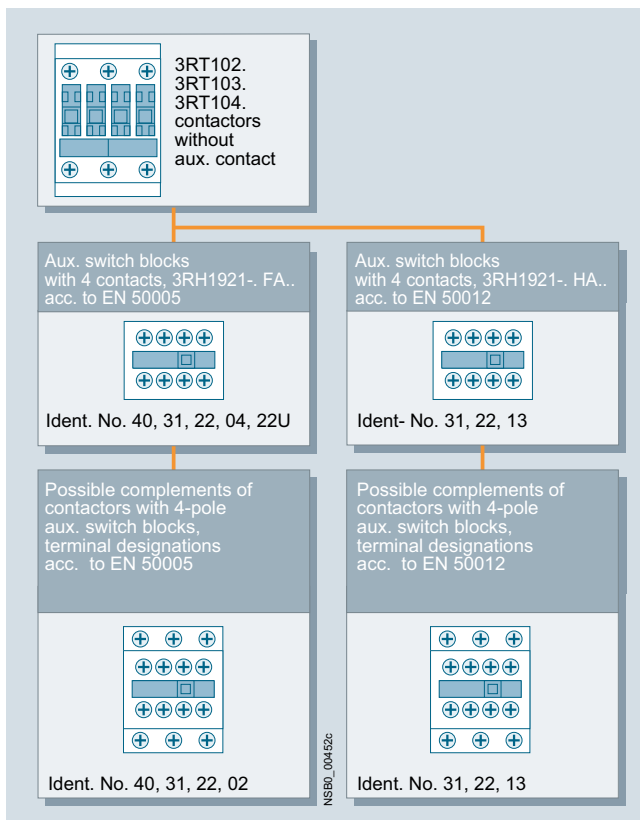
If the installation space is limited in depth, 2-pole auxiliary switch blocks (screw or spring-type connections) can be attached laterally (on the left or on the right).



1-pole auxiliary switch blocks for 3RT1 contactors

The terminal designations of the single-pole auxiliary switch blocks are comprised of identification numbers (location identifiers) on the basic unit and of function numbers on the auxiliary switch blocks.

The terminal designations of the individual auxiliary switch blocks correspond to EN 50005 or EN 50012, those of the complete contactors with auxiliary switch block 2 NO + 2 NC correspond to EN 50012.



4-pole auxiliary switch blocks for 3RT1 contactors

The auxiliary switch blocks attached to the front can be disassembled with the help of a centrally arranged release lever; the laterally attached auxiliary switch blocks are easy to remove by pressing on the checkered surfaces.

The laterally mountable auxiliary switch blocks according to EN 50012 can be used only when no 4-pole auxiliary switch blocks are snapped onto the front. If single-pole auxiliary switch blocks are used in addition, the location identifiers on the contactor must be noted.

Two enclosed and two standard contacts are available with the 3RH1921-.FE22 solid-state compatible auxiliary switch block, which can be attached to the front. The laterally mountable, solid-state compatible 3RH1921-2DE11 auxiliary switch block contains two enclosed contacts (1 NO + 1 NC). The enclosed contacts are suitable in particular for switching small voltages and currents (hard gold-plated contacts) and for operation in dusty atmospheres. The NC auxiliary contacts are mirror contacts.

Sizes S0 and S2

A maximum of 4 auxiliary contacts can be attached; the auxiliary switch blocks used can be of any version. For reasons of symmetry, when two 2-pole laterally mountable auxiliary switch blocks are used, one block must be attached on the right and one on the left.

More auxiliary contacts are permissible with size S2 under certain conditions (only upon request).

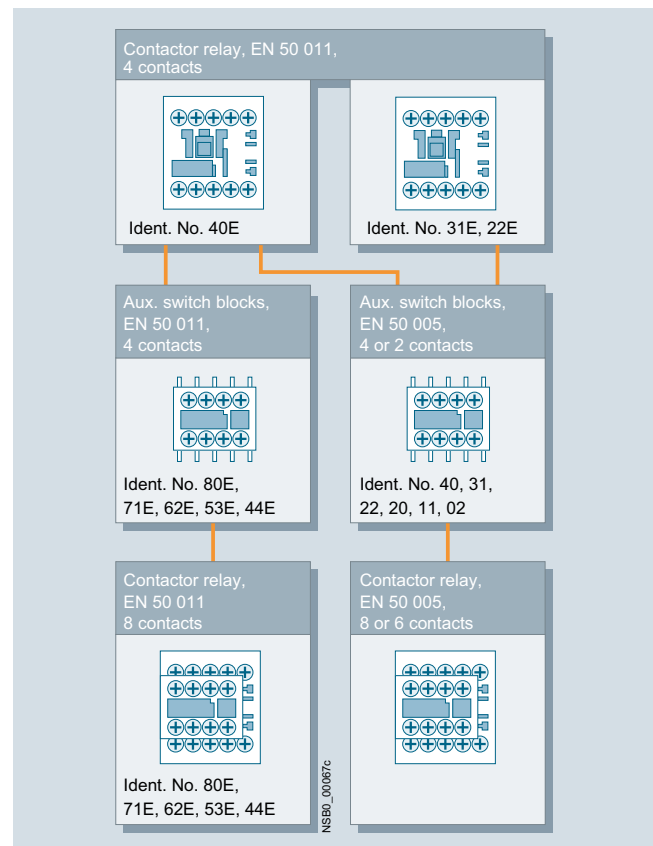
Sizes S3 to S12

A maximum of 8 auxiliary contacts can be attached; please note the following:

- Of these 8 auxiliary contacts, there must be no more than 4 NC contacts
- Ensure the symmetry of laterally mounted auxiliary switch blocks

3RH1 contactor relays

The 3RH1 contactor relays can be expanded by up to four contacts by the addition of snap-on auxiliary switch blocks.



4-pole auxiliary switch blocks for 3RH1 contactor relays

The contactor relays with 4 contacts according to EN 50011 with the Ident. No. 40E can be expanded with 80E to 44E auxiliary switch blocks to contactor relays with 8 contacts according to EN 50011. The Ident. Nos. 80E to 44E on the auxiliary switch blocks apply to the complete contactors. These auxiliary switch blocks (3RH1911-1GA. .) cannot be combined with contactor relays with identification numbers 31E or 22E; these are coded.

All contactor relays with 4 contacts according to EN 50011, Ident. Nos. 40E to 22E, can be expanded with auxiliary switch blocks 40 to 02 to contactor relays with 6 or 8 contacts in accordance with EN 50005. The identification numbers on the auxiliary switch blocks apply only to the attached auxiliary switch blocks.

In addition, fully mounted 3RH12 8-pole contactor relays are available; the mounted 4-pole auxiliary switch block in the 2nd tier is not removable. The terminal designations are according to EN 50011.

These 8-pole versions are built according to special Swiss regulations, "SUVA", and are distinguished externally by a red labeling plate.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

General data

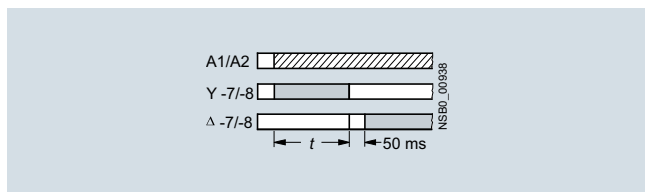
Solid-state time-delay auxiliary switch blocks

The solid-state, time-delay auxiliary switch block is fitted onto the front side of the contactor.

The timer module, which is available in the "ON-DELAY" and "OFF-DELAY" versions, allows time-delayed functions up to 100 s (3 delay ranges). It contains a relay with one NO contact and one NC contact; depending on the version, the relay is switched either after an ON-delay or after an OFF-delay.

The timer module with "WYE-DELTA FUNCTION" is equipped with one delayed and one instantaneous NO contact, with a dead time of 50 ms between the two. The delay time of the NO contact can be adjusted between 1.5 s and 30 s.

Wye-delta function



The contactor on which the solid-state time-delay auxiliary switch block is mounted operates without a delay.

Size S00

The timer module is supplied with power directly by plug-in contacts through the coil terminals of the contactor, in parallel with A1/A2. The timing function is activated by closing the contactor on which the auxiliary switch block is mounted. The OFF-delay version operates without an auxiliary voltage; minimum ON period: 200 ms.

A varistor is integrated in the timer module in order to damp opening surges in the contactor coil.

The solid-state time-delay auxiliary switch block cannot be mounted on size S00 coupling contactors.

Sizes S0 to S12

The timer module is supplied with power through two terminals (A1/A2); the time delay of the auxiliary switch block can be activated either by a parallel link to any contactor coil or by any power source.

The OFF-delay version operates without an auxiliary voltage; the minimum ON period is 200 ms.

A single-pole auxiliary switch block can be snapped onto the front of the contactor in addition to the timer module.

The timer module has no integrated components for overvoltage damping.

Electronic timing relay blocks with semiconductor output

The timer module in the "ON-DELAY" and "OFF-DELAY with auxiliary voltage" versions allows time-delayed functions up to 100 s (3 delay ranges). Contactors fitted with a timing relay block close or open after a delay according to the set time.

The timing relays are suitable for both AC and DC operation.

A varistor is integrated in the timer module in order to damp opening surges in the contactor coil.

Size S00

The version for size S00 contactors is fitted onto the front of the contactor (with the control supply voltage switched off) and then slid into its latched position; at the same time, the timing relay is connected by means of plug-in contacts to coil terminals A1 and A2 of the contactor. Any contactor coil terminals which are not required are sealed off by means of covers on the enclosure of the timing relay block, to prevent them from being connected inadvertently.

The electronic timing relay block cannot be mounted on size S00 coupling contactors.

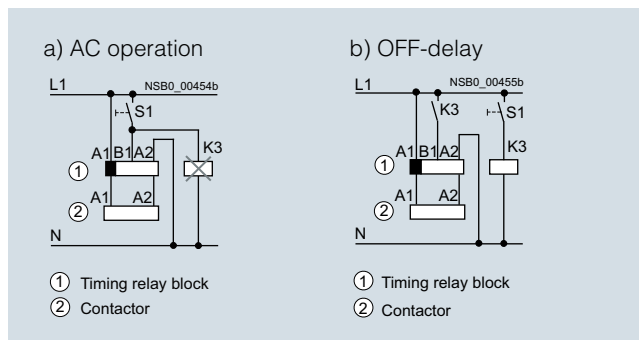
Sizes S0 to S3

The timing relay block for size S0 to S3 contactors is plugged into coil terminals A1 and A2 on top of each contactor; the timing relay is connected both electrically and mechanically by means of pins.

Configuration

The ON-delay variant of the timing relay is connected in series with the contactor coil; terminal A1 of this coil must not be connected.

With the OFF-delay variant of the timing relay, the contactor coil is contacted directly through the relay; terminals A1 and A2 of the contactor coil must not be connected.



The activation of loads parallel to the start input is not permissible with AC operation (see (a) in the circuit diagram).

The 3RT1926-2D... OFF-delay timing relay blocks have a zero potential start input B1. This means that if there is a parallel load on terminal B1, activation can be simulated with AC voltage. In this case, the additional load (e.g. contactor K3) must be wired (see (b) in the drawing).

OFF-delay device for contactors of sizes S00 to S3

AC and DC operation

IEC 60947, EN 60947

For screw and snap-on mounting onto 35 mm standard mounting rails. The OFF-delay devices have screw terminals.

The OFF-delay device prevents a contactor from dropping out unintentionally when there is a short-time voltage dip or voltage failure. It supplies a downstream, DC-operated contactor with the necessary energy during a voltage dip, ensuring that the contactor does not trip. The 3RT1916 OFF-delay devices are specifically designed for operation with the 3RT contactors and 3RH contactor relays in the SIRIUS series.

The OFF-delay device operates without external voltage on a capacitive basis, and can be energized with either AC or DC (24 V version only for DC operation). Voltage matching, which is only necessary with AC operation, is performed using a rectifier bridge.

A contactor opens after a delay when the capacitors of the solenoid coil, built into the OFF-delay device, are switched in parallel. In the event of voltage failures, the capacitors are discharged via the solenoid coil and thereby delay the opening of the contactor.

If the command devices are upstream of the OFF-delay device in the circuit, the OFF-delay takes effect with every opening operation. If the opening operation is downstream of the OFF-delay device, an OFF-delay only applies in the event of failure of the mains voltage.

Operation

In the case of the versions for rated control supply voltages of 110 V and 230 V, either AC voltage or DC voltage can be applied on the line side, whereas the version for 24 V is designed for DC operation only.

A DC-operated contactor is connected to the output according to the input voltage that is applied.

The mean value of the OFF-delay is approximately 1.5 times the specified minimum time.

Surge suppressors

- Without LED (also for spring-type terminals)
Sizes S00, S0, S2, S3, S6 to S12
- With LED (also for spring-type terminals):
Size S00

All 3RT1 contactors and 3RH1 contactor relays can be retrofitted with RC elements or varistors for damping opening surges in the coil. Diodes or diode assemblies (comprising noise suppression diodes and Zener diodes for short break times) can be used.

The surge suppressors are plugged onto the front of size S00 contactors. Space is provided for them next to a snap-on auxiliary switch block.

With all size S0 to S3 contactors, varistors, RC elements and diode assemblies can be plugged on directly at the coil terminals, either on the top or underneath.

The plug-in direction of the diodes and diode assemblies is determined by a coding device.

Coupling contactors are supplied either without overvoltage damping or with a varistor or diode connected as standard, according to the version.

Note:

The OFF-delay of the NO contact and the ON-delay of the NC contact are increased if the contactor coils are attenuated against voltage peaks (noise suppression diode 6 to 10 times; diode assembly 2 to 6 times, varistor +2 to 5 ms).

Additional load modules

The module is available for size S00 and is plugged onto the front of the contactors with or without auxiliary switch block.

Coupling links for mounting on contactors of sizes S0 to S3

DC operation

IEC 60947, EN 60947

The coupling link is suitable for use in any climate. It is finger-safe according to EN 50274. The terminal designations comply with EN 50005.

System-compatible operation with 24 V DC, operating range 17 to 30 V.

Low power consumption in conformity with the technical specifications of the solid-state systems. An LED indicates the switching state.

Surge suppression

The 3RH1924-1GP11 coupling link has an integrated surge suppressor (varistor) for the contactor coil being switched.

Mounting

The 3RH1924-1GP11 coupling link is mounted directly on the contactor coil.

Solder pin adapters

Solder pin adapters for size S00 contactors are available in two versions:

- Solder pin adapter for contactors with one integrated auxiliary contact
- Solder pin adapter for contactors with mounted 4-pole auxiliary switch block

Screw adapters

Plug-on adapters improve the accessibility of the screw connection for size S0 contactors. As a result it is possible to position the screwdriver vertically even when using insulated screwdrivers or power screwdrivers.

The adapters can be optionally rotated through 90° before mounting.

Sealable covers for sizes S2 to S12

When contactors and contactor relays are used in safety-related applications, it must be ensured that it is impossible to operate the contactors manually.

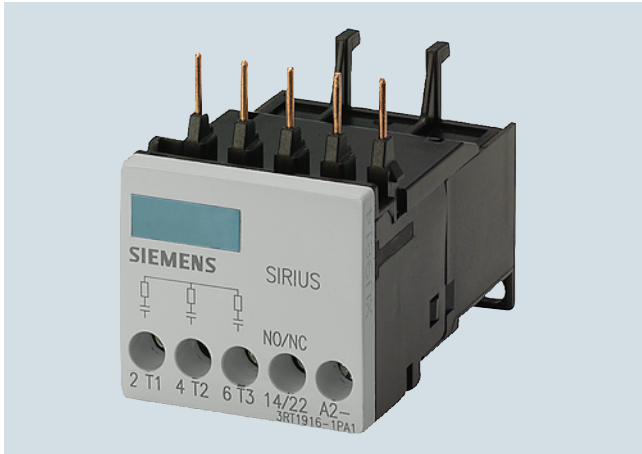
For SIRIUS contactors there are sealable covers available for this purpose as accessories; these prevent accidental manual operation. These are transparent molded-plastic caps with a bracket that enables the contactor to be sealed.

Power Contactors for Switching Motors

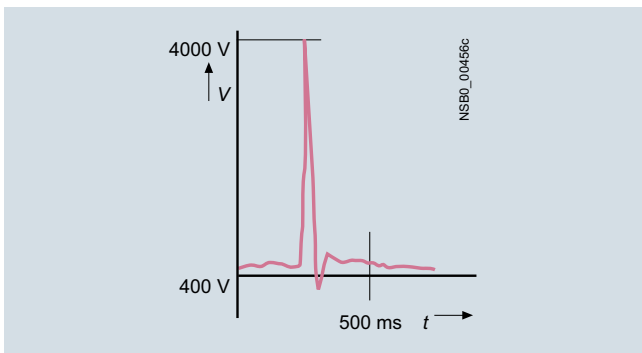
Accessories for 3RT1 contactors

General data

EMC suppression module, 3-phase (size S00)



A so-called counter-e.m.f. (electromotive force) is produced when motors or various inductive loads are turned off. Voltage peaks of up to 4000 V may occur as a result, with a frequency spectrum from 1 kHz to 10 MHz and a rate of voltage variation from 0.1 to 20 V/ns.



Voltage curve without suppression

Capacitive input to various analog and digital signals makes it necessary to suppress interference in the load circuit.

Reducing contact arcing

The connection between the main current path and the EMC suppression module enables contact arcing, which is responsible for contact erosion and the majority of clicking noises, to be reduced; this in turn is conducive to an electromagnetically compatible design.

Higher operational reliability

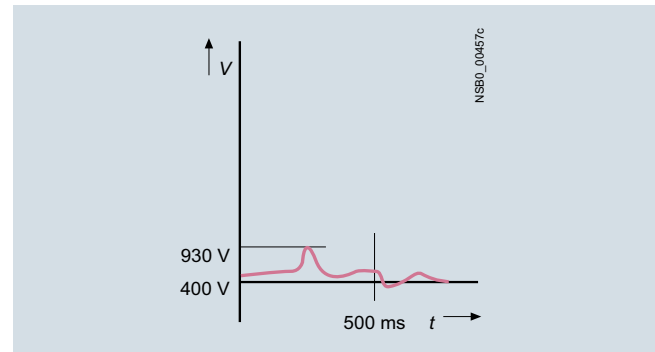
Since the EMC suppression module achieves a significant reduction in radio-frequency components and the voltage level in three phases, the contact endurance is also improved considerably. This makes an important contribution towards enhancing the reliability and availability of the system as a whole.

Dispensing with fine graduations

There is no need for fine graduations within each performance class, as smaller motors inherently have a higher inductance, so that one solution for all fixed-speed operating mechanisms up to 5.5 kW is adequate.

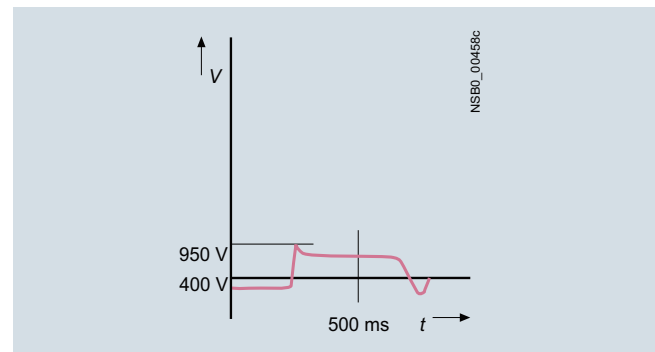
Two electrical versions are available:

- The advantages of the RC circuit lie mainly in the reduction in the rate of rise and in its RF damping ability. The selected values ensure effective interference suppression over a wide range.



Voltage curve with RC circuit

- The varistor circuit can absorb a high energy level and can also be used for frequencies ranging from 10 to 400 Hz (closed-loop controlled operating mechanisms). There is no limiting below the knee-point voltage, however.



Voltage curve with varistor circuit

Circuit diagrams

Function	Function charts	Circuit diagrams
	<p>Timing relay energized Contact closed Contact open</p>	
Solid-state time-delay auxiliary switch blocks		
ON-delay 1 NO + 1 NC	<p>3RT1916-2E, 3RT1926-2E</p> <p>NSB0_00933</p>	<p>NSB0_01838 NSB0_01873</p>
OFF-delay without auxiliary voltage 1 NO + 1 NC	<p>3RT1916-2F, 3RT1926-2F</p> <p>≥ 200 ms</p> <p>NSB0_00934</p>	<p>NSB0_01839 NSB0_01874a</p>
OFF-delay, with auxiliary voltage 1 CO contact	<p>3RT1916-2L</p> <p>≥ 35 ms</p> <p>NSB0_00939</p>	<p>NSB0_01841</p>
Wye-delta function 1 NO delayed, 1 NO instantaneous, dead time 50 ms	<p>3RT1916-2G, 3RT1926-2G</p> <p>NSB0_00935</p>	<p>NSB0_01840a NSB0_01875</p>
Electronic timing relay blocks		
ON-delay, two-wire design 1 NO contact (semiconductor output)	<p>3RT1916-2C</p> <p>NSB0_00938a</p>	<p>NSB0_00943b</p> <p>① Timing relay block ② Contactor</p>
ON-delay, two-wire design 1 NO contact (semiconductor output)	<p>3RT1926-2C</p> <p>NSB0_00938b</p>	<p>NSB0_00956</p> <p>A2 can be connected to N(L-) using either the contactor or the timing relay. --- To be connected optionally</p> <p>① Timing relay block ② Contactor</p>
OFF-delay, with auxiliary voltage 1 NO contact (semiconductor output)	<p>3RT1916-2D, 3RT1926-2D</p> <p>≥ 35 ms</p> <p>NSB0_00940a</p>	<p>NSB0_00957</p> <p>A2 must only be connected to N(L-) from the timing relay.</p> <p>✗ Do not connect</p> <p>① Timing relay block ② Contactor</p>



Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Auxiliary switches

Selection and ordering data

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RH1911-1HA..



3RH1911-2HA..



3RH1921-1HA..



3RH1921-2HA..

For contactors Auxiliary contacts

DT

Screw terminals



DT

Spring-type terminals



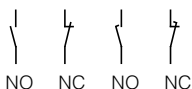
Ident. No. Version

Article No.

Price per PU

Article No.

Price per PU



Type

NO NC NO NC

Auxiliary switch blocks for snapping onto the front according to EN 50012

Size S00

1-, 2- and 4-pole auxiliary switch blocks for assembling contactors with 2, 4 and 5 auxiliary contacts

3RT101, Ident. No. 10

Ident. No.	NO	NC	NO	NC	Diagram
01 → 11	--	1	--	--	
12 → 22	1	2	--	--	
13 → 23	1	3	--	--	
22 → 32	2	2	--	--	

- ▶ **3RH1911-1HA01**
- ▶ **3RH1911-1HA12**
- ▶ **3RH1911-1HA13**
- ▶ **3RH1911-1HA22**

- ▶ **3RH1911-2HA01**
- ▶ **3RH1911-2HA12**
- ▶ **3RH1911-2HA13**
- ▶ **3RH1911-2HA22**

Sizes S0 to S3¹⁾

4-pole auxiliary switch blocks

3RT1.2, 3RT1.3, 3RT1.4

Ident. No.	NO	NC	NO	NC	Diagram
31	3	1	--	--	
22	2	2	--	--	
13	1	3	--	--	

- ▶ **3RH1921-1HA31**
- ▶ **3RH1921-1HA22**
- ▶ **3RH1921-1HA13**

- ▶ **3RH1921-2HA31**
- ▶ **3RH1921-2HA22**
- ▶ **3RH1921-2HA13**

Sizes S0 to S12²⁾

4-pole auxiliary switch blocks

3RT1.3 ... 3RT1.7

Ident. No.	NO	NC	NO	NC	Diagram
22	2	2	--	--	

- B **3RH1921-1XA22-0MA0**

- D **3RH1921-2XA22-0MA0**

Multi-unit and reusable packagings

- Size S00 available on request
- For sizes S0 to S12, see [Catalog IC 10, Chapter 16, "Appendix" → "Ordering Notes"](#)

¹⁾ Exception: 3RT16.
²⁾ Exception: 3RT12, 3RT16.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Auxiliary switches

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RH1911-1LA..



3RH1911-1FA..



3RH1911-2FA..

For contactors: Auxiliary contacts		DT	Screw terminals	DT	Spring-type terminals	
Ident. No.	Version		Article No.	Price per PU	Article No.	Price per PU
Type	NO NC NO NC					

Auxiliary switch blocks for snapping onto the front according to EN 50005

Size S00

2- and 4-pole auxiliary switch blocks for assembling contactors with 3 and 5 auxiliary contacts

3RT1.1, 3RH11, 3RH14	20	2	0	--	--		▶	3RH1911-1FA20	▶	3RH1911-2FA20
	11	1	2	--	--		▶	3RH1911-1FA11	▶	3RH1911-2FA11
	02	--	2	--	--		▶	3RH1911-1FA02	▶	3RH1911-2FA02
	11U	--	--	1	1		▶	3RH1911-1FB11	A	3RH1911-2FB11
	40	4	--	--	--		▶	3RH1911-1FA40	▶	3RH1911-2FA40
	31	3	1	--	--		▶	3RH1911-1FA31	▶	3RH1911-2FA31
	22	2	2	--	--		▶	3RH1911-1FA22	▶	3RH1911-2FA22
	22U	--	--	2	2		▶	3RH1911-1FC22	▶	3RH1911-2FC22
	11, 11U	1	1	1	1		▶	3RH1911-1FB22	B	3RH1911-2FB22

1- and 2-pole auxiliary switch blocks, terminals on one side
 • Cable entry from above

3RT1.1, 3RH11, 3RH14	--	1	--	--	--		▶	3RH1911-1AA10	--
	--	--	1				▶	3RH1911-1AA01	--
	--	1	1				▶	3RH1911-1LA11	--
	--	2	-				▶	3RH1911-1LA20	--

Multi-unit/reusable packaging available on request.



Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Auxiliary switches

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RH1921-1FA..



3RH1921-2FA..

For contactors: Auxiliary contacts		DT	Screw terminals	DT	Spring-type terminals	
Ident. No.	Version		Article No.	Price per PU	Article No.	Price per PU
Type	NO NC NO NC					

Auxiliary switch blocks for snapping onto the front according to EN 50005

Size S00

1- and 2-pole auxiliary switch blocks, terminals on one side
 • Cable entry from below

3RT1.1, 3RH11, 3RH14	--	1	--	--	--		▶	3RH1911-1BA10	--
	--	--	1				▶	3RH1911-1BA01	--
	--	1	1				▶	3RH1911-1MA11	--
	--	2	-				▶	3RH1911-1MA20	--

Sizes S0 to S3¹⁾

4-pole auxiliary switch blocks

3RT1.3, 3RT1.4	40	4	--	--	--		▶	3RH1921-1FA40	▶	3RH1921-2FA40
	31	3	1	--	--		▶	3RH1921-1FA31	▶	3RH1921-2FA31
	22	2	2	--	--		▶	3RH1921-1FA22	▶	3RH1921-2FA22
	04	--	4	--	--		▶	3RH1921-1FA04	A	3RH1921-2FA04
	22 U	--	--	2	2		▶	3RH1921-1FC22	A	3RH1921-2FC22

Multi-unit and reusable packagings

- Size S00 available on request
- For sizes S0 to S12, see [Catalog IC 10, Chapter 16, "Appendix" → "Ordering Notes"](#)

¹⁾ Exception: 3RT16.

Power Contactors for Switching Motors Accessories for 3RT1 contactors

Auxiliary switches

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B



3RH1921-1LA..



3RH1921-1MA..



3RH1921-1C..



3RH1921-2C..

For contactors	Auxiliary contacts	DT	Screw terminals	DT	Spring-type terminals	
	Ident. No.	Version	Article No.	Price per PU	Article No.	Price per PU
Type	NO	NC				

Auxiliary switch blocks for snapping onto the front according to EN 50005

Sizes S0 to S3¹⁾

2-pole auxiliary switch blocks with terminals on one side
• Cable entry from above

3RT1.3, 3RT1.4	11	1	1	--	--		▶	3RH1921-1LA11	--
	20	2	--	--	--		▶	3RH1921-1LA20	--
	02	--	2	--	--		▶	3RH1921-1LA02	--

• Cable entry from below

3RT1.3, 3RT1.4	11	1	1	--	--		▶	3RH1921-1MA11	--
	20	2	--	--	--		▶	3RH1921-1MA20	--
	02	--	2	--	--		▶	3RH1921-1MA02	--

Sizes S0 to S12²⁾

1-pole auxiliary switch blocks
According to EN 50005 and EN 50012

3RT1.3 ... 3RT1.7	10	1	--	--	--		▶	3RH1921-1CA10	▶	3RH1921-2CA10
	01	--	1	--	--		▶	3RH1921-1CA01	▶	3RH1921-2CA01
	10	--	--	1	--		▶	3RH1921-1CD10	--	
	01	--	--	--	1		▶	3RH1921-1CD01	--	

¹⁾ Exception: 3RT16.

²⁾ Exception: 3RT12, 3RT16

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Auxiliary switches

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RH1921-1.A11



3RH1921-2.A11

For contactors:	Auxiliary contacts	DT	Screw terminals	DT	Spring-type terminals	
Version			Article No.	Price per PU	Article No.	Price per PU
Type	NO NC					

Laterally mountable auxiliary switch blocks acc. to EN 50012

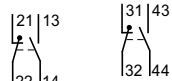
Sizes S0 to S3

Mounting: Left Right

First laterally mountable auxiliary switch block, 2-pole

3RT1.3,
3RT1.4

1 1



▶ 3RH1921-1DA11

▶ 3RH1921-2DA11

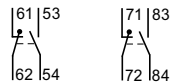
Sizes S3 ... S12

Mounting: Left Right

Second laterally mountable auxiliary switch block, 2-pole

3RT1.4 ...
3RT1.7

1 1



▶ 3RH1921-1JA11

▶ 3RH1921-2JA11

Laterally mountable auxiliary switch blocks acc. to EN 50005

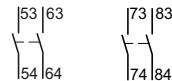
Sizes S3 to S12

Mounting: Left Right

First laterally mountable auxiliary switch block, 2-pole

3RT1.3 ...
3RT1.7

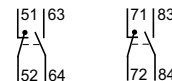
2 --



▶ 3RH1921-1EA20

▶ 3RH1921-2EA20

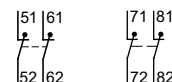
1 1



▶ 3RH1921-1EA11

--

-- 2



▶ 3RH1921-1EA02

▶ 3RH1921-2EA02

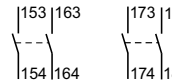
Sizes S3 to S12

Mounting: Left Right

Second laterally mountable auxiliary switch block, 2-pole

3RT1.4 ...
3RT1.7

2 --

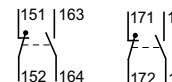


▶ 3RH1921-1KA20

D

▶ 3RH1921-2KA20

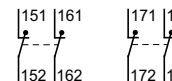
1 1



▶ 3RH1921-1KA11

--

-- 2



▶ 3RH1921-1KA02

D

▶ 3RH1921-2KA02

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B



3RH1921-2DE11,
3RH1921-2JE11



3RH1911-1NF..



3RH1921-1FE22



3RH1921-2FE22

For contactors	Contacts	DT	Screw terminals	DT	Spring-type terminals	
	Version		Article No.	Price per PU	Article No.	Price per PU
Type	NO S ¹⁾ NC ¹⁾ NC					

Solid-state compatible auxiliary switch blocks

- For operation in dusty atmospheres
- For solid-state circuits with rated operational currents I_e /AC-14 and DC-13 of 1 ... 300 mA at 3 ... 60 V
- Hard gold-plated contacts
- Mirror contacts according to IEC 60947-4-1, Appendix F

Auxiliary switch blocks for snapping onto the front according to EN 50005

Size S00

3RT1.1., 3RH11, 3RH14	1	--	--	1		▶	3RH1911-1NF11	A	3RH1911-2NF11
	2	--	--	--		▶	3RH1911-1NF20	A	3RH1911-2NF20
	--	--	--	2		A	3RH1911-1NF02	A	3RH1911-2NF02

Sizes S0 to S3

3RT1.3 ... 3RT1.7	1	1	1	1		▶	3RH1921-1FE22	B	3RH1921-2FE22
----------------------	---	---	---	---	--	---	----------------------	---	----------------------

Laterally mountable auxiliary switch blocks according to EN 50012

Sizes S0 to S12

	Mounting: Left				Right					
	First laterally mountable auxiliary switch block, 2-pole									
3RT1.3 ... 3RT1.7	1	--	--	1			--	--	▶	3RH1921-2DE11

Sizes S3 to S12

	Left				Right					
	Second laterally mountable auxiliary switch block, 2-pole									
3RT1.4 ... 3RT1.7	1	--	--	--			--	--	▶	3RH1921-2JE11

¹⁾ 1 NO + 1 NC standard auxiliary switches:
See descriptions on page 3/28.





Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Solid-state time-delay auxiliary switch blocks, timing relay blocks and other time-delay blocks

Selection and ordering data

For contactors	Auxiliary contacts	Rated control supply voltage $U_s^{1)}$	Time setting range t	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG	
Type	V	s			Article No.	Price per PU				
Solid-state time-delay auxiliary switch blocks for snapping onto the front, terminal designations according to EN 46199-5										
Size S00										
	3RT1.1, 3RH11 ²⁾ 3RH14	ON-delay³⁾ 1 NO + 1 NC	24 AC/DC	0.05 ... 1	B	3RT1916-2EJ11	1	1 unit	41H	
				0.5 ... 10	▶	3RT1916-2EJ21	1	1 unit	41H	
				5 ... 100	B	3RT1916-2EJ31	1	1 unit	41H	
			100 ... 127 AC	0.05 ... 1	B	3RT1916-2EC11	1	1 unit	41H	
				0.5 ... 10	B	3RT1916-2EC21	1	1 unit	41H	
				5 ... 100	B	3RT1916-2EC31	1	1 unit	41H	
			200 ... 240 AC	0.05 ... 1	B	3RT1916-2ED11	1	1 unit	41H	
			0.5 ... 10	▶	3RT1916-2ED21	1	1 unit	41H		
			5 ... 100	B	3RT1916-2ED31	1	1 unit	41H		
		3RT1.1, 3RH11 ²⁾ 3RH14	1 NO + 1 NC	OFF-delay without auxiliary voltage³⁾⁴⁾ 24 AC/DC	0.05 ... 1	B	3RT1916-2FJ11	1	1 unit	41H
					0.5 ... 10	▶	3RT1916-2FJ21	1	1 unit	41H
					5 ... 100	▶	3RT1916-2FJ31	1	1 unit	41H
100 ... 127 AC/DC	0.05 ... 1				B	3RT1916-2FK11	1	1 unit	41H	
	0.5 ... 10				B	3RT1916-2FK21	1	1 unit	41H	
	5 ... 100				B	3RT1916-2FK31	1	1 unit	41H	
	200 ... 240 AC/DC			0.05 ... 1	B	3RT1916-2FL11	1	1 unit	41H	
	0.5 ... 10			▶	3RT1916-2FL21	1	1 unit	41H		
	5 ... 100			▶	3RT1916-2FL31	1	1 unit	41H		
3RT101, 3RH11 ²⁾	1 CO			24 AC/DC 100 ... 127 AC	0.5 ... 10	B	3RT1916-2LJ21	1	1 unit	41H
					0.5 ... 10	B	3RT1916-2LC21	1	1 unit	41H
3RT101 ²⁾	1 NO delayed + 1 NO instantaneous, dead time 50 ms			24 AC/DC 100 ... 127 AC 200 ... 240 AC	1.5 ... 30	▶	3RT1916-2GJ51	1	1 unit	41H
		1.5 ... 30	B		3RT1916-2GC51	1	1 unit	41H		
		1.5 ... 30	B		3RT1916-2GD51	1	1 unit	41H		
Sizes S0 to S12										
	3RT10, 3RT13, 3RT14, 3RT15	ON-delay⁵⁾ 1 NO + 1 NC	24 AC/DC	0.05 ... 1	C	3RT1926-2EJ11	1	1 unit	41H	
				0.5 ... 10	▶	3RT1926-2EJ21	1	1 unit	41H	
				5 ... 100	A	3RT1926-2EJ31	1	1 unit	41H	
			100 ... 127 AC	0.05 ... 1	C	3RT1926-2EC11	1	1 unit	41H	
				0.5 ... 10	▶	3RT1926-2EC21	1	1 unit	41H	
				5 ... 100	C	3RT1926-2EC31	1	1 unit	41H	
			200 ... 240 AC	0.05 ... 1	B	3RT1926-2ED11	1	1 unit	41H	
			0.5 ... 10	▶	3RT1926-2ED21	1	1 unit	41H		
			5 ... 100	B	3RT1926-2ED31	1	1 unit	41H		
		3RT10, 3RT13, 3RT14, 3RT15	1 NO + 1 NC	OFF-delay without auxiliary voltage⁴⁾⁵⁾ 24 AC/DC	0.05 ... 1	▶	3RT1926-2FJ11	1	1 unit	41H
					0.5 ... 10	▶	3RT1926-2FJ21	1	1 unit	41H
					5 ... 100	▶	3RT1926-2FJ31	1	1 unit	41H
100 ... 127 AC/DC	0.05 ... 1				B	3RT1926-2FK11	1	1 unit	41H	
	0.5 ... 10				▶	3RT1926-2FK21	1	1 unit	41H	
	5 ... 100				B	3RT1926-2FK31	1	1 unit	41H	
	200 ... 240 AC/DC			0.05 ... 1	B	3RT1926-2FL11	1	1 unit	41H	
	0.5 ... 10			A	3RT1926-2FL21	1	1 unit	41H		
	5 ... 100			A	3RT1926-2FL31	1	1 unit	41H		
3RT10, 3RT13, 3RT14, 3RT15	1 NO delayed + 1 NO instantaneous, dead time 50 ms			24 AC/DC 100 ... 127 AC 200 ... 240 AC	1.5 ... 30	▶	3RT1926-2GJ51	1	1 unit	41H
					1.5 ... 30	▶	3RT1926-2GC51	1	1 unit	41H
					1.5 ... 30	▶	3RT1926-2GD51	1	1 unit	41H

For function diagrams and circuit diagrams, see page 3/33.








- 1) The AC voltages are valid for 50 and 60 Hz.
- 2) Cannot be fitted onto 3RT1 and 3RH11 coupling contactors.
- 3) The terminals for the control supply voltage are connected to the contactor by the integrated spring contacts of the solid-state time auxiliary switch above it when this switch is mounted.
- 4) Setting of output contacts in as-supplied state not defined (bistable relay). Application of the control supply voltage once results in contact changeover to the correct setting.

- 5) Terminals A1 and A2 for the control supply voltage of the solid-state time-delay auxiliary switch must be connected to the associated contactor by means of connecting cables.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Solid-state time-delay auxiliary switch blocks, timing relay blocks and other time-delay blocks

For contactors	Rated control supply voltage $U_s^{1)}$	Time setting range t	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG				
Type		s		Article No.	Price per PU						
Electronic timing relay blocks with semiconductor output											
Size S00											
	3RT1.1, 3RH11 ¹⁾ 3RH14	24 ... 66 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100	B ▶ B	3RT1916-2CG11	1	1 unit	41H			
					3RT1916-2CG21	1	1 unit	41H			
					3RT1916-2CG31	1	1 unit	41H			
3RT1916-2C...	90 ... 240 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100	A ▶ A	3RT1916-2CH11	1	1 unit	41H				
				3RT1916-2CH21	1	1 unit	41H				
				3RT1916-2CH31	1	1 unit	41H				
• OFF-delay with auxiliary voltage (varistor integrated)											
	3RT1.1, 3RH11 ¹⁾ 3RH14	24 ... 66 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100	B B B	3RT1916-2DG11	1	1 unit	41H			
					3RT1916-2DG21	1	1 unit	41H			
					3RT1916-2DG31	1	1 unit	41H			
3RT1916-2D...	90 ... 240 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100	B B B	3RT1916-2DH11	1	1 unit	41H				
				3RT1916-2DH21	1	1 unit	41H				
				3RT1916-2DH31	1	1 unit	41H				
Sizes S0 to S3											
For mounting onto top-lying coil terminals, (only for contactors with screw terminals)											
• ON-delay (varistor integrated)											
	3RT102, 3RT103, 3RT104 ²⁾ , 3RT13, 3RT15	24 ... 66 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100	B B B	3RT1926-2CG11	1	1 unit	41H			
					3RT1926-2CG21	1	1 unit	41H			
					3RT1926-2CG31	1	1 unit	41H			
3RT1926-2C...	90 ... 240 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100	▶ ▶ ▶	3RT1926-2CH11	1	1 unit	41H				
				3RT1926-2CH21	1	1 unit	41H				
				3RT1926-2CH31	1	1 unit	41H				
• OFF-delay with auxiliary voltage (varistor integrated)											
	3RT102, 3RT103, 3RT104 ²⁾ , 3RT13, 3RT15	24 ... 66 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100	C B D	3RT1926-2DG11	1	1 unit	41H			
					3RT1926-2DG21	1	1 unit	41H			
					3RT1926-2DG31	1	1 unit	41H			
3RT1926-2D...	90 ... 240 AC/DC	0.05 ... 1 0.5 ... 10 5 ... 100	B B C	3RT1926-2DH11	1	1 unit	41H				
				3RT1926-2DH21	1	1 unit	41H				
				3RT1926-2DH31	1	1 unit	41H				
OFF-delay devices											
Sizes S00 to S3											
	3RT1.1, 3RT1.2, 3RH1...-1BF40	110 AC/DC	S00: 130 fixed S0: 100 fixed	B	3RT1916-2BK01	1	1 unit	41H			
					3RT1.1, 3RT1.2, 3RH1...-1BM40	220/230 AC/DC	S00: 600 fixed S0: 400 fixed	3RT1916-2BL01	1	1 unit	41H
								3RT1.1, 3RT1.2, 3RT1.3, 3RT1.4, 3RH1...-1BB40	24 DC	S00: 250 fixed S0: 150 fixed S2: 90 fixed S3: 70 fixed	3RT1916-2BE01
Pneumatic delay blocks, Terminal designations according to EN 50005											
Size S0											
	3RT1.2	For mounting onto the front of contactors Auxiliary contacts 1 NO and 1 NC ³⁾⁴⁾									
		• ON-delay									
		0.1 ... 30 1 ... 60	C C	3RT1926-2PA01 3RT1926-2PA11	1 1	1 unit 1 unit	41B 41B				
• OFF-delay											
0.1 ... 30 1 ... 60	C C	3RT1926-2PR01 3RT1926-2PR11	1 1	1 unit 1 unit	41B 41B						

For function diagrams and circuit diagrams, see page 3/33.

- 1) Cannot be fitted onto 3RT1 and 3RH11 coupling contactors.
- 2) Not to be used for 3RT104 . and 3RT134 . contactors with $U_s \leq 42$ V.
- 3) In addition to these, no other auxiliary contacts are permitted.
- 4) Versions according to DIN VDE 0116 on request.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Surge suppressors

Selection and ordering data

For contactors	Version	Rated control supply voltage $U_s^{1)}$		Power consumption of LED at U_s	DT	Article No. ²⁾	Price per PU	PU (UNIT, SET, M)	PS*	PG
		AC operation	DC operation							
Type		V AC	V DC							

Surge suppressors with LED

Size S00 (also for spring-type terminals)

For plugging onto the front side of the contactors with and without auxiliary switch blocks



3RT1916-1L.00

3RT1, 3RH1	Varistors	24 ... 48	12 ... 24	10 ... 120	▶	3RT1916-1JJ00		1	1 unit	41B
		48 ... 127	24 ... 70	20 ... 470	▶	3RT1916-1JK00		1	1 unit	41B
		127 ... 240	70 ... 150	50 ... 700	▶	3RT1916-1JL00		1	1 unit	41B
		--	150 ... 250	160 ... 950	A	3RT1916-1JP00		1	1 unit	41B
3RT1, 3RH1	Noise suppression diode	--	24 ... 70	20 ... 470	▶	3RT1916-1LM00		1	1 unit	41B
		--	50 ... 150	50 ... 700	▶	3RT1916-1LN00		1	1 unit	41B
		--	150 ... 250	160 ... 950	▶	3RT1916-1LP00		1	1 unit	41B

1) Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

2) For packs of 10 or 5 units, "-Z" and order code "X90" must be added to the Article No.

For contactors	Version	Rated control supply voltage $U_s^{1)}$		DT	Article No. ²⁾	Price per PU	PU (UNIT, SET, M)	PS*	PG
		AC operation	DC operation						
Type		V AC	V DC						

Surge suppressors without LED

Size S00 (also for spring-type terminals)

For plugging onto the front side of the contactors with and without auxiliary switch blocks



3RT1916-1DG00

3RT1., 3RH1	Varistors	24 ... 48	24 ... 70	▶	3RT1916-1BB00		1	1 unit	41B
		48 ... 127	70 ... 150	▶	3RT1916-1BC00		1	1 unit	41B
		127 ... 240	150 ... 250	A	3RT1916-1BD00		1	1 unit	41B
		240 ... 400	--	▶	3RT1916-1BE00		1	1 unit	41B
		400 ... 600	--	A	3RT1916-1BF00		1	1 unit	41B
3RT1., 3RH1	RC elements	24 ... 48	24 ... 70	▶	3RT1916-1CB00		1	1 unit	41B
		48 ... 127	70 ... 150	▶	3RT1916-1CC00		1	1 unit	41B
		127 ... 240	150 ... 250	▶	3RT1916-1CD00		1	1 unit	41B
		240 ... 400	--	▶	3RT1916-1CE00		1	1 unit	41B
		400 ... 600	--	▶	3RT1916-1CF00		1	1 unit	41B
3RT1., 3RH1	Noise suppression diode	--	12 ... 250	▶	3RT1916-1DG00		1	1 unit	41B
3RT1., 3RH1	Diode assemblies (diode and Zener diode) for DC actuation	--	12 ... 250	▶	3RT1916-1EH00		1	1 unit	41B

Size S0

For fitting onto the coil terminals at top or bottom



3RT1926-1B.00











3RT1.2	Varistors	24 ... 48	24 ... 70	▶	3RT1926-1BB00		1	1 unit	41B	
		48 ... 127	70 ... 150	▶	3RT1926-1BC00		1	1 unit	41B	
		127 ... 240	150 ... 250	▶	3RT1926-1BD00		1	1 unit	41B	
		240 ... 400	--	▶	3RT1926-1BE00		1	1 unit	41B	
		400 ... 600	--	B	3RT1926-1BF00		1	1 unit	41B	
3RT1.2	RC elements	24 ... 48	24 ... 70	▶	3RT1926-1CB00		1	1 unit	41B	
		48 ... 127	70 ... 150	▶	3RT1926-1CC00		1	1 unit	41B	
		127 ... 240	150 ... 250	▶	3RT1926-1CD00		1	1 unit	41B	
		240 ... 400	--	▶	3RT1926-1CE00		1	1 unit	41B	
		400 ... 600	--	B	3RT1926-1CF00		1	1 unit	41B	
3RT1.2	Diode assemblies for DC operation	• Connectable at the top	--	24	▶	3RT1926-1ER00		1	1 unit	41B
		(e.g. for contactor with overload relay)	--	30 ... 250	▶	3RT1926-1ES00		1	1 unit	41B
		• Connectable at the bottom	--	24	▶	3RT1926-1TR00		1	1 unit	41B
		(e.g. for fuseless load feeders)	--	30 ... 250	A	3RT1926-1TS00		1	1 unit	41B

1) Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

2) For packs of 10, "-Z" and order code "X90" must be added to the Article No.

Power Contactors for Switching Motors Accessories for 3RT1 contactors

Surge suppressors

For contactors	Version	Rated control supply voltage U_s ¹⁾		DT	Article No. ²⁾	Price per PU	PU (UNIT, SET, M)	PS*	PG			
		AC operation	DC operation									
Type		V AC	V DC									
Surge suppressors without LED												
Sizes S2 and S3 (also for spring-type terminals)												
For fitting onto the coil terminals at top or bottom												
 3RT1926-1B.00	3RT1.3, 3RT1.4	Varistors 	24 ... 48	24 ... 70	▶	3RT1926-1BB00		1	1 unit	41B		
			48 ... 127	70 ... 150	▶	3RT1926-1BC00		1	1 unit	41B		
			127 ... 240	150 ... 250	▶	3RT1926-1BD00		1	1 unit	41B		
			240 ... 400	--	▶	3RT1926-1BE00		1	1 unit	41B		
			400 ... 600	--	B	3RT1926-1BF00		1	1 unit	41B		
 3RT1936-1C.00	3RT1.3 ³⁾ , 3RT1.4	RC elements 	24 ... 48	24 ... 70	▶	3RT1936-1CB00		1	1 unit	41B		
			48 ... 127	70 ... 150	▶	3RT1936-1CC00		1	1 unit	41B		
			127 ... 240	150 ... 250	▶	3RT1936-1CD00		1	1 unit	41B		
			240 ... 400	--	▶	3RT1936-1CE00		1	1 unit	41B		
			400 ... 600	--	B	3RT1936-1CF00		1	1 unit	41B		
 3RT1956-1C.00	3RT1.3, 3RT1.4	Diode assemblies for DC operation 										
			• Can be plugged in at top (e.g. for contactor with overload relay)		--	24	▶	3RT1936-1ER00		1	1 unit	41B
					--	30 ... 250	▶	3RT1936-1ES00		1	1 unit	41B
			• Can be plugged in at bottom (e.g. for fuseless load feeders)		--	24	▶	3RT1936-1TR00		1	1 unit	41B
					--	30 ... 250	B	3RT1936-1TS00		1	1 unit	41B
Sizes S6 ... S12												
For connecting to withdrawable coil with screw terminals for contactors with												
• Conventional 3RT1...-A... operating mechanism • Solid-state 3RT1...-N... operating mechanism												
 3RT1956-1C.00	3RT1.5, 3RT1.6, 3RT1.7	RC elements 	24 ... 48	24 ... 70	▶	3RT1956-1CB00		1	1 unit	41B		
			48 ... 127	70 ... 150	▶	3RT1956-1CC00		1	1 unit	41B		
			127 ... 240	150 ... 250	▶	3RT1956-1CD00		1	1 unit	41B		
			240 ... 400	--	▶	3RT1956-1CE00		1	1 unit	41B		
			400 ... 600	--	C	3RT1956-1CF00		1	1 unit	41B		
 3RT1956-1C.00	3RT1.5, 3RT1.6, 3RT1.7	RC elements 	24 ... 48	24 ... 70	▶	3RT1956-1CB02		1	1 unit	41B		
			48 ... 127	70 ... 150	A	3RT1956-1CC02		1	1 unit	41B		
			127 ... 240	150 ... 250	▶	3RT1956-1CD02		1	1 unit	41B		
			240 ... 400	--	A	3RT1956-1CE02		1	1 unit	41B		
			400 ... 600	--	C	3RT1956-1CF02		1	1 unit	41B		

1) Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

2) For packs of 10 or 5 units, "-Z" and order code "X90" must be added to the Article No.

3) For 3RT1.3 with AC operation mountable only at the top.

For contactors	Version	DT	Screw terminals	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type			Article No.				

Main current path surge suppression modules for 3RT12 vacuum contactors

Sizes S10 and S12


3RT12	For damping overvoltages and protecting motor windings against multiple re-ignition when switching off three-phase motors.						
	For connection on the contactor feeder side (2-T1/4-T2/6-T3). For separate installation.						
	Rated operational voltage $U_e = 690$ V AC	C	3RT1966-1PV3		1	1 unit	41B
	Rated operational voltage $U_e = 1000$ V AC	C	3RT1966-1PV4		1	1 unit	41B

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Miscellaneous accessories

Selection and ordering data

For contactors	Rated control supply voltage U_s	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG
Type	V		Article No.	Price per PU		

Mechanical latching blocks

Sizes S0 and S2



3RT1926-3A.31

For mounting on 1 contactor¹⁾

The contactor remains in the energized state even after a voltage failure

3RT1.3	24 AC/DC	A	3RT1926-3AB31	1	1 unit	41B
	110 AC/DC	B	3RT1926-3AF31	1	1 unit	41B
	230 AC/DC	B	3RT1926-3AP31	1	1 unit	41B

¹⁾ Two front-mounted auxiliary switch blocks can be mounted in addition.

For contactors	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type							

EMC suppression modules; 3-phase ≤ 5.5 kW

Size S00 (for contactors with AC or DC operation)¹⁾



3RT1916-1PA.

3RT101	RC elements (3 x 220 Ω /0.22 μ F)						
	Up to 400 V	▶	3RT1916-1PA1	1	1 unit	41B	
	Up to 575 V	▶	3RT1916-1PA2	1	1 unit	41B	
	Up to 690 V	C	3RT1916-1PA3	1	1 unit	41B	
3RT101	Varistors						
	Up to 400 V	A	3RT1916-1PB1	1	1 unit	41B	
	Up to 575 V	B	3RT1916-1PB2	1	1 unit	41B	
	Up to 690 V	D	3RT1916-1PB3	1	1 unit	41B	

Additional load modules

Size S00 (also for spring-type terminals)



3RT1916-1GA00

For plugging onto the front side of the contactors with and without auxiliary switch blocks²⁾

3RT1.1, 3RH1.	For increasing the permissible residual current and for limiting the residual voltage. Ensures safe opening of contactors with direct control via 230 V AC semiconductor outputs of SIMATIC controllers. Also performs the function of an overvoltage damping circuit. Rated voltage: 50/60 Hz, 180 to 255 V AC	▶	3RT1916-1GA00	1	1 unit	41B
------------------	--	---	----------------------	---	--------	-----

Control kit

Size S00



3RK1 903-OCA00


3RT1.1, 3RH1.	For manual operation of the contactor contacts for start-up and service	A	3RK1 903-OCA00	1	1 unit	42D
------------------	---	---	-----------------------	---	--------	-----

¹⁾ See also description on page 3/32.

²⁾ For packs of 10, "-Z" and order code "X90" must be added to the Article No.

Power Contactors for Switching Motors Accessories for 3RT1 contactors

Miscellaneous accessories

For contactors	Version	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG
Type	V		Article No.	Price per PU		

Coupling links for control by PLC

Sizes S0 to S3



3RT1.2,
3RT1.3,
3RT1.4

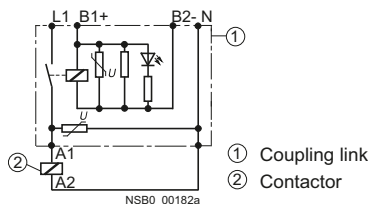
For mounting onto the coil terminals of the contactors With LED for indicating switching state

Operating range 17 ... 30 V DC
Power consumption: 0.5 W at 24 V DC
Permissible residual current of the electronics
(with "0" signal): 2.5 mA

Rated operational current I_e :

- AC-15/AC-14 at 230 V: 3 A
- DC-13 at 230 V: 0.1 A

With integrated varistor for damping opening surges.



▶ **3RH1924-1GP11** 1 1 unit 41B

For contactors	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type							

LED modules for displaying contactor operation

Sizes S0 to S121) (also for spring-type terminals)



3RT1.2 ...
3RT1.7

For snapping into the location hole of an inscription label on the front of a contactor either directly on the contactor or on the front auxiliary switch.

The LED module is connected to coil terminals A1 and A2 of the contactor and indicates its energized state. Yellow LED.

Rated voltage:

24 ... 240 V AC/DC with reverse polarity protection.

(1 pack = 5 units)

B **3RT1926-1QT00** 1 5 units 41B

Auxiliary terminals, 3-pole

Size S3



3RT104.

For connection of auxiliary and control cables (0.5 to 2.5 mm²) to the main conductor connections (for one side)




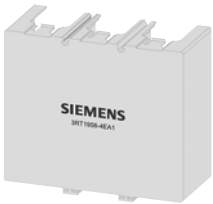

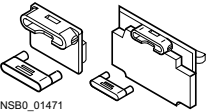
B **3RT1946-4F** 1 1 unit 41B

1) For sizes S6 to S12 the connecting leads have to be extended.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors

Miscellaneous accessories

	For contactors	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
	Size	Type							
Box terminal blocks									
	S6	3RT1.5 (3RB20.5)	For round and ribbon cables¹⁾						
			Up to 70 mm ² ²⁾	▶	3RT1955-4G	1	1 unit	41B	
			Up to 120 mm ²	▶	3RT1956-4G	1	1 unit	41B	
	Auxiliary conductor connection for box terminals	B	3TX7500-0A	1	1 unit	41B			
	S10, S12	3RT1.6, 3RT1.7 (3RB206, 3RB216)	Up to 240 mm ²	▶	3RT1966-4G	1	1 unit	41B	
			With auxiliary conductor connection						
Covers									
	S2	3RT103	Terminal covers for box terminals (additional touch protection)						
			To be fitted at the box terminals (2 units required per contactor)						
			--	B	3RT1936-4EA2	1	1 unit	41B	
			For 4-pole contactors	B	3RT1936-4EA4	1	1 unit	41B	
	S3	3RT104, 3RT144	--		▶	3RT1946-4EA2	1	1 unit	41B
			For 4-pole contactors	B	3RT1946-4EA4	1	1 unit	41B	
	S6³⁾	3RT1.5	Length: 25 mm	▶	3RT1956-4EA2	1	1 unit	41B	
	S10, S12³⁾	3RT1.6, 3RT1.7	Length: 30 mm	▶	3RT1966-4EA2	1	1 unit	41B	
	S3	3RT104, 3RT144	Terminal covers for cable lugs and busbar connection³⁾						
			For complying with the phase clearances and as touch protection if box terminal is removed (2 units required per contactor)						
			--	B	3RT1946-4EA1	1	1 unit	41B	
	S6	3RT1.5	Length: 100 mm	▶	3RT1956-4EA1	1	1 unit	41B	
	S10/S12	3RT1.6, 3RT1.7	Length: 120 mm	▶	3RT1966-4EA1	1	1 unit	41B	
	S6	3RT1.5	Can be screwed on free screw end; covers one busbar connection (1 set = 6 units)		B	3TX6526-3B	1	1 unit	41B
	S10, S12	3RT1.6, 3RT1.7	M10	B	3TX6546-3B	1	1 unit	41B	
	S6	3RT1.5	For busbar cover between contactor and 3RB2 overload relay or wiring module for contactor assemblies		▶	3RT1956-4EA3	1	1 unit	41B
			Length: 27 mm	▶	3RT1966-4EA3	1	1 unit	41B	
	S10/S12⁴⁾	3RT1.6, 3RT1.7	Length: 42 mm						
	S6	3RT1.5	For busbar cover of the flat line connectors for reversing and wye-delta assemblies		▶	3RT1956-4EA4	1	1 unit	41B
Sealable covers									
	S00	3RT1.1... 3RH1.5 ⁵⁾	Sealable covers for preventing manual operation		C	3RT1916-4MA10	1	5 units	41B
	S0 ... S12	3RT1.3... 3RT1.7 ⁵⁾	1 unit required per contactor		C	3RT1926-4MA10	1	5 units	41B

¹⁾ For connectable cross-sections of contactors, see Reference Manual "Switching Devices – Contactors and Contactor Assemblies", <https://support.industry.siemens.com/cs/ww/en/view/35554359>.

²⁾ As standard for 3RT1054-1 contactor (55 kW).

³⁾ Also fits on contactors S6 to S12 with box terminals.












⁴⁾ The 3RT1966-4EA3 cover is required in addition for use in contactor assemblies (reversing/wye-delta).

⁵⁾ Exception: contactors and contactor relays with auxiliary switch block mounted onto the front.

Power Contactors for Switching Motors

Accessories for 3RT1 contactors






Miscellaneous accessories

For contactors	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type							
Connection modules for contactors with screw terminals							
Size S00, S0							
	3RT1.1, 3RT1.2, 3RH1.	Adapters for contactors Ambient temperature $T_{u\max.} = 60\text{ °C}$ Size S00, rated operational current I_e at AC-3/400 V: 20 A Size S0, rated operational current I_e at AC-3/400 V: 25 A	Screw terminals 				
			B	3RT1916-4RD01	1	1 unit	41B
			B	3RT1926-4RD01	1	1 unit	41B
		Plugs for contactors Size S00, S0	B	3RT1900-4RE01	1	1 unit	41B
Solder pin adapters for contactors							
Size S00							
	3RT1.1, 3RH11	Assembly kit for soldering contactors onto a printed circuit board. For 1 contactor, 1 set is required.	A	3RT1916-4KA1	1	4 units	41B
							
Solder pin adapters for contactors with mounted 4-pole auxiliary switch block							
Size S00							
	3RT1.1, 3RH11	Assembly kit for soldering contactors with an auxiliary switch block onto a printed circuit board. For 1 contactor, 1 set is required.	B	3RT1916-4KA2	1	4 units	41B
							
							
							
Screw adapters for fixing the contactors							
Size S0							
	3RT1.2	Screw adapters for easier screw fixing 2 units required per contactor (1 pack contains 10 sets for 10 contactors)	C	3RT1926-4P	1	10 units	41B
							
NSB0_01470 3RT1926-4P							

Power Contactors for Switching Motors




Accessories for 3RT1 contactors

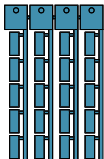
Miscellaneous accessories

For contactors		Max. conductor cross-sections		DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG
Size	Type	mm ²			Article No.	Price per PU		
Links for paralleling								
3-pole, with connection terminal¹⁾²⁾								
	S00	3RT101	25	▶	3RT1916-4BB31		1	1 unit 41B
	S0	3RT102	35, stranded	▶	3RT1926-4BB31		1	1 unit 41B
	S2	3RT103	95	▶	3RT1936-4BB31		1	1 unit 41B
3RT1936-4BB31								
3-pole, with through hole (star jumpers)¹⁾²⁾								
	S3	3RT104, 3RT144	185	▶	3RT1946-4BB31		1	1 unit 41B
3RT1946-4BB31	S6	3RT1.5	--	▶	3RT1956-4BA31		1	1 unit 41B
	S10/S12	3RT1.6, 3RT1.7	--	▶	3RT1966-4BA31		1	1 unit 41B
3RT1956-4BA31								
4-pole, with connection terminal¹⁾²⁾								
	S00	3RT101		C	3RT1916-4BB41		1	1 unit 41B
3RT1916-4BB41								

¹⁾ The links for paralleling can be reduced by one pole.

²⁾ Sizes S00 to S2: The links for paralleling are insulated.
Size S3: A cover plate is included for touch protection (can only be used when the box terminal is removed).
Sizes S6 to S12: The 3RT1956-4EA1 (for S6) or 3RT1966-4EA1 (for S10 and S12) cover can be used for touch protection.

Version		DT	Spring-type terminals 	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		
Insulation stop for securely holding back the conductor insulation for conductors up to 1 mm²						
		B	3RT1916-4JA02		1	20 units 41B
3RT1916-4JA02	Insulation stop strip can be inserted in cable entry of spring-type terminals (2 strips per contactor required, can be removed in pairs). For all SIRIUS devices with spring-type terminals, up to 2.5 mm ² conductor cross-section.					
Tools for opening spring-type terminal points						
		A	3RA2908-1A		1	1 unit 41B
3RA2908-1A	For all SIRIUS devices with spring-type terminals, for conductor cross-sections up to 2.5 mm ² . Not suitable for devices with removable terminal. Length: approx. 200 mm; 3.0 mm x 0.5 mm; titanium gray/black; partially insulated					

Version		DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Blank labels							
		C	3RT1900-1SB10		100	816 units	41B
		D	3RT1900-1SB20		100	340 units	41B
	Adhesive labels for SIRIUS						
		C	3RT1900-1SB60		100	3 060 units	41B
		C	3RT1900-1SD60		100	3 060 units	41B
3RT1900-1SB20	PC labeling system For individual inscription of unit labeling plates available from: Murrplastik Systemtechnik GmbH (see Catalog IC 10, Chapter 16, "Appendix" → "External Partners")						

Power Contactors for Switching Motors

Spare Parts for 3RT1 Contactors

Solenoid coils

Selection and ordering data

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT1934-5A.01

For contactors		Rated control supply voltage U_s			DT	Screw terminals	DT	Spring-type terminals		
Size	Type	50 Hz	50/60 Hz	60 Hz	Article No.	Price per PU	Article No.	Price per PU		
		V	V	V						
Solenoid coils · AC operation										
S0	3RT102.,	24	--	--	▶ 3RT1924-5AB01	B	3RT1924-5AB02			
	3RT132.,	42	--	--	B 3RT1924-5AD01	C	3RT1924-5AD02			
	3RT152.	48	--	--	A 3RT1924-5AH01	B	3RT1924-5AH02			
		110	--	--	▶ 3RT1924-5AF01	B	3RT1924-5AF02			
		230	--	--	▶ 3RT1924-5AP01	B	3RT1924-5AP02			
		400	--	--	▶ 3RT1924-5AV01	C	3RT1924-5AV02			
		--	24	--	▶ 3RT1924-5AC21	B	3RT1924-5AC22			
		--	42	--	B 3RT1924-5AD21	C	3RT1924-5AD22			
		--	48	--	B 3RT1924-5AH21	C	3RT1924-5AH22			
		--	110	--	▶ 3RT1924-5AG21	B	3RT1924-5AG22			
		--	220	--	B 3RT1924-5AN21	B	3RT1924-5AN22			
		--	230	--	B 3RT1924-5AL21	B	3RT1924-5AL22			
		110	--	120	B 3RT1924-5AK61	B	3RT1924-5AK62			
		220	--	240	B 3RT1924-5AP61	C	3RT1924-5AP62			
		--	100	110	B 3RT1924-5AG61	C	3RT1924-5AG62			
		--	200	220	B 3RT1924-5AN61	C	3RT1924-5AN62			
	--	400	440	B 3RT1924-5AR61	C	3RT1924-5AR62				
	S2	3RT1034	24	--	--	B 3RT1934-5AB01	B	3RT1934-5AB02		
			42	--	--	B 3RT1934-5AD01	B	3RT1934-5AD02		
			48	--	--	B 3RT1934-5AH01	B	3RT1934-5AH02		
110			--	--	B 3RT1934-5AF01	B	3RT1934-5AF02			
230			--	--	B 3RT1934-5AP01	B	3RT1934-5AP02			
400			--	--	C 3RT1934-5AV01	B	3RT1934-5AV02			
			--	24	--	B 3RT1934-5AC21	B	3RT1934-5AC22		
			--	42	--	B 3RT1934-5AD21	B	3RT1934-5AD22		
			--	48	--	B 3RT1934-5AH21	B	3RT1934-5AH22		
			--	110	--	C 3RT1934-5AG21	B	3RT1934-5AG22		
			--	220	--	C 3RT1934-5AN21	B	3RT1934-5AN22		
			--	230	--	C 3RT1934-5AL21	B	3RT1934-5AL22		
			110	--	120	B 3RT1934-5AK61	B	3RT1934-5AK62		
			220	--	240	B 3RT1934-5AP61	B	3RT1934-5AP62		
			--	100	110	B 3RT1934-5AG61	B	3RT1934-5AG62		
			--	200	220	B 3RT1934-5AN61	B	3RT1934-5AN62		
--			400	440	B 3RT1934-5AR61	B	3RT1934-5AR62			
			3RT1035,	24	--	--	B 3RT1935-5AB01	B	3RT1935-5AB02	
			3RT1036,	42	--	--	B 3RT1935-5AD01	B	3RT1935-5AD02	
			3RT133.,	48	--	--	B 3RT1935-5AH01	B	3RT1935-5AH02	
	3RT153.	110	--	--	▶ 3RT1935-5AF01	B	3RT1935-5AF02			
		230	--	--	▶ 3RT1935-5AP01	B	3RT1935-5AP02			
		400	--	--	C 3RT1935-5AV01	B	3RT1935-5AV02			
		--	24	--	B 3RT1935-5AC21	B	3RT1935-5AC22			
		--	42	--	B 3RT1935-5AD21	B	3RT1935-5AD22			
		--	48	--	B 3RT1935-5AH21	B	3RT1935-5AH22			
		--	110	--	B 3RT1935-5AG21	B	3RT1935-5AG22			
		--	220	--	B 3RT1935-5AN21	B	3RT1935-5AN22			
		--	230	--	B 3RT1935-5AL21	B	3RT1935-5AL22			
		110	--	120	B 3RT1935-5AK61	B	3RT1935-5AK62			
		220	--	240	B 3RT1935-5AP61	B	3RT1935-5AP62			
		--	100	110	B 3RT1935-5AG61	B	3RT1935-5AG62			
		--	200	220	B 3RT1935-5AN61	B	3RT1935-5AN62			
	--	400	440	C 3RT1935-5AR61	B	3RT1935-5AR62				

Power Contactors for Switching Motors

Spare Parts for 3RT1 Contactors

Solenoid coils

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT1944-5A.01



3RT1945-5A.01



3RT1945-5A.02



3RT1944-5B.42

For contactors		Rated control supply voltage U_s				DT	Screw terminals	DT	Spring-type terminals	
Size	Type	AC			DC	Article No.	Price per PU	Article No.	Price per PU	
		50 Hz	50/60 Hz	60 Hz	V					
Solenoid coils · AC operation										
S3	3RT1044	24	--	--	--	B	3RT1944-5AB01	B	3RT1944-5AB02	
		42	--	--	--	B	3RT1944-5AD01	B	3RT1944-5AD02	
		48	--	--	--	B	3RT1944-5AH01	B	3RT1944-5AH02	
		110	--	--	--	B	3RT1944-5AF01	B	3RT1944-5AF02	
		230	--	--	--	B	3RT1944-5AP01	B	3RT1944-5AP02	
		400	--	--	--	B	3RT1944-5AV01	B	3RT1944-5AV02	
		--	24	--	--	B	3RT1944-5AC21	B	3RT1944-5AC22	
		--	42	--	--	B	3RT1944-5AD21	B	3RT1944-5AD22	
		--	48	--	--	B	3RT1944-5AH21	B	3RT1944-5AH22	
		--	110	--	--	B	3RT1944-5AG21	B	3RT1944-5AG22	
		--	220	--	--	B	3RT1944-5AN21	B	3RT1944-5AN22	
		--	230	--	--	B	3RT1944-5AL21	B	3RT1944-5AL22	
	--	110	--	120	--	B	3RT1944-5AK61	B	3RT1944-5AK62	
	--	220	--	240	--	B	3RT1944-5AP61	B	3RT1944-5AP62	
	--	--	100	110	--	B	3RT1944-5AG61	B	3RT1944-5AG62	
	--	--	200	220	--	B	3RT1944-5AN61	B	3RT1944-5AN62	
	--	--	400	440	--	B	3RT1944-5AR61	B	3RT1944-5AR62	
	3RT1045, 3RT1046, 3RT134., 3RT1446, 3RT154.	24	--	--	--	B	3RT1945-5AB01	B	3RT1945-5AB02	
		42	--	--	--	B	3RT1945-5AD01	B	3RT1945-5AD02	
		48	--	--	--	B	3RT1945-5AH01	B	3RT1945-5AH02	
		110	--	--	--	B	3RT1945-5AF01	B	3RT1945-5AF02	
		230	--	--	--	B	3RT1945-5AP01	B	3RT1945-5AP02	
		400	--	--	--	C	3RT1945-5AV01	B	3RT1945-5AV02	
		--	24	--	--	B	3RT1945-5AC21	B	3RT1945-5AC22	
--		42	--	--	B	3RT1945-5AD21	B	3RT1945-5AD22		
--		48	--	--	B	3RT1945-5AH21	B	3RT1945-5AH22		
--		110	--	--	B	3RT1945-5AG21	B	3RT1945-5AG22		
--		220	--	--	B	3RT1945-5AN21	B	3RT1945-5AN22		
--		230	--	--	B	3RT1945-5AL21	B	3RT1945-5AL22		
--	110	--	120	--	B	3RT1945-5AK61	B	3RT1945-5AK62		
--	220	--	240	--	B	3RT1945-5AP61	B	3RT1945-5AP62		
--	--	100	110	--	B	3RT1945-5AG61	B	3RT1945-5AG62		
--	--	200	220	--	C	3RT1945-5AN61	B	3RT1945-5AN62		
--	--	400	440	--	B	3RT1945-5AR61	B	3RT1945-5AR62		
Solenoid coils · DC operation										
S2	3RT103.,	--	--	--	24	B	3RT1934-5BB41	B	3RT1934-5BB42	
	3RT103.,	--	--	--	42	B	3RT1934-5BD41	B	3RT1934-5BD42	
	3RT153.	--	--	--	48	B	3RT1934-5BW41	B	3RT1934-5BW42	
	--	--	--	--	60	B	3RT1934-5BE41	B	3RT1934-5BE42	
	--	--	--	--	110	B	3RT1934-5BF41	B	3RT1934-5BF42	
	--	--	--	--	125	B	3RT1934-5BG41	B	3RT1934-5BG42	
	--	--	--	--	220	B	3RT1934-5BM41	B	3RT1934-5BM42	
	--	--	--	--	230	B	3RT1934-5BP41	B	3RT1934-5BP42	
	S3	3RT104.,	--	--	--	24	B	3RT1944-5BB41	B	3RT1944-5BB42
		3RT134.,	--	--	--	42	C	3RT1944-5BD41	B	3RT1944-5BD42
		3RT144.,	--	--	--	48	B	3RT1944-5BW41	B	3RT1944-5BW42
		3RT154.	--	--	--	60	B	3RT1944-5BE41	B	3RT1944-5BE42
--		--	--	--	110	B	3RT1944-5BF41	B	3RT1944-5BF42	
--		--	--	--	125	B	3RT1944-5BG41	B	3RT1944-5BG42	
--		--	--	--	220	B	3RT1944-5BM41	B	3RT1944-5BM42	
--		--	--	--	230	B	3RT1944-5BP41	B	3RT1944-5BP42	

Power Contactors for Switching Motors

Spare Parts for 3RT1 Contactors

Solenoid coils

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT1955-5A. ...

For contactors		Rated control supply voltage $U_s \text{ min} \dots U_s \text{ max}$	DT	Screw terminals	DT	Spring-type terminals	
Size	Type	V AC/DC		Article No.	Price per PU	Article No.	Price per PU
Withdrawable coils							
Conventional operating mechanisms							
S6	3RT105, 3RT145	23 ... 26	B	3RT1955-5AB31		B	3RT1955-5AB32
		42 ... 48	B	3RT1955-5AD31		B	3RT1955-5AD32
		110 ... 127	B	3RT1955-5AF31		B	3RT1955-5AF32
		200 ... 220	B	3RT1955-5AM31		B	3RT1955-5AM32
		220 ... 240	B	3RT1955-5AP31		B	3RT1955-5AP32
		240 ... 277	B	3RT1955-5AU31		B	3RT1955-5AU32
		380 ... 420	B	3RT1955-5AV31		B	3RT1955-5AV32
		440 ... 480	B	3RT1955-5AR31		B	3RT1955-5AR32
		500 ... 550	B	3RT1955-5AS31		B	3RT1955-5AS32
		575 ... 600	B	3RT1955-5AT31		B	3RT1955-5AT32
S10	3RT106, 3RT146	23 ... 26	B	3RT1965-5AB31		B	3RT1965-5AB32
		42 ... 48	B	3RT1965-5AD31		B	3RT1965-5AD32
		110 ... 127	B	3RT1965-5AF31		B	3RT1965-5AF32
		200 ... 220	C	3RT1965-5AM31		B	3RT1965-5AM32
		220 ... 240	B	3RT1965-5AP31		B	3RT1965-5AP32
		240 ... 277	B	3RT1965-5AU31		B	3RT1965-5AU32
		380 ... 420	B	3RT1965-5AV31		B	3RT1965-5AV32
		440 ... 480	B	3RT1965-5AR31		B	3RT1965-5AR32
		500 ... 550	C	3RT1965-5AS31		B	3RT1965-5AS32
		575 ... 600	C	3RT1965-5AT31		B	3RT1965-5AT32
S10	3RT126 Vacuum contactor	23 ... 26	B	3RT1966-5AB31		--	
		42 ... 48	B	3RT1966-5AD31		--	
		110 ... 127	A	3RT1966-5AF31		--	
		200 ... 220	C	3RT1966-5AM31		--	
		220 ... 240	A	3RT1966-5AP31		--	
		240 ... 277	C	3RT1966-5AU31		--	
		380 ... 420	B	3RT1966-5AV31		--	
		440 ... 480	C	3RT1966-5AR31		--	
		500 ... 550	C	3RT1966-5AS31		--	
		575 ... 600	C	3RT1966-5AT31		--	
S12	3RT107, 3RT147, 3RT127 Vacuum contactor	23 ... 26	B	3RT1975-5AB31		B	3RT1975-5AB32
		42 ... 48	B	3RT1975-5AD31		B	3RT1975-5AD32
		110 ... 127	B	3RT1975-5AF31		B	3RT1975-5AF32
		200 ... 220	C	3RT1975-5AM31		B	3RT1975-5AM32
		220 ... 240	B	3RT1975-5AP31		B	3RT1975-5AP32
		240 ... 277	B	3RT1975-5AU31		B	3RT1975-5AU32
		380 ... 420	B	3RT1975-5AV31		B	3RT1975-5AV32
		440 ... 480	B	3RT1975-5AR31		B	3RT1975-5AR32
		500 ... 550	C	3RT1975-5AS31		B	3RT1975-5AS32
		575 ... 600	C	3RT1975-5AT31		B	3RT1975-5AT32

Power Contactors for Switching Motors



Spare Parts for 3RT1 Contactors

Solenoid coils

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT1955-5N. ...

For contactors			Rated control supply voltage U_s	DT	Screw terminals 	DT	Spring-type terminals 	
Size	Type	V AC/DC			Article No.	Price per PU	Article No.	Price per PU
Withdrawable coils								
Solid-state operating mechanism								
For 24 V DC PLC output								
S6	3RT105,	21 ... 27.3		C	3RT1955-5NB31		B	3RT1955-5NB32
	3RT145	96 ... 127		B	3RT1955-5NF31		B	3RT1955-5NF32
		200 ... 277		B	3RT1955-5NP31		B	3RT1955-5NP32
S10	3RT106,	21 ... 27.3		B	3RT1965-5NB31		B	3RT1965-5NB32
	3RT146	96 ... 127		B	3RT1965-5NF31		B	3RT1965-5NF32
		200 ... 277		B	3RT1965-5NP31		B	3RT1965-5NP32
S12	3RT126	21 ... 27.3		B	3RT1966-5NB31		--	
	Vacuum	96 ... 127		C	3RT1966-5NF31		--	
	contactor	200 ... 277		C	3RT1966-5NP31		--	
	3RT107,	21 ... 27.3		B	3RT1975-5NB31		B	3RT1975-5NB32
	3RT147,	96 ... 127		B	3RT1975-5NF31		B	3RT1975-5NF32
	3RT127	200 ... 277		B	3RT1975-5NP31		B	3RT1975-5NP32
	Vacuum							
	contactor							
For 24 V DC PLC output/PLC relay output, with remaining lifetime indicator (RLT) (withdrawable coil with laterally mounted solid-state module)								
S6	3RT105,	96 ... 127		B	3RT1955-5PF31		--	
	3RT145	200 ... 277		B	3RT1955-5PP31		--	
S10	3RT106,	96 ... 127		B	3RT1965-5PF31		--	
	3RT146	200 ... 277		B	3RT1965-5PP31		--	
S12	3RT107,	96 ... 127		B	3RT1975-5PF31		--	
	3RT147	200 ... 277		B	3RT1975-5PP31		--	

Power Contactors for Switching Motors

Spare Parts for 3RT1 Contactors

Contacts and arc chambers

Selection and ordering data

For contactors	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Size	Type						
Contacts with fixing parts							
For contactors with 3 main contacts							
S2	3RT1034	Main contacts (3 NO contacts) for utilization category AC-3	▶ 3RT1934-6A		1	1 unit	41B
	3RT1035		▶ 3RT1935-6A		1	1 unit	41B
	3RT1036		▶ 3RT1936-6A		1	1 unit	41B
S3	3RT1044	(1 set = 3 movable and 6 fixed switching elements with fixing parts)	B 3RT1944-6A		1	1 unit	41B
	3RT1045		B 3RT1945-6A		1	1 unit	41B
	3RT1046		B 3RT1946-6A		1	1 unit	41B
S6	3RT1054		▶ 3RT1954-6A		1	1 unit	41B
	3RT1055		▶ 3RT1955-6A		1	1 unit	41B
	3RT1056		▶ 3RT1956-6A		1	1 unit	41B
S10	3RT1064		▶ 3RT1964-6A		1	1 unit	41B
	3RT1065		▶ 3RT1965-6A		1	1 unit	41B
	3RT1066		▶ 3RT1966-6A		1	1 unit	41B
S12	3RT1075		▶ 3RT1975-6A		1	1 unit	41B
	3RT1076		A 3RT1976-6A		1	1 unit	41B
S3	3RT1446	Main contacts (3 NO contacts) for utilization category AC-1	B 3RT1946-6D		1	1 unit	41B
S6	3RT1456		B 3RT1956-6D		1	1 unit	41B
S10	3RT1466		B 3RT1966-6D		1	1 unit	41B
S12	3RT1476		A 3RT1976-6D		1	1 unit	41B
For 3RT12 vacuum contactors							
S10	3RT1264	3 vacuum interrupters with fixing parts	B 3RT1964-6V		1	1 unit	41B
	3RT1265		B 3RT1965-6V		1	1 unit	41B
	3RT1266		B 3RT1966-6V		1	1 unit	41B
S12	3RT1275		B 3RT1975-6V		1	1 unit	41B
	3RT1276		B 3RT1976-6V		1	1 unit	41B
For contactors with 4 main contacts							
S2	3RT1336	Main contacts (4 NO contacts) for utilization category AC-1	B 3RT1936-6E		1	1 unit	41B
S3	3RT1344		B 3RT1944-6E		1	1 unit	41B
	3RT1346		B 3RT1946-6E		1	1 unit	41B
Arc chambers							
S2	3RT103	Arc chambers, 3-pole	B 3RT1936-7A		1	1 unit	41B
S3	3RT104		B 3RT1946-7A		1	1 unit	41B
	3RT1446						
S6	3RT1054		B 3RT1954-7A		1	1 unit	41B
	3RT1055		B 3RT1955-7A		1	1 unit	41B
	3RT1056		B 3RT1956-7A		1	1 unit	41B
S10	3RT1064		B 3RT1964-7A		1	1 unit	41B
	3RT1065		B 3RT1965-7A		1	1 unit	41B
	3RT1066		B 3RT1966-7A		1	1 unit	41B
S12	3RT1075		B 3RT1975-7A		1	1 unit	41B
	3RT1076		B 3RT1976-7A		1	1 unit	41B
S6	3RT1456		B 3RT1956-7B		1	1 unit	41B
S10	3RT1466		B 3RT1966-7B		1	1 unit	41B
S12	3RT1476		B 3RT1976-7B		1	1 unit	41B

Coupling Contactors

SIRIUS 3RT10 coupling contactors (interface), 3-pole, 3 ... 11 kW

Overview

DC operation

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1,
IEC 60947-5-1, EN 60947-5-1 (auxiliary switches)

The 3RT10 coupling contactors for switching motors are tailored to the special requirements of working with electronic controls.

The 3RT101 coupling contactors cannot be extended with auxiliary switch blocks.

Two single-pole auxiliary switch blocks can be fitted to 3RT102 coupling contactors (see [Accessories on page 3/37](#)).

Coupling contactors have a low power consumption and an extended solenoid coil operating range.

Depending on the version, the solenoid coils are supplied either without overvoltage damping (3RT101.-1HB4. and 3RT101.-.MB4.-OKT0) or with a diode, suppressor diode, or varistor connected as standard.

Selection and ordering data

DC operation

Low power consumption

Extended operating range of the solenoid coil

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B



3RT101.-1.B4.



3RT101.-2.B4.

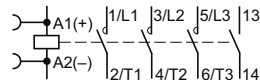
Rated data		Auxiliary contacts	DT	Screw terminals	DT	Spring-type terminals	
AC-2 and AC-3, T _u : Up to 60 °C							
Operational current I _e up to	Power rating of three-phase motors at 50 Hz and	Ident. No.	Version	Article No.	Price per PU	Article No.	Price per PU
400 V	400 V						
A	kW						

For screw fixing and snap-on mounting onto TH 35 standard mounting rail

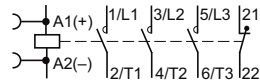
Size S00

Diode, varistor or RC element, attachable

- With auxiliary contact 1 NO, Ident. No. 10



- With auxiliary contact 1 NC, Ident. No. 01



U_s = 24 V DC, operating range **0.7 to 1.25 x U_s**
Power consumption of the solenoid coils **2.3 W** at 24 V

7	3	10	1	--	▶	3RT1015-1HB41	B	3RT1015-2HB41
		01	--	1	▶	3RT1015-1HB42	B	3RT1015-2HB42
9	4	10	1	--	▶	3RT1016-1HB41	B	3RT1016-2HB41
		01	--	1	▶	3RT1016-1HB42	B	3RT1016-2HB42
12	5.5	10	1	--	A	3RT1017-1HB41	B	3RT1017-2HB41
		01	--	1	B	3RT1017-1HB42	B	3RT1017-2HB42

U_s = 24 V DC, operating range **0.85 to 1.85 x U_s**
Power consumption of the solenoid coils **1.4 W** at 24 V

7	3	10	1	--	B	3RT1015-1MB41-OKT0	B	3RT1015-2MB41-OKT0
		01	--	1	B	3RT1015-1MB42-OKT0	B	3RT1015-2MB42-OKT0
9	4	10	1	--	B	3RT1016-1MB41-OKT0	B	3RT1016-2MB41-OKT0
		01	--	1	B	3RT1016-1MB42-OKT0	B	3RT1016-2MB42-OKT0
12	5.5	10	1	--	B	3RT1017-1MB41-OKT0	B	3RT1017-2MB41-OKT0
		01	--	1	B	3RT1017-1MB42-OKT0	B	3RT1017-2MB42-OKT0

For accessories, see page 3/42 onwards.

SIRIUS 3RT10 coupling contactors (interface), 3-pole, 3 ... 11 kW

DC operation

Low power consumption

Extended operating range of the solenoid coil

Integrated coil circuit

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT101.-1.B4.



3RT101.-2.B4.

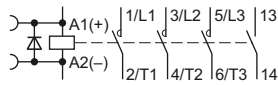
Rated data AC-2 and AC-3, T _{ij} : Up to 60 °C	Auxiliary contacts	DT	Screw terminals	DT	Spring-type terminals
Operational current I _e up to 400 V A	Ident. No. Version NO NC		Article No. Price per PU		Article No. Price per PU
Power rating of three-phase motors at 50 Hz and 400 V kW					

For screw fixing and snap-on mounting onto TH 35 standard mounting rail

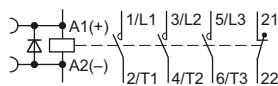
Size S00

With integrated coil circuit (diode)

- 1 NO, Ident. No. **10**



- 1 NC, Ident. No. **01**



U_s = 24 V DC, operating range **0.7 to 1.25 x U_s**
 Power consumption of the solenoid coils **2.3 W** at 24 V)

7	3	10	1	--	▶	3RT1015-1JB41	▶	3RT1015-2JB41
		01	--	1	▶	3RT1015-1JB42	▶	3RT1015-2JB42
9	4	10	1	--	▶	3RT1016-1JB41	▶	3RT1016-2JB41
		01	--	1	▶	3RT1016-1JB42	▶	3RT1016-2JB42
12	5.5	10	1	--	▶	3RT1017-1JB41	▶	3RT1017-2JB41
		01	--	1	▶	3RT1017-1JB42	A	3RT1017-2JB42

U_s = 24 V DC, operating range **0.85 to 1.85 x U_s**
 Power consumption of the solenoid coils **1.4 W** at 24 V)

7	3	10	1	--	B	3RT1015-1VB41		--
		01	--	1	B	3RT1015-1VB42	B	3RT1015-2VB42
9	4	10	1	--	B	3RT1016-1VB41	B	3RT1016-2VB41
		01	--	1	B	3RT1016-1VB42	B	3RT1016-2VB42
12	5.5	10	1	--	B	3RT1017-1VB41	B	3RT1017-2VB41
		01	--	1	B	3RT1017-1VB42	B	3RT1017-2VB42

For accessories, see page 3/42 onwards.

Coupling Contactors

SIRIUS 3RT10 coupling contactors (interface), 3-pole, 3 ... 11 kW

DC operation

Low power consumption

Extended operating range of the solenoid coil

Integrated coil circuit



PU (UNIT, SET, M)	= 1
PS*	= 1 unit
PG	= 41B



3RT101.-1.B4.



3RT101.-2.B4.

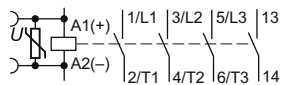
Rated data		Auxiliary contacts		DT	Screw terminals		DT	Spring-type terminals	
AC-2 and AC-3, T _{ij} : Up to 60 °C									
Operational current I _e up to	Rating of three-phase motors at 50 Hz and	Ident. No.	Version		Article No.	Price per PU		Article No.	Price per PU
	400 V	400 V kW		  NO NC					

For screw fixing and snap-on mounting onto TH 35 standard mounting rail

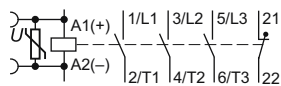
Size S00

With integrated coil circuit (varistor)

- 1 NO, Ident. No. **10**



- 1 NC, Ident. No. **01**



$U_s = 24 \text{ V DC}$, operating range **0.7 to 1.25 x U_s**
Power consumption of the solenoid coils **2.3 W** at 24 V)

7	3	10 01	1 --	-- 1	▶	3RT1015-1KB41 3RT1015-1KB42	▶	3RT1015-2KB41 3RT1015-2KB42	
9	4	10 01	1 --	-- 1	▶	3RT1016-1KB41 3RT1016-1KB42	▶	3RT1016-2KB41 3RT1016-2KB42	
12	5.5	10 01	1 --	-- 1	▶	3RT1017-1KB41 3RT1017-1KB42	▶	3RT1017-2KB41 3RT1017-2KB42	
$U_s = 24 \text{ V DC}$, operating range 0.85 to 1.85 x U_s Power consumption of the solenoid coils 1.4 W at 24 V)									
7	3	10 01	1 --	-- 1	A B	3RT1015-1WB41 3RT1015-1WB42	B	3RT1015-2WB41 --	
9	4	10 01	1 --	-- 1	B B	3RT1016-1WB41 3RT1016-1WB42	B B	3RT1016-2WB41 3RT1016-2WB42	
12	5.5	10 01	1 --	-- 1	B B	3RT1017-1WB41 3RT1017-1WB42	B B	3RT1017-2WB41 3RT1017-2WB42	

For accessories, see page 3/42 onwards.

SIRIUS 3RT10 coupling contactors (interface), 3-pole, 3 ... 11 kW

DC operation

Low power consumption

Extended operating range of the solenoid coil

Integrated coil circuit

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT102.-1KB40



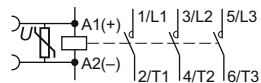
3RT102.-3KB40

Rated data AC-2 and AC-3, T_U : Up to 60 °C Operational current I_e up to 400 V A	Power rating of three-phase motors at 50 Hz and 400 V kW	Auxiliary contacts		DT	Screw terminals	DT	Spring-type terminals for coil terminals
		Ident. No.	Version	Article No.	Price per PU	Article No.	Price per PU

For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S0

With integrated coil circuit (varistor)



$U_s = 24$ V DC, operating range **0.7 to 1.25 x U_s**
 Power consumption of the solenoid coils **4.2 W** at 24 V

Varistor mounted	5.5	--	--	▶	3RT1024-1KB40	B	3RT1024-3KB40
	7.5	--	--	▶	3RT1025-1KB40	▶	3RT1025-3KB40
	11	--	--	▶	3RT1026-1KB40	▶	3RT1026-3KB40

For accessories, see page 3/42 onwards.

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

Overview

The 3RA13 reversing contactor assemblies can be ordered as follows:

Sizes S00 to S3

- Fully wired and tested, with mechanical and electrical interlock
- As individual parts for customer assembly

Sizes S6 to S12

- Only as individual parts for customer assembly

There is also a range of accessories (auxiliary switch blocks, surge suppressors, etc.) that must be ordered separately.

For overload relays for motor protection, see Chapter 7, "Protection Equipment" → "Overload Relays".

The 3RA13 contactor assemblies have screw terminals. Sizes S00 to S3 are suitable for screw and snap-on mounting onto TH 35 standard mounting rails.

For assemblies with AC operation and 50/60 Hz, a dead interval of 50 ms must be provided when used with voltages ≥ 500 V; a dead interval of 30 ms is recommended for use with voltages ≥ 400 V. These dead times do not apply to assemblies with DC operation.

The operating times of the individual contactors are not affected by the mechanical interlock.

Complete units

The fully wired reversing contactor assemblies are suitable for use in any climate. They are finger-safe according to EN 50274.

The contactor assemblies consist of 2 contactors with the same power, with one NC contact in the basic unit. The contactors are mechanically and electrically interlocked (NC contact interlock).

For motor protection, either 3RU11 or 3RB2. overload relays for direct mounting or stand-alone installation or thermistor motor protection tripping units must be ordered separately.

Components for customer assembly

Assembly kits for all sizes are available for customer assembly of reversing contactor assemblies.

Contactors, overload relays, the mechanical interlock (from size S2) and – for momentary-contact operation – auxiliary switch blocks for latching must be ordered separately.

See also the configuration manual "SIRIUS Configuration":
<https://support.industry.siemens.com/cs/ww/en/view/40625241>

Rated data AC-2 and AC-3 for 50 Hz 400 V AC		Size	Type				Assembly kit	Fully wired and tested contactor assemblies
Rating kW	Operational current I_e A		Contactor	Mechanical interlock ¹⁾	Mechanical interlock ²⁾	Mechanical interlock ³⁾		
3	7	S00	3RT1015	-- ⁴⁾	--	--	3RA1913-2A ⁵⁾	3RA1315-8XB30-1 ..
4	9		3RT1016					3RA1316-8XB30-1 ..
5.5	12		3RT1017					3RA1317-8XB30-1 ..
5.5	12	S0	3RT1024	3RA1924-1A	3RA1924-2B	--	3RA1923-2A ⁶⁾	3RA1324-8XB30-1 ..
7.5	17		3RT1025					3RA1325-8XB30-1 ..
11	25		3RT1026					3RA1326-8XB30-1 ..
15	32	S2	3RT1034	3RA1924-1A	3RA1924-2B	--	3RA1933-2A ⁷⁾	3RA1334-8XB30-1...
18.5	40		3RT1035					3RA1335-8XB30-1...
22	50		3RT1036					3RA1336-8XB30-1...
30	65	S3	3RT1044	3RA1924-1A	3RA1924-2B	--	3RA1943-2A ⁷⁾	3RA1344-8XB30-1...
37	80		3RT1045					3RA1345-8XB30-1...
45	95		3RT1046					3RA1346-8XB30-1...
55	115	S6	3RT1054	--	--	3RA1954-2A	3RA1953-2M ⁸⁾	--
75	150		3RT1055					
90	185		3RT1056					
110	225	S10	3RT1064	--	--	3RA1954-2A	3RA1963-2A ⁸⁾	--
132	265		3RT1065					
160	300		3RT1066					
200	400	S12	3RT1075	--	--	3RA1954-2A	3RA1973-2A ⁸⁾	--
250	500		3RT1076					

1) Can be mounted onto the front.

2) Laterally mountable with one auxiliary contact.

3) Laterally mountable without auxiliary contact.

4) Interlock can only be ordered with assembly kit.

5) Assembly kit contains: mechanical interlock; connecting clips for 2 contactors; wiring modules on the top and bottom.

6) Assembly kit contains: wiring modules on the top and bottom.

7) Assembly kit contains: 2 connecting clips for contactors; wiring modules on the top and bottom.

8) Assembly kit contains: wiring module on the top and bottom.

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

Selection and ordering data

Fully wired and tested contactor assemblies · Size S00 · Up to 5.5 kW

Rated data AC-2 and AC-3					Rated control supply voltage U_s ¹⁾	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	
Operational current I_e up to	Ratings of three-phase motors at 50 Hz and										
400 V	230 V	400 V	500 V	690 V							
A	kW	kW	kW	kW	V		Article No.	Price per PU			
AC operation, 50/60 Hz											
7	2.2	3	3.5	4	24 AC	A	3RA1315-8XB30-1AB0		1	1 unit	41B
					110 AC	A	3RA1315-8XB30-1AF0		1	1 unit	41B
					230 AC	▶	3RA1315-8XB30-1AP0		1	1 unit	41B
9	3	4	4.5	5.5	24 AC	A	3RA1316-8XB30-1AB0		1	1 unit	41B
					110 AC	A	3RA1316-8XB30-1AF0		1	1 unit	41B
					230 AC	▶	3RA1316-8XB30-1AP0		1	1 unit	41B
12	3	5.5	5.5	5.5	24 AC	A	3RA1317-8XB30-1AB0		1	1 unit	41B
					110 AC	A	3RA1317-8XB30-1AF0		1	1 unit	41B
					230 AC	▶	3RA1317-8XB30-1AP0		1	1 unit	41B
DC operation											
7	2.2	3	3.5	4	24 DC	▶	3RA1315-8XB30-1BB4		1	1 unit	41B
9	3	4	4.5	5.5	24 DC	▶	3RA1316-8XB30-1BB4		1	1 unit	41B

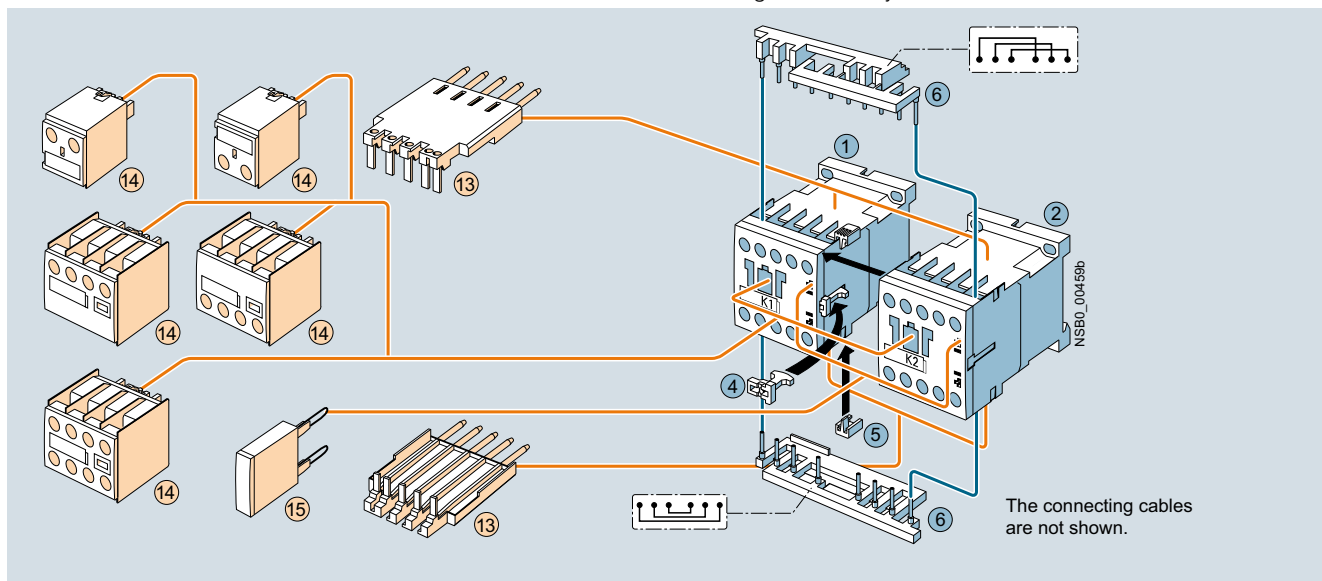


3RA1315-8XB30-1...

¹⁾ Coil operating range at 50 Hz: 0.8 to 1.1 × U_s ; at 60 Hz: 0.85 to 1.1 × U_s .

Note:

The contactors integrated in the contactor assemblies have no unassigned auxiliary contacts.



The connecting cables are not shown.

Mountable accessories (optional)

Accessories	Type	Page
13 Solder pin adapters	3RT1916-4KA1	3/65
14 Auxiliary switch block, front (only auxiliary switch block according to EN 50005 must be used)	3RH1911-1....	3/35
16 Surge suppressors	3RT1916-1....	3/42

Complete contactor assemblies

Individual parts	Type	Q1	Q2	Page
1 2 Contactor, 3 kW	3RT1015	3RT1015		3/14
1 2 Contactor, 4 kW	3RT1016	3RT1016		3/14
1 2 Contactor, 5.5 kW	3RT1017	3RT1017		3/14
4 5 6 Assembly kit	3RA1913-2A			3/64

The assembly kit contains:

- 4** Mechanical interlock
- 5** 2 connecting clips for 2 contactors
- 6** Wiring modules on the top and bottom for connecting the main current paths, electrical interlock included¹⁾, interruptible (NC contact interlock)

¹⁾ 3RT101... contactors with one NC contact in the basic unit are required for the electrical interlock

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

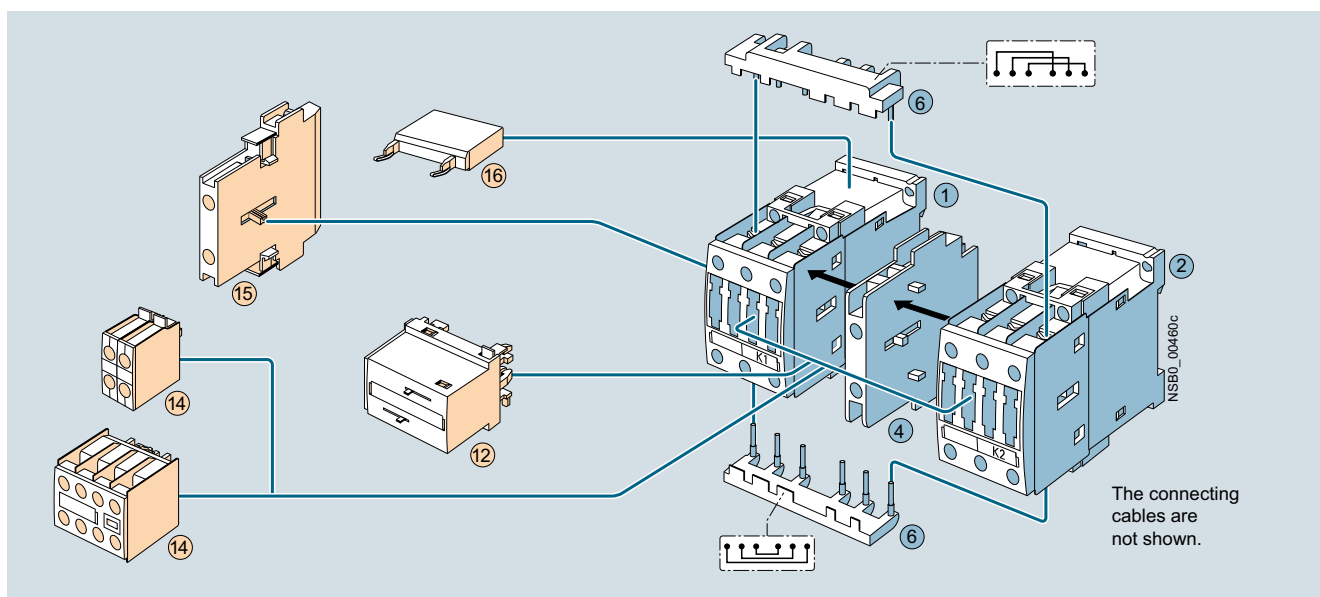
Fully wired and tested contactor assemblies · Size S0 · up to 11 kW

Rated data AC-2 and AC-3		Ratings of three-phase motors at 50 Hz and			Rated control supply voltage U_s ¹⁾	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	400 V	230 V	500 V	690 V			Article No.	Price per PU			
A	kW	kW	kW	kW	V						
AC operation, 50/60 Hz											
12	3	5.5	7.5	7.5	24 AC	B	3RA1324-8XB30-1AC2	1	1 unit	41B	
					110 AC	A	3RA1324-8XB30-1AG2	1	1 unit	41B	
					230 AC	▶	3RA1324-8XB30-1AL2	1	1 unit	41B	
17	4	7.5	10	11	24 AC	B	3RA1325-8XB30-1AC2	1	1 unit	41B	
					110 AC	A	3RA1325-8XB30-1AG2	1	1 unit	41B	
					230 AC	▶	3RA1325-8XB30-1AL2	1	1 unit	41B	
25	5.5	11	11	11	24 AC	B	3RA1326-8XB30-1AC2	1	1 unit	41B	
					110 AC	A	3RA1326-8XB30-1AG2	1	1 unit	41B	
					230 AC	A	3RA1326-8XB30-1AL2	1	1 unit	41B	
DC operation											
12	3	5.5	7.5	7.5	24 DC	▶	3RA1324-8XB30-1BB4	1	1 unit	41B	
17	4	7.5	10	11	24 DC	A	3RA1325-8XB30-1BB4	1	1 unit	41B	
25	5.5	11	11	11	24 DC	A	3RA1326-8XB30-1BB4	1	1 unit	41B	



3RA1324-8XB30-1...

¹⁾ Coil operating range at 50 Hz: 0.8 to 1.1 × U_s ; at 60 Hz: 0.85 to 1.1 × U_s .



Mountable accessories (optional)

Accessories	Type	Page
12	Mech. interlock, front 3RA1924-1A	3/63
14	Auxiliary switch block, front 3RH1921-1CA...	3/34
15	Auxiliary switch block, lateral 3RH1921-1EA...	3/38
16	Surge suppressors 3RT1926-1...	3/42

Complete contactor assemblies

Individual parts	Type		Page
	Q1	Q2	
1 2	Contactors, 5.5 kW	3RT1024	3/15
1 2	Contactors, 7.5 kW	3RT1025	3/15
1 2	Contactors, 11 kW	3RT1026	3/15
4	Mech. interlock, lateral	3RA1924-2B	3/63
6	Assembly kit	3RA1923-2A	3/64

The assembly kit contains wiring modules on the top and bottom (they also form the mechanical connection between the contactors).

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

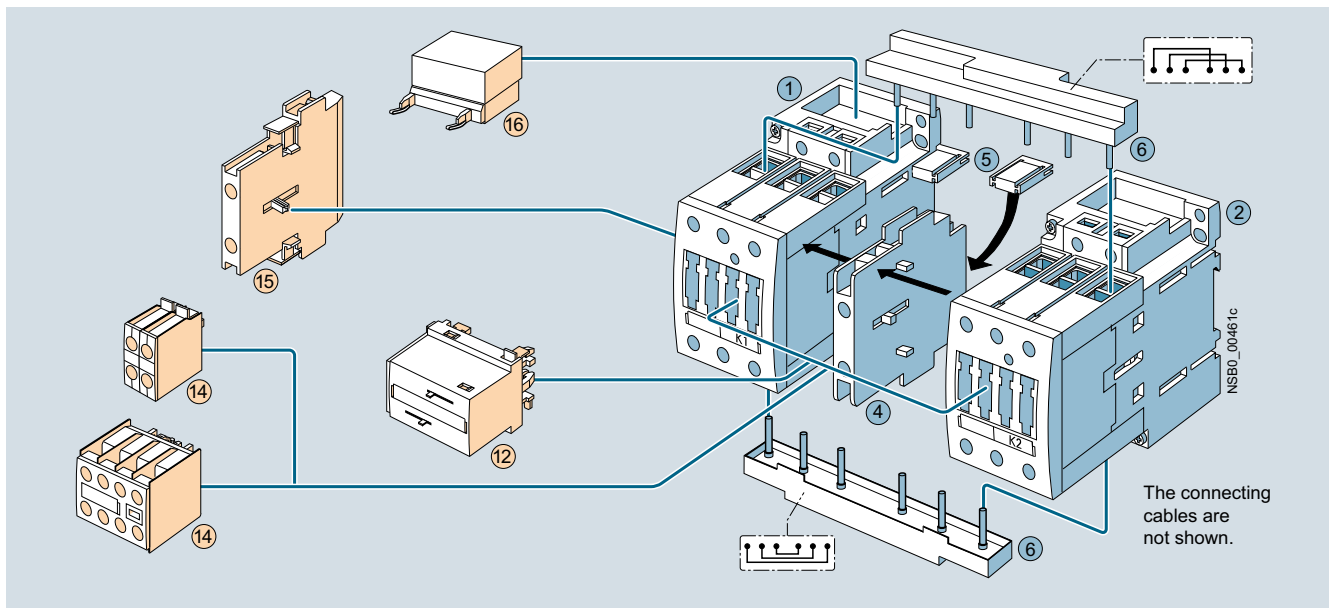
Fully wired and tested contactor assemblies · Size S2 · up to 22 kW



3RA133.-8XB30-1...

Rated data AC-2 and AC-3					Rated control supply voltage U_s ¹⁾	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of three-phase motors at 50 Hz and						Article No.	Price per PU			
500 V	230 V	400 V	500 V	690 V							
A	kW	kW	kW	kW	V						
AC operation, 50/60 Hz											
32	7.5	15	18.5	18.5	24 AC	A	3RA1334-8XB30-1AC2	1	1 unit	41B	
					110 AC	A	3RA1334-8XB30-1AG2	1	1 unit	41B	
					230 AC	A	3RA1334-8XB30-1AL2	1	1 unit	41B	
40	11	18.5	22	22	24 AC	A	3RA1335-8XB30-1AC2	1	1 unit	41B	
					110 AC	A	3RA1335-8XB30-1AG2	1	1 unit	41B	
					230 AC	A	3RA1335-8XB30-1AL2	1	1 unit	41B	
50	15	22	30	22	24 AC	B	3RA1336-8XB30-1AC2	1	1 unit	41B	
					110 AC	B	3RA1336-8XB30-1AG2	1	1 unit	41B	
					230 AC	A	3RA1336-8XB30-1AL2	1	1 unit	41B	
DC operation											
32	7.5	15	18.5	18.5	24 DC	A	3RA1334-8XB30-1BB4	1	1 unit	41B	
40	11	18.5	22	22	24 DC	A	3RA1335-8XB30-1BB4	1	1 unit	41B	
50	15	22	30	22	24 DC	A	3RA1336-8XB30-1BB4	1	1 unit	41B	

¹⁾ Coil operating range at 50 Hz: 0.8 to 1.1 x U_s ; at 60 Hz: 0.85 to 1.1 x U_s .



Mountable accessories (optional)

To be ordered separately	Type	Page
12	Mech. interlock, front 3RA1924-1A	3/63
14	Auxiliary switch block, front 3RH1921-1CA...	3/34
15	Auxiliary switch block, lateral 3RH1921-1EA...	3/38
16	Surge suppressors 3RT1926-1.... 3RT1936-1....	3/43

Complete contactor assemblies

Individual parts	Type Q1	Q2	Page
1 2	Contactors, 15 kW	3RT1034	3RT1034 3/16
1 2	Contactors, 18.5 kW	3RT1035	3RT1035 3/16
1 2	Contactors, 22 kW	3RT1036	3RT1036 3/16
4	Mech. interlock, lateral	3RA1924-2B	3/63
5 6	Assembly kit	3RA1933-2A	3/64
The assembly kit contains:			
5	2 connecting clips for 2 contactors with 10 mm clearance		
6	Wiring modules on the top and bottom for connecting the main current paths		

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

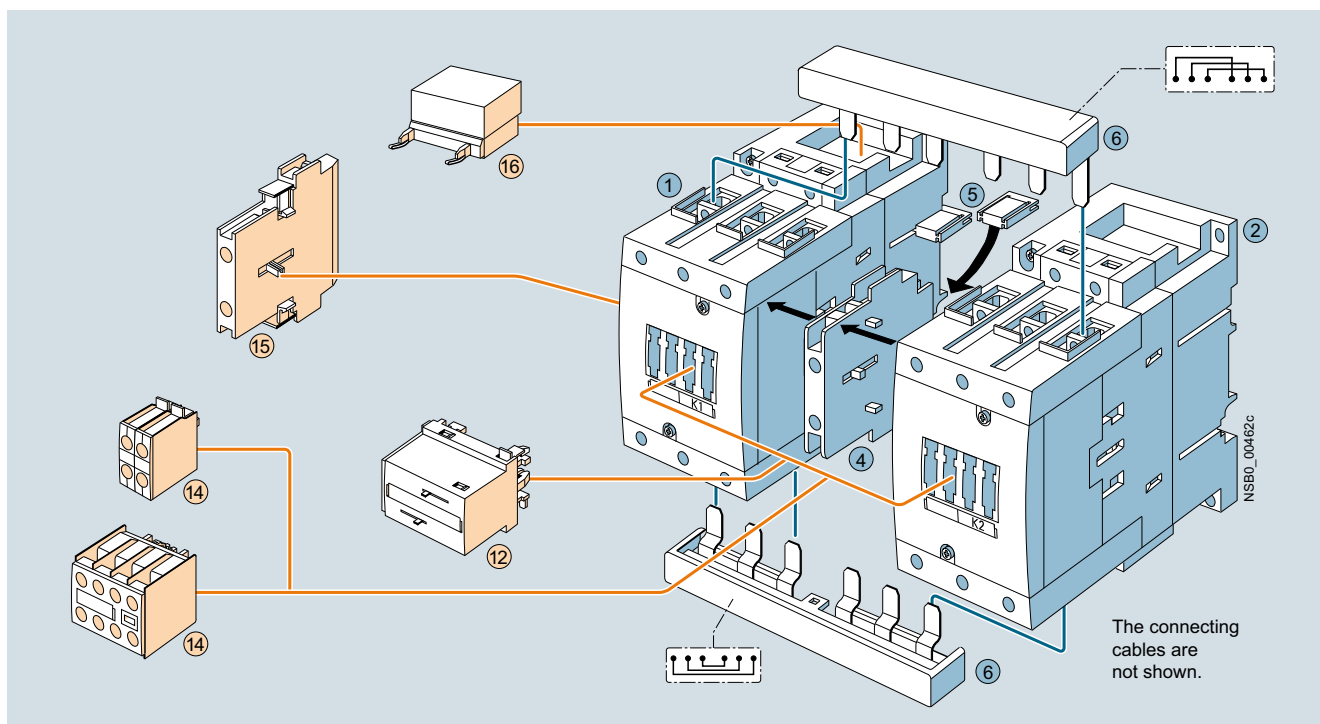
Fully wired and tested contactor assemblies · Size S3 · up to 45 kW

Rated data AC-2 and AC-3		Rated control supply voltage U_s ¹⁾			DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG	
Operational current I_e up to	Ratings of three-phase motors at 50 Hz and					Article No.	Price per PU			
500 V	230 V	400 V	500 V	690 V						
A	kW	kW	kW	kW	V					
AC operation at 50/60 Hz										
65	18.5	30	37	45	24 AC	B	3RA1344-8XB30-1AC2	1	1 unit	41B
					110 AC	B	3RA1344-8XB30-1AG2	1	1 unit	41B
					230 AC	B	3RA1344-8XB30-1AL2	1	1 unit	41B
80	22	37	45	55	24 AC	B	3RA1345-8XB30-1AC2	1	1 unit	41B
					110 AC	B	3RA1345-8XB30-1AG2	1	1 unit	41B
					230 AC	B	3RA1345-8XB30-1AL2	1	1 unit	41B
95	22	45	55	55	24 AC	B	3RA1346-8XB30-1AC2	1	1 unit	41B
					110 AC	B	3RA1346-8XB30-1AG2	1	1 unit	41B
					230 AC	B	3RA1346-8XB30-1AL2	1	1 unit	41B
DC operation										
65	18.5	30	37	45	24 DC	B	3RA1344-8XB30-1BB4	1	1 unit	41B
80	22	37	45	55	24 DC	B	3RA1345-8XB30-1BB4	1	1 unit	41B
95	22	45	55	55	24 DC	B	3RA1346-8XB30-1BB4	1	1 unit	41B



3RA1344-8XB30-1...

¹⁾ Coil operating range at 50 Hz: 0.8 to 1.1 x U_s ; at 60 Hz: 0.85 to 1.1 x U_s .



Mountable accessories (optional)		
To be ordered separately	Type	Page
12	Mech. interlock, front	3RA1924-1A 3/63
14	Auxiliary switch block, front	3RH1921-1CA.. 3/34
15	Auxiliary switch block, lateral	3RH1921-1EA.. 3/38
16	Surge suppressors	3RT1926-1.... 3/43 3RT1936-1....

Complete contactor assemblies				
Individual parts		Type Q1	Type Q2	Page
1 2	Contactors, 30 kW	3RT1044	3RT1044	3/17
1 2	Contactors, 37 kW	3RT1045	3RT1045	3/17
1 2	Contactors, 45 kW	3RT1046	3RT1046	3/17
4	Mech. interlock, lateral	3RA1924-2B		3/63
5 6	Assembly kit	3RA1943-2A		3/64

The assembly kit contains:





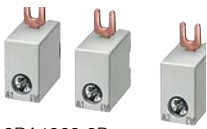
- 5 2 connecting clips for 2 contactors with 10 mm clearance
- 6 Wiring modules on the top and bottom for connecting the main current paths

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

Components for customer assembly

For contactors	Size	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Mechanical interlocks								
 <p>3RA1924-1A mounted onto 2 contactors</p>	3RT102	S0	Laterally mountable¹⁾ Each with one auxiliary contact (1 NC contact) per contactor (can only be used to connect contactors which are not more than 1 size larger or smaller. The mounting depth of the smaller contactor has to be adapted)	▶	3RA1924-2B	1	1 unit	41B
	3RT103	S2						
	3RT104	S3						
 <p>3RA1924-1A mounted onto 2 contactors</p>	3RT102	S0	Can be mounted onto the front²⁾ of contactor sizes S2 and S3 (for contactors of the same size) Note: Size S0: Wiring modules must be mounted first. Sizes S2 and S3: Use 3RA1932-2C mechanical connectors.	▶	3RA1924-1A	1	1 unit	41B
	3RT103	S2						
	3RT104	S3						
	3RT132							
	3RT152							
 <p>3RA1954-2A</p>	3RT1.5	S6	Laterally mountable, without auxiliary contacts; contactor sizes S6, S10 and S12 can be interlocked with each other as required; no adaptation of mounting depth is necessary Contactor clearance 10 mm.	▶	3RA1954-2A	1	1 unit	41B
	3RT1.6	S10						
	3RT1.7	S12						
 <p>3RA1954-2C</p>	3RT104.-A with	S3	Adapter, laterally mountable, for mechanical interlocking of contactor S3 (only for AC operation) with contactor S6 using 3RA1954-2A locking device (must be ordered separately) incl. connecting clips	A	3RA1954-2C	1	1 unit	41B
	3RT105	with S6						
Coil repeat terminals								
 <p>3RA1923-3B</p>	3RT103	S2, S3	For the coil terminals A1 and A2 for reversing starters (contactor sizes S2 and S3). 2 x A1 and 1 x A2 required per assembly. (1 set contains 10 x A1 and 5 x A2)	B	3RA1923-3B	1	1 unit	41B
	3RT104							
Base plates								
	3RT105	S6	For customer assembly of reversing contactor assemblies	B	3RA1952-2A	1	1 unit	41B
	3RT1.6	S10						
	3RT1.7	S12						

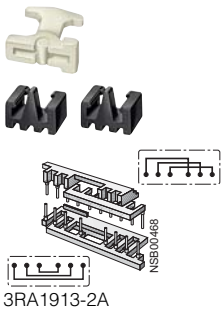
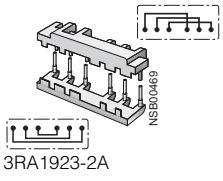
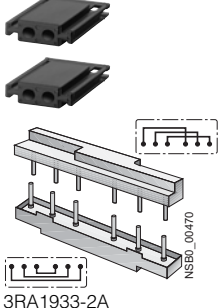
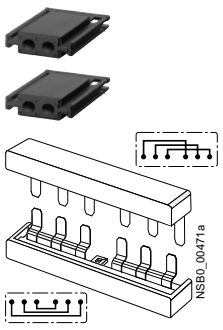
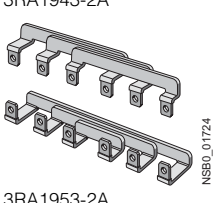
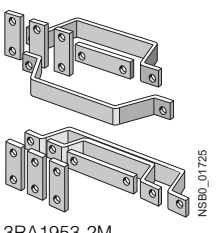
¹⁾ Can also be used for 4-pole contactors with sizes S2 and S3.

²⁾ Can also be used for size S0 4-pole contactors.

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

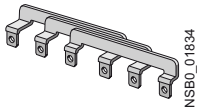
For contactors	Size	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Assembly kits for making 3-pole contactor assemblies								
 3RT101	S00	The assembly kit contains: mechanical interlock, 2 connecting clips for 2 contactors wiring modules on the top and bottom	▶	3RA1913-2A		1	1 unit	41B
 3RT102	S0	The assembly kit contains: wiring modules on the top and bottom	▶	3RA1923-2A		1	1 unit	41B
 3RT103	S2	The assembly kit contains: 2 connecting clips for 2 contactors wiring modules on the top and bottom	▶	3RA1933-2A		1	1 unit	41B
 3RT104	S3	The assembly kit contains: 2 connecting clips for 2 contactors wiring modules on the top and bottom	▶	3RA1943-2A		1	1 unit	41B
 3RT105	S6	The assembly kit contains: wiring modules on the top and bottom (for connection with box terminal)	A	3RA1953-2A		1	1 unit	41B
 3RT1.6	S6	The assembly kit contains: wiring modules on the top and bottom (for connection without box terminal)	A	3RA1953-2M		1	1 unit	41B
3RT1.7	S10		A	3RA1963-2A		1	1 unit	41B
	S12		A	3RA1973-2A		1	1 unit	41B

Contactors Assemblies

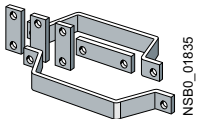
3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA13 reversing contactor assemblies

For contactors	Size	Contactors clearance	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type		mm							
Wiring modules, single									
3RT101	S00-S00	0	Top (in-phase)	A	3RA1913-3D		1	5 units	41B
			Bottom (with phase reversal)	▶	3RA1913-3E		1	5 units	41B
3RT102	S0-S0 and S0-S0	0 and 10	Top (in-phase)	▶	3RA1923-3D		1	5 units	41B
			Bottom (with phase reversal)	▶	3RA1923-3E		1	5 units	41B
3RT103	S2-S2	10	Top (in-phase)	▶	3RA1933-3D		1	1 unit	41B
			Bottom (with phase reversal)	▶	3RA1933-3E		1	1 unit	41B
3RT104	S3-S3	10	Top (in-phase)	▶	3RA1943-3D		1	1 unit	41B
			Bottom (with phase reversal)	▶	3RA1943-3E		1	1 unit	41B
3RT105	S6-S6	10	Top (in-phase, for connection with box terminal)	A	3RA1953-3D		1	1 unit	41B
			Top (with phase reversal, for connection without box terminal)	A	3RA1953-3P		1	1 unit	41B



3RA1953-3D



3RA1953-3P

For contactors	Size	Contactors clearance	Interlocking	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type		mm								
Mechanical connectors						1 pack = 20 units for 10 combinations				
3RT1.1 ¹⁾	S00-S00	0	Lateral	For 3- and 4-pole contactors	▶	3RA1912-2H		1	10 units	41B
3RT1.2	S0-S0	0 10 ²⁾	On front Lateral	For 3- and 4-pole contactors	A ▶	3RA1922-2C 3RT1922-2D		1 100	10 units 20 units	41B 41B
3RT1.3 3RT1.4	S2-S2 S3-S3	0	On front	For 3-pole contactors	▶	3RA1932-2C		1	10 units	41B
3RT1.3 3RT1.4 3RT1.5	S2-S2 S3-S3 S6-S6	10	Lateral	For 3-pole contactors	▶	3RA1932-2D		1	10 units	41B
3RT1.3	S2-S2	10	Lateral	For 4-pole contactors	A	3RA1932-2G		1	10 units	41B
3RT1.4	S3-S3	10	Lateral	For 4-pole contactors	B	3RA1942-2G		1	10 units	41B



3RA1912-2H



3RA1922-2C



3RA1932-2C



3RA1932-2D



3RA1932-2G



3RA1942-2G

¹⁾ This pack contains 10 additional interlocks.

²⁾ The connector function can be fulfilled with the wiring modules for size S0, a contactor clearance of 10 mm and a lateral interlock.

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

Overview

These 3RA14 contactor assemblies for star-delta (wye-delta) starting are designed for standard applications.

Note:

Contactor assemblies for star-delta (wye-delta) starting in special applications such as very heavy starting¹⁾ or star-delta (wye-delta) starting of special motors must be customized. Help with designing such special applications is available from Technical Assistance.

The 3RA14 contactor assemblies for wye-delta starting can be ordered as follows:

Sizes S00 to S3

- Fully wired and tested, with electrical interlock, reversing time up to 10 s (size S00 with electrical and mechanical interlocks)
- As individual parts for customer assembly

Sizes S6 to S12

- Only as individual parts for customer assembly

There is also a range of accessories (auxiliary switch blocks, surge suppressors, etc.) that must be ordered separately.

Overload relays for motor protection, see Chapter 7, "Protection Equipment" → "Overload Relays" → "SIRIUS 3RB2 Electronic Overload Relays".

The 3RA14 contactor assemblies have screw terminals. Sizes S00 to S3 are suitable for screw and snap-on mounting onto TH 35 standard mounting rails.

Complete units

Fully wired and tested 3RA14 contactor assemblies have one unassigned NO contact which is mounted onto the front of the Q3 delta contactor.

A solid-state time-delay auxiliary switch block is snapped onto the front of the complete contactor assemblies, size S00 up to 7.5 kW, while a timing relay is mounted onto the side of sizes S0 to S3, 11 kW to 75 kW. A dead interval of 50 ms on reversing is integrated into the time relay function.

- ¹⁾ For effective support from Technical Assistance, you must provide the following details:
- Rated motor voltage
 - Rated motor current
 - Service factor, operating values
 - Motor starting current factor
 - Starting time
 - Ambient temperature.

Rated data at 50 Hz 400 V AC			Size		Fully wired and tested contactor assemblies	
Rating P kW	Operational current I_e A	Motor current A	Line/delta contactor	Star contactor		
5.5	12	9.5 ... 13.8	S00-S00-S00	3RT1015	3RT1015	3RA1415-8XB31-1...
7.5	17	12.1 ... 17		3RT1017		3RA1416-8XB31-1...
11	25	19 ... 25	S0-S0-S0	3RT1024	3RT1024	3RA1423-8XC21-1...
15	32	24.1 ... 34		3RT1026		3RA1425-8XC21-1...
18.5	40	34.5 ... 40				
22	50	31 ... 43	S2-S2-S0	3RT1034	3RT1026	3RA1434-8XC21-1...
30	50	48.3 ... 65		3RT1034		
37	80	62.1 ... 77.8	S2-S2-S2		3RT1034	3RA1435-8XC21-1...
45	86	69 ... 86		3RT1036		3RA1436-8XC21-1...
55	115	77.6 ... 108.6	S3-S3-S2	3RT1044	3RT1035	3RA1444-8XC21-1...
75	150	120.7 ... 150		3RT1045	3RT1036	3RA1445-8XC21-1...
90	160	86 ... 160	S6-S6-S3	3RT1054	3RT1044	--
110	195	86 ... 195				
132	230	86 ... 230		3RT1055	3RT1045	
160	280	86 ... 280		3RT1056	3RT1046	
200	350	95 ... 350	S10-S10-S6	3RT1064	3RT1054	--
250	430	95 ... 430		3RT1065	3RT1055	
315	540	277 ... 540	S12-S12-S10	3RT1075	3RT1064	--
355	610	277 ... 610				
400	690	277 ... 690			3RT1065	
500	850	277 ... 850		3RT1076	3RT1066	

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

Components for customer assembly

Assembly kits with wiring modules and, if necessary, mechanical connectors are available for contactor assemblies for wye-delta starting. Contactors, overload relays, wye-delta timing relays, auxiliary switches for electrical interlock – if required also feeder terminals, mechanical interlocks and base plates – must be ordered separately (exception: in the case of the assembly kit for size S00 contactor assemblies, the mechanical interlock between the delta contactor and the star contactor is included in the kit).

The wiring kits for sizes S00 and S0 contain the top and bottom main conducting path connections between the line and delta contactors (top) and between the delta and star contactors (bottom).

In the case of sizes S2 to S12 only the bottom main conducting path connection between the delta and star contactors is included in the wiring module, owing to the larger conductor cross-section at the infeed.

Motor protection

Overload relays or thermistor motor protection releases can be used for overload protection.

The overload relay can be either mounted onto the Q1 line contactor or fitted separately. It must be set to 0.58 times the rated motor current.

Note:

The selection of contactor types refers to fused designs.

See also the configuration manual "SIRIUS Configuration":

<https://support.industry.siemens.com/cs/ww/en/view/40625241>

Surge suppression

Sizes S00 to S3

All contactor assemblies can be fitted with RC elements, varistors or diode assemblies for damping opening surges in the coil. As with the individual contactors, the surge suppressors can either be plugged onto the top of the contactors (S00) or fitted onto the coil terminals on the top or bottom (S0 to S3).

Sizes S6 to S12

The contactors are fitted with varistors as standard.

Rating P kW	Accessories for customer assembly					Overload relay, thermal (CLASS 10 trip class)		Overload relay, electronic (CLASS 10 trip class)	
	Timing relays	Assembly kit A, for double infeed	Assembly kit B, for single infeed	Star jumper	Base plates	Setting range A	Type	Setting range A	Type
5.5	3RT1916-2G.51	--	3RA1913-2B ¹⁾	--	--	5.5 ... 8	3RU1116-1HB0	3 ... 12	3RB2016-1SB0
7.5	3RP1574-1N.30	--	--	--	--	7 ... 10	3RU1116-1JB0	--	--
11	3RP1574-1N.30	--	3RA1923-2B ²⁾	--	--	11 ... 16	3RU1126-4AB0	6 ... 25	3RB2026-1QB0
15	--	--	--	--	--	14 ... 20	3RU1126-4BB0	--	--
18.5	--	--	--	--	--	20 ... 25	3RU1126-4DB0	--	--
22	3RP1574-1N.30	3RA1933-2C ³⁾	3RV1935-1A	3RT1926-4BA31	3RA1932-2E	18 ... 25	3RU1136-4DB0	12.5 ... 50	3RB2036-1UB0
30	--	--	--	--	--	28 ... 40	3RU1136-4FB0	--	--
37	3RP1574-1N.30	3RA1933-2B ³⁾	3RV1935-1A	3RT1936-4BA31	3RA1932-2F	36 ... 45	3RU1136-4GB0	12.5 ... 50	3RB2036-1UB0
45	--	--	--	--	--	40 ... 50	3RU1136-4HB0	--	--
55	3RP1574-1N.30	3RA1943-2C ³⁾	--	3RT1936-4BA31	3RA1942-2E	45 ... 63	3RU1146-4JB0	25 ... 100	3RB2046-1EB0
75	--	--	--	--	--	70 ... 90	3RU1146-4LB0	--	--
90	3RP1574-1N.30	--	3RA1953-3D ⁴⁾	3RT1946-4BA31	3RA1952-2E	--	--	50 ... 200	3RB2056-1FC2
110	--	--	--	--	--	--	--	--	--
132	--	--	--	--	--	--	--	--	--
160	--	--	--	--	--	--	--	--	--
200	3RP1574-1N.30	--	--	3RT1956-4BA31	3RA1962-2E	--	--	55 ... 250	3RB2066-1GC2
250	--	--	--	--	--	--	--	160 ... 630	3RB2066-1MC2
315	3RP1574-1N.30	--	--	3RT1966-4BA31	3RA1972-2E	--	--	160 ... 630	3RB2066-1MC2
355	--	--	--	--	--	--	--	--	--
400	--	--	--	--	--	--	--	--	--
500	--	--	--	--	--	--	--	--	--

¹⁾ Assembly kit contains mechanical interlock; 3 connecting clips; wiring modules on the top (connection between line and delta contactor) and on the bottom (connection between delta and star contactor); star jumper.

²⁾ Assembly kit contains 5 connecting clips; wiring modules on the top (connection between line and delta contactor) and on the bottom (connection between delta and star contactor); star jumper.

³⁾ Assembly kit contains wiring module on the bottom (connection between delta and star contactor) and star jumper.

⁴⁾ Wiring module on top from reversing contactor assembly (note conductor cross-sections).

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

Selection and ordering data

Fully wired and tested contactor assemblies · Size S00-S00-S00 · Up to 7.5 kW

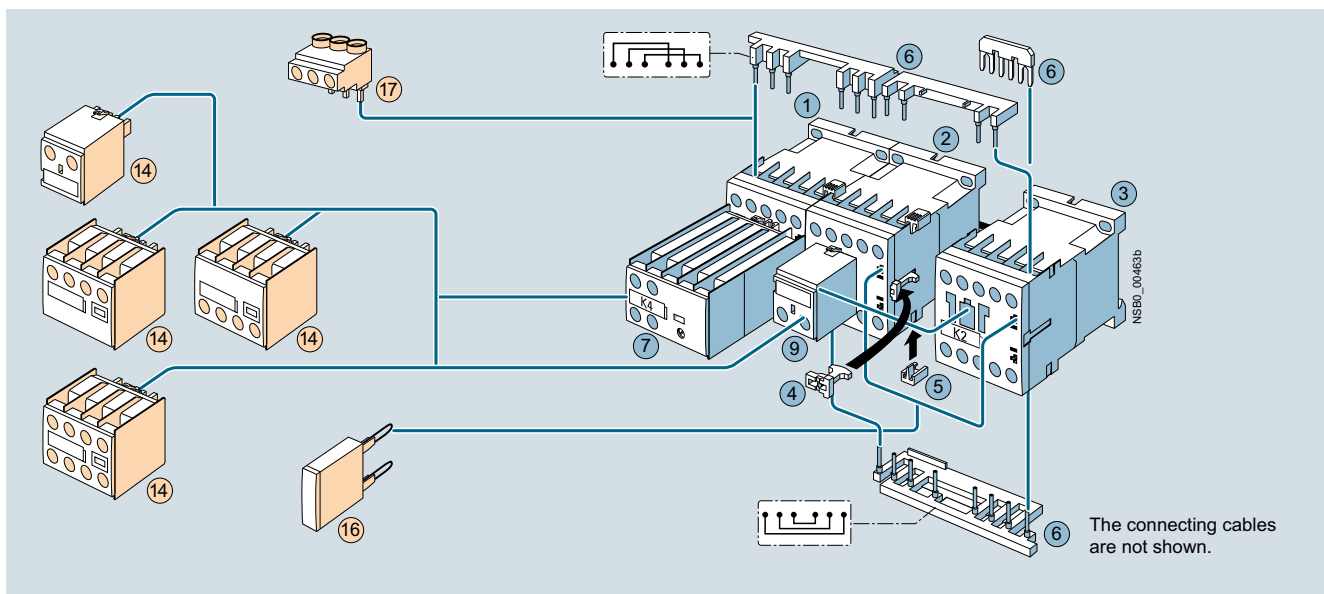
3



3RA141.-8XB31-1...

Rated data AC-3		Rated control supply voltage U_s ¹⁾		DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of three-phase motors at 50 Hz and	400 V	500 V	230 V	690 V	Article No.	Price per PU	
A	kW	kW	kW	kW	V			
AC operation, 50/60 Hz								
12	3.3	5.5	7.2	9.2	230 AC	B	3RA1415-8XB31-1AP0	1 1 unit 41B
17	4.7	7.5	10.3	9.2	24 AC	B	3RA1416-8XB31-1AB0	1 1 unit 41B
					230 AC	D	3RA1416-8XB31-1AP0	1 1 unit 41B
DC operation								
12	3.3	5.5	7.2	9.2	24 DC	B	3RA1415-8XB31-1BB4	1 1 unit 41B
17	4.7	7.5	10.3	9.2	24 DC	B	3RA1416-8XB31-1BB4	1 1 unit 41B

1) Coil operating range at 50 Hz: 0.8 to 1.1 x U_s ; at 60 Hz: 0.85 to 1.1 x U_s .



Mountable accessories (optional)

Accessories	Type	Page
14 Auxiliary switch block, front	3RH1911-1...	3/34
16 Surge suppressors	3RT1916-1...	3/42
17 Three-phase infeed terminal	3RA1913-3K	3/73

Complete contactor assemblies

Individual parts	Type			Page
	Q1 ¹⁾	Q3 ²⁾	Q2 ²⁾	
1 2 3 Contactor, 5.5 kW	3RT1015	3RT1015	3RT1015	3/14
1 2 3 Contactor, 7.5 kW	3RT1017	3RT1017	3RT1015	3/14
7 Solid-state time-delay auxiliary switch block front	3RT1916-2G.51			3/40
9 Auxiliary switch block with 1 unassigned NO contact	3RH1911-1BA10			3/34
4 5 6 Assembly kit	3RA1913-2B			3/73

The assembly kit contains:

- 4 Mechanical interlock
- 5 3 connecting clips
- 6 Wiring modules on the top and bottom for connecting the main and control conducting paths

1) Use version with 1 NO.
2) Use version with 1 NC.

Contactor Assemblies 3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

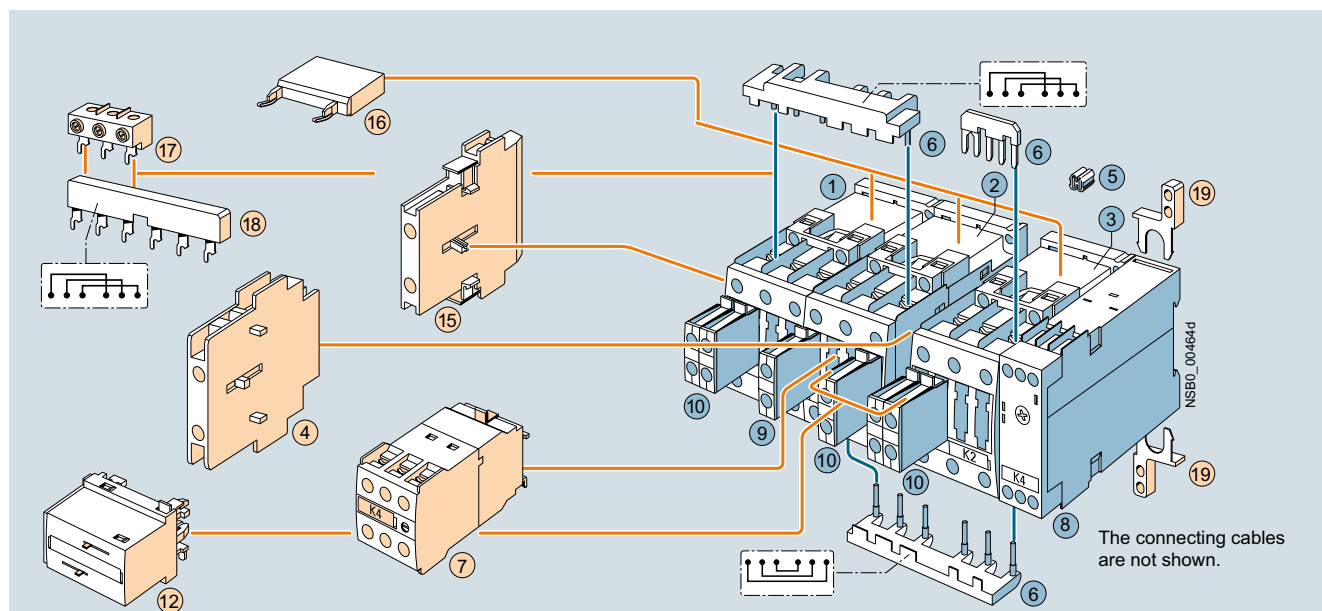
Fully wired and tested contactor assemblies · Size S0-S0-S0 · Up to 18.5 kW



3RA142.-8XC21-1...

Rated data AC-3						Rated control supply voltage U_s ¹⁾	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of three-phase motors at 50 Hz and											
400 V	230 V	400 V	500 V	690 V								
A	kW	kW	kW	kW	V							
AC operation, 50/60 Hz												
25	7.1	11	15.6	19	24 AC	B	3RA1423-8XC21-1AC2			1	1 unit	41B
					110 AC	B	3RA1423-8XC21-1AG2			1	1 unit	41B
					230 AC	C	3RA1423-8XC21-1AL2			1	1 unit	41B
32 / 40	11.4	15 / 18.5	19	19	24 AC	A	3RA1425-8XC21-1AC2			1	1 unit	41B
					110 AC	A	3RA1425-8XC21-1AG2			1	1 unit	41B
					230 AC	▶	3RA1425-8XC21-1AL2			1	1 unit	41B
DC operation												
25	7.1	11	15.6	19	24 DC	▶	3RA1423-8XC21-1BB4			1	1 unit	41B
32 / 40	11.4	15 / 18.5	19	19	24 DC	A	3RA1425-8XC21-1BB4			1	1 unit	41B

¹⁾ Coil operating range at 50 Hz: 0.8 to 1.1 x U_s ; at 60 Hz: 0.85 to 1.1 x U_s .



The connecting cables are not shown.

Mountable accessories (optional)

Accessories	Type	Page
4 Mech. interlock, lateral	3RA1924-2B	3/63
7 Solid-state time-delay auxiliary switch block, front ¹⁾	3RT1926-2G...	3/40
12 Mech. interlock, front	3RA1924-1A	3/63
15 Auxiliary switch block, lateral	3RH1921-1EA..	3/38
16 Surge suppressors	3RT1926-1....	3/42
17 Three-phase infeed terminal ²⁾	3RV1915-5A	3/73
18 Three-phase busbar ²⁾	3RT1926-4CC20	3/73
19 Push-in lug ³⁾ for timing relay screw mounting	3RP1903	4)

Complete contactor assemblies

Individual parts	Type			Page
	Q1	Q3	Q2	
1 2 3 Contactor, 11 kW	3RT1024	3RT1024	3RT1024	3/15
1 2 3 Contactor, 15/18.5 kW	3RT1026	3RT1026	3RT1024	3/15
8 Timing relay, lateral	3RP1574-1N.30			4)
9 Auxiliary switch block with 1 unassigned NO contact	3RH1921-1CA10			3/37
10 Auxiliary switch block for local control				
2 units	3RH1921-1CA01			3/37
3 units	3RH1921-1CA10			
5 6 Assembly kit	3RA1923-2B			3/73

The assembly kit contains:

- 5 Connecting clips
- 6 Wiring modules on the top and bottom for connecting the main and control conducting paths

¹⁾ Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of Q3, an auxiliary switch block can only be mounted onto the side.

²⁾ 17 and 18 can only be mounted together with contactors with screw terminals (coil).

³⁾ Not included in the scope of supply of the preassembled contactor assemblies; can be ordered as an accessory.

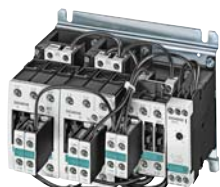
⁴⁾ See Industry Mall under "Monitoring and Control Devices" → "Relays" → "Timing relays" → "SIRIUS 3RP15 timing relays 22.5 mm".

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

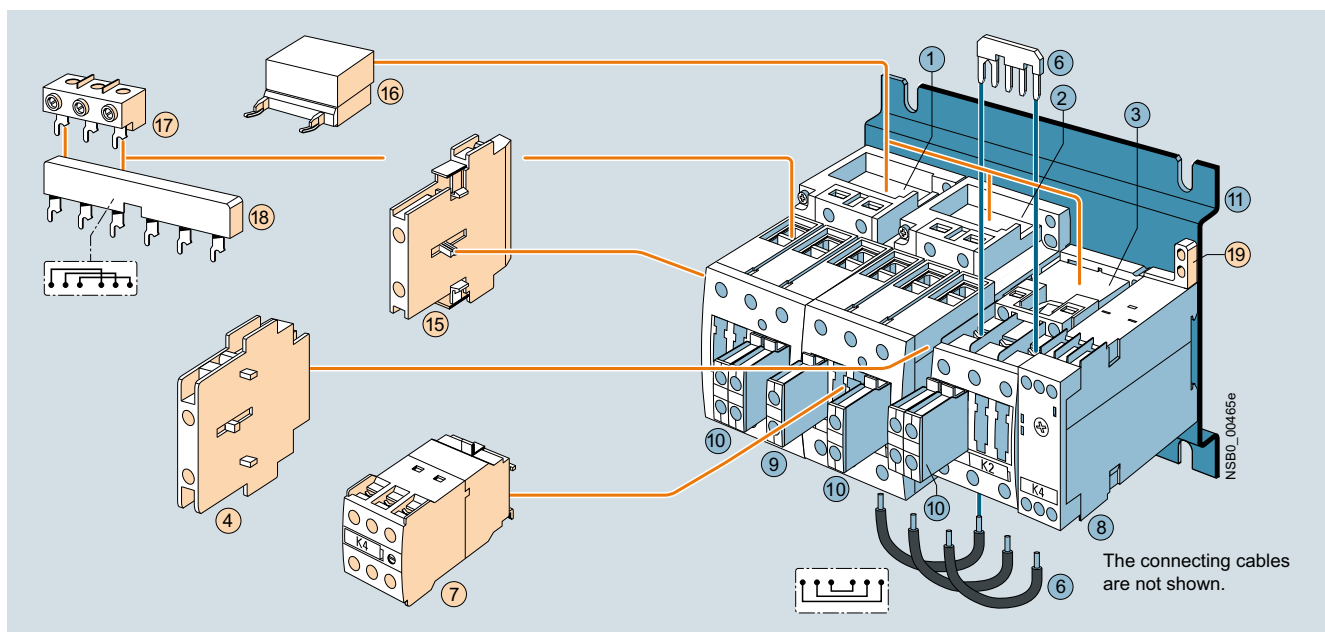
Fully wired and tested contactor assemblies · Size S2-S2-S0 · up to 30 kW



3RA1434-8XC21-1...

1) Coil operating range at 50 Hz: 0.8 to 1.1 x U_s; at 60 Hz: 0.85 to 1.1 x U_s.

Rated data AC-3		Ratings of three-phase motors at 50 Hz and				Rated control supply voltage U _s ¹⁾	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Operational current I _e up to	400 V	230 V	400 V	500 V	690 V			Article No.	Price per PU		
A	kW	kW	kW	kW	kW	V					
AC operation, 50/60 Hz											
50 / 65	19.6	22 / 30	35	34	24 AC	A	3RA1434-8XC21-1AC2	1	1 unit	41B	
					110 AC	A	3RA1434-8XC21-1AG2	1	1 unit	41B	
					230 AC	▶	3RA1434-8XC21-1AL2	1	1 unit	41B	
DC operation											
50 / 65	19.6	22 / 30	35	34	24 DC	▶	3RA1434-8XC21-1BB4	1	1 unit	41B	



Mountable accessories (optional)

To be ordered separately	Type	Page
4 Mech. interlock, lateral Depth compensation required Q3: 1.5 mm; Q2: 0 mm ¹⁾	3RA1924-2B	3/63
7 Solid-state time-delay auxiliary switch block, front ²⁾	3RT1926-2G...	3/40
15 Auxiliary switch block, lateral	3RH1921-1EA..	3/38
16 Surge suppressors	3RT1926-1.... 3RT1936-1....	3/42, 3/43
17 Three-phase infeed terminal ³⁾	3RV1935-5A	3/73
18 Three-phase busbar	3RV1935-1A	3/73
19 Push-in lug for timing relay screw mounting	3RP1903	4)

Complete contactor assemblies

Individual parts	Type	Q1	Q3	Q2	Page
1 2 3 Contactor, 22/30 kW	3RT1034	3RT1034	3RT1026	3/15	
8 Timing relay, lateral	3RP1574-1N.30			4)	
9 Auxiliary switch block with 1 unassigned NO contact	3RH1921-1CA10			3/37	
10 Auxiliary switch block for local control					
2 units	3RH1921-1CA01			3/37	
3 units	3RH1921-1CA10			3/37	
11 Base plate	3RA1932-2E			3/73	
6 Assembly kit	3RA1933-2C			3/73	

The assembly kit contains the star jumper on the top and the wiring module on the bottom for connecting the main current paths.

1) Use the 3RA1932-2B base plate for this design.
 2) Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of Q3, an auxiliary switch block can only be mounted onto the side.
 3) The 3-phase infeed terminal 17 can only be mounted with contactors with screw terminal.
 4) See Industry Mall under "Monitoring and Control Devices" → "Relays" → "Timing relays" → "SIRIUS 3RP15 timing relays 22.5 mm".

Contactors Assemblies 3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

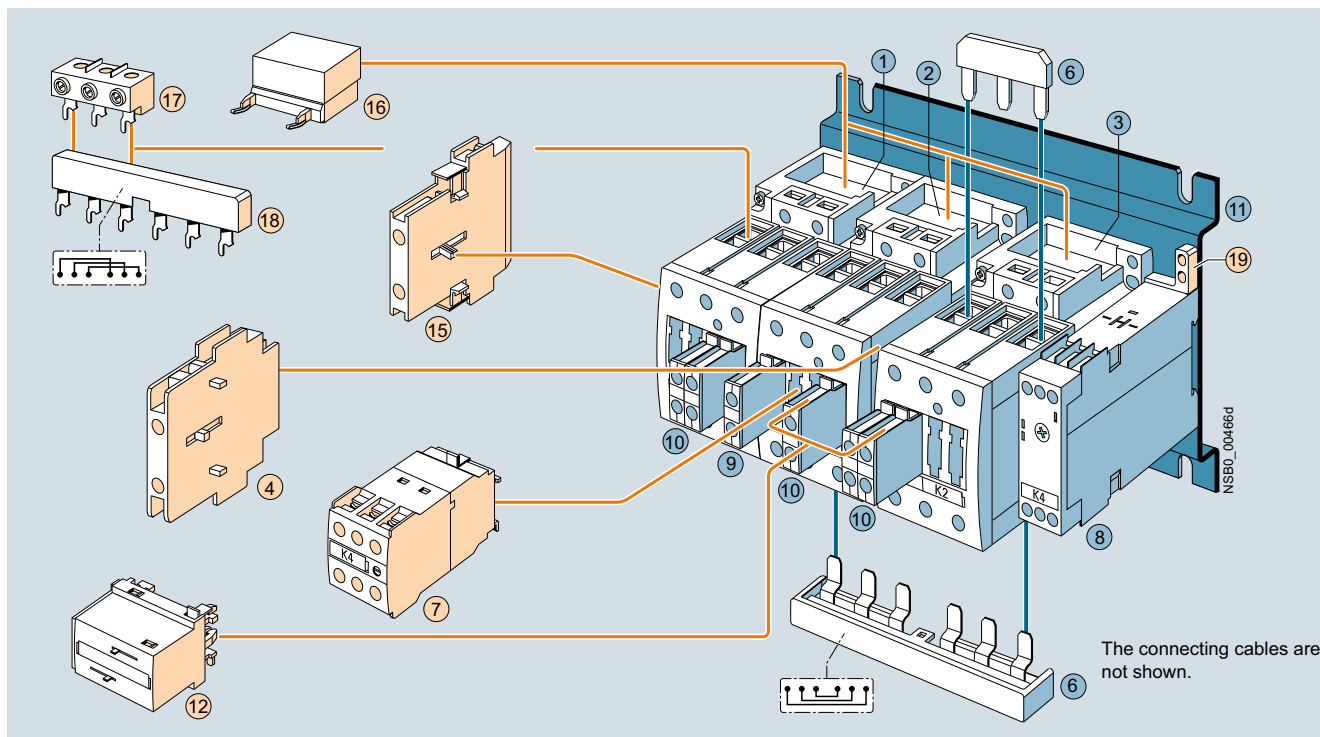
Fully wired and tested contactor assemblies · Size S2-S2-S2 · up to 45 kW



3RA143...-8XC21-1...

Rated data AC-3					Rated control supply voltage U_s ¹⁾	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	Ratings of three-phase motors at 50 Hz and						Article No.	Price per PU			
400 V	230 V	400 V	500 V	690 V							
A	kW	kW	kW	kW	V						
AC operation, 50/60 Hz											
80	25	37	51	63	24 AC	A	3RA1435-8XC21-1AC2		1	1 unit	41B
					110 AC	A	3RA1435-8XC21-1AG2		1	1 unit	41B
					230 AC	A	3RA1435-8XC21-1AL2		1	1 unit	41B
86	27	45	55	63	24 AC	A	3RA1436-8XC21-1AC2		1	1 unit	41B
					110 AC	A	3RA1436-8XC21-1AG2		1	1 unit	41B
					230 AC	A	3RA1436-8XC21-1AL2		1	1 unit	41B
DC operation											
80	25	37	51	63	24 DC	A	3RA1435-8XC21-1BB4		1	1 unit	41B
86	27	45	55	63	24 DC	A	3RA1436-8XC21-1BB4		1	1 unit	41B

¹⁾ Coil operating range at 50 Hz: 0.8 to 1.1 x U_s ; at 60 Hz: 0.85 to 1.1 x U_s .



Mountable accessories (optional)

To be ordered separately	Article No.	Page
4 Mech. interlock, lateral	3RA1924-2B	3/63
7 Solid-state time-delay auxiliary switch block, front ¹⁾	3RT1926-2G...	3/40
12 Mech. interlock, front	3RA1924-1A	3/63
15 Auxiliary switch block, lateral	3RH1921-1EA..	3/38
16 Surge suppressors	3RT1926-1....	3/42,
Three-phase infeed terminal	3RT1936-1....	3/43
17 Three-phase busbar	3RV1935-5A	3/73
18 Push-in lug for timing relay	3RV1935-1A	3/73
19 screw mounting	3RP1903	2)

Complete contactor assemblies

Individual parts	Article No.	Q1	Q3	Q2	Page
1 2 3 Contactor, 37 kW	3RT1035	3RT1035	3RT1034		3/16
1 2 3 Contactor, 45 kW	3RT1036	3RT1036	3RT1034		3/16
8 Timing relay, lateral	3RP1574-1N..30				2)
9 Auxiliary switch block with 1 unassigned NO contact	3RH1921-1CA10				3/37
10 Auxiliary switch block for local control					
2 units	3RH1921-1CA01				3/37
3 units	3RH1921-1CA10				3/37
11 Base plate	3RA1932-2F				3/73
6 Assembly kit	3RA1933-2B				3/73

The assembly kit contains the star jumper on the top and the wiring module on the bottom for connecting the main current paths.

¹⁾ Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of Q3, an auxiliary switch block can only be mounted onto the side.

²⁾ See Industry Mall under "Monitoring and Control Devices" → "Relays" → "Timing relays" → "SIRIUS 3RP15 timing relays 22.5 mm".

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

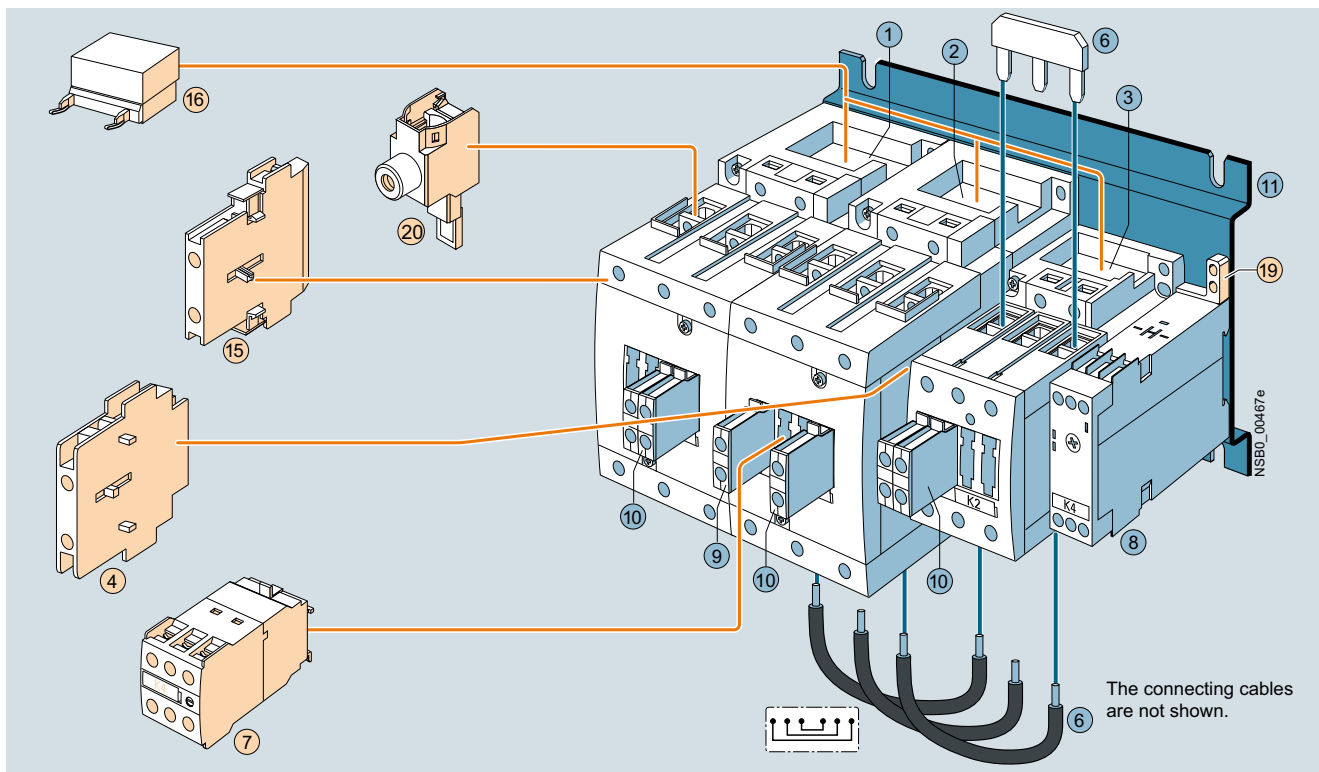
Fully wired and tested contactor assemblies · Size S3-S3-S2 · Up to 75 kW



3RA144.-8XC21-1...

Rated data AC-3		Ratings of three-phase motors at 50 Hz and				Rated control supply voltage U_s ¹⁾	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Operational current I_e up to	400 V	230 V	400 V	500 V	690 V						
A	kW	kW	kW	kW	kW	V		Article No.	Price per PU		
AC operation, 50/60 Hz											
115	37	55	81	93	24 AC	B		3RA1444-8XC21-1AC2	1	1 unit	41B
					110 AC	B		3RA1444-8XC21-1AG2	1	1 unit	41B
					230 AC	B		3RA1444-8XC21-1AL2	1	1 unit	41B
150	47	75	103	110	24 AC	B		3RA1445-8XC21-1AC2	1	1 unit	41B
					110 AC	B		3RA1445-8XC21-1AG2	1	1 unit	41B
					230 AC	B		3RA1445-8XC21-1AL2	1	1 unit	41B
DC operation											
115	37	55	81	93	24 DC	B		3RA1444-8XC21-1BB4	1	1 unit	41B
150	47	75	103	110	24 DC	B		3RA1445-8XC21-1BB4	1	1 unit	41B

1) Coil operating range at 50 Hz: 0.8 to 1.1 x U_s ; at 60 Hz: 0.85 to 1.1 x U_s .



Mountable accessories (optional)

To be ordered separately	Type	Page
4 Mech. interlock, lateral, depth compensation required Q3: 0 mm; Q2: 27.5 mm ¹⁾	3RA1924-2B	3/63
7 Solid-state time-delay auxiliary switch block, front ²⁾	3RT1926-2G...	3/40
15 Auxiliary switch block, lateral	3RH1921-1EA...	3/38
16 Surge suppressors	3RT19.6-1...	3/43
19 Push-in lug for timing relay screw mounting	3RP1903	3)
20 Single-phase infeed terminal	3RA1943-3L	3/73

Complete contactor assemblies

Individual parts	Type			Page
	Q1	Q3	Q2	
1 2 3 Contactor, 55 kW	3RT1044	3RT1044	3RT1035	3/16
1 2 3 Contactor, 75 kW	3RT1045	3RT1045	3RT1036	3/16
8 Timing relay, lateral	3RP1574-1N.30			3)
9 Auxiliary switch block with 1 unassigned NO contact	3RH1921-1CA10			3/37
10 Auxiliary switch block for local control				
2 units	3RH1921-1CA01			3/37
3 units	3RH1921-1CA10			3/37
11 Base plate	3RA1942-2E			3/73
6 Assembly kit	3RA1943-2C			3/73

The assembly kit contains the star jumper on the top and the wiring module on the bottom for connecting the main current paths.

1) Use the 3RA1942-2B base plate for this design.

2) Generally possible. If a solid-state time-delay auxiliary switch block is mounted onto the front of Q3, an auxiliary switch block can only be mounted onto the side.

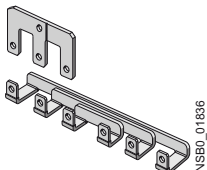
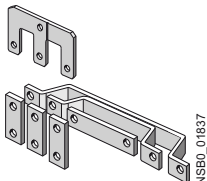

3) See Industry Mall under "Monitoring and Control Devices" → "Relays" → "Timing relays" → "SIRIUS 3RP15 timing relays 22.5 mm".

Contactors Assemblies

3RA13, 3RA14 Contactor Assemblies

SIRIUS 3RA14 contactor assemblies for star-delta (wye-delta) starting

Components for customer assembly

Version	Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Assembly kits							
The assembly kit contains: mechanical interlock, 3 connecting clips, star jumper, wiring modules on the top and bottom	S00-S00-S00	A	3RA1913-2B		1	1 unit	41B
The assembly kit contains: 5 connecting clips, star jumper, wiring modules on the top and bottom	S0-S0-S0	▶	3RA1923-2B		1	1 unit	41B
The assembly kit contains: star jumper, wiring module, bottom (Wiring module on the top is not included in the scope of supply.) (A double infeed between the line contactor and the delta contactor is recommended.)	S2-S2-S0	▶	3RA1933-2C		1	1 unit	41B
	S2-S2-S2	▶	3RA1933-2B		1	1 unit	41B
	S3-S3-S2	▶	3RA1943-2C		1	1 unit	41B
	S3-S3-S3	▶	3RA1943-2B		1	1 unit	41B
	S6-S6-S6	A	3RA1953-2B		1	1 unit	41B
	S6-S6-S6	A	3RA1953-2N		1	1 unit	41B
	S10-S10-S10	A	3RA1963-2B		1	1 unit	41B
S12-S12-S12	B	3RA1973-2B		1	1 unit	41B	
 NSBU_01636 3RA1953-2B							
 NSBU_01637 3RA1953-2N, 3RA1963-2B, 3RA1973-2B							
Single-phase infeed terminal							
Conductor cross-section: 95 mm ²	S3	A	3RA1943-3L		1	1 unit	41B
Three-phase infeed terminal							
Infeed terminal blocks for the line contactor for large conductor cross-sections							
Conductor cross-section: 6 mm ²	S00	▶	3RA1913-3K		1	1 unit	41B
Conductor cross-section: 25 mm ²	S00	▶	3RV1915-5A		1	1 unit	41E
Conductor cross-section: 25 mm ²	S0	▶	3RV1925-5AB		1	1 unit	41E
Conductor cross-section: 50 mm ²	S2	▶	3RV1935-5A		1	1 unit	41E
Three-phase busbar							
Bridging phase-by-phase of all input terminals of the line contactor (Q1) and delta contactor (Q3)	S0 S2	D ▶	3RT1926-4CC20 3RV1935-1A		1 1	1 unit 1 unit	41B 41E
Links for paralleling, 3-pole (star jumpers)							
 3RT1936-4BA31	Without terminal	S00	▶	3RT1916-4BA31	1	1 unit	41B
	(The links for paralleling can be reduced by one pole)	S0	▶	3RT1926-4BA31	1	1 unit	41B
		S2	▶	3RT1936-4BA31	1	1 unit	41B
		S3	▶	3RT1946-4BA31	1	1 unit	41B
		S6¹⁾	▶	3RT1956-4BA31	1	1 unit	41B
		S10, S12¹⁾	▶	3RT1966-4BA31	1	1 unit	41B
Base plates							
For customer assembly of contactor assemblies for star-delta (wye-delta) starting with timing relay mounted on the side							
Side-by-side mounting	S2, S2, S0	B	3RA1932-2E		1	1 unit	41B
10 mm clearance between Q3 and Q2	S2, S2, S2	B	3RA1932-2F		1	1 unit	41B
Side-by-side mounting	S3, S3, S2	B	3RA1942-2E		1	1 unit	41B
10 mm clearance between Q1, Q3 and Q2	S6, S6, S3	B	3RA1952-2E		1	1 unit	41B
	S6, S6, S6	B	3RA1952-2F		1	1 unit	41B
	S10, S10, S6	B	3RA1962-2E		1	1 unit	41B
	S10, S10, S10	B	3RA1962-2F		1	1 unit	41B
	S12, S12, S10	B	3RA1972-2E		1	1 unit	41B
S12, S12, S12	B	3RA1972-2F		1	1 unit	41B	
For customer assembly of contactor assemblies for star-delta (wye-delta) starting with a front-mounted timing relay							
10 mm clearance between Q1, Q3 and Q2	S2, S2, S0	B	3RA1932-2B		1	1 unit	41B
	S2, S2, S2	B	3RA1932-2B		1	1 unit	41B
	S3, S3, S2	B	3RA1942-2B		1	1 unit	41B

¹⁾ The 3RT1956-4EA1 (for S6) or 3RT1966-4EA1 (for S10 and S12) cover can be used for touch protection.

Contactor Assemblies

3RA13, 3RA14 Contactor Assemblies

Notes

**NEW**

Click on the Article No. in the catalog PDF to access it in the Industry Mall and get all related information.

Article-No.

3RA1943-2C
3RA1943-2B
3RA1953-2B
3RA1953-2N



Or directly in the Internet, e. g.
[www.siemens.com/
product?3RA1943-2C](http://www.siemens.com/product?3RA1943-2C)

Price groups

PG 41B

4/2

Introduction**Contactors for special applications**

- 4/4 SIRIUS 3RT14 contactors for resistive loads (AC-1), 3-pole, 140 ... 690 A
- 4/6 SIRIUS 3RT13 contactors for resistive loads (AC-1), 4-pole, 4 NO, 18 ... 140 A
- 4/8 SIRIUS 3RT15 contactors, 4-pole, 2 NO + 2 NC, 4 ... 18.5 kW
- 4/10 SIRIUS 3RT16 capacitor contactors, 12.5 ... 50 kvar
Contactors with extended operating range $0.7 \dots 1.25 \times U_S$ for railway applications
- 4/13 SIRIUS 3RT10 motor contactors, 5.5 ... 45 kW
- Ch. 5 SIRIUS 3RH11 contactor relays

Coupling contactors

- Ch. 3 SIRIUS 3RT10 coupling contactors (interface), 3-pole, 3 ... 11 kW
- Ch. 5 SIRIUS 3RH11 coupling contactors for switching auxiliary circuits, 4-pole

Switching Devices – Contactors and Contactor Assemblies

Introduction

Overview

Size
Type**S00**
3RT131, 3RT151**S0**
3RT132, 3RT152**4-pole 3RT13, 3RT15 contactors**

Type		3RT1316	3RT1317	3RT1516	3RT1517	3RT1325	3RT1326	3RT1526
Number of main contacts		4 NO		2 NO + 2 NC		4 NO		2 NO + 2 NC
AC, DC operation		(p. 4/6, 4/7)		(p. 4/9)		(p. 4/6, 4/7)		(p. 4/9)
AC-1								
I_e at 400 V	A	18 / 16	22 / 20	18 / 16	22 / 20	35 / 30	40 / 35	40 / 35
40 °C	kW	12	14.5	11	13	22	26	26
60 °C	kW	11	13	6.5	7.5	20	23	15
AC-2 and AC-3								
I_e at 400 V	A	9	12	9	12	17	25	25
400 V	kW	4	5.5	4	5.5	7.5	11	11
230 V	kW	3	3	3	3	4	5.5	5.5

Accessories for contactors

Auxiliary switch blocks	On front	3RH1911	(Chap. 3)	3RH1921	(Chap. 3)
	Lateral	3RH1911	(Chap. 3)	3RH1921	(Chap. 3)
Timing relay blocks		3RT1916	(Chap. 3)	3RT1926	(Chap. 3)
Surge suppressors		3RT1916	(Chap. 3)	3RT1926	(Chap. 3)

Size
Type**S2**
3RT1336, 3RT1535**S3**
3RT134.**S6, S10, S12**
3RT145.**4-pole 3RT13, 3RT15 contactors • 3-pole 3RT14 contactors**

Type		3RT1336	3RT1535	3RT1344	3RT1346	3RT1446	3RT1456	3RT1466	3RT1476		
Number of main contacts		4 NO	2 NO + 2 NC	4 NO		3 NO	3 NO				
AC, DC operation		(p. 4/6, 4/7)	(p. 4/9)	(p. 4/6, 4/7)		(p. 4/4)	(p. 4/4)				
AC-1 (≤ 690 V)											
I_e	40 °C	A	60	60	110	140	140	275	400	690	
	60 °C	A	55	55	100	120	130	250	380	650	
400 V	40 °C	kW	39	36	72	92	92	180	263	454	
	230 V	40 °C	kW	23	20	42	53	53	105	151	261
	500 V		kW	--	--	--	--	115	225	329	568
	690 V	60 °C	kW	--	--	--	--	159	310	454	783
	1000 V		kW	--	--	--	--	98	165	247	410
AC-2 and AC-3											
I_e /AC-3/400 V	A					44	97	138	170		
400 V	kW	11	18.5			22	55	75	90		
230 V	kW	5.5	9.5	--	--	12.7	30	37	55		
500 V	kW	--	--	--	--	29.9	55	90	110		
690 V	kW	--	--	--	--	38.2	90	132	160		

Accessories for contactors

Auxiliary switch blocks	On front	3RH1921	(Chap. 3)				
	Lateral	3RH1921	(Chap. 3)				
Terminal covers		3RT1936-4EA4	(Chap. 3)	3RT1946-4EA4	(Chap. 3)	3RT1956-4EA1/2/3	(Chap. 3)
Box terminal blocks		--		--		3RT1955/56/66-4G	(Chap. 3)
Surge suppressors		3RT1926/36	(Chap. 3)			3RT1956-1C (RC element)	(Chap. 3)

Note:

Safety characteristics for contactors, see Chapter 16, "Appendix" → "Standards and Approvals" → "Overview"

Connection methods

The contactors are available with screw terminals (box terminals or flat connectors) or with spring-type terminals.



Screw terminals



Spring-type terminals

The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Application**Use of 3RT1 contactors with IE3 motors**Note:

3RT1 power contactors in sizes S00 to S2 are not specially optimized for use with IE3 motors. In this case, use 3RT2 series power contactors, see Catalog IC 10 · 2016.

For the use of size S3 to S12 power contactors in conjunction with highly energy-efficient IE3 motors, please observe the information on dimensioning and configuring, see configuration manual "SIRIUS Industrial Controls with IE3 Motors", <https://support.industry.siemens.com/cs/ww/en/view/94770820>.

Contactors for Special Applications

SIRIUS 3RT14 contactors for resistive loads (AC-1), 3-pole, 140 ... 690 A

Overview

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1,
IEC 60947-5-1, EN 60947-5-1 (auxiliary switches)

The contactors are suitable for use in any climate.
They are finger-safe according to EN 50274.

3RT14 contactors are used for switching resistive loads (AC-1)
or as contactors, for example for variable-speed operating
mechanisms that normally only have to carry the current.

Size S3: AC or DC operation

Sizes S6 to S12: AC/DC operation

The following applies for sizes S6 to S12:

- Withdrawable coils
- Integrated coil circuit (varistor)
- Main conductors: busbar connections
- Auxiliary and control conductors: Screw terminals

The accessories for the 3RT10 contactors can also be used here.

For a general description of sizes S3 to S12, see Chapter 3, "SIRIUS 3RT10 contactors, 3-pole, 3 ... 250 kW".

Selection and ordering data

Size S3: AC or DC operation

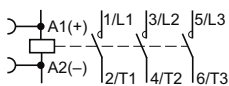


3RT1446-1A..0

Size	Rated data AC-1, $T_U: 40\text{ °C}$				Auxiliary contacts		Rated control supply voltage U_s	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
	Operational current I_e	Ratings of AC loads (p f. = 0.95) at				Version						
	up to 690 V	230 V	400 V	500 V	690 V	NO	NC	V	Article No.	Price per PU		
A	kW	kW	kW	kW								

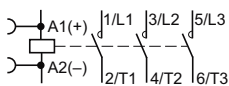
For screw fixing and snap-on mounting onto TH 35 and TH 75 standard mounting rails

AC operation



S3	140	53	92	115	159	--	--	AC 24, 50 Hz	B	3RT1446-1AB00	1	1 unit	41B
								AC 110, 50 Hz	B	3RT1446-1AF00	1	1 unit	41B
								AC 230, 50 Hz	▶	3RT1446-1AP00	1	1 unit	41B

DC operation



S3	140	53	92	115	159	--	--	24 DC	▶	3RT1446-1BB40	1	1 unit	41B
								220 DC	B	3RT1446-1BM40	1	1 unit	41B

Other voltages according to page 4/12 on request.

For accessories and spare parts, see "SIRIUS 3RT10 contactors", Chapter 3.

SIRIUS 3RT14 contactors for resistive loads (AC-1), 3-pole, 140 ... 690 A

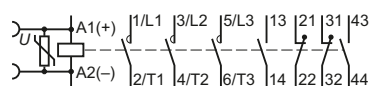
Sizes S6 to S12: AC/DC operation
Integrated coil circuit (varistor)
Main conductors: Busbar connections
Auxiliary and control conductors: Screw terminals



3RT146.

Size	Rated data AC-1, $T_U: 40^\circ\text{C}$				Auxiliary contacts		Rated control supply voltage U_s	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
	Operational current I_e	Ratings of AC loads (p f. = 0.95) at				Version						
up to 690 V	230 V	400 V	500 V	690 V			V AC/DC	Article No.	Price per PU			
	A	kW	kW	kW								

Conventional operating mechanisms



S6	275	105	180	225	310	2	2	110 ... 127 220 ... 240	▶ 3RT1456-6AF36 ▶ 3RT1456-6AP36	1 1	1 unit 1 unit	41B 41B
S10	400	151	263	329	454	2	2	110 ... 127 220 ... 240	▶ 3RT1466-6AF36 ▶ 3RT1466-6AP36	1 1	1 unit 1 unit	41B 41B
S12	690	261	454	568	783	2	2	110 ... 127 220 ... 240	▶ 3RT1476-6AF36 ▶ 3RT1476-6AP36	1 1	1 unit 1 unit	41B 41B

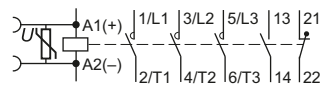
Solid-state operating mechanisms

For 24 V DC PLC output



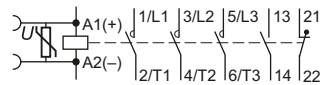
S6	275	105	180	225	310	2	2	96 ... 127 200 ... 277	B 3RT1456-6NF36 A 3RT1456-6NP36	1 1	1 unit 1 unit	41B 41B
S10	400	151	263	329	454	2	2	96 ... 127 200 ... 277	B 3RT1466-6NF36 A 3RT1466-6NP36	1 1	1 unit 1 unit	41B 41B
S12	690	261	454	568	783	2	2	96 ... 127 200 ... 277	B 3RT1476-6NF36 A 3RT1476-6NP36	1 1	1 unit 1 unit	41B 41B

For 24 V DC PLC relay output, with remaining lifetime indicator (RLT)



S6	275	105	180	225	310	1	1	96 ... 127 200 ... 277	B 3RT1456-6PF35 B 3RT1456-6PP35	1 1	1 unit 1 unit	41B 41B
S10	400	151	263	329	454	1	1	200 ... 277	B 3RT1466-6PP35	1	1 unit	41B
S12	690	261	454	568	783	1	1	200 ... 277	B 3RT1476-6PP35	1	1 unit	41B

With AS-Interface interface and remaining lifetime indicator (RLT)



S6	275	105	180	225	310	1	1	96 ... 127 200 ... 277	B 3RT1456-6QF35 B 3RT1456-6QP35	1 1	1 unit 1 unit	41B 41B
S10	400	151	263	329	454	1	1	200 ... 277	B 3RT1466-6QP35	1	1 unit	41B
S12	690	261	454	568	783	1	1	200 ... 277	B 3RT1476-6QP35	1	1 unit	41B

Other voltages according to page 4/12 on request.

For accessories and spare parts, see "SIRIUS 3RT10 contactors", Chapter 3.

Contactors for Special Applications

SIRIUS 3RT13 contactors for resistive loads (AC-1), 4-pole, 4 NO, 18 ... 140 A

Overview

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1,
IEC 60947-5-1, EN 60947-5-1 (auxiliary switches)

The contactors are suitable for use in any climate.
They are finger-safe according to EN 50274.

3RT13 contactors are used for switching resistive loads (AC-1) but are also suitable for switching mixed loads in distribution systems (e.g. for supplying heaters, lamps, motors, PC power

supply units) with p.f. 0.8 according to IEC 60947-4-1, test conditions for utilization category AC-1.

Accessories

The accessories for the 3-pole SIRIUS 3RT10 contactors can also be used for the 4-pole versions (see Chapter 3).

Auxiliary switches

Size S00: Snap-on auxiliary switch blocks according to EN 50005. Sizes S0 to S3: Snap-on auxiliary switch blocks according to EN 50012 and EN 50005 (for S0 max. 2 auxiliary contacts).

Selection and ordering data

AC operation, 4 NO contacts

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B



3RT133.-1A.00



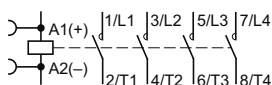
3RT131.-1A.00



3RT131.-2A.00

Rated data AC-1, T_U : 40/60 °C	Rated control supply voltage U_s	DT	Screw terminals	DT	Spring-type terminals	
Operational current I_e	Ratings of AC loads (p.f. = 0.95) at 50 Hz and 400 V		Article No.	Price per PU	Article No.	Price per PU
A	kW	V AC				

For screw fixing and snap-on mounting
onto TH 35 standard mounting rail



Size S00¹⁾

18 / 16	12 / 11	24, 50/60 Hz 110, 50/60 Hz 230, 50/60 Hz	▶ 3RT1316-1AB00 ▶ 3RT1316-1AF00 ▶ 3RT1316-1AP00	B B B	3RT1316-2AB00 3RT1316-2AF00 3RT1316-2AP00
22 / 20	14.5 / 13	24, 50/60 Hz 110, 50/60 Hz 230, 50/60 Hz	▶ 3RT1317-1AB00 ▶ 3RT1317-1AF00 ▶ 3RT1317-1AP00	B	--- --- 3RT1317-2AP00

Size S0²⁾

35 / 30	22 / 20	24, 50 Hz 110, 50 Hz 230, 50 Hz	▶ 3RT1325-1AB00 ▶ 3RT1325-1AF00 ▶ 3RT1325-1AP00		---
40 / 35	26 / 23	24, 50 Hz 110, 50 Hz 230, 50 Hz	▶ 3RT1326-1AB00 ▶ 3RT1326-1AF00 ▶ 3RT1326-1AP00		---

Size S2

60 / 55	39 / 36	24, 50 Hz 110, 50 Hz 230, 50 Hz	B B ▶ 3RT1336-1AP00	B B	--- ---
---------	---------	---------------------------------------	---------------------------	--------	------------

Size S3

110 / 100	72 / 66	24, 50 Hz 110, 50 Hz 230, 50 Hz	B B ▶ 3RT1344-1AP00	B B	--- ---
140 / 120	92 / 79	24, 50 Hz 110, 50 Hz 230, 50 Hz	B B ▶ 3RT1346-1AP00	B B	--- ---

¹⁾ For size S00: Coil operating range
at 50 Hz: 0.8 ... 1.1 x U_s ,
at 60 Hz: 0.85 ... 1.1 x U_s .

²⁾ Minimum conductor cross-section 10 mm².

Other voltages according to page 4/12 on request.

For accessories and spare parts, see
"SIRIUS 3RT10 contactors", Chapter 3.

SIRIUS 3RT13 contactors for resistive loads (AC-1), 4-pole, 4 NO, 18 ... 140 A

DC operation, 4 NO contacts

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT134.-1B..40



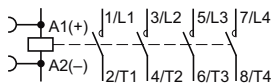
3RT131.-1B.40



3RT131.-2B.40

Rated data AC-1, T_U : 40/60 °C	Rated control supply voltage U_c	DT	Screw terminals	DT	Spring-type terminals	
Operational current I_e	Ratings of AC loads (p f. = 0.95) at 50 Hz and 400 V		Article No.	Price € per PU	Article No.	Price € per PU
A	kW	V DC				

For screw fixing and snap-on mounting onto TH 35 standard mounting rail

**Size S00**

18 / 16	12 / 11	24 220	▶ B	3RT1316-1BB40 3RT1316-1BM40	▶ A	3RT1316-2BB40 --
22 / 20	14.5 / 13	24 220	▶ B	3RT1317-1BB40 3RT1317-1BM40		3RT1317-2BB40 --

Size S0¹⁾

35 / 30	22 / 20	24 220	▶ B	3RT1325-1BB40 3RT1325-1BM40		-- --
40 / 35	26 / 23	24 220	▶ B	3RT1326-1BB40 3RT1326-1BM40		-- --

Size S2

60 / 55	39 / 36	24 220	▶ B	3RT1336-1BB40 3RT1336-1BM40		-- --
---------	----------------	-----------	--------	--	--	----------

Size S3

110 / 100	72 / 66	24 220	B	3RT1344-1BB40 3RT1344-1BM40		-- --
140 / 120	92 / 79	24 220	B	3RT1346-1BB40 3RT1346-1BM40		-- --

¹⁾ Minimum conductor cross-section 10 mm².

Other voltages [according to page 4/12](#) on request.

For accessories and spare parts, see
 "SIRIUS 3RT10 contactors", Chapter 3.

Contactors for Special Applications

SIRIUS 3RT15 contactors, 4-pole, 2 NO + 2 NC, 4 ... 18.5 kW

Overview

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1

The contactors are suitable for use in any climate.
They are finger-safe according to EN 50274.

Note:

Single device for pole reversal; not suitable for reversing duty.
3RT15 contactors are not suitable for switching a load between
two current sources.

Accessories

The accessories for the 3-pole SIRIUS 3RT10 contactors can
also be used for the 4-pole versions ([see Chapter 3](#)).

Auxiliary switches

Size S00: Snap-on auxiliary switch blocks according to
EN 50005.

Sizes S0 to S3: Snap-on auxiliary switch blocks according to
EN 50012 and EN 50005 (for S0 max. 2 auxiliary contacts).

SIRIUS 3RT15 contactors, 4-pole, 2 NO + 2 NC, 4 ... 18.5 kW

Selection and ordering data

AC and DC operation, 2 NO contacts + 2 NC contacts¹⁾

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT1526-1A..0



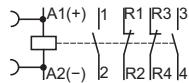
3RT151.-1...0



3RT151.-2...0

Rated data		Rated control supply voltage U_s		DT	Screw terminals		DT	Spring-type terminals	
AC-2/AC-3, T_{ij} : Up to 60 °C	AC-1, T_{ij} : 40/60 °C								
Operational current I_e	Ratings of three-phase motors at 50 Hz and	Operational current I_e			Article No.	Price per PU		Article No.	Price per PU
At 400 V	400 V								
A	kW	A	V						

For screw fixing and snap-on mounting onto TH 35 standard mounting rail

AC operation**Size S00²⁾**

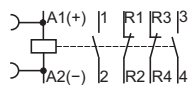
9	4	18 / 16	24, 50 Hz 110, 50 Hz 230, 50 Hz	B	3RT1516-1AB00 3RT1516-1AF00 3RT1516-1AP00	B	3RT1516-2AB00 -- 3RT1516-2AP00
12	5.5	22 / 20	24, 50 Hz 110, 50 Hz 230, 50 Hz	A	3RT1517-1AB00 3RT1517-1AF00 3RT1517-1AP00	B	3RT1517-2AB00 3RT1517-2AF00 3RT1517-2AP00

Size S0³⁾

25	11	40 / 35	24, 50 Hz 110, 50 Hz 230, 50 Hz	B	3RT1526-1AB00 3RT1526-1AF00 3RT1526-1AP00	--	--
----	----	---------	---------------------------------------	---	---	----	----

Size S2

40	18.5	55 / 50	24, 50 Hz 110, 50 Hz 230, 50 Hz	B	3RT1535-1AB00 3RT1535-1AF00 3RT1535-1AP00	--	--
----	------	---------	---------------------------------------	---	---	----	----

DC operation**Size S00**

9	4	18 / 16	24 DC 220 DC	B	3RT1516-1BB40 3RT1516-1BM40	B	3RT1516-2BB40 --
12	5.5	22 / 20	24 DC 220 DC	B	3RT1517-1BB40 3RT1517-1BM40	B	3RT1517-2BB40 --

Size S0³⁾

25	11	40 / 35	24 DC 220 DC	B	3RT1526-1BB40 3RT1526-1BM40	--	--
----	----	---------	-----------------	---	--------------------------------	----	----

Size S2

40	18.5	55 / 50	24 DC 220 DC	B	3RT1535-1BB40 3RT1535-1BM40	--	--
----	------	---------	-----------------	---	--------------------------------	----	----

¹⁾ Single device for pole reversal; not suitable for reversing duty.

²⁾ For size S00: Coil operating range at 50 Hz: 0.8 ... 1.1 x U_s
at 60 Hz: 0.85 ... 1.1 x U_s .

³⁾ Minimum conductor cross-section 10 mm².

Other voltages according to page 4/12 on request.

For accessories and spare parts, see "SIRIUS 3RT10 contactors", Chapter 3.

Contactors for Special Applications

SIRIUS 3RT16 capacitor contactors, 12.5 ... 50 kvar

Overview

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1,
IEC 60947-5-1, EN 60947-5-1 (auxiliary switches)

The contactors are suitable for use in any climate.
They are finger-safe according to EN 50274.

Function

The 3RT16 capacitor contactors are special versions of the 3RT10 contactors size S00 to S3. The capacitors are precharged by means of the mounted leading NO contacts and resistors; only then do the main contacts close.

This prevents disturbances in the network and welding of the contactors.

Only discharged capacitors are permitted to be switched on with capacitor contactors.

For the capacitor switching capacity of the basic version of the 3RT10 contactors, see Reference Manual "Switching Devices – Contactors and Contactor Assemblies", <https://support.industry.siemens.com/cs/ww/en/view/35554359>.

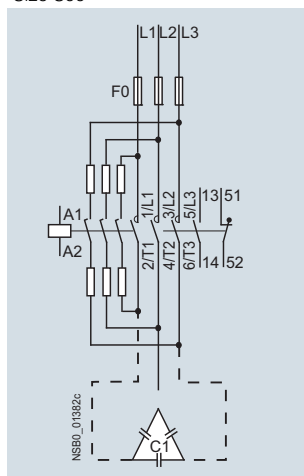
Auxiliary switches

The auxiliary switch block which is snapped onto the capacitor contactor contains the three leading NO contacts and in the case of S00 one standard NC contact and in the case of S0 and S3 one standard NO contact, which is unassigned. Size S00 also contains another unassigned NO contact in the basic unit.

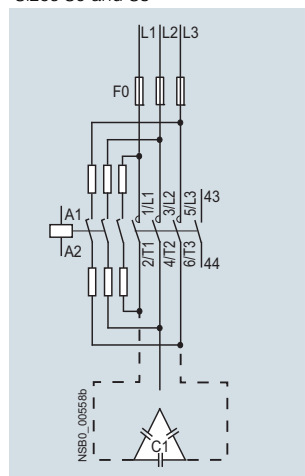
In addition, a 2-pole auxiliary switch block (2 NO, 2 NC or 1 NO + 1 NC versions) can be mounted laterally on 3RT1647 capacitor contactors; type 3RH1921-1EA... The fitting of auxiliary switches for 3RT1617 and 3RT1627 is not expandable.

Circuit diagrams

Size S00



Sizes S0 and S3



Selection and ordering data

AC operation
Screw terminals

3RT1617-1A.03



3RT1627-1A.01



3RT1647-1A.01

Utilization category AC-6b
Switching of AC capacitors
for an ambient temperature of 60 °C¹⁾

Capacitor rating at
operational voltage 50/60 Hz

At 230 V	At 400 V	At 525 V	At 690 V
kvar	kvar	kvar	kvar

Auxiliary
contacts,
unassigned

Version

NO	NC

Rated control supply
voltage $U_s^{2)}$

DT

Screw terminals



PU
(UNIT,
SET, M)

PS*

PG

Article No.

Price
per PU

For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S00

3 ... 7.5	5 ... 12.5	7.5 ... 15	10 ... 21	1	1	24	50 / 60	B	3RT1617-1AB03	1	1 unit	41B
						110		B	3RT1617-1AF03	1	1 unit	41B
						230		▶	3RT1617-1AP03	1	1 unit	41B

Size S0³⁾

3.5 ... 15	6 ... 25	7.8 ... 30	10 ... 42	1	--	24	50	B	3RT1627-1AB01	1	1 unit	41B
						110		B <td>3RT1627-1AF01</td> <td>1 <td>1 unit</td> <td>41B</td> </td>	3RT1627-1AF01	1 <td>1 unit</td> <td>41B</td>	1 unit	41B
						230		▶	3RT1627-1AP01	1 <td>1 unit</td> <td>41B</td>	1 unit	41B

Size S3

3.5 ... 30	5 ... 50	7.5 ... 60	10 ... 84	1	--	24	50	B	3RT1647-1AB01	1	1 unit	41B
						110		B <td>3RT1647-1AF01</td> <td>1 <td>1 unit</td> <td>41B</td> </td>	3RT1647-1AF01	1 <td>1 unit</td> <td>41B</td>	1 unit	41B
						230		▶	3RT1647-1AP01	1 <td>1 unit</td> <td>41B</td>	1 unit	41B

¹⁾ For size S3: 55 °C.

²⁾ Operating range: 0.85 to 1.1 x U_s .

³⁾ For conductor cross-sections > 6 mm²
use 3RV1925-5AB terminals (2 units).

Other voltages according to page 4/12 on request.

For accessories and spare parts, see
"SIRIUS 3RT10 contactors", Chapter 3.

Contactors for Special Applications

SIRIUS 3RT1 contactors

Options

Rated control supply voltages, possible on request (change of the 10th and 11th digit of the Article No.)

Rated control supply voltage U_s	Contactor type	3RT131, 3RT151	3RT132, 3RT152	3RT133, 3RT134, 3RT153	3RT144	3RT1617, 3RT1627, 3RT1647
	Size	S00	S0	S2, S3	S3	S00, S0, S3

Sizes S00 to S3

AC operation

Solenoid coils for 50 Hz (exception: Size S00: 50 and 60 Hz¹⁾)

24 V AC	B0	B0	B0	B0	B0
42 V AC	D0	D0	--	D0	--
48 V AC	H0	H0	--	H0	--
110 V AC	F0	F0	F0	F0	F0
230 V AC	P0	P0	P0	P0	P0
240 V AC	U0	U0	U0	U0	U0
400 V AC	V0	V0	V0	V0	V0

Solenoid coils for 50 and 60 Hz¹⁾

24 V AC	B0	C2	C2	C2	C2
42 V AC	D0	D2	D2	D2	--
48 V AC	H0	H2	H2	H2	--
110 V AC	F0	G2	G2	G2	G2
220 V AC	N2	N2	N2	N2	N2
230 V AC	P0	L2	L2	L2	L2
240 V AC	P2	P2	P2	P2	P2

Solenoid coils (for USA and Canada²⁾)

50 Hz	60 Hz				
110 V AC	120 V AC	K6	K6	K6	K6
220 V AC	240 V AC	P6	P6	P6	P6

Solenoid coils (for Japan)

50/60 Hz ³⁾	60 Hz ⁴⁾				
100 V AC	110 V AC	G6	G6	G6	G6
200 V AC	220 V AC	N6	N6	N6	N6
400 V AC	440 V AC	R6	R6	R6	R6

DC operation

12 V DC	A4	--	--	--	--
24 V DC	B4	B4	B4	B4	--
42 V DC	D4	D4	D4	D4	--
48 V DC	W4	--	W4	W4	--
60 V DC	--	--	--	E4	--
110 V DC	F4	F4	F4	F4	--
125 V DC	G4	G4	G4	G4	--
220 V DC	M4	M4	M4	M4	--
230 V DC	P4	--	P4	P4	--

Examples

AC operation	3RT1325-1AP00	Contactors with screw terminals; with solenoid coil for 50 Hz for rated control supply voltage 230 V AC.
	3RT1325-1AG20	Contactors with screw terminals; with solenoid coil for 50/60Hz for rated control supply voltage 110 V AC.
DC operation	3RT1526-2BB40	Contactors with spring-type terminals; for rated control supply voltage 24 V DC.
	3RT1526-2BG40	Contactors with spring-type terminals; for rated control supply voltage 125 V DC.

Rated control supply voltage	Contactor type	3RT1456-6A..., 3RT1466-6A..., 3RT1476-6A...	Rated control supply voltage	Contactor type	3RT1456-6N..., 3RT1466-6N..., 3RT1476-6N...	3RT1456-6P..., 3RT1466-6P..., 3RT1476-6P...
$U_{s \min} \dots U_{s \max}^{5)}$	Size	S00	$U_{s \min} \dots U_{s \max}^{5)}$	Size		

Sizes S6 to S12

AC/DC operation (AC 50 to 60 Hz, DC)

23 ... 26 V AC/DC	B3	21 ... 27.3 V AC/DC	B3	--
42 ... 48 V AC/DC	D3	96 ... 127 V AC/DC	F3	F3
110 ... 127 V AC/DC	F3	200 ... 277 V AC/DC	P3	P3
200 ... 220 V AC/DC	M3			
220 ... 240 V AC/DC	P3			
240 ... 277 V AC/DC	U3			
380 ... 420 V AC/DC	V3			
440 ... 480 V AC/DC	R3			
500 ... 550 V AC/DC	S3			
575 ... 600 V AC/DC	T3			

1) Coil operating range
at 50 Hz: $0.8 \dots 1.1 \times U_s$
at 60 Hz: $0.85 \dots 1.1 \times U_s$

2) Coil operating range
Size S00: at 50 Hz: $0.85 \dots 1.1 \times U_s$
at 60 Hz: $0.8 \dots 1.1 \times U_s$
Sizes S0 to S3: at 50 Hz and 60 Hz: $0.8 \dots 1.1 \times U_s$

3) Coil operating range
Size S00: at 50/60 Hz: $0.85 \dots 1.1 \times U_s$
Sizes S0 to S3: at 50 Hz: $0.8 \dots 1.1 \times U_s$
at 60 Hz: $0.85 \dots 1.1 \times U_s$

4) Coil operating range
at 60 Hz: $0.8 \dots 1.1 \times U_s$

5) Coil operating range: $0.7 \times U_{s \min} \dots 1.3 \times U_{s \max}$

Contactors for Special Applications

Contactors with Extended Operating Range $0.7 \dots 1.25 \times U_s$ for Railway Applications

SIRIUS 3RT10 motor contactors, 5.5 ... 45 kW

Overview

Standards

IEC 60947-4-1, EN 60947-4-1

The contactors are finger-safe according to EN 50274 (exception: series resistor S2 and S3).

The contactors are available with screw terminals or spring-type terminals. On sizes S0 to S3, only the auxiliary conductor terminals and coil terminals are spring-type terminals.

Control and auxiliary circuits

Contactors are available with:

- Conventional coils
- Coils with series resistor
- Coils with solid-state control unit

The solenoid coils of the contactors have an extended coil operating range from 0.7 to $1.25 \times U_s$ and are fitted as standard with varistors to provide protection against overvoltage. The opening delay is consequently 2 to 5 ms longer than for standard contactors.

Ambient temperature

The permissible ambient temperature for operation of the contactors (across the full coil operating range) is $-40 \text{ }^\circ\text{C}$ to $+70 \text{ }^\circ\text{C}$.

Uninterrupted duty at temperatures $> +60 \text{ }^\circ\text{C}$ reduces the mechanical endurance, the current carrying capacity of the conducting paths and the switching frequency.

Application

For operation in installations which are subject both to considerable variations in the control voltage and to high ambient temperatures, e.g. railway applications under extreme climatic conditions, rolling mills, etc.

Sizes S00 and S0 with conventional coil

These contactor relays have an extended operating range from 0.7 to $1.25 \times U_s$; the coils are fitted with varistors as standard. An additional series resistor is not required.

Please note:

- Size S00: It is not possible to mount an auxiliary switch block.
- Size S0: Up to two single-pole auxiliary switch blocks can be mounted.

Mounting

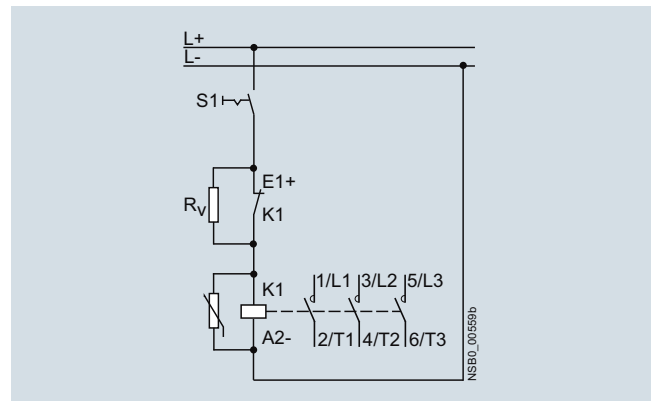
A clearance of 10 mm is required for side-by-side mounting at ambient temperatures $> 60 \text{ }^\circ\text{C} \leq 70 \text{ }^\circ\text{C}$.

Sizes S00 to S3 with series resistor

The DC solenoid systems of the contactors are modified (to holding excitation) by means of a series resistor.

Auxiliary switches

The size S00 contactors are supplied prewired with a plug-on module containing the series resistor. The varistor is integrated. The integrated NC contact is used for switching the series resistor. A 4-pole auxiliary switch block (according to EN 50005) can be additionally fitted.



Circuit diagram with series resistor (size S00)

The size S0 to S3 contactors are equipped on the front with an auxiliary switch block with 2 NO + 2 NC contacts. The separate series resistor, which is attached laterally next to the contactor on the 35 mm standard mounting rail, is fitted with connecting cables for mounting onto contactors. A circuit diagram showing the terminals is stuck onto each contactor. The NC contact 21-22 of the auxiliary contacts is required for the series resistor function.

Mounting

At ambient temperatures up to $70 \text{ }^\circ\text{C}$, size S00 contactors and contactor relays are allowed to be mounted side by side.

The resistor module of the size S0 to S3 contactors must be mounted to the left of the contactor owing to the prefabricated connecting cables.

Dimensions

Attaching the series resistor increases the width of contactor sizes S0 to S3.

Sizes S0 to S3 with contactor control unit

The contactors are supplied as complete units with a built-on contactor control unit.

Control and auxiliary circuits

The contactors are energized via upstream control electronics which ensure the coil operating range of 0.7 to $1.25 \times U_s$ at an ambient temperature of $70 \text{ }^\circ\text{C}$.

A varistor is integrated for damping opening surges in the coil. The opening delay is consequently 2 to 5 ms longer than for standard contactors.

The possibility of mounting auxiliary switches is the same as that for equivalent standard contactors.

Mounting

At ambient temperatures up to $70 \text{ }^\circ\text{C}$, sizes S0 to S3 of these contactor versions are allowed to be mounted side by side.

Dimensions

Because of the built-on contactor control unit, the height of the size S0 to S3 contactors increases by up to 34 mm.

Contactors for Special Applications

Contactors with Extended Operating Range 0.7 ... 1.25 x U_s for Railway Applications

SIRIUS 3RT10 motor contactors, 5.5 ... 45 kW

Selection and ordering data

DC operation

Conventional solenoid coil, fitted with varistor



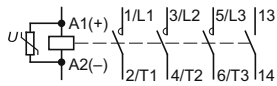
3RT103.-2K.40

Rated data AC-2 and AC-3 T_U : 70 °C	Auxiliary contacts	Rated control supply voltage U_s	DT	Spring-type terminals	PU (UNIT, SET, M)	PS*	PG
Operational current I_e at 400 V	Version NO NC			Article No.	Price per PU		
Rating of three-phase motors at 230 V 400 V 500 V 690 V		V DC					

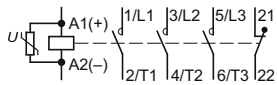
For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S00

- Ident. No. 10, 1 NO

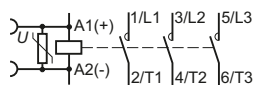


- Ident. No. 01, 1 NC



12	3	5.5	5.5	5.5	1 ¹⁾	--	24 110	▶ B	3RT1017-2KB41 3RT1017-2KF41	1 1	1 unit 1 unit	41B 41B
12	3	5.5	5.5	5.5	--	1 ¹⁾	24 110	▶ B	3RT1017-2KB42 3RT1017-2KF42	1 1	1 unit 1 unit	41B 41B

Size S0



17	4	7.5	10	11	--	-- ²⁾	24 110	▶ B	3RT1025-3KB40 3RT1025-3KF40	1 1	1 unit 1 unit	41B 41B
25	5.5	11	11	11	--	-- ²⁾	24 110	▶ B	3RT1026-3KB40 3RT1026-3KF40	1 1	1 unit 1 unit	41B 41B

¹⁾ The auxiliary contacts are not expandable.

²⁾ Up to two single-pole auxiliary switch blocks can be mounted.

For accessories and spare parts, see
"SIRIUS 3RT10 contactors", Chapter 3.

Contactors for Special Applications

Contactors with Extended Operating Range 0.7 ... 1.25 x U_s for Railway Applications

SIRIUS 3RT10 motor contactors, 5.5 ... 45 kW

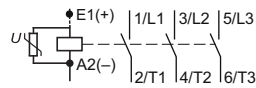
DC operation**Solenoid coil with series resistor, fitted with varistor**

3RT103.-3K.44-0LA0

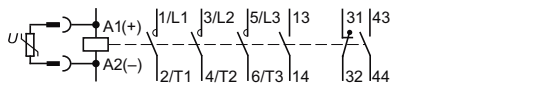


3RT103.-3K.44-0LA0

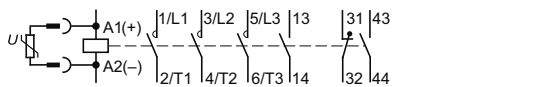
Rated data AC-2 and AC-3 T_U : 70 °C		Auxiliary contacts	Rated control supply voltage U_s	DT	Spring-type terminals	PU (UNIT, SET, M)	PS*	PG
Operational current I_e at 400 V	Rating of three-phase motors at 230 V	Version			Article No.	Price per PU		
A	kW	NO NC	V DC					

For screw fixing and snap-on mounting onto TH 35 standard mounting rail**Size S00**

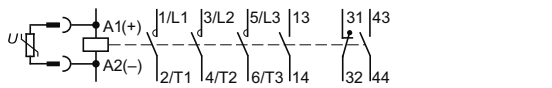
12	3	5.5	5.5	5.5	--	-- ¹⁾	24 110	B B	3RT1017-2KB42-0LA0 3RT1017-2KF42-0LA0	1 1	1 unit 1 unit	41B 41B
----	---	-----	-----	-----	----	------------------	-----------	--------	--	--------	------------------	------------

Size S0

17	4	7.5	10	11	2	1 ²⁾	24 110	B B	3RT1025-3KB44-0LA0 3RT1025-3KF44-0LA0	1 1	1 unit 1 unit	41B 41B
25	5.5	11	11	11	2	1 ²⁾	24 110	B B	3RT1026-3KB44-0LA0 3RT1026-3KF44-0LA0	1 1	1 unit 1 unit	41B 41B

Size S2

32	7.5	15	18.5	18.5	2	1 ²⁾	24 110	B B	3RT1034-3KB44-0LA0 3RT1034-3KF44-0LA0	1 1	1 unit 1 unit	41B 41B
40	11	18.5	22	22	2	1 ²⁾	24 110	B B	3RT1035-3KB44-0LA0 3RT1035-3KF44-0LA0	1 1	1 unit 1 unit	41B 41B
50	15	22	30	22	2	1 ²⁾	24 110	B B	3RT1036-3KB44-0LA0 3RT1036-3KF44-0LA0	1 1	1 unit 1 unit	41B 41B

For screw fixing and snap-on mounting onto TH 35 and TH 75 standard mounting rail**Size S3**

65	18.5	30	37	43	2	1 ²⁾	24 110	B B	3RT1044-3KB44-0LA0 3RT1044-3KF44-0LA0	1 1	1 unit 1 unit	41B 41B
80	22	37	45	55	2	1 ²⁾	24 110	B B	3RT1045-3KB44-0LA0 3RT1045-3KF44-0LA0	1 1	1 unit 1 unit	41B 41B
95	22	45	55	55	2	1 ²⁾	24 110	B B	3RT1046-3KB44-0LA0 3RT1046-3KF44-0LA0	1 1	1 unit 1 unit	41B 41B

¹⁾ The integrated NC contact is used for switching the series resistor.
A 4-pole auxiliary switch block according to EN 50005 can be mounted.

²⁾ The NC contact 21-22 is used for switching the series resistor. The auxiliary contacts are not expandable.

For accessories and spare parts, see
"SIRIUS 3RT10 contactors", Chapter 3.

Contactors for Special Applications

Contactors with Extended Operating Range 0.7 ... 1.25 x U_s for Railway Applications

SIRIUS 3RT10 motor contactors, 5.5 ... 45 kW

DC operation

Solid-state contactor control unit

Solenoid coil fitted with varistor

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41B



3RT104.-1X.40-0LA2

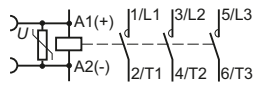


3RT103.-3X.40-0LA2

Rated data		Auxiliary contacts ¹⁾	Rated control supply voltage U_s	DT	Screw terminals		DT	Spring-type terminals for coil terminals	
AC-2 and AC-3 T_{i1} : Up to 70 °C		Version			Article No.	Price per PU		Article No.	Price per PU
Rated operational current I_e up to 400 V	Rating of three-phase motors at 50 Hz 400 V	NO NC	V DC						
A	kW								

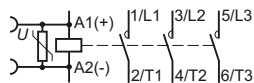
For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S0



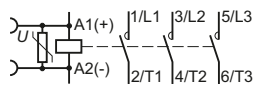
17	7.5	--	--	24	B	3RT1025-1XB40-0LA2	B	3RT1025-3XB40-0LA2
		--	--	110	B	3RT1025-1XF40-0LA2	B	3RT1025-3XF40-0LA2
25	11	--	--	24	B	3RT1026-1XB40-0LA2	B	3RT1026-3XB40-0LA2
		--	--	110	B	3RT1026-1XF40-0LA2	B	3RT1026-3XF40-0LA2

Size S2



32	15	--	--	24	B	3RT1034-1XB40-0LA2	C	3RT1034-3XB40-0LA2
		--	--	110	B	3RT1034-1XF40-0LA2	B	3RT1034-3XF40-0LA2
40	18.5	--	--	24	B	3RT1035-1XB40-0LA2	B	3RT1035-3XB40-0LA2
		--	--	110	B	3RT1035-1XF40-0LA2	B	3RT1035-3XF40-0LA2
50	22	--	--	24	B	3RT1036-1XB40-0LA2	B	3RT1036-3XB40-0LA2
		--	--	110	B	3RT1036-1XF40-0LA2	B	3RT1036-3XF40-0LA2

For screw fixing and snap-on mounting onto TH 35 and TH 75 standard mounting rail



Size S3

65	30	--	--	24	B	3RT1044-1XB40-0LA2	B	3RT1044-3XB40-0LA2
		--	--	110	B	3RT1044-1XF40-0LA2	B	3RT1044-3XF40-0LA2
80	37	--	--	24	B	3RT1045-1XB40-0LA2	B	3RT1045-3XB40-0LA2
		--	--	110	B	3RT1045-1XF40-0LA2	B	3RT1045-3XF40-0LA2
95	45	--	--	24	B	3RT1046-1XB40-0LA2	B	3RT1046-3XB40-0LA2
		--	--	110	B	3RT1046-1XF40-0LA2	B	3RT1046-3XF40-0LA2

¹⁾ Auxiliary switch blocks mountable as 3RT10 standard contactors.



NEW

Click on the Article No. in the catalog PDF to access it in the Industry Mall and get all related information.

Article-No.

3RA1943-2C
3RA1943-2B
3RA1953-2B
3RA1953-2N



Or directly in the Internet, e. g.
[www.siemens.com/
product?3RA1943-2C](http://www.siemens.com/product?3RA1943-2C)

Price groups

PG 41A, 41B, 41H, 42D

5/2

Introduction

Contactor relays

5/3

SIRIUS 3RH1 contactor relays,
4- and 8-pole

5/10

SIRIUS 3RH14 latched contactor relays,
4-pole

Coupling contactors

5/11

SIRIUS 3RH11 coupling contactors
for switching auxiliary circuits,
4-pole

Contactor relays with extended operating range $0.7 \dots 1.25 \times U_s$ for railway applications

5/13

SIRIUS 3RH11 contactor relays

Switching Devices – Contactors and Contactor Assemblies

Introduction

Overview

The advantages at a glance



S00
3RH11



S00
3RH12

Size
Type

		Article No.	Page
3RH1 contactor relays			
4-pole	• Screw terminals, spring-type terminals and ring terminal lug connections	3RH11	5/5, 5/6
8-pole		3RH12	5/5, 5/6
4-pole, latched		3RH14	5/10
Coupling contactors	• Coils for control by PLC	3RH11	5/11
Contactor relays for railway applications	• Coils with extended voltage range	3RH11	5/13
Accessories for 3RH1 contactor relays			
Auxiliary switch blocks	• On front • Lateral	3RH1911 3RH1911	5/7 Chapter 3
Timing relay blocks	• On front	3RT1916	Chapter 3
OFF-delay devices	• For mounting separately	3RT1916	5/9
Surge suppressors	• On front	3RT1916	5/8
Additional load modules	• On front	3RT1916	5/8

Connection methods

The contactor relays are available with screw terminals (box terminals) or with spring-type terminals.



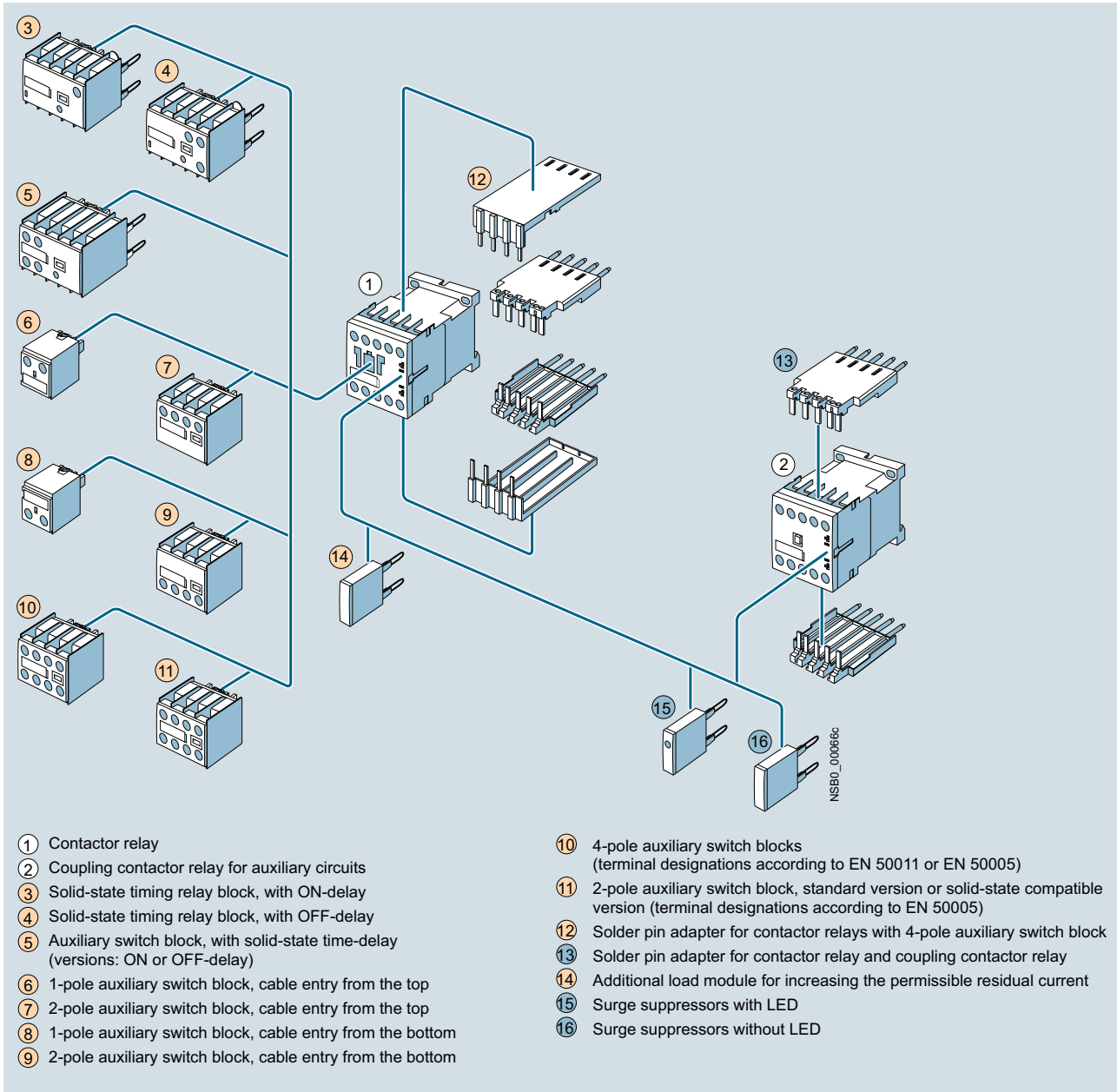
Screw terminals



Spring-type terminals

The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Overview

Contactor relays and coupling contactors, size S00 with accessories

Contactors Relays

SIRIUS 3RH1 contactor relays, 4- and 8-pole

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-4-1, EN 60947-4-1,
IEC 60947-5-1, EN 60947-5-1.

The 3RH1 contactor relays are suitable for use in any climate. They are finger-safe according to EN 50274.

The 3RH1 contactor relays have screw or spring-type terminals. The basic unit contains four contacts with terminal designations according to EN 50011.

Contact reliability

High contact stability at low voltages and currents, suitable for solid-state circuits with currents ≥ 1 mA at a voltage of ≥ 17 V.

Surge suppression

RC elements, varistors, diodes or diode assemblies (combination of a diode and a Zener diode) can be plugged onto all contactor relays from the front for damping opening surges in the coil. The plug-in direction is determined by a coding device.

Note:

The OFF-delay of the NO contact and the ON-delay of the NC contact are increased if the contactor coils are attenuated against voltage peaks (noise suppression diode 6 to 10 times; diode assembly 2 to 6 times, varistor +2 to 5 ms).

Accessories

The accessories for the 3RT1 contactors in size S00 can also be used for the 3RH1 contactor relays (see pages 5/8 and 5/9, and Chapter 3).

Auxiliary switch blocks

The 3RH1 contactor relays can be expanded by up to four contacts by the addition of snap-on auxiliary switch blocks.

The auxiliary switch block can easily be snapped onto the front of the contactors. The auxiliary switch block has a centrally positioned release lever for disassembly.

Auxiliary switches according to EN 50011

The 3RH11 contactor relays with 4 contacts with the identification number 40E according to EN 50011 can be extended with 3RH1911-.GA.. auxiliary switch blocks (see page 5/7) to obtain contactor relays with 8 contacts according to EN 50011. The identification numbers 80E to 44E on the auxiliary switch blocks apply to the complete contactors. These auxiliary switch blocks cannot be combined with contactor relays with identification numbers 31E and 22E; they are coded.

Auxiliary switches according to EN 50005

All 3RH11 contactor relays with 4 contacts, identification numbers 40E to 22E, can be extended with auxiliary switch blocks 40 to 02 to obtain contactor relays with 6 or 8 contacts in accordance with EN 50005. The identification numbers on the auxiliary switch blocks apply only to the attached auxiliary switch blocks.

Of the auxiliary contacts (integrated plus mountable) possible on the device, no more than four NC contacts are permitted.

3RH12 8-pole contactor relays

In addition, fully mounted 3RH12 8-pole contactor relays are available; the mounted 4-pole auxiliary switch block is not removable. The terminal designations are in accordance with EN 50011 or IEC 60947-5-1.

These versions are built according to special Swiss regulations SUVA and are distinguished externally by a red labeling plate.

Article No. scheme

Digit of the Article No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th
SIRIUS contactor relays	3 R H													
1st generation		1												
Device type (e.g. 1 = 4-pole contactor relay, 2 = 8-pole contactor relay)			<input type="checkbox"/>											
Number of NO contacts (e.g. 2 = 2 NO)				<input type="checkbox"/>										
Number of NC contacts (e.g. 2 = 2 NC)					<input type="checkbox"/>									
Connection type (1 = screw, 2 = spring)							<input type="checkbox"/>							
Operating range / solenoid coil circuit (e.g. A = AC standard / without)								<input type="checkbox"/>						
Rated control supply voltage (e.g. P0 = 230 V, 50 Hz)									<input type="checkbox"/>	<input type="checkbox"/>				
No significance (0)											<input type="checkbox"/>			
Special version												<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Example	3 R H	1	1	2	2	-	1	A	P	0	0			

Note:

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the catalog in the selection and ordering data.

SIRIUS 3RH1 contactor relays, 4- and 8-pole

Selection and ordering data

AC operation

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41A

Size S00



3RH11...-1B.40



3RH11...-2B.40



3RH12...-1B.40



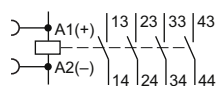
3RH12...-2B.40

Rated operational current I_e /AC-15/AC-14 at 230 V	Contacts		Rated control supply voltage U_s at 50/60 Hz ¹⁾	DT	Screw terminals		DT	Spring-type terminals	
	Ident. No.	Version			Article No.	Price per PU		Article No.	Price per PU
		 NO	 NC						
		V AC							

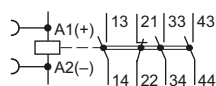
For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Terminal designations according to EN 50011

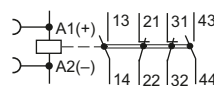
4 NO, Ident. No. **40E**



3 NO + 1 NC, Ident. No. **31E**



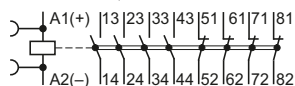
2 NO + 2 NC, Ident. No. **22E**



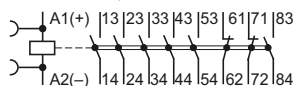
6	40E	4	--	24 110 230	▶ 3RH1140-1AB00 ▶ 3RH1140-1AF00 ▶ 3RH1140-1AP00	▶ 3RH1140-2AB00 ▶ 3RH1140-2AF00 ▶ 3RH1140-2AP00
	31E	3	1	24 110 230	▶ 3RH1131-1AB00 ▶ 3RH1131-1AF00 ▶ 3RH1131-1AP00	▶ 3RH1131-2AB00 ▶ 3RH1131-2AF00 ▶ 3RH1131-2AP00
	22E	2	2	24 110 230	▶ 3RH1122-1AB00 ▶ 3RH1122-1AF00 ▶ 3RH1122-1AP00	▶ 3RH1122-2AB00 ▶ 3RH1122-2AF00 ▶ 3RH1122-2AP00

• With permanently mounted auxiliary switch block for safety applications according to SUVA

4 NO + 4 NC, Ident. No. **44E**



6 NO + 2 NC, Ident. No. **62E**



6	44E	4	4	230	▶ 3RH1244-1AP00	B 3RH1244-2AP00
	62E	6	2	230	▶ 3RH1262-1AP00	B 3RH1262-2AP00

¹⁾ Coil operating range
 at 50 Hz: 0.8 to 1.1 x U_s
 at 60 Hz: 0.85 to 1.1 x U_s .

Other voltages according to page 5/7 on request.

For accessories, see pages 5/7 to 5/9 and "Accessories for 3RT1 contactors", Chapter 3.

Contactors Relays

SIRIUS 3RH1 contactor relays, 4- and 8-pole

DC operation · DC solenoid system

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41A

Size S00



3RH11...-1B.40



3RH11...-2B.40



3RH12...-1B.40



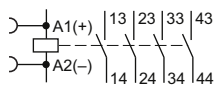
3RH12...-2B.40

Rated operational current I_e /AC-15/AC-14 at 230 V	Contacts		Rated control supply voltage U_s	DT	Screw terminals		DT	Spring-type terminals	
	Ident. No.	Version			Article No.	Price per PU		Article No.	Price per PU
A		NO NC	V DC						

For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Terminal designations according to EN 50011

4 NO, Ident. No. **40E**

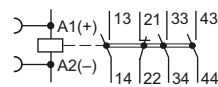


6

40E

4

3 NO + 1 NC, Ident. No. **31E**



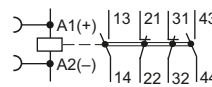
3

1

24

220

2 NO + 2 NC, Ident. No. **22E**



▶

3RH1140-1BB40

▶

3RH1140-2BB40

▶

3RH1140-1BM40

▶

3RH1140-2BM40

▶

3RH1131-1BB40

▶

3RH1131-2BB40

▶

3RH1131-1BM40

▶

3RH1131-2BM40

▶

3RH1122-1BB40

▶

3RH1122-2BB40

▶

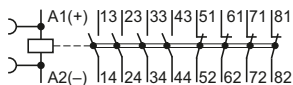
3RH1122-1BM40

▶

3RH1122-2BM40

• With permanently mounted auxiliary switch block for safety applications according to SUVA

4 NO + 4 NC, Ident. No. **44E**

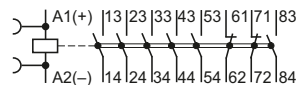


6

44E

4

6 NO + 2 NC, Ident. No. **62E**



6

2

24

▶

3RH1244-1BB40

▶

3RH1244-2BB40

▶

3RH1262-1BB40

▶

3RH1262-2BB40

Other voltages according to page 5/7 on request.

For accessories, see pages 5/7 to 5/9 and "Accessories for 3RT2 contactors", Chapter 3.

SIRIUS 3RH1 contactor relays, 4- and 8-pole

Options

Rated control supply voltages
(change of the 10th and 11th digits of the Article No.)

Rated control supply voltage U_s		Control supply voltage at	Contactor type	3RH11
AC operation				
Solenoid coils for 50/60 Hz and 60 Hz				
50/60 Hz¹⁾		60 Hz		
24 V AC	--		B0	
42 V AC	--		D0	
48 V AC	--		H0	
110 V AC	--		F0	
220 V AC	--		N2	
230 V AC	--		P0	
400 V AC	--		V0	
Solenoid coils for USA and Canada²⁾				
50 Hz		60 Hz		
110 V AC	120 V AC		K6	
220 V AC	240 V AC		P6	
Solenoid coils for Japan³⁾				
50/60 Hz		60 Hz		
100 V AC	110 V AC		G6	
200 V AC	220 V AC		N6	
400 V AC	440 V AC		R6	

Rated control supply voltage U_s		Control supply voltage at	Contactor type	3RH11
DC operation				
12 V DC				A4
24 V DC				B4
42 V DC				D4
48 V DC				W4
60 V DC				E4
110 V DC				F4
125 V DC				G4
220 V DC				M4
230 V DC				P4

- 1) Coil operating range at 50 Hz: 0.8 to $1.1 \times U_s$
at 60 Hz: 0.85 to $1.1 \times U_s$.
- 2) Coil operating range at 50 Hz: 0.85 to $1.1 \times U_s$
at 60 Hz: 0.8 to $1.1 \times U_s$.
- 3) Coil operating range at 50/60 Hz: 0.85 to $1.1 \times U_s$
at 60 Hz: 0.8 to $1.1 \times U_s$.

Accessories

The auxiliary switch blocks according to EN 50011 listed here should preferably be used for 3RH1 contactor relays.

Auxiliary switch blocks and solid-state compatible auxiliary switch blocks according to EN 50005, see "Accessories for 3RT1 contactors", Chapter 3.

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41B



3RH1911-1GA22



3RH1911-2GA22

For contactor relays	Contactor relays with AS block	Auxiliary contacts	DT	Screw terminals	DT	Spring-type terminals	
	Ident. No.	Version		⊕		⊕	
Type		NO NC		Article No.	Price per PU	Article No.	Price per PU

Auxiliary switch blocks for snapping onto the front according to EN 50011

For assembling contactor relays with 8 contacts

3RH1140, 3RH1440, Ident. No. 40E	80E	4	--		▶ 3RH1911-1GA40	▶ 3RH1911-2GA40
	71E	3	1		▶ 3RH1911-1GA31	▶ 3RH1911-2GA31
	62E	2	2		▶ 3RH1911-1GA22	▶ 3RH1911-2GA22
	53E	1	3		▶ 3RH1911-1GA13	▶ 3RH1911-2GA13
	44E	--	4		▶ 3RH1911-1GA04	▶ 3RH1911-2GA04

Contactor Relays

SIRIUS 3RH1 contactor relays, 4- and 8-pole

The following accessory parts are accessories for 3RT1 contactors in size S00 which are also suitable for 3RH1 contactor relays.

More accessory parts, see "Accessories for 3RT1 contactors size S00", Chapter 3.

For contactors	Version	Rated control supply voltage U_s ¹⁾		Power consumption of LED at U_s	DT	Article No. ²⁾	Price per PU	PU (UNIT, SET, M)	PS*	PG
		AC operation	DC operation							
Type		V AC	V DC							

Surge suppressors with LED



3RT1916-1L.00

For plugging onto the front side of the contactors with and without auxiliary switch blocks

3RH1.	Varistors	24 ... 48	12 ... 24	10 ... 120	▶	3RT1916-1JJ00		1	1 unit	41B
		48 ... 127	24 ... 70	20 ... 470	▶	3RT1916-1JK00		1	1 unit	41B
		127 ... 240	70 ... 150	50 ... 700	▶	3RT1916-1JL00		1	1 unit	41B
		--	150 ... 250	160 ... 950	A	3RT1916-1JP00		1	1 unit	41B
3RH1.	Noise suppression diodes	--	24 ... 70	20 ... 470	▶	3RT1916-1LM00		1	1 unit	41B
		--	50 ... 150	50 ... 700	▶	3RT1916-1LN00		1	1 unit	41B
		--	150 ... 250	160 ... 950	▶	3RT1916-1LP00		1	1 unit	41B

1) Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

2) For packs of 10 or 5 units, "-Z" and order code "X90" must be added to the Article No.

For contactors	Version	Rated control supply voltage U_s ¹⁾		DT	Article No. ²⁾	Price per PU	PU (UNIT, SET, M)	PS*	PG
		AC operation	DC operation						
Type		V AC	V DC						

Surge suppressors without LED



3RT1916-1DG00

For plugging onto the front side of the contactors with and without auxiliary switch blocks

3RH1	Varistors	24 ... 48	24 ... 70	▶	3RT1916-1BB00		1	1 unit	41B
		48 ... 127	70 ... 150	▶	3RT1916-1BC00		1	1 unit	41B
		127 ... 240	150 ... 250	A	3RT1916-1BD00		1	1 unit	41B
		240 ... 400	--	▶	3RT1916-1BE00		1	1 unit	41B
		400 ... 600	--	A	3RT1916-1BF00		1	1 unit	41B
3RH1	RC elements	24 ... 48	24 ... 70	▶	3RT1916-1CB00		1	1 unit	41B
		48 ... 127	70 ... 150	▶	3RT1916-1CC00		1	1 unit	41B
		127 ... 240	150 ... 250	▶	3RT1916-1CD00		1	1 unit	41B
		240 ... 400	--	▶	3RT1916-1CE00		1	1 unit	41B
		400 ... 600	--	▶	3RT1916-1CF00		1	1 unit	41B
3RH1	Noise suppression diodes	--	12 ... 250	▶	3RT1916-1DG00		1	1 unit	41B
3RH1	Diode assemblies (diode and Zener diode) for DC operation	--	12 ... 250	▶	3RT1916-1EH00		1	1 unit	41B

1) Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.

2) For packs of 10 or 5 units, "-Z" and order code "X90" must be added to the Article No.

For contactors	Version	DT	Article No. ¹⁾	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type							

Additional load modules



3RT1916-1GA00


For plugging onto the front side of the contactors with and without auxiliary switch blocks

3RH1.		▶	3RT1916-1GA00		1	1 unit	41B
-------	--	---	----------------------	--	---	--------	-----

For increasing the permissible residual current and for limiting the residual voltage. Ensures safe opening of contactors with direct control via 230 V AC semiconductor outputs of SIMATIC controllers. Also performs the function of an overvoltage damping circuit. Rated voltage: 50/60 Hz, 180 V to 255 V AC. Operating range: 0.8 to 1.1 x U_s

1) For packs of 10, "-Z" and order code "X90" must be added to the Article No.

SIRIUS 3RH1 contactor relays, 4- and 8-pole

For contactors	Rated control supply voltage U_s	Time setting range t	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG
Type	V	s		Article No.	Price per PU		

OFF-delay devices



3RT1916-2B.01

For contactor relays with DC operation
Non-adjustable delay time

3RH1...-1BF40	110 AC/DC	S00: 130 fixed	B	3RT1916-2BK01		1	1 unit	41H
3RH1...-1BM40	220/230 AC/DC	S00: 600 fixed	B	3RT1916-2BL01		1	1 unit	41H
3RH1...-1BB40	24 DC	S00: 250 fixed	B	3RT1916-2BE01		1	1 unit	41H

For contactors	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Type							

Control kit



3RK1903-0CA00

3RH1.	For manual operation of the contactor contacts for start-up and service	A	3RK1903-0CA00		1	1 unit	42D
-------	---	---	----------------------	--	---	--------	-----


Sealable covers



3RT1916-4MA10

3RH11 ¹⁾	Sealable covers for preventing manual operation	C	3RT1916-4MA10		1	5 units	41B
---------------------	---	---	----------------------	--	---	---------	-----

¹⁾ Not for contactor relays with auxiliary switch block mounted onto the front.

Version	DT	Spring-type terminals 	PU (UNIT, SET, M)	PS*	PG
		Article No.	Price per PU		

Insulation stop for securely holding back the conductor insulation on conductors up to 1 mm²


3RT1916-4JA02

Insulation stop strip, can be inserted in cable entry of the spring-type terminal (2 strips per contactor required)

- For auxiliary and control current on basic units and for mountable 3RH19 auxiliary switches, removable in pairs

B	3RT1916-4JA02		1	20 units	41B
---	----------------------	--	---	----------	-----

Tools for opening spring-type terminals



3RA2908-1A

Screwdrivers
for all SIRIUS devices with spring-type terminals
Length: approx. 200 mm;
3.0 mm x 0.5 mm;
titanium gray/black; partially insulated

A	3RA2908-1A		1	1 unit	41B
---	-------------------	--	---	--------	-----

Contactors Relays

SIRIUS 3RH14 latched contactor relays, 4-pole

Overview

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-5-1, EN 60947-5-1

The terminal designations comply with EN 50011.

Auxiliary switches

The number of auxiliary contacts can be extended by means of front auxiliary switch blocks (max. 4 contacts).

Control circuit

The contactor coil and the coil of the release solenoid are both designed for uninterrupted duty.




RC elements, varistors, diodes or diode assemblies can be fitted to both coils from the front for damping opening surges in the coil.

The contactor relay can also be switched on and released manually. For minimum operating times, see Reference Manual "Switching Devices – Contactors and Contactor Assemblies", <https://support.industry.siemens.com/cs/ww/en/view/35554359>.

Selection and ordering data



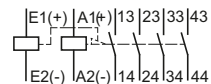
3RH1422-1A..0

Rated operational current I_e /AC-15/AC-14 at 230 V	Contacts Ident. No. acc. to EN 50011	Version	Rated control supply voltage U_s	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
					Article No.	Price per PU			
A		 NO  NC  V							

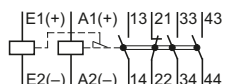
For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Terminal designations according to EN 50011

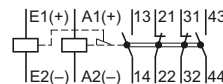
4 NO, Ident. No. **40E**



3 NO + 1 NC, Ident. No. **31E**



2 NO + 2 NC, Ident. No. **22E**



AC operation

6	40E	4	--	50/60 Hz AC ¹⁾		B	3RH1440-1AF00	1	1 unit	41A
				110	230					
	31E	3	1	110	230	B	3RH1431-1AF00	1	1 unit	41A
						B	3RH1431-1AP00	1	1 unit	41A
	22E	2	2	24	42	B	3RH1422-1AB00	1	1 unit	41A
					110	B	3RH1422-1AD00	1	1 unit	41A
					230	B	3RH1422-1AF00	1	1 unit	41A
						▶	3RH1422-1AP00	1	1 unit	41A

DC operation · DC solenoid system

6	40E	4	--	DC		B	3RH1440-1BB40	1	1 unit	41A
				24	110					
					220	B <td>3RH1440-1BM40</td> <td>1 <td>1 unit</td> <td>41A</td> </td>	3RH1440-1BM40	1 <td>1 unit</td> <td>41A</td>	1 unit	41A
	31E	3	1	24	110	B <td>3RH1431-1BB40</td> <td>1 <td>1 unit</td> <td>41A</td> </td>	3RH1431-1BB40	1 <td>1 unit</td> <td>41A</td>	1 unit	41A
					220	B <td>3RH1431-1BF40</td> <td>1 <td>1 unit</td> <td>41A</td> </td>	3RH1431-1BF40	1 <td>1 unit</td> <td>41A</td>	1 unit	41A
						B <td>3RH1431-1BM40</td> <td>1 <td>1 unit</td> <td>41A</td> </td>	3RH1431-1BM40	1 <td>1 unit</td> <td>41A</td>	1 unit	41A
	22E	2	2	24	110	▶	3RH1422-1BB40	1 <td>1 unit</td> <td>41A</td>	1 unit	41A
					220	B <td>3RH1422-1BF40</td> <td>1 <td>1 unit</td> <td>41A</td> </td>	3RH1422-1BF40	1 <td>1 unit</td> <td>41A</td>	1 unit	41A
						B <td>3RH1422-1BM40</td> <td>1 <td>1 unit</td> <td>41A</td> </td>	3RH1422-1BM40	1 <td>1 unit</td> <td>41A</td>	1 unit	41A

¹⁾ Coil operating range
at 50 Hz: 0.8 to 1.1 × U_s
at 60 Hz: 0.85 to 1.1 × U_s .

For accessories, see pages 5/7 and 5/8.

SIRIUS 3RH11 coupling contactors for switching auxiliary circuits, 4-pole

Overview

DC operation

IEC 60947-1, EN 60947-1,
IEC 60947-5-1, EN 60947-5-1

The 3RH11 coupling contactors for switching auxiliary circuits are tailored to the special requirements of working with electronic controls.

The 3RH11 coupling contactors cannot be extended with auxiliary switch blocks.

Coupling contactors have a low power consumption and an extended solenoid coil operating range.

Depending on the version, the solenoid coils are supplied either without overvoltage damping (3RH11...-HB40 or 3RH11...-MB40-0KT0), or with a diode or varistor connected as standard.

Selection and ordering data

DC operation

Low power consumption

Extended operating range of the solenoid coil

Integrated coil circuit



PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41A



3RH11...-1.B40



3RH11...-2.B40

Rated operational current $I_{th}/AC-15/AC-14$ at 230 V	Auxiliary contacts Ident. No. acc. to EN 50011	Version	DT	Screw terminals	DT	Spring-type terminals
		 NO  NC		Article No.	Price per PU	Article No. Price per PU

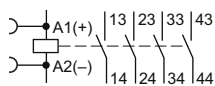
A
For screw fixing and snap-on mounting
onto TH 35 standard mounting rail

Size S00

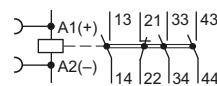
Diode, varistor or RC element, attachable

Terminal designations according to EN 50011 (auxiliary switch blocks cannot be mounted)

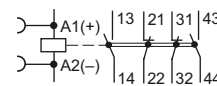
4 NO, Ident. No. **40E**



3 NO + 1 NC, Ident. No. **31E**



2 NO + 2 NC, Ident. No. **22E**



Rated control supply voltage $U_s = 24$ V DC, operating range **0.7 to 1.25 x U_s**

Power consumption of the solenoid coils **2.3 W** at 24 V

6	40E	4	--	▶	3RH1140-1HB40	B	3RH1140-2HB40
	31E	3	1	▶	3RH1131-1HB40	B	3RH1131-2HB40
	22E	2	2	▶	3RH1122-1HB40	B	3RH1122-2HB40

Rated control supply voltage $U_s = 24$ V DC, operating range **0.85 to 1.85 x U_s**

Power consumption of the solenoid coils **1.4 W** at 24 V

6	40E	4	--	B	3RH1140-1MB40-0KT0	--	
	31E	3	1	B	3RH1131-1MB40-0KT0	B	3RH1131-2MB40-0KT0
	22E	2	2	A	3RH1122-1MB40-0KT0	B	3RH1122-2MB40-0KT0

For surge suppressors, see page 5/8.

Contactors Relays

Coupling contactors

SIRIUS 3RH11 coupling contactors for switching auxiliary circuits, 4-pole

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41A



3RH11..-1.B40



3RH11..-2.B40

Rated operational current I_e /AC-15/ AC-14 at 230 V	Auxiliary contacts Ident. No. acc. to EN 50011	Version	DT	Screw terminals	DT	Spring-type terminals
				Article No.	Price per PU	Article No. Price per PU
		 NO NC				

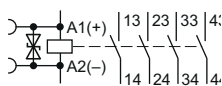
For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S00

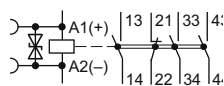
With integrated coil circuit (diode)

Terminal designations according to EN 50011 (auxiliary switch blocks cannot be mounted)

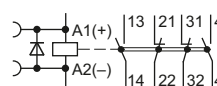
4 NO, Ident. No. **40E**



3 NO + 1 NC, Ident. No. **31E**



2 NO + 2 NC, Ident. No. **22E**



Rated control supply voltage $U_s = 24$ V DC, operating range **0.7 to 1.25 x U_s**
 Power consumption of the solenoid coils **2.3 W** at 24 V

6	40E	4	--	▶	3RH1140-1JB40	B	3RH1140-2JB40
	31E	3	1	▶	3RH1131-1JB40	B	3RH1131-2JB40
	22E	2	2	▶	3RH1122-1JB40	B	3RH1122-2JB40

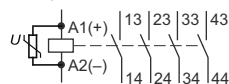
Rated control supply voltage $U_s = 24$ V DC, operating range **0.85 to 1.85 x U_s**
 Power consumption of the solenoid coils **1.4 W** at 24 V

6	40E	4	--	B	3RH1140-1VB40	B	3RH1140-2VB40
	31E	3	1	A	3RH1131-1VB40	B	3RH1131-2VB40
	22E	2	2	B	3RH1122-1VB40	B	3RH1122-2VB40

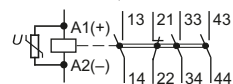
With integrated coil circuit (varistor)

Terminal designations according to EN 50011 (auxiliary switch blocks cannot be mounted)

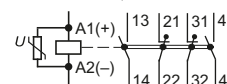
4 NO, Ident. No. **40E**



3 NO + 1 NC, Ident. No. **31E**



2 NO + 2 NC, Ident. No. **22E**



Rated control supply voltage $U_s = 24$ V DC, operating range **0.7 to 1.25 x U_s**
 Power consumption of the solenoid coils **2.3 W** at 24 V

6	40E	4	--	▶	3RH1140-1KB40	B	3RH1140-2KB40
	31E	3	1	▶	3RH1131-1KB40	B	3RH1131-2KB40
	22E	2	2	▶	3RH1122-1KB40	B	3RH1122-2KB40

Rated control supply voltage $U_s = 24$ V DC, operating range **0.85 to 1.85 x U_s**
 Power consumption of the solenoid coils **1.4 W** at 24 V

6	40E	4	--	B	3RH1140-1WB40	B	3RH1140-2WB40
	31E	3	1	A	3RH1131-1WB40	B	3RH1131-2WB40
	22E	2	2	A	3RH1122-1WB40	B	3RH1122-2WB40

Contactor Relays

Contactors with Extended Operating Range $0.7 \dots 1.25 \times U_s$ for Railway Applications

SIRIUS 3RH11 contactor relays

Overview

DC operation

IEC 60947-4-1, EN 60947-4-1.

The contactor relays are finger-safe according to EN 50274. The size S00 contactor relays have spring-type connections for all terminals.

Ambient temperature

The permissible ambient temperature for operation of the contactor relays (across the full coil operating range) is -40 to $+70$ °C.

Uninterrupted duty at temperatures $> +60$ °C reduces the mechanical endurance, the current carrying capacity of the conducting paths and the switching frequency.

Control and auxiliary circuits

The solenoid coils of the contactor relays have an extended coil operating range from 0.7 to $1.25 \times U_s$ and are fitted as standard with surge suppressors. The opening delay is consequently 2 to 5 ms longer than for standard contactors.

Application

For operation in installations which are subject both to considerable variations in the control voltage and to high ambient temperatures, e.g. railway applications under extreme climatic conditions, rolling mills, etc.

Also for control supply voltages with battery buffering to extend the operating time in the event of battery charge failure.

Contactor relays with conventional coil

Control and auxiliary circuits

These auxiliary contactor relays have an extended operating range from 0.7 to $1.25 \times U_s$; the coils are fitted with varistors as standard. An additional series resistor is not required.

Note:

An additional auxiliary switch block cannot be mounted.

Mounting

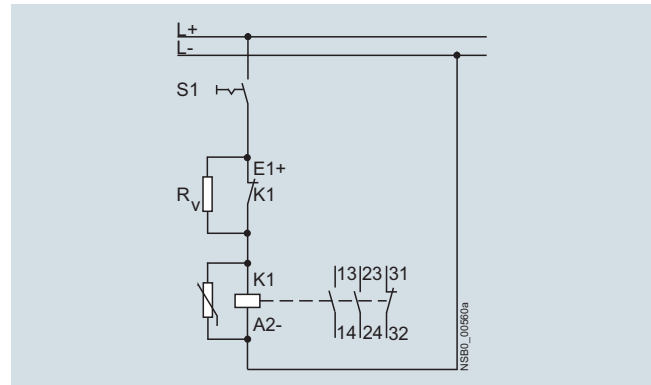
A clearance of 10 mm is required for side-by-side mounting at ambient temperatures > 60 °C ≤ 70 °C.

Contactor relays with series resistor

Control and auxiliary circuits

The DC solenoid systems of the contactor relays are modified (to holding excitation) by means of a series resistor.

The contactor relays are supplied prewired with a plug-on module containing the series resistor. A surge suppressor (varistor) is integrated.



Circuit diagram

A 4-pole auxiliary switch block (according to EN 50005) can be fitted additionally.

Side-by-side mounting

Side-by-side mounting is permissible at ambient temperatures up to 70 °C.

Contactor Relays

Contactors with Extended Operating Range 0.7 ... 1.25 x U_s for Railway Applications

SIRIUS 3RH11 contactor relays

Selection and ordering data

DC operation - DC solenoid system

Spring-type terminals

For screw fixing and snap-on mounting onto standard mounting rails

Solenoid coil with surge suppression



3RH1122-2K.40



3RH1122-2K.40-0LA0

Rated operational current				Contacts	Rated control supply voltage U_s	DT	Spring-type terminals	PU (UNIT, SET, M)	PS*	PG
$I_N/AC-15/AC-14$ $T_U: 70^\circ\text{C at}$				Version						
230 V	400 V	500 V	690 V							
A	A	A	A	NO	NC	V DC	Article No.	Price per PU		

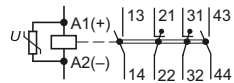
For screw fixing and snap-on mounting onto TH 35 standard mounting rail

Size S00

With conventional coil, fitted with varistor

Terminal designations according to EN 50011

2 NO + 2 NC, Ident. No. **22E**

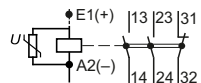


6	3	2	1	2	2 ¹⁾	24	▶ 3RH1122-2KB40	1	1 unit	41A
						110	A 3RH1122-2KF40	1	1 unit	41A

With series resistor, fitted with varistor

Terminal designations according to EN 50011

2 NO + 1 NC, Ident. No. **21X**



6	3	2	1	2	1 ²⁾	24	A 3RH1122-2KB40-0LA0	1	1 unit	41A
						110	A 3RH1122-2KF40-0LA0	1	1 unit	41A

¹⁾ It is not possible to mount an auxiliary switch block.

²⁾ 4-pole auxiliary switch block according to EN 50005 can be mounted.

**NEW**

Click on the Article No. in the catalog PDF to access it in the Industry Mall and get all related information.

Article-No.
3RA1943-2C
3RA1943-2B
3RA1953-2B
3RA1953-2N

Or directly in the Internet, e. g.
[www.siemens.com/
product?3RA1943-2C](http://www.siemens.com/product?3RA1943-2C)

Price groups

PG 14O, 41B, 41E, 41F, 41G, 41H, 41J

7/2 Introduction**SIRIUS 3RV1 motor starter protectors/circuit breakers up to 100 A**

- 7/5 General data
- 7/8 For motor protection
- 7/11 For motor protection with overload relay function
- 7/12 For starter combinations
- 7/13 For transformer protection
- 7/14 For fuse monitoring
- 7/15 For system protection according to UL 489/CSA C22.2 No. 5
- 7/16 For distance protection
- Accessories
- 7/17 - Mountable accessories
- 7/20 - Busbar accessories
- 7/23 - Rotary operating mechanisms
- 7/25 - Mounting accessories
- 7/29 - Enclosures and front plates
- 7/32 - 3RV19 infeed system

Overload relays

- 7/36 General data
- SIRIUS 3RU1 thermal overload relays
- 7/40 3RU11 up to 100 A for standard applications
- 7/45 Accessories
- SIRIUS 3RB2 electronic overload relays
- 7/47 3RB20, 3RB21 up to 630 A for standard applications
- 7/52 Accessories for 3RB20, 3RB21
- 7/54 3RB22, 3RB23 up to 630 A for high-feature applications
- 7/59 Current measuring modules for 3RB22, 3RB23
- 7/60 Accessories for 3RB22, 3RB23

Protection Equipment

Introduction

Overview



Type	3RV10	3RV11	3RV13	3RV14	3RV16	3RV16	3RV17
SIRIUS 3RV1 motor starter protectors/circuit breakers up to 100 A							
Applications							
System protection	✓ ¹⁾	✓ ¹⁾	--	--	--	--	✓
Motor protection	✓	--	--	--	--	--	--
Motor protection with overload relay function	--	✓	--	--	--	--	--
Starter combinations	--	--	✓	--	--	--	--
Transformer protection	--	--	--	✓	--	--	--
Fuse monitoring	--	--	--	--	✓	--	--
Voltage transformer circuit breakers for distance protection	--	--	--	--	--	✓	--
Size	S00, S0, S2, S3	S0, S2, S3	S0, S2, S3	S0, S2	S00	S00	S3
Rated current I_n							
• Size S00	A Up to 12	--	--	--	0.2	Up to 3	--
• Size S0	A Up to 25	Up to 25	Up to 25	Up to 20	--	--	--
• Size S2	A Up to 50	Up to 50	Up to 50	Up to 40	--	--	--
• Size S3	A Up to 100	Up to 100	Up to 100	--	--	--	Up to 70
Rated operational voltage U_e acc. to IEC	V 690 AC ²⁾	690 AC ²⁾	690 AC ²⁾	690 AC ²⁾	690 AC ²⁾	400 AC	690 AC
Rated frequency	Hz 50/60	50/60	50/60	50/60	50/60	16 ² / ₃ ... 60	50/60
Trip class	CLASS 10, 20	CLASS 10	--	CLASS 10	--	--	--
Thermal overload releases	A 0.11 ... 0.16 up to 80 ... 100	0.11 ... 0.16 up to 80 ... 100	Without ³⁾	0.11 ... 0.16 up to 28 ... 40	0.2	1.4 ... 3	10 ... 70 Non-adjustable
Electronic releases							
A multiple of the rated current	13 times	13 times	13 times	20 times	6 times	4 ... 7 times	13 times
Short-circuit breaking capacity I_{cu} at 400 V AC	kA 50/100	50/100	50/100	50/100	100	50	⁴⁾
Pages	7/8 up to 7/10	7/11	7/12	7/13	7/14, 7/16	7/16	7/15

Accessories							
For sizes	S00 S0 S2 S3	S0 S2 S3	S0 S2 S3	S0 S2	S00	S00	S3
Auxiliary switches	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓	✓ ⁵⁾
Signaling switches	-- ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	--	--	--
Undervoltage releases	✓ ✓ ✓ ✓	-- -- --	✓ ✓ ✓	✓ ✓	✓	✓	✓
Shunt releases	✓ ✓ ✓ ✓	-- -- --	✓ ✓ ✓	✓ ✓	✓	✓	✓
Isolator modules	-- ✓ ✓ --	✓ ✓ --	✓ ✓ --	✓ ✓	--	--	--
Insulated three-phase busbar system	✓ ✓ ✓ --	-- ✓ --	✓ ✓ --	✓ ✓	✓	✓	--
Busbar adapters	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓	--
Door-coupling rotary operating mechanisms	-- ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	--	--	✓
Remote motorized operating mechanisms	-- -- ✓ ✓	-- ✓ ✓	-- ✓ ✓	-- ✓	--	--	--
Link modules	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓	--
Enclosures for surface mounting	✓ ✓ ✓ --	✓ ✓ --	✓ ✓ --	✓ ✓	✓	✓	--
Enclosures for flush mounting	✓ ✓ -- --	✓ -- --	✓ -- --	✓ --	✓	✓	--
Front plates	✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓	✓	✓	--
Infeed system	✓ ✓ -- --	-- -- --	✓ -- --	✓ --	--	--	--
Pages	7/17 ... 7/35						

✓ Has this function or can use this accessory

-- Does not have this function or cannot use this accessory

1) For symmetrical loading of the three phases.

2) With molded-plastic enclosure 500 V AC. DC applications, see Reference Manual "Protection Equipment – Motor Starter Protectors · Molded Case Circuit Breakers", → "Technical Specifications" → "DC Short-Circuit Breaking Capacity".

3) For overload protection of the motors, appropriate overload relays must be used.

4) According to UL 489
- At 480 Y/277 V AC: 65 kA;
- At 480 V AC: 65 kA.

5) Only lateral auxiliary switches can be fitted.



Type	3RV10				3RV13					
SIRIUS 3RV1 molded case motor starter protectors up to 800 A¹⁾										
Applications										
Motor protection	✓				--					
Starter combinations	--				✓					
Switching capacity	Standard switching capacity				Standard switching capacity					Increased switching capacity
Size	3RV1063	3RV1073	3RV1083	3RV1353	3RV1363	3RV1373	3RV1383	3RV1364	3RV1374	
Rated current I_n	A 100 ... 200	400	630	1 ... 32	100 ... 250	400, 630	630, 800	100 ... 250	400	
Rated operational voltage U_e acc. to IEC	690 AC			690 AC						
Rated frequency	Hz 50/60			50/60						
Trip class	CLASS 10A, 10, 20, 30			-- ¹⁾						
Thermal overload releases	A 40 ... 100 up to 252 ... 630			Without ¹⁾						
Electronic releases A multiple of the rated current	Adjustable, 6 ... 13 times			Non-adjustable 1 ... 12.5 A: 13 times; adjustable 20 A, 32 A: 6 ... 12 times		1 ... 10 times				
Short-circuit breaking capacity I_{cu} at 400 V AC	kA 120	120	100	85	120	120	100	200	200	
Trip unit (release)	TU 4			TU 1: 1 ... 12.5 A; TU 2: 20 A, 32 A		TU 3				

Accessories¹⁾									
For molded case motor starter protectors	3RV1063	3RV1073	3RV1083	3RV1353	3RV1363	3RV1373	3RV1383	3RV1364	3RV1374
Auxiliary switches	✓	✓	✓	✓	✓	✓	✓	✓	✓
Undervoltage releases	✓	✓	✓	✓	✓	✓	✓	✓	✓
Shunt releases	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rotary operating mechanisms	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connection methods									
• Extended terminals on the front	✓	✓	--	✓	✓	✓	--	✓	✓
• Cable terminals on the front	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Rear terminals	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Has this function or can use this accessory

-- Does not have this function or cannot use this accessory

1) For more information, see Catalog IC 10, Chapter 7 "Protection Equipment" → "SIRIUS 3RV1 molded case motor starter protectors up to 800 A".

2) For overload protection of the motors, appropriate overload relays must be used.

Protection Equipment

Introduction



Type		3RU11	3RB20	3RB21	3RB22, 3RB23
SIRIUS overload relays up to 630 A					
Applications					
System protection		✓ ¹⁾	✓ ¹⁾	✓ ¹⁾	✓ ¹⁾
Motor protection		✓	✓	✓	✓
Alternating current, three-phase		✓	✓	✓	✓
Alternating current, single-phase		✓	--	--	✓
Direct current		✓	--	--	--
Size contactor		S00, S0, S2, S3	S00 ... S12	S00 ... S12	S00 ... S12
Rated operational current I_e					
• Size S00	A	Up to 12	Up to 12	Up to 12	Up to 25
• Size S0	A	Up to 25	Up to 25	Up to 25	Up to 25
• Size S2	A	Up to 50	Up to 50	Up to 50	Up to 100
• Size S3	A	Up to 100	Up to 100	Up to 100	Up to 100
• Size S6	A	--	Up to 200	Up to 200	Up to 200
• Size S10/S12, size 14 (3TF68/3TF69)	A	--	Up to 630	Up to 630	Up to 630
Rated operational voltage U_e	V	690/1 000 AC ²⁾	690/1 000 AC ³⁾	690/1 000 AC ³⁾	690/1 000 AC ⁴⁾
Rated frequency	Hz	50/60	50/60	50/60	50/60
Trip class		CLASS 10	CLASS 10, 20	CLASS 5, 10, 20, 30 Adjustable	CLASS 5, 10, 20, 30 Adjustable
Thermal overload releases	A	0.11 ... 0.16 up to 80 ... 100	--	--	--
Electronic overload releases	A	--	0.1 ... 0.4 up to 160 ... 630	0.1 ... 0.4 up to 160 ... 630	0.3 ... 3 up to 63 ... 630
Rated operational power for three-phase motor at 400 V AC	kW	0.04 up to 45	0.04 ... 0.09 up to 90 ... 450	0.04 ... 0.09 up to 90 ... 450	0.09 ... 1.1 up to 37 ... 450
Pages		7/42 ... 7/44	7/49, 7/50	7/51	7/56 ... 7/59
Accessories					
For sizes		S00 S0 S2 S3	S00 S0 S2 S3 S6 S10/S12	S00 S0 S2 S3 S6 S10/S12	S00 S0 S2 S3 S6 S10/S12
Terminal supports for stand-alone installation		✓ ✓ ✓ ✓	✓ ✓ 5) 5) 5) 5)	✓ ✓ 5) 5) 5) 5)	5) 5) 5) 5) 5) 5)
Mechanical RESET		✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓	-- -- -- -- -- --
Cable releases for RESET		✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓	-- -- -- -- -- --
Electrical remote RESET		✓ ✓ ✓ ✓	-- -- -- -- -- --	Integrated in the unit	Integrated in the unit
Terminal covers		-- -- ✓ ✓	-- -- -- ✓ ✓ ✓	-- -- -- ✓ ✓ ✓	-- -- -- ✓ ✓ ✓
Sealable covers for setting knobs		Integrated in the unit	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓ ✓
Pages		7/45, 7/46	7/52, 7/53	7/52, 7/53	7/60, 7/61

- ✓ Has this function or can use this accessory
 -- Does not have this function or cannot use this accessory

- 1) The units are responsible in the main circuit for overload protection of the assigned electrical loads (e.g. motors), feeder cable, and other switching and protection devices in the respective load feeder.
- 2) Size S3 up to 1 000 V AC.
- 3) Size S2 (only with straight-through transformer), S3, S6, S10, S12 up to 1 000 V AC.
- 4) With reference to the 3RB29.6 current measuring modules.
- 5) Stand-alone installation without accessories is possible.

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

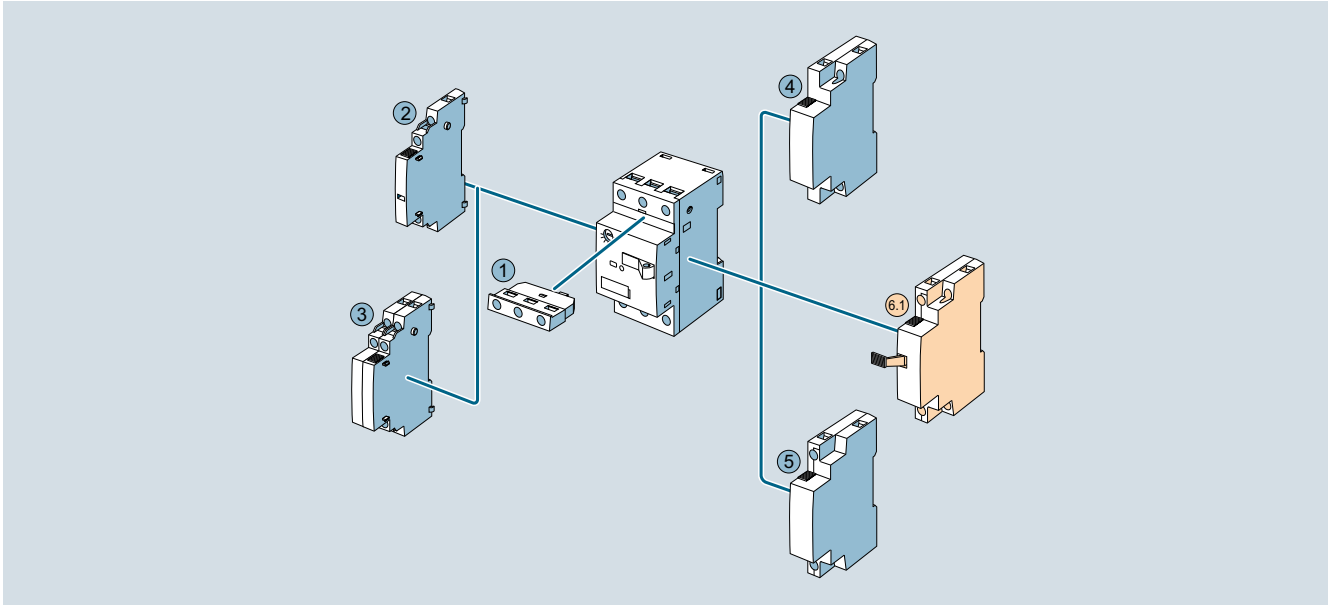
General data

Overview

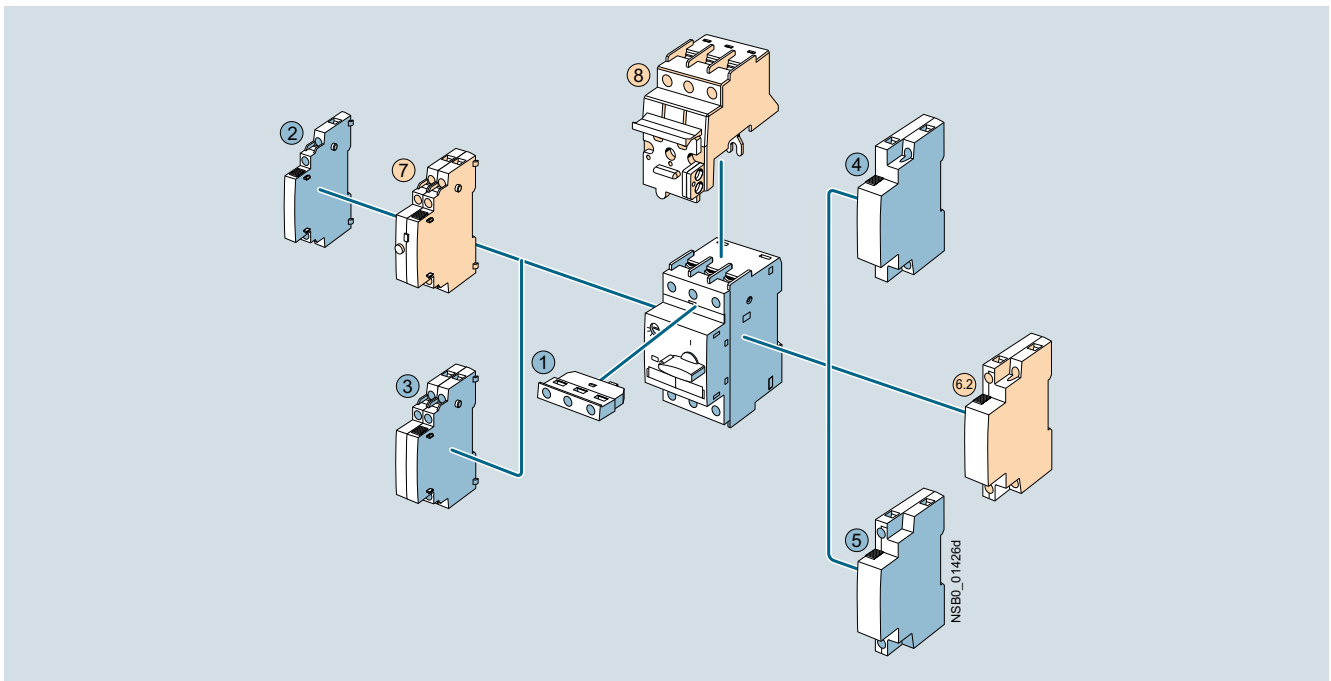
The following illustration shows our 3RV1 motor starter protectors/circuit breakers with the accessories which can be mounted for the various sizes, see also "Introduction" → "Overview" on page 7/2.

For "Accessories", see page 7/17 onwards.

Motor starter protectors/circuit breakers, size S00, with mountable accessories



Motor starter protectors/circuit breakers, sizes S0, S2 or S3, with mountable accessories



Mountable accessories for all sizes S00 ... S3

- ① Transverse auxiliary switch (can not be used with 3RV1742 circuit breaker)
- ② Lateral auxiliary switch with 2 contacts
- ③ Lateral auxiliary switch with 4 contacts
- ④ Shunt release
- ⑤ Undervoltage release

Mountable accessories

- ⑥.1 Undervoltage release with leading auxiliary contacts
- ⑥.2 Undervoltage release with leading auxiliary contacts
- ⑦ Alarm switch
- ⑧ Isolator module

For sizes

- S00
- S0 ... S3
- S0 ... S3
- S0, S2

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

General data



Size S0 motor starter protector

3RV1 motor starter protectors/circuit breakers are compact, current limiting motor starter protectors/circuit breakers which are optimized for load feeders. The motor starter protectors/circuit breakers are used according to IEC for switching and protecting three-phase motors of up to 45 kW at 400 V AC and for other loads with rated currents of up to 100 A.

The 3RV1 motor starter protectors/circuit breakers are generally approved according to IEC and UL/CSA.

According to UL 508 the 3RV1 motor starter protectors/circuit breakers in sizes S00 to S3 are approved as

- "Manual Motor Controllers"
- "Manual Motor Controllers" for "Group Installations"
- "Manual Motor Controllers Suitable for Tab Conductor Protection in Group Installations"
- "Self-Protected Combination Motor Controllers (Type E)"
This approval does not apply to size S00. Furthermore, the 3RV10 motor starter protectors in size S0 and S3 have to be equipped with additional infeed terminals.

For 3RV2 motor starter protectors/circuit breakers sizes S00 to S2 up to 80 A, [see Catalog IC 10](#).

The 3RV1742 are approved as circuit breakers according to UL 489; they are a special variant of the 3RV1 motor starter protectors.

Type of construction

The 3RV1 motor starter protectors/circuit breakers are available in four sizes:

- Size S00 – width 45 mm, max. rated current 12 A, at 400 V AC suitable for three-phase motors up to 5.5 kW
- Size S0 – width 45 mm, max. rated current 25 A, at 400 V AC suitable for three-phase motors up to 11 kW
- Size S2 – width 55 mm, max. rated current 50 A, at 400 V AC suitable for three-phase motors up to 22 kW
- Size S3 – width 70 mm, max. rated current 100 A, at 400 V AC suitable for three-phase motors up to 45 kW

For sizes S00 to S2 of the 3RV2 motor starter protectors/circuit breakers up to 80 A, [see Catalog IC 10](#).

Circuit breakers acc. to UL 489

The 3RV1742 circuit breakers are available in size S3 (width 70 mm):

- Maximum rated current 70 A at 480 Y/277 V AC
- Maximum rated current 10 A to 30 A at 480 V AC

For sizes S00 and S0 of the 3RV27 and 3RV28 circuit breakers up to 22 A, [see Catalog IC 10](#).

Connection methods

The SIRIUS 3RV1 motor starter protectors/circuit breakers can be supplied with screw terminals and spring-type terminals.



Screw terminals



Spring-type terminals

The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

"Increased safety" type of protection EEx e according to ATEX Directive 94/9/EC

3RV10 motor starter protectors are suitable for the overload protection of explosion-proof motors with "increased safety" type of protection EEx e.

Article No. scheme

Digit of the Article No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	13th	14th	15th	16th	
	□□□	□	□	□	□	-	□	□	□	□	-	□	□	□	
Motor starter protectors/circuit breakers	3 R V														
SIRIUS 1st generation	1														
Type of motor starter protector/circuit breaker	<input type="checkbox"/>														
Size	<input type="checkbox"/>														
Switching capacity	<input type="checkbox"/>														
Setting range for overload release	<input type="checkbox"/> <input type="checkbox"/>														
Trip class (CLASS)	<input type="checkbox"/>														
Connection methods	<input type="checkbox"/>														
With or without auxiliary switch	<input type="checkbox"/>														
Special versions	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>														
Example	3 R V	1	0	3	1	-	4	A	A	1	0				

Note:

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

General data

Application

Operating conditions

3RV1 motor starter protectors/circuit breakers are suitable for use in any climate. They are intended for use in enclosed rooms in which no severe operating conditions (such as dust, caustic vapors, hazardous gases) prevail. When installed in dusty and damp areas, suitable enclosures must be provided.

3RV1 motor starter protectors/circuit breakers can optionally be fed from the top or from below.

The permissible ambient temperatures, the maximum switching capacities, the tripping currents and other boundary conditions can be found in the technical specifications and tripping characteristics, see Reference Manual "Protection Equipment – Circuit Breakers · Molded Case Circuit Breakers".

3RV1 motor starter protectors/circuit breakers are suitable for operation in IT systems (IT networks). In this case, the different short-circuit breaking capacity in the IT system must be taken into account.

Since operational currents, starting currents and current peaks are different even for motors with identical power ratings due to the inrush current, the motor ratings in the selection tables are only guide values. The specific rated and startup data of the motor to be protected is always paramount to the choice of the most suitable motor starter protector/circuit breaker. This also applies to motor starter protectors for transformer protection.

Note:

For the use of 3RV1 motor starter protectors in size S3 in conjunction with highly energy-efficient IE3 motors, please observe the information on dimensioning and configuring, see "Configuration Manual for SIRIUS Controls with IE3 Motors", <https://support.industry.siemens.com/cs/ww/en/view/94770820>.

The 3RV1 motor starter protectors/circuit breakers in size S00 to S2 have not been specially optimized for use with IE3 motors. In this case please use the new motor starter protectors/circuit breakers of series 3RV2, see Catalog IC 10, Chapter 7 "Protection Equipment" → "SIRIUS 3RV2 Motor Starter Protectors/Circuit Breakers up to 80 A".

Possible uses

The 3RV1 motor starter protectors/circuit breakers can be used:

- For short-circuit protection
- For motor protection (also with overload relay function)
- For system protection
- For short-circuit protection for starter combinations
- For transformer protection
- As main and EMERGENCY-STOP switches
- For fuse monitoring
- For operation in IT systems (IT networks)
- For switching of DC current
- As voltage transformer circuit breakers
- In areas subject to explosion hazard (ATEX)
- Approved as circuit breakers according to UL 489 (3RV1742)

For more information, see Reference Manual "Protection Equipment – Circuit Breakers · Molded Case Circuit Breakers".

Motor Starter Protectors/Circuit Breakers

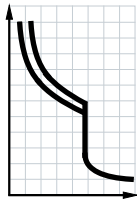
SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

For motor protection

Selection and ordering data

CLASS 10, without auxiliary switches

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41E



3RV1011-0JA10



3RV1021-0JA10



3RV1011-1EA20

Rated current	Suitable for three-phase motors ¹⁾ with P	Setting range for thermal overload releases	Instantaneous overcurrent releases	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	DT	Spring-type terminals	
I_n				I_{cu}		Article No.	Price per PU	Article No.	Price per PU
A	kW	A	A	kA					
Size S00									
0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV1011-0AA10	▶	3RV1011-0AA20	
0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV1011-0BA10	▶	3RV1011-0BA20	
0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV1011-0CA10	▶	3RV1011-0CA20	
0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV1011-0DA10	▶	3RV1011-0DA20	
0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV1011-0EA10	▶	3RV1011-0EA20	
0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV1011-0FA10	▶	3RV1011-0FA20	
0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV1011-0GA10	▶	3RV1011-0GA20	
0.8	0.18	0.55 ... 0.8	10	100	▶	3RV1011-0HA10	▶	3RV1011-0HA20	
1	0.25	0.7 ... 1	13	100	▶	3RV1011-0JA10	▶	3RV1011-0JA20	
1.25	0.37	0.9 ... 1.25	16	100	▶	3RV1011-0KA10	▶	3RV1011-0KA20	
1.6	0.55	1.1 ... 1.6	21	100	▶	3RV1011-1AA10	▶	3RV1011-1AA20	
2	0.75	1.4 ... 2	26	100	▶	3RV1011-1BA10	▶	3RV1011-1BA20	
2.5	0.75	1.8 ... 2.5	33	100	▶	3RV1011-1CA10	▶	3RV1011-1CA20	
3.2	1.1	2.2 ... 3.2	42	100	▶	3RV1011-1DA10	▶	3RV1011-1DA20	
4	1.5	2.8 ... 4	52	100	▶	3RV1011-1EA10	▶	3RV1011-1EA20	
5	1.5	3.5 ... 5	65	100	▶	3RV1011-1FA10	▶	3RV1011-1FA20	
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV1011-1GA10	▶	3RV1011-1GA20	
8	3	5.5 ... 8	104	50	▶	3RV1011-1HA10	▶	3RV1011-1HA20	
10	4	7 ... 10	130	50	▶	3RV1011-1JA10	▶	3RV1011-1JA20	
12	5.5	9 ... 12	156	50	▶	3RV1011-1KA10	▶	3RV1011-1KA20	
Size S0									
0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV1021-0AA10		--	
0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV1021-0BA10		--	
0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV1021-0CA10		--	
0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV1021-0DA10		--	
0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV1021-0EA10		--	
0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV1021-0FA10		--	
0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV1021-0GA10		--	
0.8	0.18	0.55 ... 0.8	10	100	▶	3RV1021-0HA10		--	
1	0.25	0.7 ... 1	13	100	▶	3RV1021-0JA10		--	
1.25	0.37	0.9 ... 1.25	16	100	▶	3RV1021-0KA10		--	
1.6	0.55	1.1 ... 1.6	21	100	▶	3RV1021-1AA10		--	
2	0.75	1.4 ... 2	26	100	▶	3RV1021-1BA10		--	
2.5	0.75	1.8 ... 2.5	33	100	▶	3RV1021-1CA10		--	
3.2	1.1	2.2 ... 3.2	42	100	▶	3RV1021-1DA10		--	
4	1.5	2.8 ... 4	52	100	▶	3RV1021-1EA10		--	
5	1.5	3.5 ... 5	65	100	▶	3RV1021-1FA10		--	
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV1021-1GA10		--	
8	3	5.5 ... 8	104	100	▶	3RV1021-1HA10		--	
10	4	7 ... 10	130	100	▶	3RV1021-1JA10		--	
12.5	5.5	9 ... 12.5	163	100	▶	3RV1021-1KA10		--	
16	7.5	11 ... 16	208	50	▶	3RV1021-4AA10		--	
20	7.5	14 ... 20	260	50	▶	3RV1021-4BA10		--	
22	11	17 ... 22	286	50	▶	3RV1021-4CA10		--	
25	11	20 ... 25	325	50	▶	3RV1021-4DA10		--	

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

Auxiliary switches and other accessories can be ordered separately (see "Mountable accessories" page 7/17 onwards).

Multi-unit/reusable packaging available on request.

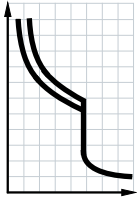
Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

For motor protection

CLASS 10, with transverse auxiliary switch (1 NO + 1 NC)

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41E



3RV1011-0KA15
with integrated transverse
auxiliary switch



3RV1021-1GA15
with integrated transverse
auxiliary switch



3RV1011-0GA25
with integrated transverse
auxiliary switch

Rated current	Suitable for three-phase motors ¹⁾ with P	Setting range for thermal overload releases	Instantaneous overcurrent releases	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	DT	Spring-type terminals	
I_n				I_{cu}		Article No.	Price per PU	Article No.	Price per PU
A	kW	A	A	kA					
Size S00									
0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV1011-0AA15	B	3RV1011-0AA25	
0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV1011-0BA15	B	3RV1011-0BA25	
0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV1011-0CA15	B	3RV1011-0CA25	
0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV1011-0DA15	B	3RV1011-0DA25	
0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV1011-0EA15	B	3RV1011-0EA25	
0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV1011-0FA15	B	3RV1011-0FA25	
0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV1011-0GA15	B	3RV1011-0GA25	
0.8	0.18	0.55 ... 0.8	10	100	▶	3RV1011-0HA15	B	3RV1011-0HA25	
1	0.25	0.7 ... 1	13	100	▶	3RV1011-0JA15	B	3RV1011-0JA25	
1.25	0.37	0.9 ... 1.25	16	100	▶	3RV1011-0KA15	B	3RV1011-0KA25	
1.6	0.55	1.1 ... 1.6	21	100	▶	3RV1011-1AA15	B	3RV1011-1AA25	
2	0.75	1.4 ... 2	26	100	▶	3RV1011-1BA15	B	3RV1011-1BA25	
2.5	0.75	1.8 ... 2.5	33	100	▶	3RV1011-1CA15	B	3RV1011-1CA25	
3.2	1.1	2.2 ... 3.2	42	100	▶	3RV1011-1DA15	B	3RV1011-1DA25	
4	1.5	2.8 ... 4	52	100	▶	3RV1011-1EA15	B	3RV1011-1EA25	
5	1.5	3.5 ... 5	65	100	▶	3RV1011-1FA15	B	3RV1011-1FA25	
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV1011-1GA15	B	3RV1011-1GA25	
8	3	5.5 ... 8	104	50	▶	3RV1011-1HA15	B	3RV1011-1HA25	
10	4	7 ... 10	130	50	▶	3RV1011-1JA15	B	3RV1011-1JA25	
12	5.5	9 ... 12	156	50	▶	3RV1011-1KA15	B	3RV1011-1KA25	
Size S0									
0.16	0.04	0.11 ... 0.16	2.1	100	▶	3RV1021-0AA15		--	
0.2	0.06	0.14 ... 0.2	2.6	100	▶	3RV1021-0BA15		--	
0.25	0.06	0.18 ... 0.25	3.3	100	▶	3RV1021-0CA15		--	
0.32	0.09	0.22 ... 0.32	4.2	100	▶	3RV1021-0DA15		--	
0.4	0.09	0.28 ... 0.4	5.2	100	▶	3RV1021-0EA15		--	
0.5	0.12	0.35 ... 0.5	6.5	100	▶	3RV1021-0FA15		--	
0.63	0.18	0.45 ... 0.63	8.2	100	▶	3RV1021-0GA15		--	
0.8	0.18	0.55 ... 0.8	10	100	▶	3RV1021-0HA15		--	
1	0.25	0.7 ... 1	13	100	▶	3RV1021-0JA15		--	
1.25	0.37	0.9 ... 1.25	16	100	▶	3RV1021-0KA15		--	
1.6	0.55	1.1 ... 1.6	21	100	▶	3RV1021-1AA15		--	
2	0.75	1.4 ... 2	26	100	▶	3RV1021-1BA15		--	
2.5	0.75	1.8 ... 2.5	33	100	▶	3RV1021-1CA15		--	
3.2	1.1	2.2 ... 3.2	42	100	▶	3RV1021-1DA15		--	
4	1.5	2.8 ... 4	52	100	▶	3RV1021-1EA15		--	
5	1.5	3.5 ... 5	65	100	▶	3RV1021-1FA15		--	
6.3	2.2	4.5 ... 6.3	82	100	▶	3RV1021-1GA15		--	
8	3	5.5 ... 8	104	100	▶	3RV1021-1HA15		--	
10	4	7 ... 10	130	100	▶	3RV1021-1JA15	D	--	
12.5	5.5	9 ... 12.5	163	100	▶	3RV1021-1KA15		--	
16	7.5	11 ... 16	208	50	▶	3RV1021-4AA15		--	
20	7.5	14 ... 20	260	50	▶	3RV1021-4BA15		--	
22	11	17 ... 22	286	50	▶	3RV1021-4CA15		--	
25	11	20 ... 25	325	50	▶	3RV1021-4DA15		--	

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

Auxiliary switches and other accessories can be ordered separately (see "Mountable accessories" page 7/17 onwards).

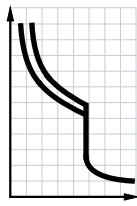
Multi-unit/reusable packaging available on request.

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

For motor protection

CLASS 10, without auxiliary switches



Rated current	Suitable for three-phase motors ¹⁾ with P	Setting range for thermal overload releases	Instantaneous overcurrent releases	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG
I_n			$I >$	I_{cu}		Article No.	Price per PU			
A	kW	A	A	kA						

Size S2



16	7.5	11 ... 16	208	50	▶	3RV1031-4AA10		1	1 unit	41E
20	7.5	14 ... 20	260	50	▶	3RV1031-4BA10		1	1 unit	41E
25	11	18 ... 25	325	50	▶	3RV1031-4DA10		1	1 unit	41E
32	15	22 ... 32	416	50	▶	3RV1031-4EA10		1	1 unit	41E
40	18.5	28 ... 40	520	50	▶	3RV1031-4FA10		1	1 unit	41E
45	22	36 ... 45	585	50	▶	3RV1031-4GA10		1	1 unit	41E
50	22	40 ... 50	650	50	▶	3RV1031-4HA10		1	1 unit	41E

3RV1031-4HA10

Size S3



40	18.5	28 ... 40	520	50	▶	3RV1041-4FA10		1	1 unit	41E
50	22	36 ... 50	650	50	▶	3RV1041-4HA10		1	1 unit	41E
63	30	45 ... 63	819	50	▶	3RV1041-4JA10		1	1 unit	41E
75 ²⁾	37	57 ... 75	975	50	▶	3RV1041-4KA10		1	1 unit	41E
90 ²⁾	45	70 ... 90	1 170	50	▶	3RV1041-4LA10		1	1 unit	41E
100 ²⁾	45	80 ... 100	1 235	50	▶	3RV1041-4MA10		1	1 unit	41E

3RV1041-4LA10

Size S3, with increased switching capacity



16	7.5	11 ... 16	208	100	▶	3RV1042-4AA10		1	1 unit	41E
20	7.5	14 ... 20	260	100	▶	3RV1042-4BA10		1	1 unit	41E
25	11	18 ... 25	325	100	▶	3RV1042-4DA10		1	1 unit	41E
32	15	22 ... 32	416	100	▶	3RV1042-4EA10		1	1 unit	41E
40	18.5	28 ... 40	520	100	▶	3RV1042-4FA10		1	1 unit	41E
50	22	36 ... 50	650	100	▶	3RV1042-4HA10		1	1 unit	41E
63	30	45 ... 63	819	100	▶	3RV1042-4JA10		1	1 unit	41E
75 ²⁾	37	57 ... 75	975	100	▶	3RV1042-4KA10		1	1 unit	41E
90 ²⁾	45	70 ... 90	1 170	100	▶	3RV1042-4LA10		1	1 unit	41E
100 ²⁾	45	80 ... 100	1 235	100	▶	3RV1042-4MA10		1	1 unit	41E

3RV1042-4JA10

CLASS 20, without auxiliary switches

Size S2



16	7.5	11 ... 16	208	50	A	3RV1031-4AB10		1	1 unit	41E
20	7.5	14 ... 20	260	50	A	3RV1031-4BB10		1	1 unit	41E
25	11	18 ... 25	325	50	A	3RV1031-4DB10		1	1 unit	41E
32	15	22 ... 32	416	50	A	3RV1031-4EB10		1	1 unit	41E
40	18.5	28 ... 40	520	50	A	3RV1031-4FB10		1	1 unit	41E
45	22	36 ... 45	585	50	A	3RV1031-4GB10		1	1 unit	41E
50	22	40 ... 50	650	50	A	3RV1031-4HB10		1	1 unit	41E

3RV1031-4AB10

Size S3, with increased switching capacity



40	18.5	28 ... 40	520	100	A	3RV1042-4FB10		1	1 unit	41E
50	22	36 ... 50	650	100	A	3RV1042-4HB10		1	1 unit	41E
63	30	45 ... 63	819	100	A	3RV1042-4JB10		1	1 unit	41E
75 ²⁾	37	57 ... 75	975	100	A	3RV1042-4KB10		1	1 unit	41E
90 ²⁾	45	70 ... 90	1 170	100	A	3RV1042-4LB10		1	1 unit	41E
100 ²⁾	45	80 ... 100	1 235	100	A	3RV1042-4MB10		1	1 unit	41E

3RV1042-4KB10

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

²⁾ For the use of 3RV104. motor starter protectors with an energy-efficient IE3 motor we recommend using a contactor for normal switching duty, see also page 7/7.

Auxiliary switches and other accessories can be ordered separately (see "Mountable accessories" page 7/17 onwards).

Multi-unit/reusable packaging available on request.

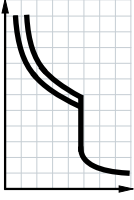






Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

For motor protection with overload relay function

Selection and ordering data

CLASS 10, with overload relay function (automatic RESET), without auxiliary switches

	Rated current	Suitable for three-phase motors ¹⁾ with P	Setting range for thermal overload releases	Instantaneous overcurrent releases	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
	I_n				I_{cu}		Article No.				
	A	kW	A	A	kA						
Size S0²⁾											
 3RV1121-0KA10	0.16	0.04	0.11 ... 0.16	2.1	100	B	3RV1121-0AA10		1	1 unit	41E
	0.2	0.06	0.14 ... 0.2	2.6	100	B	3RV1121-0BA10		1	1 unit	41E
	0.25	0.06	0.18 ... 0.25	3.3	100	B	3RV1121-0CA10		1	1 unit	41E
	0.32	0.09	0.22 ... 0.32	4.2	100	B	3RV1121-0DA10		1	1 unit	41E
	0.4	0.09	0.28 ... 0.4	5.2	100	A	3RV1121-0EA10		1	1 unit	41E
	0.5	0.12	0.35 ... 0.5	6.5	100	B	3RV1121-0FA10		1	1 unit	41E
	0.63	0.18	0.45 ... 0.63	8.2	100	A	3RV1121-0GA10		1	1 unit	41E
	0.8	0.18	0.55 ... 0.8	10	100	A	3RV1121-0HA10		1	1 unit	41E
	1	0.25	0.7 ... 1	13	100	A	3RV1121-0JA10		1	1 unit	41E
	1.25	0.37	0.9 ... 1.25	16	100	A	3RV1121-0KA10		1	1 unit	41E
	1.6	0.55	1.1 ... 1.6	21	100	A	3RV1121-1AA10		1	1 unit	41E
	2	0.75	1.4 ... 2	26	100	A	3RV1121-1BA10		1	1 unit	41E
	2.5	0.75	1.8 ... 2.5	33	100	A	3RV1121-1CA10		1	1 unit	41E
	3.2	1.1	2.2 ... 3.2	42	100	A	3RV1121-1DA10		1	1 unit	41E
	4	1.5	2.8 ... 4	52	100	A	3RV1121-1EA10		1	1 unit	41E
	5	1.5	3.5 ... 5	65	100	A	3RV1121-1FA10		1	1 unit	41E
6.3	2.2	4.5 ... 6.3	82	100	A	3RV1121-1GA10		1	1 unit	41E	
8	3	5.5 ... 8	104	100	A	3RV1121-1HA10		1	1 unit	41E	
10	4	7 ... 10	130	100	A	3RV1121-1JA10		1	1 unit	41E	
12.5	5.5	9 ... 12.5	163	100	A	3RV1121-1KA10		1	1 unit	41E	
16	7.5	11 ... 16	208	50	A	3RV1121-4AA10		1	1 unit	41E	
20	7.5	14 ... 20	260	50	A	3RV1121-4BA10		1	1 unit	41E	
22	11	17 ... 22	286	50	A	3RV1121-4CA10		1	1 unit	41E	
25	11	20 ... 25	325	50	A	3RV1121-4DA10		1	1 unit	41E	
Size S2²⁾											
 3RV1131-4EA10	16	7.5	11 ... 16	208	50	A	3RV1131-4AA10		1	1 unit	41E
	20	7.5	14 ... 20	260	50	A	3RV1131-4BA10		1	1 unit	41E
	25	11	18 ... 25	325	50	A	3RV1131-4CA10		1	1 unit	41E
	32	15	22 ... 32	416	50	A	3RV1131-4EA10		1	1 unit	41E
	40	18.5	28 ... 40	520	50	A	3RV1131-4FA10		1	1 unit	41E
	45	22	36 ... 45	585	50	A	3RV1131-4GA10		1	1 unit	41E
	50	22	40 ... 50	650	50	A	3RV1131-4HA10		1	1 unit	41E
	Size S3, with increased switching capacity²⁾										
 3RV1142-4AA10	16	7.5	11 ... 16	208	100	A	3RV1142-4AA10		1	1 unit	41E
	20	7.5	14 ... 20	260	100	A	3RV1142-4BA10		1	1 unit	41E
	25	11	18 ... 25	325	100	A	3RV1142-4CA10		1	1 unit	41E
	32	15	22 ... 32	416	100	A	3RV1142-4EA10		1	1 unit	41E
	40	18.5	28 ... 40	520	100	A	3RV1142-4FA10		1	1 unit	41E
	50	22	36 ... 50	650	100	A	3RV1142-4HA10		1	1 unit	41E
	63	30	45 ... 63	819	100	A	3RV1142-4JA10		1	1 unit	41E
	75 ³⁾	37	57 ... 75	975	100	A	3RV1142-4KA10		1	1 unit	41E
	90 ³⁾	45	70 ... 90	1 170	100	A	3RV1142-4LA10		1	1 unit	41E
	100 ³⁾	45	80 ... 100	1 235	100	A	3RV1142-4MA10		1	1 unit	41E

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

²⁾ Accessories for mounting on the right (for sizes S0 to S3) and 3RV1915 three-phase busbars (for size S0) cannot be used.

³⁾ For the use of 3RV1142 motor starter protectors with an energy-efficient IE3 motor we recommend using a contactor for normal switching duty, see also page 7/7.

Auxiliary switches and other accessories can be ordered separately (see "Mountable accessories" page 7/17 onwards).

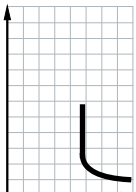







Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

For starter combinations

Selection and ordering data

Without auxiliary switches

	Rated current	Suitable for three-phase motors ¹⁾ with P	Thermal overload releases ²⁾	Instantaneous overcurrent releases	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals		PU (UNIT, SET, M)	PS*	PG
	I_n				I_{cu}		Article No.				
	A	kW	A	A	kA						
Size S0											
 3RV1321-0AC10	0.16	0.04	None	2.1	100	B	3RV1321-0AC10		1	1 unit	41E
	0.2	0.06	None	2.6	100	B	3RV1321-0BC10		1	1 unit	41E
	0.25	0.06	None	3.3	100	B	3RV1321-0CC10		1	1 unit	41E
	0.32	0.09	None	4.2	100	A	3RV1321-0DC10		1	1 unit	41E
	0.4	0.09	None	5.2	100	A	3RV1321-0EC10		1	1 unit	41E
	0.5	0.12	None	6.5	100	A	3RV1321-0FC10		1	1 unit	41E
	0.63	0.18	None	8.2	100	A	3RV1321-0GC10		1	1 unit	41E
	0.8	0.18	None	10	100	A	3RV1321-0HC10		1	1 unit	41E
	1	0.25	None	13	100	A	3RV1321-0JC10		1	1 unit	41E
	1.25	0.37	None	16	100	A	3RV1321-0KC10		1	1 unit	41E
	1.6	0.55	None	21	100	A	3RV1321-1AC10		1	1 unit	41E
	2	0.75	None	26	100	A	3RV1321-1BC10		1	1 unit	41E
	2.5	0.75	None	33	100	A	3RV1321-1CC10		1	1 unit	41E
	3.2	1.1	None	42	100	A	3RV1321-1DC10		1	1 unit	41E
	4	1.5	None	52	100	A	3RV1321-1EC10		1	1 unit	41E
	5	1.5	None	65	100	A	3RV1321-1FC10		1	1 unit	41E
	6.3	2.2	None	82	100	A	3RV1321-1GC10		1	1 unit	41E
	8	3	None	104	100	A	3RV1321-1HC10		1	1 unit	41E
	10	4	None	130	100	A	3RV1321-1JC10		1	1 unit	41E
12.5	5.5	None	163	100	A	3RV1321-1KC10		1	1 unit	41E	
16	7.5	None	208	50	A	3RV1321-4AC10		1	1 unit	41E	
20	7.5	None	260	50	A	3RV1321-4BC10		1	1 unit	41E	
22	11	None	286	50	A	3RV1321-4CC10		1	1 unit	41E	
25	11	None	325	50	A	3RV1321-4DC10		1	1 unit	41E	
Size S2											
 3RV1331-4AC10	16	7.5	None	208	50	A	3RV1331-4AC10		1	1 unit	41E
	20	7.5	None	260	50	A	3RV1331-4BC10		1	1 unit	41E
	25	11	None	325	50	A	3RV1331-4DC10		1	1 unit	41E
	32	15	None	416	50	A	3RV1331-4EC10		1	1 unit	41E
	40	18.5	None	520	50	A	3RV1331-4FC10		1	1 unit	41E
	45	22	None	585	50	A	3RV1331-4GC10		1	1 unit	41E
	50	22	None	650	50	A	3RV1331-4HC10		1	1 unit	41E
Size S3											
 3RV1341-4JC10	40	18.5	None	520	50	A	3RV1341-4FC10		1	1 unit	41E
	50	22	None	650	50	A	3RV1341-4HC10		1	1 unit	41E
	63	30	None	819	50	A	3RV1341-4JC10		1	1 unit	41E
	75 ³⁾	37	None	975	50	A	3RV1341-4KC10		1	1 unit	41E
	90 ³⁾	45	None	1 170	50	A	3RV1341-4LC10		1	1 unit	41E
	100 ³⁾	45	None	1 235	50	A	3RV1341-4MC10		1	1 unit	41E
Size S3, with increased switching capacity											
 3RV1342-4JC10	16	7.5	None	208	100	A	3RV1342-4AC10		1	1 unit	41E
	20	7.5	None	260	100	A	3RV1342-4BC10		1	1 unit	41E
	25	11	None	325	100	A	3RV1342-4DC10		1	1 unit	41E
	32	15	None	416	100	A	3RV1342-4EC10		1	1 unit	41E
	40	18.5	None	520	100	A	3RV1342-4FC10		1	1 unit	41E
	50	22	None	650	100	A	3RV1342-4HC10		1	1 unit	41E
	63	30	None	819	100	A	3RV1342-4JC10		1	1 unit	41E
	75 ³⁾	37	None	975	100	A	3RV1342-4KC10		1	1 unit	41E
	90 ³⁾	45	None	1 170	100	A	3RV1342-4LC10		1	1 unit	41E
100 ³⁾	45	None	1 235	100	A	3RV1342-4MC10		1	1 unit	41E	

¹⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

²⁾ For overload protection of the motors, appropriate overload relays must be used.

³⁾ For the use of 3RV134. motor starter protectors with an energy-efficient IE3 motor we recommend using a contactor for normal switching duty, see also page 7/7.

Auxiliary switches and other accessories can be ordered separately (see page 7/17 onwards).

Multi-unit/reusable packaging available on request.

Motor Starter Protectors/Circuit Breakers

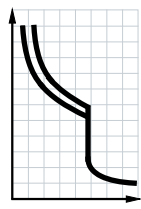
SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

For transformer protection

Selection and ordering data

CLASS 10, without auxiliary switches

Motor starter protectors for the protection of transformers with high inrush current



Rated current I_n A	Setting range for thermal overload releases A	Instantaneous overcurrent releases A	Short-circuit breaking capacity at 400 V AC kA	DT	Screw terminals Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Size S0									
0.16	0.11 ... 0.16	3.3	100	▶	3RV1421-0AA10		1	1 unit	41E
0.2	0.14 ... 0.2	4.2	100	▶	3RV1421-0BA10		1	1 unit	41E
0.25	0.18 ... 0.25	5.2	100	▶	3RV1421-0CA10		1	1 unit	41E
0.32	0.22 ... 0.32	6.5	100	▶	3RV1421-0DA10		1	1 unit	41E
0.4	0.28 ... 0.4	8.2	100	▶	3RV1421-0EA10		1	1 unit	41E
0.5	0.35 ... 0.5	10	100	▶	3RV1421-0FA10		1	1 unit	41E
0.63	0.45 ... 0.63	13	100	▶	3RV1421-0GA10		1	1 unit	41E
0.8	0.55 ... 0.8	16	100	▶	3RV1421-0HA10		1	1 unit	41E
1	0.7 ... 1	21	100	▶	3RV1421-0JA10		1	1 unit	41E
1.25	0.9 ... 1.25	26	100	▶	3RV1421-0KA10		1	1 unit	41E
1.6	1.1 ... 1.6	33	100	▶	3RV1421-1AA10		1	1 unit	41E
2	1.4 ... 2	42	100	▶	3RV1421-1BA10		1	1 unit	41E
2.5	1.8 ... 2.5	52	100	▶	3RV1421-1CA10		1	1 unit	41E
3.2	2.2 ... 3.2	65	100	▶	3RV1421-1DA10		1	1 unit	41E
4	2.8 ... 4	82	100	▶	3RV1421-1EA10		1	1 unit	41E
5	3.5 ... 5	104	100	▶	3RV1421-1FA10		1	1 unit	41E
6.3	4.5 ... 6.3	130	100	▶	3RV1421-1GA10		1	1 unit	41E
8	5.5 ... 8	163	100	▶	3RV1421-1HA10		1	1 unit	41E
10	7 ... 10	208	100	▶	3RV1421-1JA10		1	1 unit	41E
12.5	9 ... 12.5	260	100	▶	3RV1421-1KA10		1	1 unit	41E
16	11 ... 16	286	50	▶	3RV1421-4AA10		1	1 unit	41E
20	14 ... 20	325	50	▶	3RV1421-4BA10		1	1 unit	41E



3RV1421-0KA10

Size S2

16	11 ... 16	325	50	▶	3RV1431-4AA10		1	1 unit	41E
20	14 ... 20	416	50	▶	3RV1431-4BA10		1	1 unit	41E
25	18 ... 25	520	50	▶	3RV1431-4DA10		1	1 unit	41E
32	22 ... 32	660	50	▶	3RV1431-4EA10		1	1 unit	41E
40	28 ... 40	836	50	▶	3RV1431-4FA10		1	1 unit	41E



3RV1431-4DA10

Auxiliary switches and other accessories can be ordered separately (see "Mountable accessories" page 7/17 onwards).

Multi-unit/reusable packaging available on request.

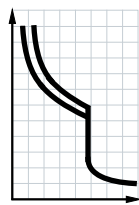
Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

For fuse monitoring

Selection and ordering data

Without auxiliary switches



Rated current	Thermal overload releases	Instantaneous overcurrent releases	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
I_n			I_{cu}		Article No.	Price per PU		
A	A	A	kA					

Size S00



3RV1611-0BD10

0.2	0.2	1.2	100	▶	3RV1611-0BD10	1	1 unit	41E
-----	-----	-----	-----	---	----------------------	---	--------	-----

Note:

The auxiliary switch required for signaling must be ordered separately.

Multi-unit/reusable packaging available on request.

Accessories

Version	Contacts	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		

Mountable auxiliary switches (essential accessories)



3RV1901-1E

Transverse auxiliary switches With screw terminals, mountable on front	1 NO + 1 NC	▶	3RV1901-1E	1	1 unit	41E
--	-------------	---	-------------------	---	--------	-----



3RV1901-1A

Lateral auxiliary switches With screw terminals, mountable on the left	1 NO + 1 NC	▶	3RV1901-1A	1	1 unit	41E
--	-------------	---	-------------------	---	--------	-----

For additional auxiliary switches and other accessories see "Mountable accessories" from page 7/17 onwards.

Motor Starter Protectors/Circuit Breakers

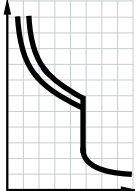



SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

For system protection according to UL 489/CSA C22.2 No. 5

Selection and ordering data

Without auxiliary switches

Circuit breakers for system protection and non-motor loads according to UL/CSA

	Rated current ¹⁾	Thermal overload releases (non-adjustable)	Instantaneous overcurrent releases	Short-circuit breaking capacity at 480 Y/277 V AC ²⁾		DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG
	I_n ¹⁾		$I >$	I_{bc}	I_{bc}		Article No.	Price per PU		
	A	A	A	kA	kA					
Size S3										
	10	10	150	65	65	B	3RV1742-5AD10	1	1 unit	41E
	15	15	225	65	65	B	3RV1742-5BD10	1	1 unit	41E
	20	20	260	65	65	B	3RV1742-5CD10	1	1 unit	41E
	25	25	325	65	65	B	3RV1742-5DD10	1	1 unit	41E
	30	30	390	65	65	B	3RV1742-5ED10	1	1 unit	41E
	35	35	455	65	--	B	3RV1742-5FD10	1	1 unit	41E
	40	40	520	65	--	B	3RV1742-5GD10	1	1 unit	41E
	45	45	585	65	--	B	3RV1742-5HD10	1	1 unit	41E
	50	50	650	65	--	B	3RV1742-5JD10	1	1 unit	41E
	60	60	780	65	--	B	3RV1742-5LD10	1	1 unit	41E
3RV1742-5FD10	70	70	910	65	--	B	3RV1742-5QD10	1	1 unit	41E

¹⁾ Rated value 100 % according to UL 489 and IEC 60947-2 ("100 % rated breaker").

²⁾ For values for 600 Y/347 V AC, see Reference Manual "Protection Equipment – Motor Starter Protectors · Molded Case Motor Starter Protectors" → "Technical Specifications" → "Permissible Rated Data of Devices Approved for North America (UL/CSA)" → "3RV17 Motor Starter Protectors as Circuit Breakers".

Transverse auxiliary switches must not be mounted, lateral auxiliary switches can be ordered separately (see "Mountable accessories" from page 7/17 onwards).

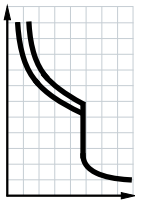



Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A


For distance protection

Selection and ordering data

Voltage transformer motor starter protectors with transverse auxiliary switches (1 CO)

	Rated current	Thermal overload releases	Instantaneous overcurrent releases	Auxiliary switch integrated in the motor starter protector, transverse	Short-circuit breaking capacity at 400 V AC	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG
	I_n				I_{cu}		Article No.	Price per PU			
Size S00											
 3RV1611-1.G14	1.4	1.4	6	1 CO	50	B	3RV1611-1AG14		1	1 unit	41E
	2.5	2.5	10.5	1 CO	50	▶	3RV1611-1CG14		1	1 unit	41E
	3	3	20	1 CO	50	▶	3RV1611-1DG14		1	1 unit	41E

Accessories

Version	Contacts	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU			
Mountable auxiliary switches for other signaling purposes							
 3RV1901-1A	Lateral auxiliary switches		1 NO + 1 NC	▶	3RV1901-1A	1	1 unit 41E
	With screw terminals, mountable on the left						

For additional auxiliary switches and other accessories see "Mountable accessories" from page 7/17 onwards.

More information

Conversion of 3VU13 to 3RV1 voltage transformer circuit breakers

The 3VU13 voltage transformer circuit breakers previously available have been discontinued. The 3RV1 voltage transformer circuit breakers are offered as replacement types.

Previous type	Replacement type
3VU1311-6HR00	3RV1611-1CG14
3VU1321-6HR00	3RV1611-1CG14 + 3RV1901-1A
3VU1311-6JR00	3RV1611-1DG14

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A Accessories

Mountable accessories

Overview

Mounting location and function

The 3RV1 motor starter protectors/circuit breakers have 3 main contact elements. In order to achieve maximum flexibility, auxiliary switches, signaling switches, auxiliary releases and isolator modules can be supplied separately.

These components are easily fitted to the switches without the use of any tools according to requirements.

For the overview graphic, [see page 7/5](#).

Front side Notes: <ul style="list-style-type: none"> A maximum of 4 auxiliary contacts with auxiliary switches can be attached to each motor starter protector/circuit breaker. Transverse auxiliary switches must not be used for the 3RV1742 circuit breakers. 	Transverse auxiliary switches, solid-state compatible transverse auxiliary switches 1 NO + 1 NC or 2 NO or 1 CO	An auxiliary switch block can be inserted transversely on the front. The overall width of the motor starter protectors/circuit breakers remains unchanged.
Left-hand side Notes: <ul style="list-style-type: none"> A maximum of 4 auxiliary contacts with auxiliary switches can be attached to each motor starter protector/circuit breaker. Auxiliary switches (2 contacts) and signaling switches can be mounted separately or together. The signaling switch cannot be used for the 3RV1742 circuit breakers. 	Lateral auxiliary switches (2 contacts) 1 NO + 1 NC or 2 NO or 2 NC Lateral auxiliary switches (4 contacts) 2 NO + 2 NC	One of the 3 lateral auxiliary switches can be mounted on the left side per motor starter protector/circuit breaker. The contacts of the auxiliary switch close and open together with the main contacts of the motor starter protector/circuit breaker. The width of the lateral auxiliary switch with 2 contacts is 9 mm. One lateral auxiliary switch with 4 contacts can be mounted on the left side per motor starter protector/circuit breaker. The contacts of the auxiliary switch close and open together with the main contacts of the motor starter protector/circuit breaker. The width of the lateral auxiliary switch with 4 contacts is 18 mm.
	Signaling switches for sizes S0, S2, and S3 Tripping 1 NO + 1 NC Short circuit 1 NO + 1 NC	One signaling switch can be mounted on the left side of each motor starter protector. The signaling switch has 2 contact systems. One contact system always signals <u>tripping</u> irrespective of whether this was caused by a short circuit, an overload or an auxiliary release. The other contact system only switches in the event of a short circuit. There is no signaling as a result of <u>switching off</u> with the actuator. In order to be able to switch on the motor starter protector again after a short circuit, the signaling switch must be reset manually after the error cause has been eliminated. The overall width of the signaling switch is 18 mm.
Right-hand side Notes: <ul style="list-style-type: none"> One auxiliary release can be mounted per motor starter protector/circuit breaker. Accessories cannot be mounted at the right-hand side of the 3RV11 motor starter protectors for motor protection with overload relay function. 	Auxiliary releases Shunt releases or Undervoltage releases or Undervoltage releases with leading auxiliary contacts 2 NO	For remote-controlled tripping of the motor starter protector/circuit breaker. The release coil should only be energized for short periods (see circuit diagrams). Trips the motor starter protector/circuit breaker when the voltage is interrupted and prevents the motor from being restarted accidentally when the voltage is restored. Used for remote-controlled tripping of the motor starter protector/circuit breaker. Particularly suitable for EMERGENCY-STOP disconnection by way of corresponding EMERGENCY-STOP pushbuttons according to EN 60204-1. Function and use as for the undervoltage release without leading auxiliary contacts, but with the following additional function: the auxiliary contacts will open in switch position OFF to deenergize the coil of the undervoltage release, thus interrupting energy consumption. In the "tripped" position, these auxiliary contacts are not guaranteed to open. The leading contacts permit the motor starter protector/circuit breaker to reclose. The overall width of the auxiliary release is 18 mm.
Top Notes: <ul style="list-style-type: none"> The isolator module cannot be used for the 3RV1742 circuit breakers. The isolator module covers the terminal screws of the transverse auxiliary switch. If the isolator module is used, we therefore recommend that either the lateral auxiliary switches be fitted or that the isolator module not be mounted until the auxiliary switch has been wired. 	Isolator modules for sizes S0 and S2	Isolator modules can be mounted to the upper terminal end of motor starter protectors of sizes S0 and S2. The supply cable is connected to the motor starter protector through the isolator module. The plug can only be unplugged when the motor starter protector is open and isolates all 3 poles of the motor starter protector from the network. The shock-protected isolation point is clearly visible and secured with a padlock to prevent reinsertion of the plug.

For a complete overview of which accessories can be used for the various motor starter protectors/circuit breakers, [see page 7/2](#).





Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A




Accessories

Mountable accessories

Selection and ordering data

Version	Contacts	For motor starter protectors/circuit breakers	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	
Size				Article No.	Price per PU			
Auxiliary switches¹⁾								
 3RV1901-1E	Transverse auxiliary switches	1 CO 1 NO + 1 NC 2 NO	S00, S0, S2, S3	▶ ▶ ▶	3RV1901-1D 3RV1901-1E 3RV1901-1F	1 1 1	1 unit 1 unit 1 unit	41E 41E 41E
	Solid-state compatible transverse auxiliary switches	1 CO	S00, S0, S2, S3	A	3RV1901-1G	1	1 unit	41E
	Covers for transverse auxiliary switches	--	S00, S0, S2, S3	▶	3RV1901-0H	1	10 units	41E
 3RV1901-1A	Lateral auxiliary switches	1 NO + 1 NC 2 NO 2 NC 2 NO + 2 NC	S00, S0, S2, S3	▶ ▶ ▶ A	3RV1901-1A 3RV1901-1B 3RV1901-1C 3RV1901-1J	1 1 1 1	1 unit 1 unit 1 unit 1 unit	41E 41E 41E 41E
	 3RV1901-1J							

¹⁾ Each motor starter protector/circuit breaker can be fitted with one transverse and one lateral auxiliary switch. The lateral auxiliary switch with 2 NO + 2 NC is used without a transverse auxiliary switch. Transverse auxiliary switches must not be used for the 3RV1742 circuit breakers.

Version	Contacts	For motor starter protectors/circuit breakers	DT	Spring-type terminals 	PU (UNIT, SET, M)	PS*	PG	
Size				Article No.	Price per PU			
Auxiliary switches¹⁾								
 3RV1901-2E	Transverse auxiliary switches	1 NO + 1 NC 2 NO	S00, S0, S2, S3	▶ ▶	3RV1901-2E 3RV1901-2F	1 1	1 unit 1 unit	41E 41E
	Lateral auxiliary switches	1 NO + 1 NC 2 NO 2 NC	S00, S0, S2, S3	▶ ▶ ▶	3RV1901-2A 3RV1901-2B 3RV1901-2C	1 1 1	1 unit 1 unit 1 unit	41E 41E 41E
 3RV1901-2A								




¹⁾ Each motor starter protector/circuit breaker can be fitted with one transverse and one lateral auxiliary switch. Transverse auxiliary switches must not be used for the 3RV1742 circuit breakers.

Motor Starter Protectors/Circuit Breakers





SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

Mountable accessories

Version	For motor starter protectors/circuit breakers	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG
Size			Article No.	Price per PU		
Signaling switches¹⁾						
	Signaling switches One signaling switch can be mounted on the left per motor starter protector.	Separate tripped and short-circuit alarms, 1 NO + 1 NC each	S0, S2, S3	▶ 3RV1921-1M	1	1 unit 41E
3RV1921-1M						
Isolator modules¹⁾						
	Isolator modules	Visible isolating distance for isolating individual motor starter protectors from the network, lockable in disconnected position	S0 S2	▶ 3RV1928-1A ▶ 3RV1938-1A	1 1	1 unit 41E 1 unit 41E
3RV1938-1A with padlock						

¹⁾ This accessory cannot be used for the 3RV1742 circuit breakers.

Rated control supply voltage U_s					For motor starter protectors/circuit breakers	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	
AC 50 Hz	AC 60 Hz	AC 50/60 Hz	AC/DC 50/60 Hz, DC 5 s ON period ¹⁾	DC							
V	V	V	V	V	Size		Article No.	Price per PU			
Auxiliary releases³⁾											
	Undervoltage releases										
	--	--	--	--	24	S00, S0, S2, S3	A	3RV1902-1AB4	1	1 unit 41E	
	24	--	--	--	--	S00, S0, S2, S3	A	3RV1902-1AB0	1	1 unit 41E	
	110	120	--	--	--	S00, S0, S2, S3	A	3RV1902-1AF0	1	1 unit 41E	
	--	208	--	--	--	S00, S0, S2, S3	A	3RV1902-1AM1	1	1 unit 41E	
	230	240	--	--	--	S00, S0, S2, S3	▶	3RV1902-1AP0	1	1 unit 41E	
	400	440	--	--	--	S00, S0, S2, S3	▶	3RV1902-1AV0	1	1 unit 41E	
	415	480	--	--	--	S00, S0, S2, S3	▶	3RV1902-1AV1	1	1 unit 41E	
	500	600	--	--	--	S00, S0, S2, S3	A	3RV1902-1AS0	1	1 unit 41E	
	Undervoltage releases with leading auxiliary contacts 2 NO										
	230	240	--	--	--	S00	A	3RV1912-1CP0	1	1 unit 41E	
	400	440	--	--	--	S00	A	3RV1912-1CV0	1	1 unit 41E	
	415	480	--	--	--	S00	A	3RV1912-1CV1	1	1 unit 41E	
	230	240	--	--	--	S0, S2, S3	A	3RV1922-1CP0	1	1 unit 41E	
	400	440	--	--	--	S0, S2, S3	A	3RV1922-1CV0	1	1 unit 41E	
	415	480	--	--	--	S0, S2, S3	A	3RV1922-1CV1	1	1 unit 41E	
	Shunt releases										
	--	--	20 ... 24	20 ... 70	--	S00, S0, S2, S3	▶	3RV1902-1DB0	1	1 unit 41E	
	--	--	90 ... 110	70 ... 190	--	S00, S0, S2, S3	A	3RV1902-1DF0	1	1 unit 41E	
	--	--	210 ... 240	190 ... 330	--	S00, S0, S2, S3	▶	3RV1902-1DP0	1	1 unit 41E	
	--	--	350 ... 415	330 ... 500	--	S00, S0, S2, S3	A	3RV1902-1DV0	1	1 unit 41E	
	--	--	500	500	--	S00, S0, S2, S3	A	3RV1902-1DS0	1	1 unit 41E	

¹⁾ The voltage range is valid for 100 % (infinite) ON period. The response voltage lies at 0.9 of the lower limit of the voltage range.

²⁾ The voltage range is valid for 5 s ON period at AC 50/60Hz and DC. The response voltage lies at 0.85 of the lower limit of the voltage range.

³⁾ One auxiliary release can be mounted on the right per motor starter protector (does not apply to 3RV11 motor starter protectors with overload relay function).

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

Busbar accessories

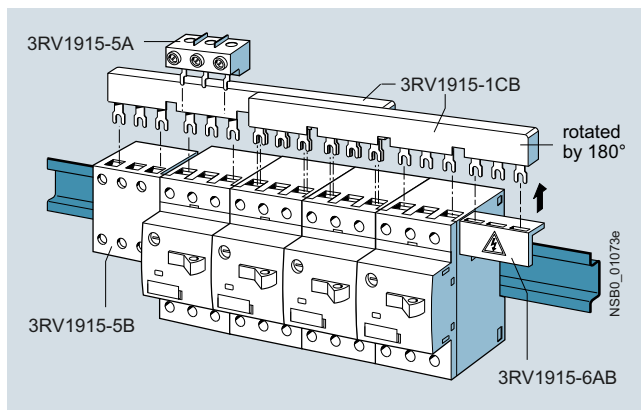
Overview

Insulated three-phase busbar system

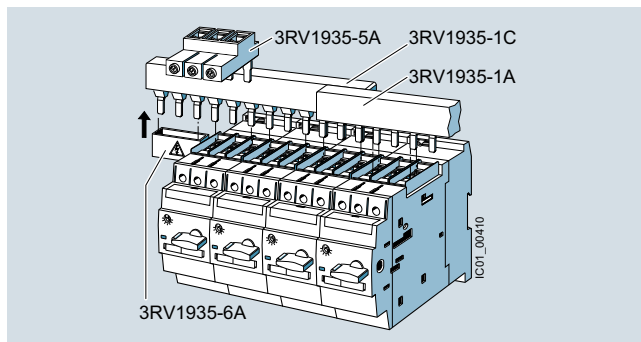
Three-phase busbar systems provide an easy, time-saving and clearly arranged means of feeding 3RV1 motor starter protectors/circuit breakers with screw terminals. Different designs are available for sizes S00, S0 and S2 and can be used for the various different versions of motor starter protectors/circuit breakers. The 3RV1915 three-phase busbar systems are not suitable for 3RV11 motor starter protectors for motor protection with overload relay function.

The busbars are suitable for between 2 and 5 motor starter protectors/circuit breakers. However, any kind of extension is possible by clamping the tags of an additional busbar (rotated by 180°) underneath the terminals of the respective last motor starter protector/circuit breaker.

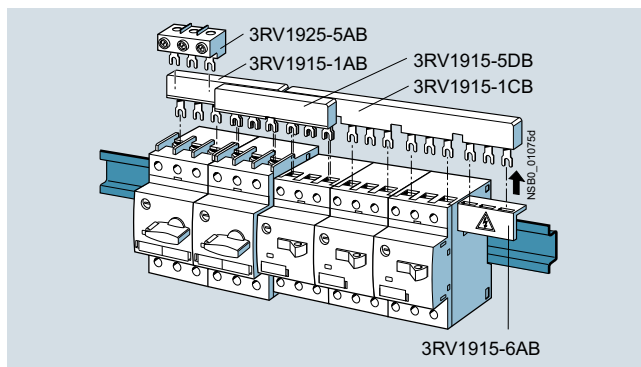
A combination of motor starter protectors of different sizes is possible only with sizes S00 and S0. Connecting pieces are available for this purpose. The motor starter protectors/circuit breakers are supplied by appropriate infeed terminals.



SIRIUS three-phase busbar system size S00



SIRIUS three-phase busbar system size S2



SIRIUS three-phase busbar system, with example for combining sizes S00 and S0

The three-phase busbar systems are finger-safe. They are designed for any short-circuit stress which can occur at the output side of connected motor starter protectors/circuit breakers.

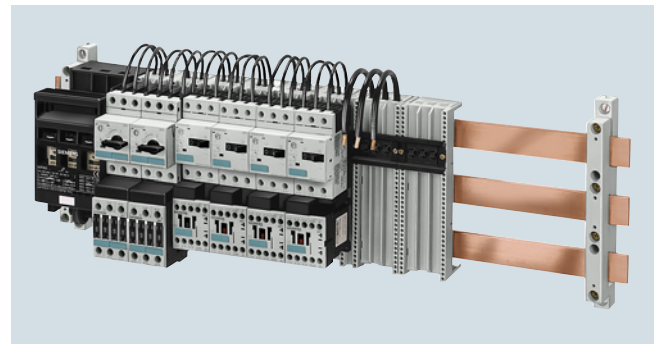
The three-phase busbar systems can also be used to construct "Type E Starters" of size S00 or S2 according to UL/CSA. Special infeed terminals must be used for this purpose however (see page 7/21).

8US busbar adapters for 40 mm and 60 mm systems

The motor starter protectors/circuit breakers are mounted directly with the aid of busbar adapters on busbar systems with 40 mm and 60 mm center-to-center clearance in order to save space and to reduce infeed times and costs. Busbar adapters for busbar systems with 40 mm center-to-center clearance are suitable for copper busbars with a width of 12 mm to 15 mm, while those with 60 mm center-to-center clearance are suitable for copper busbars with a width of 12 mm to 30 mm. The busbars can be 4 to 5 mm or 10 mm thick.

The motor starter protectors/circuit breakers are snapped onto the adapter and connected on the line side. This prepared unit is then plugged directly onto the busbar system, and is thus connected both mechanically and electrically at the same time.

For further busbar adapters for snap-mounting direct-on-line starters and reversing starters as well as additional accessories such as line terminals and outgoing terminals, flat copper profile, etc., see Catalog LV 10 "Low-Voltage Power Distribution and Electrical Installation Technology".



SIRIUS load feeders with busbar adapters snapped onto busbars

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A Accessories





Busbar accessories

Selection and ordering data

Modular spacing	Number of motor starter protectors that can be connected			Rated current I_n at 690 V	For motor starter protectors	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	Without lateral accessories	With lateral auxiliary switch	With auxiliary release								

mm A Size

Three-phase busbars

 3RV1915-1AB	For feeding several motor starter protectors with screw terminals, mounted side by side on standard mounting rails, insulated, with touch protection											
	45 ¹⁾	2	--	--	63	S00, S0	▶	3RV1915-1AB		1	1 unit	41E
		3				S00, S0	▶	3RV1915-1BB		1	1 unit	41E
		4				S00, S0	▶	3RV1915-1CB		1	1 unit	41E
 3RV1915-1BB	55 ¹⁾	--	2	--	63	S00, S0	▶	3RV1915-2AB		1	1 unit	41E
						S00, S0	▶	3RV1915-2BB		1	1 unit	41E
						S00, S0	▶	3RV1915-2CB		1	1 unit	41E
 3RV1915-1CB	63 ¹⁾	--	--	2	63	S00, S0	▶	3RV1915-3AB		1	1 unit	41E
						S00, S0	▶	3RV1915-3CB		1	1 unit	41E
 3RV1915-1DB	55 ¹⁾	2	--	--	108	S2	▶	3RV1935-1A		1	1 unit	41E
						S2	▶	3RV1935-1B		1	1 unit	41E
						S2	▶	3RV1935-1C		1	1 unit	41E
3RV1915-1DB	75 ²⁾	--	2	2	108	S2	▶	3RV1935-3A		1	1 unit	41E
						S2	▶	3RV1935-3B		1	1 unit	41E
						S2	▶	3RV1935-3C		1	1 unit	41E


¹⁾ Not suitable for 3RV11 motor starter protectors for motor protection with overload relay function. Common clamping of S00 and S0 motor starter protectors is not possible, due to the different modular spacings and terminal heights. The 3RV1915-DB connecting piece is available for connecting busbars from size S0 to size S00.

²⁾ For 3RV1 motor starter protectors with accessories mounted on the side. Auxiliary releases and lateral auxiliary/signaling switches cannot be used in combination.

Version	Modular spacing	For motor starter protectors/circuit breakers	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	-----------------	---	----	-------------	--------------	-------------------	-----	----

mm Size




Connecting pieces for three-phase busbars

 3RV1915-5DB	For connecting three-phase busbars for motor starter protectors of size S0 (left) to size S00 (right)		45	S00, S0	▶	3RV1915-5DB	1	1 unit	41E
--	---	--	----	---------	---	--------------------	---	--------	-----

Conductor cross-section			Tightening torque	For motor starter protectors	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Solid or stranded	Finely stranded with end sleeve	AWG cables, solid or stranded								

mm² mm² AWG Nm Size

Three-phase infeed terminals

 3RV1925-5AB	Connection from top			4	S00	▶		1	1 unit	41E
	2.5 ... 25	4 ... 16	10 ... 4							
 3RV1915-5B	Connection from below¹⁾			Input: 4, Output: 2 ... 2.5	S00, S0	▶		1	1 unit	41E
	2.5 ... 25	4 ... 16	10 ... 4							
 3RV1935-5A	Connection from top			4	S2	▶		1	1 unit	41E
	2.5 ... 50	1.5 ... 35	14 ... 0							

Three-phase infeed terminals for constructing "Type E starters"

Connection from top			2 ... 4	S0	▶		1	1 unit	41E
2.5 ... 25	4 ... 16	10-4							
10 ... 50	--	8 ... 0	4.5 ... 6	S2	▶		1	1 unit	41E

¹⁾ This terminal is connected in place of a switch, please take the space requirement into account.

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A Accessories

Busbar accessories

Version	For motor starter protectors	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	------------------------------	----	-------------	--------------	-------------------	-----	----

Covers for connection tags



3RV1915-6AB

Touch protection for empty positions

S00, S0

**3RV1915-6AB**

1 10 units

41E

S2

**3RV1935-6A**

1 5 units

41E

8US busbar adapters



8US1061-5FK08



8US1111-4SM00



8US1261-5FM08



8US1211-4TR00

For motor starter protectors	Rated current	Connecting cable	Adapter length	Adapter width	Rated voltage	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Size	A	AWG	mm	mm	V						

Busbar adapters for 40 mm systems

For copper busbars according to DIN 46433

Width: 12 mm and 15 mm

Thickness: 5 mm and 10 mm

S00, S0	25	12	121	45	690	▶	8US1051-5DJ07		1	1 unit	140
S00, S0 + lateral auxiliary switch	25	12	121	55	690	▶	8US1061-5DJ07		1	1 unit	140
S2	56	8	139	55	690	▶	8US1061-5FK08		1	4 units	140
S3	100	4	182	70	400 ¹⁾	▶	8US1111-4SM00		1	1 unit	140
S3	100	4	182	72	415 ... 690 ²⁾	▶	8US1011-4TM00		1	1 unit	140

Busbar adapters for 60 mm systems

For copper busbars according to DIN 46433

Width: 12 mm and 30 mm

Thickness: 5 mm and 10 mm

also for T and double-T special profiles

S00, S0	25	12	182	45	690	▶	8US1251-5DM07		1	6 units	140
S2	56	8	182	55	690	▶	8US1261-5FM08		1	1 unit	140
S3	100	4	182	70	400 ¹⁾	▶	8US1111-4SM00		1	1 unit	140
S3	100	4	182	72	415 ... 690 ²⁾	A	8US1211-4TM00		1	1 unit	140
S3 ³⁾	70 ⁴⁾	4	215	72	600 ⁴⁾	A	8US1211-4TR00		1	1 unit	140

1) At rated voltage
 ≤ 400 V: short-circuit breaking capacity 50 kA,
 > 400 to 460 V: short-circuit breaking capacity 25 kA.

2) Short-circuit breaking capacity 415/500/525 V AC
 - Up to $I_n = 25$ A: max. 30 kA
 - Up to $I_n = 90$ A: max. 16 kA
 - Up to $I_n = 100$ A: max. 6 kA
 Short-circuit breaking capacity 690 V AC:
 - max. 12 kA.

3) This busbar adapter is approved specially for 3RV1742 circuit breakers for applications according to UL/CSA.

4) Values according to UL/CSA
 - Rated current: 70 A at 600 V AC
 - Short-circuit breaking capacity:
 480 V AC: 65 kA, up to $I_n = 30$ A
 480 Y/277 V AC: 65 kA
 600 Y/347 V AC: 20 kA

For additional busbar adapters, see Catalog LV 10 "Low-Voltage Power Distribution and Electrical Installation Technology".

Motor Starter Protectors/Circuit Breakers

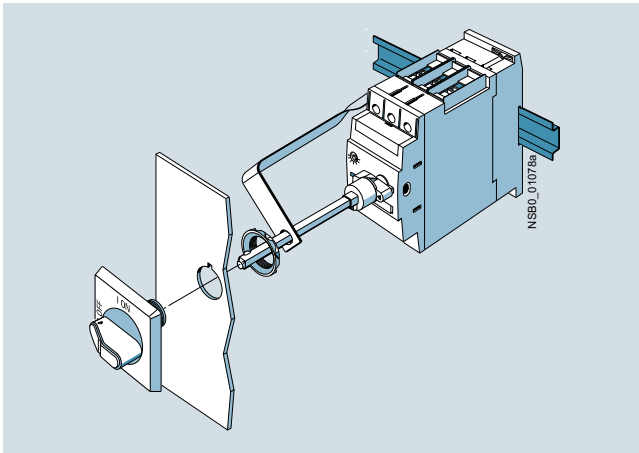
SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A Accessories

Rotary operating mechanisms

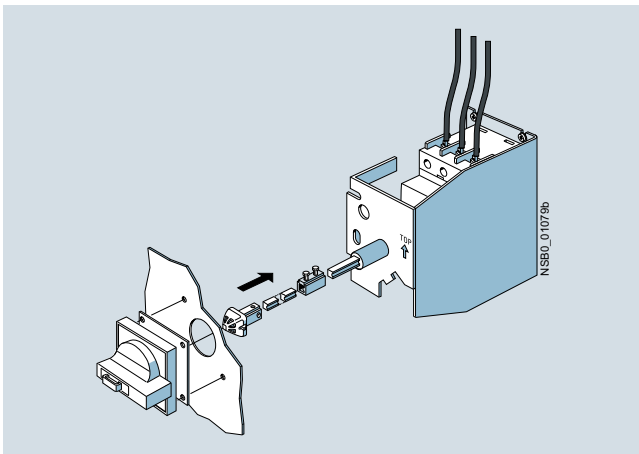
Overview

Door-coupling rotary operating mechanisms

Motor starter protectors/circuit breakers with a rotary operating mechanism can be mounted in a control cabinet and operated externally by means of a door-coupling rotary operating mechanism. When the cabinet door with motor starter protector/circuit breaker is closed, the operating mechanism is coupled. When the motor starter protector/circuit breaker closes, the coupling is locked which prevents the door from being opened unintentionally. This interlock can be defeated by the maintenance personnel. In the OPEN position, the rotary operating mechanism can be secured against reclosing with up to 3 padlocks. Inadvertent opening of the door is not possible in this case either.



SIRIUS 3RV1926-0K door-coupling rotary operating mechanism



SIRIUS 3RV2936-2B door-coupling rotary operating mechanism for arduous conditions

Remote motorized operating mechanisms

3RV1 motor starter protectors/circuit breakers are manually operated controls. They automatically trip in case of an overload or short circuit. Intentional remote-controlled tripping is possible by means of a shunt release or an undervoltage release. Reclosing is only possible directly at the motor starter protector/circuit breaker.

The remote motorized operating mechanism allows the motor starter protectors/circuit breakers to be opened and closed by electrical commands. This enables a load or an installation to be isolated from the network or reconnected to it from an operator panel.

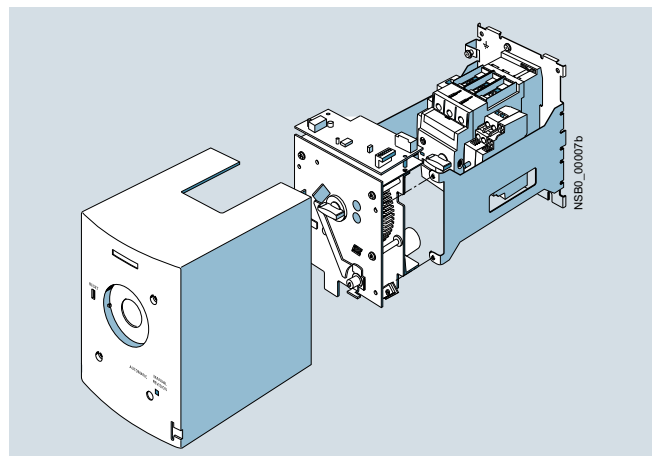
If the motor starter protector/circuit breaker is tripped as a result of overload or short circuit, it will be in tripped position. For reclosing, the remote motorized operating mechanism must first be set manually or electrically to the 0 position (electrically by means of the Open command). Then it can be reclosed.

The remote motorized operating mechanism is available for motor starter protectors of size S2 ($I_{n\max} = 50\text{ A}$) and S3 ($I_{n\max} = 100\text{ A}$) that are designed for control voltages of 230 V AC and 24 V DC. The motor starter protector/circuit breaker is fitted into the remote motorized operating mechanism as shown in the drawing.

In the "MANUAL" position, the motor starter protector/circuit breaker in the remote motorized operating mechanism can continue to be switched manually on site. In the "AUTOMATIC" position, the motor starter protector/circuit breaker is switched by means of electrical commands. The switching command must be applied for a minimum of 100 ms. The remote motorized operating mechanism closes the motor starter protector/circuit breaker after a maximum of 1 second. On voltage failure during the switching operation it is ensured that the motor starter protector/circuit breaker remains in the "OPEN" or "CLOSED" position. In the "MANUAL" and "OFF" position, the remote motorized operating mechanism can be locked with a padlock.

RESET function

The RESET button on the motorized operating mechanism serves to reset any 3RV1921-1M signaling switch that might be installed.



SIRIUS 3RV19.6-3A.. remote motorized operating mechanism

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

Rotary operating mechanisms

Selection and ordering data

Version	Color of actuator	Version of extension shaft	For motor starter protectors/circuit breakers	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	-------------------	----------------------------	---	----	-------------	--------------	-------------------	-----	----

mm

Size

Door-coupling rotary operating mechanisms



3RV2926-0B

The door-coupling rotary operating mechanisms consist of an actuator, a coupling driver and a 130/330 mm long extension shaft (6 mm x 6 mm).

The door-coupling rotary operating mechanisms are designed to degree of protection IP64. The door locking device prevents accidental opening of the control cabinet door in the ON position of the motor starter protector/circuit breaker. The OFF position can be locked with up to 3 padlocks.

Door-coupling rotary operating mechanisms	Black	130	S0, S2, S3	▶	3RV2926-0B		1	1 unit	41E
		330	S0, S2, S3	▶	3RV2926-0K		1	1 unit	41E
EMERGENCY STOP door-coupling rotary operating mechanisms	Red/yellow	130	S0, S2, S3	▶	3RV2926-0C		1	1 unit	41E
		330	S0, S2, S3	▶	3RV2926-0L		1	1 unit	41E

Door-coupling rotary operating mechanisms for arduous conditions



3RV2936-2B

The door-coupling rotary operating mechanisms consist of an actuator, a coupling driver, an extension shaft of 300 mm in length (8 mm x 8 mm), a spacer and two metal brackets, into which the motor starter protector/circuit breaker is inserted.

The door-coupling rotary operating mechanisms are designed to degree of protection IP65. The door interlocking reliably prevents opening of the control cabinet door in the ON position of the motor starter protector/circuit breaker. The OFF position can be locked with up to 3 padlocks.

Laterally mountable auxiliary releases and two-pole auxiliary switches can be used.

The door-coupling rotary operating mechanisms thus meet the requirements for isolating functions according to IEC 60947-2.

Door-coupling rotary operating mechanisms	Gray	300	S0	▶	3RV2926-2B		1	1 unit	41E
			S2	▶	3RV2936-2B		1	1 unit	41E
			S3	▶	3RV2946-2B		1	1 unit	41E
EMERGENCY STOP door-coupling rotary operating mechanisms	Red/yellow	300	S0	▶	3RV2926-2C		1	1 unit	41E
			S2	▶	3RV2936-2C		1	1 unit	41E
			S3	▶	3RV2946-2C		1	1 unit	41E

Version	Rated control supply voltage U_s	For motor starter protectors/circuit breakers	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	------------------------------------	---	----	-------------	--------------	-------------------	-----	----

Size

Remote motorized operating mechanisms



3RV19.6-3A..

Remote motorized operating mechanisms	50/60 Hz, 230 V AC	S2	X	3RV1936-3AP0		1	1 unit	41E
	24 V DC	S2	X	3RV1936-3AB4		1	1 unit	41E
	50/60 Hz, 230 V AC	S3	X	3RV1946-3AP0		1	1 unit	41E
	24 V DC	S3	X	3RV1946-3AB4		1	1 unit	41E

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A Accessories

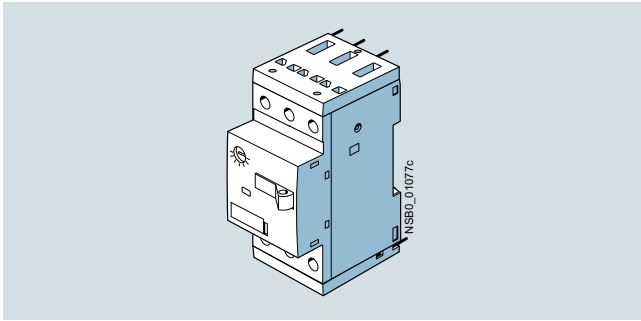
Mounting accessories

Overview

Solder pin connections

Solder pin connections are available for the main contacts and transverse auxiliary switches of size S00 motor starter protectors.

The prepared terminal parts are clamped to the upper and lower screw terminals of the motor starter protectors which allows them to be soldered into printed circuit boards.



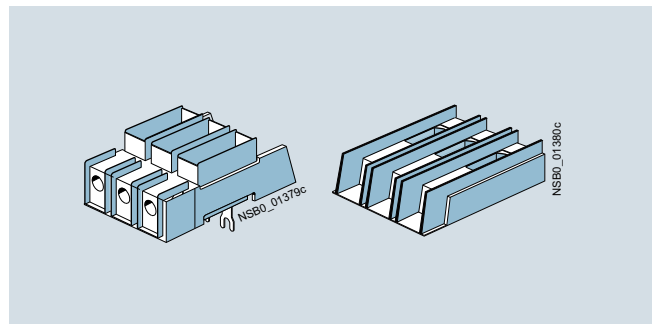
SIRIUS motor starter protector with solder pin connections 3RV1918-5A

Terminal blocks for "Self-Protected Combination Motor Controllers (Type E)" according to UL 508

The 3RV10 motor starter protectors size S0 and higher are approved according to UL 508 as "Self-Protected Combination Motor Controllers (Type E)".

This requires increased clearance and creepage distances (1 inch and 2 inches respectively) at the input side of the device, which are achieved by mounting terminal blocks.

- Size S0: The 3RV1928-1H terminal block is simply screwed onto the basic unit.
- Size S2: The basic unit is already compliant with the increased clearance and creepage distance requirements.
- Size S3: The standard box terminal must be replaced by the 3RT1946-4GA07 terminal block.




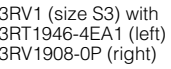
SIRIUS 3RV1928-1H (Type E) terminal blocks (left), 3RT1946-4GA07 (right)

According to CSA, the terminal blocks can be omitted when the device is used as a "Self-Protected Combination Motor Controller" (Type E).

Three-phase infeed terminals are required for constructing "Type E Starters" with an insulated busbar system (see "Busbar Accessories" on page 7/21).

Selection and ordering data

Accessories

Version	For motor starter protectors/circuit breakers	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	Size						
	Terminal covers for box terminals	S2	B	3RT1936-4EA2	1	1 unit	41B
	Additional touch protection to be fitted at the box terminals (2 units mountable per device)	S3	▶	3RT1946-4EA2	1	1 unit	41B
	Terminal covers	S3	B	3RT1946-4EA1	1	1 unit	41B
	For cable lug and busbar connection for maintaining the required voltage clearance and as touch protection if box terminal is removed (2 units can be mounted per motor starter protector/circuit breaker)						
	Scale covers	S00, S0, S2, S3	▶	3RV1908-0P	100	10 units	41E
	Sealable, for covering the set current scale						






3RV1 (size S3) with 3RT1946-4EA1 (left) 3RV1908-0P (right)

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

Mounting accessories


Version	For motor starter protectors Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Fixing accessories							
	Push-in lugs For screwing the motor starter protector onto mounting plates For each motor starter protector, 2 units are required.	S00, S0	A	3RB1900-0B		100 10 units	41F
3RB1900-0B							
Solder pin connections							
	For main contacts For soldering the main conductor connections of a motor starter protector to a printed circuit board (1set = 2 units per motor starter protector)	S00	B	3RV1918-5A		1 4 units	41E
3RV1918-5A with motor starter protector/circuit breaker							
	For main and auxiliary contacts For soldering the main conductor connections and the auxiliary conductor connections of the transverse auxiliary switch 1 NO + 1 NC of a motor starter protector to a printed circuit board (1 set = 3 units per motor starter protector)	S00	B	3RV1918-5B		1 4 units	41E
Terminal blocks for "Self-Protected Combination Motor Controllers (Type E)" according to UL 508							
	<u>Note:</u> UL 508 demands 1-inch clearance and 2-inch creepage distance at line side for "Combination Motor Controller Type E". The following terminal blocks must be used in 3RV10 motor starter protectors of sizes S0 and S3. The 3RV10 motor starter protector in size S2 conforms with the required clearance and creepage distances without a terminal block. Terminal blocks are not required for use according to CSA.						
3RV1928-1H							
	With size S0, these terminal blocks cannot be used in combination with 3RV19.5 three-phase busbars and with size S3, they cannot be used with a transverse auxiliary switch. For construction with three-phase busbars, see "Busbar Accessories", page 7/20 onwards.						
3RT1946-4GA07							
	Terminal blocks type E For extended clearances (1 and 2 inch)	S0 S3	▶ B	3RV1928-1H 3RT1946-4GA07		1 1 unit 1 1 unit	41E 41B
Auxiliary terminals, 3-pole							
	For connection of auxiliary and control cables to the main conductor connections (for one side)	S3	B	3RT1946-4F		1 1 unit	41B
3RT1946-4F							

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A Accessories

Mounting accessories


Link modules

Actuating voltage of contactor	Size		DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG
	Contactor	Motor starter protectors/circuit breakers					
				Article No.	Price per PU		

Link modules for motor starter protector/circuit breaker to contactor¹⁾

For mechanical and electrical connection between motor starter protector and contactor with screw terminals

Single-unit packaging


	AC/DC	S00	S00	▶	3RA1911-1AA00	1	1 unit	41B
		S00	S0	▶	3RA1921-1DA00	1	1 unit	41B
		S0	S0	▶	3RA1921-1AA00	1	1 unit	41B
AC	S2	S2	▶	3RA1931-1AA00	1	1 unit	41B	
	S3	S3	▶	3RA1941-1AA00	1	1 unit	41B	
	S0	S0	▶	3RA1921-1BA00	1	1 unit	41B	
DC	S2	S2	▶	3RA1931-1BA00	1	1 unit	41B	
	S3	S3	▶	3RA1941-1BA00	1	1 unit	41B	
	S00	S00	▶	3RA1911-1A	1	10 units	41B	
AC/DC	S00	S0	▶	3RA1921-1D	1	10 units	41B	
	S0	S0	▶	3RA1921-1A	1	10 units	41B	
	S2	S2	▶	3RA1931-1A	1	5 units	41B	
AC	S3	S3	▶	3RA1941-1A	1	5 units	41B	
	S0	S0	▶	3RA1921-1B	1	10 units	41B	
	S2	S2	▶	3RA1931-1B	1	5 units	41B	
DC	S3	S3	▶	3RA1941-1B	1	5 units	41B	

3RA1931-1A

Hybrid link modules for motor starter protector to contactor¹⁾

Mechanical and electrical connection between motor starter protector with screw terminals and contactor with spring-type terminals

Single-unit packaging

	AC/DC	S00	S00	▶	3RA1911-2FA00	1	1 unit	41B
		S00	S0	▶	3RA1921-2FA00	1	1 unit	41B
AC/DC	S00	S00	▶	3RA1911-2F	1	10 units	41B	
	S00	S0	▶	3RA1921-2F	1	10 units	41B	

3RA1911-2FA00

3RA1911-2F

Motor Starter Protectors/Circuit Breakers



SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

Mounting accessories


Version	For motor starter protectors	DT	Spring-type terminals	PU (UNIT, SET, M)	PS*	PG
Size		Article No.	Price per PU			

Adapters and link modules for spring-type terminals

 <p>3RA1911-2A + 8US1051-5CM47</p>  <p>3RA1911-2E</p>	Link modules Electrical connection between motor starter protector and contactor (busbar adapter not included in scope of supply)	S00	▶	3RA1911-2A	1	10 units	41B
	Link modules with mechanical connection Mechanical and electrical connection between motor starter protector and contactor	S00	▶	3RA1911-2E	1	10 units	41B
	Standard mounting rail adapters With 2 standard mounting rails 45 mm wide, one movable	S00	▶	3RA1922-1L	1	5 units	41B
	Busbar adapters 45 mm wide, 182 mm long, adapted for motor starter protectors with spring-type terminals. If there is an additional contactor, a further standard mounting rail must be fitted.	40 mm busbar systems	▶	8US1051-5CM47	1	1 unit	140
		60 mm busbar systems	▶	8US1251-5CM47	1	1 unit	140
	35 mm standard mounting rail, Plastic, including fixing screws	--	A	8US1998-7CA15	1	10 units	140

Version	Size	Color	For motor starter protectors/circuit breakers	DT	Spring-type terminals	PU (UNIT, SET, M)	PS*	PG
Size			Article No.	Price per PU				

Tools for opening spring-type terminals

 <p>3RA2908-1A</p>	Screwdrivers For all SIRIUS devices with spring-type terminals	Length approx. 200 mm, 3.0 mm x 0.5 mm	Titanium gray/black, partially insulated	S00, S0, S2, S3	A	3RA2908-1A	1	1 unit	41B
---	--	---	--	-----------------	---	-------------------	---	--------	-----

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A Accessories

Enclosures and front plates

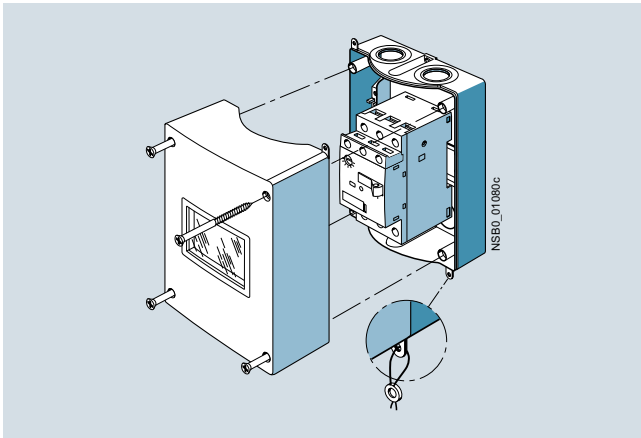
Overview

Enclosures

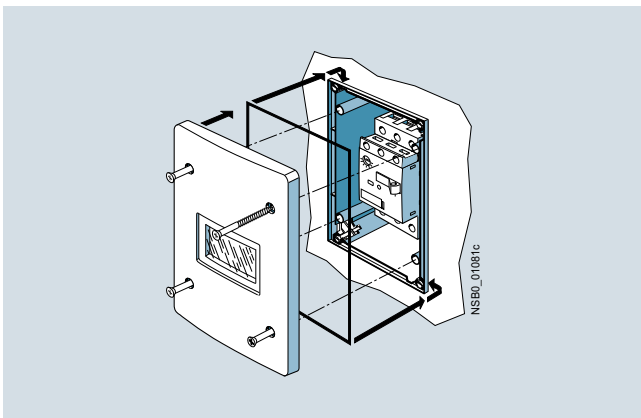
For stand-alone installation of motor starter protectors in sizes S00 ($I_{n\max} = 12\text{ A}$) S0 ($I_{n\max} = 25\text{ A}$) and S2 ($I_{n\max} = 50\text{ A}$), molded-plastic and cast aluminum enclosures for surface mounting and molded-plastic enclosures for flush mounting are available in various dimensions.

When installed in a molded-plastic enclosure the motor starter protectors have a rated operational voltage U_e of 500 V.

The enclosures for surface mounting have the degree of protection IP55; the enclosures for flush mounting also comply with the degree of protection IP55 at the front (the flush-mounted section complies with IP20).



Enclosure for surface mounting



Enclosure for flush mounting

All enclosures are equipped with N and PE terminals. There are two knockout cable entries for cable glands at the top and two at the bottom; also on the rear corresponding cable entries are scored. There is a knockout on the top of the enclosure for indicator lights that are available as accessories.

The narrow enclosure can accommodate a motor starter protector without accessories, with transverse and lateral auxiliary switch, whereas wide enclosures and enclosures for S2 motor starter protectors also provide space for a laterally mounted auxiliary release. There is no provision for installing a motor starter protector with a signaling switch.

With S00 motor starter protectors, the switch rocker is operated by means of the actuator diaphragm of the enclosure. A locking device, capable of holding up to three padlocks, can be fitted onto the actuator diaphragm to prevent the circuit breaker from closing during maintenance work, for example.

A mushroom-shaped EMERGENCY-STOP knob can be fitted in place of the locking device. If it is actuated abruptly, the motor starter protector opens and the mushroom-shaped knob latches. The knob can be unlatched again either by turning it or by using a special key. The motor starter protector can subsequently be switched on again.

The molded-plastic enclosures of sizes S0 and S2 motor starter protectors are fitted with a rotary operating mechanism.

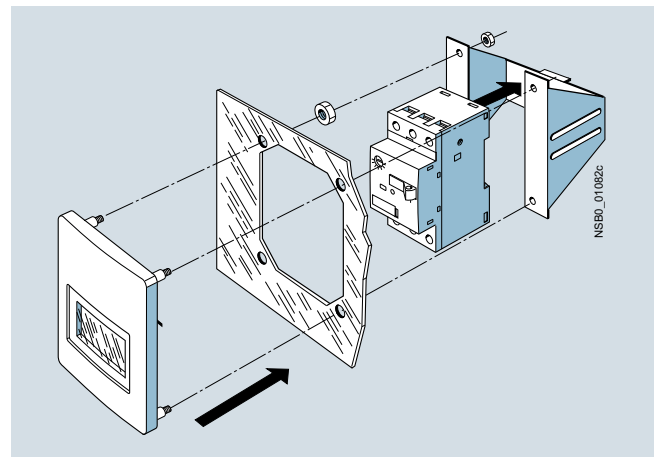
The enclosures can be supplied with either a black rotary operating mechanism or with an EMERGENCY-STOP rotary operating mechanism with a red/yellow knob.

The rotary operating mechanisms can be locked in the Open position with up to 3 padlocks.

Front plates

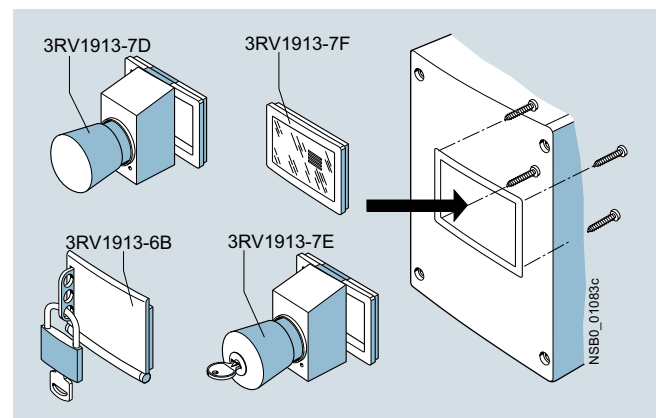
Motor starter protectors are frequently required to be actuated in any enclosure. Front plates equipped with an actuator diaphragm for size S00 motor starter protectors, or rotary operating mechanism for S0 to S3 motor starter protectors are available for this purpose.

The front plates for the motor starter protectors of size S00 are supplied with a holder into which the motor starter protectors can be snapped. A holder for size S0 motor starter protectors is additionally available for front plate sizes S0 to S3.



Front plate for size S00

Accessories for enclosures and front plates



Accessories for size S00

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

Enclosures and front plates

Selection and ordering data

Version	Degree of protection	Integrated terminals	Width	For For 3RV10 to 3RV16 motor starter protectors	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Molded-plastic enclosures for surface mounting											
 3RV1913-1DA00	With actuator diaphragm	IP55	N and PE/ground	54 mm (for motor starter protector + lateral auxiliary switch)	S00	▶		1	1 unit	41E	
				72 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S00	▶					3RV1913-1DA00
 3RV1923-1FA00	With rotary operating mechanism, lockable in 0 position	IP55	N and PE/ground	54 mm (for motor starter protector + lateral auxiliary switch)	S0	▶		1	1 unit	41E	
				72 mm (for motor starter protector + lateral auxiliary switch + auxiliary releases)	S0	▶					3RV1923-1DA00
				82 mm (for motor starter protector + lateral auxiliary switch + auxiliary releases)	S2	A					3RV1933-1DA00
 3RV1923-1GA00	With EMERGENCY-STOP rotary operating mechanism, lockable in 0 position	IP55	N and PE/ground	54 mm (for motor starter protector + lateral auxiliary switch)	S0	▶		1	1 unit	41E	
				72 mm (for motor starter protector + lateral auxiliary switch + auxiliary releases)	S0	A					3RV1933-1GA00
				82 mm (for motor starter protector + lateral auxiliary switch + auxiliary release)	S2	A					3RV1933-1GA00
Cast aluminum enclosures for surface mounting											
 3RV1923-1DA01	With rotary operating mechanism, lockable in 0 position	IP65	PE ¹⁾	72 mm (for motor starter protector + lateral auxiliary switch + auxiliary releases)	S0	▶		1	1 unit	41E	
				With EMERGENCY-STOP rotary operating mechanism, lockable in 0 position	72 mm (for motor starter protector + lateral auxiliary switch + auxiliary releases)	S0					▶
Molded-plastic enclosures for flush mounting											
 3RV1913-2DA00	With actuator diaphragm	IP55 (front side)	N and PE/ground	72 mm (for motor starter protector + lateral auxiliary switch + auxiliary releases)	S00	A		1	1 unit	41E	
				With rotary operating mechanism, lockable in 0 position	72 mm (for motor starter protector + lateral auxiliary switch + auxiliary releases)	S0					A
 3RV1923-2GA00	With EMERGENCY-STOP rotary operating mechanism, lockable in 0 position	IP55 (front side)	N and PE/ground	72 mm (for motor starter protector + lateral auxiliary switch + auxiliary releases)	S0	A		1	1 unit	41E	





¹⁾ If required, an additional N terminal can be mounted (e.g. 8WA1011-1BG11).

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

Enclosures and front plates

Version	Degree of protection	For 3RV10 to 3RV16 motor starter protectors Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Front plates								
 3RV1913-4C	Molded-plastic front plates with actuator diaphragm For actuating 3RV1 motor starter protectors in any enclosures, includes holder for motor starter protector.	IP55 (front side)	S00	A	3RV1913-4C	1	1 unit	41E
 3RV1923-4B + 3RV1923-4G	Molded-plastic front plates with rotary operating mechanism lockable in 0 position For actuation of 3RV1 motor starter protectors in any enclosure.	IP55 (front side)	S0, S2, S3	▶	3RV1923-4B	1	1 unit	41E
	Molded-plastic front plates with EMERGENCY-STOP rotary operating mechanism, red/yellow, lockable in 0 position EMERGENCY-STOP actuation of 3RV1 motor starter protectors in any enclosure.	IP55 (front side)	S0, S2, S3	A	3RV1923-4E	1	1 unit	41E
	Holders for front plates Holder is mounted on front plate, motor starter protector with and without accessories is snapped in.	--	S0	▶	3RV1923-4G	1	1 unit	41E
Accessories for enclosures								
 Insulating material enclosure for surface mounting with 3RV1913-7D	EMERGENCY STOP mushroom, red/yellow For 3RV1913-.. enclosures and front plates Latching mushroom button, unlatch by turning Cannot be used in combination with locking device	IP55	S00	▶	3RV1913-7D	1	1 unit	41E
	EMERGENCY STOP mushroom buttons, red/yellow, with lock For 3RV1913-.. enclosures and front plates RONIS lock, lock No. SB 30, supplied with 2 keys Latching mushroom button, unlatch with key Cannot be used in combination with locking device	IP55	S00	▶	3RV1913-7E	1	1 unit	41E
	Locking devices For 3RV1913-.. enclosures and front plates For 3 padlocks with max. 8 mm shackle diameter. Cannot be used in combination with EMERGENCY-STOP mushroom button	IP55	S00	▶	3RV1913-6B	1	1 unit	41E
	Spare actuator diaphragms Holders and screws are included in scope of supply	IP55	S00	A	3RV1913-7F	1	1 unit	41E
Version	Rated control supply voltage U_s V	For motor starter protectors Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Indicator lights								
 3RV1903-5B	Indicator lights For all enclosures and front plates • With LED lamp for versions 110 ... 120 V, with glow lamp for versions 220 ... 500 V • With colored lenses red, green, yellow, orange and clear	110 ... 120 220 ... 240 380 ... 415 480 ... 500	S2	C C C C	3RV1903-5B 3RV1903-5C 3RV1903-5E 3RV1903-5G	1 1 1 1	1 unit 1 unit 1 unit 1 unit	41E 41E 41E 41E

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

3RV19 infeed system

Overview

The 3RV19 infeed system is a convenient means of power supply and distribution for a group of several motor starter protectors or complete load feeders with a screw or spring-type connection up to size S0 (exception: this system cannot be used for the 3RV11, 3RV16 and 3RV1742 motor starter protectors/circuit breakers).

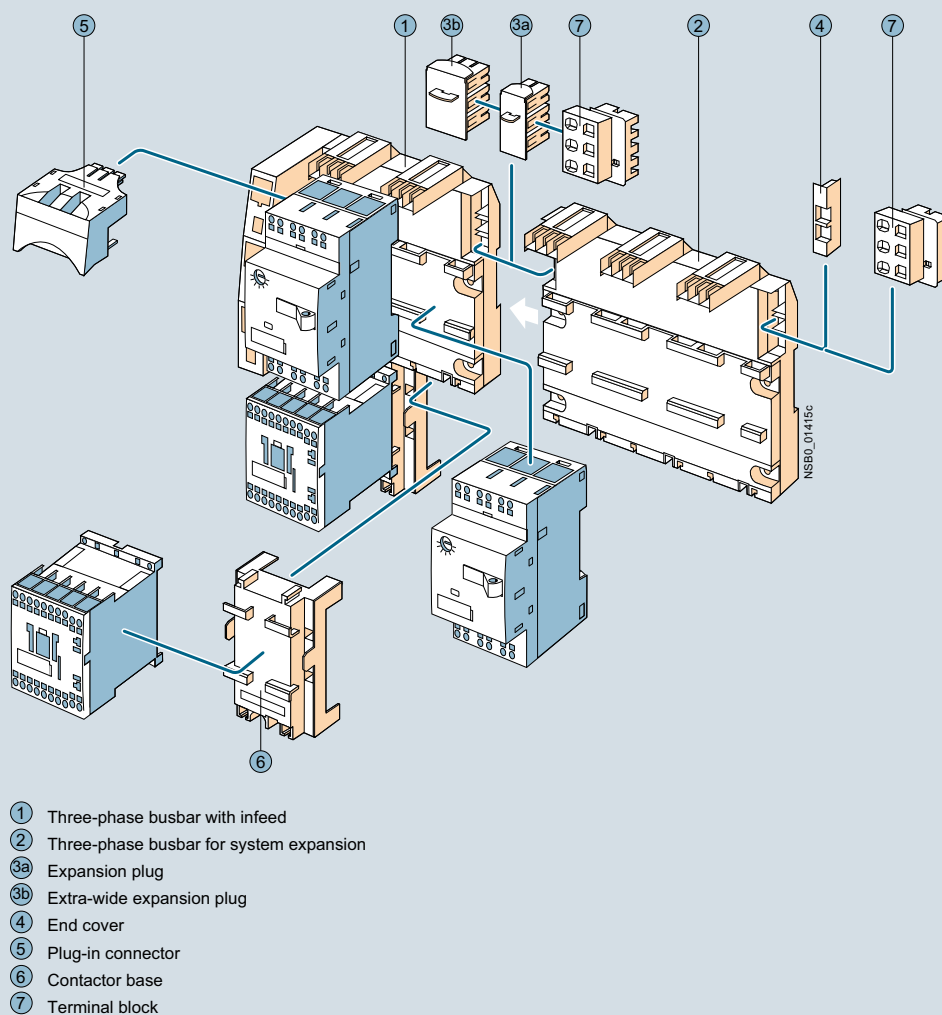
The devices with spring-type terminals are available in the SIRIUS modular system up to 5.5 kW at 400 V AC. At the same time, the motor starter protectors and load feeders with screw terminals for sizes S00 and S0 can also be integrated in the system.

The system is based on a basic module complete with a lateral incoming unit (three-phase busbar with infeed). This infeed with spring-type terminals is mounted on the right or left depending on the version and can be supplied with a maximum conductor cross-section of 25 mm² (with end sleeve). A basic module has two sockets onto each of which a motor starter protector can be snapped.

Expansion modules are available for extending the system (three-phase busbars for system expansion). The individual modules are connected through an expansion plug.

The electrical connection between the three-phase busbars and the motor starter protectors is implemented through plug-in connectors. The complete system can be mounted on a TH 35 standard mounting rail to IEC 60715 and can be expanded as required up to a maximum current carrying capacity of 63 A.

The system is mounted extremely quickly and easily thanks to the simple plug-in technique. Thanks to the lateral infeed, the system also saves space in the control cabinet. The additional overall height required for the infeed unit is only 30 mm. The alternative infeed possibilities on each side offer a high degree of flexibility for configuring the control cabinet: Infeed on left-hand or right-hand side, ring infeed or infeed on one side and outfeed from the other side to supply further loads are all possible. A terminal block with spring-type connections in combination with a standard mounting rail enables the integration of not only SIRIUS motor starter protectors but also single-phase, two-phase and three-phase components such as 5SY miniature circuit breakers or SIRIUS relay components.



SIRIUS 3RV19 infeed system

① Three-phase busbars with infeed

A three-phase busbar with infeed unit is required for connecting the incoming supply. These modules comprise one infeed module and 2 sockets which each accept one motor starter protector. A choice of two versions with infeed on the left or right is available. The infeed is connected using spring-type terminals. They permit an infeed with conductor cross-sections of up to 25 mm² with end sleeve. An end cover is supplied with each module.

② Three-phase busbars for system expansion

The three-phase busbars for system expansion support expansion of the system. There is a choice of modules with 2 or 3 sockets. The system can be expanded as required up to a maximum current carrying capacity of 63 A. An expansion plug is supplied with each module.

③a Expansion plug

The expansion plug is used for electrical connection of adjacent three-phase busbars. The current carrying capacity of this plug equals 63 A. One expansion plug is supplied with each three-phase busbar for system expansion. Additional expansion plugs are therefore only required as spare parts.

③b Extra-wide expansion plug

The wide expansion plug makes the electrical connection between two three-phase busbars, thus performing the same function as the 3RV1917-5BA00 expansion plug; the electrical characteristics (e.g. a current carrying capacity of 63 A) are identical.

The 3RV1917-5E expansion plug is 10 mm wider than the 3RV1917-5BA00 expansion plug, hence in the plugged state there is a distance of 10 mm between the connected three-phase busbars. This distance can be used to lay the auxiliary current and control current wiring ("wiring duct"). The motor starter protector and contactor can be wired from underneath, which means that the complete cable duct above the system can be omitted.

④ End cover

The end cover is used to cover the three-phase busbar at the open end of the system. This cover is therefore only required once for each system. An end cover is supplied with each three-phase busbar system with infeed. Further end covers are therefore only required as spare parts.

⑤ Plug-in connector

The plug-in connector is used for the electrical connection between the three-phase busbar and the motor starter protector. These plug-in connectors are available in versions with screw terminals for sizes S00, S0 or with spring-type terminals for size S00.

⑥ Contactor base

Load feeders can be assembled in the system using the contactor base. The contactor bases are suitable for contactors of size S00 with spring-type terminals and are simply snapped onto the three-phase busbars. Direct-on-line starters and reversing starters are possible. One contactor base is required for direct-on-line starters and two are required for reversing starters. To assemble load feeders for reversing starters, the contactor bases can be arranged either below each other (45 mm overall width) or alongside each other (90 mm overall width). It is important to note that mechanical interlocking of the contactors is only possible when they are arranged vertically.

The infeed system is designed for mounting on a 35 mm standard mounting rail with 7.5 mm overall depth. This standard mounting rail gives the contactor base a stable mounting surface to sit on. If standard mounting rails with a depth of 15 mm are used, the spacer connected to the bottom of the contactor base must be knocked out and plugged into the mating piece that is also on the underside. Then the contactor base also has a stable mounting surface. When standard mounting rails with a depth of 7.5 mm are used, the spacer has no function and can be removed.

As an alternative to using a contactor base, the 3RA1911-2E electrical link modules can also be used for direct start load feeders with spring-type connections of size S00. Motor starter protector and contactor assemblies can then be directly snapped onto the sockets of the three-phase busbars. For feeders of size S00 and S0, the corresponding 3RA1911-1.... or 3RA1921-1.... link modules should generally be used. For size S0, it is only possible integrate direct start load feeders and they must be integrated in the system as complete assemblies.

⑦ Terminal block





The 3RV1917-5D terminal block enables the integration of not only SIRIUS motor starter protectors but also single-phase, two-phase and three-phase components. Using the terminal block the 3 phases can be fed out of the system; which means that single-phase loads can also be integrated in the system. The terminal block is plugged into the slot of the expansion plug and thus enables outfeeding from the middle or end of the infeed system. The terminal block can be rotated through 180° and be locked to the support modules of the infeed system. In addition, the 45 mm wide 3RV1917-7B standard mounting rail option for screwing onto the support plate facilitates plugging the single-phase, two-phase and three-phase components onto the infeed system.

Motor Starter Protectors/Circuit Breakers


SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A Accessories

3RV19 infeed system

Selection and ordering data

Type	Version	For motor starter protectors/circuit breakers Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Three-phase busbars with infeed								
	Three-phase busbars with infeed incl. end cover 3RV1917-6A	For 2 motor starter protectors with infeed from the left	S00 (spring-type) ¹⁾ , A S00, S0 (screw)	3RV1917-1A		1	1 unit	41E
		For 2 motor starter protectors with infeed from the right	S00 (spring-type) ¹⁾ , A S00, S0 (screw)	3RV1917-1E		1	1 unit	41E
Three-phase busbars for system expansion								
	Three-phase busbars incl. expansion plug 3RV1917-5BA00	For 2 motor starter protectors	S00 (spring-type) ¹⁾ , A S00, S0 (screw)	3RV1917-4A		1	1 unit	41E
		For 3 motor starter protectors	S00 (spring-type) ¹⁾ , A S00, S0 (screw)	3RV1917-4B		1	1 unit	41E
Plug-in connectors								
	Plug-in connectors To make contact with the motor starter protectors	Single-unit packaging	S00 (spring-type) ¹⁾ , A	3RV1917-5AA00		1	1 unit	41E
		Multi-unit packaging	S00 (spring-type) ¹⁾ , A	3RV1917-5A		1	10 units	41E
		Single-unit packaging	S00 (screw)	A	3RV1917-5CA00	1	1 unit	41E
			S0 (screw)	A	3RV1927-5AA00	1	1 unit	41E
		Multi-unit packaging	S00 (screw)	A	3RV1917-5C	1	10 units	41E
			S0 (screw)	A	3RV1927-5A	1	10 units	41E

¹⁾ Compatible with the following motor starter protectors: 3RV1011-...2.
(size S00, spring-type) product version E03 and upwards.

Type	Version	For contactors Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Contactor bases								
	Contactor bases For mounting direct-on-line or reversing starters	Single-unit packaging	S00	A	3RV1917-7AA00	1	1 unit	41E
		Multi-unit packaging	S00	A	3RV1917-7A	1	10 units	41E

3RV1917-7A

Motor Starter Protectors/Circuit Breakers

SIRIUS 3RV1 Motor Starter Protectors/Circuit Breakers up to 100 A

Accessories

3RV19 infeed system

Type	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Terminal blocks							
	Terminal blocks For integration of single-phase, two-phase and three-phase components	Single-unit packaging	A	3RV1917-5D	1	1 unit	41E
3RV1917-5D							
45 mm standard mounting rails							
	45 mm standard mounting rails For mounting onto three-phase busbars	Single-unit packaging	A	3RV1917-7B	1	1 unit	41E
3RV1917-7B							
Extra-wide expansion plugs							
	Extra-wide expansion plugs As accessory	Single-unit packaging	A	3RV1917-5E	1	1 unit	41E
3RV1917-5E							
Expansion plugs							
	Expansion plugs¹⁾ As spare part	Single-unit packaging	A	3RV1917-5BA00	1	1 unit	41E
3RV1917-5BA00							
End covers							
	End covers²⁾ As spare part	Multi-unit packing	A	3RV1917-6A	100	10 units	41E
3RV1917-6A							

¹⁾ The expansion plug is included in the scope of supply of the 3RV1917-4. three-phase busbars for system expansion.

²⁾ The end cover is included in the scope of supply of the 3RV1917-1. three-phase busbars with infeed system.

Overload relays

General data

Overview



Features	3RU11	3RB20/3RB21	3RB22/3RB23	Benefits
General data				
Sizes	S00 ... S3	S00 ... S12	S00 ... S12	<ul style="list-style-type: none"> Are coordinated with the dimensions, connections and technical characteristics of the other devices in the SIRIUS modular system (contactors, etc., ...) Permit the mounting of slim and compact load feeders in widths of 45 mm (S00), 45 mm (S0), 55 mm (S2), 70 mm (S3), 120 mm (S6) and 145 mm (S10/S12); this does not include the current measuring modules for the 3RB22 to 3RB23 evaluation modules sizes S00 to S3 Simplify configuration
Seamless current range	0.11 ... 100 A	0.1 ... 630 A	0.3 ... 630 A (Up to 820 A) ¹⁾	<ul style="list-style-type: none"> Allows easy and consistent configuration with one series of overload relays (for small to large loads)
Protection functions				
Tripping due to overload	✓	✓	✓	<ul style="list-style-type: none"> Provides optimum inverse-time delayed protection of loads against excessive temperature rises due to overload
Tripping due to phase unbalance	✓	✓	✓	<ul style="list-style-type: none"> Provides optimum inverse-time delayed protection of loads against excessive temperature rises due to phase unbalance
Tripping due to phase failure	✓	✓	✓	<ul style="list-style-type: none"> Minimizes heating of three-phase motors during phase failure
Protection of single-phase loads	✓	--	✓	<ul style="list-style-type: none"> Enables the protection of single-phase loads
Tripping due to overtemperature	-- ²⁾	-- ²⁾	✓	<ul style="list-style-type: none"> Provides optimum temperature-dependent protection of loads against excessive temperature rises e.g. for stator-critical motors or in the event of insufficient coolant flow, contamination of the motor surface or for long starting or braking operations Eliminates the need for additional special equipment Saves space in the control cabinet Reduces wiring outlay and costs
by integrated thermistor motor protection function				
Tripping due to ground fault	--	✓ (Only 3RB21)	✓	<ul style="list-style-type: none"> Provides optimum protection of loads against high-resistance short circuits or ground faults due to moisture, condensed water, damage to the insulation material, etc. Eliminates the need for additional special equipment Saves space in the control cabinet Reduces wiring outlay and costs
by internal ground-fault detection (can be activated)				
Features				
RESET function	✓	✓	✓	<ul style="list-style-type: none"> Allows manual or automatic resetting of the device
Remote RESET function	✓ (By means of separate module)	✓ (Only with 3RB21 and external auxiliary voltage 24 V DC)	✓ (Electrically via external button)	<ul style="list-style-type: none"> Allows the remote resetting of the device
TEST function for auxiliary contacts	✓	✓	✓	<ul style="list-style-type: none"> Allows easy checking of the function and wiring
TEST function for electronics	--	✓	✓	<ul style="list-style-type: none"> Allows checking of the electronics
Status display	✓	✓	✓	<ul style="list-style-type: none"> Displays the current operating state
Large current adjustment button	✓	✓	✓	<ul style="list-style-type: none"> Makes it easier to set the relay exactly to the correct current value
Integrated auxiliary contacts (1 NO + 1 NC)	✓	✓	✓ (2 ×)	<ul style="list-style-type: none"> Allows the load to be switched off if necessary Can be used to output signals

✓ Available

-- Not available

¹⁾ Motor currents up to 820 A can be recorded and evaluated by a current measuring module, e.g. 3RB2906-2BG1 (0.3 to 3 A), in combination with a 3UF1868-3GA00 (820 A/1 A) series transformer. 3UF18 transformers, see [Catalog IC 10, Chapter 10, "Monitoring and Control Devices"](#) → "SIMOCODE 3UF Motor Management and Control Devices".

²⁾ The SIRIUS 3RN thermistor motor protection devices can be used to provide additional temperature-dependent protection.



Features	3RU11	3RB20/3RB21	3RB22/3RB23	Benefits
Design of load feeders				
Short-circuit strength up to 100 kA at 690 V (In conjunction with the corresponding fuses or the corresponding motor starter protector)	✓	✓	✓	<ul style="list-style-type: none"> Provides optimum protection of the loads and operating personnel in the event of short circuits due to insulation faults or faulty switching operations
Electrical and mechanical matching to 3RT contactors	✓	✓	✓ ¹⁾	<ul style="list-style-type: none"> Simplifies configuration Reduces wiring outlay and costs Enables stand-alone installation as well as space-saving direct mounting
Straight-through transformers for main circuit²⁾ (In this case the cables are routed through the feed-through openings of the overload relay and connected directly to the box terminals of the contactor)	--	✓ (S2 ... S6)	✓ (S00 ... S6)	<ul style="list-style-type: none"> Reduces the contact resistance (only one point of contact) Saves wiring costs (easy, no need for tools, and fast) Saves material costs Reduces installation costs
Spring-type connection for auxiliary circuits²⁾	✓	✓	✓	<ul style="list-style-type: none"> Enables fast connections Permits vibration-resistant connections Enables maintenance-free connections
Other features				
Temperature compensation	✓	✓	✓	<ul style="list-style-type: none"> Allows the use of the relays at high temperatures without derating Prevents premature tripping Allows compact installation of the control cabinet without distance between the devices/load feeders Simplifies configuration Enables space to be saved in the control cabinet
Very high long-term stability	✓	✓	✓	<ul style="list-style-type: none"> Provides safe protection for the loads even after years of use in severe operating conditions
Wide setting ranges	--	✓ (1:4)	✓ (1:10)	<ul style="list-style-type: none"> Minimize the configuration outlay and costs Minimize storage overheads, storage costs, tied-up capital
Fixed trip class	CLASS 10	CLASS 10 or CLASS 20 (Only 3RB20)	--	<ul style="list-style-type: none"> Optimum motor protection for standard starts
Trip classes adjustable on the device CLASS 5, 10, 20, 30	--	✓ (Only 3RB21)	✓	<ul style="list-style-type: none"> Enables solutions for very fast starting motors requiring special protection (e.g. Ex motors) Enables heavy starting solutions Reduces the number of variants Minimizes the configuring outlay and costs Minimizes storage overhead, storage costs, and tied-up capital
Low power loss	--	✓	✓	<ul style="list-style-type: none"> Reduces power consumption and energy costs (up to 98 % less power is used than for thermal overload relays) Minimizes temperature rises of the contactor and control cabinet – in some cases this may eliminate the need for control cabinet cooling Direct mounting to contactor saves space, even for high motor currents (i.e. no heat decoupling is required)

✓ Available
-- Not available

¹⁾ Exception: Up to size S3, only stand-alone installation is possible.

²⁾ Alternatively available for screw terminals.

Overload relays

General data



Features	3RU11	3RB20/3RB21	3RB22/3RB23	Benefits
Other features (continued)				
Internal power supply	-- ¹⁾	✓	--	<ul style="list-style-type: none"> Eliminates the need for configuring and connecting an additional control circuit
Variable adjustment of the trip classes (The required trip class can be adjusted by means of a rotary switch depending on the current start-up condition.)	--	✓ (Only 3RB21)	✓	<ul style="list-style-type: none"> Reduces the number of variants Minimizes the configuring outlay and costs Minimizes storage overhead, storage costs, and tied-up capital
Overload warning	--	--	✓	<ul style="list-style-type: none"> Indicates imminent tripping of the relay directly on the device due to overload, phase unbalance or phase failure through flickering of the LEDs Allows the imminent tripping of the relay to be signaled Allows measures to be taken in time in the event of inverse-time delayed overloading of the load for an extended period over the current limit Eliminates the need for an additional device Saves space in the control cabinet Reduces wiring outlay and costs
Analog output	--	--	✓	<ul style="list-style-type: none"> Allows the output of an analog output signal for actuating moving-coil instruments, feeding programmable logic controllers or transfer to bus systems Eliminates the need for an additional measuring transducer and signal converter Saves space in the control cabinet Reduces wiring outlay and costs

✓ Available

-- Not available

¹⁾ The SIRIUS 3RU11 thermal overload relays use a bimetal contactor and therefore do not require a control supply voltage.

Overload relays overview – matching contactors

Overload relays	Current measurement	Current range	Contactors (type, size, rating in kW)							
			3RT101.	3RT102.	3RT103.	3RT104.	3RT105.	3RT106.	3RT10 7.	3TF68/3TF69
Type	Type	A	S00 3/4/5.5	S0 5.5/7.5/11	S2 15/18.5/22	S3 30/37/45	S6 55/75/90	S10 110/132/160	S12 200/250	Size 14 375/450

SIRIUS 3RU11 thermal overload relays



3RU111	Integrated	0.11 ... 12	✓	--	--	--	--	--	--	--
3RU112	Integrated	1.8 ... 25	--	✓	--	--	--	--	--	--
3RU113	Integrated	5.5 ... 50	--	--	✓	--	--	--	--	--
3RU114	Integrated	18 ... 100	--	--	--	✓	--	--	--	--

3RU11

SIRIUS 3RB20 electronic overload relays¹⁾

3RB201	Integrated	0.1 ... 12	✓	--	--	--	--	--	--	--
3RB202	Integrated	0.1 ... 25	--	✓	--	--	--	--	--	--
3RB203	Integrated	6 ... 50	--	--	✓	--	--	--	--	--
3RB204	Integrated	12.5 ... 100	--	--	--	✓	--	--	--	--
3RB205	Integrated	50 ... 200	--	--	--	--	✓	--	--	--
3RB206	Integrated	55 ... 630	--	--	--	--	--	✓	✓	✓
3RB201 + 3UF18	Integrated	630 ... 820	--	--	--	--	--	--	--	✓

3RB20

SIRIUS 3RB21 electronic overload relays¹⁾

3RB211	Integrated	0.1 ... 12	✓	--	--	--	--	--	--	--
3RB212	Integrated	0.1 ... 25	--	✓	--	--	--	--	--	--
3RB213	Integrated	6 ... 50	--	--	✓	--	--	--	--	--
3RB214	Integrated	12.5 ... 100	--	--	--	✓	--	--	--	--
3RB215	Integrated	50 ... 200	--	--	--	--	✓	--	--	--
3RB216	Integrated	55 ... 630	--	--	--	--	--	✓	✓	✓
3RB211 + 3UF18	Integrated	630 ... 820	--	--	--	--	--	--	--	✓

3RB21

SIRIUS 3RB22/3RB23 electronic overload relays¹⁾

3RB2283/ 3RB2383 +	3RB2906	0.3 ... 25	✓	✓	--	--	--	--	--	--
	3RB2906	10 ... 100	✓	✓	✓	✓	--	--	--	--
	3RB2956	20 ... 200	--	--	--	--	✓	--	--	--
	3RB2966	63 ... 630	--	--	--	--	--	✓	✓	✓
	3RB2906 + 3UF18	630 ... 820	--	--	--	--	--	--	--	✓

3RB22, 3RB23

✓ Available
-- Not available

¹⁾ "Technical specifications" for the use of overload relays with trip class \geq CLASS 20 can be found in "Short-circuit protection with fuses for motor feeders", see

- Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays" <http://support.industry.siemens.com/cs/ww/en/view/35681830>.
- Configuration Manual "SIRIUS Configuration - Selection Data for Fuseless Load Feeders", <https://support.industry.siemens.com/cs/ww/en/view/40625241>.

Connection methods

The 3RU11 thermal overload relays come with screw terminals.

The 3RB20 and 3RB21 electronic overload relays are available with screw terminals (box terminals) or spring-type terminals on the auxiliary current side; the same applies for the evaluation modules of the 3RB22 to 3RB23 electronic overload relays for High-Feature application.



Screw terminals



Spring-type terminals

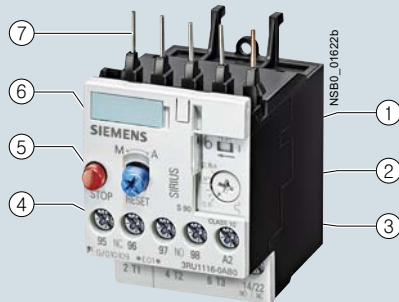
The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Overload relays

SIRIUS 3RU1 Thermal Overload Relays

3RU11 up to 100 A for standard applications

Overview



- ① Switch position indicator and TEST function of the wiring:
Indicates a trip and enables the wiring test.
- ② Motor current setting:
Setting the device to the rated motor current is easy with the large rotary knob.
- ③ Transparent, sealable cover:
Secures the motor current setting and the TEST function against adjustment.
- ④ Supply terminals:
The generously sized terminals permit connection of two conductors with different cross-sections for the main and auxiliary circuits. The auxiliary circuit can be connected with screw terminals and alternatively with spring-type terminals.
- ⑤ STOP button:
If the STOP button is pressed, the NC contact is opened. This switches off the contactor downstream. The NC contact is closed again when the button is released.
- ⑥ Selector switch for manual/automatic RESET and RESET button:
With this switch you can choose between manual and automatic RESET. A device set to manual RESET can be reset locally by pressing the RESET button. A remote RESET is possible using the RESET modules (accessories), which are independent of size.
- ⑦ Connection for mounting onto contactors:
Optimally adapted in electrical, mechanical and design terms to the contactors. Connecting pins can be used for direct mounting of the overload relays. Stand-alone installation is possible as an alternative (in some cases in conjunction with a stand-alone installation module).

The 3RU11 thermal overload relays up to 100 A have been designed for inverse-time delayed protection of loads with normal starting (for "Function", see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays") against excessive temperature rises due to overload or phase failure.

An overload or a phase failure result in an increase of the motor current beyond the set rated motor current. Via heating elements, this current rise heats up the bimetal strips inside the device which then bend and as a result trigger the auxiliary contacts by means of a tripping mechanism. The auxiliary contacts then switch off the load by means of a contactor. The break time depends on the ratio between the tripping current and current setting I_e and is stored in the form of a long-term stable tripping characteristic (see www.siemens.com/sirius/support → "Characteristic Curves").

The "tripped" status is signaled by means of a switch position indicator. Resetting takes place either manually or automatically after a recovery time has elapsed (for "Function", see Reference Manual "Protection Equipment – 3RU1 and 3RB2 Overload Relays").

The devices are manufactured in accordance with environmental guidelines and contain environmentally friendly and reusable materials.

They comply with all important worldwide standards and approvals.

"Increased safety" type of protection EEx e according to ATEX Directive 94/9/EC

The 3RU11 thermal overload relays are suitable for the overload protection of explosion-proof motors with "increased safety" type of protection EEx e.

The relays meet the requirements of IEC 60079-7 (Electrical apparatus for areas subject to explosion hazards – Increased safety "e").

EC type test certificate for Category (2) G/D exists. It has the number DMT 98 ATEX G 001.

SIRIUS 3RU1116-0AB0 thermal overload relays

Article No. scheme

Digit of the Article No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th
Thermal overload relays	□□□	□	□	□	□	-	□	□	□
SIRIUS 1st generation	3 R U			1					
Device series			□						
Size, rated operational current and power				□	□				
Setting range of the overload release							□	□	
Connection method									□
Installation type									□
Example	3 R U	1	1	3	6	-	1	H	B 0

Note:

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

Benefits

The most important features and benefits of the 3RU11 thermal overload relays are listed in the overview table (see "General Data", page 7/36 onwards).

Application

Industries

The 3RU11 thermal overload relays are suitable for customers from all industries who want to guarantee optimum inverse-time delayed protection of their electrical loads (e.g. motors) under normal starting conditions (CLASS 10).

Application area

The 3RU11 thermal overload relays have been designed for the protection of three-phase and single-phase AC and DC motors.

If single-phase AC or DC loads are to be protected by the 3RU11 thermal overload relays, all three bimetal strips must be heated. For this purpose, all main current paths of the relay must be connected in series.

Ambient conditions

3RU11 thermal overload relays compensate temperature in the temperature range from -20 °C to $+60\text{ °C}$ according to IEC 60947-4-1. At temperatures from $+60\text{ °C}$ to $+70\text{ °C}$, the upper set value of the setting range has to be reduced by a specific factor in accordance with the table below.

Ambient temperature °C	Derating factor for the upper set value
+60	1.0
+65	0.94
+70	0.87

Overload relays

SIRIUS 3RU1 Thermal Overload Relays

3RU11 up to 100 A for standard applications





Selection and ordering data

3RU11 thermal overload relays with screw terminals on the auxiliary current side for mounting onto contactor¹⁾, CLASS 10

Features and technical specifications:

- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET

- Switch position indicator
- TEST function
- STOP button
- Integrated sealable cover

Size contactor ²⁾	Rating for three- phase motors, rated value ³⁾	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁴⁾	DT	Screw terminals (on auxiliary current side)	PU (UNIT, SET, M)	PS*	PG	
									Article No.
Size S00									
 3RU1116...B0	S00	0.04	0.11 ... 0.16	0.5	▶	3RU1116-0AB0	1	1 unit	41F
		0.06	0.14 ... 0.2	1	▶	3RU1116-0BB0	1	1 unit	41F
		0.06	0.18 ... 0.25	1	▶	3RU1116-0CB0	1	1 unit	41F
		0.09	0.22 ... 0.32	1.6	▶	3RU1116-0DB0	1	1 unit	41F
		0.09	0.28 ... 0.4	2	▶	3RU1116-0EB0	1	1 unit	41F
		0.12	0.35 ... 0.5	2	▶	3RU1116-0FB0	1	1 unit	41F
		0.18	0.45 ... 0.63	2	▶	3RU1116-0GB0	1	1 unit	41F
		0.18	0.55 ... 0.8	4	▶	3RU1116-0HB0	1	1 unit	41F
		0.25	0.7 ... 1	4	▶	3RU1116-0JB0	1	1 unit	41F
		0.37	0.9 ... 1.25	4	▶	3RU1116-0KB0	1	1 unit	41F
		0.55	1.1 ... 1.6	6	▶	3RU1116-1AB0	1	1 unit	41F
		0.75	1.4 ... 2	6	▶	3RU1116-1BB0	1	1 unit	41F
		0.75	1.8 ... 2.5	10	▶	3RU1116-1CB0	1	1 unit	41F
		1.1	2.2 ... 3.2	10	▶	3RU1116-1DB0	1	1 unit	41F
		1.5	2.8 ... 4	16	▶	3RU1116-1EB0	1	1 unit	41F
		1.5	3.5 ... 5	20	▶	3RU1116-1FB0	1	1 unit	41F
	2.2	4.5 ... 6.3	20	▶	3RU1116-1GB0	1	1 unit	41F	
	3	5.5 ... 8	25	▶	3RU1116-1HB0	1	1 unit	41F	
	4	7 ... 10	35	▶	3RU1116-1JB0	1	1 unit	41F	
	5.5	9 ... 12	35	▶	3RU1116-1KB0	1	1 unit	41F	
Size S0									
 3RU1126...B0	S0	0.75	1.8 ... 2.5	10	▶	3RU1126-1CB0	1	1 unit	41F
		1.1	2.2 ... 3.2	10	▶	3RU1126-1DB0	1	1 unit	41F
		1.5	2.8 ... 4	16	▶	3RU1126-1EB0	1	1 unit	41F
		1.5	3.5 ... 5	20	▶	3RU1126-1FB0	1	1 unit	41F
		2.2	4.5 ... 6.3	20	▶	3RU1126-1GB0	1	1 unit	41F
		3	5.5 ... 8	25	▶	3RU1126-1HB0	1	1 unit	41F
		4	7 ... 10	35	▶	3RU1126-1JB0	1	1 unit	41F
		5.5	9 ... 12.5	35	▶	3RU1126-1KB0	1	1 unit	41F
		7.5	11 ... 16	40	▶	3RU1126-4AB0	1	1 unit	41F
		7.5	14 ... 20	50	▶	3RU1126-4BB0	1	1 unit	41F
		11	17 ... 22	63	▶	3RU1126-4CB0	1	1 unit	41F
	11	20 ... 25	63	▶	3RU1126-4DB0	1	1 unit	41F	
Size S2									
 3RU1136...B0	S2	3	5.5 ... 8	25	▶	3RU1136-1HB0	1	1 unit	41F
		4	7 ... 10	35	▶	3RU1136-1JB0	1	1 unit	41F
		5.5	9 ... 12.5	35	▶	3RU1136-1KB0	1	1 unit	41F
		7.5	11 ... 16	40	▶	3RU1136-4AB0	1	1 unit	41F
		7.5	14 ... 20	50	▶	3RU1136-4BB0	1	1 unit	41F
		11	18 ... 25	63	▶	3RU1136-4DB0	1	1 unit	41F
		15	22 ... 32	80	▶	3RU1136-4EB0	1	1 unit	41F
		18.5	28 ... 40	80	▶	3RU1136-4FB0	1	1 unit	41F
		22	36 ... 45	100	▶	3RU1136-4GB0	1	1 unit	41F
		22	40 ... 50	100	▶	3RU1136-4HB0	1	1 unit	41F
Size S3									
 3RU1146...B0	S3	11	18 ... 25	63	▶	3RU1146-4DB0	1	1 unit	41F
		15	22 ... 32	80	▶	3RU1146-4EB0	1	1 unit	41F
		18.5	28 ... 40	80	▶	3RU1146-4FB0	1	1 unit	41F
		22	36 ... 50	125	▶	3RU1146-4HB0	1	1 unit	41F
		30	45 ... 63	125	▶	3RU1146-4JB0	1	1 unit	41F
		37	57 ... 75	160	▶	3RU1146-4KB0	1	1 unit	41F
		45	70 ... 90	160	▶	3RU1146-4LB0	1	1 unit	41F
		45	80 ... 100 ⁵⁾	200	▶	3RU1146-4MB0	1	1 unit	41F

¹⁾ With the appropriate terminal supports (see "Accessories", page 7/45), the 3RU11 overload relays for mounting on contactors can also be installed as stand-alone units.

²⁾ Observe maximum rated operational current of the devices.

³⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁴⁾ Maximum protection by fuse only for overload relays, type of coordination "2". For fuse values in connection with contactors, see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays" → "Technical Specifications" → "Short-Circuit Protection with Fuses/Motor Starter Protectors for Motor Feeders".

⁵⁾ For overload relays > 100 A, see 3RB2 electronic overload relays, page 7/49 onwards.

Overload relays





SIRIUS 3RU1 Thermal Overload Relays

3RU11 up to 100 A for standard applications

3RU11 thermal overload relays with screw terminals on the auxiliary current side for stand-alone installation¹⁾, CLASS 10

Features and technical specifications:

- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator
- TEST function
- STOP button
- Integrated sealable cover

Size contactor 2)	Rating for three- phase motors, rated value ³⁾	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁴⁾	DT	Screw terminals (on auxiliary current side)	⊕	PU (UNIT, SET, M)	PS*	PG	
										Article No.
Size S00										
 3RU1116-0AB1	S00	0.04	0.11 ... 0.16	0.5	B	3RU1116-0AB1	1	1 unit	41F	
		0.06	0.14 ... 0.2	1	B					3RU1116-0BB1
		0.06	0.18 ... 0.25	1	B					3RU1116-0CB1
		0.09	0.22 ... 0.32	1.6	B					3RU1116-0DB1
	0.09	0.28 ... 0.4	2	▶	3RU1116-0EB1	1	1 unit	41F		
	0.12	0.35 ... 0.5	2	▶	3RU1116-0FB1	1	1 unit	41F		
	0.18	0.45 ... 0.63	2	▶	3RU1116-0GB1	1	1 unit	41F		
	0.18	0.55 ... 0.8	4	▶	3RU1116-0HB1	1	1 unit	41F		
	0.25	0.7 ... 1	4	▶	3RU1116-0JB1	1	1 unit	41F		
	0.37	0.9 ... 1.25	4	▶	3RU1116-0KB1	1	1 unit	41F		
	0.55	1.1 ... 1.6	6	▶	3RU1116-1AB1	1	1 unit	41F		
	0.75	1.4 ... 2	6	▶	3RU1116-1BB1	1	1 unit	41F		
	0.75	1.8 ... 2.5	10	▶	3RU1116-1CB1	1	1 unit	41F		
	1.1	2.2 ... 3.2	10	▶	3RU1116-1DB1	1	1 unit	41F		
	1.5	2.8 ... 4	16	▶	3RU1116-1EB1	1	1 unit	41F		
	1.5	3.5 ... 5	20	▶	3RU1116-1FB1	1	1 unit	41F		
2.2	4.5 ... 6.3	20	▶	3RU1116-1GB1	1	1 unit	41F			
3	5.5 ... 8	25	▶	3RU1116-1HB1	1	1 unit	41F			
4	7 ... 10	35	▶	3RU1116-1JB1	1	1 unit	41F			
5.5	9 ... 12	35	▶	3RU1116-1KB1	1	1 unit	41F			
Size S0										
 3RU1116-4AB1	S0	7.5	11 ... 16	40	▶	3RU1126-4AB1	1	1 unit	41F	
		7.5	14 ... 20	50	▶					3RU1126-4BB1
		11	17 ... 22	63	▶					3RU1126-4CB1
		11	20 ... 25	63	▶					3RU1126-4DB1
Size S2										
 3RU1136-4EB1	S2	15	22 ... 32	80	▶	3RU1136-4EB1	1	1 unit	41F	
		18.5	28 ... 40	80	▶					3RU1136-4FB1
		22	36 ... 45	100	▶					3RU1136-4GB1
		22	40 ... 50	100	▶					3RU1136-4HB1
Size S3										
 3RU1146-4JB1	S3	30	45 ... 63	125	▶	3RU1146-4JB1	1	1 unit	41F	
		37	57 ... 75	160	▶					3RU1146-4KB1
		45	70 ... 90	160	▶					3RU1146-4LB1
		45	80 ... 100 ⁵⁾	200	▶					3RU1146-4MB1

¹⁾ Sizes S00 to S3 for screw and snap-on mounting onto TH 35 standard mounting rails, size S3 also for TH 75 standard mounting rails.

²⁾ Observe maximum rated operational current of the devices.

³⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁴⁾ Maximum protection by fuse only for overload relays, type of coordination "2". For fuse values in connection with contactors, see [Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays" → "Technical Specifications" → "Short-Circuit Protection with Fuses/Motor Starter Protectors for Motor Feeders"](#).

⁵⁾ For overload relays > 100 A, see [3RB2 electronic overload relays, page 7/49 onwards](#).

Overload relays





SIRIUS 3RU1 Thermal Overload Relays

3RU11 up to 100 A for standard applications

3RU11 thermal overload relays with spring-type terminals for mounting onto contactor¹⁾, CLASS 10

Features and technical specifications:

- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator
- TEST function
- STOP button
- Integrated sealable cover

Size contactor ²⁾	Rating for three- phase motors, rated value ³⁾	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁴⁾	DT	Spring-type terminals (on auxiliary current side)	PU (UNIT, SET, M)	PS*	PG	
									Article No.
Size S00 for stand-alone installation⁵⁾⁶⁾									
 3RU1116...C1	S00	0.06	0.18 ... 0.25	1	B	3RU1116-0CC1	1	1 unit	41F
		0.09	0.22 ... 0.32	1.6	B	3RU1116-0DC1	1	1 unit	41F
		0.09	0.28 ... 0.4	2	B	3RU1116-0EC1	1	1 unit	41F
		0.18	0.45 ... 0.63	2	B	3RU1116-0GC1	1	1 unit	41F
		0.18	0.55 ... 0.8	4	▶	3RU1116-0HC1	1	1 unit	41F
		0.25	0.7 ... 1	4	▶	3RU1116-0JC1	1	1 unit	41F
		0.37	0.9 ... 1.25	4	▶	3RU1116-0KC1	1	1 unit	41F
		0.55	1.1 ... 1.6	6	▶	3RU1116-1AC1	1	1 unit	41F
		0.75	1.4 ... 2	6	▶	3RU1116-1BC1	1	1 unit	41F
		0.75	1.8 ... 2.5	10	B	3RU1116-1CC1	1	1 unit	41F
		1.1	2.2 ... 3.2	10	▶	3RU1116-1DC1	1	1 unit	41F
		1.5	2.8 ... 4	16	B	3RU1116-1EC1	1	1 unit	41F
		1.5	3.5 ... 5	20	▶	3RU1116-1FC1	1	1 unit	41F
		2.2	4.5 ... 6.3	20	▶	3RU1116-1GC1	1	1 unit	41F
		3	5.5 ... 8	25	▶	3RU1116-1HC1	1	1 unit	41F
		4	7 ... 10	35	▶	3RU1116-1JC1	1	1 unit	41F
		5.5	9 ... 12	35	▶	3RU1116-1KC1	1	1 unit	41F
Size S0¹⁾⁷⁾									
 3RU1116...D0	S0	0.75	1.8 ... 2.5	10	B	3RU1126-1CD0	1	1 unit	41F
		1.1	2.2 ... 3.2	10	B	3RU1126-1DD0	1	1 unit	41F
		1.5	2.8 ... 4	16	B	3RU1126-1ED0	1	1 unit	41F
		1.5	3.5 ... 5	20	B	3RU1126-1FD0	1	1 unit	41F
		2.2	4.5 ... 6.3	20	B	3RU1126-1GD0	1	1 unit	41F
		3	5.5 ... 8	25	B	3RU1126-1HD0	1	1 unit	41F
		4	7 ... 10	35	B	3RU1126-1JD0	1	1 unit	41F
		5.5	9 ... 12.5	35	B	3RU1126-1KD0	1	1 unit	41F
		7.5	11 ... 16	40	▶	3RU1126-4AD0	1	1 unit	41F
		7.5	14 ... 20	50	▶	3RU1126-4BD0	1	1 unit	41F
		11	17 ... 22	63	▶	3RU1126-4CD0	1	1 unit	41F
	11	20 ... 25	63	▶	3RU1126-4DD0	1	1 unit	41F	
Size S2¹⁾⁷⁾									
 3RU1136...D0	S2	3	5.5 ... 8	25	B	3RU1136-1HD0	1	1 unit	41F
		4	7 ... 10	35	B	3RU1136-1JD0	1	1 unit	41F
		5.5	9 ... 12.5	35	B	3RU1136-1KD0	1	1 unit	41F
		7.5	11 ... 16	40	B	3RU1136-4AD0	1	1 unit	41F
		7.5	14 ... 20	50	B	3RU1136-4BD0	1	1 unit	41F
		11	18 ... 25	63	B	3RU1136-4DD0	1	1 unit	41F
		15	22 ... 32	80	▶	3RU1136-4ED0	1	1 unit	41F
		18.5	28 ... 40	80	▶	3RU1136-4FD0	1	1 unit	41F
		22	36 ... 45	100	▶	3RU1136-4GD0	1	1 unit	41F
		22	40 ... 50	100	▶	3RU1136-4HD0	1	1 unit	41F
Size S3¹⁾⁷⁾									
 3RU1146...D0	S3	11	18 ... 25	63	B	3RU1146-4DD0	1	1 unit	41F
		15	22 ... 32	80	B	3RU1146-4ED0	1	1 unit	41F
		18.5	28 ... 40	80	B	3RU1146-4FD0	1	1 unit	41F
		22	36 ... 50	125	B	3RU1146-4HD0	1	1 unit	41F
		30	45 ... 63	125	▶	3RU1146-4JD0	1	1 unit	41F
		37	57 ... 75	160	▶	3RU1146-4KD0	1	1 unit	41F
		45	70 ... 90	160	▶	3RU1146-4LD0	1	1 unit	41F
		45	80 ... 100	200	▶	3RU1146-4MD0	1	1 unit	41F

¹⁾ With the appropriate terminal supports (see "Accessories", page 7/45), the 3RU11 overload relays for mounting on contactors can also be installed as stand-alone units.

²⁾ Observe maximum rated operational current of the devices.

³⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁴⁾ Maximum protection by fuse only for overload relays, type of coordination "2". For fuse values in connection with contactors, see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays" → "Technical Specifications" → "Short-Circuit Protection with Fuses/Motor Starter Protectors for Motor Feeders".

⁵⁾ Size S00 for screw and snap-on mounting onto TH 35 standard mounting rail.

⁶⁾ Auxiliary and main conductor connections with spring-type terminals.

⁷⁾ Auxiliary conductor connections with spring-type terminals and main conductor connections with screw terminals.

Overview

Overload relays for standard applications

The following optional accessories are available for the 3RU11 thermal overload relays:

- Terminal support for stand-alone installation of overload relay sizes S00 to S3
- Mechanical RESET (for all sizes)

- Cable release for resetting devices which are difficult to access (for all sizes)
- Electrical remote RESET module in three voltage variants (for all sizes)
- Terminal covers

Selection and ordering data



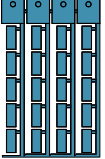
Version	Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Terminal supports for stand-alone installation							
 <p>3RU19.6-3AA01</p>	For separate mounting of overload relays; screw and snap-on mounting onto TH 35 standard mounting rail; size S3 also for TH 75 standard mounting rail	S00	▶	3RU1916-3AA01	1	1 unit	41F
		S0	▶	3RU1926-3AA01	1	1 unit	41F
		S2	▶	3RU1936-3AA01	1	1 unit	41F
		S3	▶	3RU1946-3AA01	1	1 unit	41F
Mechanical RESET							
 <p>3RU1900-1A with pushbutton and extension plunger</p>	Resetting plungers, holders and formers	S00 ... S3	▶	3RU1900-1A	1	1 unit	41F
	Pushbuttons with extended stroke (12 mm), IP65, ∅ 22 mm	S00 ... S3	B	3SB3000-0EA11	1	1 unit	41J
	Extension plungers For compensation of the distance between the pushbutton and the unlatching button of the relay	S00 ... S3	A	3SX1335	1	1 unit	41J
Cable releases with holder for RESET							
 <p>3RU1900-1.</p>	For ∅ 6.5 mm holes in the control panel; max. control panel thickness 8 mm	S00 ... S3	▶	3RU1900-1B	1	1 unit	41F
	<ul style="list-style-type: none"> • Length 400 mm • Length 600 mm 	S00 ... S3	▶	3RU1900-1C	1	1 unit	41F
Modules for remote RESET, electrical							
 <p>3RU1900-2A.71</p>	Operating range 0.85 ... 1.1 x U_N , Power consumption AC 80 VA, DC 70 W, ON period 0.2 ... 4 s, switching frequency 60/h	S00 ... S3	A	3RU1900-2AB71	1	1 unit	41F
	<ul style="list-style-type: none"> • 24 ... 30 V AC/DC • 110 ... 127 V AC/DC • 220 ... 250 V AC/DC 	S00 ... S3	A	3RU1900-2AF71	1	1 unit	41F
		S00 ... S3	A	3RU1900-2AM71	1	1 unit	41F
Terminal covers							
Covers for cable lugs and busbar connections		S3	B	3RT1946-4EA1	1	1 unit	41B
<ul style="list-style-type: none"> • Length 55 mm 							
Covers for box terminals		S2	B	3RT1936-4EA2	1	1 unit	41B
<ul style="list-style-type: none"> • Length 20.6 mm • Length 20.8 mm 		S3	▶	3RT1946-4EA2	1	1 unit	41B

Overload relays

SIRIUS 3RU1 Thermal Overload Relays

Accessories

General accessories

Version	Size	Color	For overload relays	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Tools for opening spring-type terminals										
	Screwdrivers For all SIRIUS devices with spring-type terminals	Length approx. 200 mm, 3.0 mm x 0.5 mm	Titanium gray/black, partially insulated	Main and auxiliary circuit connection: 3RU1	A	3RA2908-1A		1	1 unit	41B
Blank labels										
	Unit labeling plates ¹⁾ For SIRIUS devices	20 mm x 7 mm	Pastel turquoise	3RU1	D	3RT1900-1SB20		100	340 units	41B
	Adhesive inscription labels ¹⁾ For SIRIUS devices	19 mm x 6 mm	Pastel turquoise	3RU1	C	3RT1900-1SB60		100	3060 units	41B
		19 mm x 6 mm	Zinc yellow		C	3RT1900-1SD60		100	3060 units	41B

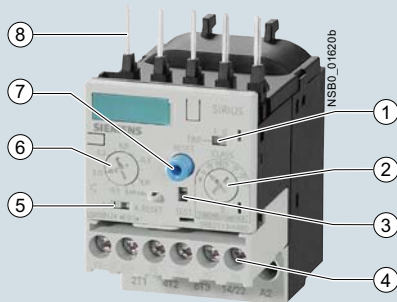
¹⁾ PC labeling system for individual inscription of unit labeling plates available from: murrplastik Systemtechnik GmbH (see Catalog IC 10, Chapter 16, "Appendix" → "External Partners").

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB20, 3RB21 up to 630 A for standard applications

Overview



- ① Switch position indicator and TEST function of the wiring:
Indicates a trip and enables the wiring test.
- ② Trip class setting/internal ground-fault detection (only 3RB21):
Using the rotary switch you can set the required trip class and activate the internal ground-fault detection dependent on the start-up conditions.
- ③ Solid-state test (device test):
Enables a test of all important device components and functions.
- ④ Connecting terminals (removable joint block for auxiliary circuits):
The generously sized terminals permit connection of two conductors with different cross-sections for the main and auxiliary circuits. The auxiliary circuit can be connected with screw terminals and alternatively with spring-type terminals.
- ⑤ Selector switch for manual/automatic RESET:
With the slide switch you can choose between manual and automatic RESET.
- ⑥ Motor current setting:
Setting the device to the rated motor current is easy with the large rotary knob.
- ⑦ A device set to manual RESET can be reset locally by pressing the RESET button. On the 3RB21 overload relay a solid-state remote RESET is integrated.
- ⑧ Connection for mounting onto contactors:
Optimally adapted in electrical, mechanical and design terms to the contactors and soft starters. Connecting pins can be used for direct mounting of the overload relays. Stand-alone installation is possible as an alternative (in some cases in conjunction with a stand-alone installation module).

SIRIUS 3RB2113-4RB0 electronic overload relays

The 3RB20 and 3RB21 electronic overload relays up to 630 A with internal power supply have been designed for inverse-time delayed protection of loads with normal and heavy starting (for "Function," see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays") against excessive temperature rises due to overload, phase unbalance or phase failure.

An overload, phase unbalance or phase failure result in an increase of the motor current beyond the set rated motor current. This rise in current is detected by the current transformers integrated into the devices and evaluated by corresponding electronic circuits which then output a pulse to the auxiliary contacts. The auxiliary contacts then switch off the load by means of a contactor. The break time depends on the ratio between the tripping current and current setting I_e and is stored in the form of a long-term stable tripping characteristic (see www.siemens.com/sirius/support → "Characteristic Curves").

In addition to inverse-time delayed protection of loads against excessive temperature rises due to overload, phase unbalance and phase failure, the 3RB21 electronic overload relays also allow internal ground-fault detection (not possible in conjunction with contactor assemblies for wye-delta starting). This provides protection of loads against high-resistance short circuits due to damage to the insulation material, moisture, condensed water etc.

The "tripped" status is signaled by means of a switch position indicator. Resetting takes place either manually or automatically after the recovery time has elapsed ("Function", see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays").

The 3RB2 electronic overload relays are suitable for operation with frequency converters. Please refer to the instructions in the reference manual "Protection Equipment – 3RU1 and 3RB2 Overload Relays".

The devices are manufactured in accordance with environmental guidelines and contain environmentally friendly and reusable materials. They comply with all important worldwide standards and approvals.

"Increased safety" type of protection EEx e according to ATEX Directive 94/9/EC

The 3RB20/3RB21 electronic overload relays are suitable for the overload protection of explosion-proof motors with "increased safety" type of protection EExe.

The relays meet the requirements of IEC 60079-7 (Electrical apparatus for areas subject to explosion hazards – Increased safety "e").

EC type test certificate for Group II, Category (2) G/D exists. It has the number PTB 06 ATEX 3001.

Article No. scheme

Digit of the Article No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th
	□□□	□	□	□	□	-	□	□	□
Electronic overload relays	3 R B								
SIRIUS 2nd generation		2							
Device series			□						
Size, rated operational current and power				□					
Version of the automatic RESET, electrical remote RESET					□				
Trip class (CLASS)							□		
Setting range of the overload release								□	
Connection method									□
Installation type									□
Example	3 R B	2	0	3	6	-	1	Q	B 0

Note:

The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB20, 3RB21 up to 630 A for standard applications

Benefits

The most important features and benefits of the 3RB20/3RB21 electronic overload relays are listed in the overview table (see "General Data", page 7/36 onwards).

Application

Industries

The 3RB20 and 3RB21 electronic overload relays are suitable for customers from all industries who want to guarantee optimum inverse-time delayed protection of their electrical loads (e.g. motors) under normal and heavy starting conditions (CLASS 5 to 30), minimize project completion times, inventories and energy consumption, and optimize plant availability and maintenance management.

Application area

The 3RB20 and 3RB21 electronic overload relays have been designed for the protection of three-phase motors in sinusoidal 50/60 Hz voltage networks. The relays are not suitable for the protection of single-phase AC or DC loads.

The 3RU11 thermal overload relays or the 3RB22 to 3RB24 electronic overload relays can be used for single-phase AC loads. For DC loads we recommend the 3RU11 thermal overload relay.

Ambient conditions

The devices are insensitive to external influences such as shocks, corrosive ambient conditions, ageing and temperature fluctuations.

For the temperature range from -25 °C to $+60\text{ °C}$, the 3RB20 and 3RB21 electronic overload relays compensate the temperature in accordance with IEC 60947-4-1.

For the 3RB20 and 3RB21 electronic overload relays with the sizes S6, S10 and S12, the upper set value of the setting range must be reduced for ambient temperatures $> 50\text{ °C}$ by a certain factor.

Type	Setting range	Stand-alone installation	
		Derating factor for the upper set value at ambient temperature	
		+50 °C	+60 °C
3RB2056, 3RB2156	50 ... 200 A	100 %	100 %
3RB2066, 3RB2166	55 ... 250 A	100 %	100 %
3RB2066, 3RB2166	160 ... 630 A	100 %	90 %

Type	Setting range	Mounting onto contactor	
		Derating factor for the upper set value at ambient temperature	
		+50 °C	+60 °C
3RB2056, 3RB2156	50 ... 200 A	100 %	70 %
3RB2066, 3RB2166	55 ... 250 A	100 %	70 %
3RB2066, 3RB2166	160 ... 630 A	100 %	70 %

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB20, 3RB21 up to 630 A for standard applications

Selection and ordering data

3RB20 electronic overload relays for mounting onto contactors¹⁾²⁾ and stand-alone installation²⁾³⁾, CLASS 10

Features and technical specifications:

- Overload protection, phase failure protection and unbalance protection
- Internal power supply
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator
- TEST function and self-monitoring

 PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41G


Size contactor ⁴⁾	Rating for three-phase motors, rated value ⁵⁾	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁶⁾	DT	Screw terminals (on auxiliary current side)	DT	Spring-type terminals (on auxiliary current side)	
	kW	A	A		Article No.	Price per PU	Article No.	Price per PU
Size S00¹⁾								
S00	0.04 ... 0.09	0.1 ... 0.4	1	▶	3RB2016-1RB0		--	
	0.12 ... 0.37	0.32 ... 1.25	2	▶	3RB2016-1NB0	B	3RB2016-1ND0	
	0.55 ... 1.5	1 ... 4	10	▶	3RB2016-1PB0	A	3RB2016-1PD0	
	1.1 ... 5.5	3 ... 12	20	▶	3RB2016-1SB0	B	3RB2016-1SD0	
Size S0¹⁾								
S0	0.04 ... 0.09	0.1 ... 0.4	1	B	3RB2026-1RB0		--	
	0.12 ... 0.37	0.32 ... 1.25	2	▶	3RB2026-1NB0		--	
	0.55 ... 1.5	1 ... 4	10	▶	3RB2026-1PB0	B	3RB2026-1PD0	
	1.1 ... 5.5	3 ... 12	20	▶	3RB2026-1SB0	B	3RB2026-1SD0	
	3 ... 11	6 ... 25	35	▶	3RB2026-1QB0	A	3RB2026-1QD0	
Size S2¹⁾³⁾⁷⁾								
S2	3 ... 11	6 ... 25	63	▶	3RB2036-1QB0		3RB2036-1QD0	
				▶	3RB2036-1QW1		3RB2036-1QX1	
	7.5 ... 22	12.5 ... 50	80	▶	3RB2036-1UB0	A	3RB2036-1UD0	
				▶	3RB2036-1UW1	▶	3RB2036-1UX1	
Size S3¹⁾³⁾⁷⁾								
S3	7.5 ... 22	12.5 ... 50	160	▶	3RB2046-1UB0	A	3RB2046-1UD0	
				▶	3RB2046-1EB0	A	3RB2046-1ED0	
	11 ... 45	25 ... 100	315	▶	3RB2046-1EW1	▶	3RB2046-1EX1	
Size S6²⁾⁷⁾								
S6 with busbar connection	22 ... 90	50 ... 200	315	▶	3RB2056-1FC2	A	3RB2056-1FF2	
For mounting onto S6 contactors with box terminals				▶	3RB2056-1FW2	▶	3RB2056-1FX2	
Size S10/S12²⁾								
S10/S12 and size 14 (3TF68/3TF69)	22 ... 110 90 ... 450	55 ... 250 160 ... 630	400 800	▶	3RB2066-1GC2	▶	3RB2066-1GF2	
				▶	3RB2066-1MC2	▶	3RB2066-1MF2	

¹⁾ The relays with an Article No. ending with "0" are designed for mounting onto contactors. With the matching terminal supports (see "Accessories", page 7/52) the sizes S00 and S0 can also be installed as stand-alone units.

²⁾ The relays with an Article No. ending with "2" are designed for mounting onto contactors and stand-alone installation. For 3TF68/3TF69 contactors, direct mounting is not possible.

³⁾ The relays with an Article No. ending with "1" are designed for stand-alone installation.

⁴⁾ Observe maximum rated operational current of the devices.

⁵⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁶⁾ Maximum protection by fuse only for overload relays, type of coordination "2". For fuse values in connection with contactors, see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays" → "Technical Specifications" → "Short-Circuit Protection with Fuses for Motor Feeders".

⁷⁾ The relays with an Article No. with "W" or "X" in penultimate position are equipped with a straight-through transformer.

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB20, 3RB21 up to 630 A for standard applications

3RB20 electronic overload relays for mounting onto contactors¹⁾²⁾ and stand-alone installation²⁾³⁾, CLASS 20

Features and technical specifications:

- Overload protection, phase failure protection and unbalance protection
- Internal power supply
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator
- TEST function and self-monitoring

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 41G



3RB2016-2RB0



3RB2026-2QD0



3RB2036-2UB0





3RB2046-2ED0



3RB2056-2FW2



3RB2066-2MF2

Size contactor ⁴⁾	Rating for three-phase motors, rated value ⁵⁾	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁶⁾	DT	Screw terminals (on auxiliary current side) 	DT	Spring-type terminals (on auxiliary current side) 	
	kW	A	A		Article No.	Price per PU	Article No.	Price per PU
Size S00¹⁾								
S00	0.04 ... 0.09	0.1 ... 0.4	1	▶	3RB2016-2RB0		--	
	0.12 ... 0.37	0.32 ... 1.25	2	▶	3RB2016-2NB0		--	
	0.55 ... 1.5	1 ... 4	10	▶	3RB2016-2PB0	B	3RB2016-2PD0	
	1.1 ... 5.5	3 ... 12	20	▶	3RB2016-2SB0		--	
Size S0¹⁾								
S0	0.12 ... 0.37	0.32 ... 1.25	2	▶	3RB2026-2NB0		--	
	0.55 ... 1.5	1 ... 4	10	▶	3RB2026-2PB0		--	
	1.1 ... 5.5	3 ... 12	20	▶	3RB2026-2SB0	B	3RB2026-2SD0	
	3 ... 11	6 ... 25	35	▶	3RB2026-2QB0	A	3RB2026-2QD0	
Size S2¹⁾³⁾⁷⁾								
S2	3 ... 11	6 ... 25	63	▶	3RB2036-2QB0		3RB2036-2QD0	
				▶	3RB2036-2QW1		3RB2036-2QX1	
	7.5 ... 22	12.5 ... 50	80	▶	3RB2036-2UB0	A	3RB2036-2UD0	
				▶	3RB2036-2UW1		3RB2036-2UX1	
Size S3¹⁾³⁾⁷⁾								
S3	7.5 ... 22	12.5 ... 50	160	▶	3RB2046-2UB0	A	3RB2046-2UD0	
	11 ... 45	25 ... 100	315	▶	3RB2046-2EB0	A	3RB2046-2ED0	
				▶	3RB2046-2EW1		3RB2046-2EX1	
Size S6²⁾⁷⁾								
S6 with busbar connection	22 ... 90	50 ... 200	315	▶	3RB2056-2FC2	A	3RB2056-2FF2	
For mounting onto S6 contactors with box terminals				▶	3RB2056-2FW2		3RB2056-2FX2	
Size S10/S12²⁾								
S10/S12 and size 14 (3TF68/3TF69)	22 ... 110	55 ... 250	400	▶	3RB2066-2GC2		3RB2066-2GF2	
	90 ... 450	160 ... 630	800	▶	3RB2066-2MC2		3RB2066-2MF2	

¹⁾ The relays with an Article No. ending with "0" are designed for mounting onto contactors. With the matching terminal supports (see "Accessories", page 7/52) the sizes S00 and S0 can also be installed as stand-alone units.

²⁾ The relays with an Article No. ending with "2" are designed for mounting onto contactors and stand-alone installation. For 3TF68/3TF69 contactors, direct mounting is not possible.

³⁾ The relays with an Article No. ending with "1" are designed for stand-alone installation.

⁴⁾ Observe maximum rated operational current of the devices.

⁵⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁶⁾ Maximum protection by fuse only for overload relays, type of coordination "2". For fuse values in connection with contactors, see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays" → "Technical Specifications" → "Short-Circuit Protection with Fuses for Motor Feeders".

⁷⁾ The relays with an Article No. with "W" or "X" in penultimate position are equipped with a straight-through transformer.

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB20, 3RB21 up to 630 A for standard applications
3RB21 electronic overload relays for mounting onto contactors¹⁾²⁾ and stand-alone installation²⁾³⁾, CLASS 5, 10, 20 and 30 adjustable

Features and technical specifications:

- Overload protection, phase failure protection and unbalance protection
- Internal ground-fault detection (activatable)
- Internal power supply
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Electrical remote RESET integrated
- Switch position indicator
- TEST function and self-monitoring

 PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41G


3RB2113-4RB0



3RB2123-4QD0



3RB2133-4UB0





3RB2143-4ED0



3RB2153-4FX2



3RB2163-4MC2

Size contactor ⁴⁾	Rating for three-phase motors, rated value ⁵⁾	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁶⁾	DT	Screw terminals (on auxiliary current side) 		Spring-type terminals (on auxiliary current side) 	
					Article No.	Price per PU	Article No.	Price per PU
Size S00¹⁾								
S00	0.04 ... 0.09	0.1 ... 0.4	1	B	3RB2113-4RB0	B	3RB2113-4RD0	
	0.12 ... 0.37	0.32 ... 1.25	2	▶	3RB2113-4NB0		--	
	0.55 ... 1.5	1 ... 4	10	▶	3RB2113-4PB0		B	3RB2113-4PD0
	1.1 ... 5.5	3 ... 12	20	▶	3RB2113-4SB0		--	
Size S0¹⁾								
S0	0.04 ... 0.09	0.1 ... 0.4	1	B	3RB2123-4RB0	B	--	
	0.12 ... 0.37	0.32 ... 1.25	2	B	3RB2123-4NB0		--	
	0.55 ... 1.5	1 ... 4	10	▶	3RB2123-4PB0		--	
	1.1 ... 5.5	3 ... 12	20	▶	3RB2123-4SB0		B	3RB2123-4SD0
	3 ... 11	6 ... 25	35	▶	3RB2123-4QB0		A	3RB2123-4QD0
Size S2¹⁾³⁾⁷⁾								
S2	3 ... 11	6 ... 25	63	▶	3RB2133-4QB0	▶	3RB2133-4QD0	
					3RB2133-4QW1		3RB2133-4QX1	
	7.5 ... 22	12.5 ... 50	80	3RB2133-4UB0	3RB2133-4UD0			
				3RB2133-4UW1	3RB2133-4UX1			
Size S3¹⁾³⁾⁷⁾								
S3	7.5 ... 22	12.5 ... 50	160	▶	3RB2143-4UB0	▶	3RB2143-4UD0	
					3RB2143-4EB0		3RB2143-4ED0	
	11 ... 45	25 ... 100	315	▶	3RB2143-4EW1		3RB2143-4EX1	
Size S6²⁾⁷⁾								
S6 with busbar connection	22 ... 90	50 ... 200	315	▶	3RB2153-4FC2	▶	3RB2153-4FF2	
For mounting onto S6 contactors with box terminals				▶	3RB2153-4FW2	▶	3RB2153-4FX2	
Size S10/S12²⁾								
S10/S12 and size 14 (3TF68/3TF69)	22 ... 110	55 ... 250	400	▶	3RB2163-4GC2	▶	3RB2163-4GF2	
	90 ... 450	160 ... 630	800	▶	3RB2163-4MC2	▶	3RB2163-4MF2	

¹⁾ The relays with an Article No. ending with "0" are designed for mounting onto contactors. With the matching terminal supports (see "Accessories", page 7/52) the sizes S00 and S0 can also be installed as stand-alone units.

²⁾ The relays with an Article No. ending with "2" are designed for mounting onto contactors and stand-alone installation. For 3TF68/3TF69 contactors, direct mounting is not possible.

³⁾ The relays with an Article No. ending with "1" are designed for stand-alone installation.

⁴⁾ Observe maximum rated operational current of the devices.

⁵⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁶⁾ Maximum protection by fuse only for overload relays, type of coordination "2". For fuse values in connection with contactors, see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays" → "Technical Specifications" → "Short-Circuit Protection with Fuses for Motor Feeders".

⁷⁾ The relays with an Article No. with "W" or "X" in penultimate position are equipped with a straight-through transformer.

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

Accessories for 3RB20, 3RB21




Overview

Overload relays for standard applications

The following optional accessories are available for the 3RB20 and 3RB21 electronic overload relays:

- Mechanical RESET (for all sizes)
- Cable release for resetting devices which are difficult to access (for all sizes)
- Sealable cover (for all sizes)
- Terminal covers for sizes S2 to S10/S12
- Box terminal blocks for sizes S6 and S10/S12


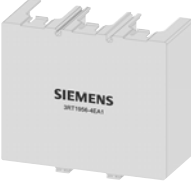



Selection and ordering data

Version	Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Terminal supports for stand-alone installation							
	For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail	S00	▶ 3RB2913-0AA1		1	1 unit	41F
		S0	▶ 3RB2923-0AA1		1	1 unit	41F
3RB29.3-0AA1							
Mechanical RESET							
	Resetting plungers, holders and formers	S00 ... S10/S12	▶ 3RU1900-1A		1	1 unit	41F
	Pushbuttons with extended stroke (12 mm), IP65, \varnothing 22 mm	S00 ... S10/S12	B 3SB3000-0EA11		1	1 unit	41J
	Extension plungers For compensation of the distance between a pushbutton and the unlatching button of the relay	S00 ... S10/S12	A 3SX1335		1	1 unit	41J
3RU1900-1A with pushbutton and extension plunger							
Cable releases with holder for RESET							
	For \varnothing 6.5 mm holes in the control panel; max. control panel thickness 8 mm	S00 ... S10/S12					
	<ul style="list-style-type: none"> • Length 400 mm • Length 600 mm 		▶ 3RU1900-1B		1	1 unit	41F
			▶ 3RU1900-1C		1	1 unit	41F
3RU1900-1.							

Overload relays


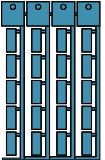
SIRIUS 3RB2 Electronic Overload Relays

Accessories for 3RB20, 3RB21

Version	Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Sealable covers							
	For covering the setting knobs	S00 ... S10/S12	▶ 3RB2984-0		1	10 units	41F
Terminal covers							
Covers for cable lugs and busbar connections							
	• Length 55 mm	S3	B	▶ 3RT1946-4EA1	1	1 unit	41B
	• Length 100 mm	S6	▶	▶ 3RT1956-4EA1	1	1 unit	41B
	• Length 120 mm	S10/S12	▶	▶ 3RT1966-4EA1	1	1 unit	41B
Covers for box terminals							
	• Length 20.6 mm	S2	B	▶ 3RT1936-4EA2	1	1 unit	41B
	• Length 20.8 mm	S3	▶	▶ 3RT1946-4EA2	1	1 unit	41B
	• Length 25 mm	S6	▶	▶ 3RT1956-4EA2	1	1 unit	41B
	• Length 30 mm	S10/S12	▶	▶ 3RT1966-4EA2	1	1 unit	41B
Covers for screw terminals							
	between contactor and overload relay, without box terminals (1 unit required per combination)	S6	▶	▶ 3RT1956-4EA3	1	1 unit	41B
		S10/S12	▶	▶ 3RT1966-4EA3	1	1 unit	41B
Box terminal blocks							
	For round and ribbon cables						
	• Up to 70 mm ²	S6 ¹⁾	▶	▶ 3RT1955-4G	1	1 unit	41B
	• Up to 120 mm ²	S6	▶	▶ 3RT1956-4G	1	1 unit	41B
	• Up to 240 mm ²	S10/S12	▶	▶ 3RT1966-4G	1	1 unit	41B
For technical specifications for conductor cross-sections, see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays".							

¹⁾ In the scope of supply for 3RT1054-1 contactors (55 kW).

General accessories

Version	Size	Color	For overload relays	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Tools for opening spring-type terminals									
	Screwdrivers For all SIRIUS devices with spring-type terminals	Length approx. 200 mm, 3.0 mm x 0.5 mm	Titanium gray/black, partially insulated	Main and auxiliary circuit connection: 3RB2	A				
3RA2908-1A					▶ 3RA2908-1A		1	1 unit	41B
Blank labels									
	Unit labeling plates¹⁾ For SIRIUS devices	20 mm x 7 mm	Pastel turquoise	3RB2	D	▶ 3RT1900-1SB20	100	340 units	41B
	Adhesive inscription labels¹⁾ For SIRIUS devices	19 mm x 6 mm	Pastel turquoise	3RB2	C	▶ 3RT1900-1SB60	100	3060 units	41B
		19 mm x 6 mm	Zinc yellow		C	▶ 3RT1900-1SD60	100	3060 units	41B

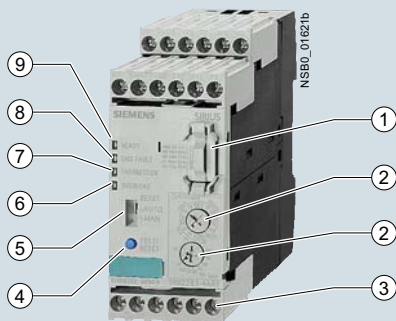
¹⁾ PC labeling system for individual inscription of unit labeling plates available from: murrplastik Systemtechnik GmbH (see Catalog IC 10, Chapter 16, "Appendix" → "External Partners").

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB22, 3RB23 up to 630 A for high-feature applications

Overview



- ① 3RB2985 function expansion module:
Enables more functions to be added, e.g. internal ground-fault detection and/or an analog output with corresponding signals.
- ② Motor current and trip class setting:
Setting the device to the motor current and to the required trip class dependent on the start-up conditions is easy with the two rotary switches.
- ③ Connecting terminals (removable joint block):
The generously sized terminals permit connection of two conductors with different cross-sections for the auxiliary, control and sensor circuits. Connection is possible with screw connection and alternatively with spring-type connection.
- ④ Test/RESET button:
Enables testing of all important device components and functions, plus resetting of the device after a trip when manual RESET is selected.
- ⑤ Selector switch for manual/automatic RESET:
With this switch you can choose between manual and automatic RESET.
- ⑥ Red LED "OVERLOAD":
A continuous red light signals an active overload trip; a flickering red light signals an imminent trip (overload warning).
- ⑦ Red LED "THERMISTOR":
A continuous red light signals an active thermistor trip.
- ⑧ Red LED "GND FAULT":
A continuous red light signals a ground-fault tripping.
- ⑨ Green LED "READY":
A continuous green light signals that the device is working correctly.

SIRIUS 3RB22 and 3RB23 evaluation modules

The 3RB22 and 3RB23 electronic overload relays up to 630 A (up to 820 A possible in combination with a series transformer) are from a modular system and comprise an evaluation unit, a current measuring module and a connecting cable. The 3RB22 overload relays (with monostable auxiliary contacts) and the 3RB23 overload relays (with bistable auxiliary contacts) are supplied from an external voltage.

They have been designed for inverse-time delayed protection of loads with normal and heavy starting (for "Function", see [Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays"](#)) against excessive temperature rises due to overload, phase unbalance or phase failure. An overload, phase unbalance or phase failure result in an increase of the motor current beyond the set rated motor current.

This current rise is detected by means of a current measuring module (see [page 7/59](#)) and electronically evaluated by the evaluation module which is connected to it. The evaluation electronics sends a signal to the auxiliary contacts. The auxiliary contacts then switch off the load by means of a contactor. The break time depends on the ratio between the tripping current and current setting I_e and is stored in the form of a long-term stable tripping characteristic (see www.siemens.com/sirius/support → "Characteristic Curves").

The "tripped" status is signaled by means of a continuous red "OVERLOAD" LED.

The LED indicates imminent tripping of the relay due to overload, phase unbalance or phase failure by flickering when the limit current has been violated. In the case of the 3RB22 and 3RB23 overload relays this warning can also be issued through auxiliary contacts.

In addition to the described inverse-time delayed protection of loads against excessive temperature rises, the 3RB22 and 3RB23 electronic overload relays also allow direct temperature monitoring of the motor windings (full motor protection) by connection with broken-wire interlock of a PTC sensor circuit. With this temperature-dependent protection, the loads can be protected against overheating caused indirectly by reduced coolant flow, for example, which cannot be detected by means of the current alone. In the event of overtemperature, the devices switch off the contactor, and thus the load, by means of the auxiliary contacts. The "tripped" status is signaled by means of a continuously illuminated "THERMISTOR" LED.

To also protect the loads against high-resistance short circuits due to damage to the insulation, humidity, condensed water, etc., the 3RB22 and 3RB23 electronic overload relays offer the possibility of internal ground fault monitoring in conjunction with a function expansion module (for details, see [Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays"](#), not possible in conjunction with contactor assemblies for start-delta (wye-delta) starting). In the event of a ground fault the 3RB22 and 3RB23 relays trip instantaneously. The "tripped" status is signaled by means of a continuous red "Ground Fault" LED. Signaling through auxiliary contacts is also possible.

After tripping due to overload, phase unbalance, phase failure, thermistor or ground-fault tripping, the relay is reset manually or automatically after the recovery time has elapsed (for "Function", see [Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays"](#)). In conjunction with a function expansion module, the motor current measured by the microprocessor can be output in the form of an analog signal DC 4 mA to 20 mA for operating rotary coil instruments or for feeding into analog inputs of programmable logic controllers.

With an additional AS-Interface analog module the current values can also be transferred over the AS-i bus system.

The 3RB2 electronic overload relays are suitable for operation with frequency converters. Please refer to the instructions in the reference manual "Protection Equipment – 3RU1 and 3RB2 Overload Relays".

The devices are manufactured in accordance with environmental guidelines and contain environmentally friendly and reusable materials.

They comply with all important worldwide standards and approvals.

Type of protection "increased safety EEx e and explosion-proof enclosure EEx d" according to ATEX Directive 94/9/EC

The 3RB22 electronic overload relays (monostable) provide quick and reliable protection for motors with types of protection EEx e and EEx d in hazardous areas.

They comply with the requirements of IEC 60079-7 (Electrical devices for areas subject to explosion hazards - Increased safety "e" as well as for flameproof enclosure "d").

EC type test certificate for Group II, Category (2) G/D exists. It has the number PTB 05 ATEX 3022.

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB22, 3RB23 up to 630 A for high-feature applications

Article No. scheme

Digit of the Article No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th			
	□□□	□	□	□	□	-	□	□	□			
Electronic overload relay	3 R B											
SIRIUS 2nd generation	2											
Device series	□											
Size, rated operational current and power	□											
Version of the automatic RESET, electrical remote RESET	□											
Trip class (CLASS)	□											
Setting range of the overload release	□											
Connection method	□											
Installation type	□											
Example	3	R	B	2	2	8	3	-	4	A	A	1

Note:

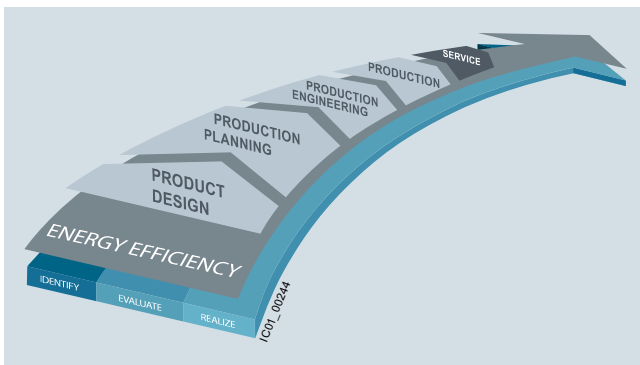
The Article No. scheme is presented here merely for information purposes and for better understanding of the logic behind the article numbers.

For your orders, please use the article numbers quoted in the catalog in the Selection and ordering data.

Benefits

The most important features and benefits of the 3RB22 and 3RB23 electronic overload relays are listed in the overview table (see "General Data", page 7/36 onwards).

Advantages through energy efficiency



Overview of the energy management process

We offer you a unique portfolio for industrial energy management, using an energy management system that helps to optimally define your energy needs. We split up our industrial energy management into three phases – identify, evaluate and realize – and we support you with the appropriate hardware and software solutions in every process phase.

The innovative products of the SIRIUS industrial controls portfolio can also make a substantial contribution to a plant's energy efficiency (see www.siemens.com/sirius/energysaving).

3RB22 and 3RB23 electronic overload relays contribute to energy efficiency throughout the plant as follows:

- Lower intrinsic power loss
- Less heating of the control cabinet
- Smaller control cabinet air conditioners can be used

Application

Industries

The 3RB22 and 3RB23 electronic overload relays are suitable for customers from all industries who want to guarantee optimum inverse-time delayed and temperature-dependent protection of their electrical loads (e.g. motors) under normal and heavy starting conditions (CLASS 5 to 30), minimize project completion times, inventories and energy consumption, and optimize plant availability and maintenance management.

Application area

The 3RB22 and 3RB23 devices have been designed for the protection of three-phase asynchronous and single-phase AC motors.

If single-phase AC motors are to be protected by the 3RB22 and 3RB23 electronic overload relays, the main current paths of the current measuring modules must be series-connected (for "Schematics", see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays").

Ambient conditions

The devices are insensitive to external influences such as shocks, corrosive ambient conditions, ageing and temperature fluctuations.

For the temperature range from –25 °C to +60 °C, the 3RB22 and 3RB23 electronic overload relays compensate the temperature in accordance with IEC 60947-4-1.

Configuration notes for use of the devices below –25 °C or above +60 °C on request.

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB22, 3RB23 up to 630 A for high-feature applications

Selection and ordering data

3RB22 and 3RB23 electronic overload relays (evaluation modules) for full motor protection, stand-alone installation, CLASS 5, 10, 20 and 30 (adjustable)

Type	3RB2283-4A.1, 3RB2383-4A.1
Features and technical specifications	
Overload protection, phase failure protection and unbalance protection	✓
Supplied from an external source	✓
	24 ... 240 V AC/DC
Auxiliary contacts	✓
	2 NO + 2 NC
Electrical remote RESET integrated	✓
4 LEDs for operating and status displays	✓
TEST function and self-monitoring	✓
Internal ground-fault detection	✓
	(with function expansion module)
Screw or spring-type terminals for auxiliary, control and sensor circuits	✓
Input for PTC sensor circuit	✓
Analog output	✓
	(with function expansion module)

✓ Available



PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41G



3RB2283-4AA1,
3RB2383-4AA1



3RB2283-4AC1,
3RB2383-4AC1

Size contactor	Version	DT	Screw terminals 	DT	Spring-type terminals 	
			Article No.	Price per PU	Article No.	Price per PU

Evaluation modules					
S00 ... S12	Monostable	▶	3RB2283-4AA1	▶	3RB2283-4AC1
	Bistable	▶	3RB2383-4AA1	▶	3RB2383-4AC1

Note:

For the overview of overload relays – matching contactors, see [page 7/39](#).

For current measuring modules and related connecting cables, see [page 7/59](#), for general accessories, see [page 7/60 onwards](#).

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB22, 3RB23 up to 630 A for high-feature applications
Functions of the 3RB22 and 3RB23 evaluation modules in combination with the 3RB2985 function expansion modules

Evaluation modules	With function expansion module	Basic functions	Inputs		
			A1/A2	T1/T2	Y1/Y2
3RB2283-4AA1 3RB2283-4AC1 3RB2383-4AA1 3RB2383-4AC1	--	Inverse-time delayed protection, temperature-dependent protection, electrical remote RESET, overload warning	Power supply 24 ... 240 V AC/DC	Connection for PTC sensor	Electrical remote RESET
	3RB2985-2CA1	Inverse-time delayed protection, temperature-dependent protection, internal ground-fault detection, electrical remote RESET, overload warning	Power supply 24 ... 240 V AC/DC	Connection PTC sensor	Electrical remote RESET
	3RB2985-2CB1	Inverse-time delayed protection, temperature-dependent protection, internal ground-fault detection, electrical remote RESET, ground-fault signaling	Power supply 24 ... 240 V AC/DC	Connection PTC sensor	Electrical remote RESET
	3RB2985-2AA0	Inverse-time delayed protection, temperature-dependent protection, electrical remote RESET, overload warning, analog output	Power supply 24 ... 240 V AC/DC	Connection PTC sensor	Electrical remote RESET
	3RB2985-2AA1	Inverse-time delayed protection, temperature-dependent protection, internal ground-fault detection, electrical remote RESET, overload warning, analog output	Power supply 24 ... 240 V AC/DC	Connection PTC sensor	Electrical remote RESET
	3RB2985-2AB1	Inverse-time delayed protection, temperature-dependent protection, internal ground-fault detection, electrical remote RESET, ground-fault signal, analog output	Power supply 24 ... 240 V AC/DC	Connection PTC sensor	Electrical remote RESET


Evaluation modules	With function expansion module	Outputs				
		I (-) / I (+)	95/96 NC	97/98 NO	05/06 NC	07/08 NO
3RB2283-4AA1 3RB2283-4AC1 3RB2383-4AA1 3RB2383-4AC1	--	No	Disconnection of the contactor (inverse-time delayed/ temperature-dependent protection)	Signal "tripped"	Overload warning	Overload warning
	3RB2985-2CA1	No	Disconnection of the contactor (inverse-time delayed/ temperature-dependent protection + ground fault)	Signal "tripped"	Overload warning	Overload warning
	3RB2985-2CB1	No	Disconnection of the contactor (inverse-time delayed/ temperature-dependent protection)	Signal "tripped"	Disconnection of the contactor (ground fault)	Signal "ground-fault tripping"
	3RB2985-2AA0	Analog signal	Disconnection of the contactor (inverse-time delayed/ temperature-dependent protection)	Signal "tripped"	Overload warning	Overload warning
	3RB2985-2AA1	Analog signal	Disconnection of the contactor (inverse-time delayed/ temperature-dependent protection + ground fault)	Signal "tripped"	Overload warning	Overload warning
	3RB2985-2AB1	Analog signal	Disconnection of the contactor (inverse-time delayed/ temperature-dependent protection)	Signal "tripped"	Disconnection of the contactor (ground fault)	Signal "ground-fault tripping"

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

3RB22, 3RB23 up to 630 A for high-feature applications

Function expansion modules for 3RB22 and 3RB23 overload relays (evaluation modules)

Size contactor	Version	For overload relays	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Sizes S00 to S12								
	For plugging into evaluation module (1 unit)							
 3RB2985-2..1	S00 ... S12	Analog Basic 1 modules¹⁾ Analog output 4 ... 20 mA DC, with overload warning	3RB22, 3RB23	▶ 3RB2985-2AA0		1	1 unit	41F
		Analog Basic 1 GF modules¹⁾²⁾ Analog output 4 ... 20 mA DC, with internal ground-fault detection and overload warning	3RB22, 3RB23	▶ 3RB2985-2AA1		1	1 unit	41F
		Analog Basic 2 GF modules¹⁾²⁾ Analog output 4 ... 20 mA DC, with internal ground-fault detection and ground-fault signaling	3RB22, 3RB23	▶ 3RB2985-2AB1		1	1 unit	41F
		Basic 1 GF modules²⁾ With internal ground-fault detection and overload warning	3RB22, 3RB23	▶ 3RB2985-2CA1		1	1 unit	41F
		Basic 2 GF modules²⁾ With internal ground-fault detection and ground-fault signaling	3RB22, 3RB23	▶ 3RB2985-2CB1		1	1 unit	41F

Note:

Analog input modules, e.g. SM 331, must be configured for 4-wire measuring transducers. In this case the analog input module must not supply current to the analog output of the 3RB22/3RB23 relay.

¹⁾ The analog signal DC 4 mA up to 20 mA can be used for operating rotary coil instruments or for feeding into analog inputs of programmable logic controllers.

²⁾ The following information on ground-fault protection refers to sinusoidal residual currents at 50/60 Hz:

- With a motor current of between 0.3 and 2 times the current setting I_n , the unit will trip at a ground-fault current equal to 30 % of the current setting.
- With a motor current of between 2 and 8 times the current setting I_n , the unit will trip at a ground-fault current equal to 15 % of the current setting.
- The response delay amounts to between 0.5 s and 1 s.

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

Current measuring modules for 3RB22, 3RB23

Overview

The current measuring modules are designed as system components for connecting to evaluation units 3RB22 and 3RB23. Using these evaluation modules the motor current is measured and the measured value sent to the evaluation unit for evaluation.

The current measuring modules in sizes S00 to S3 up to 55 mm wide are equipped with straight-through transformers and can be snap-fitted under the evaluation modules. The larger evaluation modules are installed directly on the contactor or as stand-alone units.

Selection and ordering data

Current measuring modules for mounting onto contactors¹⁾ and stand-alone installation¹⁾²⁾ (essential accessories)



3RB2906-2BG1,
3RB2906-2DG1



3RB2906-2JG1



3RB2956-2TG2



3RB2966-2WH2

Size contactor ³⁾	Rating for three-phase motors, rated value ⁴⁾	Current setting value of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁵⁾	For overload relays	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	kW	A	A							
Sizes S00/S0²⁾⁶⁾										
S00/S0	0.09 ... 1.1	0.3 ... 3	20	3RB22, 3RB23	▶	3RB2906-2BG1		1	1 unit	41G
	1.1 ... 11	2.4 ... 25	63			3RB2906-2DG1		1	1 unit	41G
Sizes S2/S3²⁾⁶⁾										
S2/S3	5.5 ... 45	10 ... 100	315	3RB22, 3RB23	▶	3RB2906-2JG1		1	1 unit	41G
Size S6¹⁾⁶⁾										
S6 with busbar connection	11 ... 90	20 ... 200	315	3RB22, 3RB23	▶	3RB2956-2TH2		1	1 unit	41G
For mounting onto S6 contactors with box terminals				3RB22, 3RB23	▶	3RB2956-2TG2		1	1 unit	41G
Sizes S10/S12¹⁾										
S10/S12 and size 14 (3TF68/3TF69)	37 ... 450	63 ... 630	800	3RB22, 3RB23	▶	3RB2966-2WH2		1	1 unit	41G

Note:

The connecting cable between the current measuring module and the evaluation module is not included in the scope of supply; please order separately.

- The current measuring modules with an Article No. ending with "2" are designed for mounting onto contactors and stand-alone installation. For 3TF68/3TF69 contactors, direct mounting is not possible.
- The current measuring modules with an Article No. ending with "1" are designed for stand-alone installation.


³⁾ Observe maximum rated operational current of the devices.

⁴⁾ Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁵⁾ Maximum protection by fuse only for overload relays, type of coordination "2". Fuse values in connection with contactors, see Configuration Manual "Configuring SIRIUS Innovations – Selection Data for Fuseless and Fused Load Feeders".

⁶⁾ The modules with an Article No. with "G" in penultimate position are equipped with a straight-through transformer.

Accessories

Size contactor	Version	For current measuring modules	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Connecting cables (essential accessories)									
 3RB2987-2	S00 ... S3	For connection between evaluation module and current measuring module							
		• Length 0.1 m (only for mounting of the evaluation module directly onto the current measuring module)	3RB29	▶	3RB2987-2B		1	1 unit	41F
	S00 ... S12	• Length 0.5 m	3RB29	▶	3RB2987-2D		1	1 unit	41F

For more general accessories, see page 7/60 onwards.

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

Accessories for 3RB22, 3RB23

Overview


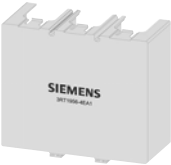

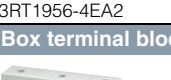



Overload relays for high-feature applications

The following optional accessories are available for the 3RB22 and 3RB23 electronic overload relays:

- Sealable covers
- Terminal covers for the 3RB29 current measuring modules sizes S6 and S10/S12
- Box terminal blocks for the 3RB29 current measuring modules sizes S6 and S10/S12
- Push-in lugs for screw fixing for 3RB22, 3RB23 evaluation modules and 3RB2906 current measuring modules

Selection and ordering data

General accessories



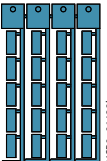
Version	Size	For overload relays	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Sealable covers for evaluation modules								
	For covering the setting knobs	--	3RB22, 3RB23	▶	3RB2984-2	1	10 units	41F
3RB2984-2								
Terminal covers for current measuring modules								
Covers for cable lugs and busbar connections								
	• Length 100 mm	S6	3RB2956	▶	3RT1956-4EA1	1	1 unit	41B
	• Length 120 mm	S10/S12	3RB2966	▶	3RT1966-4EA1	1	1 unit	41B
3RT1956-4EA1								
Covers for box terminals								
	• Length 25 mm	S6	3RB2956	▶	3RT1956-4EA2	1	1 unit	41B
	• Length 30 mm	S10/S12	3RB2966	▶	3RT1966-4EA2	1	1 unit	41B
3RT1956-4EA2								
Covers for screw terminals between contactor and overload relay, without box terminals								
	between contactor and overload relay, without box terminals	S6	3RB2956	▶	3RT1956-4EA3	1	1 unit	41B
	(1 unit required per combination)	S10/S12	3RB2966	▶	3RT1966-4EA3	1	1 unit	41B
3RT1956-4EA3								
Box terminal blocks for current measuring modules								
	For round and ribbon cables							
	• Up to 70 mm ²	S6 ¹⁾	3RB2956	▶	3RT1955-4G	1	1 unit	41B
	• Up to 120 mm ²	S6	3RB2956	▶	3RT1956-4G	1	1 unit	41B
3RT195-4G	• Up to 240 mm ²	S10/S12	3RB2966	▶	3RT1966-4G	1	1 unit	41B
	For Technical specifications for conductor cross-sections, see Reference Manual "Protection Equipment – 3RU1, 3RB2 Overload Relays".							
Push-in lugs for evaluation modules and current measuring modules								
	For screw fixing the evaluation modules	--	3RB22, 3RB23	B	3RP1903	1	10 units	41H
3RP1903								
	For screw fixing the current measuring modules (2 units per module)	S00 ... S3	3RB2906	A	3RB1900-0B	100	10 units	41F
3RB1900-0B								

¹⁾ In the scope of supply for 3RT1054-1 contactors (55 kW).

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

Accessories for 3RB22, 3RB23

Version	Size	Color	For overload relays	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Tools for opening spring-type terminals									
 3RA2908-1A	Screwdrivers For all SIRIUS devices with spring-type terminals	Length approx. 200 mm, 3.0 mm x 0.5 mm	Titanium gray/black, partially insulated	Main and auxiliary circuit connection: 3RB2	A	Spring-type terminals 			
						3RA2908-1A	1	1 unit	41B
Blank labels									
 3RT1900-1SB20	Unit labeling plates¹⁾ For SIRIUS devices	20 mm x 7 mm	Pastel turquoise	3RB2	D	3RT1900-1SB20	100	340 units	41B

¹⁾ PC labeling system for individual inscription of unit labeling plates available from: murrplastik Systemtechnik GmbH (see Catalog IC 10, Chapter 16, "Appendix" → "External Partners").

Overload relays

SIRIUS 3RB2 Electronic Overload Relays

Notes

7

Load Feeders and Motor Starters for Use in the Control Cabinet

**NEW**

Click on the Article No. in the catalog PDF to access it in the Industry Mall and get all related information.

Article-No.

3RA1943-2C
3RA1943-2B
3RA1953-2B
3RA1953-2N



Or directly in the Internet, e. g.
[www.siemens.com/
product?3RA1943-2C](http://www.siemens.com/product?3RA1943-2C)

Price groups

PG 14O, 41B, 41D, 41E, 41F

8/2

Introduction**SIRIUS 3RA1 load feeders**

8/3

General data

3RA11 direct-on-line starters

8/4

For snapping onto standard mounting rails or for screw fixing

8/7

For busbar systems

8/10

3RA12 reversing starters

8/10

For snapping onto standard mounting rails or for screw fixing

8/12

For busbar systems

Accessories

8/13

- For direct-on-line and reversing starters

8/19

- Busbar accessories

8/19

- 3RV19 infeed system

Load Feeders and Motor Starters for Use in the Control Cabinet

Introduction

Overview



3RA11



3RA12

	Article No.	Page
--	-------------	------

SIRIUS 3RA1 load feeders

- The 3RA1 fuseless load feeders consist of the 3RV1 motor starter protector and the 3RT1 contactor. The motor starter protector and contactor are prewired and mechanically connected in pre-assembled assembly kits (link modules, wiring kits and standard mounting rail or busbar adapters) The motor starter protector and contactor are mechanically and electrically connected by means of a link module.
- 4 sizes (S00, S0, S2, S3)
- Can be supplied for direct-on-line start or reversing duty as
 - Complete unit or
 - Single devices for self-assembly

3RA11 direct-on-line starters for snapping onto standard mounting rails or for screw fixing

- Rated control supply voltage 230 V AC, 50 Hz and 24 V DC for 35 mm standard mounting rail or for screw fixing

3RA11

8/4

3RA11 direct-on-line starters for busbar systems

- Rated control supply voltage 230 V AC, 50 Hz and 24 V DC for 40 and 60 mm busbar systems

3RA11

8/7

3RA12 reversing starters for snapping onto standard mounting rails or for screw fixing

- Rated control supply voltage 230 V AC, 50 Hz and 24 V DC for 35 mm standard mounting rail or for screw fixing

3RA12

8/10

3RA12 reversing starters for busbar systems

- Rated control supply voltage 230 V AC, 50 Hz and 24 V DC for 40 and 60 mm busbar systems

3RA12

8/12

3RV19 infeed systems

- Convenient means of energy supply and distribution

3RV19

8/19

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

General data

Overview

3RA1 fuseless load feeders

The 3RA1 fuseless load feeders consist of the 3RV1 motor starter protector and the 3RT1 contactor. Motor starter protectors and contactors are electrically and mechanically connected using pre-assembled assembly kits (link modules, wiring kits and standard mounting rail or busbar adapters).

As the 3RA1 fuseless load feeders are constructed from 3RV1 motor starter protectors and 3RT1 contactors, the same accessories can be used for the 3RA fuseless load feeders as for these motor starter protectors and contactors.

Pre-assembled link modules are available as accessories for the power spectrum up to 45 kW. The desired fuseless load feeder can thus be assembled quickly and economically by the customer. A time saving is also achieved in connection with switchgear acceptances, as – unlike with conventional wiring systems – there is no need to rectify possible wiring errors.

The 3RV1 motor starter protector is responsible for overload and short-circuit protection in the fuseless load feeder. Back-up protective devices, such as melting fuses or limiters, are superfluous here, as the circuit breaker is capable of withstanding short circuits of up to 50 or 100 kA at 400 V.

The 3RT1 contactor is particularly suitable for extremely complex switching tasks requiring the greatest endurance.

The permissible ambient temperature is 60 °C with butt-mounting and without derating (70 °C possible subject to certain restrictions).

3RA1 fuseless load feeders are available for motors up to 45 kW at AC-3 and 400 V (grounded network) and setting ranges from 0.14 A to 100 A.

3RA1 fuseless load feeders are available in four different sizes:

Size	Width mm	Max. rated current $I_{n \max}$ A	For three-phase motors up to kW
S00	45	12	5.5
S0	45	25	11
S2	55	50	22
S3	70	100	45

SENTRON 3VL circuit breakers and SIRIUS 3RT contactors can be used for fuseless load feeders >100 A. The corresponding distances from grounded or live parts, as detailed in the technical specifications, must be observed.

More information and assignment tables for self-assembly combinations for 400 V, 440 V, 480 V, 500 V, 550 V and 690 V, see the configuration manual "SIRIUS Configuration - Selection Data for Fuseless Load Feeders", see

<https://support.industry.siemens.com/cs/ww/en/view/40625241>

Operating conditions

3RA1 load feeders are climate-proof. They are intended for use in enclosed rooms in which no severe operating conditions (such as dust, caustic vapors, hazardous gases) prevail. Suitable covers must be provided for installation in dusty and damp locations.

Overload tripping times

All 3RA1 fuseless load feeders described here are designed for normal starting, in other words for overload tripping times of less than 10 s (CLASS 10). At rated-load operating temperature the tripping times are shorter, depending on the particular equipment and the setting range. The exact values can be derived from the tripping characteristics of the motor starter protectors.

Types of coordination

EN 60947-4-1 and IEC 60947-4-1 make a distinction between two different types of coordination, type of coordination "1" and type of coordination "2". Any short circuits that occur are cleared safely by both types of coordination. The only differences concern the extent of the damage caused to the device by a short circuit.

TOC 1

Type of coordination "1"

The load feeder may be non-operational after a short circuit has been cleared. Damage to the contactor or to the overload release is permissible.

TOC 2

Type of coordination "2"

There must be no damage to the overload release or to any other components after a short circuit has been cleared. The load feeder can resume operation without needing to be renewed. At most, welding of the contactor contacts is permissible if they can be disconnected easily without any significant deformation.

These types of coordination are indicated in the selection and ordering data by orange backgrounds.

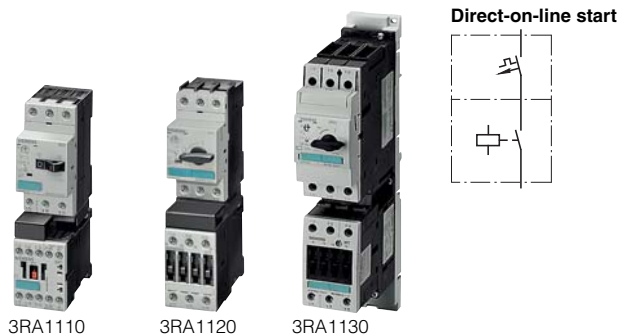


Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders



3RA11 direct-on-line starters for snapping onto standard mounting rails or for screw fixing

Selection and ordering data



Rated control supply voltage 50 Hz 230 V AC¹⁾ for 35 mm standard mounting rail or for screw fixing

- The motor starter protector and contactor are linked electrically and mechanically by means of a link module
- As from size S2 with standard mounting rail adapter²⁾ for mechanical reinforcement
- Auxiliary switches³⁾ on the motor starter protector and the contactor can be easily fitted due to the modular system (on contactor size S00: 1 NO integrated)

Size	Standard three-phase motor 4-pole at 400 V AC ⁴⁾		Setting range for thermal overload release 	Consisting of the following single devices			DT	Fuseless load feeders 	PU (UNIT, SET, M)	PS*	PG
	Standard output P	Motor current I (guide value)		Motor starter protector	+ Contactor	+ Link module + Standard mounting rail adapter					
	kW	A	A								

Type of coordination "2" at $I_q = 50 \text{ kA}/100 \text{ kA}$ at 400 V (also compatible with type of coordination "1")⁵⁾

			3RV10	3RT10	3RA19						
S00	0.09	0.3	0.28 ... 0.4	11-0EA10	15-1AP01	11-1AA00	B	3RA1110-0EA15-1AP0	1	1 unit	41D
	0.12	0.4	0.35 ... 0.5	11-0FA10		+ ⁶⁾	B	3RA1110-0FA15-1AP0	1	1 unit	41D
	0.18	0.6	0.45 ... 0.63	11-0GA10			B	3RA1110-0GA15-1AP0	1	1 unit	41D
	0.25	0.85	0.7 ... 1	11-0JA10			A	3RA1110-0JA15-1AP0	1	1 unit	41D
	0.37	1.1	0.9 ... 1.25	11-0KA10			A	3RA1110-0KA15-1AP0	1	1 unit	41D
	0.55	1.5	1.1 ... 1.6	11-1AA10			A	3RA1110-1AA15-1AP0	1	1 unit	41D
	0.75	1.9	1.4 ... 2	11-1BA10			A	3RA1110-1BA15-1AP0	1	1 unit	41D
	S0	0.75	1.9	1.8 ... 2.5	21-1CA10	24-1AP00	21-1AA00	A	3RA1120-1CA24-0AP0	1	1 unit
1.1		2.7	2.2 ... 3.2	21-1DA10		+ ⁶⁾	A	3RA1120-1DA24-0AP0	1	1 unit	41D
1.5		3.6	2.8 ... 4	21-1EA10			A	3RA1120-1EA24-0AP0	1	1 unit	41D
1.5		3.6	3.5 ... 5	21-1FA10			A	3RA1120-1FA24-0AP0	1	1 unit	41D
2.2		4.9	4.5 ... 6.3	21-1GA10			A	3RA1120-1GA24-0AP0	1	1 unit	41D
3		6.5	5.5 ... 8	21-1HA10			A	3RA1120-1HA24-0AP0	1	1 unit	41D
4		8.5	7 ... 10	21-1JA10	26-1AP00		A	3RA1120-1JA26-0AP0	1	1 unit	41D
5.5		11.5	9 ... 12.5	21-1KA10			A	3RA1120-1KA26-0AP0	1	1 unit	41D
7.5		15.5	11 ... 16	21-4AA10			A	3RA1120-4AA26-0AP0	1	1 unit	41D
7.5		15.5	14 ... 20	21-4BA10			A	3RA1120-4BA26-0AP0	1	1 unit	41D
S2	11	22	18 ... 25	31-4DA10	34-1AP00	31-1AA00	A	3RA1130-4DB34-0AP0	1	1 unit	41D
	15	29	22 ... 32	31-4EA10		+	A	3RA1130-4EB34-0AP0	1	1 unit	41D
	18.5	35	28 ... 40	31-4FA10	35-1AP00	32-1AA00	A	3RA1130-4FB35-0AP0	1	1 unit	41D
	22	41	36 ... 45	31-4GA10	36-1AP00		A	3RA1130-4GB36-0AP0	1	1 unit	41D
	22	41	40 ... 50	31-4HA10			A	3RA1130-4HB36-0AP0	1	1 unit	41D
S3	30	55	45 ... 63	41-4JA10	44-1AP00	41-1AA00			Size S3 is only available for self-assembly.		
	37	66	57 ... 75	41-4KA10	45-1AP00	+					
	45	80	70 ... 90	41-4LA10	46-1AP00	42-1AA00					
	45	80	80 ... 100	41-4MA10							

Type of coordination "1" at $I_q = 50 \text{ kA}$ at 400 V⁵⁾
(the motor starter protector is compatible with type of coordination "2")

			3RV10	3RT10	3RA19						
S00	1.1	2.7	2.2 ... 3.2	11-1DA10	15-1AP01	11-1AA00	A	3RA1110-1DA15-1AP0	1	1 unit	41D
	1.5	3.6	2.8 ... 4	11-1EA10		+ ⁶⁾	A	3RA1110-1EA15-1AP0	1	1 unit	41D
	2.2	4.9	4.5 ... 6.3	11-1GA10			A	3RA1110-1GA15-1AP0	1	1 unit	41D
	3	6.5	5.5 ... 8	11-1HA10			A	3RA1110-1HA15-1AP0	1	1 unit	41D
S0	7.5	15.5	11 ... 16	21-4AA10	25-1AP00	21-1AA00	B	3RA1120-4AA25-0AP0	1	1 unit	41D

¹⁾ Size S00 also suitable for 60 Hz.

²⁾ Standard mounting rail adapter is also suitable for screw fixing.

³⁾ For auxiliary switches, see "Accessories for direct-on-line and reversing starters".

⁴⁾ The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁵⁾ For load feeders with $I_q \geq 100 \text{ kA}$, see "Reference Manual Load Feeders and Motor Starters – 3RA1 Fuseless Load Feeders".

⁶⁾ Screw fixing with 1 push-in lug each per load feeder is possible (see "Accessories for direct-on-line and reversing starters").

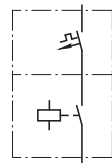
Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

3RA11 direct-on-line starters for snapping onto standard mounting rails or for screw fixing



Direct-on-line start



Rated control supply voltage 24 V DC for 35 mm standard mounting rail or for screw fixing

- The motor starter protector and contactor are linked electrically and mechanically by means of a link module
- As from size S2 with standard mounting rail adapter¹⁾ for mechanical reinforcement
- Auxiliary switches²⁾ on the motor starter protector and the contactor can be easily fitted due to the modular system (on contactor size S00: 1 NO integrated)

Size	Standard three-phase motor 4-pole at 400 V AC ³⁾	Setting range for thermal overload release	Consisting of the following single devices			DT	Fuseless load feeders	ToC 2	PU (UNIT, SET, M)	PS*	PG
	Standard output <i>P</i>	Motor current <i>I</i> (guide value)	Motor starter protector	+ Contactor	+ Link module + Standard mounting rail adapter		Article No.	Price per PU			
	kW	A	A								

Type of coordination "2" at $I_{q1} = 50 \text{ kA}/100 \text{ kA}$ at 400 V (also compatible with type of coordination "1")⁴⁾

				3RV10	3RT10	3RA19						
S00	0.06	0.2	0.14 ... 0.2	11-0BA10	15-1BB41	11-1AA00	A	3RA1110-0BA15-1BB4	1	1 unit	41D	
	0.06	0.2	0.18 ... 0.25	11-0CA10		+ ⁵⁾	A	3RA1110-0CA15-1BB4	1	1 unit	41D	
	0.09	0.3	0.22 ... 0.32	11-0DA10			A	3RA1110-0DA15-1BB4	1	1 unit	41D	
	0.09	0.3	0.28 ... 0.4	11-0EA10			A	3RA1110-0EA15-1BB4	1	1 unit	41D	
	0.12	0.4	0.35 ... 0.5	11-0FA10			A	3RA1110-0FA15-1BB4	1	1 unit	41D	
	0.18	0.6	0.45 ... 0.63	11-0GA10			A	3RA1110-0GA15-1BB4	1	1 unit	41D	
	0.18	0.6	0.55 ... 0.8	11-0HA10			A	3RA1110-0HA15-1BB4	1	1 unit	41D	
	0.25	0.85	0.7 ... 1	11-0JA10			A	3RA1110-0JA15-1BB4	1	1 unit	41D	
	0.37	1.1	0.9 ... 1.25	11-0KA10			A	3RA1110-0KA15-1BB4	1	1 unit	41D	
	0.55	1.5	1.1 ... 1.6	11-1AA10			A	3RA1110-1AA15-1BB4	1	1 unit	41D	
	0.75	1.9	1.4 ... 2	11-1BA10			A	3RA1110-1BA15-1BB4	1	1 unit	41D	
	S0	0.75	1.9	1.8 ... 2.5	21-1CA10	24-1BB40	21-1BA00	A	3RA1120-1CA24-0BB4	1	1 unit	41D
		1.1	2.7	2.2 ... 3.2	21-1DA10		+ ⁵⁾	A	3RA1120-1DA24-0BB4	1	1 unit	41D
		1.5	3.6	2.8 ... 4	21-1EA10			A	3RA1120-1EA24-0BB4	1	1 unit	41D
1.5		3.6	3.5 ... 5	21-1FA10			A	3RA1120-1FA24-0BB4	1	1 unit	41D	
2.2		4.9	4.5 ... 6.3	21-1GA10			A	3RA1120-1GA24-0BB4	1	1 unit	41D	
3		6.5	5.5 ... 8	21-1HA10			A	3RA1120-1HA24-0BB4	1	1 unit	41D	
4		8.5	7 ... 10	21-1JA10	26-1BB40		A	3RA1120-1JA26-0BB4	1	1 unit	41D	
5.5		11.5	9 ... 12.5	21-1KA10			A	3RA1120-1KA26-0BB4	1	1 unit	41D	
7.5		15.5	11 ... 16	21-4AA10			A	3RA1120-4AA26-0BB4	1	1 unit	41D	
7.5		15.5	14 ... 20	21-4BA10			A	3RA1120-4BA26-0BB4	1	1 unit	41D	
S2	11	22	18 ... 25	31-4DA10	34-1BB40	31-1BA00	A	3RA1130-4DB34-0BB4	1	1 unit	41D	
	15	29	22 ... 32	31-4EA10		+	A	3RA1130-4EB34-0BB4	1	1 unit	41D	
	18.5	35	28 ... 40	31-4FA10	35-1BB40	32-1AA00	A	3RA1130-4FB35-0BB4	1	1 unit	41D	
	22	41	36 ... 45	31-4GA10	36-1BB40		A	3RA1130-4GB36-0BB4	1	1 unit	41D	
	22	41	40 ... 50	31-4HA10			A	3RA1130-4HB36-0BB4	1	1 unit	41D	
S3	30	55	45 ... 63	41-4JA10	44-1BB40	41-1BA00						
	37	66	57 ... 75	41-4KA10	45-1BB40	+						
	45	80	70 ... 90	41-4LA10	46-1BB40	42-1AA00						
	45	80	80 ... 100	41-4MA10								
								Size S3 is only available for self-assembly.				

¹⁾ Standard mounting rail adapter is also suitable for screw fixing.

²⁾ For auxiliary switches, see "Accessories for direct-on-line and reversing starters".

³⁾ The actual starting and rated data of the motor to be protected must be considered when selecting the units.


⁴⁾ For load feeders with $I_{q1} \geq 100 \text{ kA}$, see "Reference Manual Load Feeders and Motor Starters – 3RA1 Fuseless Load Feeders".

⁵⁾ Screw fixing with 1 push-in lug each per load feeder is possible (see "Accessories for direct-on-line and reversing starters").

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

3RA11 direct-on-line starters for snapping onto standard mounting rails or for screw fixing

Size	Standard three-phase motor 4-pole at 400 V AC ¹⁾		Setting range for thermal overload release 	Consisting of the following single devices			DT	Fuseless load feeders T_{OC} 1	PU (UNIT, SET, M)	PS*	PG
	Standard output P	Motor current I (guide value)		Motor starter protector	+ Contactor	+ Link module + Standard mounting rail adapter					
	kW	A	A								
Type of coordination "1" at $I_{q1} = 50 \text{ kA}$ at 400 V²⁾											
(the motor starter protector is compatible with type of coordination "2")											
				3RV10	3RT10	3RA19					
S00	0.75	1.9	1.8 ... 2.5	11-1CA10	15-1BB41	11-1AA00	A	3RA1110-1CA15-1BB4	1	1 unit	41D
	1.1	2.7	2.2 ... 3.2	11-1DA10		+ ³⁾	A	3RA1110-1DA15-1BB4	1	1 unit	41D
	1.5	3.6	2.8 ... 4	11-1EA10			A	3RA1110-1EA15-1BB4	1	1 unit	41D
	1.5	3.6	3.5 ... 5	11-1FA10			A	3RA1110-1FA15-1BB4	1	1 unit	41D
	2.2	4.9	4.5 ... 6.3	11-1GA10			A	3RA1110-1GA15-1BB4	1	1 unit	41D
	3	6.5	5.5 ... 8	11-1HA10			A	3RA1110-1HA15-1BB4	1	1 unit	41D
	4	8.5	7 ... 10	11-1JA10	16-1BB41		A	3RA1110-1JA16-1BB4	1	1 unit	41D
	5.5	11.5	9 ... 12	11-1KA10	17-1BB41		A	3RA1110-1KA17-1BB4	1	1 unit	41D
S0	7.5	15.5	11 ... 16	21-4AA10	25-1BB40	21-1BA00	A	3RA1120-4AA25-0BB4	1	1 unit	41D
	7.5	15.5	14 ... 20	21-4BA10		+ ³⁾	A	3RA1120-4BA25-0BB4	1	1 unit	41D
	11	22	17 ... 22	21-4CA10	26-1BB40		A	3RA1120-4CA26-0BB4	1	1 unit	41D
	11	22	18 ... 25	21-4DA10			B	3RA1120-4DA26-0BB4	1	1 unit	41D

¹⁾ The actual starting and rated data of the motor to be protected must be considered when selecting the units.

²⁾ For load feeders with $I_{q1} \geq 100 \text{ kA}$, see "Reference Manual Load Feeders and Motor Starters – 3RA1 Fuseless Load Feeders".

³⁾ Screw fixing with 1 push-in lug each per load feeder is possible (see "Accessories for direct-on-line and reversing starters").

Load Feeders and Motor Starters for Use in the Control Cabinet

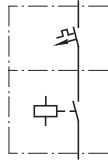
SIRIUS 3RA1 Load Feeders

3RA11 direct-on-line starters for busbar systems

Selection and ordering data



Direct-on-line start



**Rated control supply voltage 50 Hz 230 V AC¹⁾
for busbar system 60 mm**

- The motor starter protector and contactor are linked electrically and mechanically by means of a link module
- Auxiliary switches²⁾ on the motor starter protector and the contactor can be easily fitted due to the modular system (on contactor size S00: 1 NO integrated)

Size	Standard three-phase motor 4-pole at 400 V AC ³⁾	Setting range for thermal overload release	Consisting of the following single devices			DT	Fuseless load feeders ToC 2	PU (UNIT, SET, M)	PS*	PG
	Standard output P	Motor current I (guide value)	Motor starter protector	+ Contactor	+ Link module + Standard mounting rail adapter		Article No.	Price per PU		
	kW	A								

Type of coordination "2" at $I_q = 50$ kA at 400 V (also compatible with type of coordination "1")

	3RV10		3RT10								
S00	0.18	0.6	0.55 ... 0.8	11-0HA10	15-1AP01	3RA1911-1AA00	B	3RA1110-0HD15-1AP0	1	1 unit	41D
	0.25	0.85	0.7 ... 1	11-0JA10		+	B	3RA1110-0JD15-1AP0	1	1 unit	41D
	0.37	1.1	0.9 ... 1.25	11-0KA10		60 mm	B	3RA1110-0KD15-1AP0	1	1 unit	41D
	0.55	1.5	1.1 ... 1.6	11-1AA10		8US1251-5DM07	B	3RA1110-1AD15-1AP0	1	1 unit	41D
	0.75	1.9	1.4 ... 2	11-1BA10			B	3RA1110-1BD15-1AP0	1	1 unit	41D
S0	0.75	1.9	1.8 ... 2.5	21-1CA10	24-1AP00	3RA1921-1AA00	B	3RA1120-1CD24-0AP0	1	1 unit	41D
	1.1	2.7	2.2 ... 3.2	21-1DA10		+	B	3RA1120-1DD24-0AP0	1	1 unit	41D
	1.5	3.6	2.8 ... 4	21-1EA10		60 mm	B	3RA1120-1ED24-0AP0	1	1 unit	41D
	1.5	3.6	3.5 ... 5	21-1FA10		8US1251-5DM07	B	3RA1120-1FD24-0AP0	1	1 unit	41D
	2.2	4.9	4.5 ... 6.3	21-1GA10			B	3RA1120-1GD24-0AP0	1	1 unit	41D
	3	6.5	5.5 ... 8	21-1HA10			B	3RA1120-1HD24-0AP0	1	1 unit	41D
	4	8.5	7 ... 10	21-1JA10	26-1AP00		B	3RA1120-1JD26-0AP0	1	1 unit	41D
	5.5	11.5	9 ... 12.5	21-1KA10			B	3RA1120-1KD26-0AP0	1	1 unit	41D
	7.5	15.5	11 ... 16	21-4AA10			B	3RA1120-4AD26-0AP0	1	1 unit	41D
	7.5	15.5	14 ... 20	21-4BA10			B	3RA1120-4BD26-0AP0	1	1 unit	41D
S2	11	22	18 ... 25	31-4DA10	34-1AP00	3RA1931-1AA00		Size S2 is only available for self-assembly.			
	15	29	22 ... 32	31-4EA10		+					
	18.5	35	28 ... 40	31-4FA10	35-1AP00	60 mm					
	22	41	36 ... 45	31-4GA10	36-1AP00	8US1261-5FP08					
	22	41	40 ... 50	31-4HA10							
S3	30	55	45 ... 63	41-4JA10	44-1AP00	3RA1941-1AA00		For size S3, a busbar adapter is not available.			
	37	66	57 ... 75	41-4KA10	45-1AP00						
	45	80	70 ... 90	41-4LA10	46-1AP00						
	45	80	80 ... 100	41-4MA10							

Type of coordination "1" at $I_q = 50$ kA at 400 V (the motor starter protector is compatible with type of coordination "2")

	3RV10		3RT10								
S00	1.1	2.7	2.2 ... 3.2	11-1DA10	15-1AP01	3RA1911-1AA00	B	3RA1110-1DD15-1AP0	1	1 unit	41D
	1.5	3.6	2.8 ... 4	11-1EA10		+	B	3RA1110-1ED15-1AP0	1	1 unit	41D
	2.2	4.9	4.5 ... 6.3	11-1GA10		60 mm	B	3RA1110-1GD15-1AP0	1	1 unit	41D
	3	6.5	5.5 ... 8	11-1HA10		8US1251-5DM07	B	3RA1110-1HD15-1AP0	1	1 unit	41D
	5.5	11.5	9 ... 12	11-1KA10	17-1AP01		B	3RA1110-1KD17-1AP0	1	1 unit	41D
S0	7.5	15.5	14 ... 20	21-4BA10	25-1AP00	3RA1921-1AA00	A	3RA1120-4BD25-0AP0	1	1 unit	41D
	11	22	17 ... 22	21-4CA10	26-1AP00	+	B	3RA1120-4CD26-0AP0	1	1 unit	41D
	11	22	18 ... 25	21-4DA10		60 mm	B	3RA1120-4DD26-0AP0	1	1 unit	41D
						8US1251-5DM07					
S2	15	29	22 ... 32					For load feeders for lower outputs (type of coordination "2"), see above.			
	18.5	35	28 ... 40								
	22	41	36 ... 45								

¹⁾ Size S00 also suitable for 60 Hz.

²⁾ For auxiliary switches, see "Accessories for direct-on-line and reversing starters".

³⁾ The actual starting and rated data of the motor to be protected must be considered when selecting the units.

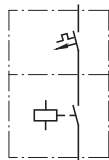
Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

3RA11 direct-on-line starters for busbar systems



Direct-on-line start



Rated control supply voltage 24 V DC for busbar system 60 mm

- The motor starter protector and contactor are linked electrically and mechanically by means of a link module
- Auxiliary switches¹⁾ on the motor starter protector and the contactor can be easily fitted due to the modular system (on contactor size S00: 1 NO integrated)

Size	Standard three-phase motor 4-pole at 400 V AC ²⁾	Setting range for thermal overload release	Consisting of the following single devices			DT	Fuseless load feeders ToC 2	PU (UNIT, SET, M)	PS*	PG
	Standard output P	Motor current I (guide value)	Motor starter protector	+ Contactor	+ Link module + Standard mounting rail adapter		Article No.	Price per PU		
	kW	A								

Type of coordination "2" at I_g = 50 kA at 400 V (also compatible with type of coordination "1")

	3RV10			3RT10							
S00	0.06	0.2	0.14 ... 0.2	11-0BA10	15-1BB41	3RA1911-1AA00	B	3RA1110-0BD15-1BB4	1	1 unit	41D
	0.06	0.2	0.18 ... 0.25	11-0CA10		+	B	3RA1110-0CD15-1BB4	1	1 unit	41D
	0.09	0.3	0.22 ... 0.32	11-0DA10		60 mm	B	3RA1110-0DD15-1BB4	1	1 unit	41D
	0.09	0.3	0.28 ... 0.4	11-0EA10		8US1251-5DM07	B	3RA1110-0ED15-1BB4	1	1 unit	41D
	0.12	0.4	0.35 ... 0.5	11-0FA10			B	3RA1110-0FD15-1BB4	1	1 unit	41D
	0.18	0.6	0.45 ... 0.63	11-0GA10			B	3RA1110-0GD15-1BB4	1	1 unit	41D
	0.18	0.6	0.55 ... 0.8	11-0HA10			B	3RA1110-0HD15-1BB4	1	1 unit	41D
	0.25	0.85	0.7 ... 1	11-0JA10			B	3RA1110-0JD15-1BB4	1	1 unit	41D
	0.37	1.1	0.9 ... 1.25	11-0KA10			B	3RA1110-0KD15-1BB4	1	1 unit	41D
	0.55	1.5	1.1 ... 1.6	11-1AA10			B	3RA1110-1AD15-1BB4	1	1 unit	41D
	0.75	1.9	1.4 ... 2	11-1BA10			B	3RA1110-1BD15-1BB4	1	1 unit	41D
S0	0.75	1.9	1.8 ... 2.5	21-1CA10	24-1BB40	3RA1921-1BA00	B	3RA1120-1CD24-0BB4	1	1 unit	41D
	1.1	2.7	2.2 ... 3.2	21-1DA10		+	B	3RA1120-1DD24-0BB4	1	1 unit	41D
	1.5	3.6	2.8 ... 4	21-1EA10		60 mm	B	3RA1120-1ED24-0BB4	1	1 unit	41D
	1.5	3.6	3.5 ... 5	21-1FA10		8US1251-5DM07	B	3RA1120-1FD24-0BB4	1	1 unit	41D
	2.2	4.9	4.5 ... 6.3	21-1GA10			B	3RA1120-1GD24-0BB4	1	1 unit	41D
	3	6.5	5.5 ... 8	21-1HA10			B	3RA1120-1HD24-0BB4	1	1 unit	41D
	4	8.5	7 ... 10	21-1JA10	26-1BB40		B	3RA1120-1JD26-0BB4	1	1 unit	41D
	5.5	11.5	9 ... 12.5	21-1KA10			A	3RA1120-1KD26-0BB4	1	1 unit	41D
	7.5	15.5	11 ... 16	21-4AA10			B	3RA1120-4AD26-0BB4	1	1 unit	41D
	7.5	15.5	14 ... 20	21-4BA10			B	3RA1120-4BD26-0BB4	1	1 unit	41D
S2	11	22	18 ... 25	31-4DA10	34-1BB40	3RA1931-1BA00		Size S2 is only available for self-assembly.			
	15	29	22 ... 32	31-4EA10		+					
	18.5	35	28 ... 40	31-4FA10	35-1BB40	60 mm					
	22	41	36 ... 45	31-4GA10	36-1BB40	8US1261-5FP08					
	22	41	40 ... 50	31-4HA10							
S3	30	55	45 ... 63	41-4JA10	44-1BB40	3RA1941-1BA00		For size S3, a busbar adapter is not available.			
	37	66	57 ... 75	41-4KA10	45-1BB40	+					
	45	80	70 ... 90	41-4LA10	46-1BB40	Not available					
	45	80	80 ... 100	41-4MA10							

¹⁾ For auxiliary switches, see "Accessories for direct-on-line and reversing starters".

²⁾ The actual starting and rated data of the motor to be protected must be considered when selecting the units.

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

3RA11 direct-on-line starters for busbar systems

Size	Standard three-phase motor 4-pole at 400 V AC ¹⁾	Setting range for thermal overload release	Consisting of the following single devices			DT	Fuseless load feeders T_{OC} 1	PU (UNIT, SET, M)	PS*	PG	
	Standard output <i>P</i>	Motor current <i>I</i> (guide value)	Motor starter protector	+ Contactor	+ Link module + Standard mounting rail adapter		Article No.	Price per PU			
	kW	A	A								
Type of coordination "1" at $I_{q1} = 50$ kA at 400 V (the motor starter protector is compatible with type of coordination "2")											
S00	0.75	1.9	1.4 ... 2							For load feeders for lower outputs, see table above (type of coordination "2").	
				3RV10	3RT10						
S00	0.75	1.9	1.8 ... 2.5	11-1CA10	15-1BB41	3RA1911-1AA00	B	3RA1110-1CD15-1BB4	1	1 unit	41D
	1.1	2.7	2.2 ... 3.2	11-1DA10		+	B	3RA1110-1DD15-1BB4	1	1 unit	41D
	1.5	3.6	2.8 ... 4	11-1EA10		60 mm	B	3RA1110-1ED15-1BB4	1	1 unit	41D
	1.5	3.6	3.5 ... 5	11-1FA10		8US1251-5DM07	B	3RA1110-1FD15-1BB4	1	1 unit	41D
	2.2	4.9	4.5 ... 6.3	11-1GA10			B	3RA1110-1GD15-1BB4	1	1 unit	41D
	3	6.5	5.5 ... 8	11-1HA10			B	3RA1110-1HD15-1BB4	1	1 unit	41D
	4	8.5	7 ... 10	11-1JA10	16-1BB41		B	3RA1110-1JD16-1BB4	1	1 unit	41D
	5.5	11.5	9 ... 12	11-1KA10	17-1BB41		B	3RA1110-1KD17-1BB4	1	1 unit	41D
S0	7.5	15.5	11 ... 16	21-4AA10	25-1BB40	3RA1921-1BA00	B	3RA1120-4AD25-0BB4	1	1 unit	41D
	7.5	15.5	14 ... 20	21-4BA10		+	B	3RA1120-4BD25-0BB4	1	1 unit	41D
	11	22	17 ... 22	21-4CA10	26-1BB40	60 mm	B	3RA1120-4CD26-0BB4	1	1 unit	41D
	11	22	18 ... 25	21-4DA10		8US1251-5DM07	B	3RA1120-4DD26-0BB4	1	1 unit	41D
S2	15	29	22 ... 32							For load feeders for higher outputs, see table above (type of coordination "2").	
	18.5	35	28 ... 40								
	22	41	36 ... 45								
			...								

¹⁾ The actual starting and rated data of the motor to be protected must be considered when selecting the units.

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

3RA12 reversing starters for snapping onto standard mounting rails or for screw fixing

Selection and ordering data

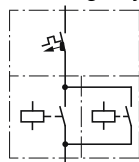


3RA1210



3RA1220

Reversing duty



Rated control supply voltage 50 Hz 230 V AC¹⁾ for 35 mm standard mounting rail or for screw fixing

- The motor starter protector and contactor are mechanically and electrically connected by means of a link module
- As from size S0 with standard mounting rail adapter²⁾ for mechanical reinforcement
- Auxiliary switches³⁾ on the motor starter protector and the contactor can be easily fitted due to the modular system
- Complete unit always with electrical and mechanical interlock

Size	Standard three-phase motor 4-pole at 400 V AC ⁴⁾	Setting range for thermal overload release	Consisting of the following single devices			DT	Fuseless load feeders ^{T_{OC} 2}	PU (UNIT, SET, M)	PS*	PG
	Standard output P	Motor current I (guide value)	Motor starter protector	+ 2 contactors	+ Link module + Assembly kit RS ⁵⁾		Article No.	Price per PU		
	kW	A	A							

Type of coordination "2" at I_q = 50 kA/100 kA at 400 V (also compatible with type of coordination "1")⁶⁾

				3RV10	3RT10	3RA19					
S00	0.18	0.6	0.45 ... 0.63	11-0GA10	15-1AP02	11-1AA00	B	3RA1210-0GA15-0AP0	1	1 unit	41D
	0.37	1.1	0.9 ... 1.25	11-0KA10		+	B	3RA1210-0KA15-0AP0	1	1 unit	41D
	0.55	1.5	1.1 ... 1.6	11-1AA10		13-2A ⁷⁾	B	3RA1210-1AA15-0AP0	1	1 unit	41D
	0.75	1.9	1.4 ... 2	11-1BA10			B	3RA1210-1BA15-0AP0	1	1 unit	41D
S0	1.1	2.7	2.2 ... 3.2	21-1DA10	24-1AP00	21-1AA00 + 23-1B ⁸⁾	B	3RA1220-1DB24-0AP0	1	1 unit	41D
S2	11	22	18 ... 25	31-4DA10	34-1AP00	31-1AA00		Size S2 is only available for self-assembly.			
	15	29	22 ... 32	31-4EA10		+					
	18.5	35	28 ... 40	31-4FA10	35-1AP00	33-1B ⁸⁾					
	22	41	36 ... 45	31-4GA10	36-1AP00						
	22	41	40 ... 50	31-4HA10							
S3	30	55	45 ... 63	41-4JA10	44-1AP00	41-1AA00		Size S3 is only available for self-assembly.			
	37	66	57 ... 75	41-4KA10	45-1AP00	+					
	45	80	70 ... 90	41-4LA10	46-1AP00	43-1B ⁸⁾					
	45	80	80 ... 100	41-4MA10							

Type of coordination "1" at I_q = 50 kA at 400 V⁶⁾ (the motor starter protector is compatible with type of coordination "2")

S00	0.75	1.9	1.4 ... 2					For load feeders for lower outputs (type of coordination "2"), see above.			
S0	7.5	15.5	11 ... 16	21-4AA10	25-1AP00	21-1AA00 + 23-1B ⁸⁾	B	3RA1220-4AB25-0AP0	1	1 unit	41D
S2	15	29	22 ... 32					For load feeders for lower outputs (type of coordination "2"), see above.			
	18.5	35	28 ... 40								
	22	41	36 ... 45								
	...										

1) Size S00 also suitable for 60 Hz.

2) Assembly kit for standard mounting rail adapter also suitable for screw fixing.

3) For auxiliary switches, see "Accessories for direct-on-line and reversing starters".

4) The actual starting and rated data of the motor to be protected must be considered when selecting the units.

5) RS = Reversing duty for standard rail mounting.

6) For load feeders with I_q ≥ 100 kA, see "Reference Manual Load Feeders and Motor Starters – 3RA1 Fuseless Load Feeders".

7) A wiring kit is necessary: Screw fixing with 1 push-in lug each per load feeder (see "Accessories for direct-on-line and reversing starters").

8) The mechanical locking device must be ordered separately (see "Accessories for direct-on-line and reversing starters").

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

3RA12 reversing starters for snapping onto standard mounting rails or for screw fixing

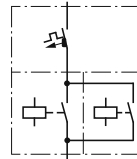


3RA1210



3RA1220

Reversing duty



Rated control supply voltage 24 V DC for 35 mm standard mounting rail or for screw fixing

- The motor starter protector and contactor are mechanically and electrically connected by means of a link module
- As from size S0 with standard mounting rail adapter¹⁾ for mechanical reinforcement
- Auxiliary switches²⁾ on the motor starter protector and the contactor can be easily fitted due to the modular system
- Complete unit always with electrical and mechanical interlock

Size	Standard three-phase motor 4-pole at 400 V AC ³⁾	Setting range for thermal overload release	Consisting of the following single devices			DT	Fuseless load feeders ToC 2	PU (UNIT, SET, M)	PS*	PG
	Standard output <i>P</i> kW	Motor current <i>I</i> (guide value) A	Motor starter protector	+ 2 contactors	+ Link module + Assembly kit RS ⁴⁾		Article No.	Price per PU		

Type of coordination "2" at $I_q = 50 \text{ kA}/100 \text{ kA}$ at 400 V (also compatible with type of coordination "1")⁵⁾

	3RV10			3RT10		3RA19					
S00	0.06	0.2	0.18 ... 0.25	11-OCA10	15-1BB42	11-1AA00	B	3RA1210-0CA15-0BB4	1	1 unit	41D
	0.09	0.3	0.28 ... 0.4	11-OEA10		+	A	3RA1210-0EA15-0BB4	1	1 unit	41D
	0.12	0.4	0.35 ... 0.5	11-OFA10		13-2A ⁶⁾	A	3RA1210-0FA15-0BB4	1	1 unit	41D
	0.18	0.6	0.45 ... 0.63	11-OGA10			A	3RA1210-0GA15-0BB4	1	1 unit	41D
	0.18	0.6	0.55 ... 0.8	11-OHA10			A	3RA1210-0HA15-0BB4	1	1 unit	41D
	0.25	0.85	0.7 ... 1	11-OJA10			A	3RA1210-0JA15-0BB4	1	1 unit	41D
	0.37	1.1	0.9 ... 1.25	11-OKA10			A	3RA1210-0KA15-0BB4	1	1 unit	41D
	0.55	1.5	1.1 ... 1.6	11-1AA10			A	3RA1210-1AA15-0BB4	1	1 unit	41D
	0.75	1.9	1.4 ... 2	11-1BA10			A	3RA1210-1BA15-0BB4	1	1 unit	41D
S0	0.75	1.9	1.8 ... 2.5	21-1CA10	24-1BB40	21-1BA00	B	3RA1220-1CB24-0BB4	1	1 unit	41D
	1.1	2.7	2.2 ... 3.2	21-1DA10		+	B	3RA1220-1DB24-0BB4	1	1 unit	41D
	1.5	3.6	3.5 ... 5	21-1FA10		23-1B ⁷⁾	A	3RA1220-1FB24-0BB4	1	1 unit	41D
	2.2	4.9	4.5 ... 6.3	21-1GA10			A	3RA1220-1GB24-0BB4	1	1 unit	41D
	4	8.5	7 ... 10	21-1JA10	26-1BB40		B	3RA1220-1JB26-0BB4	1	1 unit	41D
	7.5	15.5	11 ... 16	21-4AA10			B	3RA1220-4AB26-0BB4	1	1 unit	41D
S2	11	22	18 ... 25	31-4DA10	34-1BB40	31-1BA00		Size S2 is only available for self-assembly.			
	15	29	22 ... 32	31-4EA10		+					
	18.5	35	28 ... 40	31-4FA10	35-1BB40	33-1B ⁷⁾					
	22	41	36 ... 45	31-4GA10	36-1BB40						
	22	41	40 ... 50	31-4HA10							
S3	30	55	45 ... 63	41-4JA10	44-1BB40	41-1BA00		Size S3 is only available for self-assembly.			
	37	66	57 ... 75	41-4KA10	45-1BB40	+					
	45	80	70 ... 90	41-4LA10	46-1BB40	43-1B ⁷⁾					
	45	80	80 ... 100	41-4MA10							

Type of coordination "1" at $I_q = 50 \text{ kA}$ at 400 V⁵⁾ (the motor starter protector is compatible with type of coordination "2")

	3RV10			3RT10		3RA19					
S00	0.75	1.9	1.4 ... 2						For load feeders for lower outputs (type of coordination "2"), see above.		
S00	0.75	1.9	1.8 ... 2.5	11-1CA10	15-1BB42	11-1AA00	A	3RA1210-1CA15-0BB4	1	1 unit	41D
	1.1	2.7	2.2 ... 3.2	11-1DA10		+	A	3RA1210-1DA15-0BB4	1	1 unit	41D
	1.5	3.6	2.8 ... 4	11-1EA10		13-2A ⁶⁾	B	3RA1210-1EA15-0BB4	1	1 unit	41D
	3	6.5	5.5 ... 8	11-1HA10			B	3RA1210-1HA15-0BB4	1	1 unit	41D
S2	15	29	22 ... 32					For load feeders for lower outputs (type of coordination "2"), see above.			
	18.5	35	28 ... 40								
	22	41	36 ... 45								

¹⁾ Assembly kit for standard mounting rail adapter also suitable for screw fixing.

²⁾ For auxiliary switches, see "Accessories for direct-on-line and reversing starters".

³⁾ The actual starting and rated data of the motor to be protected must be considered when selecting the units.

⁴⁾ RS = Reversing duty for standard rail mounting.

⁵⁾ For load feeders with $I_q \geq 100 \text{ kA}$, see "Reference Manual Load Feeders and Motor Starters – 3RA1 Fuseless Load Feeders".

⁶⁾ A wiring kit is necessary: Screw fixing with 1 push-in lug each per load feeder is possible (see "Accessories for direct-on-line and reversing starters").

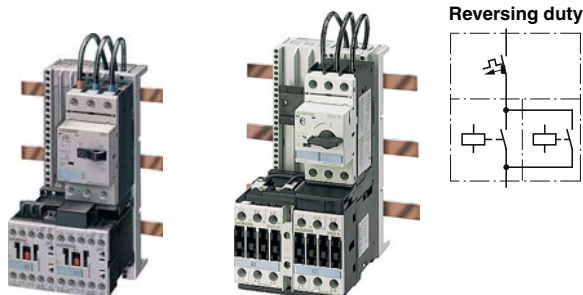
⁷⁾ The mechanical locking device must be ordered separately (see "Accessories for direct-on-line and reversing starters").

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

3RA12 reversing starters for busbar systems

Selection and ordering data



3RA1210

3RA1220

Rated control supply voltage 24 V DC for busbar system 60 mm

- The motor starter protector and contactor are mechanically and electrically connected by means of a link module
- Auxiliary switches¹⁾ on the motor starter protector and the contactor can be easily fitted due to the modular system
- Complete unit always with electrical and mechanical interlock

Size	Standard three-phase motor 4-pole at 400 V AC ²⁾	Setting range for thermal overload release	Consisting of the following single devices			DT	Fuseless load feeders	T _{OC} 2	PU (UNIT, SET, M)	PS*	PG
	Standard output P	Motor current I (guide value)	Motor starter protector	+ 2 contactors	+ Link module + Assembly kit RS ³⁾		Article No.	Price per PU			
	kW	A									

Type of coordination "2" at I_q = 50 kA at 400 V (also compatible with type of coordination "1")

				3RV10	3RT10	3RA19					
S00	0.06	0.2	0.18 ... 0.25	11-0CA10	15-1BB42	11-1AA00 + 60 mm 13-1D	B	3RA1210-0CD15-0BB4	1	1 unit	41D
S0	0.75	1.9	1.8 ... 2.5	21-1CA10	24-1BB40	21-1BA00	B	3RA1220-1CD24-0BB4	1	1 unit	41D
	1.1	2.7	2.2 ... 3.2	21-1DA10		+	B	3RA1220-1DD24-0BB4	1	1 unit	41D
	1.5	3.6	3.5 ... 5	21-1FA10		60 mm	B	3RA1220-1FD24-0BB4	1	1 unit	41D
	3	6.5	5.5 ... 8	21-1HA10		23-1D ⁴⁾	B	3RA1220-1HD24-0BB4	1	1 unit	41D
	7.5	15.5	14 ... 20	21-4BA10			B	3RA1220-4BD26-0BB4	1	1 unit	41D
S2	11	22	18 ... 25	31-4DA10	34-1BB40	31-1BA00		Size S2 is only available for self-assembly.			
	15	29	22 ... 32	31-4EA10		+					
	18.5	35	28 ... 40	31-4FA10	35-1BB40	60 mm					
	22	41	36 ... 45	31-4GA10	36-1BB40	33-1D ⁴⁾					
	22	41	40 ... 50	31-4HA10							
S3	30	55	45 ... 63	41-4JA10	44-1BB40	41-1BA00		For size S3, a busbar adapter is not available.			
	37	66	57 ... 75	41-4KA10	45-1BB40	+					
	45	80	70 ... 90	41-4LA10	46-1BB40	Not available					
	45	80	80 ... 100	41-4MA10							

Type of coordination "1" at I_q = 50 kA at 400 V (the motor starter protector is compatible with type of coordination "2")

				3RV10	3RT10	3RA19					
S00	0.75	1.9	1.4 ... 2								
	For load feeders for lower outputs (type of coordination "2"), see above.										
				3RV10	3RT10	3RA19					
S00	1.5	3.6	3.5 ... 5	11-1FA10		11-1AA00 + 60 mm 13-1D	B	3RA1210-1FD15-0BB4	1	1 unit	41D
S2	15	29	22 ... 32					For load feeders for lower outputs (type of coordination "2"), see above.			
	18.5	35	28 ... 40								
	22	41	36 ... 45								

¹⁾ For auxiliary switches, see "Accessories for direct-on-line and reversing starters".

²⁾ The actual starting and rated data of the motor to be protected must be considered when selecting the units.

³⁾ RS = Reversing duty for busbar systems.

⁴⁾ The mechanical locking device must be ordered separately (see "Accessories for direct-on-line and reversing starters").






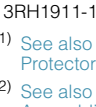
Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

Accessories

Accessories for 3RA1 direct-on-line and reversing starters

Selection and ordering data

	For motor starter protectors Size	For contactors Size	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
MSPs/circuit breakers¹⁾										
	S00 ... S3	--	Auxiliary switches							
			Transverse	1 CO contacts ▶	3RV1901-1D		1	1 unit	41E	
			Transverse	1 NO + 1 NC ▶	3RV1901-1E		1	1 unit	41E	
	S00 ... S3	--	Laterally mountable	1 NO + 1 NC ▶	3RV1901-1A		1	1 unit	41E	
	S00 ... S3	--	Undervoltage releases		▶	3RV1902-1AP0		1	1 unit	41E
			50 Hz 230 V AC							
	S00 ... S3	--	Shunt releases		▶	3RV1902-1DP0		1	1 unit	41E
			50 Hz 230 V AC							
3RV1902-1...										
Contactors²⁾										
Snap-on auxiliary switch blocks										
Connection from below										
	--	S00	1-pole	1 NO	▶	3RH1911-1BA10	1	1 unit	41B	
				1 NC	▶	3RH1911-1BA01	1	1 unit	41B	
3RH1911-1BA..	--	S00	2-pole	1 NO + 1 NC	▶	3RH1911-1MA11	1	1 unit	41B	
				2 NO	▶	3RH1911-1MA20	1	1 unit	41B	
	--	S0 ... S3	1-pole	1 NO + 1 NC	▶	3RH1921-1MA11	1	1 unit	41B	
				2 NO	▶	3RH1921-1MA20	1	1 unit	41B	
				2 NC	▶	3RH1921-1MA02	1	1 unit	41B	
Connection from 2 sides										
	--	S00	4-pole	2 NO + 2 NC	▶	3RH1911-1FA22	1	1 unit	41B	
				1 NO	▶	3RH1921-1CA10	1	1 unit	41B	
				1 NC	▶	3RH1921-1CA01	1	1 unit	41B	
3RH1911-1F..	--	S0 ... S3	4-pole	2 NO + 2 NC	▶	3RH1921-1FA22	1	1 unit	41B	

¹⁾ See also Chapter 7 "Protection Equipment" → "SIRIUS 3RV1 Motor Starter Protectors up to 100 A".




²⁾ See also Chapter 3 "Switching Devices – Contactors and Contactor Assemblies".

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

Accessories

Accessories for 3RA1 direct-on-line and reversing starters

For contactors	Version	Rated control supply voltage U_s ¹⁾	DT	Article No. ²⁾	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Surge suppressors without LED									
Type									
Size S00									
 3RT1916-1DG00	For plugging onto the front side of the contactors with and without auxiliary switch blocks								
	3RT1.	Varistors	24 ... 48 V AC 24 ... 70 V DC	▶	3RT1916-1BB00		1	1 unit	41B
			127 ... 240 V AC 150 ... 250 V DC	A	3RT1916-1BD00		1	1 unit	41B
	3RT1.	RC elements	24 ... 48 V AC 24 ... 70 V DC	▶	3RT1916-1CB00		1	1 unit	41B
			127 ... 240 V AC 150 ... 250 V DC	▶	3RT1916-1CD00		1	1 unit	41B
3RT1.	Noise suppression diodes	12 ... 250 V DC	▶	3RT1916-1DG00		1	1 unit	41B	
3RT1.	Diode assemblies (diode and Zener diode) for DC operation and short break times	12 ... 250 V DC	▶	3RT1916-1EH00		1	1 unit	41B	
Size S0									
For fitting onto the coil terminals at top or bottom									
 3RT1926-1B.00	3RT10 2	Varistors	24 ... 48 V AC 24 ... 70 V DC	▶	3RT1926-1BB00		1	1 unit	41B
			127 ... 240 V AC 150 ... 250 V DC	▶	3RT1926-1BD00		1	1 unit	41B
	3RT10 2	RC elements	24 ... 48 V AC 24 ... 70 V DC	▶	3RT1926-1CB00		1	1 unit	41B
			127 ... 240 V AC 150 ... 250 V DC	▶	3RT1926-1CD00		1	1 unit	41B
	3RT10 2	Diode assemblies For DC operation and short break times, • Can be plugged in at bottom	24 V DC 30 ... 250 V DC	▶ A	3RT1926-1TR00 3RT1926-1TS00		1 1	1 unit 1 unit	41B 41B
Sizes S2 and S3									
For fitting onto the coil terminals at top or bottom									
 3RT1936-1C.00	3RT10 3, 3RT10 4	Varistors	24 ... 48 V AC 24 ... 70 V DC	▶	3RT1926-1BB00		1	1 unit	41B
			127 ... 240 V AC 150 ... 250 V DC	▶	3RT1926-1BD00		1	1 unit	41B
	3RT10 3, 3RT10 4	RC elements	24 ... 48 V AC 24 ... 70 V DC	▶	3RT1936-1CB00		1	1 unit	41B
			127 ... 240 V AC 150 ... 250 V DC	▶	3RT1936-1CD00		1	1 unit	41B
	3RT10 3, 3RT10 4	Diode assemblies For DC operation and short break times, • Can be plugged in at bottom	24 V DC 30 ... 250 V DC	▶ B	3RT1936-1TR00 3RT1936-1TS00		1 1	1 unit 1 unit	41B 41B

¹⁾ Can be used for AC operation for 50/60 Hz. Please inquire about further voltages.








²⁾ For packs of 10 or 5 units, "-Z" and order code "X90" must be added to the Article No.

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

Accessories

Accessories for 3RA1 direct-on-line and reversing starters


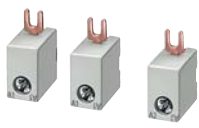



For motor starter protectors Size	For contactors Size	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Link modules								
				Electrical and mechanical link between motor starter protector and contactor.				
3RA1911-1A				Single-unit packaging				
				<u>Actuating voltage of contactor</u>				
	S00	S00	▶	AC and DC		1	1 unit	41B
	S0	S00	▶			1	1 unit	41B
	S0	S0	▶	AC		1	1 unit	41B
	S2	S2	▶			1	1 unit	41B
	S3	S3	▶			1	1 unit	41B
	S0	S0	▶	DC		1	1 unit	41B
	S2	S2	▶			1	1 unit	41B
	S3	S3	▶			1	1 unit	41B
								
3RA1921-1A				Multi-unit packaging				
				<u>Actuating voltage of contactor</u>				
	S00	S00	▶	AC and DC		1	10 units	41B
	S0	S00	▶			1	10 units	41B
	S0	S0	▶	AC		1	10 units	41B
	S2	S2	▶			1	5 units	41B
	S3	S3	▶			1	5 units	41B
	S0	S0	▶	DC		1	10 units	41B
	S2	S2	▶			1	5 units	41B
	S3	S3	▶			1	5 units	41B
								
3RA1931-1A								
Hybrid link modules								
	Screw terminals	Cage Clamp terminals		Electrical and mechanical connection between motor starter protector with screw terminals and contactor with Cage Clamp terminals				
				Single-unit packaging				
				<u>Actuating voltage of contactor</u>				
	S00	S00	▶	AC and DC		1	1 unit	41B
	S0	S00	▶			1	1 unit	41B
								
3RA1921-2FA00				Multi-unit packaging				
				<u>Actuating voltage of contactor</u>				
	S00	S00	▶	AC and DC		1	10 units	41B
	S0	S00	▶			1	10 units	41B
Wiring kit								
	--	S00	▶	Reversing duty Electrical and mechanical link for reversing contactors.		1	1 unit	41B
		S0	▶	Can be combined with link module.		1	1 unit	41B
		S2	▶			1	1 unit	41B
		S3	▶			1	1 unit	41B
				For size S00: Optionally with integrated electrical and mechanical locking device. For sizes S0 to S3: Mechanical locking device must be ordered separately.				
3RA1913-2A				Star-delta (wye-delta) starting Electrical and mechanical link for three contactors of same size	A	1	1 unit	41B
		S0	▶			1	1 unit	41B
		S2	▶			1	1 unit	41B
		S3	▶			1	1 unit	41B
Connection modules for contactors with screw terminals (can only be used for direct-on-line starters)								
		Size S00, S0		Adapters for contactors Ambient temperature $T_{u \text{ max.}} = 60 \text{ °C}$				
	--	S00	B	Size S00, rated operational current I_e at AC-3/400 V: 20 A		1	1 unit	41B
3RT1926-4RD01	--	S0	B	Size S0, rated operational current I_e at AC-3/400 V: 25 A		1	1 unit	41B
	--	S00, S0	B	Plugs for contactors Size S00, S0		1	1 unit	41B
3RT1900-4RE01								

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

Accessories

Accessories for 3RA1 direct-on-line and reversing starters






	For motor starter protectors Size	For contactors Size	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Mechanical interlocks									
	--	S0, S2, S3	For reversing contactors, laterally mountable with 1 auxiliary contact (1 NC) each per contactor.	▶	3RA1924-2B		1	1 unit	41B
3RA1924-2B									
Coil repeat terminals									
	--	S0, S2, S3	For A1 and A2 of the reversing contactors (one set contains 10 x A1 and 5 x A2)	B	3RA1923-3B		1	1 unit	41B
3RA1923-3B									
Standard mounting rail adapters									
			Single-unit packaging						
	S00, S0	S00, S0	For mechanical fixing of motor starter protector and	▶	3RA1922-1AA00		1	1 unit	41B
	S2	S2	contactor; for snapping onto standard mounting rail or for screw fixing	▶	3RA1932-1AA00		1	1 unit	41B
	S3	S3		▶	3RA1942-1AA00		1	1 unit	41B
			Multi-unit packaging						
	S00, S0	S00, S0	For mechanical fixing of motor starter protector and	▶	3RA1922-1A		1	5 units	41B
	S2	S2	contactor; for snapping onto standard mounting rail or for screw fixing	▶	3RA1932-1A		1	5 units	41B
	S3	S3		▶	3RA1942-1A		1	5 units	41B
3RA1932 3RA1922									
Side modules									
	S00 ... S3	S00 ... S3	For standard mounting rail adapters 10 mm wide, 96 mm long, for widening standard mounting rail adapters. For sizes S00 to S2: 2 units required. For size S3: 3 units required.	▶	3RA1902-1B		1	10 units	41B
3RA1902									
Assembly kits (RS) for reversing duty for standard mounting rails									
	S0	S0	Also suitable for screw fixing.	A	3RA1923-1B		1	1 unit	41B
	S2	S2	Comprising:	A	3RA1933-1B		1	1 unit	41B
	S3	S3	Wiring kit, standard mounting rail adapters, side modules. Link modules to be ordered separately. The mechanical locking device is also to be ordered separately.	A	3RA1943-1B		1	1 unit	41B
3RA1933-1B									

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

Accessories

Accessories for 3RA1 direct-on-line and reversing starters





	For motor starter protectors Size	For contactors Size	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Accessories, adapters and link modules for Cage Clamp terminals										
 3RA1911-2A + 8US1051-5CM47	S00	--	Link modules, Cage Clamp terminals Electrical connection between motor starter protector and contactor (1 pack = 10 units)	▶	3RA1911-2A		1	10 units	41B	
	S00	--	Link modules, Cage Clamp terminals with mechanical connections Mechanical and electrical connection between motor starter protector and contactor (1 pack = 10 units)	▶	3RA1911-2E		1	10 units	41B	
		--	Standard mounting rail adapters For Cage Clamp terminals with 2 standard mounting rails, one is movable, 45 mm wide	▶	3RA1922-1L		1	5 units	41B	
		--	Busbar adapters 45 mm wide, 182 mm long, adapted for motor starter protectors with Cage Clamp terminals. If there is an additional contactor, a further standard mounting rail must be fitted.	▶	8US1051-5CM47		1	1 unit	140	
		--	Standard mounting rails 35 mm, Plastic, incl. fixing screws (1 pack = 10 units)	A	8US1998-7CA15		1	10 units	140	
 3RA1911-2E										
Push-in lugs for screw fixing										
 3RB1900-0B	S00, S0	--	For 3RV1 motor starter protectors: 2 units each required, for 3RA1 fuseless load feeders: 1 unit each required, for AS-Interface device holder: 2 units each required (1 pack = 10 units)	A	3RB1900-0B		100	10 units	41F	
Busbar adapters										
 8US1251-5DM07	S00, S0	S00, S0	45 mm wide, 182 mm long for busbars	60	▶	8US1251-5DM07		1	6 units	140
	S2	S2	55 mm wide, 242 mm long, including screw and spacer	60	▶	8US1261-5FP08		1	1 unit	140
Device holders										
 8US1250-5AM00	S00, S0	S00, S0	With standard mounting rail, without connecting cables 45 mm wide, 182 mm long for busbars	60	▶	8US1250-5AM00		1	1 unit	140
	S0	S0	55 mm wide, 182 mm long	60	▶	8US1260-5AM00		1	1 unit	140
	S2	S2	55 mm wide, 242 mm long, including screw and spacer	60	▶	8US1260-5AP00		1	1 unit	140

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

Accessories

Accessories for 3RA1 direct-on-line and reversing starters

	For motor starter protectors Size	For contactors Size	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Side modules									
	--	--	Including connecting wedges, for widening busbar adapters or device holders, 13.5 mm wide, 182 mm long	A	8US1998-2BM00		1	4 units	140
Assembly kits (RS) for reversing duty for 60 mm busbar systems									
				Busbar center-to-center clearance mm					
	S00, S0	S00	Consisting of wiring kit, busbar adapter, device holder, and side module. Link modules and mechanical locking devices to be ordered separately. Mechanical interlocking only included for size S00.	60	A	3RA1913-1D	1	1 unit	41B
	S0	S0		A	3RA1923-1D	1	1 unit	41B	
	S2	S2		A	3RA1933-1D	1	1 unit	41B	
Connecting wedges									
	--	--	For mechanical linking of busbar adapters and device holders or of standard mounting rail adapters (2 units per combination required) (1 pack = 100 units)		8US1998-1AA00		100	100 units	140
Spacers									
	--	S00, S0	Fixes the feeder onto the busbar adapter (1 pack = 100 units)		8US1998-1BA00		100	100 units	140
Screw holders									
	--	S00, S0	Allows additional fixing of the feeder (1 pack = 20 units)	B	8US1998-1CA00		100	20 units	140

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	----	-------------	--------------	-------------------	-----	----

Configuration Manual "SIRIUS Configuration"

Configuration Manual "SIRIUS Configuration: Selection Data for Fuseless Load Feeders"

More information and assignment tables for self-assembly combinations for 400 V, 440 V, 480 V, 500 V, 550 V and 690 V. The configuration manual can be downloaded free of charge in PDF format from the Internet, see <https://support.industry.siemens.com/cs/ww/en/view/40625241>

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

Busbar accessories, 3RV19 infeed system

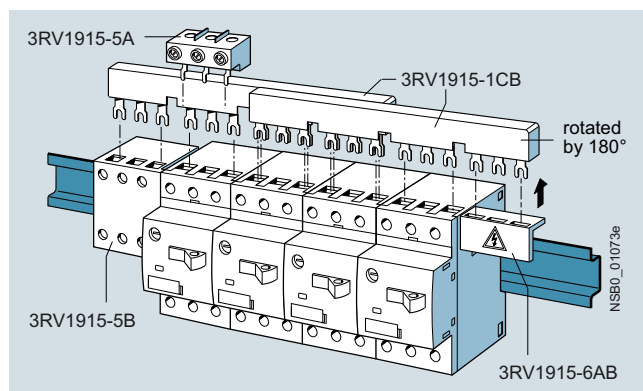
Overview

Insulated three-phase busbar system

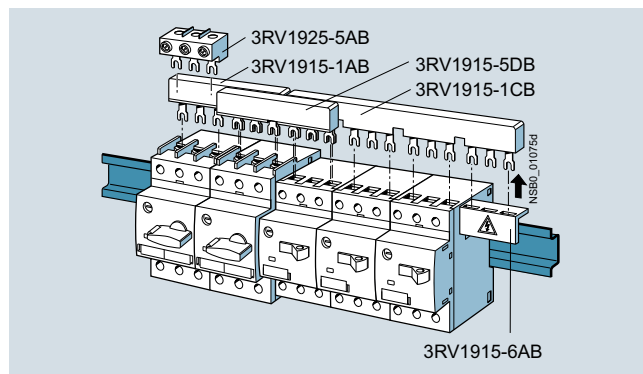
Three-phase busbar systems provide an easy, time-saving and clearly arranged means of feeding 3RA1 load feeders with screw terminals. Different versions are available for sizes S00, S0 and S2 and can also be used for the various different types of motor starter protectors.

The busbars are suitable for between 2 and 5 feeders. However, any kind of extension is possible by clamping the tags of an additional busbar (rotated by 180°) underneath the terminals of the respective last motor starter protector.

A combination of feeders of different sizes is possible only with sizes S00 and S0. Connecting pieces are available for this purpose. The motor starter protectors/circuit breakers are supplied by appropriate infeed terminals.



Three-phase busbar system, size S00



Three-phase busbar system, with example for combining sizes S00 and S0

The three-phase busbar systems are finger-safe. They are designed for any short-circuit stress which can occur at the output side of connected motor starter protectors.

The three-phase busbar systems can also be used to construct "Type E Starters" of size S0 or S2 according to UL/CSA. Special infeed terminals must be used for this purpose however.

For selection and ordering data, see Chapter 7 "Protection Equipment" → "SIRIUS 3RV1 Motor Starter Protectors up to 100 A" → "Busbar Accessories".

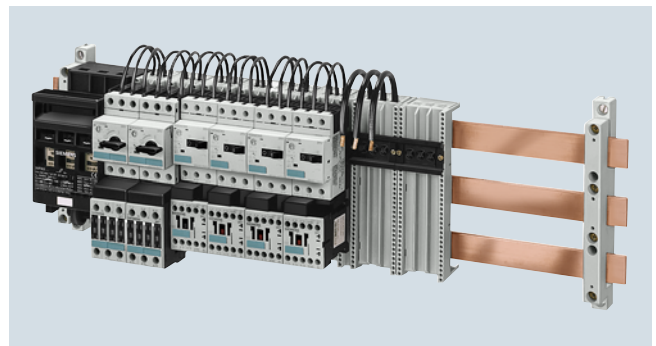
Busbar adapters for 60 mm systems

The load feeders are mounted directly with the aid of busbar adapters on busbar systems with 60 mm center-to-center clearance in order to save space and to reduce infeed times and costs.

Busbar adapters for busbar systems with 60 mm center-to-center clearance are suitable for copper busbars with a width of 12 mm to 30 mm. The busbars can be 4 to 5 mm or 10 mm thick.

The feeders are snapped onto the adapter and connected on the line side. This prepared unit is then plugged directly onto the busbar system, and is thus connected both mechanically and electrically at the same time.

For selection and ordering data, see Chapter 7 "Protection Equipment" → "SIRIUS 3RV1 Motor Starter Protectors up to 100 A" → "Busbar Accessories".



SIRIUS motor starter protectors and load feeders with busbar adapters snapped onto busbars

SIRIUS 3RV19 infeed system

The 3RV19 infeed system is a convenient means of energy supply and distribution for a group of several motor starter protectors or complete load feeders with a screw or spring-type connection up to size S0.

The system is based on a basic module complete with a lateral incoming unit (three-phase busbar with infeed) which has two slots.

Expansion modules are available for extending the system (three-phase busbars for system expansion).



SIRIUS 3RV19 infeed system with three 3RA1110 load feeders and two 3RA1120 load feeders

For the 3RV19 infeed system, see Chapter 7 "Protection Equipment" → "SIRIUS 3RV1 motor starter protectors up to 100 A" → "3RV19 infeed system".

Load Feeders and Motor Starters for Use in the Control Cabinet

SIRIUS 3RA1 Load Feeders

Notes

Motor Starters for Use in the Field, High Degree of Protection



Price groups

PG 41B

9/2

Introduction

SIRIUS 3RE encapsulated starters

- 9/3 General data
- 9/4 3RE10 direct-on-line starters
- 9/4 3RE13 reversing starters
- 9/4 Accessories

NEW

Click on the Article No. in the catalog PDF to access it in the Industry Mall and get all related information.

Article-No.

3RA1943-2C
 3RA1943-2B
 3RA1953-2B
 3RA1953-2N



Or directly in the Internet, e. g.
[www.siemens.com/
 product?3RA1943-2C](http://www.siemens.com/product?3RA1943-2C)

Motor Starters for Use in the Field, High Degree of Protection

Introduction

Overview



3RE10

	Article No.	Page
--	-------------	------

SIRIUS 3RE encapsulated starters

	<ul style="list-style-type: none"> The 3RE1 encapsulated starters are used for switching and for the inverse-time delayed protection of load feeders up to 22 kW at 400 V AC. The starters are available as direct-on-line starters for motors with a single direction of rotation and as reversing starters for motors with two directions of rotation 		
3RE10 direct-on-line starters	<ul style="list-style-type: none"> Molded-plastic enclosure, degree of protection IP65, including contactor 	3RE10	9/4
3RE13 reversing starters	<ul style="list-style-type: none"> Molded-plastic enclosure, degree of protection IP65, including contactor assembly 	3RE13	9/4
Accessories	<ul style="list-style-type: none"> Molded-plastic enclosure, degree of protection IP65, for direct-on-line and reversing starters 	3RE19	9/4

Motor Starters for Use in the Field, High Degree of Protection SIRIUS 3RE Encapsulated Starters

General data

Overview



3RE1010 direct-on-line starter

The 3RE1 encapsulated starters are available as direct-on-line starters and as reversing starters.

Direct-on-line starters

The direct-on-line starters are available in three sizes:

- Size **S00** is suitable for three-phase motors up to 5.5 kW with 400 V AC and a maximum rated motor current of 12 A. The starters are available in the following two versions:
 - Molded-plastic enclosure for direct-on-line starters including contactor – in this case the overload relay must be selected and ordered according to the rated motor current.
 - Molded-plastic enclosure for direct-on-line starters (without contactor) – in this case the contactor and overload relay must be selected and ordered separately.
- Size **S0** is suitable for three-phase motors up to 11 kW with 400 V AC and a maximum rated motor current of 25 A. The starters are available in the following two versions:
 - Molded-plastic enclosure for direct-on-line starters including contactor – in this case the overload relay must be selected and ordered according to the rated motor current.
 - Molded-plastic enclosure for direct-on-line starters (without contactor) – in this case the contactor, auxiliary switch and overload relay must be selected and ordered separately.
- Size **S2** is suitable for three-phase motors up to 22 kW with 400 V AC and a maximum rated motor current of 50 A. The starters are available in the following version:
 - Molded-plastic enclosure for direct-on-line starters (without contactor) – in this case the contactor, auxiliary switch and overload relay must be selected and ordered separately.

Reversing starters

The reversing starters are available in two sizes:

- Size **S00** is suitable for three-phase motors up to 5.5 kW with 400 V AC and a maximum rated motor current of 12 A. The starters are available in the following two versions:
 - Molded-plastic enclosure for reversing starters including contactor assembly – in this case the overload relay must be selected and ordered according to the rated motor current.
 - Molded-plastic enclosure for reversing starters (without contactor assembly) – in this case the contactor assembly, auxiliary switch and overload relay must be selected and ordered separately.
- Size **S0** is suitable for three-phase motors up to 11 kW with 400 V AC and a maximum rated motor current of 25 A. The starters are available in the following version:
 - Molded-plastic enclosure for direct-on-line starters (without contactor assembly) – in this case the contactor assembly, auxiliary switch and overload relay must be selected and ordered separately.

Benefits

The 3RE1 encapsulated starters have a high degree of protection (IP65) and are used for the switching and inverse-time delayed protection of loads. They are ideally suited for implementation directly at the machine.

Application

The 3RE1 encapsulated starters are used for switching and for the inverse-time delayed protection of load feeders up to 22 kW at 400 V AC

The starters are available as direct-on-line starters for motors with a single direction of rotation and as reversing starters for motors with two directions of rotation.

Motor Starters for Use in the Field, High Degree of Protection

SIRIUS 3RE Encapsulated Starters

3RE10 direct-on-line starters, 3RE13 reversing starters, accessories

Selection and ordering data

Size	Rated data Utilization category AC-2/AC-3 T_U : Up to + 35 °C	Rated control supply voltage U_s	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Operation al current I_e at 400 V		Rating of three-phase motors at 400 V/50 Hz	Article No.		Price per PU		
A	kW	V	At Hz				

Direct-on-line starters including contactor



3RE1010

S00	12	5.5	230 AC	50 / 60	B	3RE1010-8XC17-0AP0	1	1 unit	41B
			400 AC	50 / 60	B				
S0	17	7.5	230 AC	50	B	3RE1020-8XC25-0AP0	1	1 unit	41B
			400 AC	50	B				
	25	11	230 AC	50	B	3RE1020-8XC26-0AP0	1	1 unit	41B
			400 AC	50	B				

Reversing starters including contactor assembly



3RE1310

S00	12	5.5	230 AC	50 / 60	B	3RE1310-8XC17-0AP0	1	1 unit	41B
			400 AC	50 / 60	B				

Version	For contactor Overload relay Size	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	---	----	-------------	-----------------	----------------------	-----	----

Enclosures for direct-on-line starters



3RE1923-1CB2

Molded-plastic enclosures for surface mounting

Degree of protection IP65,
with actuators,
with metric cable gland

- With PE terminal
- With N and PE terminals
- With N and PE terminals

S00	B	3RE1913-1CB1	1	1 unit	41B
S0	B	3RE1923-1CB2	1	1 unit	41B
S2	B	3RE1933-1CB3	1	1 unit	41B

Enclosures for reversing starters



3RE1923-2CB3

Molded-plastic enclosures for surface mounting

Degree of protection IP65,
with actuators,
with metric cable gland

- With N and PE terminals

S00/S0	B	3RE1913-2CB3	1	1 unit	41B
--------	---	--------------	---	--------	-----

**NEW**

Click on the Article No. in the catalog PDF to access it in the Industry Mall and get all related information.

Article-No.

3RA1943-2C
 3RA1943-2B
 3RA1953-2B
 3RA1953-2N



Or directly in the Internet, e. g.
[www.siemens.com/
 product?3RA1943-2C](http://www.siemens.com/product?3RA1943-2C)

Price groups

PG 41B, 41H, 41L

11/2 Introduction**Safety relays**





Safety relays SIRIUS 3TK28

- 11/3 General data
- 11/5 With relay enabling circuits
- 11/10 With electronic enabling circuits
- 11/13 With contactor relay enabling circuits
- 11/16 With special functions
- 11/18 Accessories

Safety Technology

Introduction

Overview

		Article No.	Page
SIRIUS Safety Integrated			
 <p>3TK2826-2BB40</p>	3TK28 safety relays <ul style="list-style-type: none"> • Key modules of a consistent and cost-effective safety chain • Can be used for all safety applications thanks to compliance with the highest safety requirements (PL e according to EN ISO 13849-1 or SIL 3 according to IEC 61508) • Suitable for use all over the world through compliance with all globally established certifications 		
	<u>Safety relays with relay enabling circuits</u> <ul style="list-style-type: none"> • Different voltages can be switched through the floating contacts • Inductive currents up to 5 A can be switched with relay contacts 	3TK282, 3TK283	11/5
 <p>3TK2841-1BB40</p>	<u>Safety relays with electronic enabling circuits</u> <ul style="list-style-type: none"> • Wear-free • Suitable for operation in fast switching applications • Insensitive to vibrations and dirt • Good electrical endurance 	3TK284	11/10
	<u>Safety relays with contactor relay enabling circuits</u> <ul style="list-style-type: none"> • Different voltages can be switched through the floating contacts • Inductive currents up to 10 A can be switched with contactor relay enabling circuits • High mechanical and electrical endurance 	3TK285	11/13
 <p>3TK2850-2BB40</p>	<u>Safety relays with special functions</u> <p>Safe standstill monitoring with 3TK2810-0</p> <ul style="list-style-type: none"> • Monitoring without external sensors • Universal use in applications possible <p>Safe speed monitoring with 3TK2810-1</p> <ul style="list-style-type: none"> • Monitoring of speed with encoders and proximity switches possible • Easy diagnostics options via display • Integrated monitoring of a spring-type locking protective door 	3TK2810	11/16
	 <p>3TK2810-1BA41</p>		

Connection methods

The safety relays are available with screw or spring-type terminals.



Screw terminals



Spring-type terminals

The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Overview



SIRIUS 3TK28 safety relay

SIRIUS safety relays are the key elements of a consistent and cost-effective safety chain. Whether you need EMERGENCY-STOP disconnection, protective door monitoring or the protection of presses or punches – with SIRIUS safety relays, any safety application can be implemented to optimum effect in terms of engineering and price.

SIRIUS safety relays provide numerous safety-related functions:

- Monitoring the safety functions of sensors
- Monitoring the sensor leads
- Monitoring the correct function of the safety relay
- Monitoring actuators for standstill
- Safety-related disconnection when dangers arise

Depending on the version of the device, SIRIUS safety relays satisfy the most stringent requirements (PL e) of EN ISO 13849-1 and achieve the highest Safety Integrity Level (SIL 3) according to IEC 61508.

3TK28 safety relays				With relay enabling circuits			With electronic enabling circuits			With contactor relay enabling circuits			With special functions	
Basic units	Basic units t_V	Expansion units	Two-hand control units	Basic units	Basic units t_V	Multifunction units	Basic units	Expansion units	Expansion units t_V	Standstill monitors	Speed monitors			
3TK2821	3TK2826	3TK2830	3TK2834	3TK2840	3TK2842	3TK2845	3TK2850	3TK2856	3TK2857	3TK2810-0	3TK2810-1			
3TK2822	3TK2827			3TK2841			3TK2851							
3TK2823	3TK2828						3TK2852							
3TK2824							3TK2853							
3TK2825														
3TK2826														
See page 11/5				See page 11/10			See page 11/13			See page 11/16				

Note:

For 3SK successor devices and other products from the safety technology portfolio, see [Catalog IC 10 "Industrial Controls"](#).

Safety Relays

SIRIUS 3TK28 Safety Relays

General data

Benefits

General

- Can be used for all safety applications thanks to compliance with the highest safety requirements (PL e according to EN ISO 13849-1 or SIL 3 according to IEC 61508)
- Suitable for use all over the world through compliance with all globally established certifications
- Compact, service-proven SIRIUS design creates more space in the control cabinet
- Flexible connectability and expandability make subsequent changes easy
- Removable terminals for greater plant availability
- Yellow front plate clearly identifies the device as an item of safety technology
- Sensor cable up to 2 000 m long enables use in large-scale plants

Relay outputs

- Different voltages can be switched through the floating contacts
- Higher currents can be switched with relay contacts

Electronic outputs

- Wear-free
- Suitable for operation in fast switching applications
- Insensitive to vibrations and dirt
- Good electrical endurance

Microprocessor systems

- Flexible use thanks to many different integrated functions
- Easy parameterization using DIP switches on the front
- High functional reliability based on extensive monitoring functions
- Operated by the machine control system
- Also connection of non-contact sensors (light arrays, light barriers etc.)

Application

SIRIUS safety relays are used mainly in autonomous safety applications which are not connected to a safety-related bus system.

Their function here is to evaluate the sensors and the safety-related shutdown of hazards. Also they check and monitor the sensors, actuators and safety-related functions of the safety relay.

More information

For the manual "SIRIUS 3TK28 Safety Relay", see <https://support.industry.siemens.com/cs/ww/en/view/58843445>.

For the system manual "3TK2810-1 Safety-Related Speed Monitor", see <https://support.industry.siemens.com/cs/ww/en/view/43707376>.

For the manual "SIRIUS 3TK2826 Safety Relay", see <https://support.industry.siemens.com/cs/ww/en/view/24044904>.

For the manual "3TK2845 Multifunction Device", see <https://support.industry.siemens.com/cs/ww/en/view/25613330>.

Overview



SIRIUS 3TK282. safety relay

Safety relays with relay enabling circuits – Safety with floating contacts

SIRIUS safety relays with relay enabling circuits are not only extremely space-saving thanks to their compact design, they also offer extra safety with positively driven NO and feedback contacts in pairs. If one of the contact welds, the other assumes the disconnection of the circuit. A positively driven feedback contact (NC) then performs the fault detection of the faulty NO contact.

For two-hand operation consoles in press control systems, the 3TK2834 press control device serves as a safe evaluation unit.

3TK2830 expansion units are available to increase the number of enabling circuits.

3TK2826 safety relays

The 3TK2826 is a parameterizable safety relay. It is used as an evaluation unit for typical safety chains (identify, evaluate, realize). A number of functions can be set using the DIP switches on the front. The 3TK2826 is therefore universally applicable.

Safety sensors (e.g. EMERGENCY-STOP devices) are connected at the input side while contactors or valves for disconnecting the "hazardous function" are connected at the output side. The 3TK2826 performs the monitoring of the sensor and actuator functions as well as the safe disconnection of the outputs (enabling circuits).

3TK2826 with DIP switch:

OFF	Schematic	DIP switch No.	ON
Without crossover monitoring		1	Switching mat operation
NC/NO evaluation		2	NC/NC evaluation
2 x 1-channel		3	1 x 2-channel
Debounce time for sensor inputs ≈ 50 ms		4	Debounce time for sensor inputs ≈ 10 ms
Sensor input Autostart		5	Sensor input Monitored start
Cascading input autostart		6	Cascading input Monitored start
With start test		7	Without start test
Automatic start after mains failure (not permitted in connection with a start test)		8	Without automatic start after mains failure

Benefits

General

- Compact design
- Floating safe outputs
- 3TK2834 safety relay also suitable for press and punch controls
- Can be used up to an ambient temperature of max. 70 °C

3TK2826 safety relays

- Connection for all common sensor types
- Many functions available in just one device
- Status displays
- Extended diagnostic capabilities
- Approvals (EN ISO 13849-1, IEC 61508, UL/CSA)
- Reporting of trip faults in the actuator circuit
- Floating outputs
- Wide-range device
- Sensor condition saved in the event of voltage failure

Safety Relays

SIRIUS 3TK28 Safety Relays

With relay enabling circuits

Selection and ordering data

Type	Basic units				
	3TK2821	3TK2822	3TK2823	3TK2824	3TK2825
Sensors					
• Inputs	1	1	1	1	1
• Electronic	--	--	--	--	--
• With contacts	✓	✓ ¹⁾	✓	✓	✓
• Magnetically operated switch (Reed contacts)	--	--	--	--	--
Safety mats	--	--	--	--	--
Start					
• Auto	✓	✓	--	✓	✓
• Monitored	✓	--	✓	✓	✓
Cascading input 24 V DC	--	--	--	--	--
Key-operated switch	--	--	--	--	--
Enabling circuit, floating					
• Stop category 0	3 NO	2 NO	2 NO	2 NO	3 NO
• Stop category 1	--	--	--	--	--
Enabling circuit, electronic					
• Stop category 0	--	--	--	--	--
• Stop category 1	--	--	--	--	--
Signaling outputs					
• Floating	1 NC	--	--	--	2 NC
• Electronic	--	--	--	--	--
Standards	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508
Test certificates	BG, SUVA, UL, CSA	BG, SUVA, UL, CSA	BG, SUVA, UL, CSA	BG, SUVA, UL, CSA	BG, SUVA, UL, CSA
SIL level max. according to IEC 61508	1	3	3	1	3
Performance level PL according to EN ISO 13849-1	c	e	e	c	e
Probability of a dangerous failure per hour (PFH_d)	1.1 × 10 ⁻⁹ 1/h	1.3 × 10 ⁻⁹ 1/h	1.3 × 10 ⁻⁹ 1/h	8.7 × 10 ⁻¹⁰ 1/h	1.5 × 10 ⁻⁹ 1/h
Rated control supply voltage					
• 24 V DC	--	--	--	✓	✓
• 24 V AC/DC	✓	✓	✓	✓	--
• 24 V AC	--	--	--	--	✓
• 115 V AC	--	--	--	✓	✓
• 230 V AC	--	--	--	✓	✓
• 24 ... 240 V AC/DC	--	--	--	--	--

✓ Available

-- Not available

1) The ON button is not monitored.

Safety Relays

SIRIUS 3TK28 Safety Relays

With relay enabling circuits

Type	Basic units						Two-hand control units 3TK2834	Expansion units ²⁾ 3TK2830
	3TK2826 24 V DC	Wide voltage range	24 V DC t_v	Wide voltage range t_v	3TK2827 t_v	3TK2828 t_v		
Sensors								
• Inputs	1	1	1	1	1	1	1	--
• Electronic	✓	--	✓	--	--	--	--	--
• With contacts	✓	✓	✓	✓	✓	✓	✓	--
• Magnetically operated switch (Reed contacts)	✓	✓	✓	✓	--	--	--	--
Safety mats	✓	✓	✓	✓	--	--	--	--
Start								
• Auto	✓	✓	✓	✓	--	✓	--	--
• Monitored	✓	✓	✓	✓	✓	--	--	--
Cascading input 24 V DC	✓	✓	✓	✓	--	--	--	--
Key-operated switch	--	--	--	--	--	--	--	--
Enabling circuit, floating								
• Stop category 0	4 NO	4 NO	2 NO	2 NO	2 NO	2 NO	2 NO	4 NO
• Stop category 1	--	--	2 NO	2 NO	2 NO	2 NO	--	--
Enabling circuit, electronic								
• Stop category 0	--	--	--	--	--	--	--	--
• Stop category 1	--	--	--	--	--	--	--	--
Signaling outputs								
• Floating	1 NC	1 NO + 1 NC	2 NC	1 NO + 2 NC	1 NC	1 NC	2 NC	--
• Electronic	2	--	2	--	--	--	--	--
Standards			IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508			IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508, EN 574		IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508
Test certificates	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA	BG, SUVA, UL, CSA	BG, SUVA, UL, CSA	BG, SUVA, UL, CSA, TÜV	BG, SUVA, UL, CSA, TÜV
SIL level max. according to IEC 61508	3	3	3	3	3 ¹⁾	3 ¹⁾	--	As basic unit
Performance level PL according to EN ISO 13849-1	e	e	e	e	e ¹⁾	e ¹⁾	--	As basic unit
Probability of a dangerous failure per hour (PFH_d)	7.8 x 10 ⁻⁹ 1/h	7.8 x 10 ⁻⁹ 1/h	7.8 x 10 ⁻⁹ 1/h	7.8 x 10 ⁻⁹ 1/h	2.7 x 10 ⁻⁹ 1/h	2.7 x 10 ⁻⁹ 1/h	1.4 x 10 ⁻⁹ 1/h	1.2 x 10 ⁻⁹ 1/h
Rated control supply voltage								
• 24 V DC	✓	--	✓	--	✓	✓	✓	--
• 24 V AC/DC	--	--	--	--	--	--	--	✓
• 24 V AC	--	--	--	--	✓	✓	✓	--
• 115 V AC	--	--	--	--	✓	✓	✓	✓
• 230 V AC	--	--	--	--	✓	✓	✓	✓
• 24 ... 240 V AC/DC	--	✓	--	✓	--	--	--	--

✓ Available
-- Not available

¹⁾ Only possible for instantaneous enabling contacts, otherwise SIL level 2 or Performance level PL d.

Safety Relays

SIRIUS 3TK28 Safety Relays

With relay enabling circuits

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41L



3TK2821-1CB30



3TK2825-1BB40



3TK2826-2BB40



3TK2827-1BB41

Rated control supply voltage U_s	Start	OFF-delay t_v	DT	Screw terminals	DT	Spring-type terminals	
V		s		Article No.	Price per PU	Article No.	Price per PU

Basic units

With floating enabling circuits

3TK2821	• 24 AC/DC	Auto/monitored	--	▶	3TK2821-1CB30	▶	3TK2821-2CB30
3TK2822	• 24 AC/DC	Auto	--	A	3TK2822-1CB30	C	3TK2822-2CB30
3TK2823	• 24 AC/DC	Monitored	--	A	3TK2823-1CB30	C	3TK2823-2CB30
3TK2824	• 24 AC/DC	Auto/monitored	--	A	3TK2824-1CB30	C	3TK2824-2CB30
	• 24 DC	Auto/monitored	--	A	3TK2824-1BB40	C	3TK2824-2BB40
	• 115 AC	Auto/monitored	--	C	3TK2824-1AJ20	C	3TK2824-2AJ20
	• 230 AC	Auto/monitored	--	C	3TK2824-1AL20	C	3TK2824-2AL20
3TK2825	• 24 DC	Auto/monitored	--	▶	3TK2825-1BB40	A	3TK2825-2BB40
	• 24 AC	Auto/monitored	--	C	3TK2825-1AB20	C	3TK2825-2AB20
	• 115 AC	Auto/monitored	--	C	3TK2825-1AJ20	C	3TK2825-2AJ20
	• 230 AC	Auto/monitored	--	A	3TK2825-1AL20	C	3TK2825-2AL20
3TK2826	• 24 DC	Auto/monitored	--	A	3TK2826-1BB40	A	3TK2826-2BB40
	• 24 ... 240 AC/DC	Auto/monitored	--	A	3TK2826-1CW30	C	3TK2826-2CW30

With time-delayed enabling circuits

3TK2826 t_v	• 24 DC	Auto/monitored	0.05 ... 3	C	3TK2826-1BB41	C	3TK2826-2BB41
	• 24 ... 240 AC/DC	Auto/monitored	0.05 ... 3	C	3TK2826-1CW31	C	3TK2826-2CW31
	• 24 DC	Auto/monitored	0.5 ... 30	A	3TK2826-1BB42	C	3TK2826-2BB42
	• 24 ... 240 AC/DC	Auto/monitored	0.5 ... 30	C	3TK2826-1CW32	C	3TK2826-2CW32
	• 24 DC	Auto/monitored	5 ... 300	C	3TK2826-1BB44	C	3TK2826-2BB44
	• 24 ... 240 AC/DC	Auto/monitored	5 ... 300	C	3TK2826-1CW34	C	3TK2826-2CW34
3TK2827 t_v	• 24 DC	Monitored	0.05 ... 3	A	3TK2827-1BB41	C	3TK2827-2BB41
	• 24 AC	Monitored	0.05 ... 3	C	3TK2827-1AB21	C	3TK2827-2AB21
	• 115 AC	Monitored	0.05 ... 3	C	3TK2827-1AJ21	C	3TK2827-2AJ21
	• 230 AC	Monitored	0.05 ... 3	C	3TK2827-1AL21	C	3TK2827-2AL21
	• 24 DC	Monitored	0.5 ... 30	A	3TK2827-1BB40	C	3TK2827-2BB40
	• 24 AC	Monitored	0.5 ... 30	C	3TK2827-1AB20	C	3TK2827-2AB20
	• 115 AC	Monitored	0.5 ... 30	C	3TK2827-1AJ20	C	3TK2827-2AJ20
	• 230 AC	Monitored	0.5 ... 30	C	3TK2827-1AL20	C	3TK2827-2AL20
3TK2828 t_v	• 24 DC	Auto	0.05 ... 3	A	3TK2828-1BB41	A	3TK2828-2BB41
	• 24 AC	Auto	0.05 ... 3	C	3TK2828-1AB21	C	3TK2828-2AB21
	• 115 AC	Auto	0.05 ... 3	C	3TK2828-1AJ21	C	3TK2828-2AJ21
	• 230 AC	Auto	0.05 ... 3	C	3TK2828-1AL21	C	3TK2828-2AL21
	• 24 DC	Auto	0.5 ... 30	A	3TK2828-1BB40	C	3TK2828-2BB40
	• 24 AC	Auto	0.5 ... 30	C	3TK2828-1AB20	C	3TK2828-2AB20
	• 115 AC	Auto	0.5 ... 30	C	3TK2828-1AJ20	C	3TK2828-2AJ20
	• 230 AC	Auto	0.5 ... 30	C	3TK2828-1AL20	C	3TK2828-2AL20

Safety Relays

SIRIUS 3TK28 Safety Relays

With relay enabling circuits

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41L



3TK2830-1CB30

Rated control supply voltage U_s	Start	OFF-delay t_v	DT	Screw terminals	DT	Spring-type terminals	
V		s		Article No.	Price per PU	Article No.	Price per PU

Two-hand control units

With floating enabling circuits

3TK2834

• 24 DC	--	--	A	3TK2834-1BB40	C	3TK2834-2BB40
• 24 AC	--	--	C	3TK2834-1AB20	C	3TK2834-2AB20
• 115 AC	--	--	C	3TK2834-1AJ20	C	3TK2834-2AJ20
• 230 AC	--	--	C	3TK2834-1AL20	C	3TK2834-2AL20

Expansion units

With floating enabling circuits

3TK2830

• 24 AC/DC	--	--	▶	3TK2830-1CB30	▶	3TK2830-2CB30
• 115 AC	--	--	C	3TK2830-1AJ20	C	3TK2830-2AJ20
• 230 AC	--	--	C	3TK2830-1AL20	C	3TK2830-2AL20

Safety Relays

SIRIUS 3TK28 Safety Relays

With electronic enabling circuits

Overview



SIRIUS 3TK284. safety relay

Fast, safe and wear-free switching

Evaluation units with electronic components are becoming increasingly established in safety applications, as a considerably higher number of starting operations and electrical life of the devices is achieved with permanent functional checks and consistently wear-free operation. The compact and light devices also permit series connection or normal operational switching, e.g. through a PLC.

If several enabling circuits or floating enabling circuits are required in one application, the units can be expanded with expansion units from the 3TK2830 series.

3TK2845 multi-function units

Up to now, standard combinations of safety applications such as EMERGENCY-STOP and protective door monitoring were possible only by using several individual safety relays. 3TK2845 combines several functions in a single unit. Two electronic and two relay enabling circuits ensure safe disconnection – in just a few steps, quickly and cheaply.

Benefits

- Permanent function checking
- No wear because switched electronically
- High switching frequency
- Long electrical endurance
- Evaluation of electronic sensors
- Sensor lead up to max. 2 000 m
- Cascading possible
- Insensitive to vibrations and dirt
- Compact design, low weight
- Approved for the world market

3TK2845 safety relays

- Two sensor inputs (e.g. EMERGENCY-STOP, protective door)
- Also suitable for protective door interlocking and OK buttons
- Two electronic and two relay enabling circuits

Selection and ordering data

Type	Basic units			Multi-function units							
	3TK2840	3TK2841	3TK2842	3TK2845		"Monitored start"	"Monitored start"	OK button	OK button	"Spring-type interlocking"	"Solenoid interlocking"
			t_v	"Automatic and monitored start"	"Automatic and monitored start"						
				t_v	t_v	t_v	t_v	t_v	t_v	t_v	t_v
Sensors											
• Inputs	1	1	1	2	2	2	2	2	2	2	2
• Electronic	--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• With contacts	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
• Magnetically operated switch (Reed contacts)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Safety mats	--	✓	✓	✓	✓	✓	✓	--	--	--	--
Start											
• Auto	✓	✓	✓	1	1	--	--	1	1	--	--
• Monitored	✓	✓	✓	1	1	2	2	1	1	2	2
Cascading input 24 V DC	--	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Key-operated switch	--	--	--	✓	✓	✓	✓	✓	✓	✓	✓
Enabling circuit, floating											
• Stop category 0	--	--	--	2 NO	1 NO	2 NO	1 NO	2 NO	1 NO	1 NO	1 NO
• Stop category 1	--	--	--	--	1 NO	--	1 NO	--	1 NO	1 NO	1 NO
Enabling circuit, electronic											
• Stop category 0	2 ¹⁾	2	1	2	1	2	1	2	1	1	1
• Stop category 1	--	--	1	--	1	--	1	--	1	1	1
Signaling outputs											
• Floating	--	--	--	--	--	--	--	--	--	--	--
• Electronic	--	--	--	1	1	1	1	1	1	1	1
Standards	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508, EN 50156-1						IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508			
Test certificates	TÜV, UL, CSA										
SIL level max. according to IEC 61508	2	3	3	3	3	3	3	3	3	3	3
Performance Level PL according to EN ISO 13849-1	d	e	e	e	e	e	e	e	e	e	e
Probability of a dangerous failure per hour (PFH_d)	1.1 x 10 ⁻⁸ /h	5.4 x 10 ⁻¹¹ /h	5.4 x 10 ⁻¹¹ /h	6.9 x 10 ⁻⁹ /h	6.9 x 10 ⁻⁹ /h	6.9 x 10 ⁻⁹ /h	6.9 x 10 ⁻⁹ /h	6.9 x 10 ⁻⁹ /h	6.9 x 10 ⁻⁹ /h	6.9 x 10 ⁻⁹ /h	6.9 x 10 ⁻⁹ /h
Rated control supply voltage 24 V DC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

✓ Available

-- Not available

1) The outputs are only safe when an external contactor is used.

Safety Relays

SIRIUS 3TK28 Safety Relays

With electronic enabling circuits

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41L



3TK2841-1BB40



3TK2842-1BB41



3TK2845-1HB40



3TK2845-1HB41



3TK2845-2DB40

Rated control supply voltage U_s	Start	OFF-delay t_v	DT	Screw terminals	DT	Spring-type terminals	
V		s		Article No.	Price per PU	Article No.	Price per PU

Basic units

With electronic enabling circuits

3TK2840

• 24 DC	Auto/monitored	--	B	3TK2840-1BB40	C	3TK2840-2BB40
---------	----------------	----	---	---------------	---	---------------

3TK2841

• 24 DC	Auto/monitored	--	A	3TK2841-1BB40	C	3TK2841-2BB40
---------	----------------	----	---	---------------	---	---------------

With time-delayed enabling circuits

3TK2842 t_v

• 24 DC	Auto/monitored	0.05 ... 3	C	3TK2842-1BB41	C	3TK2842-2BB41
	Auto/monitored	0.5 ... 30	B	3TK2842-1BB42	B	3TK2842-2BB42
	Auto/monitored	5 ... 300	C	3TK2842-1BB44	C	3TK2842-2BB44

Multi-function units

3TK2845 "Automatic and monitored start"

• 24 DC	1/1	--	C	3TK2845-1HB40	C	3TK2845-2HB40
---------	-----	----	---	---------------	---	---------------

3TK2845 t_v "Automatic and monitored start"

• 24 DC	1/1	0.05 ... 3	C	3TK2845-1HB41	C	3TK2845-2HB41
	1/1	0.5 ... 30	C	3TK2845-1HB42	C	3TK2845-2HB42
	1/1	5 ... 300	C	3TK2845-1HB44	C	3TK2845-2HB44

3TK2845 "Monitored start"

• 24 DC	--/2	--	C	3TK2845-1DB40	C	3TK2845-2DB40
---------	------	----	---	---------------	---	---------------

3TK2845 t_v "Monitored start"

• 24 DC	--/2	0.05 ... 3	C	3TK2845-1DB41	C	3TK2845-2DB41
	--/2	0.5 ... 30	C	3TK2845-1DB42	C	3TK2845-2DB42
	--/2	5 ... 300	C	3TK2845-1DB44	C	3TK2845-2DB44

3TK2845 "OK button"

• 24 DC	1/1	--	C	3TK2845-1EB40	C	3TK2845-2EB40
---------	-----	----	---	---------------	---	---------------

3TK2845 t_v "OK button"

• 24 DC	1/1	0.05 ... 3	C	3TK2845-1EB41	C	3TK2845-2EB41
	1/1	0.5 ... 30	C	3TK2845-1EB42	C	3TK2845-2EB42
	1/1	5 ... 300	C	3TK2845-1EB44	C	3TK2845-2EB44

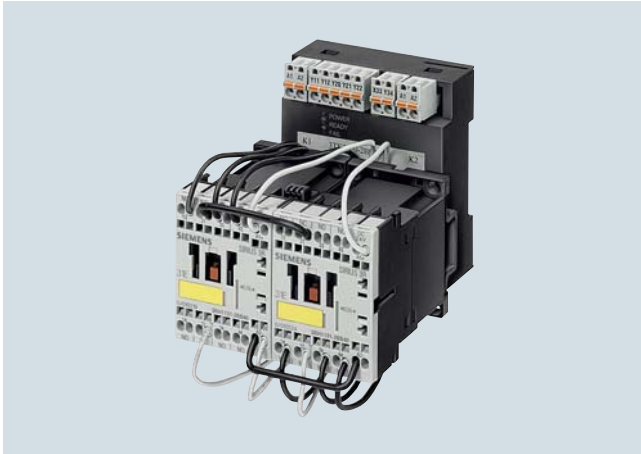
3TK2845 t_v "Spring-type interlocking"

• 24 DC	--/2	0.05 ... 3	C	3TK2845-1FB41	C	3TK2845-2FB41
	--/2	0.5 ... 30	C	3TK2845-1FB42	C	3TK2845-2FB42
	--/2	5 ... 300	C	3TK2845-1FB44	C	3TK2845-2FB44

3TK2845 t_v "Solenoid interlocking"

• 24 DC	--/2	0.05 ... 3	C	3TK2845-1GB41	C	3TK2845-2GB41
	--/2	0.5 ... 30	C	3TK2845-1GB42	C	3TK2845-2GB42
	--/2	5 ... 300	C	3TK2845-1GB44	C	3TK2845-2GB44

Overview



SIRIUS 3TK285. safety relay

The 3-in-1 complete unit

The 3TK285. safety relays are a perfect combination of electronic safety functionality and two redundant SIRIUS contactor relays with contacts. They are ready-assembled, wired, tested and certified as a unit.

Expansion units (3TK2856 and 3TK2857) are available to increase the number of enabling circuits.

Benefits

- Floating enabling circuits
- AC-15/DC-13 switching capacity
- Protective separation
- High mechanical and electrical endurance
- Certified as a complete unit
- Fault minimization and cost reduction through factory wiring
- Low mounting costs

Safety Relays

SIRIUS 3TK28 Safety Relays

With contactor relay enabling circuits

Selection and ordering data

Type	Basic units				Expansion units ¹⁾	
	3TK2850	3TK2851	3TK2852	3TK2853	3TK2856	3TK2857 t _v
Sensors						
• Inputs	1	1	1	1	--	--
• Electronic	--	--	--	✓	--	--
• With contacts	✓	✓	✓	✓	--	--
• Magnetically operated switch (Reed contacts)	✓	✓	✓	✓	--	--
Safety mats	✓	✓	✓	✓	--	--
Start						
• Auto	✓	✓	✓	✓	--	--
• Monitored	✓	✓	✓	✓	--	--
Cascading input 24 V DC	--	--	--	✓	✓	✓
Key-operated switch	--	--	--	--	--	--
Enabling circuit, floating						
• Stop category 0	3 NO	2 NO	6 NO	3 NO	6 NO	--
• Stop category 1	--	--	--	--	--	3 NO
Enabling circuit, electronic						
• Stop category 0	--	--	--	1	1	1
• Stop category 1	--	--	--	--	--	--
Signaling outputs						
• Floating	--	1 NC	1 NC	--	1 NC	--
• Electronic	--	--	--	--	--	--
Standards	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508
Test certificates	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA	TÜV, UL, CSA
SIL level max. according to IEC 61508	2	2	2	3	As basic unit	As basic unit
Performance level PL according to EN ISO 13849-1	d	d	d	e	As basic unit	As basic unit
Probability of a dangerous failure per hour (PFH_d)	1.2 × 10 ⁻⁸ 1/h	1.1 × 10 ⁻⁸ 1/h	1.1 × 10 ⁻⁸ 1/h	1.1 × 10 ⁻⁸ 1/h	1.1 × 10 ⁻⁸ 1/h	1.1 × 10 ⁻⁸ 1/h
Rated control supply voltage						
• 24 V DC	✓	✓	✓	✓	✓	✓
• 24 V AC/DC	--	--	--	--	--	--
• 24 V AC	✓	✓	--	--	--	--
• 115 V AC	✓	✓	--	--	--	--
• 230 V AC	✓	✓	✓	--	--	--
• 24 ... 240 V AC/DC	--	--	--	--	--	--
Rated operational voltage						
• 24 V DC	✓	✓	✓	✓	✓	✓
• 230 V AC	✓	✓	✓	✓	✓	✓
• 600 V AC	✓	✓	✓	✓	✓	✓
Switching capacity						
• AC-15 at U = 230 V	6 A	6 A	6 A	6 A	6 A	6 A
• DC-13 at U = 24 V	10 A	10 A	10 A	10 A	10 A	10 A

✓ Available

-- Not available

1) For expansion of Siemens safety products.

Safety Relays

SIRIUS 3TK28 Safety Relays

With contactor relay enabling circuits

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41L





3TK2850-2BB40



3TK2851-2BB40



3TK2852-2BB40

Rated control supply voltage U_s	Start	OFF-delay t_v	DT	Screw terminals 	DT	Spring-type terminals 	
V		s		Article No.	Price per PU	Article No.	Price per PU
Basic units							
With contactor relay enabling circuits							
3TK2850							
• 24 DC	Auto/monitored	--	C	3TK2850-1BB40	C	3TK2850-2BB40	
• 115 AC	Auto/monitored	--	C	3TK2850-1AJ20	C	3TK2850-2AJ20	
• 230 AC	Auto/monitored	--	C	3TK2850-1AL20	C	3TK2850-2AL20	
3TK2851							
• 24 DC	Auto/monitored	--	C	3TK2851-1BB40	C	3TK2851-2BB40	
• 115 AC	Auto/monitored	--	C	3TK2851-1AJ20	C	3TK2851-2AJ20	
• 230 AC	Auto/monitored	--	C	3TK2851-1AL20	C	3TK2851-2AL20	
3TK2852							
• 24 DC	Auto/monitored	--	C	3TK2852-1BB40	C	3TK2852-2BB40	
• 230 AC	Auto/monitored	--	C	3TK2852-1AL20	C	3TK2852-2AL20	
3TK2853							
• 24 DC	Auto/monitored	--	C	3TK2853-1BB40	C	3TK2853-2BB40	
Expansion units							
With contactor relay enabling circuits							
3TK2856							
• 24 DC	--	--	C	3TK2856-1BB40	C	3TK2856-2BB40	
3TK2857 t_v							
• 24 DC	--	0.05 ... 3	C	3TK2857-1BB41	C	3TK2857-2BB41	
• 24 DC	--	0.5 ... 30	C	3TK2857-1BB42	C	3TK2857-2BB42	
• 24 DC	--	5 ... 300	C	3TK2857-1BB44	C	3TK2857-2BB44	

Safety Relays

SIRIUS 3TK28 Safety Relays

With special functions

Overview



SIRIUS 3TK2810 safety relays

3TK2810-0 standstill monitors

The standstill monitor increases safety in hazardous areas. Without a sensor, it detects motor stoppage from the residual magnetization of the rotating motor. When an adjustable threshold value is undershot, it uses its outputs to allow access to hazardous areas, for example by unlocking a protective door.

3TK2810-1 speed monitors

The speed monitor combines two safety functions in one unit by continuously monitoring machines and plants for standstill and speed.

Through simple parameterization and permanent diagnosis on the display, faults can be quickly remedied at any time – often before they cause plant downtimes.

In addition to standstill and speed monitoring, the unit also features an integrated monitoring function of a protective door with spring-type interlocking. Therefore, an additional evaluation unit is not needed.

Benefits

3TK2810-0 standstill monitors

- No additional sensors required
- Signaling of faults with diagnostics display
- Standstill time can be set
- The unit can be used with frequency converters

3TK2810-1 speed monitors

- Menu-prompted, easy parameterization
- Direct diagnosis on the display means shorter downtimes thanks to early fault detection
- Integrated protective door monitoring means greater safety because access to the plant is allowed only in the safe state
- Suitable for all standard sensors, i.e. high flexibility

Selection and ordering data

Type	Standstill monitors 3TK2810-0	Speed monitors 3TK2810-1
Sensors		
• Inputs	3	4
• Electronic	--	3
• With contacts	--	1
• Without sensors (measuring inputs)	3	--
• Magnetically operated switch (Reed contacts)	--	--
Safety mats	--	--
Start		
• Auto	✓	✓
• Monitored	--	✓
Cascading input 24 V DC	--	--
Key-operated switch	--	--
Enabling circuit, floating		
• Stop category 0	3 NO + 1 NC	2
• Stop category 1	--	--
Enabling circuit, electronic		
• Stop category 0	--	--
• Stop category 1	--	--

✓ Available

-- Not available

Type	Standstill monitors 3TK2810-0	Speed monitors 3TK2810-1
Signaling outputs		
• Floating	1 CO	--
• Electronic	2	2
Standards	IEC 60204-1, EN ISO 12100, EN ISO 13849-1, IEC 61508	IEC 60947-5-1, EN ISO 13849-1, IEC 60204-1, IEC 61508
Test certificates	TÜV, UL, CSA	TÜV, UL, CSA
SIL level max. according to IEC 61508	3	3
Performance level PL according to EN ISO 13849-1	e	e
Probability of a dangerous failure per hour (PFH_d)	1.5 x 10 ⁻⁸ 1/h	3.38 x 10 ⁻⁹ 1/h
Rated control supply voltage		
• 24 V DC	✓	✓
• 230 V AC	✓	--
• 400 V AC	✓	--
• 120 ... 240 V AC/DC	--	✓

PU (UNIT, SET, M) = 1
 PS* = 1 unit
 PG = 41L



3TK2810-0BA01



3TK2810-0GA02



3TK2810-1BA41

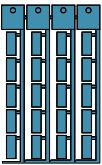







Rated control supply voltage U_s	OFF-delay t_v	DT	Screw terminals	DT	Spring-type terminals	
V	s		Article No.	Price per PU	Article No.	Price per PU
Standstill monitors						
3TK2810-0						
• 24 DC	0.2 ... 6	B	3TK2810-0BA01	C	3TK2810-0BA02	
• 230 AC	0.2 ... 6	C	3TK2810-0GA01	C	3TK2810-0GA02	
• 400 AC	0.2 ... 6	C	3TK2810-0JA01	C	3TK2810-0JA02	
Speed monitors						
3TK2810-1 for NPN/PNP proximity switches and encoders						
• 24 DC	0 ... 600	A	3TK2810-1BA41	A	3TK2810-1BA42	
• 120 ... 240 AC/DC	0 ... 600	B	3TK2810-1KA41	B	3TK2810-1KA42	
3TK2810-1 for NAMUR proximity switches and encoders						
• 24 DC	0 ... 600	B	3TK2810-1BA41-0AA0	B	3TK2810-1BA42-0AA0	
• 120 ... 240 AC/DC	0 ... 600	B	3TK2810-1KA41-0AA0	B	3TK2810-1KA42-0AA0	

Safety Relays

SIRIUS 3TK28 Safety Relays

Accessories

Accessories

Use	Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Blank labels								
	For 3TK28							
		Unit labeling plates For SIRIUS devices 20 mm x 7 mm, pastel turquoise ¹⁾	D	3RT1900-1SB20		100	340 units	41B
	For 3TK28	Adhesive labels For SIRIUS devices						
		• 19 mm x 6 mm, pastel turquoise	C	3RT1900-1SB60		100	3 060 units	41B
		• 19 mm x 6 mm, zinc yellow	C	3RT1900-1SD60		100	3 060 units	41B
3RT1900-1SB20								
Push-in lugs and covers								
	For 3TK28							
		Push-in lugs For screw fixing 2 units are required for each device	B	3RP1903		1	10 units	41H
3RP1903								
	For 3TK2827, 3TK2828							
		Sealable covers For securing against unauthorized adjustment of setting knobs	B	3RP1902		1	5 units	41H
3RP1902								
	For 3TK2826							
		Sealing foils For securing against unauthorized adjustment of setting knobs	A	3TK2826-0DA00-0HA0		1	5 units	41L
	For 3TK28							
			▶	3TK2820-0AA00		1	1 unit	41L
Adapters and connection cables for speed monitors								
	For 3TK2810-1							
		Adapters For connecting encoders of type Siemens/Heidenhain						
		• 15-pole	A	3TK2810-1A		1	1 unit	41L
3TK2810-1A								
		• 25-pole	A	3TK2810-1B		1	1 unit	41L
	3TK2810-1B							
	For 3TK2810-1							
		Connection cables For connecting the speed monitor to the 3TK2810-1A or 3TK2810-1B adapter	C	3TK2810-0A		1	1 unit	41L
3TK2810-0A								
Tools for opening spring-type terminals								
	For auxiliary circuit connections							
		Screwdrivers For all SIRIUS devices with spring-type terminals; 3.0 mm x 0.5 mm, length approx. 200 mm, titanium gray/black, partially insulated	A					
3RA2908-1A				Spring-type terminals 				
				3RA2908-1A		1	1 unit	41B

¹⁾ PC labeling system for individual inscription of unit labeling plates available from: murrplastik Systemtechnik GmbH, see Chapter 16 "Appendix" → "External Partners".

Commanding and Signaling Devices

**NEW**

Click on the Article No. in the catalog PDF to access it in the Industry Mall and get all related information.

Article-No.

3RA1943-2C
3RA1943-2B
3RA1953-2B
3RA1953-2N



Or directly in the Internet, e. g.
[www.siemens.com/
product?3RA1943-2C](http://www.siemens.com/product?3RA1943-2C)

Price groups

PG 41J, 41K, 42A

13/2 **Introduction****SIRIUS 3SB3 pushbuttons and indicator lights, 22 mm**

- 13/4 General data
Actuators and indicators, plastic, round, 22 mm
- 13/10 Complete units
- 13/16 Coordinate switches, complete
- 13/19 Actuating and signaling elements
Actuators and indicators, plastic, square, 26 mm x 26 mm
- 13/28 Complete units
- 13/30 Actuating and signaling elements
Actuators and indicators, metal, round, 22 mm
- 13/34 Complete units
- 13/39 Actuating and signaling elements
Components for actuators and indicators
- 13/49 Contact blocks and lampholders
- 13/53 AS-Interface F adapters for EMERGENCY STOP devices
- 13/54 Special locks
Inscriptions
- 13/55 Laser inscriptions
- 13/56 Inscriptions by laser printer
- 13/57 Insert labels
- 13/59 Backing plates
Accessories and spare parts
- 13/64 Buttons and lenses
- 13/65 Lamps, acoustic signal transformers and keys
- 13/67 Protective covers
- 13/69 Miscellaneous accessories
Enclosures
- 13/72 General data
- 13/73 Enclosures with standard fittings
- 13/75 Empty enclosures
- 13/76 Customized enclosures
- 13/77 Contact blocks and lampholders
- 13/79 Labeling plates for enclosures
- 13/81 Accessories for enclosures
Enclosures for AS-Interface
- 13/82 General data
- 13/83 AS-Interface enclosures with standard fittings
- 13/84 Components for AS-Interface
Enclosures
- IK PI¹⁾ Enclosures and front panel modules for AS-Interface

SIRIUS 3SB3 two-hand operation consoles

13/85 Plastic and metal enclosures

Note:

Conversion tool
e.g. from 3SB1 to 3SB3; see
www.siemens.com/sirius/conversion-tool

1)

See Catalog IK PI
"Industrial Communication"

Commanding and Signaling Devices

Introduction

Overview



3SB30, 3SB32



3SB31, 3SB33



3SB35, 3SB36

Pushbuttons and indicator lights

Designs

Nominal diameter

22 mm

26 mm × 26 mm

22 mm

Version

Plastic, round

Plastic, square

Metal, round

Actuators

Pushbuttons and pushbutton switches

✓

✓

✓

Illuminated pushbuttons and pushbutton switches

✓

✓

✓

Mushroom pushbuttons

✓

--

✓

Push-pull buttons

✓

--

✓

EMERGENCY STOP mushroom pushbuttons

✓

✓

✓

Selector switches

✓

✓

✓

Key-operated switches

✓

✓

✓

Special actuators

Coordinate switches

✓

--

--

Twin pushbuttons

✓

--

--

Potentiometer drives

✓

--

--

Indicators

Indicator lights

✓

✓

✓

Acoustic signaling devices

✓

--

--

Contact blocks

Single-pole

✓

✓

✓

Two-pole

✓

✓

✓

Lampholders

Wedge bases

✓ (with solder connections)

✓ (with solder connections)

✓ (with solder connections)

BA 9s bases

✓

✓

✓

With integrated LED

✓

✓

✓

Connections

Plug-in connection

--

--

--

Screw terminals

✓

✓

✓

Spring-type terminals

✓

✓

✓

Solder pins

✓

✓

✓

AS-Interface

✓

✓

✓

✓ Standard

-- Not available

□ Optional

AS-Interface solutions

Commanding and signaling devices of the SIRIUS 3SB3 series can be connected to the AS-Interface communication system quickly and easily with the help of various solutions.

For AS-Interface solutions, see [Catalog IK PI "Industrial Communication SIMATIC NET"](#).

AS-Interface EMERGENCY STOP according to ISO 13850

Using a special F adapter, EMERGENCY STOP devices according to ISO 13850 can be directly connected through the standard AS-Interface with safety-related communication (see page 13/53).

AS-Interface enclosures

Enclosures with standard fittings are listed in this catalog. For customized enclosures, use the 3SB3/3SF5 configurator to select the elements for equipping (see page 13/82).

AS-Interface front panel modules

The front panel module has one 4I/4O slave for connection of four 3SB3 commanding or signaling devices (see Catalog IK PI).

Note:

For safety characteristics, see Chapter 16, "Appendix" → "Standards and Approvals" → "Overview".



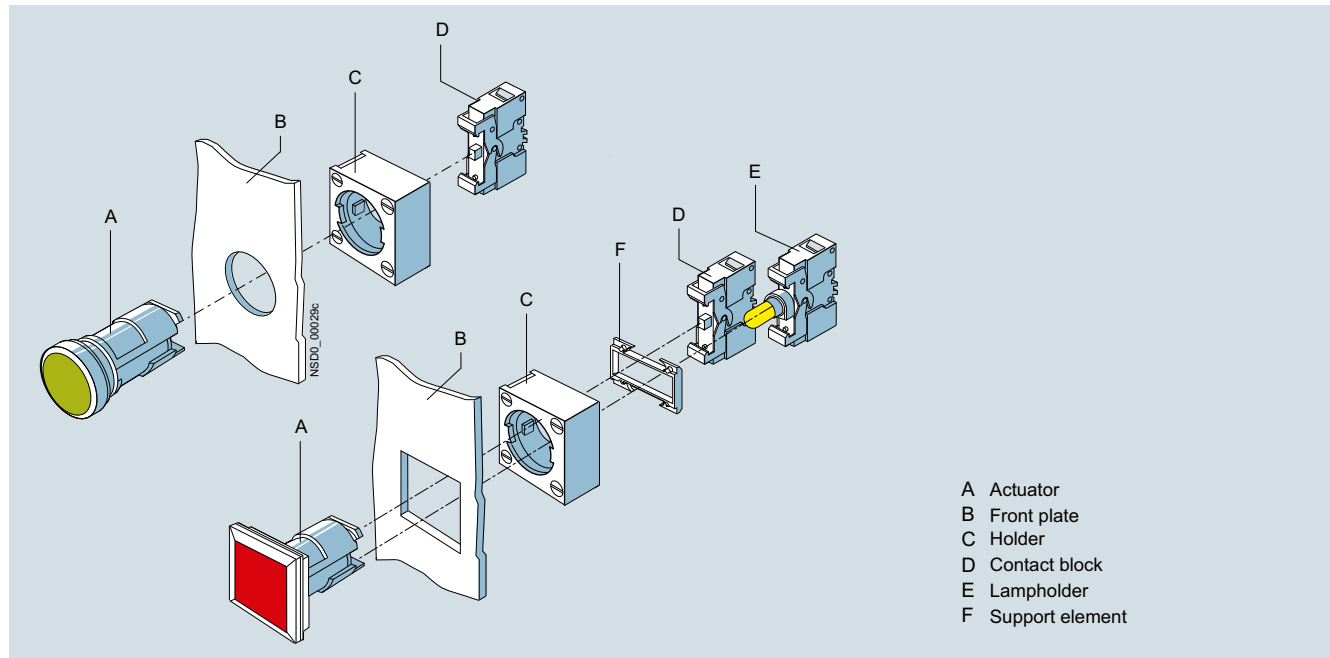
	3SB38	3SB386
	Enclosures	Two-hand operation consoles
Enclosures		
Plastic	✓	✓
Metal	✓	✓
Actuators		
Pushbuttons and pushbutton switches	✓	✓
Illuminated pushbuttons and pushbutton switches	✓	✓
Mushroom pushbuttons	✓	✓
Push-pull buttons	✓	☐
EMERGENCY STOP mushroom pushbuttons	✓	✓
Selector switches	✓	☐
Key-operated switches	✓	☐
Bowden wires	--	--
Indicators		
Indicator lights	✓	☐
Acoustic signaling devices	✓	☐
Contact blocks		
Single-pole	✓	✓
Two-pole	--	✓
Three-pole	--	--
Four-pole	--	--
Connections		
Screw terminals	✓	✓
Spring-type terminals	✓	☐
Molded cables	--	--
Plug-in connection	☐	☐
AS-Interface	✓	☐

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

General data

Overview

Front plate mounting

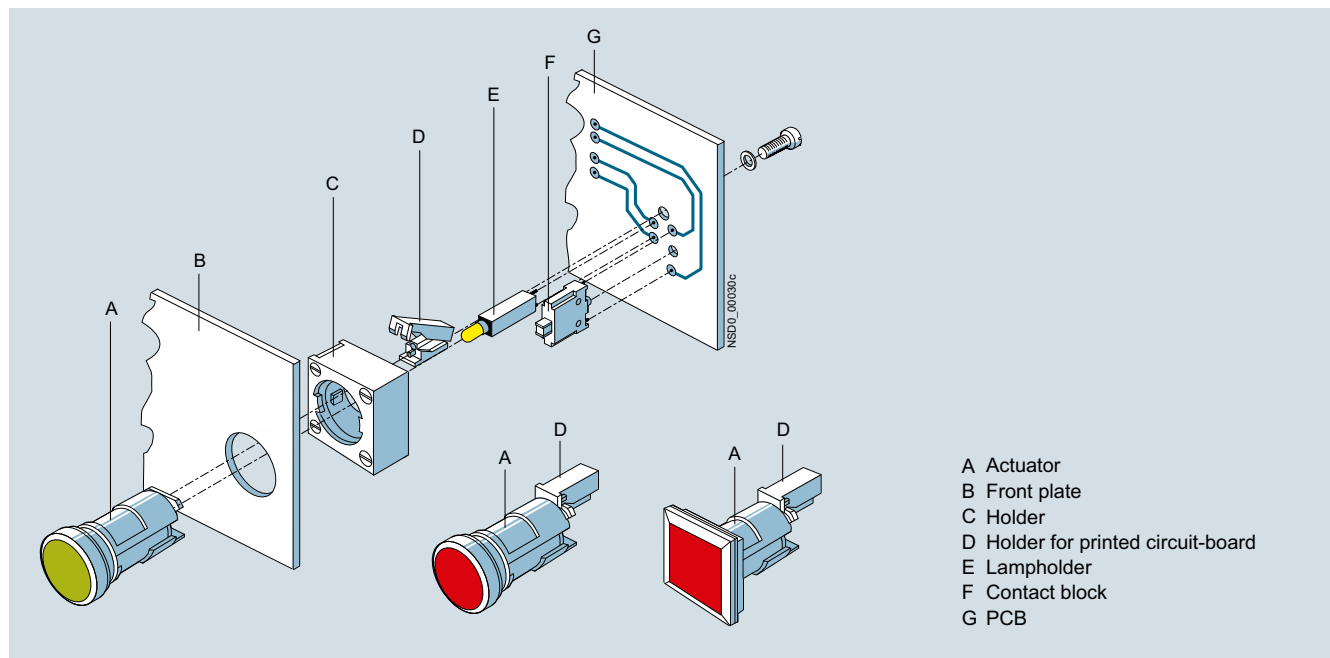


For actuators, see pages 13/10 to 13/48.

For contact blocks and lampholders, see pages 13/49 to 13/51.

For holders, see page 13/52.

Mounting on printed circuit boards



For contact blocks for mounting on printed circuit boards, see page 13/52.

Design

The 3SB3 series is a modular range of commanding and signaling devices for front plate mounting and rear conductor connection. As an alternative, individual elements can also be supplied for use on printed circuit boards. Complete units are offered for the most commonly used applications.



Actuators and indicators and complete units

The 3SB3 series is available:

- Made of molded plastic in flat, round and square design
- Made of metal in round design

The devices are of modern industrial design and can be mounted rapidly by a single person. The operating surfaces of the pushbuttons and illuminated pushbuttons are concave. The lenses of the indicator lights are convex.

The metal version with a high degree of protection according to IP67 and NEMA 4 is available for the world market.

One command point comprises:

- An actuator or lens assembly in front of the control panel
- A holder for mounting behind the control panel
- Up to 3 contact blocks and/or 1 lampholder behind the control panel
- A comprehensive range of accessories for inscription

Mounting of the contact blocks

Two contact blocks can be snapped onto the actuator in the standard version.

When three contact blocks or illuminated actuators are required, an additional holder must be plugged onto the actuator from the rear.

- 3SB3901-0AB holder for 3 contact blocks or for 2 contact blocks and 1 lampholder
- 3SB3901-0AC holder with pressure plates for actuating a central contact block when using a selector switch, key-operated switch and twin pushbutton with 3 contact blocks

For illuminated pushbuttons, illuminated pushbutton switches and illuminated selector switches the holder is included in the scope of supply as standard.

Contact blocks

The contact blocks are fitted with slow-action contacts (NO contact or NC contact) with double operating contacts. These ensure a high switching reliability even with small voltages and currents, such as 5 V/1 mA. They are suitable for use in both electronic systems and conventional controls.

Standards

IEC 60947-1, EN 60947-1,
IEC 60947-5-1, EN 60947-5-1,
IEC 60947-5-5, EN 60947-5-5 for EMERGENCY STOP
mushroom pushbuttons

Connection methods

The devices are available with screw terminals (box terminals), spring-type terminals or solder pins.



Screw terminals



Spring-type terminals



Solder pin connections

The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Support function

The 3SB3 pushbuttons and indicator lights can also be ordered via an online configurator.



Configurator available in the Industry Mall

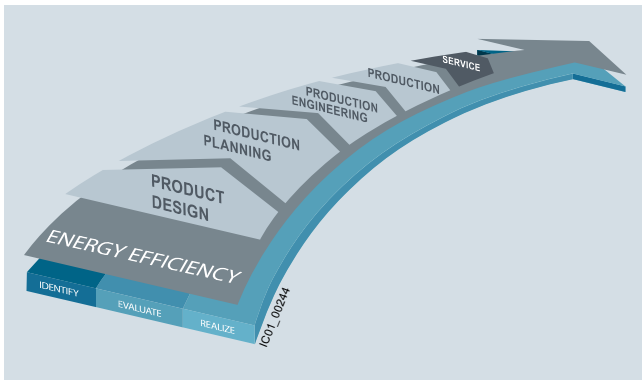
The online configurator is indicated in the corresponding tables by the symbol shown on an orange background.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

General data

Benefits

Advantages through energy efficiency



Overview of the energy management process

We offer you a unique portfolio for efficient energy management in the industry – a process that is used to optimize the energy requirements. We divide operational energy management into the three phases of identification, evaluation and implementation, and support you with suitable hardware and software solutions in each phase of the process.

The innovative products of the SIRIUS industrial controls portfolio can also make a substantial contribution to a plant's energy efficiency (see www.siemens.com/sirius/energysaving).

3SB3 pushbuttons and indicator lights contribute to energy efficiency throughout the plant as follows:

- Lower power consumption by means of LED technology
- Long service life

Application

Environmental conditions

The devices are climate-proof (KTW 24) and suitable for standard industrial applications and operation in marine applications. The 3SB3 series is climate-proof (KTW 24) and suitable for standard industrial applications and operation in marine applications.

The 3SB3 series uses the material polycarbonate. Polycarbonate can only be used to a limited extent when in contact with certain ambient media such as organic oils/lubricants. Its suitability for use is crucially influenced by the composition, concentration and exposure time of such ambient media and the relevant operating temperature of the plant. We ask you to consider these aspects when planning your specific application. Regardless of this, we recommend that you use solvent-resistant devices when using commanding and signaling devices in atmospheres that contain oil. These use the material polyamide and are marked with the word "solvent-resistant".

AS-Interface solutions

The 3SB3 commanding and signaling devices can be connected to the AS-Interface communication system quickly and safely with the help of various solutions.

The following solutions are available:

- ASIsafe EMERGENCY STOP mushroom pushbuttons (see page 13/53)
- AS-Interface enclosures with 1 to 6 command points (see page 13/82)
- AS-Interface front panel modules for 4 command points (see Catalog IK PI, "SIMATIC NET Industrial Communication")

"Intrinsic safety" type of protection EEx i according to ATEX directive 94/9/EC

The pushbuttons and indicator lights in round and square designs can also be used in hazardous areas.

The 3SB34...-0. contact blocks and the 3SB34...-1A lampholders (with 3SB39 01-1.A LED lamp) with screw terminals or spring-type terminals can be used.

Safety EMERGENCY STOP pushbuttons according to ISO 13850

For controls according to IEC 60204-1 or EN 60204-1, the mushroom pushbuttons of the 3SB3 series are suitable for use as safety EMERGENCY STOP pushbuttons.

Safety circuits




IEC 60947-5-1 and EN 60947-5-1 require positive opening. This means that for the purpose of personal safety, the reliable opening of NC contacts in all safety circuits is expressly prescribed for the electrical equipment of machines and is designated according to IEC 60947-5-1 with the symbol ☞.

Category 4 according to EN ISO 13849-1 can be attained with the EMERGENCY STOP mushroom pushbuttons if the corresponding fail-safe evaluation units are selected and correctly installed, e.g. the 3SK11 safety relays, the 3RK3 Modular Safety System (see Chapter 11, "Safety Technology") or matching units from the ASIsafe, SIMATIC or SINUMERIK product ranges.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

General data

Technical specifications

Type	3SB3400-0, 3SB3420-0	3SB1400-0J	3SB3400-1, 3SB3420-1	3SB3403-0, 3SB3423-0	3SB3403-1, 3SB3423-1	3SB3411-0	3SB3411-1
Contact blocks and lampholders							
Standards	IEC 60947-5-1, IEC 60947-5-5, EN 60947-5-1, EN 60947-5-5						
Connection type	 Screw terminals			 Spring-type terminals		 Solder pins	
Rated insulation voltage U_i	V	400	250	400		250	60
For pollution degree according to IEC 60947-1		Class 3	Class 3	Class 3		Class 3	Class 3
Rated impulse withstand voltage U_{imp}	kV	4	4	4	4	4	1.5
Conventional thermal current I_{th}	A	10	--	10	--	10	--
Rated operational current I_e at rated operational voltage U_e							
• Alternating current 50/60 Hz, AC-12							
- At $U_e = 24 \dots 230$ V	A	10	--	10	--	10	--
- At $U_e = 400$ V	A	10	--	10	--	--	--
• Alternating current 50/60 Hz, AC-15							
- At $U_e = 24 \dots 230$ V	A	6	6	--	6	--	4
- At $U_e = 400$ V	A	3	4	--	3	--	--
• Direct current, DC-12							
- At $U_e = 24$ V	A	10	10	--	10	--	10
- At $U_e = 48$ V	A	5	--	--	5	--	5
- At $U_e = 110$ V	A	2.5	2	--	2.5	--	2.5
- At $U_e = 230$ V	A	1	0.5	--	1	--	1
• Direct current, DC-13							
- At $U_e = 24$ V	A	3	5	--	3	--	3
- At $U_e = 48$ V	A	1.5	--	--	1.5	--	1.5
- At $U_e = 110$ V	A	0.7	0.5	--	0.7	--	0.7
- At $U_e = 230$ V	A	0.3	0.2	--	0.3	--	0.3
Contact stability							
• Test voltage	V	5	--	5	--	5	--
• Test current	mA	1	--	1	--	1	--
Lampholders							
	--		BA 9s	--	BA 9s	--	Wedge bases
Lamps							
	--		Incandescent lamps, glow lamps and LED lamps	--	Incandescent lamps, glow lamps and LED lamps	--	Incandescent lamps and LED lamps
Short-circuit protection, weld-free, acc. to IEC 60947-5-1							
• DIAZED fuse links, utilization category gG according to IEC 60269-3-1		Dz10 A					
• DIAZED fuse links, quick according to DIN VDE 0635		Dz 16 A					
• Miniature circuit breaker with C characteristic acc. to IEC 60898	A	10					
Mechanical endurance							
		10 x 10 ⁶ operating cycles					
Electrical endurance							
• For utilization category AC-15 with 3RT20 15 to 3RT20 26 contactors		10 x 10 ⁶ operating cycles					
• With utilization category DC-12, DC-13		With direct current it depends on the operational voltage, the breaking current, the circuit inductance and the switching frequency					
Switching frequency	1/h	1 000 operating cycles					
Degree of protection acc. to IEC 60529							
• Connections		IP20					
• Contact chambers		IP40	--	IP40	--	IP40	--
Touch protection, acc. to EN 50274 und BGV A3							
		Finger-safe			Finger-safe		
Conductor cross-sections¹⁾							
• Finely stranded, without end sleeves	mm ²	--			2 x (0.25 ... 1.5)	--	
• Finely stranded, with end sleeves to DIN 46228	mm ²	2 x (0.5 ... 1.5)			2 x (0.25 ... 0.75)	--	
• Solid	mm ²	2 x (1 ... 1.5)			2 x (0.25 ... 1.5)	--	
• Solid with end sleeves to DIN 46228	mm ²	2 x (0.5 ... 0.75)			--	--	
• AWG cables, solid or stranded		2 x AWG 18 ... 14			2 x AWG 24 ... 16	--	
Tightening torque, terminal screw	Nm	0.8			--	--	
Solder pins	mm ²	--			--	0.8 x 0.8	

1) For standard screwdriver size 2 or Pozidriv 2.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

General data

Type	3SB3400-0, 3SB3420-0	3SB3400-1, 3SB3420-1	3SB3403-0, 3SB3423-0	3SB3403-1, 3SB3423-1	3SB3411-0	3SB3411-1
Data according to UL and CSA						
Rated operational voltage	V AC 300	--	300	--	300	--
Conventional thermal current (uninterrupted current)	A 10	--	10	--	10	--
Switching capacity	A 300, R 300, A 600 same polarity					
Rated voltage (lamps)						
• Lamp with BA 9s base	V AC --	125	--	125	--	--
• Lamp with wedge base	V AC --	60	--	60	--	60
• Lampholders with integrated LED	V --	24 AC/DC, 110 AC, 230 AC	--	24 AC/DC, 110 AC, 230 AC	--	--
Rated power (lamps)	W --	2.5	--	2.5	--	1

Type	3SB30, 3SB32	3SB31, 3SB33	3SB35, 3SB36
Actuating and signaling elements			
Enclosure material	Plastic		Metal
Design	Round	Square	Round
Terminal designation acc. to EN 50013	Identification number on the holder, function digit on the contact block		
Device identification	Snap-on label		
Tightening torques			
• Screw on holder	Nm max. 1		
Mechanical endurance			
• Pushbuttons	10 x 10 ⁶ operating cycles		
• Illuminated pushbutton	3 x 10 ⁶ operating cycles		
• Actuators, rotary or latching	3 x 10 ⁵ operating cycles		
• Key-operated switch with key monitoring	1 x 10 ⁵ operating cycles		
Switching frequency	1/h	1 000 operating cycles	
Climatic withstand capability acc. to EN ISO 6270-2	Climate-proof KTW24; suitable for marine applications		
Ambient temperature			
• During operation, non-illuminated and with LED	°C	-25 ... +70	
• During operation, devices with incandescent lamp	°C	-25 ... +60	
• During storage, transport	°C	-40 ... +80	
Degree of protection acc. to IEC 60529			
• Actuating and indicating elements, standard	IP66	IP65	IP67 and NEMA Type 4
- With protective caps	IP67	IP67	--
• Key-operated switch with key monitoring	IP54	--	--
• Twin pushbuttons (3SB31)	IP65	--	--
Protective measures	When mounted on metal front plates and enclosures, the actuators and lens assemblies are not to be included in the protective measures. When mounted in insulated enclosures, the "total insulation" protective measures are met.		Grounding with grounding screw is necessary for operation with protective extra-low voltage (PELV).
Shock resistance acc. to IEC 60068-2-27 For half-sine shock type, 11 ms shock duration			
• Devices without incandescent lamp	≤ 50 g		
• Devices with incandescent lamp	≤ 30 g		
Vibration resistance acc. to IEC 60068-2-6			
• Acceleration at frequency 20 ... 200 Hz	5 g		

Type	3SB38 0.-0, 3SB38 0.-1	--	3SB38 0.-2, 3SB38 0.-3
Enclosures			
Enclosure material	Plastic		Metal
Actuating and signaling elements	Plastic, round		Metal, round
Degree of protection acc. to IEC 60529	IP65		IP67 and NEMA Type 4
Resistance to extreme climates acc. to DIN 50017	KTW 24		KTW 24

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

General data

Configuration

Mounting and fixing

The 3SB3 devices can be easily and quickly mounted:

- Actuators or indicator lights are positioned in the opening of the front plate from the front
- Position the holder from the rear
- Tighten the screw on the holder
- Snap on the contact block or the lampholder directly onto the actuator from the back

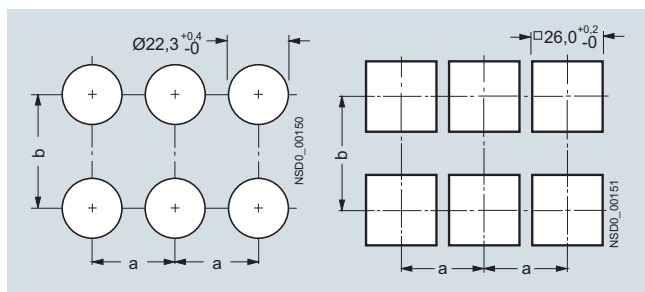
The holder for the round versions is set to a switchboard thickness of 1 to 4 mm when delivered and is placed in the direction of the arrow \uparrow 1–4 mm \uparrow on the actuator/indicator from the back. The fixing screw is located underneath, on the right.

For a switchboard thickness of 3 to 6 mm, the holder is reversed and mounted in the direction of the arrow at \uparrow 3–6 mm \uparrow and the fixing screw is located on the upper right. In this case, the fixing screw must be rotated counterclockwise to its limit before mounting the holder.

A front plate thickness of 1 to 4 mm can be compensated with the holder for the square version.

When label holders, protective caps or similar accessories are used, the greatest permissible front plate thickness must be reduced by the wall thickness of the accessory part.

Mounting dimensions on front plates

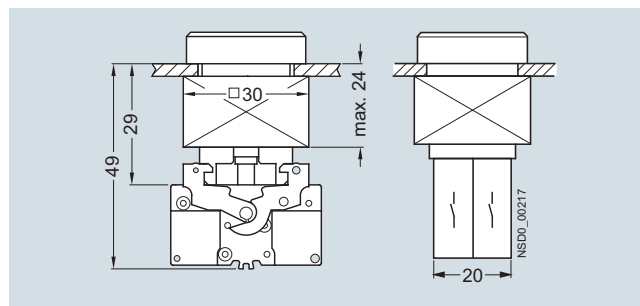


Minimum clearance	a	b
For contact blocks (1 contact) and lampholder		
• For front plate mounting, with screw terminals	30 ¹⁾	45
• For front plate mounting with spring-type terminals	30 ¹⁾	30 ¹⁾
• For use on PCB, with solder pin connections	30 ¹⁾	30 ¹⁾
Contact blocks with 2 contacts		
• For front plate mounting	30 ¹⁾	50
When using holders for labeling plates		
• 12.5 mm x 27 mm	30 ¹⁾	45 ²⁾
• 27.0 mm x 27 mm	30 ¹⁾	60

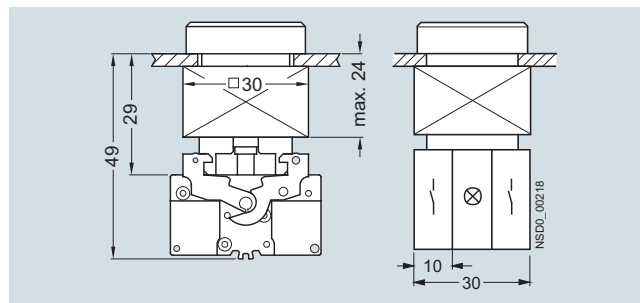
1) For mushroom pushbutton, EMERGENCY STOP and push-pull button: Note the mushroom diameters d = 40 mm or 60 mm.

2) 60 mm with contact blocks having two contacts.

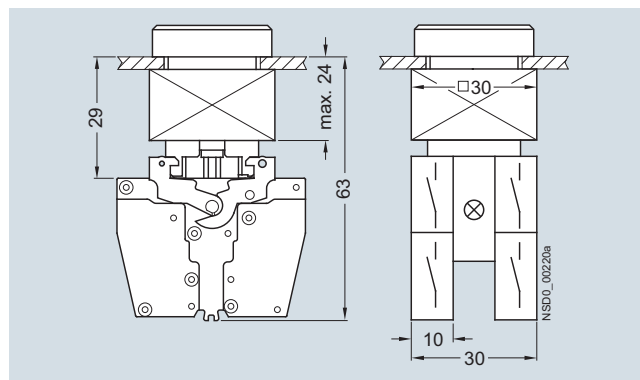
Mounting depth



Pushbuttons with two contact blocks

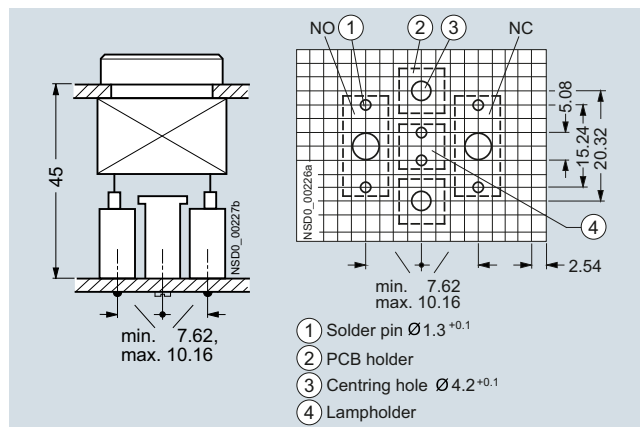


Illuminated pushbuttons with lampholder and two contact blocks



Illuminated pushbuttons with lampholder and two contact blocks with two contacts

Mounting on printed circuit boards



Illuminated pushbutton with solder pins

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Complete units

Selection and ordering data

The following applies to all complete units:

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Rated voltage of lamp	Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Screw terminals	DT	Spring-type terminals	
				Configurator		Configurator	
V				Article No.	Price per PU	Article No.	Price per PU

Pushbuttons

Pushbuttons with flat button



Pushbutton with flat button

Black	1 NO	▶	B	3SB3202-0AA11	B	3SB3202-0AA11-0CC0
Black	1 NC		B	3SB3203-0AA11	B	3SB3203-0AA11-0CC0
Red	1 NC	▶	B	3SB3203-0AA21	B	3SB3203-0AA21-0CC0
Yellow	1 NO	▶	B	3SB3202-0AA31	B	3SB3202-0AA31-0CC0
Green	1 NO	▶	B	3SB3202-0AA41	B	3SB3202-0AA41-0CC0
Blue	1 NO	▶	B	3SB3202-0AA51	B	3SB3202-0AA51-0CC0
White	1 NO	▶	B	3SB3202-0AA61	B	3SB3202-0AA61-0CC0
Black	1 NO + 1 NC		B	3SB3201-0AA11	B	3SB3201-0AA11-0CC0
Red	1 NO + 1 NC		B	3SB3201-0AA21	B	3SB3201-0AA21-0CC0
Yellow	1 NO + 1 NC		B	3SB3201-0AA31	B	3SB3201-0AA31-0CC0
Green	1 NO + 1 NC		B	3SB3201-0AA41	B	3SB3201-0AA41-0CC0
Blue	1 NO + 1 NC		B	3SB3201-0AA51	B	3SB3201-0AA51-0CC0
White	1 NO + 1 NC		B	3SB3201-0AA61	B	3SB3201-0AA61-0CC0

Pushbuttons with raised button



Black	1 NO		B	3SB3202-0BA11		--
Black	1 NC		C	3SB3203-0BA11		--
Red	1 NC		B	3SB3203-0BA21		--
Yellow	1 NO		B	3SB3202-0BA31		--
Blue	1 NO		B	3SB3202-0BA51		--
White	1 NO		C	3SB3202-0BA61		--
Black	1 NO + 1 NC		B	3SB3201-0BA11		--
Red	1 NO + 1 NC		B	3SB3201-0BA21		--
Yellow	1 NO + 1 NC		C	3SB3201-0BA31		--
Blue	1 NO + 1 NC		C	3SB3201-0BA51		--
White	1 NO + 1 NC		C	3SB3201-0BA61		--

Illuminated pushbuttons with flat button

With integrated LED
(incl. holder for 3 elements)



Illuminated pushbutton with flat button

24 AC/DC	Red ²⁾	1 NC	▶	B	3SB3246-0AA21	B	3SB3246-0AA21-0CC0
	Yellow ²⁾	1 NO		B	3SB3245-0AA31	B	3SB3245-0AA31-0CC0
	Green ²⁾	1 NO	▶	B	3SB3245-0AA41	B	3SB3245-0AA41-0CC0
	Blue ²⁾	1 NO	▶	B	3SB3245-0AA51	B	3SB3245-0AA51-0CC0
	White	1 NO	▶	B	3SB3245-0AA61	B	3SB3245-0AA61-0CC0
	Clear ²⁾	1 NO	▶	B	3SB3245-0AA71	B	3SB3245-0AA71-0CC0
24 AC/DC	Red ²⁾	1 NO + 1 NC		B	3SB3247-0AA21	B	3SB3247-0AA21-0CC0
	Yellow ²⁾	1 NO + 1 NC		B	3SB3247-0AA31	B	3SB3247-0AA31-0CC0
	Green ²⁾	1 NO + 1 NC		B	3SB3247-0AA41	B	3SB3247-0AA41-0CC0
	Blue ²⁾	1 NO + 1 NC		B	3SB3247-0AA51	B	3SB3247-0AA51-0CC0
	White	1 NO + 1 NC		B	3SB3247-0AA61	B	3SB3247-0AA61-0CC0
	Clear ²⁾	1 NO + 1 NC		B	3SB3247-0AA71	B	3SB3247-0AA71-0CC0
110 AC	Red ²⁾	1 NC		B	3SB3250-0AA21		--
	Yellow ²⁾	1 NO		B	3SB3257-0AA31		--
	Green ²⁾	1 NO		B	3SB3257-0AA41		--
	Blue ²⁾	1 NO		B	3SB3257-0AA51		--
	White	1 NO		B	3SB3257-0AA61		--
	Clear ²⁾	1 NO		B	3SB3257-0AA71		--
110 AC	Red ²⁾	1 NO + 1 NC		B	3SB3251-0AA21		--
	Yellow ²⁾	1 NO + 1 NC		B	3SB3251-0AA31		--
	Green ²⁾	1 NO + 1 NC		B	3SB3251-0AA41		--
	Blue ²⁾	1 NO + 1 NC		C	3SB3251-0AA51		--
	White	1 NO + 1 NC		B	3SB3251-0AA61		--
	Clear ²⁾	1 NO + 1 NC		B	3SB3251-0AA71		--

For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A or 3SB3403-0A).





²⁾ Inscription is possible by inserting a label.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Complete units

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Rated voltage of the lamp	Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Screw terminals 	DT	Spring-type terminals 			
				Configurator 			Configurator 		
				Article No.	Price per PU			Article No.	Price per PU

Pushbuttons



Illuminated pushbutton with flat button

Illuminated pushbuttons with flat button with integrated LED (incl. holder for 3 elements)

230 AC	Red ²⁾	1 NC	▶	3SB3254-0AA21	B	3SB3254-0AA21-0CC0
	Yellow ²⁾	1 NO	B	3SB3253-0AA31	B	3SB3253-0AA31-0CC0
	Green ²⁾	1 NO	▶	3SB3253-0AA41	B	3SB3253-0AA41-0CC0
	Blue ²⁾	1 NO	B	3SB3253-0AA51	B	3SB3253-0AA51-0CC0
	White	1 NO	B	3SB3253-0AA61	B	3SB3253-0AA61-0CC0
	Clear ²⁾	1 NO	▶	3SB3253-0AA71	B	3SB3253-0AA71-0CC0
230 AC	Red ²⁾	1 NO + 1 NC	B	3SB3255-0AA21	B	3SB3255-0AA21-0CC0
	Yellow ²⁾	1 NO + 1 NC	B	3SB3255-0AA31	B	3SB3255-0AA31-0CC0
	Green ²⁾	1 NO + 1 NC	B	3SB3255-0AA41	B	3SB3255-0AA41-0CC0
	Blue ²⁾	1 NO + 1 NC	B	3SB3255-0AA51	B	3SB3255-0AA51-0CC0
	White	1 NO + 1 NC	B	3SB3255-0AA61	B	3SB3255-0AA61-0CC0
	Clear ²⁾	1 NO + 1 NC	B	3SB3255-0AA71	B	3SB3255-0AA71-0CC0



Illuminated pushbutton with flat button

Illuminated pushbuttons with flat button With BA 9s lampholder, without lamp (incl. holder for 3 elements)

--	Red ²⁾	1 NC	B	3SB3207-0AA21	B	3SB3207-0AA21-0CC0
	Yellow ²⁾	1 NO	B	3SB3206-0AA31	B	3SB3206-0AA31-0CC0
	Green ²⁾	1 NO	B	3SB3206-0AA41	B	3SB3206-0AA41-0CC0
	Blue ²⁾	1 NO	B	3SB3206-0AA51	B	3SB3206-0AA51-0CC0
	White	1 NO	B	3SB3206-0AA61	B	3SB3206-0AA61-0CC0
	Clear ²⁾	1 NO	B	3SB3206-0AA71	B	3SB3206-0AA71-0CC0
--	Red ²⁾	1 NO + 1 NC	B	3SB3205-0AA21	B	3SB3205-0AA21-0CC0
	Yellow ²⁾	1 NO + 1 NC	B	3SB3205-0AA31	B	3SB3205-0AA31-0CC0
	Green ²⁾	1 NO + 1 NC	B	3SB3205-0AA41	B	3SB3205-0AA41-0CC0
	Blue ²⁾	1 NO + 1 NC	B	3SB3205-0AA51	B	3SB3205-0AA51-0CC0
	White	1 NO + 1 NC	B	3SB3205-0AA61	B	3SB3205-0AA61-0CC0
	Clear ²⁾	1 NO + 1 NC	B	3SB3205-0AA71	B	3SB3205-0AA71-0CC0

Push-pull buttons



Mushroom push-pull button

Mushroom push-pull buttons, Ø 40 mm, latching, With pull-to-unlatch mechanism

--	Red	1 NC	▶	3SB3203-1CA21	B	3SB3203-1CA21-0CC0
		1 NO + 1 NC	B	3SB3201-1CA21	B	3SB3201-1CA21-0CC0

 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A or 3SB3403-0A).





²⁾ Inscription is possible by inserting a label.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Complete units

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Version	Color of actuator/ Lock No.	Contacts for front plate mounting ¹⁾	DT	Screw terminals 	DT	Spring-type terminals 	
				Configurator 	Configurator 		
				Article No.	Price per PU	Article No.	Price per PU


Selector switches



Selector switch



Selector switches, 2 switch positions

Switching sequence O-I, 50° operating angle

Latching Black 1 NO  ▶ **3SB3202-2KA11**
 1 NO + 1 NC  B **3SB3201-2KA11**



Selector switches, 2 switch positions



Switching sequence O-I, 90° operating angle

Latching Black 1 NO  B **3SB3202-2HA11**
 1 NO + 1 NC  B **3SB3201-2HA11**

Selector switches, 3 switch positions

Switching sequence I-O-II, 2 x 50° operating angle

Latching Black 1 NO, 1 NO  ▶ **3SB3210-2DA11**
 1 NO + 1 NC,  B **3SB3208-2DA11**
 1 NO + 1 NC

Momentary contact Black 1 NO, 1 NO  B **3SB3210-2EA11**
 1 NO + 1 NC,  B **3SB3208-2EA11**
 1 NO + 1 NC



Key-operated switches



RONIS key-operated switch

RONIS key-operated switches, 2 switch positions

With 2 keys, removal position O + I,
Switching sequence O-I, 50° operating angle

Latching SB 30 1 NO  ▶ **3SB3202-4AD11**
 1 NO + 1 NC  B **3SB3201-4AD11**

Twin pushbuttons



Twin pushbuttons with flat buttons

Twin pushbuttons,

With flat, rectangular buttons²⁾

With I/O inscription White/White 1 NO + 1 NC,  B **3SB3100-8AC61**
 1 NO + 1 NC

 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A or 3SB3403-0A).





²⁾ Mounting the twin pushbuttons in 3SB38 enclosures is not possible. For accessories, see page 13/27.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm






















Actuators and Indicators, Plastic, Round, 22 mm

Complete units


PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Screw terminals 	DT	Spring-type terminals 
			Configurator 		Configurator 
			Article No. Price per PU		Article No. Price per PU

EMERGENCY STOP devices acc. to ISO 13850 and IEC 60947-5-5, with holder and yellow backing plate, Ø 80 mm, with inscription

 <p>With rotate-to-unlatch mechanism</p>	EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with positive latching function With rotate-to-unlatch mechanism					
	Red	1 NC		3SB3203-1HA20	B	3SB3203-1HA20-0CC0
		1 NC with installation monitoring		3SB3266-1HA20	B	--
	Red	1 NO + 1 NC		3SB3201-1HA20	B	3SB3201-1HA20-0CC0
		1 NC		3SB3203-1HR20	B	--
	Red	1 NC with installation monitoring		3SB3266-1HR20	B	--
		1 NO + 1 NC		3SB3201-1HR20	B	--
Red	1 NC		3SB3203-1HP20	B	--	
	1 NO + 1 NC		3SB3201-1HP20	B	--	
 <p>With rotate-to-unlatch mechanism and switch position indicator</p>	With rotate-to-unlatch mechanism and mechanical switch position indicator					
	Red	1 NC		3SB3203-1HA26	B	3SB3203-1HA26-0CC0
		1 NC with installation monitoring		3SB3266-1HA26	B	--
	Red	1 NO + 1 NC		3SB3201-1HA26	B	3SB3201-1HA26-0CC0
		1 NC		3SB3203-1HR26	B	--
	Red	1 NC with installation monitoring		3SB3266-1HR26	B	--
		1 NO + 1 NC		3SB3201-1HR26	B	--
 <p>With pull-to-unlatch mechanism</p>	With pull-to-unlatch mechanism					
	Red	1 NC		3SB3203-1TA20	B	--
		1 NO + 1 NC		3SB3201-1TA20	B	--
	Red	1 NC		3SB3203-1TR20	B	--
		1 NO + 1 NC		3SB3201-1TR20	B	--

 For the online configurator, see www.siemens.com/sirius/configurators.

 Positive opening according to IEC 60947-5-1, Annex K.
 Can be used with 3SK11 safety relays or the 3RK3 Modular Safety System; see Chapter 11, "Safety Technology".
 Certificate:







¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A or 3SB3403-0A).

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Complete units

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Rated voltage of the lamp	Color of the lens	DT	Screw terminals 	DT	Spring-type terminals 	
			Configurator 			
			Article No.	Price per PU		
					Configurator 	
			Article No.	Price per PU		

Indicator lights



Indicator light with smooth lens

Indicator lights with smooth lens ¹⁾ With integrated LED					
24 AC/DC	Red	▶	3SB3244-6AA20	B	3SB3244-6AA20-0CC0
	Yellow	▶	3SB3244-6AA30	B	3SB3244-6AA30-0CC0
	Green	▶	3SB3244-6AA40	B	3SB3244-6AA40-0CC0
	Blue	B	3SB3244-6AA50	B	3SB3244-6AA50-0CC0
	White	B	3SB3244-6AA60	B	3SB3244-6AA60-0CC0
	Clear	▶	3SB3244-6AA70	B	3SB3244-6AA70-0CC0
110 AC	Red	B	3SB3248-6AA20		--
	Yellow	B	3SB3248-6AA30		--
	Green	B	3SB3248-6AA40		--
	Blue	B	3SB3248-6AA50		--
	White	B	3SB3248-6AA60		--
	Clear	B	3SB3248-6AA70		--
230 AC	Red	▶	3SB3252-6AA20	B	3SB3252-6AA20-0CC0
	Yellow	▶	3SB3252-6AA30	B	3SB3252-6AA30-0CC0
	Green	▶	3SB3252-6AA40	B	3SB3252-6AA40-0CC0
	Blue	B	3SB3252-6AA50	B	3SB3252-6AA50-0CC0
	White	B	3SB3252-6AA60	B	3SB3252-6AA60-0CC0
	Clear	▶	3SB3252-6AA70	B	3SB3252-6AA70-0CC0
With BA 9s lampholder, without lamp					
--	Red	B	3SB3204-6AA20	B	3SB3204-6AA20-0CC0
	Yellow	B	3SB3204-6AA30	B	3SB3204-6AA30-0CC0
	Green	B	3SB3204-6AA40	B	3SB3204-6AA40-0CC0
	Blue	B	3SB3204-6AA50	B	3SB3204-6AA50-0CC0
	White	B	3SB3204-6AA60	B	3SB3204-6AA60-0CC0
	Clear	B	3SB3204-6AA70	B	3SB3204-6AA70-0CC0
Indicator lights with lens with concentric rings ¹⁾ With integrated LED					
24 AC/DC	Red	▶	3SB3244-6BA20	B	3SB3244-6BA20-0CC0
	Yellow	▶	3SB3244-6BA30	B	3SB3244-6BA30-0CC0
	Green	▶	3SB3244-6BA40	B	3SB3244-6BA40-0CC0
	Blue	B	3SB3244-6BA50	B	3SB3244-6BA50-0CC0
	White	B	3SB3244-6BA60	B	3SB3244-6BA60-0CC0
	Clear	▶	3SB3244-6BA70	B	3SB3244-6BA70-0CC0
110 AC	Red	B	3SB3248-6BA20		--
	Yellow	B	3SB3248-6BA30		--
	Green	B	3SB3248-6BA40		--
	Blue	B	3SB3248-6BA50		--
	White	B	3SB3248-6BA60		--
	Clear	B	3SB3248-6BA70		--
230 AC	Red	▶	3SB3252-6BA20	B	3SB3252-6BA20-0CC0
	Yellow	▶	3SB3252-6BA30	B	3SB3252-6BA30-0CC0
	Green	▶	3SB3252-6BA40	B	3SB3252-6BA40-0CC0
	Blue	B	3SB3252-6BA50	B	3SB3252-6BA50-0CC0
	White	B	3SB3252-6BA60	B	3SB3252-6BA60-0CC0
	Clear	▶	3SB3252-6BA70	B	3SB3252-6BA70-0CC0
With BA 9s lampholder, without lamp					
--	Amber	B	3SB3204-6BA00		--
	Red	B	3SB3204-6BA20	B	3SB3204-6BA20-0CC0
	Yellow	B	3SB3204-6BA30	B	3SB3204-6BA30-0CC0
	Green	B	3SB3204-6BA40	B	3SB3204-6BA40-0CC0
	Blue	B	3SB3204-6BA50	B	3SB3204-6BA50-0CC0
	White	B	3SB3204-6BA60	B	3SB3204-6BA60-0CC0
	Clear	B	3SB3204-6BA70	B	3SB3204-6BA70-0CC0
With BA 9s lampholder, with LED					
130 AC	Amber	B	3SB3240-6BA00		--
	Red	B	3SB3240-6BA20		--
	Yellow	B	3SB3240-6BA30		--
	Green	B	3SB3240-6BA40		--
	Blue	B	3SB3240-6BA50		--
	White	B	3SB3240-6BA60		--
	Clear	B	3SB3240-6BA70		--

 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Inscription by inserting a label is not possible.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Complete units

Version	Rated voltage of the lamp	Color of lens	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
				Configurator			
	V			Article No.	Price per PU		

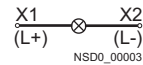
Signaling devices



Acoustic signaling device

Acoustic signaling devices, IP65¹⁾

Continuous tone 2.4 kHz,
operational current min. 4 mA,
sound pressure
min. 80 dB/10 cm



Degree of protection	Color of the actuator	DT	Without connection	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		

Black	B	3SB3233-7BA10	1	1 unit	41J
	B	3SB3234-7BA10	1	1 unit	41J
	B	3SB3235-7BA10	1	1 unit	41J

For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Mounting in 3SB38 enclosures only with the 3SB3400-1A lampholder for front plate mounting, which is included.

Version	Degree of protection	Color of the actuator	DT	Without connection	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		

Special devices

Actuators for potentiometers¹⁾²⁾

30 ... 32 mm long
With shaft Ø 6 mm
With shaft Ø 6.3 mm (1/4 inch)



Actuator for potentiometers

Pushbuttons with extended stroke¹⁾

For actuating relays (possible to connect the 3SX1335 extension plunger)

12 mm stroke



Pushbutton with 12 mm stroke

IP65	Black	B	3SB1000-7CH07	1	1 unit	41J
		B	3SB1000-7CJ07	1	1 unit	41J
IP65	Black	B	3SB3000-0EA11	1	1 unit	41J

¹⁾ Mounting in 3SB38 enclosure is not possible.

²⁾ The potentiometer is not included in the scope of supply.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Coordinate switches, complete

Overview



Coordinate switch with contact blocks

Coordinate switches control auxiliary circuits permitting movements in various directions of machines and equipment.

The switches are designed for front plate mounting. They are climate-proof.

Operation

The 3SB14 00–0J contact block is used, which due to its depth cannot be built into 3SB38 enclosures.

Switches are available as follows:

- With 2 or 4 switch positions
- Latching or momentary contact type
- With or without mechanical interlocking

In the case of switches with mechanical interlock in O position, the switch is unlatched with the unlatching button at the front of the actuating lever.

Inscription

A backing plate consisting of a black, plastic label holder and two or four adhesive, silver-colored labeling plates of 27 mm x 27 mm in size is available for labeling purposes. These labels can be supplied with and without customized inscription.

Please note the mounting dimensions!

Selection and ordering data

Version	Operating travel	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
	<input type="checkbox"/> Contact closed <input type="checkbox"/> Contact open					
Article No.			Price per PU			

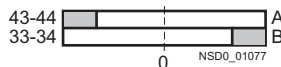
Coordinate switches

2 switch positions, 1 NO per direction

Horizontal, momentary contact type



NSD0_01079



Without mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

B	3SB1201-7DV01	1	1 unit	41J
B	3SB1201-7DV20	1	1 unit	41J

With mechanical interlocking in the O position

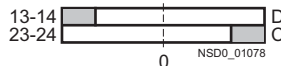
- With plastic front ring, black
- With metal front ring

B	3SB1201-7DW01	1	1 unit	41J
C	3SB1201-7DW20	1	1 unit	41J

Vertical, momentary contact type



NSD0_01080



Without mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

B	3SB1201-7FV01	1	1 unit	41J
B	3SB1201-7FV20	1	1 unit	41J

With mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

B	3SB1201-7FW01	1	1 unit	41J
B	3SB1201-7FW20	1	1 unit	41J



Coordinate switches
2 switch positions

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Actuators and Indicators, Plastic, Round, 22 mm

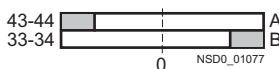
Coordinate switches, complete

Version	Operating travel	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG
	<input type="checkbox"/> Contact closed <input type="checkbox"/> Contact open		Article No.	Price per PU			

Coordinate switches

2 switch positions, 1 NO per direction

Horizontal, latching



Without mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

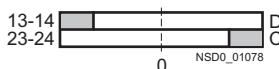
B	3SB1201-7EV01	1	1 unit	41J
B	3SB1201-7EV20	1	1 unit	41J

With mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

C	3SB1201-7EW01	1	1 unit	41J
C	3SB1201-7EW20	1	1 unit	41J

Vertical, latching



Without mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

B	3SB1201-7GV01	1	1 unit	41J
C	3SB1201-7GV20	1	1 unit	41J

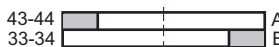
With mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

C	3SB1201-7GW01	1	1 unit	41J
C	3SB1201-7GW20	1	1 unit	41J

4 switch positions, 1 NO per direction

Momentary contact type



Without mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

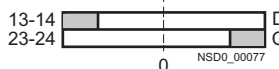
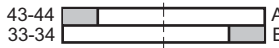
B	3SB1208-7JV01	1	1 unit	41J
B	3SB1208-7JV20	1	1 unit	41J

With mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

B	3SB1208-7JW01	1	1 unit	41J
B	3SB1208-7JW20	1	1 unit	41J

Latching



Without mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

B	3SB1208-7KV01	1	1 unit	41J
B	3SB1208-7KV20	1	1 unit	41J

With mechanical interlocking in the O position

- With plastic front ring, black
- With metal front ring

C	3SB1208-7KW01	1	1 unit	41J
B	3SB1208-7KW20	1	1 unit	41J



Coordinate switches
2 switch positions




Coordinate switches
4 switch positions

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Coordinate switches, complete

Accessories

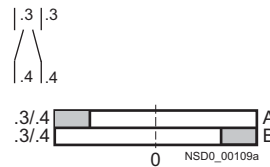
Version	Graphic symbols/ Operating travel	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
Contact blocks	<input type="checkbox"/> Contact closed <input type="checkbox"/> Contact open					
			Article No.	Price per PU		

Spare contact blocks



3SB14 00-0J

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Contact blocks with 2 contacts 1 NO, 1 NO (included in scope of supply of switch)	B	3SB1400-0J		1	1 unit	41J



Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG

Backing plates



3SB19 06-0AV



3SB19 06-0AW

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Label holders for coordinate switches						
2 switch positions, horizontal, 89 mm x 30 mm	B	3SB1906-0AU		1	1 unit	41J
2 switch positions, vertical, 30 mm x 89 mm	B	3SB1906-0AV		1	1 unit	41J
4 switch positions	B	3SB1906-0AW		1	1 unit	41J
Labeling plates 27 mm x 27 mm, silver-colored, adhesive						
Without inscription	B	3SB1906-2AA		100	10 units	41J
With customized inscription (engraved)		3SB1906-2XZ				
• Text lines (up to 5 lines each with 11 characters)	B	K0Y, K1Y, K2Y, or K5Y		1	1 unit	41J
• Graphic symbol with No.	B	K3Y		1	1 unit	41J
• Any inscription or symbol	B	K9Y		1	1 unit	41J

For black plastic labels, [see page 13/60](#).

Options

Customized inscriptions

The labeling plates can be inscribed with text or symbols. 5 lines with 11 characters each in a letter height of 4 mm are possible.

Ordering notes

Append the following order codes to the Article No.:

- Text line(s) in upper/lower case, upper case always for beginning of line (e.g. "Lift out"): **K0Y**
- Text line(s) in upper case (e.g. "LIFT OUT"): **K1Y**
- Text line(s) in lower case (e.g. "lift out"): **K2Y**
- Text line(s) in upper/lower case, all words begin with upper case letters (e.g. "Lift Out"): **K5Y**
- Symbol with number according to ISO 7000 or IEC 60417: **K3Y**
- Any inscription or symbol according to order form supplement: **K9Y**

When ordering, specify the required inscription in plain text in addition to the article number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

In the case of multi-line inscriptions, the text must be assigned to the respective line, e.g. "Z1 = Lift, Z2 = Lower".

Symbols can also be ordered with numbers according to ISO 7000 or IEC 60417.

For special symbols (order code K9Y), a CAD drawing in DXF format can be submitted.

Ordering example

A label inscribed with symbol No. 1117 according to ISO 7000 is required:

3SB19 06-2XZ
K3Y
Z = 1117 ISO







For other ordering examples, [see page 13/63](#).

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Selection and ordering data

Version	Inscription	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		
Pushbuttons with holder¹⁾							
	Pushbuttons with flat button	Black	▶	3SB3000-0AA11		1	1 unit 41J
		Red	▶	3SB3000-0AA21		1	1 unit 41J
		Yellow	B	3SB3000-0AA31		1	1 unit 41J
		Green	▶	3SB3000-0AA41		1	1 unit 41J
		Blue	B	3SB3000-0AA51		1	1 unit 41J
		White	▶	3SB3000-0AA61		1	1 unit 41J
		Gray	B	3SB3000-0AB51		1	1 unit 41J
		Clear ²⁾	B	3SB3000-0AA71		1	1 unit 41J
With flat button		I	Green	B	3SB3000-0AA81	1	1 unit 41J
		O	Red	B	3SB3000-0AB01	1	1 unit 41J
		I	White	B	3SB3000-0AB11	1	1 unit 41J
		O	Black	B	3SB3000-0AB21	1	1 unit 41J
	Pushbuttons with raised button	Black	B	3SB3000-0BA11		1	1 unit 41J
		Red	B	3SB3000-0BA21		1	1 unit 41J
		Yellow	B	3SB3000-0BA31		1	1 unit 41J
		Green	B	3SB3000-0BA41		1	1 unit 41J
		Blue	B	3SB3000-0BA51		1	1 unit 41J
		White	B	3SB3000-0BA61		1	1 unit 41J
With raised button							
	Pushbuttons with raised button, latching by pressing in and turning to the right, unlatches by turning to the left	Black	▶	3SB3000-0CA11		1	1 unit 41J
		Red	B	3SB3000-0CA21		1	1 unit 41J
With raised button, latching	Pushbuttons with raised front ring (height 13 mm)	Black	B	3SB3000-0AA12		1	1 unit 41J
		Red	B	3SB3000-0AA22		1	1 unit 41J
		Yellow	B	3SB3000-0AA32		1	1 unit 41J
		Green	B	3SB3000-0AA42		1	1 unit 41J
		Blue	B	3SB3000-0AA52		1	1 unit 41J
	Pushbuttons with raised front ring castellated (height 13 mm)	Black	B	3SB3000-0AA13		1	1 unit 41J
		Red	B	3SB3000-0AA23		1	1 unit 41J
		Yellow	B	3SB3000-0AA33		1	1 unit 41J
		Green	B	3SB3000-0AA43		1	1 unit 41J
		White	B	3SB3000-0AA63		1	1 unit 41J
With raised front ring	Pushbuttons with raised front ring (height 18.5 mm)	Black	B	3SB3000-0AA14		1	1 unit 41J
		Red	B	3SB3000-0AA24		1	1 unit 41J
		Yellow	B	3SB3000-0AA34		1	1 unit 41J
		Green	B	3SB3000-0AA44		1	1 unit 41J
		Blue	B	3SB3000-0AA54		1	1 unit 41J
		White	B	3SB3000-0AA64		1	1 unit 41J
	Illuminated pushbuttons with flat button (incl. holder for 3 elements)	Amber ²⁾	C	3SB3001-0AA01		1	1 unit 41J
		Red ²⁾	▶	3SB3001-0AA21		1	1 unit 41J
		Yellow ²⁾	▶	3SB3001-0AA31		1	1 unit 41J
		Green ²⁾	▶	3SB3001-0AA41		1	1 unit 41J
		Blue ²⁾	B	3SB3001-0AA51		1	1 unit 41J
		White	B	3SB3001-0AA61		1	1 unit 41J
		Clear ²⁾	▶	3SB3001-0AA71		1	1 unit 41J
With raised front ring, castellated	Illuminated pushbuttons with raised button (incl. holder for 3 elements)	Red	B	3SB3001-0BA21		1	1 unit 41J
		Yellow	B	3SB3001-0BA31		1	1 unit 41J
		Green	B	3SB3001-0BA41		1	1 unit 41J
		Blue	B	3SB3001-0BA51		1	1 unit 41J
		Clear	B	3SB3001-0BA71		1	1 unit 41J
	Pushbutton switches with flat button, latching , unlatches by pressing again	Black	B	3SB3000-0DA11		1	1 unit 41J
		Red	B	3SB3000-0DA21		1	1 unit 41J
		Yellow	B	3SB3000-0DA31		1	1 unit 41J
		Green	B	3SB3000-0DA41		1	1 unit 41J
		Blue	B	3SB3000-0DA51		1	1 unit 41J
		White	B	3SB3000-0DA61		1	1 unit 41J
		Gray	C	3SB3000-0DB51		1	1 unit 41J
		Illuminated pushbutton with raised button	Illuminated pushbutton switches with flat button, latching , unlatches by pressing again (incl. holder for 3 elements)	Red ²⁾	B	3SB3001-0DA21	
Yellow ²⁾	B			3SB3001-0DA31		1	1 unit 41J
Green ²⁾	B			3SB3001-0DA41		1	1 unit 41J
Blue ²⁾	B			3SB3001-0DA51		1	1 unit 41J
White	B			3SB3001-0DA61		1	1 unit 41J
Clear ²⁾	B			3SB3001-0DA71		1	1 unit 41J

⚙ For the online configurator, see www.siemens.com/sirius/configurators.




¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Inscription is possible by inserting a label.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Version	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		
Mushroom pushbuttons with holder¹⁾²⁾						
 <p>Mushroom pushbutton, Ø 30 mm</p>	Mushroom pushbuttons, Ø 30 mm		Black	B	3SB3000-1DA11	1 1 unit 41J
			Red	B	3SB3000-1DA21	1 1 unit 41J
			Yellow	B	3SB3000-1DA31	1 1 unit 41J
			Green	B	3SB3000-1DA41	1 1 unit 41J
 <p>Mushroom pushbutton, Ø 40 mm</p>	Mushroom pushbuttons, Ø 40 mm		Black	▶ B	3SB3000-1GA11	1 1 unit 41J
			Red	▶ B	3SB3000-1GA21	1 1 unit 41J
			Yellow	B	3SB3000-1GA31	1 1 unit 41J
			Green	B	3SB3000-1GA41	1 1 unit 41J
 <p>Mushroom pushbutton, Ø 60 mm</p>	Mushroom pushbuttons, Ø 60 mm		Black	B	3SB3000-1QA11	1 1 unit 41J
			Red	B	3SB3000-1QA21	1 1 unit 41J
			Yellow	B	3SB3000-1QA31	1 1 unit 41J
			Green	B	3SB3000-1QA41	1 1 unit 41J
 <p>Illuminated mushroom pushbutton, Ø 30 mm</p>	Illuminated mushroom pushbuttons, Ø 30 mm (incl. holder for 3 elements)		Red	B	3SB3001-1DA21	1 1 unit 41J
			Yellow	B	3SB3001-1DA31	1 1 unit 41J
			Green	B	3SB3001-1DA41	1 1 unit 41J
			Blue	B	3SB3001-1DA51	1 1 unit 41J
			White	B	3SB3001-1DA61	1 1 unit 41J
			Clear	B	3SB3001-1DA71	1 1 unit 41J
 <p>Illuminated mushroom pushbutton, Ø 40 mm</p>	Illuminated mushroom pushbuttons, Ø 40 mm (incl. holder for 3 elements)		Yellow	B	3SB3001-1GA31	1 1 unit 41J
			Green	B	3SB3001-1GA41	1 1 unit 41J
			White	B	3SB3001-1GA61	1 1 unit 41J
			Clear	C	3SB3001-1GA71	1 1 unit 41J

⚙ For the online configurator, see www.siemens.com/sirius/configurators.


¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Maximum permissible equipment: 3 single-pole or 2 double-pole contact blocks. When using the 3SB3901-0AB holder, the central command point must not be empty.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Version	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		
Push-pull buttons with holder¹⁾²⁾						
 <p>Push-pull button, Ø 30 mm</p>	Push-pull buttons, Ø 30 mm, latching, pull to unlatch	Black	B	3SB3000-1EA11	1	1 unit 41J
		Red	B	3SB3000-1EA21	1	1 unit 41J
		Yellow	B	3SB3000-1EA31	1	1 unit 41J
 <p>Push-pull button, Ø 40 mm</p>	Push-pull buttons, Ø 40 mm, latching, pull to unlatch	Black	▶ B	3SB3000-1CA11	1	1 unit 41J
		Red	▶ B	3SB3000-1CA21	1	1 unit 41J
		Yellow	B	3SB3000-1CA31	1	1 unit 41J
		Green	C	3SB3000-1CA41	1	1 unit 41J
 <p>Push-pull button, Ø 30 mm, can be illuminated, latching, pull to unlatch (incl. holder for 3 elements)</p>	Push-pull buttons, Ø 60 mm, latching, pull to unlatch	Black	B	3SB3000-1RA11	1	1 unit 41J
		Red	B	3SB3000-1RA21	1	1 unit 41J
 <p>Push-pull button, Ø 30 mm, can be illuminated</p>	Push-pull buttons, Ø 30 mm, can be illuminated, latching, pull to unlatch (incl. holder for 3 elements)	Red	B	3SB3001-1EA21	1	1 unit 41J
		Yellow	B	3SB3001-1EA31	1	1 unit 41J
		Green	B	3SB3001-1EA41	1	1 unit 41J
		Blue	B	3SB3001-1EA51	1	1 unit 41J
		Clear	B	3SB3001-1EA71	1	1 unit 41J
 <p>Push-pull button, Ø 40 mm, can be illuminated</p>	Push-pull buttons, Ø 40 mm, can be illuminated, latching, pull to unlatch (incl. holder for 3 elements)	Red	B	3SB3001-1CA21	1	1 unit 41J
		Yellow	B	3SB3001-1CA31	1	1 unit 41J
		Green	B	3SB3001-1CA41	1	1 unit 41J
		Blue	B	3SB3001-1CA51	1	1 unit 41J
		Clear	B	3SB3001-1CA71	1	1 unit 41J

For the online configurator, see www.siemens.com/sirius/configurators.













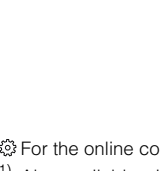



¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Maximum permissible equipment: 3 single-pole or 2 double-pole contact blocks. When using the 3SB3901-0AB holder, the central command point must not be empty.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Version	Version Illumination	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG						
				Article No.	Price per PU								
Selector switches with holder¹⁾													
Selector switches with 2 switch positions													
	Switching sequence O-I, 90° operating angle, latching		Non-illuminated	Black	B	3SB3000-2HA11	1	1 unit	41J				
				Red	B	3SB3000-2HA21	1	1 unit	41J				
				Green	B	3SB3000-2HA41	1	1 unit	41J				
				White	B	3SB3000-2HA61	1	1 unit	41J				
	Switching sequence O-I, 50° operating angle, latching		Illuminated (incl. holder for 3 elements)	Red	B	3SB3001-2HA21	1	1 unit	41J				
				Yellow	B	3SB3001-2HA31	1	1 unit	41J				
				Green	B	3SB3001-2HA41	1	1 unit	41J				
				Blue	B	3SB3001-2HA51	1	1 unit	41J				
				Clear	B	3SB3001-2HA71	1	1 unit	41J				
					Switching sequence O-I, 50° operating angle, momentary contact		Non-illuminated	Black	▶	3SB3000-2KA11	1	1 unit	41J
Red	B	3SB3000-2KA21	1					1 unit	41J				
Green	B	3SB3000-2KA41	1					1 unit	41J				
White	B	3SB3000-2KA61	1					1 unit	41J				
	Switching sequence O-I, 50° operating angle, momentary contact		Illuminated (incl. holder for 3 elements)					Red	B	3SB3001-2KA21	1	1 unit	41J
								Yellow	B	3SB3001-2KA31	1	1 unit	41J
				Green	B	3SB3001-2KA41	1	1 unit	41J				
				Blue	B	3SB3001-2KA51	1	1 unit	41J				
				Clear	B	3SB3001-2KA71	1	1 unit	41J				
					Switching sequence I-O-II, 2 x 50° operating angle, latching		Non-illuminated	Black	▶	3SB3000-2DA11	1	1 unit	41J
Red	B	3SB3000-2DA21	1					1 unit	41J				
Green	B	3SB3000-2DA41	1					1 unit	41J				
White	B	3SB3000-2DA61	1					1 unit	41J				
	Switching sequence I-O-II, 2 x 50° operating angle, Momentary contact		Illuminated (incl. holder for 3 elements)					Red	B	3SB3001-2DA21	1	1 unit	41J
								Yellow	B	3SB3001-2DA31	1	1 unit	41J
				Green	B	3SB3001-2DA41	1	1 unit	41J				
				Blue	B	3SB3001-2DA51	1	1 unit	41J				
				Clear	B	3SB3001-2DA71	1	1 unit	41J				
					Switching sequence I-O-II, 2 x 50° operating angle, momentary contact to the left, latching to the right		Non-illuminated	Black	▶	3SB3000-2GA11	1	1 unit	41J
Red	B	3SB3000-2GA21	1					1 unit	41J				
Green	B	3SB3000-2GA41	1					1 unit	41J				
White	B	3SB3000-2GA61	1					1 unit	41J				
	Switching sequence I-O-II, 2 x 50° operating angle, latching to the left, momentary contact to the right		Illuminated (incl. holder for 3 elements)					Red	B	3SB3001-2GA21	1	1 unit	41J
								Yellow	B	3SB3001-2GA31	1	1 unit	41J
				Green	B	3SB3001-2GA41	1	1 unit	41J				
				Blue	B	3SB3001-2GA51	1	1 unit	41J				
				Clear	B	3SB3001-2GA71	1	1 unit	41J				
					Switching sequence I-O-II, 2 x 50° operating angle, latching to the left, momentary contact to the right		Non-illuminated	Black	B	3SB3000-2FA11	1	1 unit	41J
Red	B	3SB3000-2FA21	1					1 unit	41J				
Green	B	3SB3000-2FA41	1					1 unit	41J				
White	B	3SB3000-2FA61	1					1 unit	41J				
	Switching sequence I-O-II, 2 x 50° operating angle, latching to the left, momentary contact to the right		Illuminated (incl. holder for 3 elements)					Red	B	3SB3001-2FA21	1	1 unit	41J
								Yellow	B	3SB3001-2FA31	1	1 unit	41J
				Green	B	3SB3001-2FA41	1	1 unit	41J				
				Blue	C	3SB3001-2FA51	1	1 unit	41J				
				Clear	B	3SB3001-2FA71	1	1 unit	41J				




For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Version	Lock version Type	Lock No./color	Key removal position	DT	Configurator		PU (UNIT, SET, M)	PS*	PG								
					Article No.	Price per PU											
Key-operated switches with holder¹⁾																	
	Key-operated switches with 2 keys, 2 switch positions																
	Switching sequence O-I, RONIS 50° operating angle, Latching	SB 30	O+I O I	B B B	3SB3000-4HD11	Price per PU	1	1 unit	41J								
					3SB3000-4HD01												
3SB3000-4HD21																	
	Switching sequence O-I, RONIS 50° operating angle, Latching	SB 30	O+I O I	▶ ▶ B	3SB3000-4AD11	Price per PU	1	1 unit	41J								
					3SB3000-4AD01												
					3SB3000-4AD21												
	CES	SSG 10	O+I O I	▶ ▶ B	3SB3000-4LD11	Price per PU	1	1 unit	41J								
					3SB3000-4LD01												
					3SB3000-4LD21												
	LSG 1	O+I O	B B	3SB3000-4LF01	Price per PU	1	1 unit	41J									
				3SB3000-4LF11													
	CES with key monitoring ²⁾	SSG 10	O	C	3SB3000-4LD05	Price per PU	1	1 unit	41J								
		BKS	S1	O+I O I	B B B	3SB3000-5AD11	Price per PU	1	1 unit	41J							
						3SB3000-5AD01											
						3SB3000-5AD21											
E1 for VW ³⁾		O+I O	B B	3SB3000-5AE01	Price per PU	1	1 unit	41J									
				3SB3000-5AE11													
E2 for VW ³⁾		O+I O	B B	3SB3000-5AE21	Price per PU	1	1 unit	41J									
				3SB3000-5AE31													
E7 for VW ³⁾		O+I O	B B	3SB3000-5AE41	Price per PU	1	1 unit	41J									
				3SB3000-5AE51													
E9 for VW ³⁾	O+I O	B B	3SB3000-5AE61	Price per PU	1	1 unit	41J										
			3SB3000-5AE71														
O.M.R. ⁴⁾	73038 Light blue	O+I O	B B	3SB3000-3AG11	Price per PU	1	1 unit	41J									
				3SB3000-3AG01													
	73037 Red	O+I O	B B	3SB3000-3AH11	Price per PU	1	1 unit	41J									
				3SB3000-3AH01													
	73034 Black	O+I O	B B	3SB3000-3AJ11	Price per PU	1	1 unit	41J									
				3SB3000-3AJ01													
	73033 Yellow	O+I O	B B	3SB3000-3AK11	Price per PU	1	1 unit	41J									
				3SB3000-3AK01													
	Switching sequence O-I, RONIS 50° operating angle, momentary contact	RONIS	SB 30	O	▶	3SB3000-4BD01	Price per PU	1	1 unit	41J							
						CES					SSG 10	O	▶	3SB3000-4MD01	Price per PU	1	1 unit
LSG 1														O			
		BKS	S1	O	B		3SB3000-5BD01	Price per PU	1	1 unit							
O.M.R. ⁴⁾		73038 Light blue	O	B	3SB3000-3BG01	Price per PU	1	1 unit	41J								
					73037 Red					O	B	3SB3000-3BH01	Price per PU	1	1 unit	41J	
												73034 Black					O
					73033 Yellow					O	B		3SB3000-3BK01	Price per PU	1	1 unit	

⚙️ For the online configurator, see www.siemens.com/sirius/configurators.

For BKS and CES special locks, see page 13/54.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ For key-operated switches with key monitoring, the enclosed holder 3SB3901-0AB must be used.
The key scan is performed by a 3SB34 single-pole NC contact block, which must be snap-mounted in the center position. Scanning of the switch positions must be performed by additional contact blocks, which are snap-mounted on the actuator.
Special locks can be ordered only with order code "Y01".






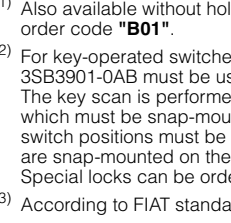

³⁾ Keys are not included in scope of supply.

⁴⁾ According to FIAT standards; also available for other users.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Version	Lock version			DT	Configurator	PU (UNIT, SET, M)	PS*	PG			
	Type	Lock No./color	Key removal position						Article No.	Price per PU	
Key-operated switches with holder¹⁾											
Key-operated switches with 2 keys, 3 switch positions											
 RONIS key-operated switch	Switching sequence I-O-II, 2 x 50° operating angle, Latching		RONIS	SB 30	I+O+II	B	3SB3000-4DD11	1	1 unit	41J	
					O	B	3SB3000-4DD01	1	1 unit	41J	
					I+II	B	3SB3000-4DD41	1	1 unit	41J	
					I	B	3SB3000-4DD21	1	1 unit	41J	
					II	B	3SB3000-4DD31	1	1 unit	41J	
					O+I	B	3SB3000-4DD51	1	1 unit	41J	
 CES key-operated switch			CES	SSG 10	I+O+II	B	3SB3000-4PD11	1	1 unit	41J	
					O	B	3SB3000-4PD01	1	1 unit	41J	
					O+I	B	3SB3000-4PD51	1	1 unit	41J	
					I+II	B	3SB3000-4PD41	1	1 unit	41J	
					I	B	3SB3000-4PD21	1	1 unit	41J	
					II	B	3SB3000-4PD31	1	1 unit	41J	
 CES with key monitoring ²⁾			CES with key monitoring ²⁾	SSG 10	O	C	3SB3000-4PD05	1	1 unit	41J	
 BKS key-operated switch			BKS	S1	I+O+II	B	3SB3000-5DD11	1	1 unit	41J	
					II	C	3SB3000-5DD31	1	1 unit	41J	
 O.M.R. key-operated switch			O.M.R. ³⁾	73038	I+O+II	B	3SB3000-3DG11	1	1 unit	41J	
				Light blue	O	B	3SB3000-3DG01	1	1 unit	41J	
 RONIS key-operated switch, 2 x 50° operating angle, Momentary contact			RONIS	SB 30	O	B	3SB3000-4ED01	1	1 unit	41J	
 CES key-operated switch, 2 x 50° operating angle, momentary contact to the left, latching to the right			CES	SSG 10	O	B	3SB3000-4QD01	1	1 unit	41J	
 BKS key-operated switch, 2 x 50° operating angle, momentary contact to the left, latching to the right			BKS	S1	O	B	3SB3000-5ED01	1	1 unit	41J	
 O.M.R. key-operated switch, 2 x 50° operating angle, latching to the left, momentary contact to the right			O.M.R. ³⁾	73034	O	B	3SB3000-3EJ01	1	1 unit	41J	
				Black							
 RONIS key-operated switch, 2 x 50° operating angle, latching to the left, momentary contact to the right			RONIS	SB 30	O+II	B	3SB3000-4GD61	1	1 unit	41J	
					O	B	3SB3000-4GD01	1	1 unit	41J	
					II	B	3SB3000-4GD31	1	1 unit	41J	
 CES key-operated switch, 2 x 50° operating angle, latching to the left, momentary contact to the right			CES	SSG 10	O+II	B	3SB3000-4SD61	1	1 unit	41J	
					O	B	3SB3000-4SD01	1	1 unit	41J	
 BKS key-operated switch, 2 x 50° operating angle, latching to the left, momentary contact to the right			BKS	S1	O	B	3SB3000-5GD01	1	1 unit	41J	
 O.M.R. key-operated switch, 2 x 50° operating angle, latching to the left, momentary contact to the right			O.M.R. ³⁾	73038	O	B	3SB3000-3FG01	1	1 unit	41J	
				Light blue							
 O.M.R. key-operated switch, 2 x 50° operating angle, latching to the left, momentary contact to the right			O.M.R. ³⁾	73034	I	B	3SB3000-3FJ21	1	1 unit	41J	
				Black							

For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ For key-operated switches with key monitoring, the enclosed holder 3SB3901-0AB must be used. The key scan is performed by a 3SB34 single-pole NC contact block, which must be snap-mounted in the center position. Scanning of the switch positions must be performed by additional contact blocks, which are snap-mounted on the actuator. Special locks can be ordered only with order code "Y01".


³⁾ According to FIAT standards; also available for other users.

For BKS and CES special locks, see page 13/54.

















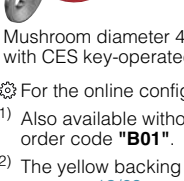

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Version	Color of the actuator	Approval	DT	Configurator	 PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		

EMERGENCY STOP devices acc. to ISO 13850 and IEC 60947-5-5 with holder¹⁾²⁾, can also be used with safety relays³⁾

 <p>Mushroom diameter 32 mm</p>	<p>EMERGENCY STOP mushroom pushbuttons, Ø 32 mm, with positive latching according to ISO 13850, with rotate-to-unlatch mechanism</p>	Red ⁴⁾		B	3SB3000-1FA20	1	1 unit	41J
 <p>Mushroom diameter 40 mm, with rotate-to-unlatch mechanism with switch position indicator</p>	<p>EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with positive latching according to ISO 13850, with rotate-to-unlatch mechanism</p> <ul style="list-style-type: none"> Without switch position indicator With mechanical switch position indicator 	Red			<p>3SB3000-1HA20</p> <p>3SB3000-1HA26</p>	1	1 unit	41J
 <p>Mushroom diameter 40 mm, with rotate-to-unlatch mechanism with switch position indicator</p>	<p>Mushroom pushbuttons, Ø 40 mm with positive latching according to ISO 13850, with rotate-to-unlatch mechanism</p>	Black		B	3SB3000-1HA10	1	1 unit	41J
 <p>Mushroom diameter 40 mm, with pull-to-unlatch mechanism</p>	<p>EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with positive latching according to ISO 13850, with pull-to-unlatch mechanism</p>	Red		B	3SB3000-1TA20	1	1 unit	41J
 <p>Mushroom diameter 60 mm</p>	<p>EMERGENCY STOP mushroom pushbuttons, Ø 60 mm with positive latching according to ISO 13850, with rotate-to-unlatch mechanism</p>	Red		B	3SB3000-1AA20	1	1 unit	41J
 <p>Mushroom diameter 40 mm, with RONIS key-operat. switch</p>	<p>EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with RONIS key-operated switch Lock No. SB 30, with positive latching according to ISO 13850, unlatching only possible using key</p>	Red		B	3SB3000-1BA20	1	1 unit	41J
 <p>Mushroom diameter 40 mm, with CES key-operat. switch</p>	<p>EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with CES key-operated switch Lock No. SSG 10, with positive latching according to ISO 13850, unlatching only possible using key</p>	Red		B	3SB3000-1KA20	1	1 unit	41J
 <p>Mushroom diameter 40 mm, with BKS key-operated switch</p>	<p>EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with BKS key-operated switch Lock No. S1, with positive latching according to ISO 13850, unlatching only possible using key</p>	Red		B	3SB3000-1LA20	1	1 unit	41J
 <p>Mushroom diameter 40 mm, with CES key-operated switch</p>	<p>EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with O.M.R. key-operated switch Lock No. 73037, with positive latching according to ISO 13850, unlatching only possible using key</p>	Red		B	3SB3000-1MA20	1	1 unit	41J

 For the online configurator, see www.siemens.com/sirius/configurators.

1) Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

2) The yellow backing plates must be ordered separately; see "Accessories" on page 13/69.

3) Can be used with 3SK11 safety relays or the 3RK3 Modular Safety System; see [Catalog IC 10, Chapter 11, "Safety Technology"](#).

4) Solvent-resistant

For BKS and CES special locks, see page 13/54.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Version	Color of the lens	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		

Signaling elements with holder¹⁾



Indicator light with concentric rings

Indicator lights With smooth lens ²⁾	Amber	B	3SB3001-6AA00	1	1 unit	41J
	Red	▶	3SB3001-6AA20	1	1 unit	41J
	Yellow	B	3SB3001-6AA30	1	1 unit	41J
	Green	▶	3SB3001-6AA40	1	1 unit	41J
	Blue	B	3SB3001-6AA50	1	1 unit	41J
	White	B	3SB3001-6AA60	1	1 unit	41J
	Clear	▶	3SB3001-6AA70	1	1 unit	41J
Indicator lights With lens with concentric rings ²⁾	Amber	B	3SB3001-6BA00	1	1 unit	41J
	Red	B	3SB3001-6BA20	1	1 unit	41J
	Yellow	B	3SB3001-6BA30	1	1 unit	41J
	Green	B	3SB3001-6BA40	1	1 unit	41J
	Blue	B	3SB3001-6BA50	1	1 unit	41J
	White	B	3SB3001-6BA60	1	1 unit	41J
	Clear	B	3SB3001-6BA70	1	1 unit	41J



Acoustic signaling device

Acoustic signaling device, IP40³⁾ For 24 V DC acoustic signal transformers ⁴⁾ (without BA 9s bases)	Black	B	3SB3000-7AA10	1	1 unit	41J
--	-------	---	----------------------	---	--------	-----

For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Inscription by inserting a label is not possible.

³⁾ For acoustic signaling devices, IP65, see [Complete units, page 13/15](#).

⁴⁾ Following must also be ordered:
 - 3SB1902-2BN acoustic signal transformer; see [Accessories, page 13/66](#)
 - Lampholder with screw terminals
 3SB3400-1A for front plate mounting or
 3SB3420-1A for floor mounting
 Devices assembled in this way are suitable for use in enclosures.
 Lampholders with spring-type terminals cannot be used.

Version	Inscription	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		

Twin pushbuttons with indicator light with holder¹⁾²⁾



Twin pushbuttons with indicator light, with flat buttons

Twin pushbuttons with indicator light, with flat, rectangular buttons incl. holder for 3 elements	I/O ³⁾	Green/Red	B	3SB3101-8BC21	1	1 unit	41J
	I/O ³⁾	White/Black	B	3SB3101-8BC31	1	1 unit	41J
	↑/↓ ³⁾	Green/Red	B	3SB3101-8BC81	1	1 unit	41J



Twin pushbuttons with indicator light, with flat and raised buttons

Twin pushbuttons with indicator light, with flat and raised, rectangular buttons, incl. holder for 3 elements	I/O ³⁾	Green/Red	B	3SB3101-8DC21	1	1 unit	41J
	I/O ³⁾	White/Black	B	3SB3101-8DC31	1	1 unit	41J

For the online configurator, see www.siemens.com/sirius/configurators.


¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Mounting the twin pushbuttons in 3SB38 enclosures is not possible.

³⁾ Black inscription for green, red and white buttons; white inscription on black button.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Actuators and Indicators, Plastic, Round, 22 mm

Actuating and signaling elements

Version	Inscription	Color of actuator	DT	Configurator 	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		

Twin pushbuttons with holder¹⁾²⁾



Twin pushbutton with flat buttons

Twin pushbuttons, with flat, rectangular buttons I/O ³⁾ I/O ³⁾ ↑/↓ ³⁾	Green/Red	B	3SB3100-8AC21	1	1 unit	41J
	White/Black	B	3SB3100-8AC31	1	1 unit	41J
	White/White	B	3SB3100-8AC61-0AD0	1	1 unit	41J
	Green/Red	B	3SB3100-8CC21	1	1 unit	41J
	White/Black	B	3SB3100-8CC31	1	1 unit	41J

 For the online configurator, see www.siemens.com/sirius/configurators.

- Also available without holder. Supplement Article No. with "-Z" and quote order code "**B01**".
- Mounting the twin pushbuttons in 3SB38 enclosures is not possible.
- Black inscription for green, red and white buttons; white inscription on black button.

Version	Use	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	-----	----	-------------	--------------	-------------------	-----	----

Accessories for twin pushbuttons



Label holder

Label holders 70 mm x 30 mm For labeling plate 12.5 mm x 27 mm ¹⁾	Twin pushbuttons	B	3SB3922-0AY	100	10 units	41J
--	------------------	---	--------------------	-----	----------	-----



Protective cap

Protective caps, clear Silicone, for degree of protection IP67	Twin pushbuttons with flat buttons	B	3SB3921-0AQ	1	1 unit	41J
--	------------------------------------	---	--------------------	---	--------	-----



- Mounting in 3SB38 enclosure is not possible. For labeling plates, see pages 13/55 and 13/60.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Square, 26 mm × 26 mm

Complete units

Selection and ordering data

Version	Rated voltage of the lamp	Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG		
					Configurator					
V					Article No.	Price per PU				
Pushbuttons										
 Pushbuttons	Pushbuttons with flat button	--	Black	1 NO	B	3SB3302-0AA11	1	1 unit	41J	
		Black	1 NC	B	3SB3303-0AA11	1	1 unit	41J		
		Red	1 NC	B	3SB3303-0AA21	1	1 unit	41J		
		Yellow	1 NO	B	3SB3302-0AA31	1	1 unit	41J		
		Green	1 NO	B	3SB3302-0AA41	1	1 unit	41J		
		Blue	1 NO	B	3SB3302-0AA51	1	1 unit	41J		
		White	1 NO	B	3SB3302-0AA61	1	1 unit	41J		
		Black	1 NO + 1 NC	B	3SB3301-0AA11	1	1 unit	41J		
		Red	1 NO + 1 NC	B	3SB3301-0AA21	1	1 unit	41J		
		Yellow	1 NO + 1 NC	B	3SB3301-0AA31	1	1 unit	41J		
		Green	1 NO + 1 NC	B	3SB3301-0AA41	1	1 unit	41J		
		Blue	1 NO + 1 NC	C	3SB3301-0AA51	1	1 unit	41J		
		White	1 NO + 1 NC	B	3SB3301-0AA61	1	1 unit	41J		
		 Illuminated pushbutton	Illuminated pushbuttons with flat button With integrated LED (incl. holder for 3 elements)	24 AC/DC	Red ²⁾	1 NC	B	3SB3346-0AA21	1	1 unit
Yellow ²⁾	1 NO			B	3SB3345-0AA31	1	1 unit	41J		
Green ²⁾	1 NO			B	3SB3345-0AA41	1	1 unit	41J		
Blue ²⁾	1 NO			B	3SB3345-0AA51	1	1 unit	41J		
White	1 NO			B	3SB3345-0AA61	1	1 unit	41J		
Clear ²⁾	1 NO			B	3SB3345-0AA71	1	1 unit	41J		
Red ²⁾	1 NO + 1 NC			B	3SB3347-0AA21	1	1 unit	41J		
Yellow ²⁾	1 NO + 1 NC			B	3SB3347-0AA31	1	1 unit	41J		
Green ²⁾	1 NO + 1 NC			B	3SB3347-0AA41	1	1 unit	41J		
Blue ²⁾	1 NO + 1 NC			B	3SB3347-0AA51	1	1 unit	41J		
White	1 NO + 1 NC			B	3SB3347-0AA61	1	1 unit	41J		
Clear ²⁾	1 NO + 1 NC			B	3SB3347-0AA71	1	1 unit	41J		
Illuminated pushbuttons with flat button With integrated LED (incl. holder for 3 elements)	230 AC			Red ²⁾	1 NC	B	3SB3354-0AA21	1	1 unit	41J
				Yellow ²⁾	1 NO	C	3SB3353-0AA31	1	1 unit	41J
		Green ²⁾	1 NO	B	3SB3353-0AA41	1	1 unit	41J		
		Blue ²⁾	1 NO	C	3SB3353-0AA51	1	1 unit	41J		
		White	1 NO	B	3SB3353-0AA61	1	1 unit	41J		
		Clear ²⁾	1 NO	B	3SB3353-0AA71	1	1 unit	41J		
		Red ²⁾	1 NO + 1 NC	B	3SB3355-0AA21	1	1 unit	41J		
		Yellow ²⁾	1 NO + 1 NC	C	3SB3355-0AA31	1	1 unit	41J		
		Green ²⁾	1 NO + 1 NC	B	3SB3355-0AA41	1	1 unit	41J		
		Blue ²⁾	1 NO + 1 NC	C	3SB3355-0AA51	1	1 unit	41J		
		White	1 NO + 1 NC	C	3SB3355-0AA61	1	1 unit	41J		
		Clear ²⁾	1 NO + 1 NC	B	3SB3355-0AA71	1	1 unit	41J		
		Illuminated pushbuttons with flat button With BA 9s lampholder, without lamp (incl. holder for 3 elements)	--	Red ²⁾	1 NC	B	3SB3307-0AA21	1	1 unit	41J
				Yellow ²⁾	1 NO	B	3SB3306-0AA31	1	1 unit	41J
Green ²⁾	1 NO			B	3SB3306-0AA41	1	1 unit	41J		
Blue ²⁾	1 NO			B	3SB3306-0AA51	1	1 unit	41J		
White	1 NO			B	3SB3306-0AA61	1	1 unit	41J		
Clear ²⁾	1 NO			B	3SB3306-0AA71	1	1 unit	41J		
Red ²⁾	1 NO + 1 NC			B	3SB3305-0AA21	1	1 unit	41J		
Yellow ²⁾	1 NO + 1 NC			B	3SB3305-0AA31	1	1 unit	41J		
Green ²⁾	1 NO + 1 NC			B	3SB3305-0AA41	1	1 unit	41J		
Blue ²⁾	1 NO + 1 NC			B	3SB3305-0AA51	1	1 unit	41J		
White	1 NO + 1 NC			B	3SB3305-0AA61	1	1 unit	41J		
Clear ²⁾	1 NO + 1 NC			B	3SB3305-0AA71	1	1 unit	41J		

For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A or 3SB3403-0A).

²⁾ Inscription is possible by inserting a label.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Actuators and Indicators, Plastic, Square, 26 mm × 26 mm

Complete units

Version	Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

EMERGENCY STOP devices acc. to ISO 13850 and IEC 60947-5-5, with holder and yellow backing plate, Ø 80 mm, with inscription²⁾



EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with positive latching, with rotate-to-unlatch mechanism

EMERGENCY STOP mushroom pushbutton with rotate-to-unlatch mechanism

For the online configurator, see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Annex K. Can be used with 3SK11 safety relays or the 3RK3 Modular Safety System; see Chapter 11, "Safety Technology".
Certificate:



¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A).

²⁾ German inscription "NOT-HALT".

Version	Rated voltage of lamp	Color of the lens	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

Signaling devices



Indicator light

Indicator lights With integrated LED	24 AC/DC	Red	B	3SB3344-6AA20	1	1 unit	41J
		Yellow	B	3SB3344-6AA30	1	1 unit	41J
		Green	B	3SB3344-6AA40	1	1 unit	41J
		Blue	B	3SB3344-6AA50	1	1 unit	41J
		White	B	3SB3344-6AA60	1	1 unit	41J
		Clear	B	3SB3344-6AA70	1	1 unit	41J
Indicator lights With integrated LED	230 AC	Red	B	3SB3352-6AA20	1	1 unit	41J
		Yellow	B	3SB3352-6AA30	1	1 unit	41J
		Green	B	3SB3352-6AA40	1	1 unit	41J
		Blue	B	3SB3352-6AA50	1	1 unit	41J
		White	B	3SB3352-6AA60	1	1 unit	41J
		Clear	B	3SB3352-6AA70	1	1 unit	41J
Indicator lights with BA 9s lampholder (without lamp)	-	Red	B	3SB3304-6AA20	1	1 unit	41J
		Yellow	B	3SB3304-6AA30	1	1 unit	41J
		Green	B	3SB3304-6AA40	1	1 unit	41J
		Blue	B	3SB3304-6AA50	1	1 unit	41J
		White	B	3SB3304-6AA60	1	1 unit	41J
		Clear	B	3SB3304-6AA70	1	1 unit	41J








For the online configurator, see www.siemens.com/sirius/configurators.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Square, 26 mm × 26 mm

Actuating and signaling elements

Selection and ordering data

Version	Color of the actuator	DT	Configurator 	PU (UNIT, SET, M)	PS*	PG	
			Article No.	Price per PU			
Pushbuttons and pushbutton switches with holder¹⁾							
 Pushbutton	Pushbuttons with flat button	Black	B	3SB3110-0AA11	1	1 unit	41J
		Red	B	3SB3110-0AA21	1	1 unit	41J
		Yellow	B	3SB3110-0AA31	1	1 unit	41J
		Green	B	3SB3110-0AA41	1	1 unit	41J
		Blue	B	3SB3110-0AA51	1	1 unit	41J
		White	B	3SB3110-0AA61	1	1 unit	41J
		Clear ²⁾	B	3SB3110-0AA71	1	1 unit	41J
 Pushbutton with raised front ring	Pushbuttons with raised front ring (height 13 mm)	Black	B	3SB3110-0AA12	1	1 unit	41J
		Red	B	3SB3110-0AA22	1	1 unit	41J
		Green	C	3SB3110-0AA42	1	1 unit	41J
		Blue	B	3SB3110-0AA52	1	5 units	41J
		White	B	3SB3110-0AA62	1	1 unit	41J
 Pushbutton with raised front ring, castellated	Pushbuttons With raised front ring, castellated (height 13 mm)	Black	C	3SB3110-0AA13	1	1 unit	41J
		Red	C	3SB3110-0AA23	1	1 unit	41J
		Yellow	C	3SB3110-0AA33	1	1 unit	41J
		Green	C	3SB3110-0AA43	1	1 unit	41J
		Blue	B	3SB3110-0AA53	1	5 units	41J
		White	C	3SB3110-0AA63	1	1 unit	41J
 Illuminated pushbutton	Illuminated pushbuttons with flat button (incl. holder for 3 elements)	Red ²⁾	B	3SB3111-0AA21	1	1 unit	41J
		Yellow ²⁾	B	3SB3111-0AA31	1	1 unit	41J
		Green ²⁾	B	3SB3111-0AA41	1	1 unit	41J
		Blue ²⁾	B	3SB3111-0AA51	1	1 unit	41J
		White	B	3SB3111-0AA61	1	1 unit	41J
		Clear ²⁾	B	3SB3111-0AA71	1	1 unit	41J
 Pushbutton switch	Pushbutton switches, latching, with flat button unlatching by pressing again	Black	B	3SB3110-0DA11	1	1 unit	41J
		Red	B	3SB3110-0DA21	1	1 unit	41J
		Yellow	B	3SB3110-0DA31	1	1 unit	41J
		Green	B	3SB3110-0DA41	1	1 unit	41J
		Blue	C	3SB3110-0DA51	1	1 unit	41J
		White	B	3SB3110-0DA61	1	1 unit	41J
 Illuminated pushbutton switch	Illuminated pushbutton switches, latching, with flat button (incl. holder for 3 elements), unlatching by pressing again	Red ²⁾	B	3SB3111-0DA21	1	1 unit	41J
		Yellow ²⁾	B	3SB3111-0DA31	1	1 unit	41J
		Green ²⁾	B	3SB3111-0DA41	1	1 unit	41J
		Blue ²⁾	B	3SB3111-0DA51	1	1 unit	41J
		White	B	3SB3111-0DA61	1	1 unit	41J
		Clear ²⁾	B	3SB3111-0DA71	1	1 unit	41J













 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Inscription is possible by inserting a label.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Actuators and Indicators, Plastic, Square, 26 mm × 26 mm

Actuating and signaling elements

Version	Version Illumination	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG	
				Article No.	Price per PU			
Selector switches with holder¹⁾								
Selector switches with 2 switch positions								
	Switching sequence O-I, 50° operating angle, latching 	Non-illuminated	Black	B	3SB3110-2KA11	1	1 unit	41J
			Red	B	3SB3110-2KA21	1	1 unit	41J
			Green	B	3SB3110-2KA41	1	1 unit	41J
			White	B	3SB3110-2KA61	1	1 unit	41J
			Illuminated (incl. holder for 3 elements)	Red	B	3SB3111-2KA21	1	1 unit
Yellow	B	3SB3111-2KA31	1	1 unit	41J			
Green	B	3SB3111-2KA41	1	1 unit	41J			
Blue	B	3SB3111-2KA51	1	1 unit	41J			
Clear	B	3SB3111-2KA71	1	1 unit	41J			
	Switching sequence O-I, 50° operating angle, Momentary contact 	Non-illuminated	Black	B	3SB3110-2LA11	1	1 unit	41J
			Red	C	3SB3110-2LA21	1	1 unit	41J
			Green	C	3SB3110-2LA41	1	1 unit	41J
			White	C	3SB3110-2LA61	1	1 unit	41J
			Illuminated (incl. holder for 3 elements)	Red	B	3SB3111-2LA21	1	1 unit
Yellow	C	3SB3111-2LA31	1	1 unit	41J			
Green	C	3SB3111-2LA41	1	1 unit	41J			
Blue	C	3SB3111-2LA51	1	1 unit	41J			
Clear	B	3SB3111-2LA71	1	1 unit	41J			
Selector switches with 3 switch positions								
	Switching sequence I-O-II, 2 x 50° operating angle, Latching 	Non-illuminated	Black	B	3SB3110-2DA11	1	1 unit	41J
			Red	B	3SB3110-2DA21	1	1 unit	41J
			Green	C	3SB3110-2DA41	1	1 unit	41J
			White	C	3SB3110-2DA61	1	1 unit	41J
			Illuminated (incl. holder for 3 elements)	Red	B	3SB3111-2DA21	1	1 unit
Yellow	B	3SB3111-2DA31	1	1 unit	41J			
Green	B	3SB3111-2DA41	1	1 unit	41J			
Blue	C	3SB3111-2DA51	1	1 unit	41J			
Clear	B	3SB3111-2DA71	1	1 unit	41J			
	Switching sequence I-O-II, 2 x 50° operating angle, Momentary contact 	Non-illuminated	Black	B	3SB3110-2EA11	1	1 unit	41J
			Red	B	3SB3110-2EA21	1	1 unit	41J
			Green	C	3SB3110-2EA41	1	1 unit	41J
			White	C	3SB3110-2EA61	1	1 unit	41J
			Illuminated (incl. holder for 3 elements)	Red	C	3SB3111-2EA21	1	1 unit
Yellow	C	3SB3111-2EA31	1	1 unit	41J			
Green	B	3SB3111-2EA41	1	1 unit	41J			
Blue	C	3SB3111-2EA51	1	1 unit	41J			
Clear	B	3SB3111-2EA71	1	1 unit	41J			
	Switching sequence I-O-II, 2 x 50° operating angle, momentary contact to the left, latching to the right 	Non-illuminated	Black	B	3SB3110-2GA11	1	1 unit	41J
			Green	C	3SB3110-2GA41	1	1 unit	41J
			White	B	3SB3110-2GA61	1	1 unit	41J
	Switching sequence I-O-II, 2 x 50° operating angle, latching to the left, momentary contact to the right 	Non-illuminated	Black	B	3SB3110-2FA11	1	1 unit	41J
			Red	C	3SB3110-2FA21	1	1 unit	41J
			Green	B	3SB3110-2FA41	1	1 unit	41J

⚙ For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".









SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Plastic, Square, 26 mm × 26 mm

Actuating and signaling elements

Version	Lock version		DT	Configurator		PU (UNIT, SET, M)	PS*	PG
	Type	Lock No./color		Key removal position	Article No.			

Key-operated switches with holder¹⁾

		Key-operated switches with 2 keys, 2 switch positions								
 RONIS key-operated switch	Switching sequence O-I, 50° operating angle, Latching 	RONIS	SB 30	O+I	B	3SB3110-4AD11	1	1 unit	41J	
						B	3SB3110-4AD01	1	1 unit	41J
		CES	SSG 10	O+I	B	3SB3110-4LD11	1	1 unit	41J	
				O	B	3SB3110-4LD01	1	1 unit	41J	
				I	B	3SB3110-4LD21	1	1 unit	41J	
		LSG 1	O+I	C	3SB3110-4LF01	1	1 unit	41J		
			O	B	3SB3110-4LF11	1	1 unit	41J		
		BKS	E2 for VW ²⁾	O	B	3SB3110-5AE31	1	1 unit	41J	
			E7 for VW ²⁾	O+I	B	3SB3110-5AE41	1	1 unit	41J	
				O	B	3SB3110-5AE51	1	1 unit	41J	
	E9 for VW ²⁾	O	B	3SB3110-5AE71	1	1 unit	41J			
 CES key-operated switch	Switching sequence O-I, 50° operating angle, Momentary contact 	O.M.R. ³⁾	73037 Red	O	B	3SB3110-3AH01	1	1 unit	41J	
			73034 Black	O+I	B	3SB3110-3AJ11	1	1 unit	41J	
		RONIS	SB 30	O	B	3SB3110-4BD01	1	1 unit	41J	
		CES	SSG 10	O	B	3SB3110-4MD01	1	1 unit	41J	
 O.M.R. key-operated switch	Switching sequence I-O-II, 2 x 50° operating angle, Latching 	Key-operated switches with 2 keys, 3 switch positions								
		RONIS	SB 30	I+O+II	B	3SB3110-4DD11	1	1 unit	41J	
		CES	SSG 10	I+O+II	B	3SB3110-4PD11	1	1 unit	41J	
				O	B	3SB3110-4PD01	1	1 unit	41J	
		RONIS	SB 30	O	B	3SB3110-4ED01	1	1 unit	41J	
		CES	SSG 10	O	B	3SB3110-4QD01	1	1 unit	41J	
		Switching sequence I-O-II, 2 x 50° operating angle, momentary contact to the left, latching to the right 	CES	SSG 10	O	B	3SB3110-4SD01	1	1 unit	41J
			Switching sequence I-O-II, 2 x 50° operating angle, latching to the left, momentary contact to the right 	CES	SSG 10	O+I	C	3SB3110-4RD51	1	1 unit

For the online configurator, see www.siemens.com/sirius/configurators.

For BKS and CES special locks, see page 13/54.









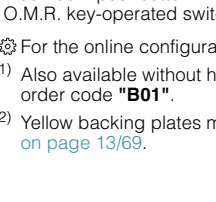

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Keys are not included in scope of supply.

³⁾ According to FIAT standards; also available for other users.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Actuators and Indicators, Plastic, Square, 26 mm × 26 mm

Actuating and signaling elements

Version	Color of the actuator	Approval	DT	Configurator	Price per PU	PU (UNIT, SET, M)	PS*	PG
EMERGENCY STOP devices acc. to ISO 13850 and IEC 60947-5-5 with holder¹⁾²⁾, can also be used with safety relays³⁾								
	Red		B	3SB3110-1HA20		1	1 unit	41J
EMERGENCY STOP mushroom pushbutton with rotate-to-unlatch mechanism								
	Red		B	3SB3110-1BA20		1	1 unit	41J
EMERGENCY STOP mushroom pushbutton with RONIS key-operated switch								
	Red		B	3SB3110-1KA20		1	1 unit	41J
EMERGENCY STOP mushroom pushbutton with CES key-operated switch								
	Red		B	3SB3110-1LA20		1	1 unit	41J
EMERGENCY STOP mushroom pushbutton with BKS key-operated switch								
	Red		B	3SB3110-1MA20		1	1 unit	41J
EMERGENCY STOP mushroom pushbutton with O.M.R. key-operated switch								


For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Yellow backing plates must be ordered separately; see "Accessories" on page 13/69.

³⁾ Can be used with 3SK11 safety relays or the 3RK3 Modular Safety System; see Catalog IC 10, Chapter 11, "Safety Technology".

For BKS and CES special locks, see page 13/54.

Version	Color of the lens	DT	Configurator	Price per PU	PU (UNIT, SET, M)	PS*	PG
Signaling elements with holder¹⁾							
	Indicator lights	Red	B	3SB3111-6AA20		1	1 unit 41J
		Yellow	B	3SB3111-6AA30		1	1 unit 41J
		Green	B	3SB3111-6AA40		1	1 unit 41J
		Blue	B	3SB3111-6AA50		1	1 unit 41J
		Clear	B	3SB3111-6AA70		1	1 unit 41J
		White	B	3SB3111-6AA60		1	1 unit 41J

For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Complete units

Selection and ordering data

The following applies to all complete units:

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Rated voltage of the lamp	Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Screw terminals	DT	Spring-type terminals	
				Configurator		Configurator	
V				Article No.	Price per PU	Article No.	Price per PU

Pushbuttons

Pushbuttons with flat button

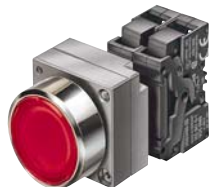


Pushbutton with flat button

Rated voltage of the lamp	Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Article No.	Price per PU	Article No.	Price per PU
V	Black ²⁾	1 NO	▶	3SB3602-0AA11	B	3SB3602-0AA11-0CC0	
	Black ²⁾	1 NC	B	3SB3603-0AA11	B	3SB3603-0AA11-0CC0	
	Red	1 NC	▶	3SB3603-0AA21	C	3SB3603-0AA21-0CC0	
	Yellow	1 NO	B	3SB3602-0AA31	C	3SB3602-0AA31-0CC0	
	Green	1 NO	▶	3SB3602-0AA41	C	3SB3602-0AA41-0CC0	
	Blue	1 NO	B	3SB3602-0AA51	C	3SB3602-0AA51-0CC0	
	White	1 NO	▶	3SB3602-0AA61	C	3SB3602-0AA61-0CC0	
	Black ²⁾	1 NO + 1 NC	B	3SB3601-0AA11	B	3SB3601-0AA11-0CC0	
	Red	1 NO + 1 NC	B	3SB3601-0AA21	B	3SB3601-0AA21-0CC0	
	Yellow	1 NO + 1 NC	B	3SB3601-0AA31	C	3SB3601-0AA31-0CC0	
	Green	1 NO + 1 NC	B	3SB3601-0AA41	C	3SB3601-0AA41-0CC0	
	Blue	1 NO + 1 NC	B	3SB3601-0AA51	B	3SB3601-0AA51-0CC0	
	White	1 NO + 1 NC	B	3SB3601-0AA61	B	3SB3601-0AA61-0CC0	
	Clear	1 NO + 1 NC	B	3SB3601-0AA71	--	--	

Illuminated pushbuttons with flat button

With integrated LED (incl. holder for 3 elements)



Illuminated pushbutton with flat button

Rated voltage of the lamp	Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Article No.	Price per PU	Article No.	Price per PU	
24 AC/DC	Red ³⁾	1 NC	▶	3SB3646-0AA21	C	3SB3646-0AA21-0CC0		
	Yellow ³⁾	1 NO	B	3SB3645-0AA31	B	3SB3645-0AA31-0CC0		
	Green ³⁾	1 NO	▶	3SB3645-0AA41	B	3SB3645-0AA41-0CC0		
	Blue ³⁾	1 NO	B	3SB3645-0AA51	C	3SB3645-0AA51-0CC0		
	White	1 NO	B	3SB3645-0AA61	B	3SB3645-0AA61-0CC0		
	Clear ³⁾	1 NO	▶	3SB3645-0AA71	C	3SB3645-0AA71-0CC0		
	Red ³⁾	1 NO + 1 NC	B	3SB3647-0AA21	B	3SB3647-0AA21-0CC0		
	Yellow ³⁾	1 NO + 1 NC	B	3SB3647-0AA31	C	3SB3647-0AA31-0CC0		
	Green ³⁾	1 NO + 1 NC	B	3SB3647-0AA41	B	3SB3647-0AA41-0CC0		
	Blue ³⁾	1 NO + 1 NC	B	3SB3647-0AA51	B	3SB3647-0AA51-0CC0		
	White	1 NO + 1 NC	B	3SB3647-0AA61	B	3SB3647-0AA61-0CC0		
	Clear ³⁾	1 NO + 1 NC	B	3SB3647-0AA71	C	3SB3647-0AA71-0CC0		
	110 AC	Red ³⁾	1 NC	B	3SB3650-0AA21	--	--	
		Yellow ³⁾	1 NO	B	3SB3657-0AA31	--	--	
Green ³⁾		1 NO	B	3SB3657-0AA41	--	--		
Blue ³⁾		1 NO	B	3SB3657-0AA51	--	--		
White		1 NO	B	3SB3657-0AA61	--	--		
Clear ³⁾		1 NO	D	3SB3657-0AA71	--	--		
Red ³⁾		1 NO + 1 NC	B	3SB3651-0AA21	--	--		
Yellow ³⁾		1 NO + 1 NC	B	3SB3651-0AA31	--	--		
Green ³⁾		1 NO + 1 NC	B	3SB3651-0AA41	--	--		
Blue ³⁾		1 NO + 1 NC	D	3SB3651-0AA51	--	--		
White		1 NO + 1 NC	B	3SB3651-0AA61	--	--		
Clear ³⁾		1 NO + 1 NC	B	3SB3651-0AA71	--	--		
230 AC		Red ³⁾	1 NC	▶	3SB3654-0AA21	C	3SB3654-0AA21-0CC0	
		Yellow ³⁾	1 NO	B	3SB3653-0AA31	C	3SB3653-0AA31-0CC0	
	Green ³⁾	1 NO	▶	3SB3653-0AA41	C	3SB3653-0AA41-0CC0		
	Blue ³⁾	1 NO	C	3SB3653-0AA51	C	3SB3653-0AA51-0CC0		
	White	1 NO	B	3SB3653-0AA61	C	3SB3653-0AA61-0CC0		
	Clear ³⁾	1 NO	▶	3SB3653-0AA71	C	3SB3653-0AA71-0CC0		
	Red ³⁾	1 NO + 1 NC	B	3SB3655-0AA21	C	3SB3655-0AA21-0CC0		
	Yellow ³⁾	1 NO + 1 NC	B	3SB3655-0AA31	C	3SB3655-0AA31-0CC0		
	Green ³⁾	1 NO + 1 NC	B	3SB3655-0AA41	C	3SB3655-0AA41-0CC0		
	Blue ³⁾	1 NO + 1 NC	D	3SB3655-0AA51	C	3SB3655-0AA51-0CC0		
	White	1 NO + 1 NC	B	3SB3655-0AA61	C	3SB3655-0AA61-0CC0		
	Clear ³⁾	1 NO + 1 NC	B	3SB3655-0AA71	C	3SB3655-0AA71-0CC0		

For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A or 3SB3403-0A).

²⁾ Solvent-resistant





³⁾ Inscription is possible by inserting a label.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

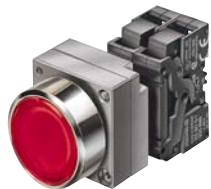
Complete units

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Rated voltage of the lamp	Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Screw terminals 	DT	Spring-type terminals 	
				Configurator 			Configurator 
				Article No.	Price per PU	Article No.	Price per PU

V

Pushbuttons



Illuminated pushbutton with flat button

Illuminated pushbuttons with flat button

With BA 9s lampholder, without lamp (incl. holder for 3 elements)

--	Red ²⁾	1 NC	B	3SB3607-0AA21	C	3SB3607-0AA21-0CC0
	Amber ²⁾	1 NO	D	3SB3606-0AA01	--	--
	Yellow ²⁾	1 NO	B	3SB3606-0AA31	B	3SB3606-0AA31-0CC0
	Green ²⁾	1 NO	B	3SB3606-0AA41	C	3SB3606-0AA41-0CC0
	Blue ²⁾	1 NO	B	3SB3606-0AA51	C	3SB3606-0AA51-0CC0
	White	1 NO	B	3SB3606-0AA61	B	3SB3606-0AA61-0CC0
	Clear ²⁾	1 NO	B	3SB3606-0AA71	C	3SB3606-0AA71-0CC0
	Red ²⁾	1 NO + 1 NC	B	3SB3605-0AA21	C	3SB3605-0AA21-0CC0
	Amber ²⁾	1 NO + 1 NC	B	3SB3605-0AA01	--	--
	Yellow ²⁾	1 NO + 1 NC	B	3SB3605-0AA31	C	3SB3605-0AA31-0CC0
	Green ²⁾	1 NO + 1 NC	B	3SB3605-0AA41	C	3SB3605-0AA41-0CC0
	Blue ²⁾	1 NO + 1 NC	B	3SB3605-0AA51	C	3SB3605-0AA51-0CC0
	White	1 NO + 1 NC	B	3SB3605-0AA61	C	3SB3605-0AA61-0CC0
	Clear ²⁾	1 NO + 1 NC	B	3SB3605-0AA71	C	3SB3605-0AA71-0CC0



Illuminated pushbutton with flat button

Illuminated pushbuttons with flat solvent-resistant button³⁾

With integrated LED (incl. holder for 3 elements)

24 AC/DC	Red ²⁾	1 NC	B	3SB3646-0AA21-0PA0	--	--
	Yellow ²⁾	1 NO	B	3SB3645-0AA31-0PA0	--	--
	Green ²⁾	1 NO	B	3SB3645-0AA41-0PA0	--	--
	Blue ²⁾	1 NO	B	3SB3645-0AA51-0PA0	--	--
	White	1 NO	B	3SB3645-0AA61-0PA0	--	--
	Clear ²⁾	1 NO	B	3SB3645-0AA71-0PA0	--	--
	Red ²⁾	1 NO + 1 NC	B	3SB3647-0AA21-0PA0	--	--
	Yellow ²⁾	1 NO + 1 NC	B	3SB3647-0AA31-0PA0	--	--
	Green ²⁾	1 NO + 1 NC	B	3SB3647-0AA41-0PA0	--	--
	Blue ²⁾	1 NO + 1 NC	B	3SB3647-0AA51-0PA0	--	--
	White	1 NO + 1 NC	B	3SB3647-0AA61-0PA0	--	--
	Clear ²⁾	1 NO + 1 NC	B	3SB3647-0AA71-0PA0	--	--

Mushroom pushbuttons



Mushroom push-pull button

Mushroom push-pull buttons, Ø 40 mm, latching

With pull-to-unlatch mechanism

--	Red	1 NC	B	3SB3603-1CA21	B	3SB3603-1CA21-0CC0
		1 NO + 1 NC	B	3SB3601-1CA21	C	3SB3601-1CA21-0CC0

 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A or 3SB3403-0A).

²⁾ Inscription is possible by inserting a label.





³⁾ Not suitable for laser inscription.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

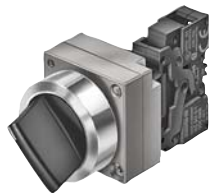
Actuators and Indicators, Metal, Round, 22 mm

Complete units

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Version	Color of actuator/ Lock No.	Contacts for front plate mounting ¹⁾	DT	Screw terminals 	DT	Spring-type terminals 	
				Configurator 	Configurator 		
				Article No.	Price per PU	Article No.	Price per PU


Selector switches



Selector switch


Selector switches, 2 switch positions

Switching sequence O-I, 50° operating angle

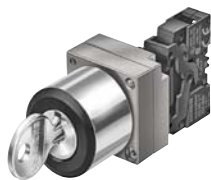
Latching	Color	Contacts	DT	DT	DT
	Black	1 NO	▶	3SB3602-2KA11	B 3SB3602-2KA11-0CC0
		1 NO + 1 NC	B	3SB3601-2KA11	B 3SB3601-2KA11-0CC0
Heavy duty ²⁾	Black	1 NO	D	3SB3602-2PA11	--
		1 NO + 1 NC	D	3SB3601-2PA11	--

Selector switches, 3 switch positions

Switching sequence I-O-II, 2 x 50° operating angle

Latching	Color	Contacts	DT	DT	DT
	Black	1 NO, 1 NO	▶	3SB3610-2DA11	B 3SB3610-2DA11-0CC0
		1 NO + 1 NC, 1 NO + 1 NC	▶	3SB3608-2DA11	C 3SB3608-2DA11-0CC0
		Heavy duty ²⁾	1 NO, 1 NO	D	3SB3610-2SA11
Momentary contact	Black	1 NO + 1 NC, 1 NO + 1 NC	D	3SB3608-2SA11	--
		1 NO, 1 NO	▶	3SB3610-2EA11	C 3SB3610-2EA11-0CC0
		1 NO + 1 NC, 1 NO + 1 NC	B	3SB3608-2EA11	C 3SB3608-2EA11-0CC0
Heavy duty ²⁾	Black	1 NO, 1 NO	D	3SB3610-2TA11	--
		1 NO + 1 NC, 1 NO + 1 NC	D	3SB3608-2TA11	--


Key-operated switches



RONIS key-operated switch

RONIS key-operated switches, 2 switch positions

With 2 keys, removal position O + I, switching sequence O-I, 50° operating angle

Latching	Color	Contacts	DT	DT	DT
	SB 30	1 NO	▶	3SB3602-4AD11	C 3SB3602-4AD11-0CC0
		1 NO + 1 NC	B	3SB3601-4AD11	C 3SB3601-4AD11-0CC0

 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The inscription 1 NO + 1 NC means that a contact block with two contacts is used (3SB3400-0A or 3SB3403-0A).





²⁾ Solvent-resistant

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

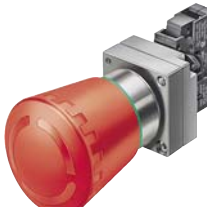









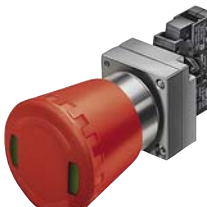






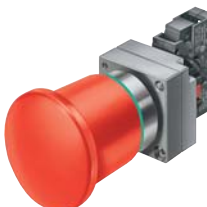







Actuators and Indicators, Metal, Round, 22 mm

Complete units

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Color of the actuator	Contacts for front plate mounting ¹⁾	DT	Screw terminals 	DT	Spring-type terminals 
			Configurator 		Configurator 
			Article No. Price per PU		Article No. Price per PU

EMERGENCY STOP devices acc. to ISO 13850 and IEC 60947-5-5, with holder and yellow backing plate, Ø 80 mm, with inscription

 <p>EMERGENCY STOP mushroom pushbutton With rotate-to-unlatch mechanism</p>	EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with positive latching With rotate-to-unlatch mechanism					
	• German inscription "NOT-HALT"					
	Red	1 NC 	▶	3SB3603-1HA20	B	3SB3603-1HA20-OCC0
		1 NC with installation monitoring 	B	3SB3666-1HA20		--
		1 NO + 1 NC 	B	3SB3601-1HA20	B	3SB3601-1HA20-OCC0
		1 NC, 1 NC 		--	B	3SB3611-1HA20-OCC0
	• English inscription "EMERGENCY STOP"					
	Red	1 NC 	B	3SB3603-1HR20		--
		1 NC with installation monitoring 	B	3SB3666-1HR20		--
		1 NO + 1 NC 	B	3SB3601-1HR20		--
	• French inscription "ARRET D'URGENCE"					
	Red	1 NC 	B	3SB3603-1HP20		--
	1 NO + 1 NC 	B	3SB3601-1HP20		--	
 <p>EMERGENCY STOP mushroom pushbutton With rotate-to-unlatch mechanism and switch position indicator</p>	With rotate-to-unlatch mechanism and mechanical switch position indicator					
	• German inscription "NOT-HALT"					
	Red	1 NC 	C	3SB3603-1HA26	B	3SB3603-1HA26-OCC0
		1 NC with installation monitoring 	B	3SB3666-1HA26		--
		1 NO + 1 NC 	B	3SB3601-1HA26	B	3SB3601-1HA26-OCC0
	• English inscription "EMERGENCY STOP"					
	Red	1 NC 	B	3SB3603-1HR26		--
		1 NC with installation monitoring 	B	3SB3666-1HR26		--
		1 NO + 1 NC 	B	3SB3601-1HR26		--
	 <p>EMERGENCY STOP mushroom pushbutton with pull-to-unlatch mechanism</p>	With pull-to-unlatch mechanism, solvent-resistant				
		• German inscription "NOT-HALT"				
		Red	1 NC 	B	3SB3603-1TA20	B
		1 NO + 1 NC 	B	3SB3601-1TA20	B	3SB3601-1TA20-OCC0
		1 NC, 1 NC 		--	B	3SB3611-1TA20-OCC0
• English inscription "EMERGENCY STOP"						
Red		1 NC 	B	3SB3603-1TR20		--
		1 NO + 1 NC 	B	3SB3601-1TR20		--
• French inscription "ARRET D'URGENCE"						
Red		1 NC 	B	3SB3603-1TP20		--
		1 NO + 1 NC 	B	3SB3601-1TP20		--

 For the online configurator, see www.siemens.com/sirius/configurators.

 Positive opening according to IEC 60947-5-1, Annex K.
 Can be used with 3SK11 safety relays or the 3RK3 Modular Safety System;
 see [Catalog IC 10, Chapter 11, "Safety Technology"](#).
 Certificate:







¹⁾ Meaning of the inscription:
 1 NO + 1 NC: One contact block is delivered with two contacts
 (3SB3400-0A or 3SB3403-0A).
 1 NC, 1 NC: Two contact blocks are delivered with one contact each
 (2 x 3SB3403-0C).

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Complete units

PU (UNIT) = 1
 PS* = 1 unit
 PG = 41J

Rated voltage of lamp	Color of the lens	DT	Screw terminals 	DT	Spring-type terminals 	
			Configurator 			
			Article No.	Price per PU		
					Configurator 	
					Article No.	Price per PU

V

Indicator lights

Indicator lights with lens with concentric rings¹⁾

With integrated LED



Indicator light

24 AC/DC

Red ▶ **3SB3644-6BA20**
 Yellow B **3SB3644-6BA30**
 Green ▶ **3SB3644-6BA40**
 Blue B **3SB3644-6BA50**
 White B **3SB3644-6BA60**
 Clear ▶ **3SB3644-6BA70**

B **3SB3644-6BA20-0CC0**
 B **3SB3644-6BA30-0CC0**
 B **3SB3644-6BA40-0CC0**
 B **3SB3644-6BA50-0CC0**
 B **3SB3644-6BA60-0CC0**
 B **3SB3644-6BA70-0CC0**

110 AC

Red B **3SB3648-6BA20**
 Yellow B **3SB3648-6BA30**
 Green B **3SB3648-6BA40**
 Blue B **3SB3648-6BA50**
 White B **3SB3648-6BA60**
 Clear B **3SB3648-6BA70**

B **3SB3648-6BA20-0CC0**
 C **3SB3648-6BA30-0CC0**
 C **3SB3648-6BA40-0CC0**
 C **3SB3648-6BA50-0CC0**
 B **3SB3648-6BA60-0CC0**
 B **3SB3648-6BA70-0CC0**

230 AC

Red ▶ **3SB3652-6BA20**
 Yellow B **3SB3652-6BA30**
 Green ▶ **3SB3652-6BA40**
 Blue B **3SB3652-6BA50**
 White B **3SB3652-6BA60**
 Clear ▶ **3SB3652-6BA70**

C **3SB3652-6BA20-0CC0**
 C **3SB3652-6BA30-0CC0**
 C **3SB3652-6BA40-0CC0**
 C **3SB3652-6BA50-0CC0**
 C **3SB3652-6BA60-0CC0**
 C **3SB3652-6BA70-0CC0**

With BA 9s lampholder, without lamp

--

Red B **3SB3604-6BA20**
 Yellow B **3SB3604-6BA30**
 Green B **3SB3604-6BA40**
 Blue B **3SB3604-6BA50**
 White B **3SB3604-6BA60**
 Clear B **3SB3604-6BA70**

B **3SB3604-6BA20-0CC0**
 C **3SB3604-6BA30-0CC0**
 B **3SB3604-6BA40-0CC0**
 C **3SB3604-6BA50-0CC0**
 B **3SB3604-6BA60-0CC0**
 C **3SB3604-6BA70-0CC0**

 For the online configurator, see www.siemens.com/sirius/configurators.








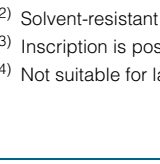
¹⁾ Inscription by inserting a label is not possible.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Selection and ordering data

Version	Inscription	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG	
				Article No.	Price per PU			
Pushbuttons with holder¹⁾								
	Pushbuttons with flat button	Black ²⁾	▶	3SB3500-0AA11		1	1 unit 41J	
		Red	▶	3SB3500-0AA21		1	1 unit 41J	
		Yellow	B	3SB3500-0AA31		1	1 unit 41J	
		Green	▶	3SB3500-0AA41		1	1 unit 41J	
		Blue	B	3SB3500-0AA51		1	1 unit 41J	
		White	▶	3SB3500-0AA61		1	1 unit 41J	
		Gray	B	3SB3500-0AB51		1	1 unit 41J	
		Clear ³⁾	B	3SB3500-0AA71		1	1 unit 41J	
		I	Green	B	3SB3500-0AA81		1	1 unit 41J
		O	Red	B	3SB3500-0AB01		1	1 unit 41J
	Pushbuttons with flat solvent-resistant button⁴⁾	Black ²⁾	▶	3SB3500-0AA11		1	1 unit 41J	
		Red	B	3SB3500-0AA21-0PA0		1	1 unit 41J	
		Yellow	B	3SB3500-0AA31-0PA0		1	1 unit 41J	
		Green	B	3SB3500-0AA41-0PA0		1	1 unit 41J	
	Pushbuttons with raised button	Blue	B	3SB3500-0AA51-0PA0		1	1 unit 41J	
		White	C	3SB3500-0AA61-0PA0		1	1 unit 41J	
		Black ²⁾	B	3SB3500-0BA11		1	1 unit 41J	
		Red	B	3SB3500-0BA21		1	1 unit 41J	
		Yellow	B	3SB3500-0BA31		1	1 unit 41J	
	Pushbuttons with raised front ring (height 15.5 mm)	Green	B	3SB3500-0BA41		1	1 unit 41J	
		Blue	B	3SB3500-0BA51		1	1 unit 41J	
		White	B	3SB3500-0BA61		1	1 unit 41J	
		Black ²⁾	B	3SB3500-0AA12		1	1 unit 41J	
		Red ²⁾	B	3SB3500-0AA22		1	1 unit 41J	
	Illuminated pushbuttons with flat button (incl. holder for 3 elements)	Yellow ²⁾	B	3SB3500-0AA32		1	1 unit 41J	
		Green ²⁾	B	3SB3500-0AA42		1	1 unit 41J	
		Blue ²⁾	B	3SB3500-0AA52		1	1 unit 41J	
		White ²⁾	B	3SB3500-0AA62		1	1 unit 41J	
		Amber ³⁾	B	3SB3501-0AA01		1	1 unit 41J	
		Red ³⁾	▶	3SB3501-0AA21		1	1 unit 41J	
	Illuminated pushbuttons with flat button (incl. holder for 3 elements)	Yellow ³⁾	▶	3SB3501-0AA31		1	1 unit 41J	
		Green ³⁾	▶	3SB3501-0AA41		1	1 unit 41J	
		Blue ³⁾	B	3SB3501-0AA51		1	1 unit 41J	
		White	B	3SB3501-0AA61		1	1 unit 41J	
		Clear ³⁾	▶	3SB3501-0AA71		1	1 unit 41J	
		Red ³⁾	B	3SB3501-0AA21-0PA0		1	1 unit 41J	
	Illuminated pushbuttons with flat solvent-resistant button⁴⁾ (incl. holder for 3 elements)	Yellow ³⁾	B	3SB3501-0AA31-0PA0		1	1 unit 41J	
		Green ³⁾	B	3SB3501-0AA41-0PA0		1	1 unit 41J	
		Blue ³⁾	B	3SB3501-0AA51-0PA0		1	1 unit 41J	
		White	B	3SB3501-0AA61-0PA0		1	1 unit 41J	
		Clear ³⁾	B	3SB3501-0AA71-0PA0		1	1 unit 41J	
		Amber	C	3SB3501-0BA01		1	1 unit 41J	
	Illuminated pushbuttons with raised button (incl. holder for 3 elements)	Red	B	3SB3501-0BA21		1	1 unit 41J	
		Yellow	B	3SB3501-0BA31		1	1 unit 41J	
		Green	B	3SB3501-0BA41		1	1 unit 41J	
		Blue	B	3SB3501-0BA51		1	1 unit 41J	
		Clear	B	3SB3501-0BA71		1	1 unit 41J	
		Black ²⁾	B	3SB3500-0DA11		1	1 unit 41J	
		Red ²⁾	B	3SB3500-0DA21		1	1 unit 41J	
		Yellow ²⁾	B	3SB3500-0DA31		1	1 unit 41J	
Green ²⁾	B	3SB3500-0DA41		1	1 unit 41J			
Pushbutton switches with flat button, latching, unlatching by pressing again	Pushbutton switches with flat button, latching, unlatching by pressing again, (incl. holder for 3 elements)	Blue ²⁾	B	3SB3500-0DA51		1	1 unit 41J	
		White ²⁾	B	3SB3500-0DA61		1	1 unit 41J	
		Gray ²⁾	D	3SB3500-0DB51		1	1 unit 41J	
		Amber ³⁾	D	3SB3501-0DA01		1	1 unit 41J	
		Red ³⁾	B	3SB3501-0DA21		1	1 unit 41J	
		Yellow ³⁾	B	3SB3501-0DA31		1	1 unit 41J	
		Green ³⁾	B	3SB3501-0DA41		1	1 unit 41J	
Blue ³⁾	B	3SB3501-0DA51		1	1 unit 41J			
White	B	3SB3501-0DA61		1	1 unit 41J			
Clear ³⁾	B	3SB3501-0DA71		1	1 unit 41J			

⚙ For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Solvent-resistant







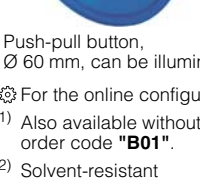





³⁾ Inscription is possible by inserting a label.

⁴⁾ Not suitable for laser inscription.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Version	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG	
			Article No.	Price per PU			
Mushroom pushbuttons with holder¹⁾							
	Mushroom pushbuttons, Ø 30 mm	Black ²⁾	B	3SB3500-1DA11	1	1 unit	41J
		Red	B	3SB3500-1DA21	1	1 unit	41J
		Yellow	B	3SB3500-1DA31	1	1 unit	41J
		Green	B	3SB3500-1DA41	1	1 unit	41J
	Mushroom pushbuttons, Ø 40 mm	Black ²⁾	B	3SB3500-1GA11	1	1 unit	41J
		Red	B	3SB3500-1GA21	1	1 unit	41J
		Yellow	B	3SB3500-1GA31	1	1 unit	41J
		Green	B	3SB3500-1GA41	1	1 unit	41J
	Mushroom pushbuttons, Ø 60 mm	Black ²⁾	B	3SB3500-1QA11	1	1 unit	41J
		Red	B	3SB3500-1QA21	1	1 unit	41J
		Yellow	B	3SB3500-1QA31	1	1 unit	41J
		Green	B	3SB3500-1QA41	1	1 unit	41J
	Illuminated mushroom pushbuttons, Ø 30 mm (incl. holder for 3 elements)	Amber	B	3SB3501-1DA01	1	1 unit	41J
		Yellow	B	3SB3501-1DA31	1	1 unit	41J
		Green	B	3SB3501-1DA41	1	1 unit	41J
		White	B	3SB3501-1DA61	1	1 unit	41J
	Illuminated mushroom pushbuttons, Ø 40 mm (incl. holder for 3 elements)	Amber	B	3SB3501-1GA01	1	1 unit	41J
		Yellow	B	3SB3501-1GA31	1	1 unit	41J
		Green	B	3SB3501-1GA41	1	1 unit	41J
		White	B	3SB3501-1GA61	1	1 unit	41J
	Illuminated mushroom pushbuttons, Ø 60 mm (incl. holder for 3 elements)	Amber	B	3SB3501-1QA01	1	1 unit	41J
		Yellow	B	3SB3501-1QA31	1	1 unit	41J
		Green	B	3SB3501-1QA41	1	1 unit	41J
		White	B	3SB3501-1QA61	1	1 unit	41J
	Push-pull buttons, Ø 30 mm, latching, pull to unlatch	Black ²⁾	B	3SB3500-1EA11	1	1 unit	41J
		Red	B	3SB3500-1EA21	1	1 unit	41J
	Push-pull buttons, Ø 40 mm, latching, pull to unlatch	Black ²⁾	B	3SB3500-1CA11	1	1 unit	41J
		Red	B	3SB3500-1CA21	1	1 unit	41J
		Yellow	B	3SB3500-1CA31	1	1 unit	41J
		Green	C	3SB3500-1CA41	1	1 unit	41J
	Push-pull buttons, Ø 60 mm, latching, pull to unlatch	Black ²⁾	B	3SB3500-1RA11	1	1 unit	41J
		Red	B	3SB3500-1RA21	1	1 unit	41J
	Push-pull buttons, Ø 30 mm, latching, pull to unlatch	Amber	B	3SB3501-1EA01	1	1 unit	41J
		Red	B	3SB3501-1EA21	1	1 unit	41J
		Yellow	B	3SB3501-1EA31	1	1 unit	41J
		Green	B	3SB3501-1EA41	1	1 unit	41J
		Blue	B	3SB3501-1EA51	1	1 unit	41J
		Clear	B	3SB3501-1EA71	1	1 unit	41J
	Push-pull buttons, Ø 40 mm, latching, pull to unlatch	Amber	C	3SB3501-1CA01	1	1 unit	41J
		Red	B	3SB3501-1CA21	1	1 unit	41J
		Yellow	B	3SB3501-1CA31	1	1 unit	41J
		Green	B	3SB3501-1CA41	1	1 unit	41J
		Blue	B	3SB3501-1CA51	1	1 unit	41J
		Clear	B	3SB3501-1CA71	1	1 unit	41J
	Push-pull buttons, Ø 60 mm, latching, pull to unlatch	Amber	C	3SB3501-1RA01	1	1 unit	41J
		Red	B	3SB3501-1RA21	1	1 unit	41J
		Yellow	B	3SB3501-1RA31	1	1 unit	41J
		Green	C	3SB3501-1RA41	1	1 unit	41J
		Blue	C	3SB3501-1RA51	1	1 unit	41J
		Clear	D	3SB3501-1RA71	1	1 unit	41J

For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Solvent-resistant

* You can order this quantity or a multiple thereof.
Illustrations are approximate





SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Version	Version Illumination	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		

Selector switches with holder

Selector switches with 2 switch positions									
 <p>Selector switch, 2 switch positions, standard version, 90°</p>	 <p>Switching sequence O-I, 90° operating angle, latching</p>	Non-illuminated, standard version¹⁾		Black	▶	3SB3500-2HA11	1	1 unit	41J
				Red	A	3SB3500-2HA21	1	1 unit	41J
				Green	B	3SB3500-2HA41	1	1 unit	41J
				White	B	3SB3500-2HA61	1	1 unit	41J
		Non-illuminated, with solvent-resistant knob¹⁾		Black	B	3SB3500-2HA11-0PA0	1	1 unit	41J
				Red	B	3SB3500-2HA21-0PA0	1	1 unit	41J
				Green	B	3SB3500-2HA41-0PA0	1	1 unit	41J
		Illuminated, standard version¹⁾ (incl. holder for 3 elements)		Amber	C	3SB3501-2HA01	1	1 unit	41J
				Red	C	3SB3501-2HA21	1	1 unit	41J
				Yellow	C	3SB3501-2HA31	1	1 unit	41J
				Green	C	3SB3501-2HA41	1	1 unit	41J
				Blue	C	3SB3501-2HA51	1	1 unit	41J
		Clear	B	3SB3501-2HA71	1	1 unit	41J		
 <p>Selector switch, 2 switch positions, standard version, 50°</p>	 <p>Switching sequence O-I, 50° operating angle, latching</p>	Non-illuminated, standard version¹⁾		Black	▶	3SB3500-2KA11	1	1 unit	41J
				Red	B	3SB3500-2KA21	1	1 unit	41J
				Green	B	3SB3500-2KA41	1	1 unit	41J
				White	B	3SB3500-2KA61	1	1 unit	41J
		Non-illuminated, with solvent-resistant knob¹⁾		Black	B	3SB3500-2KA11-0PA0	1	1 unit	41J
				Red	D	3SB3500-2KA21-0PA0	1	1 unit	41J
				Green	B	3SB3500-2KA41-0PA0	1	1 unit	41J
		Illuminated, standard version¹⁾ (incl. holder for 3 elements)		Amber	D	3SB3501-2KA01	1	1 unit	41J
				Red	B	3SB3501-2KA21	1	1 unit	41J
				Yellow	B	3SB3501-2KA31	1	1 unit	41J
				Green	B	3SB3501-2KA41	1	1 unit	41J
				Blue	B	3SB3501-2KA51	1	1 unit	41J
		Clear	B	3SB3501-2KA71	1	1 unit	41J		
Illuminated, with solvent-resistant knob¹⁾ (incl. holder for 3 elements)		Red	D	3SB3501-2KA21-0PA0	1	1 unit	41J		
		Green	C	3SB3501-2KA41-0PA0	1	1 unit	41J		
		Blue	D	3SB3501-2KA51-0PA0	1	1 unit	41J		
		Clear	B	3SB3501-2KA71-0PA0	1	1 unit	41J		
Non-illuminated, heavy-duty version		Black ²⁾	C	3SB3500-2PA11	1	1 unit	41J		
		Red	D	3SB3500-2PA21	1	1 unit	41J		
		Green	D	3SB3500-2PA41	1	1 unit	41J		
		White	D	3SB3500-2PA61	1	1 unit	41J		
Illuminated, heavy-duty version (incl. holder for 3 elements)		Amber	D	3SB3501-2PA01	1	1 unit	41J		
		Red	D	3SB3501-2PA21	1	1 unit	41J		
		Yellow	D	3SB3501-2PA31	1	1 unit	41J		
		Green	D	3SB3501-2PA41	1	1 unit	41J		
		Blue	D	3SB3501-2PA51	1	1 unit	41J		
		Clear	D	3SB3501-2PA71	1	1 unit	41J		
Non-illuminated, long actuator		Black ²⁾	D	3SB3500-3PA11	1	1 unit	41J		
		Red	D	3SB3500-3PA21	1	1 unit	41J		
		Green	D	3SB3500-3PA41	1	1 unit	41J		
		White	D	3SB3500-3PA61	1	1 unit	41J		
Illuminated, long actuator (incl. holder for 3 elements)		Red	D	3SB3501-3PA21	1	1 unit	41J		
		Yellow	D	3SB3501-3PA31	1	1 unit	41J		
		Green	D	3SB3501-3PA41	1	1 unit	41J		
		Blue	D	3SB3501-3PA51	1	1 unit	41J		
		Clear	D	3SB3501-3PA71	1	1 unit	41J		

* For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Solvent-resistant





SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Version	Version Illumination	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
				Article No.	Price per PU		

Selector switches with holder

Selector switches with 2 switch positions								
 <p>Selector switch, 2 switch positions, standard version</p>	Non-illuminated, standard version ¹⁾ Switching sequence O-I, 50° operating angle, momentary contact 	Black	▶	3SB3500-2LA11	1	1 unit	41J	
		Red	B	3SB3500-2LA21	1	1 unit	41J	
		Green	B	3SB3500-2LA41	1	1 unit	41J	
		White	B	3SB3500-2LA61	1	1 unit	41J	
 <p>Selector switch, 2 switch positions, heavy-duty version</p>	Non-illuminated, with solvent-resistant knob ¹⁾	Black	B	3SB3500-2LA11-0PA0	1	1 unit	41J	
		Red	B	3SB3500-2LA21-0PA0	1	1 unit	41J	
		Green	B	3SB3500-2LA41-0PA0	1	1 unit	41J	
 <p>Selector switch, 2 switch positions, long actuator</p>	illuminated, standard version ¹⁾ (incl. holder for 3 elements)	Amber	D	3SB3501-2LA01	1	1 unit	41J	
		Red	B	3SB3501-2LA21	1	1 unit	41J	
		Yellow	B	3SB3501-2LA31	1	1 unit	41J	
		Green	B	3SB3501-2LA41	1	1 unit	41J	
		Blue	B	3SB3501-2LA51	1	1 unit	41J	
		Clear	B	3SB3501-2LA71	1	1 unit	41J	
		illuminated, with solvent-resistant knob ¹⁾ (incl. holder for 3 elements)	Red	C	3SB3501-2LA21-0PA0	1	1 unit	41J
			Green	D	3SB3501-2LA41-0PA0	1	1 unit	41J
			Blue	C	3SB3501-2LA51-0PA0	1	1 unit	41J
			Clear	B	3SB3501-2LA71-0PA0	1	1 unit	41J
Non-illuminated, heavy-duty version	Black ²⁾ Red Green White	D	3SB3500-2QA11	1	1 unit	41J		
		D	3SB3500-2QA21	1	1 unit	41J		
		D	3SB3500-2QA41	1	1 unit	41J		
		D	3SB3500-2QA61	1	1 unit	41J		
illuminated, Heavy-duty version (incl. holder for 3 elements)	Amber Red Yellow Green Blue Clear	D	3SB3501-2QA01	1	1 unit	41J		
		D	3SB3501-2QA21	1	1 unit	41J		
		D	3SB3501-2QA31	1	1 unit	41J		
		D	3SB3501-2QA41	1	1 unit	41J		
		D	3SB3501-2QA51	1	1 unit	41J		
Non-illuminated, long actuator	Black ²⁾ Red Green	D	3SB3500-3QA11	1	1 unit	41J		
		D	3SB3500-3QA21	1	1 unit	41J		
		D	3SB3500-3QA41	1	1 unit	41J		
illuminated, long actuator (incl. holder for 3 elements)	Red Yellow Green Blue Clear	D	3SB3501-3QA21	1	1 unit	41J		
		D	3SB3501-3QA31	1	1 unit	41J		
		D	3SB3501-3QA41	1	1 unit	41J		
		D	3SB3501-3QA51	1	1 unit	41J		
		D	3SB3501-3QA71	1	1 unit	41J		

For the online configurator, see www.siemens.com/sirius/configurators.





¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Solvent-resistant

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Version	Version Illumination	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG			
				Article No.	Price per PU					
Selector switches with holder										
Selector switches with 3 switch positions										
 <p>Selector switch, 3 switch positions, standard version</p>  <p>Selector switch, 3 switch positions, heavy-duty version</p>  <p>Selector switch, 3 switch positions, long actuator</p>	Switch position sequence I-O-II, 2 x 50° operating angle, latching 	Non-illuminated, standard version¹⁾		Black ▶	3SB3500-2DA11	1	1 unit	41J		
				Red B	3SB3500-2DA21	1	1 unit	41J		
				Green B	3SB3500-2DA41	1	1 unit	41J		
				White B	3SB3500-2DA61	1	1 unit	41J		
				Non-illuminated, with solvent-resistant knob¹⁾		Black B	3SB3500-2DA11-0PA0	1	1 unit	41J
				Red C	3SB3500-2DA21-0PA0	1	1 unit	41J		
				Green B	3SB3500-2DA41-0PA0	1	1 unit	41J		
				Illuminated, standard version¹⁾		Amber D	3SB3501-2DA01	1	1 unit	41J
				Red B	3SB3501-2DA21	1	1 unit	41J		
				Yellow B	3SB3501-2DA31	1	1 unit	41J		
				Green B	3SB3501-2DA41	1	1 unit	41J		
				Blue B	3SB3501-2DA51	1	1 unit	41J		
		Clear B	3SB3501-2DA71	1	1 unit	41J				
		Illuminated, with solvent-resistant knob¹⁾		Red B	3SB3501-2DA21-0PA0	1	1 unit	41J		
		Green D	3SB3501-2DA41-0PA0	1	1 unit	41J				
		Blue B	3SB3501-2DA51-0PA0	1	1 unit	41J				
		Clear D	3SB3501-2DA71-0PA0	1	1 unit	41J				
		Non-illuminated, heavy-duty version		Black ²⁾ C	3SB3500-2SA11	1	1 unit	41J		
		Red D	3SB3500-2SA21	1	1 unit	41J				
		Green D	3SB3500-2SA41	1	1 unit	41J				
		White D	3SB3500-2SA61	1	1 unit	41J				
		Illuminated, heavy-duty version		Amber D	3SB3501-2SA01	1	1 unit	41J		
		Red D	3SB3501-2SA21	1	1 unit	41J				
		Yellow D	3SB3501-2SA31	1	1 unit	41J				
		Green D	3SB3501-2SA41	1	1 unit	41J				
		Blue D	3SB3501-2SA51	1	1 unit	41J				
		Clear D	3SB3501-2SA71	1	1 unit	41J				
		Non-illuminated, long actuator		Black ²⁾ D	3SB3500-3SA11	1	1 unit	41J		
		Red D	3SB3500-3SA21	1	1 unit	41J				
		Green D	3SB3500-3SA41	1	1 unit	41J				
		White D	3SB3500-3SA61	1	1 unit	41J				
		Illuminated, long actuator		Red D	3SB3501-3SA21	1	1 unit	41J		
		Yellow D	3SB3501-3SA31	1	1 unit	41J				
		Green D	3SB3501-3SA41	1	1 unit	41J				
		Blue D	3SB3501-3SA51	1	1 unit	41J				
		Clear D	3SB3501-3SA71	1	1 unit	41J				
		Non-illuminated, standard version¹⁾		Black ▶	3SB3500-2EA11	1	1 unit	41J		
		Red B	3SB3500-2EA21	1	1 unit	41J				
		Green B	3SB3500-2EA41	1	1 unit	41J				
		White B	3SB3500-2EA61	1	1 unit	41J				
		Non-illuminated, with solvent-resistant knob¹⁾		Black B	3SB3500-2EA11-0PA0	1	1 unit	41J		
		Red B	3SB3500-2EA21-0PA0	1	1 unit	41J				
		Green B	3SB3500-2EA41-0PA0	1	1 unit	41J				
		Illuminated, standard version¹⁾		Amber D	3SB3501-2EA01	1	1 unit	41J		
		Red B	3SB3501-2EA21	1	1 unit	41J				
		Yellow B	3SB3501-2EA31	1	1 unit	41J				
		Green B	3SB3501-2EA41	1	1 unit	41J				
		Blue B	3SB3501-2EA51	1	1 unit	41J				
		Clear B	3SB3501-2EA71	1	1 unit	41J				
		Illuminated, with solvent-resistant knob¹⁾		Red B	3SB3501-2EA21-0PA0	1	1 unit	41J		
		Green B	3SB3501-2EA41-0PA0	1	1 unit	41J				
		Blue B	3SB3501-2EA51-0PA0	1	1 unit	41J				
		Clear B	3SB3501-2EA71-0PA0	1	1 unit	41J				

For the online configurator, see www.siemens.com/sirius/configurators.





¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Solvent-resistant

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Version	Version Illumination	Color of the actuator	DT	Configurator	PU (UNIT, SET, M)	PS*	PG	
				Article No.	Price per PU			
Selector switches with holder								
 <p>Selector switch, 3 switch positions, standard version</p>	Selector switches with 3 switch positions							
	Switch position sequence I-O-II, 2 x 50° operating angle, Momentary contact 	Non-illuminated, Heavy-duty Version	Black ²⁾	C	3SB3500-2TA11	1	1 unit	41J
			Red	D	3SB3500-2TA21	1	1 unit	41J
			Green	D	3SB3500-2TA41	1	1 unit	41J
			White	D	3SB3500-2TA61	1	1 unit	41J
		Illuminated, heavy-duty version (incl. holder for 3 elements)	Amber	D	3SB3501-2TA01	1	1 unit	41J
			Red	D	3SB3501-2TA21	1	1 unit	41J
			Yellow	D	3SB3501-2TA31	1	1 unit	41J
			Green	D	3SB3501-2TA41	1	1 unit	41J
			Blue	D	3SB3501-2TA51	1	1 unit	41J
			Clear	D	3SB3501-2TA71	1	1 unit	41J
		Non-illuminated, long actuator	Black ²⁾	D	3SB3500-3TA11	1	1 unit	41J
Red			D	3SB3500-3TA21	1	1 unit	41J	
Green	D		3SB3500-3TA41	1	1 unit	41J		
White	D		3SB3500-3TA61	1	1 unit	41J		
	Illuminated, long actuator (incl. holder for 3 elements)	Red	D	3SB3501-3TA21	1	1 unit	41J	
		Yellow	D	3SB3501-3TA31	1	1 unit	41J	
		Green	D	3SB3501-3TA41	1	1 unit	41J	
		Blue	D	3SB3501-3TA51	1	1 unit	41J	
		Clear	D	3SB3501-3TA71	1	1 unit	41J	
	Switch position sequence I-O-II, 2 x 50° operating angle, momentary contact to the left, latching to the right 	Non-illuminated, standard version¹⁾	Black	B	3SB3500-2GA11	1	1 unit	41J
			Red	B	3SB3500-2GA21	1	1 unit	41J
			Green	B	3SB3500-2GA41	1	1 unit	41J
		White	B	3SB3500-2GA61	1	1 unit	41J	
	Illuminated, standard version¹⁾ (incl. holder for 3 elements)	Amber	D	3SB3501-2GA01	1	1 unit	41J	
		Red	D	3SB3501-2GA21	1	1 unit	41J	
		Yellow	D	3SB3501-2GA31	1	1 unit	41J	
		Green	B	3SB3501-2GA41	1	1 unit	41J	
		Blue	D	3SB3501-2GA51	1	1 unit	41J	
		Clear	C	3SB3501-2GA71	1	1 unit	41J	
	Non-illuminated, heavy-duty version	Black ²⁾	D	3SB3500-2VA11	1	1 unit	41J	
		Red	D	3SB3500-2VA21	1	1 unit	41J	
Green		D	3SB3500-2VA41	1	1 unit	41J		
White		D	3SB3500-2VA61	1	1 unit	41J		
	Illuminated, heavy-duty version	Amber	D	3SB3501-2VA01	1	1 unit	41J	
		Red	D	3SB3501-2VA21	1	1 unit	41J	
		Yellow	D	3SB3501-2VA31	1	1 unit	41J	
		Green	D	3SB3501-2VA41	1	1 unit	41J	
		Blue	D	3SB3501-2VA51	1	1 unit	41J	
		Clear	D	3SB3501-2VA71	1	1 unit	41J	
	Non-illuminated, long actuator	Black	D	3SB3500-3VA11	1	1 unit	41J	
		Red	D	3SB3500-3VA21	1	1 unit	41J	
Switch position sequence I-O-II, 2 x 50° operating angle, latching to the left, momentary contact to the right 		Non-illuminated, standard version¹⁾	Black	B	3SB3500-2FA11	1	1 unit	41J
			Red	D	3SB3500-2FA21	1	1 unit	41J
		Green	B	3SB3500-2FA41	1	1 unit	41J	
		White	B	3SB3500-2FA61	1	1 unit	41J	
	Illuminated, standard version¹⁾ (incl. holder for 3 elements)	Amber	D	3SB3501-2FA01	1	1 unit	41J	
		Red	D	3SB3501-2FA21	1	1 unit	41J	
		Yellow	C	3SB3501-2FA31	1	1 unit	41J	
		Green	B	3SB3501-2FA41	1	1 unit	41J	
		Blue	D	3SB3501-2FA51	1	1 unit	41J	
		Clear	B	3SB3501-2FA71	1	1 unit	41J	
	Non-illuminated, heavy-duty version	Black ²⁾	D	3SB3500-2UA11	1	1 unit	41J	
		Red	D	3SB3500-2UA21	1	1 unit	41J	
Green		D	3SB3500-2UA41	1	1 unit	41J		
White		D	3SB3500-2UA61	1	1 unit	41J		
	Illuminated, heavy-duty version	Amber	D	3SB3501-2UA01	1	1 unit	41J	
		Red	D	3SB3501-2UA21	1	1 unit	41J	
		Yellow	D	3SB3501-2UA31	1	1 unit	41J	
		Green	D	3SB3501-2UA41	1	1 unit	41J	
		Blue	D	3SB3501-2UA51	1	1 unit	41J	
		Clear	D	3SB3501-2UA71	1	1 unit	41J	
	Non-illuminated, long actuator	Black	D	3SB3500-3UA11	1	1 unit	41J	
		Red	D	3SB3500-3UA21	1	1 unit	41J	
Green		D	3SB3500-3UA41	1	1 unit	41J		
White		D	3SB3500-3UA61	1	1 unit	41J		

For the online configurator, see www.siemens.com/sirius/configurators.






¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Solvent-resistant

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Version	Lock version			DT	Configurator	PU (UNIT, SET, M)	PS*	PG	
	Type	Lock No./color	Key removal position						
					Article No.	Price per PU			
Key-operated switches with holder¹⁾									
Key-operated switches with 2 keys, 2 switch positions									
 RONIS key-operated switch	Switching sequence O-I, 50° operating angle, Latching 	RONIS	SB 30	O+I O I	▶ ▶ B	3SB3500-4AD11 3SB3500-4AD01 3SB3500-4AD21	1 1 1	1 unit 1 unit 1 unit	41J 41J 41J
		CES	SSG 10	O+I O I	▶ ▶ B	3SB3500-4LD11 3SB3500-4LD01 3SB3500-4LD21	1 1 1	1 unit 1 unit 1 unit	41J 41J 41J
			LSG 1	O+I O B	B B	3SB3500-4LF01 3SB3500-4LF11	1 1	1 unit 1 unit	41J 41J
 CES key-operated switch		BKS	S1	O+I O B	B B	3SB3500-5AD11 3SB3500-5AD01	1 1	1 unit 1 unit	41J 41J
			E1 for VW ²⁾	O B	B	3SB3500-5AE11	1	1 unit	41J
		E2 for VW ²⁾	O+I O B	B B	3SB3500-5AE21 3SB3500-5AE31	1 1	1 unit 1 unit	41J 41J	
		E7 for VW ²⁾	O+I O B	B B	3SB3500-5AE41 3SB3500-5AE51	1 1	1 unit 1 unit	41J 41J	
		E9 for VW ²⁾	O B	B	3SB3500-5AE71	1	1 unit	41J	
		O.M.R. ³⁾	73038	O+I Light blue I	B B B	3SB3500-3AG11 3SB3500-3AG01 3SB3500-3AG21	1 1 1	1 unit 1 unit 1 unit	41J 41J 41J
73037	O+I Red I		B B B	3SB3500-3AH11 3SB3500-3AH01 3SB3500-3AH21	1 1 1	1 unit 1 unit 1 unit	41J 41J 41J		
73034	O+I Black O I		B B B	3SB3500-3AJ11 3SB3500-3AJ01 3SB3500-3AJ21	1 1 1	1 unit 1 unit 1 unit	41J 41J 41J		
73033	O+I Yellow O I		B B B	3SB3500-3AK11 3SB3500-3AK01 3SB3500-3AK21	1 1 1	1 unit 1 unit 1 unit	41J 41J 41J		
RONIS	SB 30		O	▶	3SB3500-4BD01	1	1 unit	41J	
CES	SSG 10		O	▶	3SB3500-4MD01	1	1 unit	41J	
 O.M.R. key-operated switch	Switching sequence O-I, 50° operating angle, Momentary contact 	LSG 1	O	B	3SB3500-4MF11	1	1 unit	41J	
		BKS	S1	O	B	3SB3500-5BD01	1	1 unit	41J
			O.M.R. ³⁾	73038	O	B	3SB3500-3BG01	1	1 unit
		73037		O	B	3SB3500-3BH01	1	1 unit	41J
		73034		O	B	3SB3500-3BJ01	1	1 unit	41J
		73033	O	B	3SB3500-3BK01	1	1 unit	41J	

⚙️ For the online configurator, see www.siemens.com/sirius/configurators.

For BKS and CES special locks, see page 13/54.

¹⁾ Also available without holder. Supplementary Article No. with "-Z" and quote order code "B01".





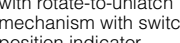











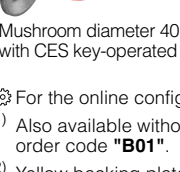

²⁾ Keys are not included in scope of supply.

³⁾ According to FIAT standards; also available for other users.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Version	Color of actuator	Approval	DT	Configurator	Price per PU	PU (UNIT, SET, M)	PS*	PG
				Article No.				
EMERGENCY STOP devices acc. to ISO 13850 and IEC 60947-5-5 with holder¹⁾²⁾, can also be used with safety relays³⁾								
	EMERGENCY STOP mushroom pushbuttons, Ø 32 mm, with positive latching according to ISO 13850, with rotate-to-unlatch mechanism	Red						
Mushroom diameter 32 mm				B	3SB3500-1FA20	1	1 unit	41J
				B	3SB3500-1FA20-0PA0	1	1 unit	41J
	EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with positive latching acc. to ISO 13850, with rotate-to-unlatch mechanism	Red						
Mushroom diameter 40 mm, with rotate-to-unlatch mechanism with switch position indicator				▶	3SB3500-1HA20	1	1 unit	41J
				B	3SB3500-1HA20-0PA0	1	1 unit	41J
				▶	3SB3500-1HA26	1	1 unit	41J
	Mushroom pushbuttons, Ø 40 mm with positive latching acc. to ISO 13850, with rotate-to-unlatch mechanism	Black		B	3SB3500-1HA10	1	1 unit	41J
	EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with positive latching according to ISO 13850, with pull-to-unlatch mechanism, solvent-resistant ⁴⁾	Red		B	3SB3500-1TA20	1	1 unit	41J
Mushroom diameter 40 mm, With pull-to-unlatch mechan.								
	EMERGENCY STOP mushroom pushbuttons, Ø 60 mm, with positive latching according to ISO 13850, with rotate-to-unlatch mechanism ⁴⁾	Red		B	3SB3500-1AA20	1	1 unit	41J
Mushroom diameter 60 mm								
	EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with RONIS key-operated switch (with 2 keys), lock No. SB 30, with positive latching acc. to ISO 13850, unlatching only possible using key	Red		B	3SB3500-1BA20	1	1 unit	41J
Mushroom diameter 40 mm, with RONIS key-oper. switch								
	EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with CES key-operated switch (with 2 keys), lock No. SSG 10, with positive latching according to ISO 13850, unlatching only possible using key	Red		B	3SB3500-1KA20	1	1 unit	41J
Mushroom diameter 40 mm, with CES key-operated switch								
	EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with BKS key-operated switch (with 2 keys), lock No. S1, with positive latching according to ISO 13850, unlatching only possible using key	Red		B	3SB3500-1LA20	1	1 unit	41J
Mushroom diameter 40 mm, with CES key-operated switch								
	EMERGENCY STOP mushroom pushbuttons, Ø 40 mm, with O.M.R. key-operated switch (with 2 keys), lock No. 73037, with positive latching according to ISO 13850, unlatching only possible using key	Red		B	3SB3500-1MA20	1	1 unit	41J

⚙ For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "B01".

²⁾ Yellow backing plates must be ordered separately; see "Accessories" on page 13/69.

³⁾ Can be used with 3SK11 safety relays or the 3RK3 Modular Safety System; see [Catalog IC 10, Chapter 11, "Safety Technology"](#).



⁴⁾ Not suitable for laser inscription.

For BKS and CES special locks, see page 13/54.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Actuators and Indicators, Metal, Round, 22 mm

Actuating and signaling elements

Version	Color of lens	DT	Configurator 	PU (UNIT, SET, M)	PS*	PG		
			Article No.	Price per PU				
Signaling elements with holder¹⁾								
 Indicator light with smooth lens	Indicator lights with lens with concentric rings²⁾		Amber	B	3SB3501-6BA00	1	1 unit	41J
		Red	▶	3SB3501-6BA20	1	1 unit	41J	
		Yellow	B	3SB3501-6BA30	1	1 unit	41J	
		Green	▶	3SB3501-6BA40	1	1 unit	41J	
		Blue	B	3SB3501-6BA50	1	1 unit	41J	
		White	B	3SB3501-6BA60	1	1 unit	41J	
		Clear	▶	3SB3501-6BA70	1	1 unit	41J	
	Indicator lights with smooth lens²⁾		Amber	B	3SB3501-6AA00	1	1 unit	41J
		Red	B	3SB3501-6AA20	1	1 unit	41J	
		Yellow	B	3SB3501-6AA30	1	1 unit	41J	
		Green	B	3SB3501-6AA40	1	1 unit	41J	
		Blue	B	3SB3501-6AA50	1	1 unit	41J	
		White	▶	3SB3501-6AA60	1	1 unit	41J	
		Clear	B	3SB3501-6AA70	1	1 unit	41J	
	Indicator lights with smooth solvent-resistant lens²⁾³⁾		Red	B	3SB3501-6AA20-0PA0	1	1 unit	41J
	Yellow	B	3SB3501-6AA30-0PA0	1	1 unit	41J		
	Green	B	3SB3501-6AA40-0PA0	1	1 unit	41J		
	Blue	B	3SB3501-6AA50-0PA0	1	1 unit	41J		
	White	B	3SB3501-6AA60-0PA0	1	1 unit	41J		
	Clear	B	3SB3501-6AA70-0PA0	1	1 unit	41J		

 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ Also available without holder. Supplement Article No. with "-Z" and quote order code "**B01**".

²⁾ Inscription by inserting a label is not possible.






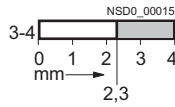


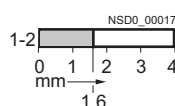


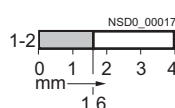


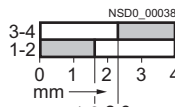

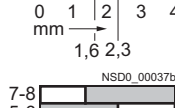

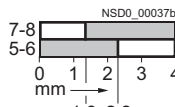


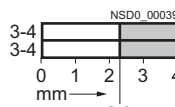

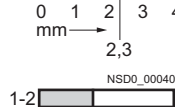

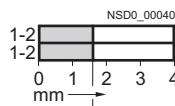

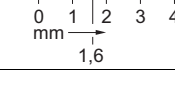



³⁾ Not suitable for laser inscription.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Components for Actuators and Indicators

Contact blocks and lampholders

Selection and ordering data

Version	Graphic symbols	Operating travel	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
		 Contact closed  Contact open					
				Article No.	Price per PU		
Contact blocks for front plate mounting							
Contact blocks with one contact							
 3SB34 00-0B			C	▶ 3SB3400-0B	1	1 unit	41J
				▶ 3SB3400-0BA	1	1 unit	41J
 3SB34 00-0C			C	▶ 3SB3400-0C	1	1 unit	41J
				▶ 3SB3400-0CA	1	1 unit	41J
 3SB34 00-0M			B	▶ 3SB3400-0M	1	1 unit	41J
Contact blocks with 2 contacts							
Mounting depth 63 mm (including unit labeling plate)							
 3SB34 00-0A			B	▶ 3SB3400-0A	1	1 unit	41J
				▶ 3SB3400-0AA	1	1 unit	41J
			C	▶ 3SB3400-0N	1	1 unit	41J
				▶ 3SB3400-0H	1	1 unit	41J
		C	▶ 3SB3400-0HA	1	1 unit	41J	
 3SB34 00-0D			B	▶ 3SB3400-0D	1	1 unit	41J
				▶ 3SB3400-0DA	1	1 unit	41J
			C	▶ 3SB3400-0P	1	1 unit	41J
		B	▶ 3SB3400-0E	1	1 unit	41J	
			▶ 3SB3400-0EA	1	1 unit	41J	
		C	▶ 3SB3400-0Q	1	1 unit	41J	
Blocks with 2 diodes³⁾, type 1N 4007							
Mounting depth 63 mm							
 3SB34 00-2A			B	▶ 3SB3400-2A	1	1 unit	41J

⊕ Positive opening according to IEC 60947-5-1, Annex K.
Can be used with 3SK1, 3TK28 safety relays or the 3RK3 Modular Safety System; see Chapter 11, "Safety Technology".

¹⁾ The NC contact opens automatically upon disconnection of the actuator. On delivery, the contact is open (= safe state). Activation (= NC contacts on the non-actuated control device are closed) takes place upon first-time actuation after the contact block is snapped onto the actuator. Unsuitable for mounting in 3SB38 enclosure.


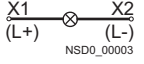
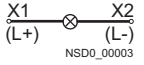
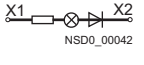
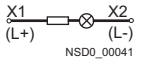

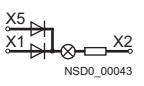

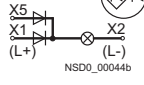
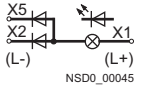
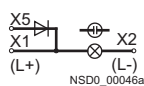

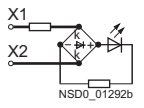
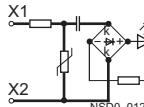
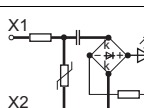



²⁾ With 3SB3901-0CH dust protection shield (see page 13/69).

³⁾ Cannot be used in combinations of lampholders with integrated LEDs with 110V AC (3SB3400-1Q*) or 230V (3SB3400-1R*)

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Components for Actuators and Indicators

Contact blocks and lampholders

Version	Graphic symbols	Rated voltage	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
		V		Article No.	Price per PU		
Contact blocks for front plate mounting							
	BA 9s lampholders, mounting depth 50 mm						
	Without lamp		Acc. to lamp	▶ 3SB3400-1A	1	1 unit	41J
	With 24 V incandescent lamp (3SX1344)		24 AC/DC	B 3SB3400-1D	1	1 unit	41J
	With integrated voltage reducer and with 130 V lamp (3SX1731) ¹⁾²⁾		230/240 AC	B 3SB3400-1C	1	1 unit	41J
	With built-in resistor for longer endurance and with 130 V lamp (3SX1731) ¹⁾³⁾		110/130 AC/DC	B 3SB3400-1B	1	1 unit	41J
	BA 9s lampholders, mounting depth 66 mm, with separate lamp test function⁴⁾						
	With integrated voltage reducer and with 130 V lamp (3SX1731) ¹⁾		230/240 AC	B 3SB3400-1F	1	1 unit	41J
	Without lamp	AC/DC-LED 	Acc. to lamp	B 3SB3400-1G	1	1 unit	41J
	For incandescent lamp, max. 2.6 W; for LED lamp, 24/48/230 V AC/DC ⁵⁾						
	Without lamp		Acc. to lamp	B 3SB3400-1L	1	1 unit	41J
	Without lamp		Acc. to lamp	B 3SB3400-1H	1	1 unit	41J
	Lampholders with integrated LED⁶⁾						
	Mounting depth 50 mm						
	Yellow		24 AC/DC	B 3SB3400-1PA	1	1 unit	41J
	Red		▶ 3SB3400-1PB	1	1 unit	41J	
	Green		▶ 3SB3400-1PC	1	1 unit	41J	
	Blue		B 3SB3400-1PD	1	1 unit	41J	
	White		▶ 3SB3400-1PE	1	1 unit	41J	
	Yellow		110 AC	B 3SB3400-1QA	1	1 unit	41J
	Red		B 3SB3400-1QB	1	1 unit	41J	
	Green		B 3SB3400-1QC	1	1 unit	41J	
	Blue		B 3SB3400-1QD	1	1 unit	41J	
	White		B 3SB3400-1QE	1	1 unit	41J	
Yellow		230 AC	B 3SB3400-1RA	1	1 unit	41J	
Red		▶ 3SB3400-1RB	1	1 unit	41J		
Green		▶ 3SB3400-1RC	1	1 unit	41J		
Blue		B 3SB3400-1RD	1	1 unit	41J		
White		▶ 3SB3400-1RE	1	1 unit	41J		
	Transformers						
	For snapping onto 3SB3400-1A lampholder		127/24 240/24 260/24	B 3SB3400-3A B 3SB3400-3C D 3SB3400-3E	1	1 unit	41J
	For AC incandescent lamp, max. 2 W		400/24	B 3SB3400-3F	1	1 unit	41J
			127/6	B 3SB3400-3M	1	1 unit	41J
	Mounting depth 97 mm		240/6	B 3SB3400-3P	1	1 unit	41J
			400/6	B 3SB3400-3S	1	1 unit	41J
	Can only be combined with 3SB3400-0BA and 3SB3400-0CA contact blocks		480/6	B 3SB3400-3U	1	1 unit	41J
			600/6	D 3SB3400-3W	1	1 unit	41J


3SB34 00-3.

- The voltage reducer can only be used with this lamp.
- Also suitable for 230 V AC LED lamp, 3SB3901-1.F
- Also suitable for 130 V AC LED lamp, 3SB3901-1.D
- The lampholder with separate lamp test function cannot be installed in an enclosure.
- Not suitable for LED lamps which are suitable only for AC or DC.
- For use with SIRIUS commanding and signaling devices only.



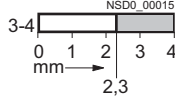

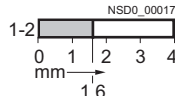
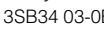

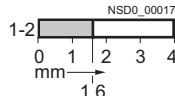

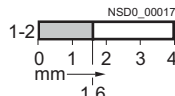


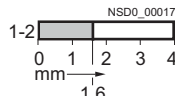


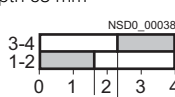

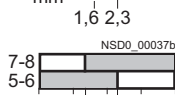

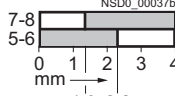

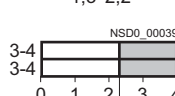

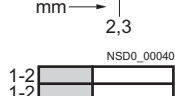

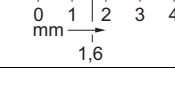



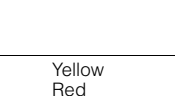


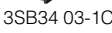


SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Components for Actuators and Indicators

Contact blocks and lampholders

Version	Rated voltage of the lamp/ Graphic symbols V	Operating travel/color □ Contact closed □ Contact open	DT	Spring-type terminals Article No.	 Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	--	--	----	--------------------------------------	---	-------------------	-----	----

Contact blocks for front plate mounting

	Contact blocks with one contact , mounting depth 50 mm							
	1 NO			B	3SB3403-0B	1	1 unit	41J
	1 NO with gold-plated contacts			B	3SB3403-0BA	1	1 unit	41J
	1 NC			B	3SB3403-0C	1	1 unit	41J
	1 NC with gold-plated contacts			B	3SB3403-0CA	1	1 unit	41J
	1 NC with installation monitoring contact ¹⁾			B	3SB3403-0M	1	1 unit	41J
	• Mounting depth 63 mm							
	Contact blocks with 2 contacts , mounting depth 63 mm							
	1 NO + 1 NC			B	3SB3403-0A	1	1 unit	41J
	1 NO + 1 NC with gold-plated contacts			B	3SB3403-0AA	1	1 unit	41J
	1 NO leading + 1 NC lagging			B	3SB3403-0H	1	1 unit	41J
	1 NO leading + 1 NC lagging with hard gold-plated contacts			C	3SB3403-0HA	1	1 unit	41J
	2 NO			B	3SB3403-0D	1	1 unit	41J
	2 NO with gold-plated contacts			D	3SB3403-0DA	1	1 unit	41J
	2 NC			B	3SB3403-0E	1	1 unit	41J
	2 NC with gold-plated contacts			D	3SB3403-0EA	1	1 unit	41J
		BA 9s lampholders , mounting depth 50 mm						
Without lamp ²⁾		Acc. to lamp  X1 (L+) X2 (L-) NSDO_00003		B	3SB3403-1A	1	1 unit	41J
	With integrated voltage reducer and with 130 V lamp (3SX1731) ²⁾³⁾	230/240 V AC  X1 X2 NSDO_00042		B	3SB3403-1C	1	1 unit	41J
		Lampholders with integrated LED⁴⁾						
Mounting depth 50 mm		24 V AC/DC	Yellow Red Green Blue White	B B B B B	3SB3403-1PA 3SB3403-1PB 3SB3403-1PC 3SB3403-1PD 3SB3403-1PE	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit	41J 41J 41J 41J 41J
		110 V AC	Yellow Red Green Blue White	B B B B B	3SB3403-1QA 3SB3403-1QB 3SB3403-1QC 3SB3403-1QD 3SB3403-1QE	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit	41J 41J 41J 41J 41J
		230 V AC	Yellow Red Green Blue White	B B B B B	3SB3403-1RA 3SB3403-1RB 3SB3403-1RC 3SB3403-1RD 3SB3403-1RE	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit	41J 41J 41J 41J 41J

⊕ Positive opening according to IEC 60947-5-1, Annex K.

¹⁾ The NC contact opens automatically upon disconnection of the actuator. On delivery, the contact is open (= safe state). For more explanations, see footnote 1) on page 13/49. Not suitable for mounting in 3SB38 enclosure.

²⁾ Not suitable for square command devices.






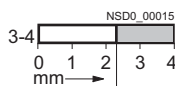

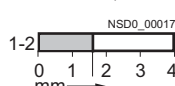

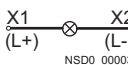
³⁾ Use these lamps only.

⁴⁾ For use with SIRIUS commanding and signaling devices only.




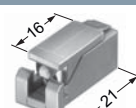
SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Components for Actuators and Indicators

Contact blocks and lampholders

Version	Graphic symbols	Operating travel	DT	Solder pin connection	PU (UNIT, SET, M)	PS*	PG
		 Contact closed  Contact open					
			Article No.	Price per PU			
Contact blocks for use on printed circuit boards							
 3SB34 11-0B	Contact blocks with one contact Mounting depth 44 mm						
	1 NO		 NSD0_00015	B	3SB3411-0B	1	1 unit 41J
	1 NC		 NSD0_00017	B	3SB3411-0C	1	1 unit 41J
 3SB34 11-1A	Wedge base lampholders W2 x 4.6 d Mounting depth 44 mm Without lamp		 NSD0_00003	B	3SB3411-1A	1	1 unit 41J

⊕ Positive opening according to IEC 60947-5-1, Annex K.

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Holders for 3 contact blocks, for front plate mounting						
 3SB39 01-0AB		Holders for pushbuttons and pushbutton switches¹⁾ For snapping on 3 blocks (for illuminated pushbuttons and illuminated selector switches the holder is included in the scope of supply)			100	20 units 41J
 3SB39 01-0AC		Holders for selector switches, key-operated switches and twin pushbuttons With pressure plate for actuating the central contact block of three contact blocks ²⁾			100	10 units 41J
Pressure plates for use on printed circuit boards						
 3SB39 01-0AW	B	Pressure plates for selector switches and key-operated switches For actuating the central contact block of three contact blocks ²⁾			100	10 units 41J
Accessories for printed circuit boards						
 3SB39 01-0AA	B	Holders for printed circuit boards For mounting the command devices on the printed circuit board (screw is included in the scope of supply)			100	10 units 41J

¹⁾ Holder also for mushroom pushbutton and push-pull button.

²⁾ The pressure plates can be removed to meet individual requirements.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Components for Actuators and Indicators

AS-Interface F adapters for EMERGENCY STOP devices

Overview



EMERGENCY STOP mushroom pushbutton with F adapter for bus connection

The AS-Interface F adapter is used to connect an EMERGENCY STOP device according to ISO 13850 from the 3SB3 series to the AS-Interface bus system. The F adapter is suitable for control devices with mounting on front plates.

The F adapter has a safe AS-Interface 2E slave and is snapped from behind onto the EMERGENCY STOP mushroom pushbutton. In the 2I/1O expanded version, an output is also available for actuating an indicator light with LED.

Depending on the version, screw terminals or spring-type terminals or the insulation piercing method are used for connecting to the AS-Interface bus cable. Addressing is performed using the AS-Interface connection or the integrated addressing socket.

Safety category 4 (SIL 3) is achieved with the adapter.

Selection and ordering data

Version	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
		Article No.	Price per PU		
 3SF5402-1AA03	AS-Interface F adapter for 3SB3 EMERGENCY STOP mushroom pushbuttons For mounting on front plates <ul style="list-style-type: none"> • 2I • 2I/1O, with output for LED control 	▶ 3SF5402-1AA03	1	1 unit	42A
		▶ 3SF5402-1AB03	1	1 unit	42A
Version	DT	Spring-type terminals	PU (UNIT, SET, M)	PS*	PG
		Article No.	Price per PU		
 3SF5402-1AA04	AS-Interface F adapter for 3SB3 EMERGENCY STOP mushroom pushbuttons For mounting on front plates <ul style="list-style-type: none"> • 2I • 2I/1O, with output for LED control 	▶ 3SF5402-1AA04	1	1 unit	42A
		▶ 3SF5402-1AB04	1	1 unit	42A
Version	DT	Insulation piercing method	PU (UNIT, SET, M)	PS*	PG
		Article No.	Price per PU		
 3SF5402-1AA05	AS-Interface F adapter for 3SB3 EMERGENCY STOP mushroom pushbuttons For mounting on front plates <ul style="list-style-type: none"> • 2I • 2I/1O, with output for LED control 	▶ 3SF5402-1AA05	1	1 unit	42A
		▶ 3SF5402-1AB05	1	1 unit	42A

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Components for Actuators and Indicators

Special locks

Options

Special locks for key-operated switches

The BKS and CES plastic and metal key-operated switches, round and square versions, can be optionally equipped with special locks.

In this case, the Article No. of the matching key-operated switch must be supplemented with **"-Z"**, the matching order code **"Y01"** or **"Y02"** and the required lock number.

Order code	Y01	Y02
In accordance with the table of special locks	No	Yes
Normal delivery time	25 working days	5 working days
Additional price per unit		
Ordering example	3SB3000-4LD01-Z Y01 Z = SSG18	3SB3000-4LD01-Z Y02 Z = SSG11

Available special locks with order code "Y02"	Article No. with order code
Key-operated switches	
CES SSG 11 to SSG 15	3SB3...-4LD01-Z Y02 3SB3...-4LD11-Z Y02 3SB3...-4LD21-Z Y02 3SB3...-4MD01-Z Y02 3SB3...-4PD...-Z Y02 3SB3...-4QD...-Z Y02 3SB3...-4RD...-Z Y02 3SB3...-4SD...-Z Y02
BKS E1, E2, E7, E9 ¹⁾	3SB3...-5AD...-Z Y02 3SB3...-5BD01-Z Y02 3SB3...-5DD...-Z Y02 3SB3...-5ED01-Z Y02 3SB3...-5FD01-Z Y02 3SB3...-5GD01-Z Y02
BKS E9 ¹⁾	3SB3...-5FD51-Z Y02

EMERGENCY STOP mushroom pushbuttons

CES SSP 9	3SB3...-1KA20-Z Y02
BKS E2, E7, E9 ¹⁾	3SB3...-1LA20-Z Y02

¹⁾ Delivery of these BKS key-operated switches (locks for VW) without key.

Ordering notes

- For all special locks, an additional price applies.
- The order code **"Y01"** or **"Y02"** must be quoted in accordance with the above table. Automated processing of the order with a defined delivery time can be guaranteed only for correctly submitted orders.
- For applications in which access security is important and several lock numbers are used, we recommend the use of BKS or CES key-operated switches.
- Special locks for VW (E1, E2, ...) will be delivered without keys, all others with 2 keys.

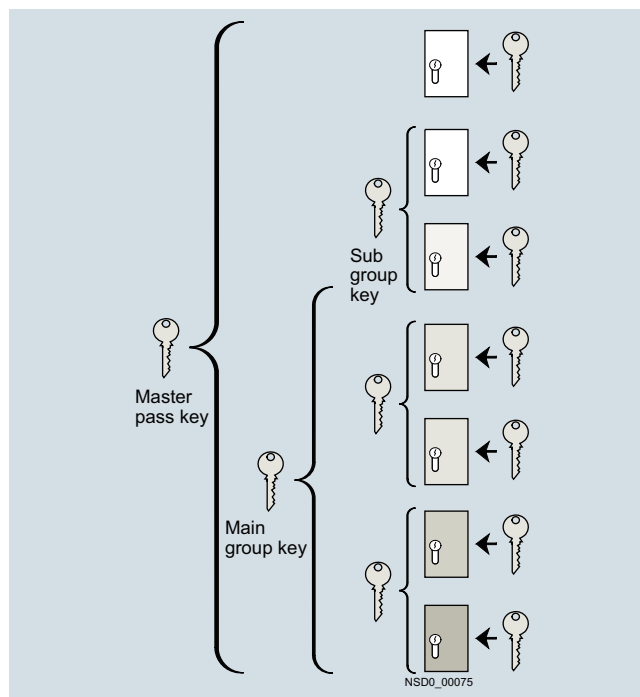
Master and master-pass key systems

The following key systems can be supplied with BKS and CES key-operated switches:

- Central lock systems
- Master key systems
- Central master key systems
- Master-pass key systems

When placing an order you must supplement the Article No. of the matching key-operated switches with **"-Z"** and quote the order code **"Y03"**.

Price and delivery time on request.



Example of master-pass key system

Overview**Inscription of actuating and signaling elements**

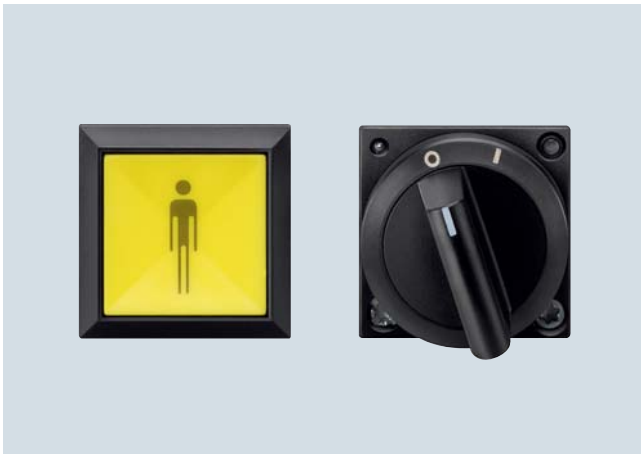
Actuating and signaling elements of plastic and metal can be optionally inscribed with a laser.



Pushbutton (metal) with laser inscription

The actuators of the pushbuttons, illuminated pushbuttons, mushroom pushbuttons, illuminated mushroom pushbuttons and twin pushbuttons can be inscribed as well as the lenses of the indicator lights.

Selector switches can be inscribed only if they are made of plastic (only one text line on the front ring).



Pushbutton and selector switch (plastic) with laser inscription

Version

A letter height of 4 mm is used as standard for text inscriptions:

The typeface used is Arial. Other font heights and typefaces are possible, but must be specified when ordering.

For round buttons and lenses, the possible number of characters per line is:

- 10 characters for one line of text
- 8 characters for 2 lines of text
- 6 characters for 3 lines of text, but 10 characters in the middle line

On square buttons and lenses, 10 characters are possible per line.

Ordering notes

When ordering, supplement the Article No. of the actuator or the indicator light with "**-Z**" and an order code:

- Text line in upper/lower case, always upper case for beginning of line (e.g. "Lift out"): **Y10**
- Text in upper case (e.g. "LIFT OUT"): **Y11**
- Text in lower case (e.g. "lift out"): **Y12**
- Text in upper/lower case, all words begin with capital letters (e.g. "Lift Out"): **Y15**
- Symbol with number according to ISO 7000 or IEC 60417: **Y13**
- Any inscription or symbol according to order form supplement: **Y19**

When ordering, specify the required inscription in plain text in addition to the article number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language (see ordering example 1).

In the case of multi-line inscriptions, the text must be assigned to the respective line, e.g. "Z1 = Lift, Z2 =Lower". For long words you can also specify the end-of-line division.

Symbols can also be ordered with numbers according to ISO 7000 or IEC 60417 (see ordering examples 2 and 3).

For special symbols (order code Y19), a CAD drawing in BMP, GIF, JPEG, PDF, PNG or TIFF format must be submitted. For special inscriptions (order code Y19): document in DOC or XLS formats.

E-mail to: sirius-attach.aud@siemens.com

Ordering example 1

A round pushbutton with the inscription "Reset" is required:

3SB3000-0AA41-Z
Y10
Z = Reset (English)

Ordering example 2

A square pushbutton inscribed with symbol No. 5389 according to IEC 60417 is required:

3SB3110-0AA31-Z
Y13
Z = 5389 IEC

Ordering example 3

A round pushbutton inscribed with symbol No. 1118 according to ISO 7000 is required:

3SB3000-0AA41-Z
Y13
Z = 1118 ISO

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Inscriptions

Inscriptions by laser printer

Overview

Label inscriptions

Using the "Label Designer" software, which can be downloaded from the Internet, and the labeling plates for laser inscription you can create your own customized labels with a standard laser printer.

The self-adhesive or snap-on labels can be stuck or snapped onto the corresponding label holders (see [Backing plates](#)). Round labels are provided for inserting in illuminated pushbuttons and switches.

The labels are suitable for printing with one to three lines of text or symbols.

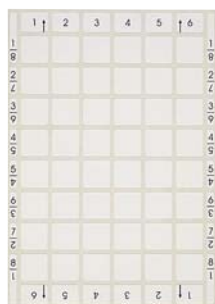
For applications with more exacting requirements we recommend factory-printed labeling plates and insert labels (laser-printed or engraved depending on the type).

For the Label Designer software, see www.siemens.com/sirius-label-designer

Selection and ordering data

Version	Color	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	-------	----	-------------	--------------	-------------------	-----	----

Labels for printing



Insert labels For inserting in round illuminated pushbuttons and illuminated pushbutton switches	Milky	B	3SB3901-2AB		100	480 units	41J
Labeling plates 12.5 mm x 27 mm For sticking onto label holders	White	B	3SB3902-2AA		100	480 units	41J
Labeling plate 27 mm x 27 mm For sticking onto label holders	White	B	3SB3903-2AA		100	480 units	41J
Labeling plate 17.5 mm x 28 mm For snapping onto label holders	White	B	3SB3905-2AA		100	784 units	41J
Labeling plates 22 mm x 22 mm For sticking onto label holders	White	B	3SB3906-2AA		100	700 units	41J

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Inscriptions

Insert labels

Overview

Pushbuttons (clear) and illuminated pushbuttons with a flat button can be fitted with insert labels for identification purposes, but indicator lights cannot.

These insert labels are made of semi-transparent plastic with black inscription; they can be turned and inserted in any 90° angle.

Inscription

The inscription is in upper/lower case and all words begin with upper case letters. Graphic symbols, including those not listed in the catalog, are according to ISO 7000 or IEC 60417 (see page 13/58).












The insert labels without inscription are suitable for user marking with a permanent pen.

Selection and ordering data

PU (UNIT) = 100 (customized inscription: 1)

PS* = 10 units (customized inscription: 1 unit)

PG = 41J

Inscription/symbol	Symbol No.	DT	Round range		Square range		
			Article No.	Price per PU	Article No.	Price per PU	
Insert labels							
For self-inscription							
	Blank	--	B	3SB1901-4AS	B	3SB3940-4AA	
With inscription							
	Ein	--	B	3SB1901-4AB	B	3SB3940-4AB	
	On	--	B	3SB1901-4EB	B	3SB3940-4EB	
	Aus	--	B	3SB1901-4AC	B	3SB3940-4AC	
	Off	--	B	3SB1901-4EC	B	3SB3940-4EC	
	Auf	--	B	3SB1901-4AD	B	3SB3940-4AD	
	Up	--	B	3SB1901-4ED	B	3SB3940-4ED	
	Ab	--	B	3SB1901-4AE	B	3SB3940-4AE	
	Down	--	B	3SB1901-4EE	B	3SB3940-4EE	
	Vor	--	B	3SB1901-4AF	B	3SB3940-4AF	
	Forward	--	B	3SB1901-4EF	B	3SB3940-4EF	
	Zurück	--	B	3SB1901-4AG	B	3SB3940-4AG	
	Reverse	--	B	3SB1901-4EG	B	3SB3940-4EG	
	Rechts	--	B	3SB1901-4AH	--	--	
	Right	--	C	3SB1901-4EH	--	--	
	Links	--	B	3SB1901-4AJ	--	--	
	Left	--	C	3SB1901-4EJ	--	--	
	Auf	--	B	3SB1901-4AD	B	3SB3940-4AD	
	Open	--	B	3SB1901-4EP	--	--	
	Zu	--	B	3SB1901-4AL	B	3SB3940-4AL	
	Close	--	B	3SB1901-4EQ	--	--	
	Schnell	--	B	3SB1901-4AM	B	3SB3940-4AM	
	Fast	--	B	3SB1901-4ER	--	--	
	Langsam	--	B	3SB1901-4AN	B	3SB3940-4AN	
	Slow	--	B	3SB1901-4ES	--	--	
	Betrieb	--	B	3SB1901-4AP	--	--	
	Running	--	B	3SB1901-4EV	--	--	
	Störung	--	B	3SB1901-4AQ	B	3SB3940-4AQ	
	Fault	--	B	3SB1901-4EW	--	--	
	Einrichten	--	B	3SB1901-4AR	--	--	
	Reset	--	B	3SB1901-4EM	B	3SB3940-4EM	
	Test	--	B	3SB1901-4EN	--	--	
	Start	--	B	3SB1901-4EK	B	3SB3940-4EK	
	Halt	--	B	3SB1901-4AK	B	3SB3940-4AK	
	Stop	--	B	3SB1901-4EL	B	3SB3940-4EL	
With graphic symbol							
	O (Off)		5008 IEC	B	3SB1901-4MB	B	3SB3940-4MB
	I (On)		5007 IEC	B	3SB1901-4MC	B	3SB3940-4MC
	II (On)		--	B	3SB1901-4MD	B	3SB3940-4MD
	III (On)		--	B	3SB1901-4ME	--	--
	Electric motor		0011 ISO	B	3SB1901-4PA	--	--
	Motion in direction of arrow		5022 IEC	B	3SB1901-4NA	B	3SB3940-4NA
	Increase, plus		5005 IEC	B	3SB1901-4NG	B	3SB3940-4NG
	Decrease, minus		5006 IEC	B	3SB1901-4NH	B	3SB3940-4NH
With customized inscription							
	For inscriptions or symbols, see Options			B	3SB1901-4AZ	B	3SB3940-4AZ
	• Text line(s) or symbol with No.			B	K0Y, K1Y, K2Y, K3Y or K5Y	B	K0Y, K1Y, K2Y, K3Y or K5Y
	• Any inscription or symbol			B	K9Y	B	K9Y

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Inscriptions

Insert labels

Options

Customized inscriptions

The labels can be inscribed with text and symbols not listed in the ordering data.

By default, a letter height of 4 mm (for a single line of text) or 3 mm (for 2 or 3 lines of text) is used for text inscriptions.

The typeface used is Arial. Other font heights and typefaces are possible, but must be specified when ordering.

For round insert labels, the maximum possible number of characters per line is:

- 10 characters for one line of text
- 8 characters for 2 lines of text
- 6 characters for 3 lines of text, but 10 characters in the middle line

On square insert labels, 10 characters are possible per line.

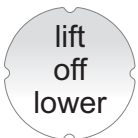
Examples for customized inscription



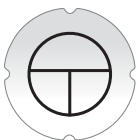
Two-line inscription in upper/lower case lettering (K0Y)



Single-line inscription in upper case lettering (K1Y)



Three-line inscription in lower case letters (K2Y)



Symbol number 5011 according to IEC 60147 (K3Y)



Any symbol according to order form supplement (K9Y)

Ordering notes

Append the following order codes to the Article No.:

- Text line(s) in upper/lower case, upper case always for beginning of line (e.g. "Lift/Off"): **K0Y**
- Text line(s) in upper case (e.g. "LIFT"): **K1Y**
- Text line(s) in lower case (e.g. "lift/off/lower"): **K2Y**
- Text line(s) in upper/lower case, all words begin with upper case letters (e.g. "On Off"): **K5Y**
- Symbol with number according to ISO 7000 or IEC 60417: **K3Y**
- Any inscription or symbol according to order form supplement: **K9Y**

When ordering, specify the required inscription in plain text in addition to the article number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

In the case of multi-line inscriptions, the text must be assigned to the respective line, e.g. "Z1 = Lift, Z2 = Lower". For long words you can also specify the end-of-line division (hyphenation), (see [ordering example 1](#)).

Symbols can also be ordered with numbers according to ISO 7000 or IEC 60417 (see [ordering examples 2 and 3](#)).

For special symbols (order code K9Y), a CAD drawing in BMP, GIF, JPEG, PDF, PNG or TIFF format must be submitted. For special inscriptions (order code K9Y): document in DOC or XLS formats.

E-mail to: sirius-attach.aud@siemens.com

Ordering example 1

A label with 2 lines of text is required:

3SB1901-4AZ
K1Y
Z1 = LIFT
Z2 = LOWER

Ordering example 2

A label inscribed with symbol No. 5011 according to IEC 60417 is required:

3SB1901-4AZ
K3Y
Z = 5011 IEC

Ordering example 3

A label inscribed with symbol No. 1118 according to ISO 7000 is required:

3SB1901-4AZ
K3Y
Z = 1118 ISO

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Inscriptions

Backing plates

Overview

The backing plates consist of a black plastic label holder and a labeling plate (black with white print or silver-colored with black print) for sticking or snapping in place. They are not suitable for EMERGENCY STOP buttons.

Note the mounting dimensions!

Inscription

The inscription is in upper/lower case and all words begin with upper case letters. The typeface is Arial. Graphic symbols, including those not listed in the tables, are according to ISO 7000 or IEC 60417 (see page 13/63).

Self-adhesive labels

There are two sizes available for the round and square ranges:

- Label holders 30 mm × 45 mm × 2.7 mm with labeling plate 12.5 mm × 27 mm
- Label holders 30 mm × 60 mm × 2.7 mm with labeling plate 27 mm × 27 mm






Snap-on labels

The following version is available for the round range:

- Label holders 29.8 mm × 51 mm × 3 mm with labeling plate 17.5 mm × 28 mm (inscription area: 17.5 mm × 27 mm)

Selection and ordering data

PU (UNIT) = 100
PS* = 10 units
PG = 41J

Inscription	DT	Black		Silver-colored	
		Article No.	Price per PU	Article No.	Price per PU
Self-adhesive labeling plates, 12.5 mm x 27 mm					
For self-inscription					
	Blank	B	3SB3902-1AA	B	3SB1901-2AA
With inscription					
	Ein	B	3SB3902-1AB	B	3SB1901-2AB
	On	B	3SB3902-1EB	B	3SB1901-2EB
	Aus	B	3SB3902-1AC	B	3SB1901-2AC
	Off	B	3SB3902-1EC	B	3SB1901-2EC
	Auf	B	3SB3902-1AD	B	3SB1901-2AD
	Up	B	3SB3902-1ED	B	3SB1901-2ED
	Ab	B	3SB3902-1AE	B	3SB1901-2AE
	Down	B	3SB3902-1EE	B	3SB1901-2EE
	Vor	B	3SB3902-1AF	B	3SB1901-2AF
	Forward	B	3SB3902-1EF	B	--
	Zurück	B	3SB3902-1AG	B	3SB1901-2AG
	Reverse	B	3SB3902-1EG	B	--
	Rechts	B	3SB3902-1AH	B	3SB1901-2AH
	Right	B	3SB3902-1EH	B	3SB1901-2EH
	Links	B	3SB3902-1AJ	B	3SB1901-2AJ
	Left	B	3SB3902-1EJ	B	3SB1901-2EJ
	Auf	B	3SB3902-1AD	B	3SB1901-2AD
	Open	B	3SB3902-1EP	B	3SB1901-2EP
	Zu	B	3SB3902-1AL	B	3SB1901-2AL
	Close	B	3SB3902-1EQ	B	3SB1901-2EQ
	Schnell	--	--	B	3SB1901-2AM
	Fast	--	--	B	3SB1901-2ER
	Langsam	--	--	B	3SB1901-2AN
	Slow	--	--	B	3SB1901-2ES
	Halt	B	3SB3902-1AK	B	3SB1901-2AK
	Stop	B	3SB3902-1EK	B	3SB1901-2EK
	Start	B	3SB3902-1EL	B	3SB1901-2EL
	Test	B	3SB3902-1EN	B	3SB1901-2EN
	Betrieb	B	3SB3902-1AP	B	3SB1901-2AP
	Running	--	--	B	3SB1901-2EV
	Störung	B	3SB3902-1AQ	B	3SB1901-2AQ
	Fault	B	3SB3902-1EW	B	3SB1901-2EW
	Einrichten	--	--	B	3SB1901-2AR
	Reset	--	--	B	3SB1901-2EM
	Stop Start	B	3SB3902-1BC	B	3SB1901-2BC
	Hand Auto	B	3SB3902-1BA	B	3SB1901-2BA
	Man Auto	B	3SB3902-1EU	B	3SB1901-2EU
	Hand O Auto	--	--	B	3SB1901-2BE
	Man O Auto	--	--	B	3SB1901-2ET



For label holders, see page 13/62.





SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Inscriptions

Backing plates

PU (UNIT) = 100 (customized inscription: 1)
 PS* = 10 units (customized inscription: 1 unit)
 PG = 41J

Inscription	DT	Black		Silver-colored	
		Article No.	Price per PU	Article No.	Price per PU
Self-adhesive labeling plates, 12.5 mm x 27 mm					
		With graphic symbol			
O	B	3SB3902-1MB		B	3SB1901-2MB
I	B	3SB3902-1MC		B	3SB1901-2MC
II		--		C	3SB1901-2MD
III		--		B	3SB1901-2ME
O I	B	3SB3902-1MF		B	3SB1901-2MF
I O II	B	3SB3902-1MG		B	3SB1901-2MG
1 O 2		--		B	3SB1901-2MK
1 2	B	3SB3902-1ML			--
↑	B	3SB3902-1NJ		B	3SB1901-2NJ
→	B	3SB3902-1NA		B	3SB1901-2NA
		With customized inscription			
		For inscriptions or symbols, see "Options" on page 13/63.			
		• Text line(s)		B	3SB3902-1XZ
		• Symbol with No.		B	K0Y, K1Y, K2Y or K5Y
		• Any inscription or symbol		B	K3Y
		B	K9Y	B	3SB1901-2XZ
		B	K3Y	B	K3Y
		B	K9Y	B	K9Y

Inscription	DT	Black		Silver-colored	
		Article No.	Price per PU	Article No.	Price per PU
Self-adhesive labeling plates, 27 mm x 27 mm					
		For self-inscription			
Blank	B	3SB3903-1AA		B	3SB1906-2AA
		With inscription			
Ein	B	3SB3903-1AB			--
On	B	3SB3903-1EB			--
Aus	B	3SB3903-1AC			--
Off	B	3SB3903-1EC			--
Auf	B	3SB3903-1AD			--
Ab	B	3SB3903-1AE			--
Vor	B	3SB3903-1AF			--
Zurück	B	3SB3903-1AG			--
Rechts	B	3SB3903-1AH			--
Links	B	3SB3903-1AJ			--
Auf	B	3SB3903-1AD			--
Zu	B	3SB3903-1AL			--
Halt	B	3SB3903-1AK			--
Start	B	3SB3903-1EL			--
Betrieb	B	3SB3903-1AP			--
Störung	B	3SB3903-1AQ			--
Stop Start	B	3SB3903-1BC			--
Hand Auto	B	3SB3903-1BA			--
		With graphic symbol			
O	B	3SB3903-1MB			--
I	B	3SB3903-1MC			--
O I	B	3SB3903-1MF			--
→	B	3SB3903-1NA			--
		With customized inscription			
		For inscriptions or symbols, see "Options" on page 13/63.			
		• Text line(s)		B	3SB3903-1XZ
		• Symbol with No.		B	K0Y, K1Y, K2Y or K5Y
		• Any inscription or symbol		B	K3Y
		B	K9Y	B	3SB1906-2XZ
		B	K3Y	B	K3Y
		B	K9Y	B	K9Y










For label holders, see page 13/62.

* You can order this quantity or a multiple thereof.
 Illustrations are approximate

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Inscriptions

Backing plates




PU (UNIT) = 100 (customized inscription: 1)
 PS* = 10 units (customized inscription: 1 unit)
 PG = 41J

Inscription	DT	Black		Silver-colored	
		Article No.	Price per PU	Article No.	Price per PU
Snap-on labels 17.5 mm x 28 mm					
For self-inscription					
	Blank	B	3SB3905-1AA	B	3SB1904-2AA
With inscription					
	Ein	B	3SB3905-1AB	B	3SB1904-2AB
	On	B	3SB3905-1EB	B	3SB1904-2EB
	Aus	B	3SB3905-1AC	B	3SB1904-2AC
	Off	B	3SB3905-1EC	B	3SB1904-2EC
	Auf	B	3SB3905-1AD	B	3SB1904-2AD
	Up	B	3SB3905-1ED		--
	Ab	B	3SB3905-1AE	B	3SB1904-2AE
	Down	B	3SB3905-1EE		--
	Vor	B	3SB3905-1AF	B	3SB1904-2AF
	Forward	B	3SB3905-1EF		--
	Zurück	B	3SB3905-1AG	B	3SB1904-2AG
	Reverse	B	3SB3905-1EG	B	3SB1904-2EG
	Rechts	B	3SB3905-1AH	B	3SB1904-2AH
	Right	B	3SB3905-1EH	B	3SB1904-2EH
	Links	B	3SB3905-1AJ	B	3SB1904-2AJ
	Auf	B	3SB3905-1AD	B	3SB1904-2AD
	Open	B	3SB3905-1EP		--
	Zu	B	3SB3905-1AL	B	3SB1904-2AL
	Close	B	3SB3905-1EQ		--
	Halt	B	3SB3905-1AK	B	3SB1904-2AK
	Stop	B	3SB3905-1EK	B	3SB1904-2EK
	Start	B	3SB3905-1EL	B	3SB1904-2EL
	Test	B	3SB3905-1EN	B	3SB1904-2EN
	Betrieb	B	3SB3905-1AP	B	3SB1904-2AP
	Running	B	3SB3905-1EV	B	3SB1904-2EV
	Störung	B	3SB3905-1AQ	B	3SB1904-2AQ
	Fault	B	3SB3905-1EW	B	3SB1904-2EW
	Einrichten		--	B	3SB1904-2AR
	Reset		--	B	3SB1904-2EM
	Stop Start	B	3SB3905-1BC	B	3SB1904-2BC
	Hand Auto	B	3SB3905-1BA	B	3SB1904-2BA
	Man Auto	B	3SB3905-1EU	C	3SB1904-2EU
	Man O Auto		--	B	3SB1904-2ET
With graphic symbol					
	O	B	3SB3905-1MB	B	3SB1904-2MB
	I	B	3SB3905-1MC	B	3SB1904-2MC
	O I	B	3SB3905-1MF	B	3SB1904-2MF
	I O II		--	B	3SB1904-2MG
	1 O 2		--	B	3SB1904-2MK
	→	B	3SB3905-1NA	B	3SB1904-2NA
	↑	B	3SB3905-1NJ	B	3SB1904-2NJ
With customized inscription					
	For inscriptions or symbols, see "Options" on page 13/63.		3SB3905-1XZ		3SB1904-2XZ
	• Text line(s)	B	K0Y, K1Y, K2Y or K5Y	B	K0Y, K1Y, K2Y or K5Y
	• Symbol with No.	B	K3Y	B	K3Y
	• Any inscription or symbol	B	K9Y	B	K9Y

For label holders, see page 13/62.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Inscriptions

Backing plates

Version	DT	Black	PU (UNIT, SET, M)	PS*	PG
		Article No.	Price per PU		
Label holders for labeling plates 12.5 mm x 27 mm					
		For round range, flat	B	3SB3922-0AV	100 10 units 41J
		For potentiometer drives 3SB10 00-7CH07¹⁾	B	3SB3922-0AS	1 1 unit 41J
		For square range, flat	B	3SB3942-0AX	100 5 units 41J
3SB3922-0AV					
Label holders for labeling plates 27 mm x 27 mm					
		For round range, flat	B	3SB3923-0AV	100 10 units 41J
		For round range, high	C	3SB3923-0AX	1 10 units 41J
		For potentiometer drives, flat	B	3SB3923-0AS	1 1 unit 41J
		For square range, flat	B	3SB3943-0AX	100 1 unit 41J
3SB3923-0AV					
Label holders for labeling plates 17.5 mm x 28 mm					
		For round range	B	3SB3925-0AV	100 10 units 41J
3SB3925-0AV					

¹⁾ This label holder can also be used for pushbuttons with dust covers if the front plate thickness of 3 mm is not exceeded.

Options

Customized inscriptions

The labels can be inscribed with text and symbols not listed in the ordering data.

The following letter heights are used as standard for text inscriptions:

- Label size 12.5 mm × 27 mm: maximum 3 lines with letter height 4 mm (1-line), 3.5 mm (2-line) or 2.5 mm (3-line)
- Label size 27 mm × 27 mm: maximum 5 lines with letter height 4 mm (1- to 5-line)
- Label size 17.5 mm × 28 mm: maximum 3 lines with letter height 4 mm (1- and 2-line) or 3 mm (3-line)

Up to 11 characters per line are possible. The typeface used is Arial. Other font heights and typefaces are possible, but must be specified when ordering.

Examples for customized inscription

Two-line inscription in upper/lower case lettering (K0Y)



Single-line inscription in upper case lettering (K1Y)



Three-line inscription in lower case letters (K2Y)



Symbol number 5011 according to IEC 60417 (K3Y)



Any symbol according to order form supplement (K9Y)

Ordering notes

Append the following order codes to the Article No.:

- Text line(s) in upper/lower case, upper case always for beginning of line (e.g. "Lift/Off"): **K0Y**
- Text line(s) in upper case (e.g. "LIFT"): **K1Y**
- Text line(s) in lower case (e.g. "lift/off/lower"): **K2Y**
- Text line(s) in upper/lower case, all words begin with upper case letters (e.g. "On Off"): **K5Y**
- Symbol with number according to ISO 7000 or IEC 60417: **K3Y**
- Any inscription or symbol according to order form supplement: **K9Y**

When ordering, specify the required inscription in plain text in addition to the article number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

In the case of multi-line inscriptions, the text must be assigned to the respective line, e.g. "Z1 = Lift, Z2 = Lower". For long words you can also specify the end-of-line division (hyphenation), (see [ordering example 1](#)).

Symbols can also be ordered with numbers according to ISO 7000 or IEC 60417 (see [ordering examples 2 and 3](#)).

For special symbols (order code K9Y), a CAD drawing in BMP, GIF, JPEG, PDF, PNG or TIFF format must be submitted. For special inscriptions (order code K9Y): document in DOC or XLS formats.

E-mail to: sirius-attach.aud@siemens.com

Ordering example 1

A label with 2 lines of text is required:

3SB3902-1XZ
K1Y
Z1 = LIFT
Z2 = LOWER

Ordering example 2

A label inscribed with symbol No. 5011 according to IEC 60417 is required:

3SB3902-1XZ
K3Y
Z = 5011 IEC

Ordering example 3

A label inscribed with symbol No. 1118 according to ISO 7000 is required:









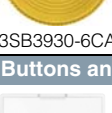


3SB3902-1XZ
K3Y
Z = 1118 ISO

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Accessories and Spare Parts

Buttons and lenses

Selection and ordering data

Version	Color	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Buttons and lenses for round version¹⁾							
	Buttons, flat For round illuminated pushbuttons and pushbutton switches, plastic version	Red	B	3SB3930-0CA2		100	10 units 41J
		Yellow	B	3SB3930-0CA3		100	10 units 41J
		Green	B	3SB3930-0CA4		100	10 units 41J
		Blue	B	3SB3930-0CA5		100	10 units 41J
		White	B	3SB3930-0CA6		100	10 units 41J
		Clear	B	3SB3930-0CA7		100	10 units 41J
	3SB3930-0CA6						
	Buttons, flat For round pushbuttons and pushbutton switches, metal version	Black ³⁾	B	3SB3930-0EA1		100	10 units 41J
		Red	B	3SB3930-0EA2		100	10 units 41J
		Yellow	B	3SB3930-0EA3		100	10 units 41J
		Green	B	3SB3930-0EA4		100	10 units 41J
		Blue	B	3SB3930-0EA5		100	10 units 41J
		White	B	3SB3930-0EA6		100	10 units 41J
		Clear	B	3SB3930-0EA7		100	10 units 41J
3SB3930-0EA3							
	Buttons, raised For round illuminated pushbuttons and pushbutton switches, plastic version	Red	B	3SB3930-0DA2		1	10 units 41J
		Green	B	3SB3930-0DA4		1	10 units 41J
		Clear	B	3SB3930-0DA7		1	10 units 41J
3SB3930-0DA4							
	Buttons, raised For round pushbuttons and pushbutton switches, metal version	Black ³⁾	D	3SB3930-0FA1		1	10 units 41J
		Red	C	3SB3930-0FA2		1	10 units 41J
		Yellow	C	3SB3930-0FA3		1	10 units 41J
		Green	C	3SB3930-0FA4		1	10 units 41J
		Blue	C	3SB3930-0FA5		1	10 units 41J
		White	C	3SB3930-0FA6		1	10 units 41J
		Clear	C	3SB3930-0FA7		1	10 units 41J
3SB3930-0FA4							
	Buttons, flat For round illuminated pushbuttons and pushbutton switches, metal version	Amber	B	3SB3930-0GA0		100	10 units 41J
		Red	B	3SB3930-0GA2		100	10 units 41J
		Yellow	B	3SB3930-0GA3		100	10 units 41J
		Green	B	3SB3930-0GA4		100	10 units 41J
		Blue	B	3SB3930-0GA5		100	10 units 41J
		White	B	3SB3930-0GA6		100	10 units 41J
		Clear	B	3SB3930-0GA7		100	10 units 41J
3SB3930-0GA3							
	Buttons, flat, solvent-resistant²⁾ For round illuminated pushbuttons and pushbutton switches, metal version	Red	B	3SB3930-0GA20-0PA0		100	10 units 41J
		Yellow	B	3SB3930-0GA30-0PA0		100	10 units 41J
		Green	B	3SB3930-0GA40-0PA0		100	10 units 41J
		Blue	B	3SB3930-0GA50-0PA0		100	10 units 41J
		White	B	3SB3930-0GA60-0PA0		100	10 units 41J
		Clear	B	3SB3930-0GA70-0PA0		100	10 units 41J
	Buttons, raised For round illuminated pushbuttons and pushbutton switches, metal version	Amber	C	3SB3930-0HA0		1	10 units 41J
		Red	C	3SB3930-0HA2		1	10 units 41J
		Yellow	C	3SB3930-0HA3		1	10 units 41J
		Green	C	3SB3930-0HA4		1	10 units 41J
		Blue	C	3SB3930-0HA5		1	10 units 41J
		White	C	3SB3930-0HA6		1	10 units 41J
		Clear	C	3SB3930-0HA7		1	10 units 41J
3SB3930-0HA4							
	Lenses, smooth For round indicator lights, plastic and metal versions	Amber	C	3SB3930-6BA0		1	10 units 41J
		Red	B	3SB3930-6BA2		1	10 units 41J
		Yellow	B	3SB3930-6BA3		1	10 units 41J
		Green	B	3SB3930-6BA4		1	10 units 41J
		Blue	B	3SB3930-6BA5		1	10 units 41J
		White	B	3SB3930-6BA6		1	10 units 41J
		Clear	B	3SB3930-6BA7		1	10 units 41J
3SB3930-6BA3							
	Lens with concentric rings For round indicator lights, plastic and metal versions	Amber	B	3SB3930-6CA0		1	10 units 41J
		Red	B	3SB3930-6CA2		1	10 units 41J
		Yellow	B	3SB3930-6CA3		1	10 units 41J
		Green	B	3SB3930-6CA4		1	10 units 41J
		Blue	B	3SB3930-6CA5		1	10 units 41J
		White	B	3SB3930-6CA6		1	10 units 41J
		Clear	B	3SB3930-6CA7		1	10 units 41J
3SB3930-6CA3							
Buttons and lenses for square version							
	Buttons, flat For square illuminated pushbuttons and pushbutton switches, plastic version	Red	B	3SB3950-0CA2		100	10 units 41J
		Yellow	B	3SB3950-0CA3		100	10 units 41J
		Green	B	3SB3950-0CA4		100	10 units 41J
		Blue	B	3SB3950-0CA5		100	10 units 41J
		White	B	3SB3950-0CA6		100	10 units 41J
		Clear	B	3SB3950-0CA7		100	10 units 41J
	3SB3950-0CA6						
	Lenses, smooth For square indicator lights, plastic version	Red	B	3SB3950-6AA2		1	10 units 41J
		Yellow	B	3SB3950-6AA3		1	10 units 41J
		Green	B	3SB3950-6AA4		1	10 units 41J
		Blue	B	3SB3950-6AA5		1	10 units 41J
		White	B	3SB3950-6AA6		1	10 units 41J
		Clear	B	3SB3950-6AA7		1	10 units 41J
	3SB3950-6AA2						

¹⁾ In scope of supply of pushbuttons or indicator lights.








³⁾ Solvent-resistant

²⁾ Not suitable for laser inscription.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Accessories and Spare Parts

Lamps, acoustic signal transformers and keys

Selection and ordering data

Version	Rated voltage	Color	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
V								
Lamps, BA 9s bases¹⁾								
 3SB1902-0AY	Incandescent lamps 1.2 W Max. length 28 mm, max. bulb diameter 10 mm	24 AC/DC	Clear	A	3SB1902-0AY		1 10 units	41J
	Incandescent lamps 2 W Max. length 28 mm, max. bulb diameter 10 mm	6 AC/DC	Clear	A	3SX1342		1 10 units	41J
		12 AC/DC		A	3SX1343		1 10 units	41J
		24 AC/DC		A	3SX1344		1 10 units	41J
		30 AC/DC		B	3SB1902-2AF		1 10 units	41J
48 AC/DC			B	3SB1902-1AP		1 10 units	41J	
60 AC/DC		A	3SR9424		1 10 units	41J		
 3SB3901-1PA	Incandescent lamps 2.6 W Length 28 mm, bulb diameter 10 mm	110 ... 130 AC/DC ²⁾	Clear	A	3SX1731		1 10 units	41J
	Multi-incandescent lamps 1.2 W Endurance 25 000 hours, high resistance to vibration	24 AC/DC		B	3SB1902-2BU		1 10 units	41J
	LED lamps³⁾, super-bright Max. length 28 mm, bulb diameter 10 mm, max. operational current 15 mA	24 AC/DC	Red	▶	3SB3901-1CA		1 10 units	41J
			Yellow	B	3SB3901-1BA		1 10 units	41J
			Green	▶	3SB3901-1DA		1 10 units	41J
		48 AC/DC	Blue	▶	3SB3901-1PA		1 10 units	41J
			White	B	3SB3901-1QA		1 10 units	41J
			Red	B	3SB3901-1CC		1 10 units	41J
			Yellow	B	3SB3901-1BC		1 10 units	41J
			Green	B	3SB3901-1DC		1 10 units	41J
			Blue	B	3SB3901-1PC		1 10 units	41J
		130 AC, 70 ... 90 DC, if X1 at "+" ⁴⁾	White	B	3SB3901-1QC		1 10 units	41J
			Red	B	3SB3901-1CD		1 10 units	41J
			Yellow	B	3SB3901-1BD		1 10 units	41J
		230 AC, 110 ... 160 DC, if X1 at "+" ⁴⁾	Green	B	3SB3901-1DD		1 10 units	41J
			Blue	B	3SB3901-1PD		1 10 units	41J
			White	B	3SB3901-1QD		1 10 units	41J
Red	B		3SB3901-1CF		1 10 units	41J		
Yellow	B		3SB3901-1BF		1 10 units	41J		
230 AC/DC	Green	B	3SB3901-1DF		1 10 units	41J		
	Blue	B	3SB3901-1PF		1 10 units	41J		
	White	B	3SB3901-1QF		1 10 units	41J		
	Red	B	3SB3901-1CG		1 10 units	41J		
	Yellow	B	3SB3901-1BG		1 10 units	41J		
	Green	B	3SB3901-1DG		1 10 units	41J		
 3SB1902-4MC	LED lamps³⁾ Max. length 28 mm, bulb diameter 10 mm, operational current 15 mA	22 ... 32 DC	Red	D	3SB1902-4AJ		1 10 units	41J
			Yellow	D	3SB1902-4BJ		1 10 units	41J
			Green	D	3SB1902-4CJ		1 10 units	41J
 3SB1902-4MC	LED lamps³⁾, flashing (1.4 Hz) Max. length 28 mm, bulb diameter 10 mm, operational current 24 ... 29 mA	24 DC	Red	B	3SB1902-4LC		1 10 units	41J
			Yellow	C	3SB1902-4MC		1 10 units	41J
			Green	C	3SB1902-4NC		1 10 units	41J
 3SX1703	Glow lamps⁵⁾ Length 28 mm, bulb diameter 10 mm Operational current approx. 1.8 mA	110 AC 220 AC 220 AC	Clear	A	3SX1703		1 10 units	41J
			Clear	A	3SX1701		1 10 units	41J
			Green	C	3SX1702		1 10 units	41J
 3SB1902-2AD	Lamp extractors For lamps with BA 9s base			C	3SB1902-2AD		1 1 unit	41J

¹⁾ Essential accessories when using lampholders with BA 9s base and delivery without lamp.

²⁾ Also for 230 V when used with a 3SB3400-1C voltage reducer.

³⁾ For use with SIRIUS commanding and signaling devices only.







⁴⁾ Not suitable for 3SB3400-1G lampholder with separate lamp test function. Can be used with 3SB3400-1L.

⁵⁾ Due to the inherent orange color of glow lamps and their lower luminance level compared with incandescent lamps, it is recommended that they only be used with clear or red screw lenses and in areas where ambient light levels are not very high.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Accessories and Spare Parts


Lamps, acoustic signal transformers and keys

Version	Rated voltage	Color	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
V									
Lamps, wedge bases¹⁾									
 3SB2908-1AE	Incandescent lamps Wedge base W2 × 4.6 d, 1.0 W	6 AC/DC	Clear	C	3SB2908-1AA		100	10 units	41J
		12 AC/DC		B	3SB2908-1AB		100	10 units	41J
		24 AC/DC		A	3SB2908-1AC		100	10 units	41J
		30 AC/DC		A	3SB2908-1AD		100	10 units	41J
		48 AC/DC		B	3SB2908-1AE		1	10 units	41J
		60 AC/DC		B	3SB2908-1AF		1	10 units	41J
 3SB3901-1SB	LED lamps²⁾, super-bright Wedge base W2 × 4.6 d Operational current 10 mA	24 AC/DC	Red	B	3SB3901-1SB		1	10 units	41J
			Yellow	B	3SB3901-1RB		1	10 units	41J
			Green	B	3SB3901-1TB		1	10 units	41J
			White	B	3SB3901-1UB		1	10 units	41J
			Blue	B	3SB2908-1BD		1	10 units	41J
 3SB3901-1VE		28 AC/DC	Red	B	3SB3901-1SE		1	10 units	41J
			Yellow	B	3SB3901-1RE		1	10 units	41J
			Green	B	3SB3901-1TE		1	10 units	41J
			White	B	3SB3901-1UE		1	10 units	41J
			Blue	C	3SB3901-1VE		1	10 units	41J
 3SB2908-2AB	Lamp extractors For lamps with bases W2 × 4.6 d				3SB2908-2AB		1	1 unit	41J
 3SB1902-1AU	Lamp adapters For fitting a lamp with a wedge base socket in a BA 9s lampholder			C	3SB1902-1AU		1	1 unit	41J
Acoustic signal transformers, BA 9s base									
 3SB1902-2BN	Acoustic signal transformers For acoustic signaling devices ³⁾ operational current 25 mA, 0.6 W, sound pressure 80 dB/10 cm	24 ... 28 DC		B	3SB1902-2BN		1	1 unit	41J

¹⁾ Can be used with lamp adapters in lampholders with BA 9s base.

²⁾ For use with SIRIUS commanding and signaling devices only.

³⁾ For increased protection, the IP65 acoustic signaling device (complete unit) can be used.

Version, lock manufacturer	Lock No.	Color	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Keys for actuators¹⁾									
 3SY1054	RONIS ²⁾	SB 30	--	B	3SB3910-4A		1	1 unit	41J
	BKS ²⁾	S1	--	A	3SY1066		1	1 unit	41J
	CES	LSG 1	--	B	3SB1910-2F		1	1 unit	41J
	CES ²⁾	SSG 10	--	B	3SY1054		1	1 unit	41J
	CES	SSP 9	--	A	3SY1052		1	1 unit	41J
	O.M.R.	73038	Light blue	C	3SB1910-2L		1	1 unit	41J
		73037	Red	B	3SB1910-2M		1	1 unit	41J
		73034	Black	B	3SB1910-2N		1	1 unit	41J
	73033	Yellow	D	3SB1910-2P		1	1 unit	41J	

¹⁾ Included in scope of supply of the key-operated switches and the EMERGENCY STOP mushroom pushbuttons with lock. This does not include locks for VW and main and general locking systems.

²⁾ Also available with special lock. Supplement Article No. with "-Z" and specify the required lock in plain language.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Accessories and Spare Parts

Protective covers

Selection and ordering data

Version	Use	Color	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Protective caps¹⁾, degree of protection IP67								
Material: Elastolan								
 3SB3921-0AJ	Protective caps For round version	Flat button (plastic)	Clear	B	3SB3921-0AJ		1	1 unit 41J
		Flat button (metal), raised button (plastic)	Clear	B	3SB3921-0AM		1	1 unit 41J
	• Material: PVC	Raised button (metal)	Clear	C	3SB1902-2AN		1	1 unit 41J
 3SB3941-0AJ	Protective caps For square version	Flat button (plastic)	Clear	B	3SB3941-0AJ		1	1 unit 41J
Material: silicone								
 3SB3921-0AH	Protective caps For round version	Flat button (plastic)	Clear	B	3SB3921-0AH		1	1 unit 41J
		Flat button (metal), raised button (plastic)	Clear	B	3SB1902-0AK		1	1 unit 41J
	 3SB1902-0AK		Raised button (metal)	Clear	B	3SB1902-0AN		1
 3SB1902-0AN								
 3SB3921-0BA	Protective caps For round version	Selector switch (plastic and metal normal actuator)	Clear	B	3SB3921-0BA		1	1 unit 41J
 3SB1902-2BH	Protective caps For round version	Mushroom push-pull button, Ø 40 mm (plastic and metal)	Clear	B	3SB1902-2BH		1	1 unit 41J
 3SB3921-0BU		EMERGENCY STOP mushroom pushbutton, Ø 40 mm (plastic and metal)	Clear	B	3SB3921-0BU		1	1 unit 41J
 3SB3941-0AH	Protective caps For square version	Flat button (plastic)	Clear	B	3SB3941-0AH		1	1 unit 41J

¹⁾ No protective caps can be used with 3SB38 plastic enclosures.

For the 3SB38 metal enclosures, protective caps can only be used together with single-pole contact blocks for front plate mounting. In addition, the base plate must be removed.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm

Accessories and Spare Parts

Protective covers

Version	Use	Color	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Other protective caps¹⁾									
 3SB1902-0AL	Sealable caps For round version	Flat button (plastic)	Black	B	3SB1902-0AL		1	1 unit	41J
		Flat button (metal), raised button (plastic) ²⁾	Clear	B	3SB1902-2AR		1	1 unit	41J
 3SB1902-2AR									
 3SB3921-0BT	Dust covers For use in dusty environments	BKS, CES, O.M.R. Key-operated switch	Clear	B	3SB3921-0BT		1	1 unit	41J
Protective collars for front plates									
 3SB3921-0AX	Protective collars for EMERGENCY STOP³⁾ For round version	EMERGENCY STOP mushroom pushbutton without key-operated switch	Yellow	B	3SB3921-0AK		1	1 unit	41J
		EMERGENCY STOP mushroom pushbutton With key-operated switch	Gray	C	3SB3921-0AP		1	1 unit	41J
			Yellow	B	3SB3921-0AX		1	1 unit	41J
 3SB3921-0CG	Protective collars for EMERGENCY STOP for 5 padlocks³⁾ For round version	EMERGENCY STOP mushroom pushbutton 3SB3. ...-1AA20	Yellow	B	3SB3921-0CG		1	1 unit	41J
 3SB3921-0AS	Sun collars For round version	Illuminated pushbuttons	Black	B	3SB3921-0AS		1	1 unit	41J
Blanking plugs for spare command points for front plates									
 3SB3921-0AA	Blanking plugs For round version	Plastic version	Black	▶	3SB3921-0AA		1	10 units	41J
 3SB3941-0AA	Blanking plugs For square version	Plastic version	Black	B	3SB3941-0AA		1	1 unit	41J
 3SB1902-0AQ	Blanking plugs (plastic) ⁴⁾ For round version	Metal version	Alumini-zed	B	3SB1902-0AQ		1	10 units	41J

¹⁾ Not suitable for mounting in 3SB38 enclosures. Not to be used with label holder.

²⁾ For front panel thickness of max. 2 mm.






³⁾ The protective collar must only be used to protect against inadvertent actuating and must be fitted to allow unimpeded actuation of the EMERGENCY STOP mushroom pushbutton.

⁴⁾ Not suitable for 3SB38 plastic enclosures.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Accessories and Spare Parts

Miscellaneous accessories

Selection and ordering data

Version	Use	Inscription	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Yellow backing plates for EMERGENCY STOP									
<i>For use on front plates</i>									
 3SB3921-0AC  3SB3921-0BW	Backing plates, round Self-adhesive, outer diameter 60 mm, inner diameter 23 mm	EMERGENCY STOP mushroom pushbutton (round version)	Blank Customized inscription ¹⁾	B	3SB3921-0DY 3SB3921-0DZ K1Y 3SB3921-0DZ K9Y		1	1 unit	41J
	Backing plates, round Self-adhesive, outer diameter 80 mm inner diameter 23 mm	EMERGENCY STOP mushroom pushbutton (round version)	Blank 4 languages de ²⁾ , en, it, es	B	3SB3921-0AB 3SB3921-0BW		1	1 unit	41J
			NOT-HALT	B	3SB3921-0AC		1	1 unit	41J
			NOT-AUS	B	3SB3921-0CK		1	1 unit	41J
			EMERGENCY STOP	B	3SB3921-0AD		1	1 unit	41J
			ARRET D'URGENCE	B	3SB3921-0AG		1	1 unit	41J
			EMERGENZA	B	3SB3921-0AN		1	1 unit	41J
			NØDSTOP	B	3SB3921-0AT		1	1 unit	41J
			Customized inscription ¹⁾		3SB3921-0AZ K1Y 3SB3921-0AZ K9Y				
		Backing plates, round Self-adhesive, outer diameter 80 mm cutout 26 mm x 26 mm	EMERGENCY STOP mushroom pushbutton (square version)	Blank NOT-HALT NOT-AUS EMERGENCY STOP	B	3SB3941-0AB 3SB3941-0AC 3SB3941-0BX 3SB3941-0AD		1	1 unit
	Backing plates, round 1 mm thick, outer diameter 75 mm inner diameter 22.5 mm	EMERGENCY STOP mushroom pushbutton (round version)	Blank NOT-HALT NOT-AUS	B	3SB1902-2BA 3SB1902-2BB 3SB3921-0CH		1	1 unit	41J
 3SB3921-0DA	Backing plates, illuminated, round Self-adhesive, outer diameter 60 mm, inner diameter 23 mm ³⁾	EMERGENCY STOP mushroom pushbutton (round version)	Blank NOT-HALT NOT-AUS EMERGENCY STOP	▶ ▶ B B	3SB3921-0DA 3SB3921-0DK 3SB3921-0DC 3SB3921-0DD		1	1 unit	41J
	Suitable as signaling device for EMERGENCY STOP, with plug-in terminal for 24 V AC/DC ⁴⁾						1	1 unit	41J
							1	1 unit	41J
							1	1 unit	41J
Labeling plates									
 3SB3901-0CH  3TX4210-0H	Labeling plates For supporting dust resistance	Contact blocks		B	3SB3901-0CH		100	10 units	41J
	Unit labeling plates	Contact blocks, lampholders		B	3TX4210-0H		100	100 units	41B

¹⁾ The customized inscription, e.g. in languages other than those specified in the table or as symbols, is performed as follows:
 - Text: Upper case according to order code "K1Y" or
 - Symbol: According to order form supplement and order code "K9Y"
 (compare "Options" on page 13/63).

²⁾ With German inscription "NOT-HALT".

³⁾ For front panel thickness of max. 4 mm.

⁴⁾ The illuminated label can also be operated through the AS-Interface F adapter (see page 13/53).

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Accessories and Spare Parts

Miscellaneous accessories

Version	Use	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Holders and pressure plates							
 3SB3901-0AB	Holders For snapping on 3 blocks ¹⁾	▶	3SB3901-0AB		100	20 units	41J
 3SB3901-0AC	Holders and pressure plates For actuating the central contact block of 3 contact blocks ²⁾	▶	3SB3901-0AC		100	10 units	41J
 3SB3901-0AW	Pressure plates For actuating the central contact block of 3 contact blocks ²⁾	B	3SB3901-0AW		100	10 units	41J
Holders for commanding and signaling elements³⁾							
 3SB3931-0AA	Holders for plastic version, round	▶	3SB3931-0AA		1	10 units	41J
 3SB3951-0AA	Holders for plastic version, square	B	3SB3951-0AA		1	1 unit	41J
 3SB3931-0AC	Holders for metal version, round	▶	3SB3931-0AC		1	10 units	41J
 3SB3921-0BD	Grounding studs For grounding metal actuators for fitting in front plates or enclosures made of non-conducting materials, e.g. 3SB38 plastic enclosures	B	3SB3921-0BD		100	50 units	41J

¹⁾ The holder for illuminated commanding devices is included in the scope of supply.

²⁾ The pressure plates can be removed one by one to meet individual requirements.

³⁾ The matching holder for actuators and indicators is included in the scope of supply (exception: ordering with order code "B01").

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Accessories and Spare Parts

Miscellaneous accessories

Version	Use	Color	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Tools								
 3SB3941-0AF	Blanking tools 26 mm x 26 mm, for square version		B	3SB3941-0AF		1	1 unit	41J
 3SB1902-2BG	Hole drilling templates For 30 mm x 30 mm grid, horizontal, for round and square versions		C	3SB1902-2BG		1	1 unit	41J
 3SB3921-0BC	Mounting tools (plastic) For buttons and lenses, metal version		B	3SB3921-0BC		1	1 unit	41J
 3SX1707	Mounting tools For potentiometer drives and for pushbuttons with extended stroke		C	3SX1707		1	1 unit	41J
 3SB3901-0CB	Dismantling tools For contact blocks and lampholders	Blocks with screw terminals	C	3SB3901-0CB		1	1 unit	41J
	Dismantling tools For contact blocks and lampholders	Blocks with spring-type terminals	C	3SB3901-0CG		1	1 unit	41J
Various accessories								
 3SB3921-0AU	Single frames For square design of the round version	Black	C	3SB3921-0AU		1	1 unit	41J
 3SB3921-0AE	Adapter parts Adapters for 30.5 mm mounting hole, comprising a metal disk with an adhesive layer on one side, degree of protection IP65	As thrust ring for a thin molded-plastic front plate	B	3SB3921-0AE		1	1 unit	41J
 3SB3901-0AA	Holders for printed circuit boards For mounting the command devices on the printed circuit board (screw is included in the scope of supply)	Contact blocks and lampholders for solder connection	B	3SB3901-0AA		100	10 units	41J
 3SX1335	Extension plungers For compensation of the distance between a pushbutton and the unlatching button of an overload relay	Pushbuttons with extended stroke	A	3SX1335		1	1 unit	41J

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

General data

Overview



Enclosures with standard and customized equipment

Enclosed pushbuttons and indicator lights are used as hand operated control devices for separately allocated control units and cabinets.

Enclosures with actuator are available for suspension (e.g. for crane control units).

The enclosed pushbuttons and indicator lights are available with conventional controls as well as for connection to the AS-Interface bus system.

The following versions are available:

- Enclosures with standard fittings with 1 to 3 command points
- Enclosures with customized fittings with 1 to 6 command points
- Empty enclosures (individual parts must be ordered separately)

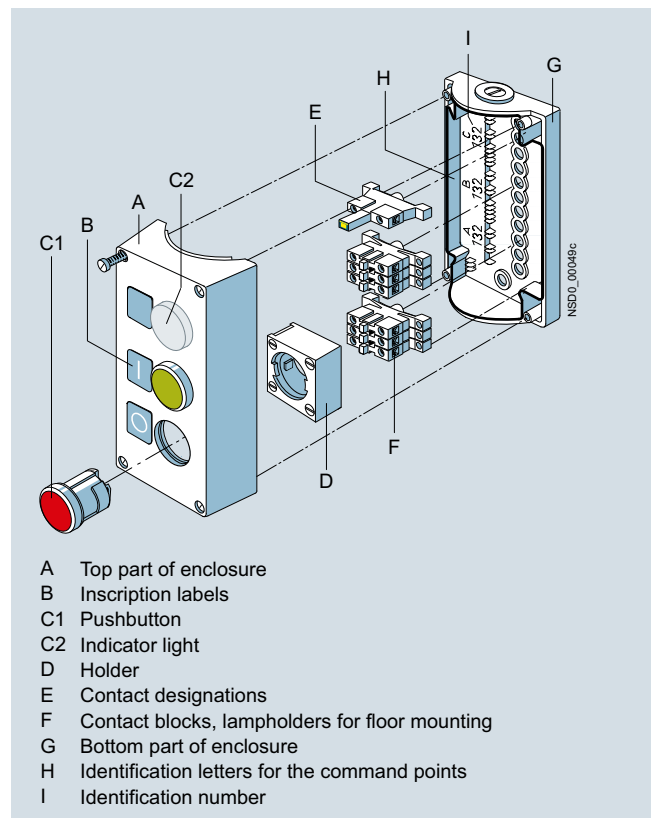
Customized enclosures

On request enclosures with more than 6 command points can also be supplied with AS-Interface connection.

Use the configurator for selection.

For AS-Interface enclosures, [see page 13/82](#).

Enclosures with standard fittings



Standards

IEC 60947-5-1, EN 60947-5-1

Application

The devices are climate-proof (KTW 24) according to EN ISO 6270-2 and suitable for stationary use (weather-protected) and for use in marine applications.

Technical specifications

Type	3SB380.-0, 3SB380.-1	3SB380.-2, 3SB380.-3
Enclosures		
Enclosure material	Plastic	Metal
Actuating and signaling elements	Plastic, round	Metal, round
Degree of protection acc. to IEC 60529	IP65	IP67 and NEMA Type 4
Climatic withstand capability acc. to EN ISO 6270-2	KTW 24	
Shock resistance acc. to IEC 60068-2-27 For half-sine shock type, 11 ms shock duration		
• Devices without incandescent lamp	≤ 50 g	
• Devices with incandescent lamp	≤ 30 g	
Vibration resistance acc. to IEC 60068-2-6		
• Acceleration at frequency 20 ... 200 Hz	5 g	

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Enclosures with standard fittings

Overview

- Enclosures with standard fittings are available with:
- 1 to 3 command points
 - Operational voltage up to 400 V
 - Vertical mounting type
 - Plastic enclosures are equipped with plastic actuators and indicators, metal enclosures are equipped with metal actuators and indicators
 - Contact blocks and lampholders for base mounting (are snapped into the enclosure base); screw terminals (box terminals) as standard; some versions also with spring-type terminals (Article No. ends with -OCC0)

Color of enclosure top:

- Gray, RAL 7035
- Yellow, RAL 1004 for EMERGENCY STOP

Color of enclosure base:






- Black, RAL 9005

Selection and ordering data

Equipping options	Contact block function	Number of command points	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
				Configurator			
				Article No.	Price per PU		

Plastic enclosures with standard fittings

Cable entry top and bottom each 1 x M20

	A = Pushbutton green, label "I"	1 NO	1	B	3SB3801-0DA3	1	1 unit	41J
	A = Pushbutton red, label "O"	1 NC	1	B	3SB3801-0DB3	1	1 unit	41J
	A = Pushbutton white, label "I"	1 NO	1	B	3SB3801-0DD3	1	1 unit	41J
	A = Pushbutton black, label "O"	1 NC	1	B	3SB3801-0DE3	1	1 unit	41J
	A = EMERGENCY STOP mushroom pushbuttons, red, Ø 40 mm, with positive latching according to ISO 13850 and rotate-to-unlatch mechanism							
	• With yellow top part, without protective collar	1 NC ☞	1	B	3SB3801-0DG3	1	1 unit	41J
		2 NC ☞	1	B	3SB3801-0EG3	1	1 unit	41J
	• With yellow top part, with protective collar ¹⁾	1 NC ☞	1	B	3SB3801-0DF3	1	1 unit	41J
		2 NC ☞	1	B	3SB3801-0EF3	1	1 unit	41J
	B = Pushbutton green, label "I"	1 NO	2	B	3SB3802-0DA3	1	1 unit	41J
	A = Pushbutton red, label "O"	1 NC						
	B = Pushbutton white, label "I"	1 NO	2	B	3SB3802-0DB3	1	1 unit	41J
	A = Pushbutton black, label "O"	1 NC						
	C = Indicator light, clear, label without inscription	BA 9s ²⁾	3	B	3SB3803-0DA3	1	1 unit	41J
	B = Pushbutton green, label "I"	1 NO						
	A = Pushbutton red, label "O"	1 NC						
	C = Pushbutton black, label "II"	1 NO	3	C	3SB3803-0DB3	1	1 unit	41J
	B = Pushbutton black, label "I"	1 NO						
	A = Pushbutton red, label "O"	1 NC						
	C = Indicator light, clear, label without inscription	BA 9s ²⁾	3	C	3SB3803-0DC3	1	1 unit	41J
	B = Pushbutton white, label "I"	1 NO						
	A = Pushbutton black, label "O"	1 NC						

⚙ For the online configurator, see www.siemens.com/sirius/configurators.

☞ Positive opening according to IEC 60947-5-1, Annex K. Can be used with 3SK1, 3TK28 safety relays or the 3RK3 Modular Safety System; see Chapter 11, "Safety Technology".

¹⁾ The protective collar must only be used to protect against inadvertent actuating and must be fitted to allow unimpeded access to the EMERGENCY STOP mushroom pushbutton.

²⁾ Only lampholder; order lamp separately.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Enclosures with standard fittings

Equipping options	Contact block function	Number of command points	DT	Screw terminals	PU (UNIT, SET, M)	PS*	PG
				Spring-type terminals²⁾			
				Configurator			
				Article No.	Price per PU		

Metal enclosures with standard fittings

Cable entry top and bottom each 1 x M20

	A = Pushbutton green, label "I"	1 NO	1	B	3SB3801-2DA3	1	1 unit	41J
	A = Pushbutton red, label "O"	1 NC	1	B	3SB3801-2DB3	1	1 unit	41J
	A = Pushbutton white, label "I"	1 NO	1	B	3SB3801-2DD3	1	1 unit	41J
	A = Pushbutton black, label "O"	1 NC	1	B	3SB3801-2DE3	1	1 unit	41J
	A = EMERGENCY STOP mushroom pushbuttons, red, Ø 40 mm, with positive latching according to ISO 13850 and rotate-to-unlatch mechanism							
	• With yellow top part, without protective collar	1 NC	1	B	3SB3801-2DG3	1	1 unit	41J
		2 NC	1	B	3SB3801-2EG3	1	1 unit	41J
	- with M12 plug	2 NC	1	C	3SB3801-2EG10-0CC0	1	1 unit	41J
	• With yellow top part, with protective collar ¹⁾	1 NC	1	B	3SB3801-2DF3	1	1 unit	41J
		2 NC	1	B	3SB3801-2EF3	1	1 unit	41J
	A = EMERGENCY STOP mushroom pushbuttons, red, Ø 60 mm, with positive latching according to ISO 13850 and rotate-to-unlatch mechanism							
	• With yellow top part, with protective collar for 5 padlocks ¹⁾	2 NC	1	B	3SB3801-2EA30	1	1 unit	41J
		2 NC	1	B	3SB3801-2EA30-0CC0	1	1 unit	41J
	A = Mushroom pushbutton, black, Ø 60 mm, with positive latching and rotate-to-unlatch mechanism							
	• With gray top part, with protective collar for 5 padlocks ¹⁾	2 NC ²⁾	1	B	3SB3801-2EB30-0CC0	1	1 unit	41J
	B = Pushbutton green, label "I"	1 NO	2	B	3SB3802-2DA3	1	1 unit	41J
	A = Pushbutton red, label "O"	1 NC						
	B = Pushbutton white, label "I"	1 NO	2	B	3SB3802-2DB3	1	1 unit	41J
	A = Pushbutton black, label "O"	1 NC						
	C = Indicator light, clear, label without inscription	BA 9s ³⁾	3	B	3SB3803-2DA3	1	1 unit	41J
	B = Pushbutton green, label "I"	1 NO						
	A = Pushbutton red, label "O"	1 NC						
	C = Pushbutton black, label "II"	1 NO	3	B	3SB3803-2DB3	1	1 unit	41J
	B = Pushbutton black, label "I"	1 NO						
	A = Pushbutton red, label "O"	1 NC						
	C = Indicator light, clear, label without inscription	BA 9s ³⁾	3	B	3SB3803-2DC3	1	1 unit	41J
	B = Pushbutton white, label "I"	1 NO						
	A = Pushbutton black, label "O"	1 NC						

For the online configurator, see www.siemens.com/sirius/configurators.

Positive opening according to IEC 60947-5-1, Annex K. Can be used with 3SK1, 3TK28 safety relays or the 3RK3 Modular Safety System; see Chapter 11, "Safety Technology".

¹⁾ The protective collar must only be used to protect against inadvertent actuating and must be fitted to allow unimpeded access to the EMERGENCY STOP mushroom pushbutton.


²⁾ **-0CC0**: Contact blocks with spring-type terminals.

³⁾ Only lampholder; order lamp separately.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Empty enclosures

Selection and ordering data

Version	Number of command points	DT	Configurator 	PU (UNIT, SET, M)	PS*	PG
			Article No.	Price per PU		

Empty enclosures, plastic



3SB38 02-0AA3

Cable entry top and bottom
1 x M20 each for 1 to 3 command points,
1 x M25 each for 4 and 6 command points

For contact blocks, lampholders and accessories with snap-on base mounting, also single-pole front plate blocks can be used (switching state is maintained upon opening) with gray top part

1	B	3SB3801-0AA3	1	1 unit	41J
2	B	3SB3802-0AA3	1	1 unit	41J
3	B	3SB3803-0AA3	1	1 unit	41J
4	B	3SB3804-0AA3	1	1 unit	41J
6	B	3SB3806-0AA3	1	1 unit	41J



3SB38 01-0AB3

For EMERGENCY STOP, for contact blocks and accessories with snap-on base mounting, also single-pole front plate blocks can be used (switching state is maintained upon opening)

- With yellow top part, without protective collar

1	B	3SB3801-0AB3	1	1 unit	41J
---	---	---------------------	---	--------	-----

- With yellow top part, with protective collar¹⁾

1	B	3SB3801-0AD3	1	1 unit	41J
---	---	---------------------	---	--------	-----

Empty enclosures, metal



3SB38 04-2AA3

Cable entry top and bottom
1 x M20 each for 1 to 3 command points,
1 x M25 each for 4 and 6 command points

For contact blocks, lampholders and accessories with snap-on base mounting, also single-pole front plate blocks can be used (switching state is maintained upon opening) with gray top part

1	B	3SB3801-2AA3	1	1 unit	41J
2	B	3SB3802-2AA3	1	1 unit	41J
3	B	3SB3803-2AA3	1	1 unit	41J
4	B	3SB3804-2AA3	1	1 unit	41J
6	B	3SB3806-2AA3	1	1 unit	41J



3SB38 01-2AB3

For EMERGENCY STOP, for contact blocks, lampholders and accessories with snap-on base mounting, also single-pole front plate blocks can be used (switching state is maintained upon opening)

- With yellow top part, without protective collar

1	B	3SB3801-2AB3	1	1 unit	41J
---	---	---------------------	---	--------	-----

- With yellow top part, with protective collar¹⁾

1	B	3SB3801-2AD3	1	1 unit	41J
---	---	---------------------	---	--------	-----



3SB38 01-2AD3

- With gray top part, with protective collar¹⁾

1	B	3SB3801-2AE3	1	1 unit	41J
---	---	---------------------	---	--------	-----

- With yellow top part, with protective collar for 3 padlocks¹⁾, for mushroom Ø 40 mm, can be locked (BKS, CES, O.M.R.)

1	B	3SB3801-2EC3	1	1 unit	41J
---	---	---------------------	---	--------	-----



3SB38 01-2EC3

 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The protective collar must only be used to protect against inadvertent actuating and must be fitted to allow unimpeded access to the EMERGENCY STOP mushroom pushbutton.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Customized enclosures

Overview

Customized enclosures are available with:

- 1 to 6 command points
- Operational voltage up to 400 V

One command point comprises:

- 1 actuator or indicator
- Up to 3 contact blocks or up to 2 contact blocks + 1 lampholder
- 1 labeling plate

For plastic enclosures the command points are equipped as standard with plastic actuators and indicators, for metal enclosures they are equipped with metal actuators and indicators.

For cable entry in each case, a hole is provided at the top and bottom:

- For M20 for 1 to 3 command points
- For M25 for 4 and 6 command points

Ordering notes (selection by configurator)

To order customized enclosures with the 3SB3 control devices (except suspended pushbuttons), use the 3SB3/3SF5 configurator to select the blocks for equipping. An electronic order form will be generated for the additional options.

For the configurator, see

- Electronic Catalog CA 01 on DVD or
- Industry Mall, www.siemens.com/industrymall

The order number must be supplemented with the order code "K0Y" (as already listed in the selection table).




The list price of the complete enclosure is generated in the configurator for the customized equipment.

Please send the resulting electronic order form along with your order by e-mail to our Competence Center at

sirius-attach.aud@siemens.com

If you are unable to access either of these media, please contact our Technical Assistance.

Selection and ordering data

Version	Number of command points	DT	Configurator	PU (UNIT, SET, M)	PS*	PG		
			Article No.	Price per PU ¹⁾				
Plastic enclosures								
	With contact blocks and lampholders for base mounting	1	C	3SB3801-0AZ K0Y	1	1 unit	41J	
		2	C	3SB3802-0AZ K0Y	1	1 unit	41J	
		3	C	3SB3803-0AZ K0Y	1	1 unit	41J	
		4	B	3SB3804-0AZ K0Y	1	1 unit	41J	
		6	B	3SB3806-0AZ K0Y	1	1 unit	41J	
		With single-pole contact blocks and lampholders for front plate mounting	1	C	3SB3801-1AZ K0Y	1	1 unit	41J
	2		C	3SB3802-1AZ K0Y	1	1 unit	41J	
	3		C	3SB3803-1AZ K0Y	1	1 unit	41J	
	4		B	3SB3804-1AZ K0Y	1	1 unit	41J	
	6		B	3SB3806-1AZ K0Y	1	1 unit	41J	
	Metal enclosures							
		With contact blocks and lampholders for base mounting	1	C	3SB3801-2AZ K0Y	1	1 unit	41J
2			C	3SB3802-2AZ K0Y	1	1 unit	41J	
3			C	3SB3803-2AZ K0Y	1	1 unit	41J	
4			C	3SB3804-2AZ K0Y	1	1 unit	41J	
6			C	3SB3806-2AZ K0Y	1	1 unit	41J	
With single-pole contact blocks and lampholders for front plate mounting			1	C	3SB3801-3AZ K0Y	1	1 unit	41J
		2	C	3SB3802-3AZ K0Y	1	1 unit	41J	
		3	C	3SB3803-3AZ K0Y	1	1 unit	41J	
		4	C	3SB3804-3AZ K0Y	1	1 unit	41J	
		6	C	3SB3806-3AZ K0Y	1	1 unit	41J	
			Suspended pushbuttons	Max. 6	D	3SB3887-1AZ K0Y	1	1 unit
With holding plate and actuator, customized equipment ²⁾								

 For the online configurator, see www.siemens.com/sirius/configurators.

¹⁾ The prices depend on the equipment selected.



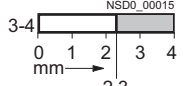

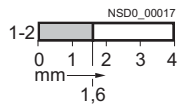

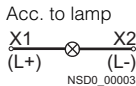
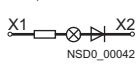

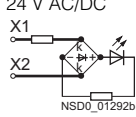
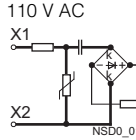
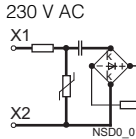
²⁾ Order forms for customized orders are available from Technical Assistance.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Contact blocks and lampholders

Selection and ordering data

For self-equipping of the enclosures

Version	Rated voltage/ Graphic symbols	Operating travel/color	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG	
		<input type="checkbox"/> Contact closed <input type="checkbox"/> Contact open		Article No.	Price per PU				
Contact blocks for base mounting									
 3SB3420-0B	Contact blocks with one contact								
	1 NO 1 NO with gold-plated contacts			3SB3420-0B 3SB3420-0BA		1 1	1 unit 1 unit	41J 41J	
	1 NC 1 NC with gold-plated contacts			3SB3420-0C 3SB3420-0CA		1 1	1 unit 1 unit	41J 41J	
 3SB3420-1A	BA 9s lampholders								
	Without lamp	Acc. to lamp		3SB3420-1A		1	1 unit	41J	
	With integrated voltage reducer and with 130 V lamp (3SX1731) ¹⁾	230/240 V AC		Clear	B	3SB3420-1C	1	1 unit 41J	
 3SB3420-1PE	Lampholders with integrated LED²⁾								
		24 V AC/DC		Yellow Red Green Blue White	B B B B B	3SB3420-1PA 3SB3420-1PB 3SB3420-1PC 3SB3420-1PD 3SB3420-1PE	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit 41J 41J 41J 41J 41J	
		110 V AC		Yellow Red Green Blue White	B B B D B	3SB3420-1QA 3SB3420-1QB 3SB3420-1QC 3SB3420-1QD 3SB3420-1QE	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit 41J 41J 41J 41J 41J	
		230 V AC		Yellow Red Green Blue White	B B B B B	3SB3420-1RA 3SB3420-1RB 3SB3420-1RC 3SB3420-1RD 3SB3420-1RE	1 1 1 1 1	1 unit 1 unit 1 unit 1 unit 1 unit 41J 41J 41J 41J 41J	
	Support terminals								
				Black	B	3SB3901-0AG	1	1 unit	41J
				Blue	B	3SB3901-0AH	1	1 unit	41J
				Green/Yellow	B	3SB3901-0AJ	1	1 unit	41J


⊕ Positive opening according to IEC 60947-5-1, Annex K.

¹⁾ The voltage reducer can only be used with this lamp.

²⁾ For use with SIRIUS commanding and signaling devices only.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Contact blocks and lampholders

Version	Rated voltage/ Graphic symbols	Operating travel/color DT	Spring-type terminals	PU (UNIT, SET, M)	PS*	PG
		<input type="checkbox"/> Contact closed <input type="checkbox"/> Contact open	 Article No. Price per PU			

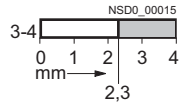
Contact blocks for base mounting



3SB3423-0B

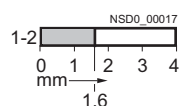
Contact blocks with one contact

1 NO
1 NO with
gold-plated contacts



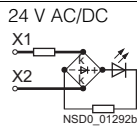
B	3SB3423-0B	1	1 unit	41J
D	3SB3423-0BA	1	1 unit	41J

1 NC
1 NC with
gold-plated contacts



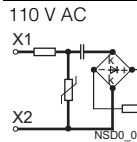
B	3SB3423-0C	1	1 unit	41J
B	3SB3423-0CA	1	1 unit	41J

Lampholders with integrated LED¹⁾



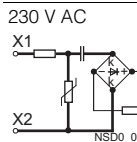
24 V AC/DC
Yellow
Red
Green
Blue
White

B	3SB3423-1PA	1	1 unit	41J
B	3SB3423-1PB	1	1 unit	41J
B	3SB3423-1PC	1	1 unit	41J
B	3SB3423-1PD	1	1 unit	41J
B	3SB3423-1PE	1	1 unit	41J



110 V AC
Yellow
Red
Green
Blue
White

B	3SB3423-1QA	1	1 unit	41J
D	3SB3423-1QB	1	1 unit	41J
D	3SB3423-1QC	1	1 unit	41J
D	3SB3423-1QD	1	1 unit	41J
D	3SB3423-1QE	1	1 unit	41J



230 V AC
Yellow
Red
Green
Blue
White

C	3SB3423-1RA	1	1 unit	41J
B	3SB3423-1RB	1	1 unit	41J
B	3SB3423-1RC	1	1 unit	41J
B	3SB3423-1RD	1	1 unit	41J
B	3SB3423-1RE	1	1 unit	41J

Support terminals

Black
Blue
Green/Yellow

B	3SB3423-2F	1	1 unit	41J
B	3SB3423-2G	1	1 unit	41J
B	3SB3423-2H	1	1 unit	41J



3SB3423-2G

⊕ Positive opening according to IEC 60947-5-1, Annex K.

¹⁾ For use with SIRIUS commanding and signaling devices only.

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG

Accessories



3SB3901-0AW

Pressure plates for selector switches and key-operated switches

For actuating the central contact block of 3 contact blocks¹⁾

B	3SB3901-0AW	100	10 units	41J
---	--------------------	-----	----------	-----

¹⁾ The pressure plates can be removed one by one to meet individual requirements.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Labeling plates for enclosures

Overview

Black labels

The labeling plates (black with white inscription or silver-colored with black print) have an adhesive layer on the back. The size of the labels is 22 mm x 22 mm.

Inscription















The inscriptions have upper case initial letters. The typeface is Arial. Graphic symbols, including those not listed in the catalog, are according to ISO 7000 or IEC 60417 (see page 13/80).

Selection and ordering data

PU (UNIT) = 1
 PS* = 10 units (customized inscription: 1 unit)
 PG = 41J

Inscription	DT	Black		Silver-colored	
		Article No.	Price per PU	Article No.	Price per PU

Labeling plates, self-adhesive, 22 mm x 22 mm

		Black		Silver-colored	
		Article No.	Price per PU	Article No.	Price per PU
	For user inscription				
	Blank	B 3SB3906-1AA		B 3SB1901-3AA	
	With inscription				
	Ein	B 3SB3906-1AB		B 3SB1901-3AB	
	On	B 3SB3906-1EB		B 3SB1901-3EB	
	Aus	B 3SB3906-1AC		B 3SB1901-3AC	
	Off	B 3SB3906-1EC		B 3SB1901-3EC	
	Auf	B 3SB3906-1AD		B 3SB1901-3AD	
	Up	B 3SB3906-1ED		B 3SB1901-3ED	
	Ab	B 3SB3906-1AE		B 3SB1901-3AE	
	Down	B 3SB3906-1EE		B 3SB1901-3EE	
	Auf	B 3SB3906-1AD		B 3SB1901-3AD	
	Open	B 3SB3906-1EP		B 3SB1901-3EP	
	Zu	B 3SB3906-1AL		B 3SB1901-3AL	
	Close	B 3SB3906-1EQ		B 3SB1901-3EQ	
	Vor	B 3SB3906-1AF		B 3SB1901-3AF	
	Forward	B 3SB3906-1EF		B 3SB1901-3EF	
	Zurück	B 3SB3906-1AG		B 3SB1901-3AG	
	Reverse	B 3SB3906-1EG		B 3SB1901-3EG	
	Rechts	B 3SB3906-1AH		B 3SB1901-3AH	
	Right	B 3SB3906-1EH		--	
	Links	B 3SB3906-1AJ		B 3SB1901-3AJ	
	Left	B 3SB3906-1EJ		--	
	Schnell	B 3SB3906-1AM		B 3SB1901-3AM	
	Fast	B 3SB3906-1ER		--	
	Langsam	B 3SB3906-1AN		B 3SB1901-3AN	
	Slow	B 3SB3906-1ES		--	
	Betrieb	B 3SB3906-1AP		B 3SB1901-3AP	
	Running	B 3SB3906-1EV		B 3SB1901-3EV	
	Störung	B 3SB3906-1AQ		B 3SB1901-3AQ	
	Fault	B 3SB3906-1EW		--	
	Einrichten	B 3SB3906-1AR		B 3SB1901-3AR	
	Start	B 3SB3906-1EL		B 3SB1901-3EL	
	Reset	B 3SB3906-1EM		B 3SB1901-3EM	
	Test	B 3SB3906-1EN		B 3SB1901-3EN	
	Halt	B 3SB3906-1AK		B 3SB1901-3AK	
	Stop	B 3SB3906-1EK		B 3SB1901-3EK	
	NOT-HALT	B 3SB3906-1AS		B 3SB1901-3AT	
	NOT-AUS	B 3SB3906-1AV		B 3SB1901-3AS	
	EMERGENCY STOP	B 3SB3906-1EY		B 3SB1901-3EY	
	Lüfter	B 3SB3906-1CA		--	
	Pumpe	B 3SB3906-1CB		B 3SB1901-3CB	
	Kühlung	B 3SB3906-1CC		--	
	Heizung	B 3SB3906-1CD		--	
	Beleuchtung	B 3SB3906-1CE		B 3SB1901-3CE	
	Filter	B 3SB3906-1CF		--	
	Motor	B 3SB3906-1CG		--	
	Kompressor	B 3SB3906-1CH		B 3SB1901-3CH	
	With graphic symbol				
	O	B 3SB3906-1MB		B 3SB1901-3MB	
	I	B 3SB3906-1MC		B 3SB1901-3MC	
	II	B 3SB3906-1MD		B 3SB1901-3MD	
	III	B 3SB3906-1ME		B 3SB1901-3ME	
	O I (horizontal)	B 3SB3906-1MF		B 3SB1901-3MF	
	I O II (horizontal)	B 3SB3906-1MG		B 3SB1901-3MG	
	I O (vertical)	B 3SB3906-1MH		B 3SB1901-3MH	
	II O I (vertical)	B 3SB3906-1MW		C 3SB1901-3MW	
	→	B 3SB3906-1NA		B 3SB1901-3NA	

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Labeling plates for enclosures

Inscription	DT	Black	DT	Silver-colored	
		Article No.	Price per PU	Article No.	Price per PU

Labeling plates, self-adhesive, 22 mm x 22 mm



With customized inscription

For inscriptions or symbols, see [Options](#)

- Text line(s)
- Symbol with No.
- Any inscription or symbol

3SB3906-0XZ

- B **K0Y, K1Y, K2Y** or **K5Y**
- B **K3Y**
- B **K9Y**

3SB1901-3XZ

- B **K0Y, K1Y, K2Y** or **K5Y**
- B **K3Y**
- B **K9Y**

Options

Customized inscriptions

The labels can be inscribed with text and symbols not listed in the ordering data.

A letter height of 4 mm is used as standard for text inscriptions (1 to 3 lines).

Up to 11 characters per line are possible. The typeface used is Arial. Other font heights and typefaces are possible, but must be specified when ordering.

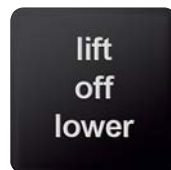
Examples for customized inscription



Two-line inscription in upper/lower case lettering (K0Y)



Single-line inscription in upper case lettering (K1Y)



Three-line inscription in lower case letters (K2Y)



Symbol number 5011 according to IEC 60417 (K3Y)



Any symbol according to order form supplement (K9Y)

Ordering notes

Append the following order codes to the Article No.:

- Text line(s) in upper/lower case, upper case always for beginning of line (e.g. "Lift/Off"): **K0Y**
- Text line(s) in upper case (e.g. "LIFT"): **K1Y**
- Text line(s) in lower case (e.g. "lift/off/lower"): **K2Y**
- Text line(s) in upper/lower case, all words begin with upper case letters (e.g. "On Off"): **K5Y**
- Symbol with number according to ISO 7000 or IEC 60417: **K3Y**
- Any inscription or symbol according to order form supplement: **K9Y**

When ordering, specify the required inscription in plain text in addition to the article number and order code. In the case of special inscriptions with words in languages other than German, give the exact spelling and specify the language.

In the case of multi-line inscriptions, the text must be assigned to the respective line, e.g. "Z1 = Lift, Z2 = Lower". For long words you can also specify the end-of-line division (hyphenation), (see [ordering example 1](#)).

Symbols can also be ordered with numbers according to ISO 7000 or IEC 60417 (see [ordering examples 2 and 3](#)).

For special symbols (order code K9Y), a CAD drawing in DXF format should be submitted to:

sirius-attach.aud@siemens.com

Ordering example 1

A label with 2 lines of text is required:

3SB3906-0XZ
K1Y
Z1 = LIFT
Z2 = LOWER

Ordering example 2

A label inscribed with symbol No. 5011 according to IEC 60417 is required:

3SB3906-0XZ
K3Y
Z = 5011 IEC

Ordering example 3












A label inscribed with symbol No. 1118 according to ISO 7000 is required:

3SB3906-0XZ
K3Y
Z = 1118 ISO

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures

Accessories for enclosures

Selection and ordering data

Version	Color/ Inscription	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
Blanking plugs for spare command points							
 3SB3921-0AA	Blanking plugs For plastic version, round	Black	▶ 3SB3921-0AA		1	10 units	41J
 3SB1902-0AQ	Blanking plugs (plastic)¹⁾ For metal version, round	Aluminized	B 3SB1902-0AQ		1	10 units	41J
Holders and pressure plates							
 3SB3901-0AB	Holders for pushbuttons and pushbutton switches For snapping on 3 blocks For front plate mounting ²⁾		▶ 3SB3901-0AB		100	20 units	41J
 3SB3901-0AC	Holders for selector switches and key-operated switches With pressure plate For front plate mounting ³⁾		▶ 3SB3901-0AC		100	10 units	41J
 3SB3901-0AW	Pressure plates for selector switches and key-operated switches For actuating a central contact block, for base mounting ³⁾		B 3SB3901-0AW		100	10 units	41J
Accessories for enclosures							
 3SB1902-1AQ	Yellow backing plates As high-contrast background for EMERGENCY STOP, self-adhesive	Without inscription	D 3SB1902-1AQ		1	1 unit	41J
		With inscription	B 3SB1902-2AQ		1	1 unit	41J
		• NOT-HALT	B 3SB3921-0CJ		1	1 unit	41J
		• NOT-AUS	B 3SB3921-0BV		1	1 unit	41J
 3SB3901-0CK	M20 cable glands incl. hexagonal nut		B 3SB3901-0CK		1	1 unit	41J
		M25 cable glands incl. hexagonal nut	B 3SB3901-0CM		1	1 unit	41J
 3SB3901-0CL	M20 hexagonal nuts For glands		B 3SB3901-0CL		100	10 units	41J
		M25 hexagonal nuts For glands	B 3SB3901-0CN		100	10 units	41J
 3SB3901-0CS	Connecting pieces For connecting 2 plastic enclosures	• M20/M20	B 3SB3901-0CS		1	1 unit	41J
		• M20/M25 ⁴⁾	B 3SB3901-0CT		1	1 unit	41J
		• M25/M25	B 3SB3901-0CU		1	1 unit	41J
 3SB3901-0CP	Connecting pieces For connecting 2 metal enclosures	• M20/M20	B 3SB3901-0CP		1	1 unit	41J
		• M20/M25	B 3SB3901-0CQ		1	1 unit	41J
 3SB3921-0BD	Grounding studs For grounding metal actuators when fitting in plastic enclosures		B 3SB3921-0BD		100	50 units	41J

¹⁾ Not suitable for 3SB38 plastic enclosures.

²⁾ The holder for illuminated commanding devices is included in the scope of supply.

³⁾ The pressure plates can be removed one by one to meet individual requirements.

⁴⁾ Not suitable for plastic enclosures with 6 command points.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures for AS-Interface

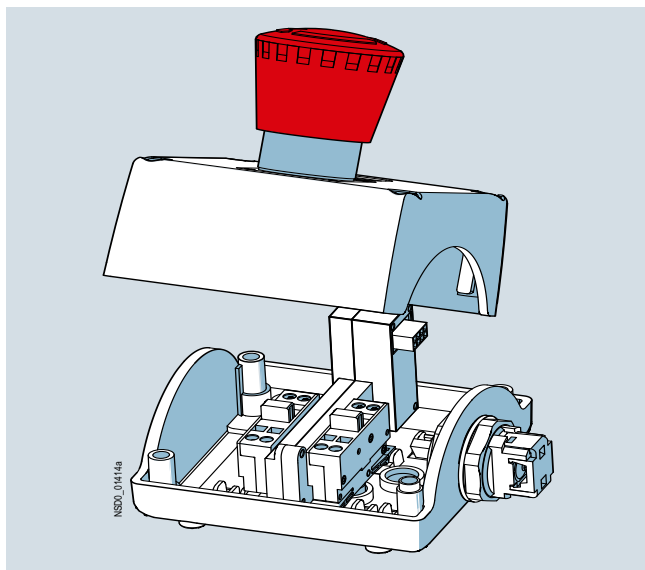
General data

Overview



AS-Interface enclosures with customized equipment

Distributed command devices of the 3SB3 series can be quickly connected to the AS-Interface communication system using AS-Interface enclosures. Using suitable components you can make your own enclosures with integrated AS-Interface or flexibly modify existing enclosures.



EMERGENCY STOP enclosure

Enclosures

Color of enclosure top:

- Gray, RAL 7035
- Yellow, RAL 1004, for EMERGENCY STOP

Color of enclosure base:

- Black, RAL 9005

Equipping with AS-Interface slaves

The following slave types are available for connecting the command points:

- Slave in A/B technology with 4 inputs and 3 outputs
- Slave with 4 inputs and 4 outputs
- F slave with two safe inputs for EMERGENCY STOP mushroom pushbutton

The following table shows the maximum number of slaves possible:

Enclosures for	Number of slaves for enclosures without EMERGENCY STOP	Number of slaves for enclosures with EMERGENCY STOP
1 command point	Not available	1 x F slave
2 command points	1 x slave 4I/4O or 4I/3O	Not available
3 command points	1 x slave 4I/4O or 4I/3O	1 x slave 4I/4O or 4I/3O + 1 x F slave
4 command points	2 x slave 4I/4O or 4I/3O ¹⁾	2 x slave 4I/4O or 4I/3O + 1 x F slave ¹⁾
6 command points	2 x slave 4I/4O or 4I/3O	2 x slave 4I/4O or 4I/3O + 1 x F slave

¹⁾ Applies to plastic enclosures. For metal enclosures with 4 command points, only 1 x slave 4I/4O or 4I/3O is possible.

Connection

One set of links is required in each case to connect a slave to contact blocks, to lampholders and to the connection element.

The connection elements are mounted in the front-end cable glands and are used for connection of the AS-Interface or for bringing unused inputs or outputs out of the enclosure.

For connection to AS-Interface, the following options are available:

- Terminal for shaped AS-Interface cable. The cable is contacted by the insulation piercing method and routed past the enclosure on the outside (possible only with plastic enclosure).
- Cable gland for the shaped AS-Interface cable or round cable. The cable is routed into the enclosure (preferable for metal enclosure).
- Connection using M12 plug

If fewer than all inputs/outputs of the installed slaves in an enclosure are used for connecting the command devices, if required free inputs and outputs can be routed to the outside through an M12 socket on the top or bottom side of the enclosure.

To supply inputs with power, the S+ connection of the slave must always be assigned to the socket and the OUT- connection must be assigned for outputs.

Addressing is performed using the AS-Interface connections or the integrated addressing socket. An external power supply is not required.

Customized enclosures (selection by configurator)

To order customized 3SF58 AS-Interface enclosures with the 3SB3 control devices, use the 3SB3/3SF5 configurator to select the blocks for equipping. An electronic order form will be generated for the additional options.

For related ordering notes, see page 13/76.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures for AS-Interface

AS-Interface enclosures with standard fittings

Overview

Enclosures with standard fittings are available with:

- 1 to 3 command points
- Operational voltage through AS-Interface (approx. 30 V)
- Vertical mounting type
- Plastic enclosures are equipped with plastic actuators and indicators, metal enclosures are equipped with metal actuators and indicators

The enclosures without EMERGENCY STOP each have one user module with 4I/3O; the enclosures with EMERGENCY STOP mushroom pushbuttons have a safe AS-Interface slave integrated in the enclosure.

Enclosures with EMERGENCY STOP mushroom pushbuttons are fitted with two NC contact blocks, which are wired to the F slave. The contact blocks and lampholders (with spring-type terminals) of the control device, and the AS-Interface slaves, are mounted in the base of the enclosure and are cable-connected.

The plastic enclosures are designed with a connection for the AS-Interface flat cable (the cable is run along the outside of the enclosure). For metal enclosures, the AS-Interface cable is run inside the enclosure.

The enclosures with EMERGENCY STOP mushroom pushbuttons are also available with an M12 connector.

Selection and ordering data

Equipping options (A, B, C = identification letters of the command points)	Number of command points	DT	Configurator	PU (UNIT, SET, M)	PS*	PG
AS-Interface enclosures, plastic						
With M12 top connector						
A = EMERGENCY STOP mushroom pushbuttons, red, with rotate-to-unlatch mechanism, 1 NC, 1 NC yellow enclosure top	1	B	3SF5811-0AA10	1	1 unit	42A
With terminal for insulation piercing method at top						
A = EMERGENCY STOP mushroom pushbuttons, red, with rotate-to-unlatch mechanism, 1 NC, 1 NC						
• Yellow enclosure top	1	A	3SF5811-0AA08	1	1 unit	42A
• Yellow enclosure top, with protective collar ¹⁾	1	A	3SF5811-0AB08	1	1 unit	42A
B = Pushbutton green, label "I", 1 NO	2	A	3SF5812-0DA00	1	1 unit	42A
A = Pushbutton red, label "O", 1 NO						
B = Pushbutton white, label "I", 1 NO	2	A	3SF5812-0DB00	1	1 unit	42A
A = Pushbutton black, label "O", 1 NO						
C = Indicator light clear, label without inscription	3	A	3SF5813-0DA00	1	1 unit	42A
B = Pushbutton green, label "I", 1 NO						
A = Pushbutton red, label "O", 1 NO						
C = Indicator light clear, label without inscription	3	A	3SF5813-0DC00	1	1 unit	42A
B = Pushbutton white, label "I", 1 NO						
A = Pushbutton black, label "O", 1 NO						
C = Pushbutton black, label "II", 1 NO	3	A	3SF5813-0DB00	1	1 unit	42A
B = Pushbutton black, label "I", 1 NO						
A = Pushbutton red, label "O", 1 NO						
AS-Interface enclosures, metal						
With M12 top connector						
A = EMERGENCY STOP mushroom pushbuttons, red, with rotate-to-unlatch mechanism, 1 NC, 1 NC						
• Yellow enclosure top	1	C	3SF5811-2AA10	1	1 unit	42A
• Yellow enclosure top, with protective collar ¹⁾	1	C	3SF5811-2AB10	1	1 unit	42A
With cable gland at top						
A = EMERGENCY STOP mushroom pushbuttons, red, with rotate-to-unlatch mechanism, 1 NC, 1 NC						
• Yellow enclosure top	1	A	3SF5811-2AA08	1	1 unit	42A
• Yellow enclosure top, with protective collar ¹⁾	1	A	3SF5811-2AB08	1	1 unit	42A
B = Pushbutton green, label "I", 1 NO	2	A	3SF5812-2DA00	1	1 unit	42A
A = Pushbutton red, label "O", 1 NO						
B = Pushbutton white, label "I", 1 NO	2	A	3SF5812-2DB00	1	1 unit	42A
A = Pushbutton black, label "O", 1 NO						
C = Indicator light clear, label without inscription	3	A	3SF5813-2DA00	1	1 unit	42A
B = Pushbutton green, label "I", 1 NO						
A = Pushbutton red, label "O", 1 NO						
C = Indicator light clear, label without inscription	3	A	3SF5813-2DC00	1	1 unit	42A
B = Pushbutton white, label "I", 1 NO						
A = Pushbutton black, label "O", 1 NO						
C = Pushbutton black, label "II", 1 NO	3	A	3SF5813-2DB00	1	1 unit	42A
B = Pushbutton black, label "I", 1 NO						
A = Pushbutton red, label "O", 1 NO						

For the online configurator, see www.siemens.com/sirius/configurators.



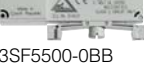






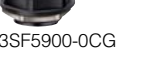

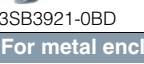





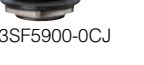


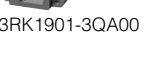


¹⁾ The protective collar must only be used to protect against inadvertent actuating and must be fitted to allow unimpeded access to the EMERGENCY STOP mushroom pushbutton.

SIRIUS 3SB3 Pushbuttons and Indicator Lights, 22 mm Enclosures for AS-Interface

Components for AS-Interface enclosures

Selection and ordering data

For self-equipping of the enclosures

Version	Number of command points	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
For plastic enclosures							
 3SF5500-0BA	AS-Interface slaves F slave, 2 safe inputs, for plastic enclosures, EMERGENCY STOP, without protective collar	1 ... 6	A	3SF5500-0BA	1	1 unit	42A
 3SF5500-0DA	F slave, 2 safe inputs, for plastic or metal enclosures, EMERGENCY STOP, with protective collar	1	A	3SF5500-0DA	1	1 unit	42A
 3SF5500-0BB	A/B slave, 4 inputs/3 outputs for plastic enclosures	2 ... 6	A	3SF5500-0BB	1	1 unit	42A
 3SF5500-0BC	Slave, 4 inputs/4 outputs for plastic enclosures	2 ... 6	A	3SF5500-0BC	1	1 unit	42A
 3SF5900-0CA	Sets of links For F slave		A	3SF5900-0BA	1	1 unit	42A
 3SF5900-0CB	For slave 4I/4O or A/B slave 4I(3O)		A	3SF5900-0BB	1	1 unit	42A
 3SF5900-0CC	Connection elements For AS-Interface shaped cable, connection by insulation piercing method, for plastic enclosures	1 ... 3 4 ... 6	A B	3SF5900-0CA 3SF5900-0CB	1 1	1 unit 1 unit	42A 42A
 3SF5900-0CD	For AS-Interface connection via M12 plug, for plastic enclosures	1 ... 3 4 ... 6	B B	3SF5900-0CC 3SF5900-0CD	1 1	1 unit 1 unit	42A 42A
 3SF5900-0CE	For bringing out unused inputs/outputs through an M12 socket, for plastic enclosures	1 ... 3 4 ... 6	B B	3SF5900-0CE 3SF5900-0CF	1 1	1 unit 1 unit	42A 42A
 3SF5900-0CG	For AS-Interface shaped cable, cable is routed into the enclosure, for plastic or metal enclosures	1 ... 3 4 ... 6	A A	3SF5900-0CG 3SF5900-0CH	1 1	1 unit 1 unit	42A 42A
 3SF5900-0CK	For round cables, cable is routed into the enclosure, for plastic or metal enclosures	1 ... 3 4 ... 6	A A	3SF5900-0CJ 3SF5900-0CK	1 1	1 unit 1 unit	42A 42A
 3SB3921-0BD	Grounding studs For grounding metal actuators when fitting in plastic enclosures	--	B	3SB3921-0BD	100	50 units	41J
For metal enclosures							
 3SF5500-0CA	AS-Interface slaves F slave, 2 safe inputs, for metal enclosures, EMERGENCY STOP, without protective collar	1 ... 6	A	3SF5500-0CA	1	1 unit	42A
 3SF5500-0DA	F slave, 2 safe inputs, for plastic or metal enclosures, EMERGENCY STOP, with protective collar	1	A	3SF5500-0DA	1	1 unit	42A
 3SF5500-0CB	A/B slave, 4 inputs/3 outputs, for metal enclosures	2 ... 6	A	3SF5500-0CB	1	1 unit	42A
 3SF5500-0CC	Slave, 4 inputs/4 outputs, for metal enclosures	2 ... 6	A	3SF5500-0CC	1	1 unit	42A
 3SF5900-0BA	Sets of links For F slave		A	3SF5900-0BA	1	1 unit	42A
 3SF5900-0BB	For slave 4I/4O or A/B slave 4I(3O)		A	3SF5900-0BB	1	1 unit	42A
 3SF5900-0CC	Connection elements For AS-Interface connection using M12 plug, for plastic enclosure	1 ... 3 4 ... 6	B B	3SF5900-2CC 3SF5900-2CD	1 1	1 unit 1 unit	42A 42A
 3SF5900-0CE	For bringing out unused inputs/outputs through an M12 socket, for metal enclosure	1 ... 3 4 ... 6	B B	3SF5900-2CE 3SF5900-2CF	1 1	1 unit 1 unit	42A 42A
 3SF5900-0CG	For AS-Interface shaped cable, cable is routed into the enclosure, for plastic or metal enclosures	1 ... 3 4 ... 6	A A	3SF5900-0CG 3SF5900-0CH	1 1	1 unit 1 unit	42A 42A
 3SF5900-0CJ	For round cables, cable is routed into the enclosure, for plastic or metal enclosures	1 ... 3 4 ... 6	A A	3SF5900-0CJ 3SF5900-0CK	1 1	1 unit 1 unit	42A 42A
Spare parts							
 3RK1901-3QA00	Cable clips for cable adapters		B	3RK1901-3QA00	100	10 units	42C

SIRIUS 3SB3 Two-Hand Operation Consoles

Plastic and metal enclosures

Overview



Two-hand operation console with metal enclosure

Equipment

The two-hand operation consoles are pre-equipped with 3SB3 command devices. In the case of plastic enclosures the command points are equipped as standard with actuators and indicators made of plastic and in the case of metal enclosures they are equipped with actuators and indicators made of metal.

The standard equipment comprises:

- 2 black mushroom pushbuttons, Ø 40 mm, 1 NO + 1 NC Article No. 3SB3000-1GA11 or 3SB3500-1GA11
- 1 red EMERGENCY STOP mushroom pushbutton according to ISO 13850, dia. 40 mm, with positive latching, 2 NC Article No. 3SB3000-1HA20 or 3SB3500-1HA20

The plastic version can be retrofitted with up to 8 customized command points. The surface of the console has premachined breaking points for this purpose.

Application

The two-hand operation consoles are required for use with machines and systems that have hazardous areas, in order to direct both hands of the operator to one position.

The operation consoles are primarily used on presses, stamping machines, printing presses and paper converting machines, in the chemical industry and in the rubber and plastics industries.




The control command is given by pressing the two mushroom pushbuttons on the sides simultaneously (within 0.5 s of each other) and must be maintained for as long as a hazard exists.

For the further processing of control commands, suitable evaluation units are used, e.g. 3SK11 safety relays or the 3RK3 modular safety system (see Chapter 11, "Safety Technology").

Standards

The two-hand operation consoles comply with the requirements of EN 574.

Selection and ordering data

Version	DT	Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	
Metal enclosures, degree of protection IP65							
 3SB38 63-4BB	Two-hand operation consoles, metal enclosure						
		• With standard fittings	B	3SB3863-4BB	1	1 unit	41J
		• With standard fittings and 4 additional holes for 22.5 mm command devices ¹⁾	B	3SB3863-4BA	1	1 unit	41J
	• Empty enclosure, unequipped	B	3SB3863-4BC	1	1 unit	41J	
Plastic enclosures, degree of protection IP65							
 3SB38 63-1BB3	Two-hand operation consoles, plastic enclosure		B	3SB3863-1BB3	1	1 unit	41J
	With standard fittings and premachined breaking points for 8 additional command devices, 22.5 mm ¹⁾ , with holes for metric cable glands						
Accessories							
 3SB39 01-0AQ	Stands for two-hand operation consoles		B	3SB3901-0AQ3	1	1 unit	41J
	With holes for metric cable glands						

¹⁾ See 3SB3 Pushbuttons and Indicator Lights, 22 mm, page 13/4.

SIRIUS 3SB3 Two-Hand Operation Consoles

Notes

Appendix



16/2	Ordering notes
16/3	Standards and approvals
16/10	Partner at Siemens
	Online services
16/11	Information and ordering options available on the Internet and on DVD
16/12	Information and Download Center, Social Media, Mobile Media
	Industry Services
16/13	Your machines and plants can do more – with Industry Services
16/14	Industry Services for the entire life cycle
16/18	Software licenses
16/20	Subject index
16/23	Article number index
16/28	Conditions of sale and delivery

Appendix

Ordering notes

Things you should know about Catalog Add-On IC 10 AO

Catalog Add-On IC 10 AO contains all selection and order-relevant data.

Delivery time class (DT)

▶ Preferred type	Preferred types are available immediately from stock, i.e. are dispatched within 24 hours.
A 1 or 2 working days	Normal quantities of the products are usually delivered within the specified time following receipt of your order at our branch.
B 3 to 5 working days	
C 6 to 15 working days	
D 16 to 30 working days	In exceptional cases, the actual delivery time may differ from that specified.
X On request	

The delivery times apply up to the ramp at Siemens AG (products ready for dispatch). The transport times depend on the destination and type of shipping. The standard transport time for Germany is 1 day.

The delivery times specified here represent the situation in October 2014. They are continuously optimized. For more up-to-the-minute information, please visit our site at www.siemens.com/sirius/mall.

Price units (PU)

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

Packaging sizes (PS)

The packaging size defines the number, e.g. of units, sets or meters, for outer packaging. Only the quantity defined by the packaging size or a multiple thereof can be ordered.

Multi-unit/reusable packaging available on request.

Price groups (PG)

Each product is assigned to a price group.

Example

3RA1110-0FA15-1APO

DT: 3 to 5 working days
PG: 41D
Order quantity 1 unit or a multiple thereof

3RV1901-0H

DT: Preferred type
PG: 41E
Order quantity 10 units or a multiple thereof

3SB3901-0AB

DT: Preferred type
PG: 41J
Order quantity 20 units or a multiple thereof

DT	Article No.	Price € per PU	PU (UNIT, SET, M)	PS*	PG
B	3RA1110-0FA15-1APO		1	1 unit	41D
▶	3RV1901-0H		1	10 units	41E
▶	3SB3901-0AB		100	20 units	41J

Dimensions

All dimensions in mm.

Ordering special versions

For ordering products that differ from the versions listed in the catalog, the article number specified in the catalog must be supplemented with "-Z"; the required features must be specified by means of the alphanumeric order codes or in plain text.

Small orders

When small orders are placed, the costs associated with order processing are greater than the order value. We recommend therefore that you combine several small orders. Where this is not possible, we unfortunately have to charge a processing supplement of € 20.00 to cover our costs for order processing and invoicing for all orders with a net goods value of less than € 250.00.

Approvals, test certificates, characteristic curves

An overview of the certificates available for Industrial Control products along with more technical documentation can be consulted daily on the Internet at:

www.siemens.com/sirius/approvals

Product support: Approvals/certificates

Product support: Characteristics

Safety characteristics

In the following standards, the so-called B10 values for calculating the safety integrity or safety integrity level (SIL) in functional safety at a high or continuous demand rate are required also for electromechanical switchgear:

- IEC 62061 "Safety of machines – Functional safety of safety-related electrical, electronic and programmable electronic control systems",
- ISO 13849-1 "Safety of machines – Safety-related components of controls – Part 1: General principles".

Failure rates of electromechanical components are required for calculating the safety integrity or safety integrity level (SIL) in functional safety:

- in the manufacturing industry at a high demand rate
- in the process industry at a low demand rate

Further requirements are laid down in IEC 61511-1 "Functional safety – Safety instrumented systems for the process industry sector – Part 1: Framework, definitions, system, hardware and software requirements".

The German versions of the above standards are:

- EN 62061 (VDE 0113-50:2013)
- EN ISO 13849-1:2008
- EN 61511-1 (VDE 810-1:2005)

The TÜV-tested Safety Evaluation Tool assists in calculating the safety function as verification for the machine documentation.

It is available on the Internet at www.siemens.com/safety-evaluation-tool.

At www.siemens.com/safety-integrated you will also find examples of functions with calculations according to the current standards.

Definitions

$\lambda(t) dt$ is the probability that a unit which has not failed by a certain time t will fail in the following interval $(t; t + dt)$. Failure rates have the dimension 1/time unit, e.g. 1/h. Failure rates for components are often specified in FIT (failures in time unit): 1 FIT equals $10^{-9}/h$. From the failure rate it is possible to derive a (mathematical) distribution function of the failure probability:

$F(t) = 1 - \exp(-\lambda t)$, with λ as constant failure rate

- The mean value of this exponential distribution is also referred to as:
 - Mean Time To Failure (MTTF) in the case of irreparable components; 63.2 % of components fail by the MTTF.
 - Mean Operating Time Between Failures (MTBF) in the case of repairable components.
- $MTTF = 1/\lambda$. (MTTF is a statistical mean value but no guarantee for endurance)

Electromechanical components are often irreparable components. In general, the failure rate of monitored units changes with age.

Appendix

Standards and approvals

The B10 value for devices subject to wear is expressed in number of operating cycles:

- it is the number of operating cycles after which 10 % of the test specimens fail in the course of an endurance test (or: the number of operating cycles after which 10 % of the devices have failed).

For low demand rates (mainly in the process industry), the failure rate and not the B10 value is used to determine the failure probability.

Standard B10 values at a high demand rate

With the help of the B10 value and a simplified formula (see section 6.7.8.2.1 of EN 62061), the user can then calculate the total failure rate of an electromechanical component:

$$\lambda = 0.1 \times C / B10$$

with C = operating cycles per hour. C is specified by the user.

The failure rate is made up of safe (λ_S) and dangerous (λ_D) failures:

$$\lambda = \lambda_S + \lambda_D$$

or

$$\lambda_D = [\text{share of dangerous failures in \%}] \times \lambda$$

$$\lambda_S = [\text{share of safe failures in \%}] \times \lambda$$

The failure rate of the dangerous failures λ_D of the components used is needed for further calculations.

The standard B10 values and the share of dangerous failures for SIRIUS product groups at a high demand rate are listed in the technical specifications or product data sheets; see <https://support.industry.siemens.com/cs/ww/en/ps/16027>.

The B10_d value used in EN ISO 13849-1:2008 is determined as follows:

$$B10_d = \frac{B10}{\text{Share of dangerous failures}}$$

Calculation example

A protective door is monitored by a position switch with a separate actuator.

The protective door is opened 4 times an hour.

The overall failure rate of the position switch is:

$$\lambda = 0.1 \cdot C / B10 \text{ [failures/h]}$$

$$\lambda = 0.1 \cdot 4 / 1000000 = 4 \cdot 10^{-7} \text{ [failures/h]}$$

The dangerous failure rate is calculated with:

$$\lambda_D = 20 \% \text{ of } \lambda = 0.2 \cdot 4 \cdot 10^{-7} \text{ [failures/h]}$$

$$\lambda_D = 8 \cdot 10^{-8} \text{ [failures/h]}$$

Standard failure rates (at a low demand rate)

On the basis of the failure rates, it is possible to calculate the average probability of failure on demand (PFD_{avg}) of a PLT protective device.

A so-called low demand rate is assumed, meaning the rate of demand on the safety-related system amounts to no more than once a year and is not greater than double the frequency of the repeat test.

A repeat test once a year is recommended for electromechanical components in order to reveal passive faults.

For special applications it is possible, in agreement with the inspecting institution (e.g. a technical inspectorate, government agency or the like) to extend the test intervals by using suitable solutions (e.g. a multi-channel version etc.).

The standard B10 values and the share of dangerous failures for SIRIUS product groups at a low demand rate are listed in the technical specifications or product data sheets; see <https://support.industry.siemens.com/cs/ww/en/ps/16027>.

Standards

IEC	EN	Title
60947-1 60947-2 60947-3	60947-1 60947-2 60947-3	Low-voltage switchgear and controlgear: General rules • Circuit-breakers • Switches, disconnectors, switch-disconnectors and fuse-combination units
60947-4-1 60947-4-2 60947-4-3	60947-4-1 60947-4-2 60947-4-3	• Contactors and motor starters - Electromechanical contactors and motor starters • Contactors and motor-starters - AC semiconductor motor controllers and starter • Contactors and motor-starters - AC semiconductor controllers and contactors for non-motor loads
60947-5-1 60947-5-2 60947-5-3	60947-5-1 60947-5-2 60947-5-3	• Control circuit devices and switching elements - Electromechanical control circuit devices • Control circuit devices and switching elements - Proximity switches • Control circuit devices and switching elements - Requirements for proximity devices with defined behaviour under fault conditions (PDDb)
60947-5-5 60947-5-6 60947-5-7 60947-5-8 60947-5-9	60947-5-5 60947-5-6 60947-5-7 60947-5-8 60947-5-9	• Control circuit devices and switching elements - Electrical emergency stop device with mechanical latching function • Control circuit devices and switching elements - DC interface for proximity sensors and switching amplifiers (NAMUR) • Control circuit devices and switching elements - Requirements for proximity devices with analogue output • Control circuit devices and switching elements - Three-position enabling switches • Control circuit devices and switching elements - Flow rate switches
60947-6-1 60947-6-2	60947-6-1 60947-6-2	• Multiple function equipment - Transfer switching equipment • Multiple function equipment - Control and protective switching devices (or equipment) (CPS)
60947-7-1 60947-7-2 60947-7-3 60947-7-4	60947-7-1 60947-7-2 60947-7-3 --	• Ancillary equipment - Terminal blocks for copper conductors • Ancillary equipment - Protective conductor terminal blocks for copper conductors • Ancillary equipment - Safety requirements for fuse terminal blocks • Ancillary equipment - PCB terminal blocks for copper conductors
60947-8	60947-8	• Control units for built-in thermal protection (PTC) for rotating electrical machines
62026-2	50295	• Actuator sensor interface (AS-i)
60269-1 60269-4	60269-1 60269-4	Low-voltage fuses: General requirements Low-voltage fuses: Supplementary requirements for fuse-links for the protection of semiconductor devices
60050-441	--	International Electrotechnical Vocabulary. Switchgear, controlgear and fuses
61439-1 61439-2 61439-3	61439-1 61439-2 61439-3	Low-voltage switchgear and controlgear assemblies: General rules Low-voltage switchgear and controlgear assemblies: Power switchgear and controlgear assemblies Low-voltage switchgear and controlgear assemblies: Distribution boards intended to be operated by ordinary persons (DBO)
61439-4	61439-4	Low-voltage switchgear and controlgear assemblies: Particular requirements for assemblies for construction sites (ACS)
61439-5 61439-6 --	61439-5 61439-6 50274	Low-voltage switchgear and controlgear assemblies: Assemblies for power distribution in public networks Low-voltage switchgear assemblies - Part 6: Busbar trunking systems (busways) Low-voltage switchgear and controlgear assemblies - Protection against electric shock - Protection against unintentional direct contact with hazardous live parts
61140	61140	Protection against electric shock - Common aspects for installation and equipment
60664-1	60664-1	Insulation coordination for electrical equipment in low-voltage systems: Principles, requirements and tests
60204-1 --	60204-1 50178	Safety of machinery – Electrical equipment of machines: General requirements Electronic equipment for use in power installations
60079-14 60079-2	60079-14 60079-2	Electrical apparatus for explosive gas atmospheres: Electrical installations in hazardous areas (other than mines) Electrical apparatus for explosive gas atmospheres: Pressurized Enclosures "p"
61810-1 61812-1	61810-1 61812-1	Electromechanical elementary relays: General requirements Time relays for industrial and residential use: Requirements and tests
60999-1	60999-1	Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units: General requirements and particular requirements for clamping units for conductors from 0,2 mm ² up to 35 mm ² (included)
60999-2	60999-2	Connecting devices - Electrical copper conductors - Safety requirements for screw-type and screwless-type clamping units: Particular requirements for clamping units for conductors above 35 mm ² up to 300 mm ² (included)
61000-4-1	61000-4-1	Electromagnetic compatibility (EMC): Testing and measuring techniques - Overview of IEC 61000-4 series
61000-6-2 61000-6-3	61000-6-2 61000-6-3	Electromagnetic compatibility (EMC); Generic standards - Immunity for industrial environments Electromagnetic compatibility (EMC): Generic standards - Emission standard for residential, commercial and light-industrial environments
61000-6-4	61000-6-4	Electromagnetic compatibility (EMC): Generic standards - Emission standard for industrial environments
61869-1	61869-1	Instrument transformers: General requirements
61869-2	61869-2	Instrument transformers: Additional requirements for current transformers

Appendix

Standards and approvals

UL	CSA C22.2	ASME	JIS	Title
508	--	--	--	Industrial control equipment
60947-1	No. 60947-1	--	--	Low-voltage switchgear and controlgear - Part 1: General rules
60947-4-1A	No. 60947-4-1	--	--	Low-voltage switchgear and controlgear - Part 4-1: Contactor and motor starters - Electromechanical contactors and motor starters
60947-4-2	No. 60947-4-2	--	--	Low-voltage switchgear and controlgear - Part 4-2: Contactors and motor-starters - AC semiconductor motor controllers and starters
60947-5-1	No. 60947-5-1	--	--	Low-voltage switchgear and controlgear - Part 5-1: Control circuit devices and switching elements - Electromechanical control circuit devices
489	No. 5	--	--	Molded case circuit breakers, molded case switches, and circuit breaker enclosures
1012	--	--	--	Power units other than CLASS 2
1059	--	--	--	Terminal blocks
486A-486B	--	--	--	Wire connectors
486E	--	--	--	Equipment wiring terminals for use with aluminum and/or copper conductors
50	--	--	--	Enclosures for electrical equipment. Non-environmental considerations
50E	--	--	--	Enclosures for electrical equipment - Environmental considerations
--	No. 14	--	--	Industrial control equipment
--	No. 107.1	--	--	General use power supplies
--	--	A17.5 / B 44.1	--	Elevator and escalator electrical equipment
--	--	--	C 8201-4-1	Low-voltage switchgear and controlgear; Contactors and motor-starters

Approval requirements valid in different countries

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

As far as is economically viable, the requirements of the various standards valid in other countries are also taken into account in the design of the equipment.

In some countries an approval is required for certain low-voltage switchgear and controlgear components (see table below).












Depending on the market requirements, these components have been submitted for approval to the authorized testing institutes.

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

For this equipment, partial limitations of the maximum permissible voltages, currents and ratings can be imposed, or special approval and, in some cases, special identification is required.

For use on board ship, the specifications of the marine classification societies must be observed (see table below). In some cases, they require type tests of the components to be approved.

Testing bodies, approval identification and approval requirements

Country	Canada ¹⁾	USA ¹⁾	China	Russia / Belarus / Kazakhstan
Government-appointed or private, officially recognized testing bodies	CSA UL (USA)	UL	CQC	Official national regulation / TR
Mark of conformity	   c  US c  US	  c  US c  US		
Approval requirement	+	+	+	+
Remarks	UL and CSA are authorized to grant approval certificates in accordance with Canadian and North American regulations. Please note: These approvals are not recognized in many cases and must be covered by additional approvals issued by the national testing agency.		CCC	Eurasian customs union

For more information about the approval marks, see page 16/9.

¹⁾ For guide numbers and file numbers for approvals, please visit <http://support.industry.siemens.com> and select "Product Support".

Marine classification societies

Country	Germany	United Kingdom	France	Norway	CIS	Italy	Poland	USA
Name	Germanischer Lloyd	Lloyds Register of Shipping	Bureau Veritas	Det Norske Veritas	Russian Maritime Register of Shipping	Registro Italiano Navale	Polski Rejestr Statków	American Bureau of Shipping
Codes	GL ¹⁾	LR	BV	DNV ¹⁾	RS	RINA	PRS	ABS

¹⁾ DNV and GL have merged and call themselves DNV GL.

CE marking

Manufacturers of products which fall within the subject area to which EC directives apply must identify their products, operating instructions or packaging with a CE mark of conformity.

By attaching the CE marking, the manufacturer confirms that the product conforms to the relevant basic requirements of all directives applicable to the product. The mark of conformity is a mandatory requirement for putting products into circulation throughout the EC.

All the products in this catalog are in conformance with the relevant specific EC directives and bear the CE mark of conformity **CE**.

- Low-voltage directive
- EMC directive
- Machinery directive
- Ex protection directive

ALPHA/LOVAG

Siemens AG sits in the ALPHA committee of "ALPHA im VDE".

The responsibility of manufacturers and the high quality of products are promoted by "ALPHA im VDE" by means of supportive procedural guidelines for testing equipment according to the currently valid standards.

Providing specific conditions are fulfilled, "ALPHA im VDE" can also issue officially recognized product certificates if required. As a member of LOVAG, "ALPHA im VDE" is also working towards obtaining international recognition for declarations of conformity and certificates.

LOVAG (Low-Voltage Agreement Group) is a body comprising international specialists from certification bodies and industry who are working together to create a standardized European certificate.

List of LOVAG members

SGS BELGIUM NV	Belgium
Division SGS CEBEC	
ALPHA in VDE	Germany
ASEFA	France
ACAE	Italy
IMQ S.p.A	
Intertek Semko AB	Sweden
APPLUSS + CTC	Spain



Accident prevention

Test certificates and approvals from IFA (institute for occupational safety and health of the German social accident insurance), SUVA (Swiss institute for accident prevention), BG ETEM (German trade association for energy, textiles, electrical goods and media products) TÜV and VDE are available for some devices in safety control systems. For details, [see the respective product descriptions](#).

Appendix

Standards and approvals

Ex protection certificates for SIRIUS controls

Motor protection devices that protect a motor installed in a potentially explosive atmosphere against overloading must comply with certain special requirements. These requirements are laid down in the following standards:

- EN 50495
- EN 60079-0
- EN 60079-1
- EN 60079-2
- EN 60079-14
- EN 60079-17
- EN 60947-1
- EN 60947-4-1
- EN 60947-5-1
- EN 60947-8
- EN ISO/IEC 80079-34

Certification

July 1, 2003 saw the dawning of a new era in the field of explosion protection. Since this date, only those devices and protection systems that have been certified for operation in potentially explosive atmospheres according to directive 94/9/EC (from April 20, 2016 2014/34(EU)) can be brought into circulation within the European Union.

Only those motor protection devices that have been constructed according to the above-mentioned standards and which have a declaration of conformity from the manufacturer based on a prototype test certificate may be brought into circulation within the member states of the EC.

The quality management system of the manufacturer is also subjected to certain requirements and a "QM certificate" must be obtained for the manufacturer from a recognized authority.

Certification of the QM system

A certificate of approval for quality assurance production has been issued by DEKRA EXAM GmbH¹⁾ with the number BVS 11 ATEX ZQS/E111 of DEKRA EXAM GmbH¹⁾ according to Directive 94/9/EC (from April 20, 2016 2014/34(EU)).

This certificate is valid for equipment groups I and II and categories M2 and 2: Safety and control devices for electrical equipment.

Certificates

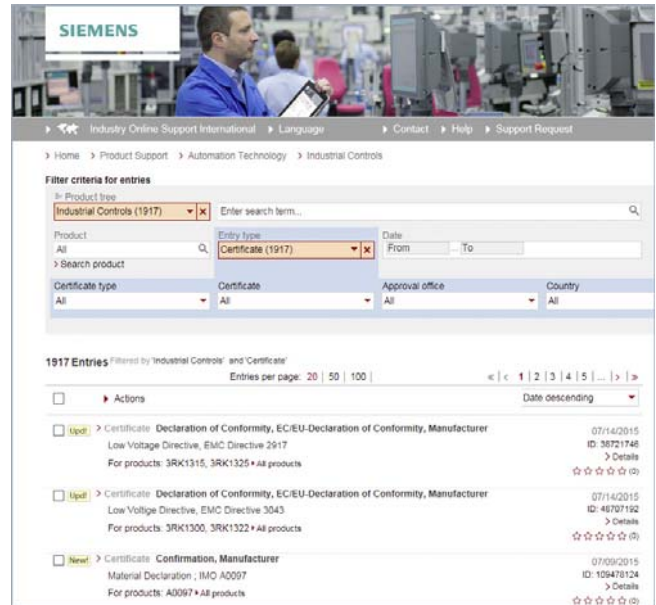
For the 3RV, 3RU, 3RB, 3UF, 3RN and 3RW motor protection devices, the corresponding declarations of conformity and prototype test certificates for Category 2D, 2G, and in some cases M2, are available and can be supplied on request.

Declarations of conformity and prototype test certificates are available at <http://support.industry.siemens.com> for viewing and downloading.

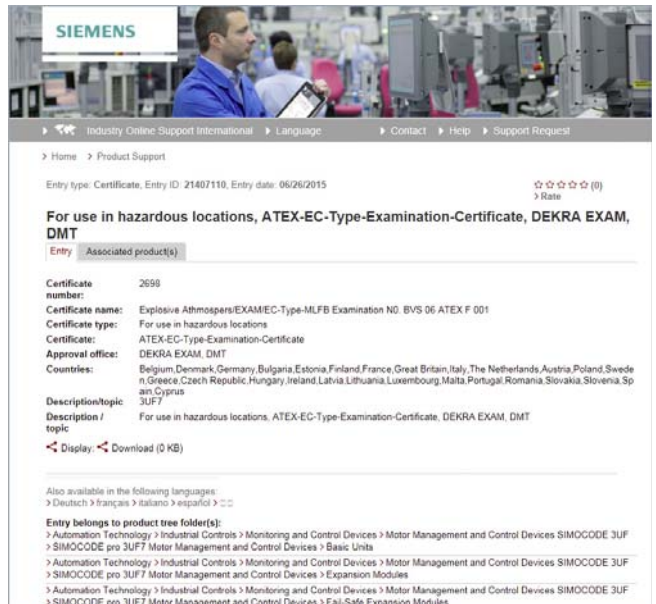
You can find more information about industrial controls for applications in explosion-protected areas at www.siemens.com/sirius/atex.

¹⁾ DEKRA EXAM GmbH

The certification authority of the "DEKRA EXAM GmbH" numbered as authority number 0158 according to Article 9 of Directive 94/9/EC of the European Parliament and Council dated March 23, 1994, certifies that Siemens Amberg and Cham maintains a quality system for production that satisfies Appendix IV of this Directive.



Selection box



Description of certificate with view and download option

Identifying markings

All equipment must be marked in according to the ATEX guideline. The ATEX identification code contains the equipment group, the approved environment, the number of the certification authority and other technical data that was determined from the type test.

Certificate of the AS-International Association for AS-Interface products

AS-Interface products are tested and certified by the AS-International Association. The products have been tested in an accredited test laboratory according to testing guidelines.

Special standards for the USA and Canada

In the USA and Canada, for machine tools and processing machines in particular, supply lines are laid using rubber insulated cable enclosed in heavy-duty steel piping similar to that used for gas or water pipe systems.











The tubing system must be completely watertight and electrically conductive (especially sleeving and elbows). Since the tubing system can also be grounded, the cable entries of enclosed units equipped with heavy-gauge or metric threads must be fitted with metal adapters between these threads and the tube thread. The necessary adapters are specified for the switchgear as accessories; they should be ordered separately unless otherwise specified.

Low-voltage switchgear and controlgear for auxiliary circuits (e.g. contactor relays, commanding and signaling devices and auxiliary switches/auxiliary contacts in general) are generally only approved by CSA and UL for "**Heavy Duty**" or "**Standard Duty**" and are identified either with these specifications in addition to the maximum permissible voltage or by using an abbreviation.

The abbreviations are harmonized with IEC 60947-5-1 Appendix 1 Table A.1 and correspond to the stated utilization categories.

For various switching devices detailed in the catalog, a note has been included to the effect that, above a certain voltage, the auxiliary switches/auxiliary contacts can only be used if they have the same polarity. This means that the input terminals can only be connected to the same pole of the actuating voltage, e.g. "600 V AC above 300 V AC same polarity".

Different features of UL approvals (for USA and Canada)

Recognized Component	Listed Product
Devices are identified on the rating plate using the "UL recognition mark": USA:   Canada:  	Devices are identified using the "UL listing mark" on the rating plate e.g. USA:  LISTED XXX Canada:  LISTED XXX IND. CONT. EQ. IND. CONT. EQ. (XXX stands for: UL Code Classification Number)
Devices are approved as modules for "factory wiring", i.e.: as devices for installation in control systems, which are selected, installed, wired and tested entirely by trained personnel in factories, workshops or elsewhere, according to the operating conditions .	Devices are approved for "field wiring", i.e.: <ul style="list-style-type: none"> As devices for installation in control systems, which are completely wired by trained personnel in factories, workshops or elsewhere. As single devices for sale in retail outlets in the USA/Canada.
If devices are  or  approved as "listed products", they are also approved as  or  "recognized components".	

For more information about UL and CSA, see page 16/6.

Special standards for Russia, Australia and China

EAC approval for Russia/Belarus/Kazakhstan/Armenia



EAC mark

Since 15.02.2013 Russia, Kazakhstan, Belarus and Armenia have been united in the Eurasian EAC customs union. An EAC approval as replacement for the GOST mark is required for all products that are to be sold in Russia.

All devices delivered to the customs union must have these customs certifications.

C-Tick licensing for Australia



RCM mark (new)



C-Tick mark (old)

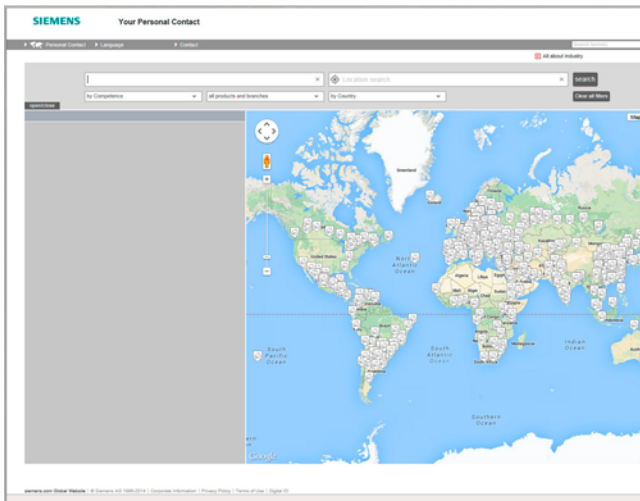
The RCM mark is required for marketing Siemens components in Australia. Electronic devices must provide proof of EMC clearance in Australia, similar to the CE mark of conformity laid down by the EMC directive applicable in the EC and bear the "C-Tick" mark. These requirements have been in force since October 1st, 1999.

The RCM mark was introduced on 01.03.2013. The transition period in which the old C-Tick mark will remain valid is three years.

Appendix

Partner at Siemens

Overview



At Siemens we are resolutely pursuing the same goal: long-term improvement of your competitive ability. We are committed to this goal. Thanks to our commitment, we continue to set new standards in automation and drive technology. In all industries – worldwide.

At your service locally, around the globe for consulting, sales, training, service, support, spare parts ... on the entire Industry Automation and Drive Technologies range.

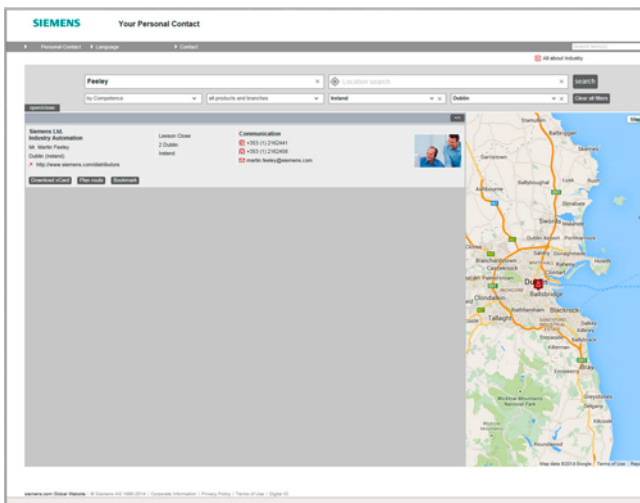
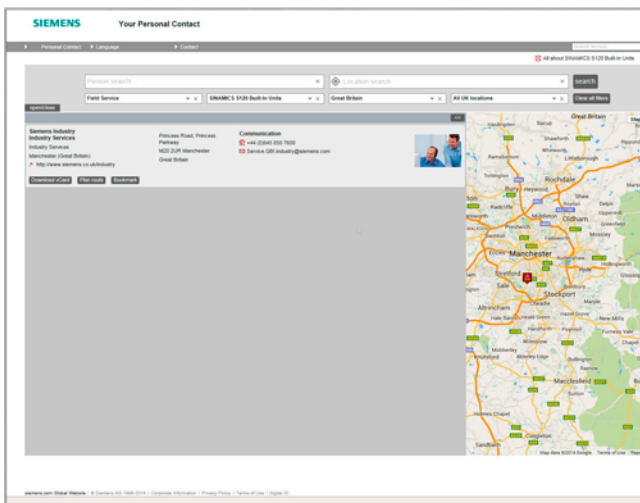
Your personal contact can be found in our Contacts Database at: www.siemens.com/automation/partner

You start by selecting

- the required competence,
- products and branches,
- a country,
- a city

or by a

- location search or
- person search.



Information and Ordering Options on the Internet and DVD

The Future of Manufacturing in the WWW



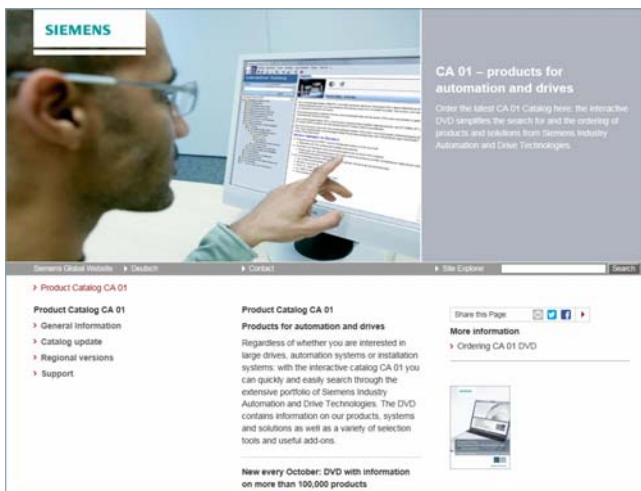
Detailed knowledge of the range of products and services available is essential when planning and engineering automation systems. It goes without saying that this information must always be as up-to-date as possible.

Industry is on the threshold of the fourth industrial revolution as digitization now follows after the automation of production. The goals are to increase productivity and efficiency, speed, and quality. In this way, companies can remain competitive on the path to the future of industry.

You will find everything you need to know about products, systems and services on the internet at:

www.siemens.com/industry

Product Selection Using the Interactive CA 01 Automation and Drives Catalog



Detailed information together with user-friendly interactive functions:

The CA 01 interactive catalog covers more than 100,000 products, thus providing a comprehensive overview of the product range provided by Siemens.

You will find everything you need here for solving tasks in the fields of automation, switching, installation and drives. All information is provided over a user interface that is both user-friendly and intuitive.

You can order the CA 01 product catalog from your Siemens sales contact or in the Information and Download Center:

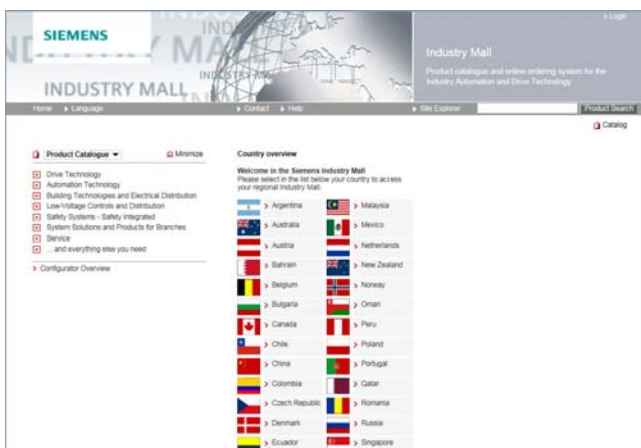
www.siemens.com/industry/infocenter

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

www.siemens.com/automation/ca01

or on DVD.

Easy Shopping with the Industry Mall



The Industry Mall is the electronic ordering platform of Siemens AG on the Internet. Here you have online access to a huge range of products presented in an informative and attractive way.

Data transfer via EDIFACT allows the whole procedure, from selection through ordering to tracking and tracing, to be carried out online. Availability checks, customer-specific discounts and bid creation are also possible.

Numerous additional functions are provided for your support. For example, powerful search functions make it easy to select the required products. Configurators enable you to configure complex product and system components quickly and easily. CAx data types are also provided here.

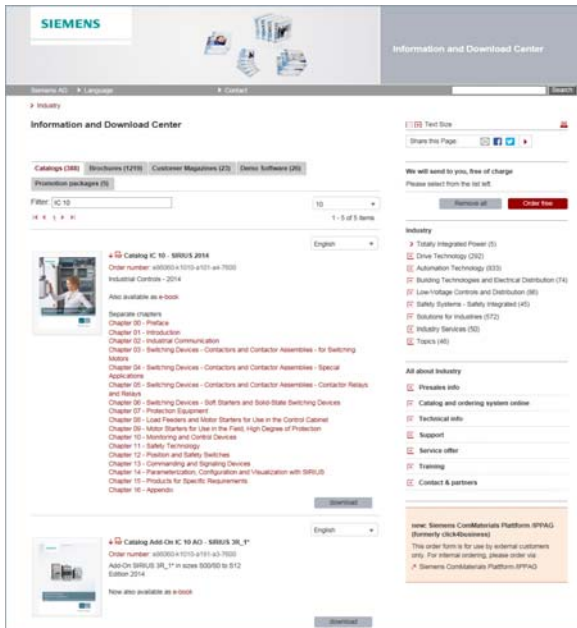
You can find the Industry Mall on the Internet at:

www.siemens.com/industrymall

Appendix Online Services

Information and Download Center, Social Media, Mobile Media

Downloading Catalogs



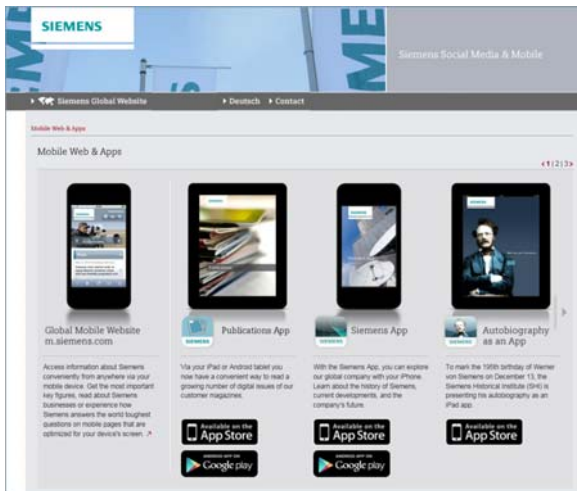
In addition to numerous other useful documents, you can also find the catalogs listed on the back inside cover of this catalog in the Information and Download Center. You can download these catalogs in PDF format without having to register.

The filter dialog above the first catalog displayed makes it possible to carry out targeted searches. If you enter "MD 3" for example, you will find both the MD 30.1 and MD 31.1 catalogs. If you enter "IC 10", both the IC 10 catalog and the associated news or add-ons are displayed.

Visit us at:

www.siemens.com/industry/infocenter

Social and Mobile Media



Connect with Siemens through social media: visit our social networking sites for a wealth of useful information, demos on products and services, the opportunity to provide feedback, to exchange information and ideas with customers and other Siemens employees, and much, much more. Stay in the know and follow us on the ever-expanding global network of social media.

To find out more about Siemens' current social media activities, visit us at:

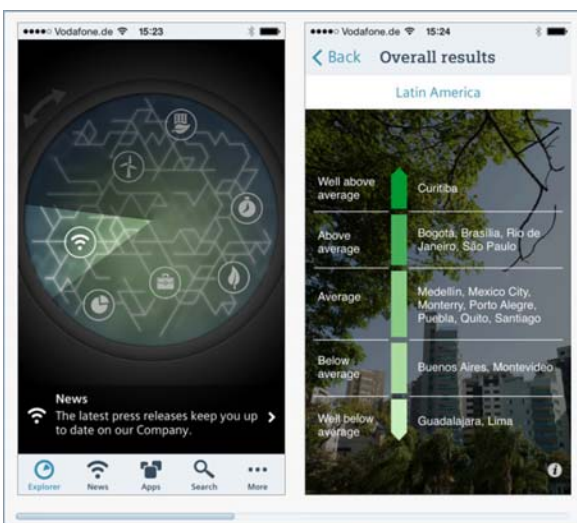
www.siemens.com/socialmedia

Or via our product pages at:

www.siemens.com/automation or www.siemens.com/drives

Connect with Siemens Industry at our central access point to read all the news on the future of manufacturing, watch current videos and inform yourself about all the latest industry developments:

www.siemens.com/future-of-manufacturing/news.html



Discover the world of Siemens.

We are also constantly expanding our offering of cross-platform apps for smartphones and tablets. You will find the current Siemens apps at the App Store (iOS) or at Google Play (Android):

<https://itunes.apple.com/en/app/siemens/id452698392?mt=8>

<https://play.google.com/store/search?q=siemens>

The Siemens app, for example, tells you all about the history, latest developments and future plans of the company – with informative pictures, fascinating reports and the most recent press releases.

Your machines and plant can do more – with Industry Services.

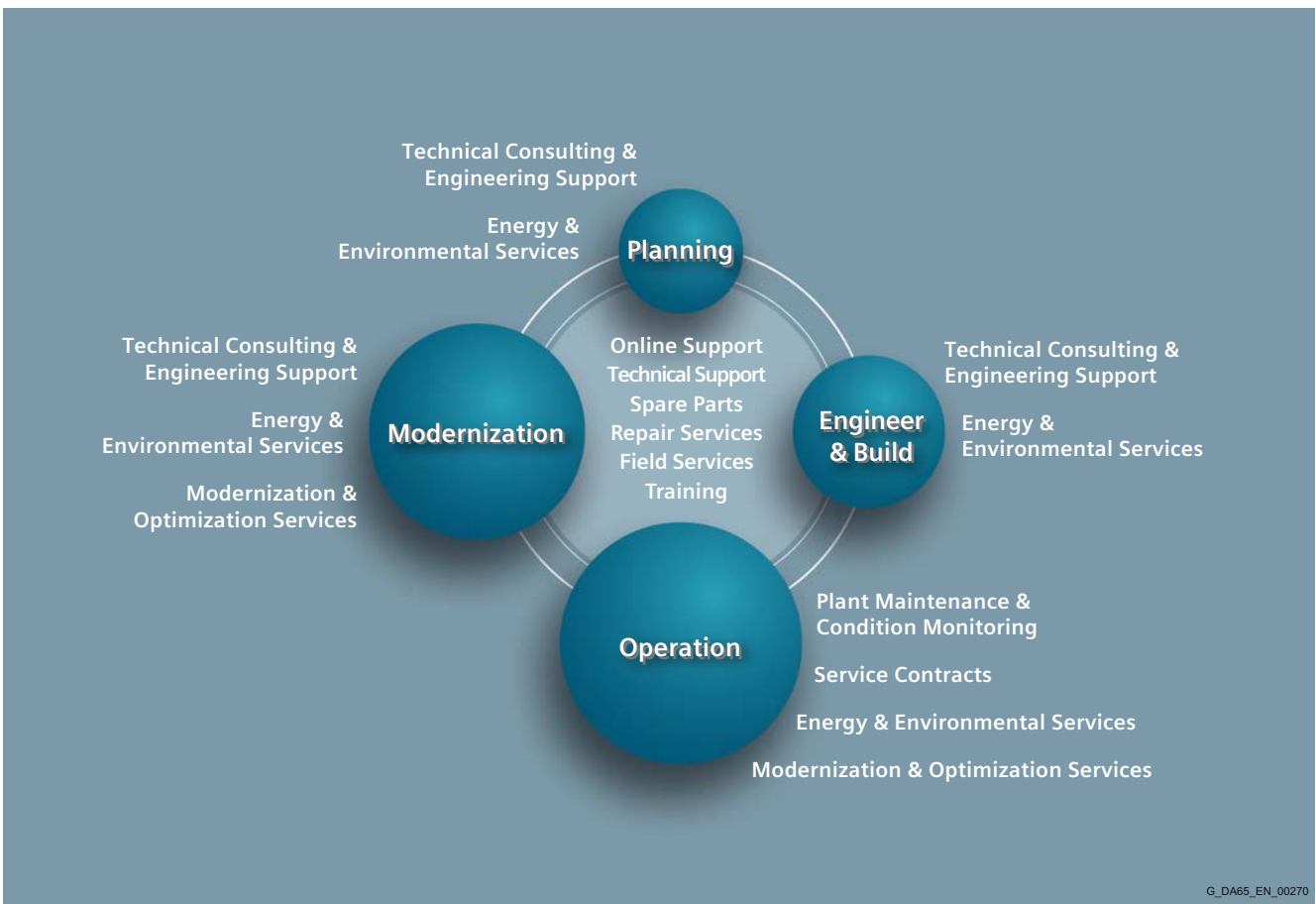


Whether it is production or process industry - in view of rising cost pressure, growing energy costs, and increasingly stringent environmental regulations, services for industry are a crucial competitive factor in manufacturing as well as in process industries.

All over the world Siemens supports its customers with product, system, and application-related services throughout the entire life cycle of a plant. Right from the earliest stages of planning, engineering, and building, all the way to operation and modernization. These services enable customers to benefit from the Siemens experts' unique technological and product knowledge and industry expertise.

Thus downtimes are reduced and the utilization of resources is optimized. The bottom line: increased plant productivity, flexibility, and efficiency, plus reduced overall costs.

Discover all advantages of our service portfolio:
www.siemens.com/industry-services



Siemens supports its clients with technology based Services across a plants entire life cycle.

Appendix

Industry Services

Industry Services for the entire life cycle

Online Support

Online support is a comprehensive information system for all questions relating to products, systems, and solutions that Siemens has developed for industry over time. With more than 300,000 documents, examples and tools, it offers users of automation and drive technology a way to quickly find up-to-date information. The 24-hour service enables direct, central access to detailed product information as well as numerous solution examples for programming, configuration and application.

The content, in six languages, is increasingly multimediated – and now also available as a mobile app. Online support's "Technical Forum" offers users the opportunity to share information with each other. The "Support Request" option can be used to contact Siemens' technical support experts. The latest content, software updates, and news via newsletters and Twitter ensure that industry users are always up to date.



<http://support.industry.siemens.com>

Online Support App



Using the Online Support app, you can access over 300,000 documents covering all Siemens industrial products - anywhere, any time. Regardless of whether you need help implementing your project, fault-finding, expanding your system or are planning a new machine.

You have access to FAQs, manuals, certificates, characteristics curves, application examples, product notices (e.g. announcements of new products) and information on successor products in the event that a product is discontinued.

Just scan the product code printed on the product directly using the camera of your mobile device to immediately see all technical information available on this product at a glance. The graphical CAx information (3D model, circuit diagrams or EPLAN macros) is also displayed. You can forward this information to your workplace using the e-mail function.

The search function retrieves product information and articles and supports you with a personalized suggestion list. You can find your favorite pages – articles you need frequently – under

"mySupport". You also receive selected news on new functions, important articles or events in the News section.

Scan the QR code
for information on
our Online Support
app.



The app is available free of charge from the Apple App Store (iOS) or from Google Play (Android).

www.siemens.com/industry/onlinesupportapp

Technical Support

The ability to quickly analyze system and error messages and take appropriate action are key factors in ensuring that plants run safely and efficiently. Questions can arise at any time and in any industry, whether it's an individual product or a complete automation solution. Siemens technical support offers individual technical assistance in matters related to functionality, how to operate, applications, and fault clearance in industrial products and systems – at any time and globally, over the phone, by e-mail, or via remote access. Experienced experts from Siemens answer incoming questions promptly. Depending on the requirements, they first consult specialists in the areas of development, on-site services, and sales. Technical support is also available for discontinued products that are no longer available. Using the support request number, any inquiry can be clearly identified and systematically tracked.



Spare Parts

Drive and automation systems must be available at all times. Even a single missing spare part can bring the entire plant to a standstill – and result in substantial financial losses for the operator. The spare parts services from Siemens protect against such losses – with the aid of quickly available, original spare parts that ensure smooth interaction with all other system components. Spare parts are kept on hand for up to ten years; defective parts can be returned. For many products and solutions, individual spare parts packages ensure a preventive stock of spare parts on-site. The spare parts services is available around the world and around the clock. Optimum supply chain logistics ensure that replacement components reach their destination as quickly as possible. Siemens' logistics experts take care of planning and management as well as procurement, transportation, customs handling, warehousing, and complete order management for spare parts.



Repair Services

Reliable electrical and electronic equipment is crucial for operating continuous processes. That is why it is essential that motors and converters always undergo highly specialized repair and maintenance. Siemens offers complete customer and repair services – on site and in repair centers – as well as technical emergency services worldwide. The repair services include all measures necessary to quickly restore the functionality of defective units. In addition, services such as spare parts logistics, spare parts storage and rapid manufacturing are available to plant operators in all verticals. With a global network of certified repair shops operated by Siemens as well as third parties, Siemens handles the maintenance and overhaul of motors, converters, and other devices as an authorized service partner.



Field Services

It's a top priority in all industries: the availability of plants and equipment. Siemens offers specialized maintenance services such as inspection and upkeep as well as rapid fault clearance in industrial plants – worldwide, continuously, and even with emergency services as needed. The services include startup as well as maintenance and fault clearance during operation. The startup service includes checking the installation, function tests, parameterization, integration tests for machines and plants, trial operation, final acceptance, and employee training. All services, including remote maintenance of drives, are also available as elements of customized service contracts.



Appendix

Industry Services

Industry Services for the entire life cycle

Training

Increasingly, up-to-date knowledge is becoming a determining factor in success. One of the key resources of any company is well-trained staff that can make the right decision at the right moment and take full advantage of the potential. With SITRAIN – Training for Industry, Siemens offers comprehensive advanced training programs. The technical training courses convey expertise and practical knowledge directly from the manufacturer. SITRAIN covers Siemens' entire product and system portfolio in the field of automation and drives. Together with the customer, Siemens determines the company's individual training needs and then develops an advanced training program tailored to the desired requirements. Additional services guarantee that the knowledge of all Siemens partners and their employees is always up-to-date.



Technical Consulting & Engineering Support

The efficiency of plants and processes leads to sustainable economic success. Individual services from Siemens help save substantial time and money while also guaranteeing maximum safety. Technical consulting covers the selection of products and systems for efficient industrial plants. The services include planning, consulting, and conceptual design as well as product training, application support, and configuration verification – in all phases of a plant's lifecycle and in all questions related to product safety. Engineering support offers competent assistance throughout the entire project, from developing a precise structure for startup to product-specific preparation for implementation as well as support services in areas such as prototype development, testing and acceptance.



Energy & Environmental Services

Efficient energy use and resource conservation – these top sustainability concerns pay off – both for the environment and for companies. Siemens offers integrated solutions that unlock all technical and organizational potential for successful environmental management. Customized consulting services are aimed at sustainably lowering the cost of energy and environmental protection and thus increasing plant efficiency and availability. The experts provide support in the conceptual design and implementation of systematic solutions in energy and environmental management, enabling maximum energy efficiency and optimized water consumption throughout the entire company. Improved data transparency makes it possible to identify savings potential, reduce emissions, optimize production processes, and thereby noticeably cut costs.



Modernization & Optimization Services

High machine availability, expanded functionality and selective energy savings – in all industries, these are decisive factors for increasing productivity and lowering costs. Whether a company wants to modernize individual machines, optimize drive systems, or upgrade entire plants, Siemens' experts support the projects from planning to commissioning.

Expert consulting and project management with solution responsibility lead to security and make it possible to specifically identify savings potential in production. This secures investments over the long term and increases economic efficiency in operation.



Plant Maintenance & Condition Monitoring

Modern industrial plants are complex and highly automated. They must operate efficiently in order to ensure the company's competitive strength. In addition, the steadily increasing networking of machines and plants require consistent security concepts. Maintenance and status monitoring as well as the implementation of integrated security concepts by Siemens' experts support optimum plant use and avoid downtime. The services include maintenance management as well as consulting on maintenance concepts, including the complete handling and execution of the necessary measures. Complete solutions also cover remote services, including analysis, remote diagnosis, and remote monitoring. These are based on the Siemens Remote Services platform with certified IT security.



Service Contracts

Making maintenance costs calculable, reducing interfaces, speeding up response times, and unburdening the company's resources – the reduced downtimes that these measures achieve increase the productivity of a plant. Service contracts from Siemens make maintenance and repairs more cost-effective and efficient. The service packages include local and remote maintenance for a system or product group in automation and drive technology. Whether you need extended service periods, defined response times, or special maintenance intervals, the services are compiled individually and according to need. They can be adjusted flexibly at any time and used independently of each other. The expertise of Siemens' specialists and the capabilities of remote maintenance thus ensure reliable and fast maintenance processes throughout a plant's entire life cycle.



Appendix

Software Licenses

Overview

Software types

Software requiring a license is categorized into types. The following software types have been defined:

- Engineering software
- Runtime software

Engineering software

This includes all software products for creating (engineering) user software, e.g. for configuring, programming, parameterizing, testing, commissioning or servicing.

Data generated with engineering software and executable programs can be duplicated for your own use or for use by third-parties free-of-charge.

Runtime software

This includes all software products required for plant/machine operation, e.g. operating system, basic system, system expansions, drivers, etc.

The duplication of the runtime software and executable programs created with the runtime software for your own use or for use by third-parties is subject to a charge.

You can find information about license fees according to use in the ordering data (e.g. in the catalog). Examples of categories of use include per CPU, per installation, per channel, per instance, per axis, per control loop, per variable, etc.

Information about extended rights of use for parameterization/configuration tools supplied as integral components of the scope of delivery can be found in the readme file supplied with the relevant product(s).

License types

Siemens Industry Automation & Drive Technologies offers various types of software license:

- Floating license
- Single license
- Rental license
- Rental floating license
- Trial license
- Demo license
- Demo floating license

Floating license

The software may be installed for internal use on any number of devices by the licensee. Only the concurrent user is licensed. The concurrent user is the person using the program. Use begins when the software is started. A license is required for each concurrent user.

Single license

Unlike the floating license, a single license permits only one installation of the software per license.

The type of use licensed is specified in the ordering data and in the Certificate of License (CoL). Types of use include for example per instance, per axis, per channel, etc.

One single license is required for each type of use defined.

Rental license

A rental license supports the "sporadic use" of engineering software. Once the license key has been installed, the software can be used for a specific period of time (the operating hours do not have to be consecutive).

One license is required for each installation of the software.

Rental floating license

The rental floating license corresponds to the rental license, except that a license is not required for each installation of the software. Rather, one license is required per object (for example, user or device).

Trial license

A trial license supports "short-term use" of the software in a non-productive context, e.g. for testing and evaluation purposes. It can be transferred to another license.

Demo license

The demo license support the "sporadic use" of engineering software in a non-productive context, for example, use for testing and evaluation purposes. It can be transferred to another license. After the installation of the license key, the software can be operated for a specific period of time, whereby usage can be interrupted as often as required.

One license is required per installation of the software.

Demo floating license

The demo floating license corresponds to the demo license, except that a license is not required for each installation of the software. Rather, one license is required per object (for example, user or device).

Certificate of license (CoL)

The CoL is the licensee's proof that the use of the software has been licensed by Siemens. A CoL is required for every type of use and must be kept in a safe place.

Downgrading

The licensee is permitted to use the software or an earlier version/release of the software, provided that the licensee owns such a version/release and its use is technically feasible.

Delivery versions

Software is constantly being updated. The following delivery versions

- PowerPack
- Upgrade

can be used to access updates.

Existing bug fixes are supplied with the ServicePack version.

PowerPack

PowerPacks can be used to upgrade to more powerful software. The licensee receives a new license agreement and CoL (Certificate of License) with the PowerPack. This CoL, together with the CoL for the original product, proves that the new software is licensed.

A separate PowerPack must be purchased for each original license of the software to be replaced.

Upgrade

An upgrade permits the use of a new version of the software on the condition that a license for a previous version of the product is already held.

The licensee receives a new license agreement and CoL with the upgrade. This CoL, together with the CoL for the previous product, proves that the new version is licensed.

A separate upgrade must be purchased for each original license of the software to be upgraded.

ServicePack

ServicePacks are used to debug existing products. ServicePacks may be duplicated for use as prescribed according to the number of existing original licenses.

License key

Siemens Industry Automation & Drive Technologies supplies software products with and without license keys.

The license key serves as an electronic license stamp and is also the "switch" for activating the software (floating license, rental license, etc.).

The complete installation of software products requiring license keys includes the program to be licensed (the software) and the license key (which represents the license).

Software Update Service (SUS)

As part of the SUS contract, all software updates for the respective product are made available to you free of charge for a period of one year from the invoice date. The contract will automatically be extended for one year if it is not canceled three months before it expires.

The possession of the current version of the respective software is a basic condition for entering into an SUS contract.

You can download explanations concerning license conditions from www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

Appendix

Subject index

- A**
- Acoustic signal transformers for acoustic signaling devices 13/66
 - Actuating elements 13/19 ... 13/27, 13/30 ... 13/33, 13/39 ... 13/47
 - Adapters
 - For safety relays 11/18
 - Additional load modules for contactors and contactor relays 3/44, 5/8
 - Arc chambers
 - For contactors 3/53
 - AS-Interface
 - EMERGENCY STOP mushroom pushbutton 13/53, 13/83
 - Enclosures for pushbuttons and indicator lights 13/82 ... 13/84
 - F adapter 13/53
 - Slaves 13/84
 - Assembly kits
 - For contactor assemblies 3/64, 3/73
 - ATEX
 - Motor starter protectors/circuit breakers 7/6
 - Overload relays 7/40, 7/47, 7/54
 - Auxiliary releases
 - For motor starter protectors/circuit breakers 7/17, 7/19
 - Auxiliary switch blocks
 - for contactors and contactor relays 3/34 ... 3/39
 - Laterally mountable 3/38
 - Solid-state compatible 3/39
 - Solid-state time-delay 3/40
 - Auxiliary switches
 - For motor starter protectors/circuit breakers 7/2, 7/14, 7/16 ... 7/18
 - Auxiliary terminals 3/45, 3/46
- B**
- Backing plates
 - For coordinate switches 13/18
 - For EMERGENCY STOP mushroom pushbuttons 13/69
 - For pushbuttons and indicator lights 13/59 ... 13/63
 - Base plates
 - For contactor assemblies 3/63, 3/73
 - Blanking plugs
 - For pushbuttons and indicator lights 13/68
 - Box terminal blocks 7/53, 7/60
 - Busbar adapters
 - For load feeders 8/17
 - For motor starter protectors/circuit breakers 7/2, 7/20, 7/22, 7/28
 - Busbar systems
 - For load feeders 8/19
 - For motor starter protectors/circuit breakers 7/2, 7/20, 7/22
 - Buttons for pushbuttons 13/64
- C**
- Cable releases for RESET 7/45, 7/52
 - Cable-operated switches 13/3
 - Capacitor contactors 4/10
 - Coil repeat terminals 3/63
 - Connecting cables 7/59
 - Connection cable
 - For safety relays 11/18
 - Connection modules for contactors 3/47
 - Connections
 - For motor starter protectors/circuit breakers 7/26
 - Connectors, mechanical 3/65
 - Contact blocks
 - For coordinate switches 13/18
 - For pushbuttons 13/49 ... 13/52, 13/77, 13/78
 - Contactor Assemblies
 - Contactor assemblies for star-delta (wye-delta) starting
 - Reversing contactor assemblies
 - Components for customer assembly 3/58
 - Contactor assemblies
 - Contactor assemblies for star-delta (wye-delta) starting
 - Complete units 3/66 ... 3/72
 - Components for customer assembly 3/73
 - Reversing contactor assemblies
 - Complete units 3/58 ... 3/62
 - Components for customer assembly ... 3/58, 3/63 ... 3/65
 - Contactor bases 7/34
 - Contactor relays 5/3 ... 5/14
 - Coupling contactors 5/11
 - Latched 5/10
 - With auxiliary switch block 5/5, 5/6
 - Contactors
 - Capacitor contactors 4/10
 - For railway applications 4/13 ... 4/16, 5/13, 5/14
 - For switching motors 3/5 ... 3/53, 4/13 ... 4/16
 - Vacuum contactors 3/26, 3/27
 - With auxiliary switch block 3/14 ... 3/21
 - For switching resistive loads 4/4 ... 4/7
 - With extended operating range .. 4/13 ... 4/16, 5/13, 5/14
 - Contactors and contactor relays
 - Arc chutes 3/53
 - Auxiliary switch blocks 3/34 ... 3/39
 - Auxiliary switch blocks, solid-state time-delay 3/40
 - Auxiliary terminals 3/45, 3/46
 - Control kit (manual operation) 5/9
 - Coupling links 3/45
 - Covers 3/46, 5/9
 - Insulation stop for spring-type terminals 3/48, 5/9
 - LED module for indicating contactor operation 3/45
 - Links for paralleling 3/48
 - Mechanical latching blocks 3/44
 - OFF-delay devices 5/9
 - Solenoid coils 3/49 ... 3/52
 - Timing relay blocks, electronic 3/41
 - Control kit (manual operation)
 - For contactors and contactor relays 5/9
 - Coordinate switches 13/16, 13/17
 - Coupling contactors
 - For switching auxiliary circuits 5/11
 - For switching motors 3/54 ... 3/57
 - Coupling links
 - For contactors and contactor relays 3/45
 - Covers
 - For contactors 3/46
 - For motor starter protectors/circuit breakers 7/25
 - Covers, sealable
 - For motor starter protectors/circuit breakers 7/25
 - Current measuring modules 7/59
- D**
- Delay blocks for contactors
 - Electronic 3/41
 - Pneumatic 3/41
 - Direct-on-line starters, load feeders 8/4 ... 8/9
 - Distance protection 7/2, 7/16
 - Door-coupling rotary operating mechanisms
 - For motor starter protectors/circuit breakers 7/2, 7/23, 7/24
- E**
- Electrical remote RESET 7/45
 - Electronic overload relays 7/36 ... 7/39
 - For high-feature applications 7/54 ... 7/59
 - For standard applications 7/49 ... 7/53
 - EMC suppression modules for contactors ... 3/44
 - EMERGENCY STOP mushroom pushbutton 13/11, 13/13, 13/25, 13/29, 13/33, 13/37, 13/47, 13/73, 13/74, 13/83
 - EMERGENCY-STOP door-coupling rotary operating mechanisms
 - For motor starter protectors/circuit breakers 7/24
 - EMERGENCY-STOP mushroom button
 - For motor starter protectors/circuit breakers 7/31
 - Encapsulated starters 9/3, 9/4
 - Enclosures
 - For motor starter protectors/circuit breakers 7/2, 7/29 ... 7/31
 - For pushbuttons and indicator lights 13/3, 13/72 ... 13/83
 - Enclosures for flush mounting
 - For motor starter protectors/circuit breakers 7/2, 7/29 ... 7/31
 - Enclosures for surface mounting
 - For motor starter protectors/circuit breakers 7/2, 7/29 ... 7/31
 - End covers 7/35
 - Evaluation modules 7/56
 - Expansion plugs 7/35
 - Explosion protection (ATEX)
 - Motor starter protectors/circuit breakers 7/6
 - Overload relays 7/40, 7/47, 7/54

- F**
- Front plates
- For motor starter protectors/circuit breakers 7/2, 7/29 ... 7/31
- Function expansion modules 7/58
- Fuse monitoring 7/2, 7/14
- Fuseless load feeders 8/3 ... 8/19
- H**
- Hybrid link modules
- For motor starter protectors/circuit breakers 7/27
- I**
- Incandescent lamps
- For pushbuttons and indicator lights
 - BA 9s 13/65
 - Wedge bases 13/66
- Indicator light
- Indicator lights 13/2, 13/14, 13/15, 13/26, 13/29, 13/33, 13/38, 13/48
- For motor starter protectors/circuit breakers 7/31
- Infeed system
- For load feeders 8/19
 - For motor starter protectors/circuit breakers 7/2, 7/32 ... 7/35
- Infeed terminals
- For contactors 3/73
 - For motor starter protectors/circuit breakers 7/21
- Inscription labels
- For overload relays 7/46, 7/53, 7/61
 - For safety relays 11/18
 - Unlabeled 3/48
- Insert labels
- For pushbuttons and indicator lights 13/57 ... 13/58
- Insulated three-phase busbar system
- For motor starter protectors/circuit breakers 7/2, 7/20, 7/22
- Insulation stop for spring-type terminals 3/48, 5/9
- Integrated signal lamps 13/3
- Interlocks
- For contactor assemblies 3/63
- Isolator modules 7/2, 7/17, 7/19
- K**
- Key-operated switches
- For rotary buttons and switches 13/12, 13/23, 13/24, 13/32, 13/36, 13/45, 13/46
- L**
- labeling plates
- For contact blocks (pushbuttons) 13/69
 - For enclosures (pushbuttons) 13/79
- Lampholders
- For pushbuttons and indicator lights 13/49 ... 13/52, 13/77, 13/78
- Lamps
- For pushbuttons and indicator lights
 - BA 9s 13/65
 - Wedge bases 13/66
- Latched contactor relays 5/10
- Latching blocks, mechanical
- For contactors 3/44
- LED lamps
- For pushbuttons and indicator lights
 - BA 9s 13/65
 - Wedge bases 13/66
- LED module
- For displaying contactor operation 3/45
- Lenses for indicator lights 13/64
- Link modules
- For motor starter protectors/circuit breakers 7/2, 7/27, 7/28
- Links for paralleling
- For contactors 3/48, 3/73
- M**
- Mechanical connectors
- For contactor assemblies 3/65
- Mechanical interlocks
- For contactor assemblies 3/63
- Mechanical latching blocks
- For contactors 3/44
- Mechanical RESET 7/45, 7/52
- Modules for remote RESET, electrical 7/45
- Molded case motor starter protectors 7/3
- Molded-plastic enclosures
- For motor starter protectors/circuit breakers 7/29 ... 7/31
- Momentary-contact foot switches 13/3
- Motor protection 7/2, 7/8 ... 7/11
- Motor starter protectors/circuit breakers 7/2, 7/8 ... 7/31
- Auxiliary releases 7/17, 7/19
 - Auxiliary switches 7/2, 7/14, 7/16 ... 7/18
 - Busbar adapters 7/2, 7/20, 7/22, 7/28
 - Busbar system 7/2, 7/20, 7/22
 - Distance protection 7/2, 7/16
 - Door-coupling rotary operating mechanisms 7/2, 7/23, 7/24
 - EMERGENCY-STOP door-coupling rotary operating mechanisms 7/24
 - Enclosures 7/2, 7/29 ... 7/31
 - Enclosures for flush mounting 7/2, 7/29 ... 7/31
 - Enclosures for surface mounting 7/2, 7/29 ... 7/31
 - Explosion protection (ATEX) 7/6
 - Front plates 7/2, 7/29 ... 7/31
 - Fuse monitoring 7/2, 7/14
 - Hybrid link modules 7/27
 - Indicator lights 7/31
 - Infeed system 7/2, 7/32 ... 7/35
 - Insulated three-phase busbar system 7/2, 7/20, 7/22
 - Isolator modules 7/2, 7/17, 7/19
 - Link modules 7/2, 7/27, 7/28
 - Molded-plastic enclosures 7/29 ... 7/31
 - Motor protection 7/2, 7/8 ... 7/11
 - With overload relay function 7/11
 - Mounting accessories 7/25 ... 7/28
 - Remote motorized operating mechanisms 7/2, 7/23, 7/24
 - Rotary operating mechanisms 7/2, 7/23, 7/24
 - Scale covers 7/25
 - Shunt releases 7/2, 7/17, 7/19
 - Signaling switches 7/2, 7/17, 7/19
 - Solder pin connections 7/25, 7/26
 - Starter combinations 7/2, 7/12
 - System protection 7/2, 7/15
 - Terminal blocks 7/26
 - Terminals 7/21
 - Transformer protection 7/2, 7/13
 - Type E terminals 7/21
 - Undervoltage releases 7/2, 7/17, 7/19
 - Voltage transformer circuit breakers 7/2, 7/16
- Motor starters
- Encapsulated starters 9/3, 9/4
 - For use in the control cabinet 8/1 ... 8/19
 - For use in the field 9/1 ... 9/4
 - High degree of protection 9/1 ... 9/4
- Mounting accessories
- For motor starter protectors/circuit breakers 7/25 ... 7/28
- Mushroom pushbuttons and switches 13/11, 13/13, 13/20, 13/21, 13/37, 13/40

Appendix

Subject index

- O**
- OFF-delay devices for contactors and contactor relays 3/41, 5/9
 - Overload relays 7/36 ... 7/61
 - Electronic 7/36 ... 7/39
 - for high-feature applications 7/54 ... 7/59
 - For standard applications 7/49 ... 7/53
 - Explosion protection (ATEX) ... 7/40, 7/47, 7/54
 - Thermal 7/36 ... 7/39
 - For standard applications 7/40 ... 7/46
- P**
- Plug-in connectors 7/34
 - Pneumatic delay blocks for contactors 3/41
 - Protection Equipment 7/1 ... 7/61
 - Protective caps
 - For pushbuttons 13/67
 - Protective collars
 - For pushbuttons and indicator lights 13/68
 - Pushbuttons and indicator lights ... 13/2 ... 13/84
 - Nominal diameter 22 mm 13/4 ... 13/84
 - Pushbuttons and pushbutton switches 13/2, 13/4, 13/10, 13/19, 13/28, 13/30, 13/34, 13/35, 13/39
 - Push-in lugs
 - For motor starter protectors/ circuit breakers 7/26
 - For overload relays 7/60
- R**
- Remote motorized operating mechanisms
 - For motor starter protectors/ circuit breakers 7/2, 7/23, 7/24
 - Remote RESET, electrical 7/45
 - RESET for overload relays
 - Cable releases 7/45, 7/52
 - Electrical remote 7/45
 - Mechanical 7/45, 7/52
 - Reversing contactor assemblies 3/58 ... 3/62
 - Reversing starters
 - 3RA12 load feeders 8/10 ... 8/12
 - Rotary operating mechanisms
 - For motor starter protectors/ circuit breakers 7/2, 7/23, 7/24
- S**
- Safety relays, 3TK28
 - With contactor relay enabling circuits 11/13 ... 11/15
 - With electronic enabling circuits 11/10 ... 11/12
 - With relay enabling circuits 11/5 ... 11/9
 - With special functions 11/16, 11/17
 - Scale covers
 - For motor starter protectors/ circuit breakers 7/25
 - Screw adapters for contactors 3/47
 - Screwdrivers 3/48, 5/9, 7/28, 7/46, 7/53, 7/61, 11/18
 - Sealable covers
 - For contactors 3/46, 5/9
 - For motor starter protectors/ circuit breakers 7/25
 - For overload relays 7/53
 - For safety relays 11/18
 - Selector switch
 - For rotary buttons and switches 13/12, 13/22, 13/31, 13/36, 13/41, 13/42, 13/43, 13/44
 - Shunt releases
 - For motor starter protectors/ circuit breakers 7/2, 7/17, 7/19
 - Signaling columns 13/3
 - Signaling elements 13/26, 13/33, 13/48
 - Signaling switches
 - For motor starter protectors/ circuit breakers 7/2, 7/17, 7/19
 - Solder pin adapters for contactors 3/47
 - Solder pin connections
 - For motor starter protectors/ circuit breakers 7/25, 7/26
 - Solenoid coils
 - For contactors 3/49 ... 3/52
 - Standard mounting rail adapters
 - For load feeders 8/16
 - Standard mounting rails, 45 mm 7/35
 - Star-delta (wye-delta) starting 3/66 ... 3/73
 - Starter combinations 7/2, 7/12
 - Surge suppressors for contactors and contactor relays 3/42, 5/8
 - System protection 7/2, 7/15
- T**
- Terminal blocks
 - For motor starter protectors/ circuit breakers 7/26, 7/35
 - For overload relays 7/53
 - Terminal covers
 - For contactors 3/46
 - For motor starter protectors/ circuit breakers 7/25
 - For overload relays 7/45, 7/53, 7/60
 - Terminal supports 7/45, 7/52
 - Terminals
 - For contactor assemblies 3/73
 - For motor starter protectors/ circuit breakers 7/21
 - Thermal overload relays 7/36 ... 7/39
 - For standard applications 7/40 ... 7/46
 - Three-phase
 - Busbar system
 - For motor starter protectors/ circuit breakers 7/20, 7/22
 - Busbar systems
 - For load feeders 8/19
 - Busbars
 - For motor starter protectors/ circuit breakers 7/21, 7/34
 - Infeed terminals 7/21
 - Timing relay blocks
 - for contactors and contactor relays 3/41
 - Tools for
 - Spring-type terminals 7/28, 7/46, 7/53, 7/61, 11/18
 - Transformer protection 7/2, 7/13
 - Twin pushbuttons 13/12, 13/26, 13/27
 - Two-hand operation consoles 13/3, 13/85
- Type E**
- Terminal blocks 7/26
 - Terminals 7/21
- U**
- Undervoltage releases
 - For motor starter protectors/ circuit breakers 7/2, 7/17, 7/19
 - Unit labeling plates
 - For contact blocks (pushbuttons) 13/69
 - For overload relays 7/46, 7/53, 7/61
 - For safety relays 11/18
- V**
- Vacuum contactors 3/26, 3/27
 - Voltage transformer circuit breakers 7/2, 7/16
- W**
- Wiring modules
 - For contactor assemblies 3/65

Overview

Article No.	Page
3RA	
3RA11	8/4 ... 8/5
3RA1110-0	8/4 ... 8/5, 8/7, 8/8
3RA1110-1	8/4 ... 8/9
3RA1120-1	8/4 ... 8/5, 8/7, 8/8
3RA1120-4	8/4 ... 8/9
3RA12	8/10 ... 8/12
3RA131	3/59
3RA132	3/60
3RA133	3/61
3RA134	3/62
3RA141	3/68
3RA142	3/69
3RA143	3/70, 3/71
3RA144	3/72
3RA190	8/16
3RA1911	7/27, 7/28, 8/15, 8/17
3RA1912	3/65
3RA1913	3/64, 3/65, 3/73, 8/15, 8/18
3RA1921	7/27, 8/15
3RA1922	3/65, 7/28, 8/16, 8/17
3RA1923	3/63 ...3/ 65, 3/73, 8/15, 8/16, 8/18
3RA1924	3/63, 8/16
3RA1931	7/27, 8/15
3RA1932	3/65, 3/73, 8/16
3RA1933	3/64, 3/65, 3/73, 8/15, 8/16, 8/18
3RA1941	7/27, 8/15
3RA1942	3/65, 3/73, 8/16
3RA1943	3/64, 3/65, 3/73, 8/15, 8/16
3RA1952	3/63, 3/73
3RA1953	3/64, 3/65, 3/73
3RA1954	3/63
3RA1962	3/63, 3/73
3RA1963	3/64, 3/73
3RA1972	3/63, 3/73
3RA1973	3/64, 3/73
3RA2	3/48, 5/9, 7/28, 7/46, 7/53, 7/61, 11/18
3RB	
3RB1	7/26, 7/60, 8/17
3RB20	7/49, 7/50
3RB21	7/51
3RB22	7/56
3RB23	7/56
3RB290	7/59
3RB291	7/52
3RB292	7/52
3RB295	7/59
3RB296	7/59
3RB298	7/53, 7/58 ... 7/60
3RE	
3RE10	9/4
3RE13	9/4
3RE19	9/4

Article No.	Page
3RH	
3RH1122-1A	5/5
3RH1122-1B	5/6
3RH1122-1H	5/11
3RH1122-1J	5/12
3RH1122-1K	5/12
3RH1122-1M	5/11
3RH1122-1V	5/12
3RH1122-1W	5/12
3RH1122-2A	5/5
3RH1122-2B	5/6
3RH1122-2H	5/11
3RH1122-2J	5/12
3RH1122-2K	5/12, 5/14
3RH1122-2M	5/11
3RH1122-2V	5/12
3RH1122-2W	5/12
3RH1131-1A	5/5
3RH1131-1B	5/6
3RH1131-1H	5/11
3RH1131-1J	5/12
3RH1131-1K	5/12
3RH1131-1M	5/11
3RH1131-1V	5/12
3RH1131-1W	5/12
3RH1131-2A	5/5
3RH1131-2B	5/6
3RH1131-2H	5/11
3RH1131-2J	5/12
3RH1131-2K	5/12
3RH1131-2M	5/11
3RH1131-2V	5/12
3RH1131-2W	5/12
3RH1140-1A	5/5
3RH1140-1B	5/6
3RH1140-1H	5/11
3RH1140-1J	5/12
3RH1140-1K	5/12
3RH1140-1M	5/11
3RH1140-1V	5/12
3RH1140-1W	5/12
3RH1140-2A	5/5
3RH1140-2B	5/6
3RH1140-2H	5/11
3RH1140-2J	5/12
3RH1140-2K	5/12
3RH1140-2V	5/12
3RH1140-2W	5/12
3RH1244-1A	5/5
3RH1244-1B	5/6
3RH1244-2A	5/5
3RH1244-2B	5/6
3RH1262-1A	5/5

Appendix

Article number index

Article No.	Page
3RH1262-1B	5/6
3RH1262-2A	5/5
3RH1262-2B	5/6
3RH1422-1A	5/10
3RH1422-1B	5/10
3RH1431-1A	5/10
3RH1431-1B	5/10
3RH1440-1A	5/10
3RH1440-1B	5/10
3RH191	3/34 ... 3/36, 3/39, 5/7, 8/13
3RH1921	3/34, 3/36 ... 3/39, 8/13
3RH1924	3/45
3RK	
3RK	3/44, 5/9, 13/84
3RP	
3RP	7/60, 11/18
3RT	
3RT1015-1A	3/14
3RT1015-1B	3/18
3RT1015-1H	3/54
3RT1015-1J	3/55
3RT1015-1K	3/56
3RT1015-1M	3/54
3RT1015-1V	3/55
3RT1015-1W	3/56
3RT1015-2A	3/14
3RT1015-2B	3/18
3RT1015-2H	3/54
3RT1015-2J	3/55
3RT1015-2K	3/56
3RT1015-2M	3/54
3RT1015-2V	3/55
3RT1015-2W	3/56
3RT1016-1A	3/14
3RT1016-1B	3/18
3RT1016-1H	3/54
3RT1016-1J	3/55
3RT1016-1K	3/56
3RT1016-1M	3/54
3RT1016-1V	3/55
3RT1016-1W	3/56
3RT1016-2A	3/14
3RT1016-2B	3/18
3RT1016-2H	3/54
3RT1016-2J	3/55
3RT1016-2K	3/56
3RT1016-2M	3/54
3RT1016-2V	3/55
3RT1016-2W	3/56
3RT1017-1A	3/14
3RT1017-1B	3/18
3RT1017-1H	3/54
3RT1017-1J	3/55
3RT1017-1K	3/56

Article No.	Page
3RT1017-1M	3/54
3RT1017-1V	3/55
3RT1017-1W	3/56
3RT1017-2A	3/14
3RT1017-2B	3/18
3RT1017-2H	3/54
3RT1017-2J	3/55
3RT1017-2K	3/56, 4/14, 4/15
3RT1017-2M	3/54
3RT1017-2V	3/55
3RT1017-2W	3/56
3RT1023-1A	3/15
3RT1023-1B	3/19
3RT1023-3A	3/15
3RT1023-3B	3/19
3RT1024-1A	3/15
3RT1024-1B	3/19
3RT1024-1K	3/57
3RT1024-3A	3/15
3RT1024-3B	3/19
3RT1024-3K	3/57
3RT1025-1A	3/15
3RT1025-1B	3/19
3RT1025-1K	3/57
3RT1025-1X	4/16
3RT1025-3A	3/15
3RT1025-3B	3/19
3RT1025-3K	3/57, 4/14, 4/15
3RT1025-3X	4/16
3RT1026-1A	3/15
3RT1026-1B	3/19
3RT1026-1K	3/57
3RT1026-1X	4/16
3RT1026-3A	3/15
3RT1026-3B	3/19
3RT1026-3K	3/57, 4/14, 4/15
3RT1026-3X	4/16
3RT1034-1A	3/16
3RT1034-1B	3/20
3RT1034-1X	4/16
3RT1034-3A	3/16
3RT1034-3B	3/20
3RT1034-3K	4/15
3RT1034-3X	4/16
3RT1035-1A	3/16
3RT1035-1B	3/20
3RT1035-1X	4/16
3RT1035-3A	3/16
3RT1035-3B	3/20
3RT1035-3K	4/15
3RT1035-3X	4/16
3RT1036-1A	3/16
3RT1036-1B	3/20
3RT1036-1X	4/16

Article number index

Article No.	Page
3RT1036-3A	3/16
3RT1036-3B	3/20
3RT1036-3K	4/15
3RT1036-3X	4/16
3RT1044-1A	3/17
3RT1044-1B	3/21
3RT1044-1X	4/16
3RT1044-3A	3/17
3RT1044-3B	3/21
3RT1044-3K	4/15
3RT1044-3X	4/16
3RT1045-1A	3/17
3RT1045-1B	3/21
3RT1045-1X	4/16
3RT1045-3A	3/17
3RT1045-3B	3/21
3RT1045-3K	4/15
3RT1045-3X	4/16
3RT1046-1A	3/17
3RT1046-1B	3/21
3RT1046-1X	4/16
3RT1046-3A	3/17
3RT1046-3B	3/21
3RT1046-3K	4/15
3RT1046-3X	4/16
3RT105	3/22 ... 3/24
3RT106	3/22 ... 3/24
3RT107	3/22 ... 3/24
3RT12	3/27
3RT1316-1A	4/6
3RT1316-1B	4/7
3RT1316-2A	4/6
3RT1316-2B	4/7
3RT1317-1A	4/6
3RT1317-1B	4/7
3RT1317-2A	4/6
3RT1317-2B	4/7
3RT1325-1A	4/6
3RT1325-1B	4/7
3RT1326-1A	4/6
3RT1326-1B	4/7
3RT1336-1A	4/6
3RT1336-1B	4/7
3RT1344-1A	4/6
3RT1344-1B	4/7
3RT1346-1A	4/6
3RT1346-1B	4/7
3RT1446-1A	4/4
3RT1446-1B	4/4
3RT145	4/5
3RT146	4/5
3RT147	4/5
3RT1516-1A	4/9
3RT1516-1B	4/9

Article No.	Page
3RT1516-2A	4/9
3RT1516-2B	4/9
3RT1517-1A	4/9
3RT1517-1B	4/9
3RT1517-2A	4/9
3RT1517-2B	4/9
3RT1526-1A	4/9
3RT1526-1B	4/9
3RT1535-1A	4/9
3RT1535-1B	4/9
3RT161	4/11
3RT162	4/11
3RT164	4/11
3RT1900-1	3/48, 7/46, 7/53, 7/61, 11/18
3RT1900-4	3/47, 8/15
3RT1916-1	3/42, 3/44, 5/8, 8/14
3RT1916-2	3/40, 3/41, 5/9
3RT1916-4B	3/48, 3/73
3RT1916-4J	3/48, 5/9
3RT1916-4K	3/47
3RT1916-4M	3/46, 5/9
3RT1916-4R	3/47, 8/15
3RT1922	3/65
3RT1924	3/49
3RT1926-1	3/42, 3/43, 3/45, 8/14
3RT1926-2C	3/41
3RT1926-2D	3/41
3RT1926-2E	3/40
3RT1926-2F	3/40
3RT1926-2G	3/40
3RT1926-2P	3/41
3RT1926-3	3/44
3RT1926-4B	3/48, 3/73
3RT1926-4C	3/73
3RT1926-4M	3/46
3RT1926-4P	3/47
3RT1926-4R	3/47, 8/15
3RT1934-5	3/49, 3/50
3RT1934-6	3/53
3RT1935-5	3/49
3RT1935-6	3/53
3RT1936-1	3/43, 8/14
3RT1936-4B	3/48, 3/73
3RT1936-4E	3/46, 7/25, 7/45, 7/53
3RT1936-6	3/53
3RT1936-7	3/53
3RT1944-5	3/50
3RT1944-6	3/53
3RT1945-5	3/50
3RT1945-6	3/53
3RT1946-4B	3/48, 3/73
3RT1946-4E	3/46, 7/25, 7/45, 7/53
3RT1946-4F	3/45, 7/26
3RT1946-4G	7/26

Appendix

Article number index

Article No.	Page
3RT1946-6	3/53
3RT1946-7	3/53
3RT1954-6	3/53
3RT1954-7	3/53
3RT1955-4	3/46, 7/53, 7/60
3RT1955-5	3/51, 3/52
3RT1955-6	3/53
3RT1955-7	3/53
3RT1956-1	3/43
3RT1956-4B	3/48, 3/73
3RT1956-4E	3/46, 7/53, 7/60
3RT1956-4G	3/46, 7/53, 7/60
3RT1956-6	3/53
3RT1956-7	3/53
3RT1964-6A	3/53
3RT1964-6V	3/53
3RT1964-7	3/53
3RT1965-5	3/51, 3/52
3RT1965-6A	3/53
3RT1965-6V	3/53
3RT1965-7	3/53
3RT1966-1	3/43
3RT1966-4B	3/48, 3/73
3RT1966-4E	3/46, 7/53, 7/60
3RT1966-4G	3/46, 7/53, 7/60
3RT1966-5	3/51, 3/52
3RT1966-6A	3/53
3RT1966-6D	3/53
3RT1966-6V	3/53
3RT1966-7	3/53
3RT1975-5	3/51, 3/52
3RT1975-6A	3/53
3RT1975-6V	3/53
3RT1975-7	3/53
3RT1976-6A	3/53
3RT1976-6D	3/53
3RT1976-6V	3/53
3RT1976-7	3/53
3RU	
3RU11	7/42 ... 7/44
3RU1900-1	7/45, 7/52
3RU1900-2	7/45
3RU191	7/45
3RU192	7/45
3RU193	7/45
3RU194	7/45
3RV	
3RV101	7/8, 7/9
3RV102	7/8, 7/9
3RV103	7/10
3RV104	7/10
3RV112	7/11
3RV113	7/11
3RV114	7/11

Article No.	Page
3RV132	7/12
3RV133	7/12
3RV134	7/12
3RV14	7/13
3RV1611-0	7/14
3RV1611-1	7/16
3RV17	7/15
3RV1901-0	7/18
3RV1901-1	7/14, 7/16, 7/18, 8/13
3RV1901-2A	7/18
3RV1901-2B	7/18
3RV1901-2C	7/18
3RV1901-2E	7/18
3RV1901-2F	7/18
3RV1902-1AB0	7/19
3RV1902-1AB4	7/19
3RV1902-1AF	7/19
3RV1902-1AM	7/19
3RV1902-1AP	7/19, 8/13
3RV1902-1AS	7/19
3RV1902-1AV	7/19
3RV1902-1D	7/19, 8/13
3RV1903	7/31
3RV1908	7/25
3RV1912	7/19
3RV1913	7/30, 7/31
3RV1915-1	7/21
3RV1915-2	7/21
3RV1915-3	7/21
3RV1915-5	3/73, 7/21
3RV1915-6	7/22
3RV1917-1	7/34
3RV1917-4	7/34
3RV1917-5	7/34, 7/35
3RV1917-6	7/35
3RV1917-7	7/34, 7/35
3RV1918	7/26
3RV1921	7/19
3RV1922	7/19
3RV1923	7/30, 7/31
3RV1925	3/73, 7/21
3RV1927	7/34
3RV1928	7/19, 7/26
3RV1933	7/30
3RV1935-1	3/73, 7/21
3RV1935-3	7/21
3RV1935-5	3/73, 7/21
3RV1935-6	7/22
3RV1936	7/24
3RV1938	7/19
3RV194	7/24
3RV2	7/24

Article number index

Article No.	Page
3SB	
3SB10	13/15
3SB12	13/16, 3/17
3SB14	13/18
3SB19	13/18, 13/57, 13/59 ... 13/61, 13/65 ... 13/69, 13/71, 13/81
3SB2	13/66
3SB3000-0	7/45, 7/52, 13/15, 13/19
3SB3000-1	13/20, 13/21, 13/25
3SB3000-2	13/22
3SB3000-3	13/23, 13/24
3SB3000-4	13/23, 13/24
3SB3000-5	13/23, 13/24
3SB3000-7	13/26
3SB3001	13/19 ... 13/22, 13/26
3SB310	13/12, 13/26, 13/27
3SB311	13/30 ... 13/33
3SB32	13/10 ... 13/15
3SB3201	13/10 ... 13/13
3SB3202	13/10, 13/12
3SB3203	13/10, 13/11, 13/13
3SB3204	13/14
3SB3205	13/11
3SB3206	13/11
3SB3207	13/11
3SB3208	13/12
3SB33	13/28, 13/29
3SB3400-0	13/49
3SB3400-1	13/50
3SB3400-2	13/49
3SB3400-3	13/50
3SB3403	13/51
3SB341	13/52
3SB3420	13/77
3SB3423-0	13/78
3SB3423-1	13/78
3SB3423-2	13/78
3SB3500-0	13/39
3SB3500-1	13/40, 13/47
3SB3500-2	13/41 ... 13/44
3SB3500-3	13/41 ... 13/46
3SB3500-4	13/45, 13/46
3SB3500-5	13/45, 13/46
3SB3501	13/39 ... 13/44, 13/48
3SB36	13/34 ... 13/38
3SB3601	13/34 ... 13/37
3SB3602	13/34, 13/36
3SB3603	13/34, 13/35, 13/37
3SB3604	13/38
3SB3605	13/35
3SB3606	13/35
3SB3607	13/35
3SB3608	13/36
3SB38	13/73 ... 13/75, 13/85

Article No.	Page
3SB39	13/27, 13/52, 13/56, 13/59 ... 13/62, 13/64 ... 13/71, 13/77 ... 13/79, 13/81, 13/84 ... 13/85
3SF	
3SF	13/53, 13/83, 13/84
3SR	
3SR	13/65
3SX	
3SX	7/45, 7/52, 13/65, 13/71
3SY	
3SY	13/66
3TK	
3TK281	11/17, 11/18
3TK2820	11/18
3TK2821	11/8
3TK2822	11/8
3TK2823	11/8
3TK2824	11/8
3TK2825	11/8
3TK2826-0	11/18
3TK2826-1	11/8
3TK2826-2	11/8
3TK2827	11/8
3TK2828	11/8
3TK283	11/9
3TK2840	11/12
3TK2841	11/12
3TK2842	11/12
3TK2845	11/12
3TK285	11/15
3TX	
3TX	3/46, 13/69
8US	
8US10	7/22, 7/28, 8/17
8US11	7/22
8US12	7/22, 7/28, 8/17
8US19	7/28, 8/17, 8/18

Appendix

Conditions of sale and delivery

1. General Provisions

By using this catalog you can acquire hardware and software products described therein from Siemens AG subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as "T&C"). Please note that the scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

1.1 For customers with a seat or registered office in Germany

For customers with a seat or registered office in Germany, the following applies subordinate to the T&C:

- the "General Terms of Payment"¹⁾ and,
- for software products, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office in Germany"¹⁾ and,
- for other supplies and services, the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"¹⁾.

1.2 For customers with a seat or registered office outside Germany

For customers with a seat or registered office outside Germany, the following applies subordinate to the T&C:

- the "General Terms of Payment"¹⁾ and,
- for software products, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or Registered Office outside of Germany"¹⁾ and
- for other supplies and/or services, the "General Conditions for Supplies of Siemens Industry for Customers with a Seat or Registered Office outside of Germany"¹⁾.

2. Prices

The prices are in € (Euro) ex point of delivery, exclusive of packaging.

The sales tax (value added tax) is not included in the prices. It shall be charged separately at the respective rate according to the applicable statutory legal regulations.

Prices are subject to change without prior notice. We will charge the prices valid at the time of delivery.

To compensate for variations in the price of raw materials (e.g. silver, copper, aluminum, lead, gold, dysprosium and neodym), surcharges are calculated on a daily basis using the so-called metal factor for products containing these raw materials. A surcharge for the respective raw material is calculated as a supplement to the price of a product if the basic official price of the raw material in question is exceeded.

The metal factor of a product indicates the basic official price (for those raw materials concerned) as of which the surcharges on the price of the product are applied, and with what method of calculation.

An exact explanation of the metal factor can be downloaded at:

www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

To calculate the surcharge (except in the cases of dysprosium and neodym), the official price from the day prior to that on which the order was received or the release order was effected is used.

To calculate the surcharge applicable to dysprosium and neodym ("rare earths"), the corresponding three-month basic average price in the quarter prior to that in which the order was received or the release order was effected is used with a one-month buffer (details on the calculation can be found in the explanation of the metal factor).

3. Additional Terms and Conditions

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

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog - especially with regard to data, dimensions and weights given - these are subject to change without prior notice.

4. Export regulations

We shall not be obligated to fulfill any agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes and/or other sanctions.

Export of goods listed in this catalog may be subject to licensing requirements. We will indicate in the delivery details whether licenses are required under German, European and US export lists. Goods labeled with "AL" not equal to "N" are subject to European or German export authorization when being exported out of the EU. Goods labeled with "ECCN" not equal to "N" are subject to US re-export authorization.

The export indications can be viewed in advance in the description of the respective goods on the Industry Mall, our online catalog system. Only the export labels "AL" and "ECCN" indicated on order confirmations, delivery notes and invoices are authoritative.

Even without a label, or with label "AL:N" or "ECCN:N", authorization may be required i .a. due to the final disposition and intended use of goods.

If you transfer goods (hardware and/or software and/or technology as well as corresponding documentation, regardless of the mode of provision) delivered by us or works and services (including all kinds of technical support) performed by us to a third party worldwide, you must comply with all applicable national and international (re-)export control regulations.

If required for the purpose of conducting export control checks, you (upon request by us) shall promptly provide us with all information pertaining to the particular end customer, final disposition and intended use of goods delivered by us respectively works and services provided by us, as well as to any export control restrictions existing in this relation.

The products listed in this catalog may be subject to European/German and/or US export regulations. Any export requiring approval is therefore subject to authorization by the relevant authorities.

Errors excepted and subject to change without prior notice.

¹⁾ The text of the Terms and Conditions of Siemens AG can be downloaded at www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

Further information can be obtained from our branch offices listed at www.siemens.com/automation/partner

Interactive Catalog on DVD	<i>Catalog</i>	Low-Voltage Power Distribution and Electrical Installation Technology	<i>Catalog</i>
Products for Automation and Drives	CA 01	SENTRON · SIVACON · ALPHA	LV 10
Building Control		Protection, Switching, Measuring and Monitoring Devices, Switchboards and Distribution Systems	
GAMMA Building Control	ET G1	Standards-Compliant Components for Photovoltaic Plants	LV 11
Drive Systems		Electrical Components for the Railway Industry	LV 12
SINAMICS G130 Drive Converter Chassis Units	D 11	<i>Digital: TÜV-certified Power Monitoring System</i>	LV 14
SINAMICS G150 Drive Converter Cabinet Units		Components for Industrial Control Panels according to UL Standards	LV 16
SINAMICS GM150, SINAMICS SM150 Medium-Voltage Converters	D 12	3WT Air Circuit Breakers up to 4000 A	LV 35
SINAMICS PERFECT HARMONY GH180 Medium-Voltage Air-Cooled Drives Germany Edition	D 15.1	3VT Molded Case Circuit Breakers up to 1600 A	LV 36
SINAMICS G180 Converters – Compact Units, Cabinet Systems, Cabinet Units Air-Cooled and Liquid-Cooled	D 18.1	<i>Digital: SIVACON System Cubicles, System Lighting and System Air-Conditioning</i>	LV 50
SINAMICS S120 Chassis Format Units and Cabinet Modules	D 21.3	<i>Digital: ALPHA Distribution Systems</i>	LV 51
SINAMICS S150 Converter Cabinet Units		ALPHA FIX Terminal Blocks	LV 52
SINAMICS DCM DC Converter, Control Module	D 23.1	SIVACON S4 Power Distribution Boards	LV 56
SINAMICS DCM Cabinet	D 23.2	SIVACON 8PS Busbar Trunking Systems	LV 70
SINAMICS Inverters for Single-Axis Drives and SIMOTICS Motors	D 31	<i>Digital: DELTA Switches and Socket Outlets</i>	ET D1
SINAMICS G120P and SINAMICS G120P Cabinet pump, fan, compressor converters	D 35	Motion Control	
LOHER VARIO High Voltage Motors	D 83.2	SINUMERIK 840D sl Type 1B	NC 62
Flameproof, Type Series 1PS4, 1PS5, 1MV4 and 1MV5 Frame Size 355 to 1000, Power Range 80 to 7100 kW		Equipment for Machine Tools	
Three-Phase Induction Motors SIMOTICS HV, SIMOTICS TN	D 84.1	SINUMERIK 808	NC 81.1
• Series H-compact		Equipment for Machine Tools	
• Series H-compact PLUS		SINUMERIK 828	NC 82
High Voltage Three-phase Induction Motors SIMOTICS HV Series A-compact PLUS	D 84.9	Equipment for Machine Tools	
Three-Phase Induction Motors SIMOTICS HV, Series H-compact	D 86.1	SIMOTION, SINAMICS S120 & SIMOTICS Equipment for Production Machines	PM 21
Synchronous Motors with Permanent-Magnet Technology, HT-direct	D 86.2	<i>Digital: Drive and Control Components for Cranes</i>	CR 1
DC Motors	DA 12		
SIMOREG DC MASTER 6RA70 Digital Chassis Converters	DA 21.1	Power Supply	
SIMOREG K 6RA22 Analog Chassis Converters	DA 21.2	SITOP Power supply	KT 10.1
<i>Digital: SIMOREG DC MASTER 6RM70 Digital Converter Cabinet Units</i>	DA 22		
SIMOVERT PM Modular Converter Systems	DA 45	Safety Integrated	
SIEMOSYN Motors	DA 48	Safety Technology for Factory Automation	SI 10
MICROMASTER 420/430/440 Inverters	DA 51.2		
MICROMASTER 411/COMBIMASTER 411	DA 51.3	SIMATIC HMI / PC-based Automation	
<u>Low-Voltage Three-Phase-Motors</u>		Human Machine Interface Systems/ PC-based Automation	ST 80/ ST PC
SIMOTICS Low-Voltage Motors	D 81.1		
SIMOTICS FD Low-Voltage Motors	D 81.8	SIMATIC Ident	
LOHER Low-Voltage Motors	D 83.1	Industrial Identification Systems	ID 10
MOTOX Geared Motors	D 87.1		
SIMOGEAR Geared Motors	MD 50.1	SIMATIC Industrial Automation Systems	
SIMOGEAR Gearboxes with adapter	MD 50.11	Products for Totally Integrated Automation	ST 70
<u>Mechanical Driving Machines</u>		SIMATIC PCS 7 Process Control System	ST PCS 7
FLENDER Standard Couplings	MD 10.1	System components	
FLENDER High Performance Couplings	MD 10.2	SIMATIC PCS 7 Process Control System Technology components	ST PCS 7 T
FLENDER Backlash-free Couplings	MD 10.3	Add-ons for the SIMATIC PCS 7 Process Control System	ST PCS 7 AO
FLENDER SIG Standard industrial gear units	MD 30.1		
FLENDER SIP Standard industrial planetary gear units	MD 31.1	SIMATIC NET	
		Industrial Communication	IK PI
Process Instrumentation and Analytics		SIRIUS Industrial Controls	
<i>Digital: Field Instruments for Process Automation</i>	FI 01	<i>Digital: SIRIUS Industrial Controls</i>	IC 10
<i>Digital: SIPART Controllers and Software</i>	MP 31		
Products for Weighing Technology	WT 10	<i>Digital: These catalogs are only available as a PDF.</i>	
<i>Digital: Process Analytical Instruments</i>	AP 01		
<i>Digital: Process Analytics, Components for Continuous Emission Monitoring</i>	AP 11	Information and Download Center	
		Digital versions of the catalogs are available on the Internet at: www.siemens.com/industry/infocenter	
		There you'll find additional catalogs in other languages.	
		Please note the section "Downloading catalogs" on page "Online services" in the appendix of this catalog.	

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates.

For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>.

To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>.

Get more information

Control Components and Systems Engineering:
www.siemens.com/sirius

Siemens AG
Industry Sector
Control Components and
Systems Engineering
Postfach 2355
90713 FÜRTH
GERMANY

Subject to change without prior notice
PDF (E86060-K1010-A191-A5-7600)
ST.PV.T.0040.S.00.40.40
KG 0116 324 En
Produced in Germany
© Siemens AG 2016

The information provided in this catalog contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice.
All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.