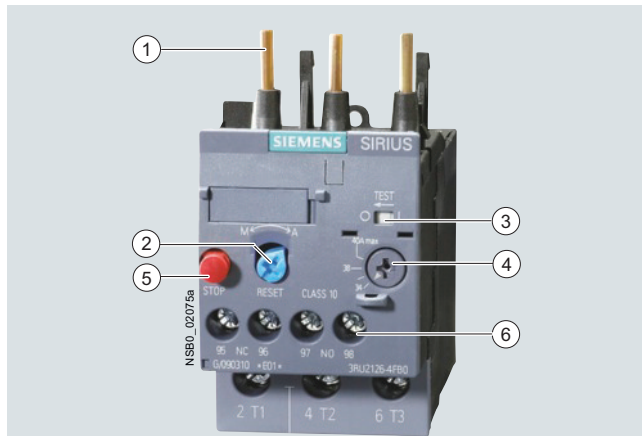


Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

3RU2 up to 40 A
for standard applications

Overview



- ① Connection for mounting onto contactors:
Optimally adapted in electrical, mechanical and design terms to the contactors. The overload relay can be connected directly to these contactor using these pins. Stand-alone installation is possible as an alternative (in conjunction with a terminal bracket for stand-alone installation).
- ② 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.
- ③ Switch position indicator and TEST function of the wiring:
Indicates a trip and enables the wiring test.
- ④ Motor current setting:
Setting the device to the rated motor current is easy with the large rotary knob.
- 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 Supply terminals:
Depending on the device version, the terminals for screw, spring-type or ring terminal lug connection are configured for the main and auxiliary circuit.

A sealable transparent cover can be optionally mounted (accessory). It secures the motor current setting against adjustment.

SIRIUS 3RU21 26-4FB00 thermal overload relay

The 3RU21 thermal overload relays up to 40 A have been designed for inverse-time delayed protection of loads with normal starting (for "Function" see note on [Technical Information on page 5/1](#)) against excessive temperature rises due to overload or phase failure.

An overload or phase failure results 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 (for "Characteristic Curves" see the note on [Technical Information on page 5/1](#)).

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 note on [Technical Information on page 5/1](#)).

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.

For 3RU11 overload relay sizes S2 and S3 see [page 5/93 onwards](#).

"Increased safety" type of protection EEx e according to ATEX directive 94/9/EC

The 3RU21 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 EN 60079-7 (Electrical apparatus for areas subject to explosion hazards – Increased safety "e"); see www.siemens.com/industrial-controls/atex.

EC prototype test certificate for Category (2)G/D has been submitted. More details on request.

Order No. scheme

Digit of the Order No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th	
	□□□	□	□	□	□	-	□	□	□	
Thermal overload relays	3 R U									
SIRIUS 2nd generation	2									
Device series	□									
Size, rated operational current and power	□ □									
Setting range of the overload release	□ □									
Connection methods	□									
Installation type	□									
Example	3 R U	2	1	1	6	-	0	A	B	0

Note:

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

For your orders, please use the order numbers quote in the catalog in the Selection and ordering data.

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

3RU2 up to 40 A
for standard applications

Selection and ordering data

3RU21 thermal overload relays for mounting onto contactor¹⁾, CLASS 10

Features and technical specifications:

- Screw, spring-type or ring terminal lug connection²⁾
- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator
- TEST function
- STOP button

- Sealable covers (optional accessory)
- Terminal covers for devices with ring terminal lug connection (optional accessory)

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 101



3RU21 16-4AB0



3RU21 16-4AC0



3RU21 26-4FB0



3RU21 26-4AC0

Size contactor ³⁾	Rating for induction motor, rated value ⁴⁾	Current setting of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁵⁾	DT	Screw terminals		Spring-type terminals	
					Order No.	Price per PU	Order No.	Price per PU
					⊕		⊕	
Size S00								
S00	0.04	0.11 ... 0.16	0.5	▶	3RU21 16-0AB0	B	3RU21 16-0AC0	
	0.06	0.14 ... 0.2	1	▶	3RU21 16-0BB0	B	3RU21 16-0BC0	
	0.06	0.18 ... 0.25	1	▶	3RU21 16-0CB0	B	3RU21 16-0CC0	
	0.09	0.22 ... 0.32	1.6	▶	3RU21 16-0DB0	B	3RU21 16-0DC0	
	0.09	0.28 ... 0.4	2	▶	3RU21 16-0EB0	B	3RU21 16-0EC0	
	0.12	0.35 ... 0.5	2	▶	3RU21 16-0FB0	B	3RU21 16-0FC0	
	0.18	0.45 ... 0.63	2	▶	3RU21 16-0GB0	B	3RU21 16-0GC0	
	0.18	0.55 ... 0.8	4	▶	3RU21 16-0HB0	B	3RU21 16-0HC0	
	0.25	0.7 ... 1	4	▶	3RU21 16-0JB0	B	3RU21 16-0JC0	
	0.37	0.9 ... 1.25	4	▶	3RU21 16-0KB0	B	3RU21 16-0KC0	
	0.55	1.1 ... 1.6	6	▶	3RU21 16-1AB0	B	3RU21 16-1AC0	
	0.75	1.4 ... 2	6	▶	3RU21 16-1BB0	B	3RU21 16-1BC0	
	0.75	1.8 ... 2.5	10	▶	3RU21 16-1CB0	B	3RU21 16-1CC0	
	1.1	2.2 ... 3.2	10	▶	3RU21 16-1DB0	B	3RU21 16-1DC0	
	1.5	2.8 ... 4	16	▶	3RU21 16-1EB0	B	3RU21 16-1EC0	
	1.5	3.5 ... 5	20	▶	3RU21 16-1FB0	B	3RU21 16-1FC0	
	2.2	4.5 ... 6.3	20	▶	3RU21 16-1GB0	B	3RU21 16-1GC0	
	3	5.5 ... 8	25	▶	3RU21 16-1HB0	B	3RU21 16-1HC0	
	4	7 ... 10	35	▶	3RU21 16-1JB0	B	3RU21 16-1JC0	
	5.5	9 ... 12.5	35	▶	3RU21 16-1KB0	B	3RU21 16-1KC0	
	7.5	11 ... 16	40	▶	3RU21 16-4AB0	B	3RU21 16-4AC0	
Size S0								
S0	0.75	1.8 ... 2.5	10	▶	3RU21 26-1CB0	B	3RU21 26-1CC0	
	1.1	2.2 ... 3.2	10	▶	3RU21 26-1DB0	B	3RU21 26-1DC0	
	1.5	2.8 ... 4	16	▶	3RU21 26-1EB0	B	3RU21 26-1EC0	
	1.5	3.5 ... 5	20	▶	3RU21 26-1FB0	B	3RU21 26-1FC0	
	2.2	4.5 ... 6.3	20	▶	3RU21 26-1GB0	B	3RU21 26-1GC0	
	3	5.5 ... 8	25	▶	3RU21 26-1HB0	B	3RU21 26-1HC0	
	4	7 ... 10	35	▶	3RU21 26-1JB0	B	3RU21 26-1JC0	
	5.5	9 ... 12.5	35	▶	3RU21 26-1KB0	B	3RU21 26-1KC0	
	7.5	11 ... 16	40	▶	3RU21 26-4AB0	▶	3RU21 26-4AC0	
	7.5	14 ... 20	50	▶	3RU21 26-4BB0	▶	3RU21 26-4BC0	
	11	17 ... 22	63	▶	3RU21 26-4CB0	▶	3RU21 26-4CC0	
	11	20 ... 25	63	▶	3RU21 26-4DB0	▶	3RU21 26-4DC0	
	15	23 ... 28	63	▶	3RU21 26-4NB0	▶	3RU21 26-4NC0	
	15	27 ... 32	80	▶	3RU21 26-4EB0	▶	3RU21 26-4EC0	
	18.5	30 ... 36	80	▶	3RU21 26-4PB0	▶	3RU21 26-4PC0	
	18.5	34 ... 40	80	▶	3RU21 26-4FB0	▶	3RU21 26-4FC0	

1) For matching terminal brackets see "Accessories" on page 5/86.

2) The 3RU21 overload relays are also available with ring terminal lug connection. The Order No. must be changed in the 10th position to "J": e.g. 3RU21 16-0AJ0.

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 for overload relay, type of coordination "2". For fuse values in connection with contactors see "Technical specifications" --> "Short-circuit protection with fuses/motor starter protectors for motor feeders", see note on Technical Information on page 5/1.

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

3RU2 up to 40 A
for standard applications

3RU21 thermal overload relays for stand-alone installation¹⁾, CLASS 10

Features and technical specifications:

- Screw or spring-type terminals
- Overload and phase failure protection
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Switch position indicator
- TEST function
- STOP button
- Sealable covers (optional accessory)

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 101



3RU21 16-4AB1





3RU21 16-4AC1



3RU21 26-4FB1



3RU21 26-4FC1

Size contactor ²⁾	Rating for induction motor, rated value ³⁾	Current setting of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁴⁾	DT	Screw terminals 		DT	Spring-type terminals 	
					Order No.	Price per PU		Order No.	Price per PU
	kW	A	A						
Size S00									
S00	0.04	0.11 ... 0.16	0.5	B	3RU21 16-0AB1	B	3RU21 16-0AC1		
	0.06	0.14 ... 0.2	1	B	3RU21 16-0BB1	B	3RU21 16-0BC1		
	0.06	0.18 ... 0.25	1	B	3RU21 16-0CB1	B	3RU21 16-0CC1		
	0.09	0.22 ... 0.32	1.6	B	3RU21 16-0DB1	B	3RU21 16-0DC1		
	0.09	0.28 ... 0.4	2	B	3RU21 16-0EB1	B	3RU21 16-0EC1		
	0.12	0.35 ... 0.5	2	B	3RU21 16-0FB1	B	3RU21 16-0FC1		
	0.18	0.45 ... 0.63	2	B	3RU21 16-0GB1	B	3RU21 16-0GC1		
	0.18	0.55 ... 0.8	4	B	3RU21 16-0HB1	B	3RU21 16-0HC1		
	0.25	0.7 ... 1	4	B	3RU21 16-0JB1	B	3RU21 16-0JC1		
	0.37	0.9 ... 1.25	4	B	3RU21 16-0KB1	B	3RU21 16-0KC1		
	0.55	1.1 ... 1.6	6	B	3RU21 16-1AB1	B	3RU21 16-1AC1		
	0.75	1.4 ... 2	6	B	3RU21 16-1BB1	B	3RU21 16-1BC1		
	0.75	1.8 ... 2.5	10	B	3RU21 16-1CB1	B	3RU21 16-1CC1		
	1.1	2.2 ... 3.2	10	B	3RU21 16-1DB1	B	3RU21 16-1DC1		
	1.5	2.8 ... 4	16	B	3RU21 16-1EB1	B	3RU21 16-1EC1		
	1.5	3.5 ... 5	20	B	3RU21 16-1FB1	B	3RU21 16-1FC1		
	2.2	4.5 ... 6.3	20	B	3RU21 16-1GB1	B	3RU21 16-1GC1		
	3	5.5 ... 8	25	B	3RU21 16-1HB1	B	3RU21 16-1HC1		
	4	7 ... 10	35	B	3RU21 16-1JB1	B	3RU21 16-1JC1		
	5.5	9 ... 12.5	35	B	3RU21 16-1KB1	B	3RU21 16-1KC1		
	7.5	11 ... 16	40	B	3RU21 16-4AB1	B	3RU21 16-4AC1		
Size S0									
S0	7.5	14 ... 20	50	B	3RU21 26-4BB1	B	3RU21 26-4BC1		
	11	17 ... 22	63	B	3RU21 26-4CB1	B	3RU21 26-4CC1		
	11	20 ... 25	63	B	3RU21 26-4DB1	B	3RU21 26-4DC1		
	15	23 ... 28	63	B	3RU21 26-4NB1	B	3RU21 26-4NC1		
	15	27 ... 32	80	B	3RU21 26-4EB1	B	3RU21 26-4EC1		
	18.5	30 ... 36	80	B	3RU21 26-4PB1	B	3RU21 26-4PC1		
	18.5	34 ... 40	80	B	3RU21 26-4FB1	B	3RU21 26-4FC1		

¹⁾ Screw and snap-on mounting onto TH 35 standard mounting rail.

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 for overload relay, type of coordination "2". For fuse values in connection with contactors see "Technical specifications" --> "Short-circuit protection with fuses/motor starter protectors for motor feeders", see note on Technical Information on page 5/1.

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

Accessories

Overview

Overload relays for standard applications

The following optional accessories are available for the 3RU21 thermal overload relays:

- Terminal bracket for stand-alone installation with screw or spring-type terminals for every size
- 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)
- Sealable cover (for all sizes)
- Terminal covers for devices with ring terminal lug connection

Selection and ordering data

Version	Size	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	------	----	-----------	--------------	-------------------	-----	----

Terminal brackets for stand-alone installation



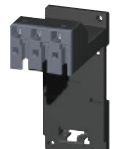
3RU29 16-3AA01



3RU29 26-3AA01



3RU29 16-3AC01



3RU29 26-3AC01

Terminal brackets for overload relays with screw terminals

For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail

S00
S0

Screw terminals



3RU29 16-3AA01
3RU29 26-3AA01

1 1 unit 101
1 1 unit 101

Terminal brackets for overload relays with spring-type terminals

For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail

S00
S0

B
B

Spring-type terminals



3RU29 16-3AC01
3RU29 26-3AC01

1 1 unit 101
1 1 unit 101

Mechanical RESET



3RU29 00-1A with pushbutton and extension plunger

Resetting plungers, holders and formers

S00, S0

▶

3RU29 00-1A

1 1 unit 101

Pushbuttons with extended stroke (12 mm), IP65, ø 22 mm

S00, S0

B

3SB30 00-0EA11

1 1 unit 102

Extension plungers

For compensation of the distance between the pushbutton and the unlatching button of the relay

S00, S0

A

3SX1 335

1 1 unit 102

Cable releases with holder for RESET



3RU29 00-1.

For ø 6.5 mm holes in the control panel; max. control panel thickness 8 mm

- Length 400 mm
- Length 600 mm

S00, S0

▶

3RU29 00-1B

1 1 unit 101

S00, S0

▶

3RU29 00-1C

1 1 unit 101

Overload Relays

SIRIUS 3RU2 Thermal Overload Relays

Accessories

Version	Size	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	------	----	-----------	--------------	-------------------	-----	----

Modules for remote RESET, electrical



3RU19 00-2A.71

Operating range $0.85 \dots 1.1 \times U_N$,
power consumption AC 80 VA, DC 70 W,
ON period 0.2 ... 4 s,
switching frequency 60/h

- 24 ... 30 V AC/DC
- 110 ... 127 V AC/DC
- 220 ... 250 V AC/DC

S00, S0 ▶
S00, S0 ▶
S00, S0 ▶

3RU19 00-2AB71
3RU19 00-2AF71
3RU19 00-2AM71

1 1 unit 101
1 1 unit 101
1 1 unit 101

Sealable covers



3RV29 08-0P

For covering the setting knobs

S00, S0 ▶

3RV29 08-0P

100 10 units 101

Terminal covers



3RU29 16-3BJ21



3RU29 26-3BJ21



3RU29 16-3BJ20



3RV29 28-4AA00



3RT29 16-4EA13

Covers for devices with ring terminal lug connection (ensure finger-safety)

- Main current level
 - Cover between contactor and overload relay for direct mounting of the overload relay
 - Cover for overload relay on load side

S00 C
S0 C
S0 C
S0 C

Ring terminal lug connection



3RU29 16-3BJ21
3RU29 26-3BJ21
3RU29 16-3BJ20
3RV29 28-4AA00
3RT29 16-4EA13

1 10 units 101
1 10 units 101
1 10 units 101
1 1 unit 101
1 10 units 101

- Auxiliary current level

S00, S0 B

3RT29 16-4EA13

1 10 units 101

General accessories

Version	Size	Color	For overload relays	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
---------	------	-------	---------------------	----	-----------	--------------	-------------------	-----	----

Tools for opening spring-type terminals by hand



3RA29 08-1A

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 con-
nection:
3RU2

A

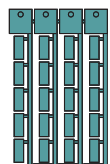
Spring-type terminals



3RA29 08-1A

1 1 unit 101

Blank labels



3RT19 00-1SB20

Unit labeling plates¹⁾
for SIRIUS devices

20 mm x 7 mm

Pastel
turquoise

3RU2

D

3RT19 00-1SB20

100 340 units 101

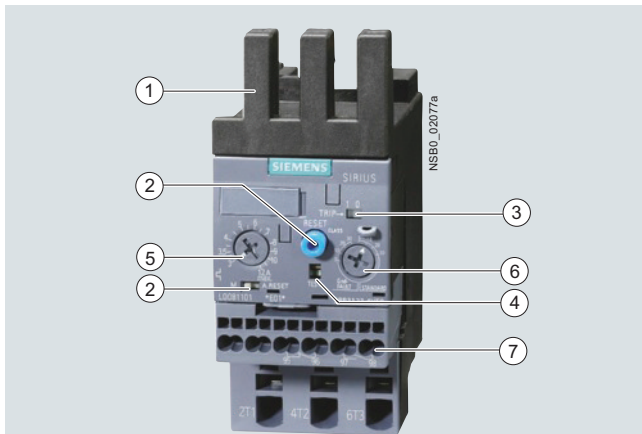
¹⁾ PC labeling system for individual inscription of unit labeling plates available from: murrplastik Systemtechnik GmbH www.murrplastik.de.

Overload Relays

SIRIUS 3RB3 Solid-State Overload Relays

3RB30, 3RB31 up to 40 A
for standard applications

Overview



- ① Connection for mounting onto contactors: Optimally adapted in electrical, mechanical and design terms to the contactors and soft starters. The overload relay can be connected directly using these connection pins. Stand-alone installation is possible as an alternative (in conjunction with a terminal bracket for stand-alone installation).
 - ② Selector switch for manual/automatic RESET and RESET button: With the slide switch you can choose between manual and automatic RESET. A device set to manual RESET can be reset locally by pressing the RESET button. On the 3RB31 an electrical remote RESET is integrated.
 - ③ Switch position indicator and TEST function of the wiring: Indicates a trip and enables the wiring test.
 - ④ Solid-state test (device test): Enables a test of all important device components and functions.
 - ⑤ Motor current setting: Setting the device to the rated motor current is easy with the large rotary knob.
 - ⑥ Trip class setting/internal ground-fault detection (only 3RB31): Using the rotary switch you can set the required trip class and activate the internal ground-fault detection dependent on the start-up conditions.
 - ⑦ Connecting terminals (removable joint block for auxiliary circuits): Depending on the device version, the terminals for screw and spring-type connection are configured for the main and auxiliary circuit.
- A sealable transparent cover can be optionally mounted (accessory). It secures the motor current setting against adjustment.

SIRIUS 3RB31 23-4VE00 solid-state overload relay

Order No. scheme

Digit of the Order No.	1st - 3rd	4th	5th	6th	7th	8th	9th	10th	11th
Solid-state overload relays	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SIRIUS 3rd generation	3 R B								
Device series		3							
Size, rated operational current and power			<input type="checkbox"/>						
Version of the automatic RESET, electrical remote RESET					<input type="checkbox"/>				
Trip class (CLASS)							<input type="checkbox"/>		
Setting range of the overload release								<input type="checkbox"/>	
Connection methods									<input type="checkbox"/>
Installation type									<input type="checkbox"/>
Example	3 R B	3	0	1	6	-	1	R	B 0

Note:

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

For your orders, please use the order numbers quote in the catalog in the Selection and ordering data.

The 3RB30 and 3RB31 solid-state overload relays up to 40 A with internal power supply have been designed for inverse-time delayed protection of loads with normal and heavy starting (for "Function" see note on Technical Information on page 5/1) 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 the current transformers integrated into the devices and evaluated by corresponding solid-state 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 (for "Characteristic Curves" see the note on Technical Information on page 5/1).

In addition to inverse-time delayed protection of loads against excessive temperature rises due to overload, phase unbalance and phase failure, the 3RB31 solid-state 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 (for "Function" see note on Technical Information on page 5/1).

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.

For 3RB20 and 3RB21 overload relay sizes S2 to S10/S12 see page 5/114 onwards.

"Increased safety" type of protection EEx e according to ATEX directive 94/9/EC

The 3RB30/3RB31 solid-state 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 EN 60079-7 (Electrical apparatus for areas subject to explosion hazards – Increased safety "e"); see www.siemens.com/industrial-controls/atex.

EC type test certificate for Group II, Category (2) G/D exists. It has the number PTB 09 ATEX 3001.

Overload Relays

SIRIUS 3RB3 Solid-State Overload Relays

3RB30, 3RB31 up to 40 A
for standard applications

Selection and ordering data

3RB30 solid-state overload relays for mounting onto contactor¹⁾, CLASS 10

Features and technical specifications:

- Screw and spring-type terminals
- 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
- Sealable covers (optional accessory)

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 101



3RB30 16-1TB0



3RB30 16-1TE0



3RB30 26-1VB0



3RB30 26-1VE0

Size contactor ²⁾	Rating for induction motor Rated value ³⁾	Current setting of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁴⁾	DT	Screw terminals Order No.	DT	Spring-type terminals Order No.
	kW	A	A		Price per PU		Price per PU
Size S00¹⁾							
S00	0.04 ... 0.09	0.1 ... 0.4	4	A	3RB30 16-1RB0	A	3RB30 16-1RE0
	0.12 ... 0.37	0.32 ... 1.25	6	A	3RB30 16-1NB0	A	3RB30 16-1NE0
	0.55 ... 1.5	1 ... 4	20	A	3RB30 16-1PB0	A	3RB30 16-1PE0
	1.1 ... 5.5	3 ... 12	25	A	3RB30 16-1SB0	A	3RB30 16-1SE0
	2.2 ... 7.5	4 ... 16	25	A	3RB30 16-1TB0	A	3RB30 16-1TE0
Size S0¹⁾							
S0	0.04 ... 0.09	0.1 ... 0.4	4	A	3RB30 26-1RB0	A	3RB30 26-1RE0
	0.12 ... 0.37	0.32 ... 1.25	6	A	3RB30 26-1NB0	A	3RB30 26-1NE0
	0.55 ... 1.5	1 ... 4	20	A	3RB30 26-1PB0	A	3RB30 26-1PE0
	1.1 ... 5.5	3 ... 12	25	A	3RB30 26-1SB0	A	3RB30 26-1SE0
	3 ... 11	6 ... 25	50	A	3RB30 26-1QB0	A	3RB30 26-1QE0
	5.5 ... 18.5	10 ... 40	50	A	3RB30 26-1VB0	A	3RB30 26-1VE0

¹⁾ With the suitable terminal brackets (see "Accessories", page 5/106), these overload relays 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 for overload relay, type of coordination "2". For fuse values in connection with contactors see "Technical specifications" --> "Short-circuit protection with fuses for motor feeders", see note on Technical Information on page 5/1.

Overload Relays

SIRIUS 3RB3 Solid-State Overload Relays

**3RB30, 3RB31 up to 40 A
for standard applications**

3RB30 solid-state overload relays for mounting onto contactor¹⁾, CLASS 20

Features and technical specifications:

- Screw and spring-type terminals
- 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
- Sealable covers (optional accessory)

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 101



3RB30 16-2TB0





3RB30 16-2TE0



3RB30 26-2VB0



3RB30 26-2VE0

Size contactor ²⁾	Rating for induction motor Rated value ³⁾	Current setting of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁴⁾	DT	Screw terminals 	DT	Spring-type terminals 	
	kW	A	A		Order No.	Price per PU	Order No.	Price per PU
Size S00¹⁾								
S00	0.04 ... 0.09	0.1 ... 0.4	4	A	3RB30 16-2RB0	A	3RB30 16-2RE0	
	0.12 ... 0.37	0.32 ... 1.25	6	A	3RB30 16-2NB0	A	3RB30 16-2NE0	
	0.55 ... 1.5	1 ... 4	20	A	3RB30 16-2PB0	A	3RB30 16-2PE0	
	1.1 ... 5.5	3 ... 12	25	A	3RB30 16-2SB0	A	3RB30 16-2SE0	
	2.2 ... 7.5	4 ... 16	25	A	3RB30 16-2TB0	A	3RB30 16-2TE0	
Size S0¹⁾								
S0	0.04 ... 0.09	0.1 ... 0.4	4	A	3RB30 26-2RB0	A	3RB30 26-2RE0	
	0.12 ... 0.37	0.32 ... 1.25	6	A	3RB30 26-2NB0	A	3RB30 26-2NE0	
	0.55 ... 1.5	1 ... 4	20	A	3RB30 26-2PB0	A	3RB30 26-2PE0	
	1.1 ... 5.5	3 ... 12	25	A	3RB30 26-2SB0	A	3RB30 26-2SE0	
	3 ... 11	6 ... 25	50	A	3RB30 26-2QB0	A	3RB30 26-2QE0	
	5.5 ... 18.5	10 ... 40	50	A	3RB30 26-2VB0	A	3RB30 26-2VE0	

¹⁾ With the suitable terminal brackets (see "Accessories", page 5/106), these overload relays 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 for overload relay, type of coordination "2". For fuse values in connection with contactors see "Technical specifications" --> "Short-circuit protection with fuses for motor feeders", see note on Technical Information on page 5/1.

Overload Relays

SIRIUS 3RB3 Solid-State Overload Relays

3RB30, 3RB31 up to 40 A
for standard applications

3RB31 solid-state overload relays for mounting onto contactor¹⁾, CLASS 5, 10, 20 and 30 adjustable

Features and technical specifications:

- Screw and spring-type terminals
- 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
- Sealable covers (optional accessory)

PU (UNIT, SET, M) = 1
PS* = 1 unit
PG = 101



3RB31 13-4TB0





3RB31 13-4TE0



3RB31 23-4VB0



3RB31 23-4VE0

Size contactor ²⁾	Rating for induction motor Rated value ³⁾	Current setting of the inverse-time delayed overload release	Short-circuit protection with fuse, type of coordination "2", operational class gG ⁴⁾	DT	Screw terminals 		Spring-type terminals 	
					Order No.	Price per PU	Order No.	Price per PU
Size S00¹⁾								
S00	0.04 ... 0.09	0.1 ... 0.4	4	A	3RB31 13-4RB0	A	3RB31 13-4RE0	
	0.12 ... 0.37	0.32 ... 1.25	6	A	3RB31 13-4NB0	A	3RB31 13-4NE0	
	0.55 ... 1.5	1 ... 4	20	A	3RB31 13-4PB0	A	3RB31 13-4PE0	
	1.1 ... 5.5	3 ... 12	25	A	3RB31 13-4SB0	A	3RB31 13-4SE0	
	2.2 ... 7.5	4 ... 16	25	A	3RB31 13-4TB0	A	3RB31 13-4TE0	
Size S0¹⁾								
S0	0.04 ... 0.09	0.1 ... 0.4	4	A	3RB31 23-4RB0	A	3RB31 23-4RE0	
	0.12 ... 0.37	0.32 ... 1.25	6	A	3RB31 23-4NB0	A	3RB31 23-4NE0	
	0.55 ... 1.5	1 ... 4	20	A	3RB31 23-4PB0	A	3RB31 23-4PE0	
	1.1 ... 5.5	3 ... 12	25	A	3RB31 23-4SB0	A	3RB31 23-4SE0	
	3 ... 11	6 ... 25	50	A	3RB31 23-4QB0	A	3RB31 23-4QE0	
	5.5 ... 18.5	10 ... 40	50	A	3RB31 23-4VB0	A	3RB31 23-4VE0	

¹⁾ With the suitable terminal brackets (see "Accessories", page 5/106), these overload relays 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 for overload relay, type of coordination "2". For fuse values in connection with contactors see "Technical specifications" --> "Short-circuit protection with fuses for motor feeders", see note on Technical Information on page 5/1.

Overload Relays

SIRIUS 3RB3 Solid-State Overload Relays

Accessories

Overview

Overload relays for standard applications







The following optional accessories are available for the 3RB30/3RB31 solid-state overload relays:

- Terminal bracket for stand-alone installation with screw or spring-type terminals for every size
- Mechanical RESET (for all sizes)
- Cable release for resetting devices which are difficult to access (for all sizes)
- Sealable cover (for all sizes)


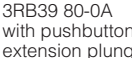
Selection and ordering data

Version	Size	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
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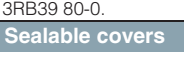
Terminal brackets for stand-alone installation

Image	Description	Size	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	Terminal brackets for overload relays with screw terminals For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail	S00	▶	Screw terminals 3RU29 16-3AA01 3RU29 26-3AA01		1	1 unit	101
		S0	▶			1	1 unit	101
								
3RU29 16-3AA01								
								
3RU29 26-3AA01								
	Terminal brackets for overload relays with spring-type terminals For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail	S00	B	Spring-type terminals 3RU29 16-3AC01 3RU29 26-3AC01		1	1 unit	101
		S0	B			1	1 unit	101
								
3RU29 16-3AC01								
								
3RU29 26-3AC01								


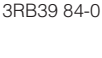
Mechanical RESET

Image	Description	Size	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	Resetting plungers, holders and formers	S00, S0	▶	3RB39 80-0A		1	1 unit	101
	Pushbuttons with extended stroke (12 mm), IP65, \varnothing 22 mm	S00, S0	B	3SB30 00-0EA11		1	1 unit	102
	Extension plungers For compensation of the distance between a pushbutton and the unlatching button of the relay	S00, S0	A	3SX1 335		1	1 unit	102
								
3RB39 80-0A with pushbutton and extension plunger								

Cable releases with holder for RESET

Image	Description	Size	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	For \varnothing 6.5 mm holes in the control panel; max. control panel thickness 8 mm • Length 400 mm • Length 600 mm	S00, S0	▶	3RB39 80-0B 3RB39 80-0C		1	1 unit	101
		S00, S0	▶			1	1 unit	101
								
3RB39 80-0.								

Sealable covers

Image	Description	Size	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
	For covering the setting knobs	S00, S0	A	3RB39 84-0		1	1 unit	101
								
3RB39 84-0								