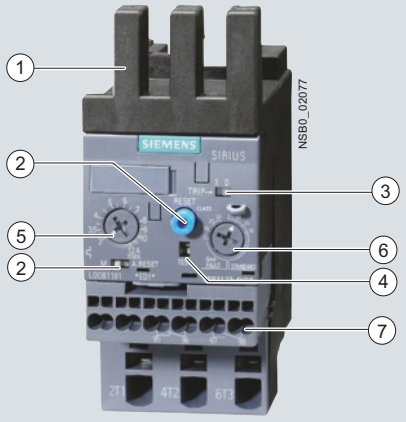
## Overview




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.

3RB31 23-4VE00 solid-state overload relays

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 set current $I_e$ 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 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.

### *"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 Chapter 9 "Appendix" --> "Standards and approvals" --> "Type overview of approved devices for explosion-protected areas (ATEX Explosion Protection)".

## Benefits

The most important features and benefits of the 3RB30/3RB31 solid-state overload relays are listed in the overview table (see "General data" on page 5/34).

## General data

### Application

#### *Industries*

The 3RB30/3RB31 solid-state 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 CLASS 30), minimize project completion times, inventories and power consumption, and optimize plant availability and maintenance management.

#### *Application*

The 3RB30/3RB31 solid-state overload relays have been designed for the protection of induction motors in sinusoidal 50/60 Hz voltage networks. The relays are not suitable for the protection of single-phase AC or DC loads.

The 3RU21 thermal overload relay or the 3RB22/3RB23 solid-state overload relay can be used for single-phase AC loads. For DC loads we recommend the 3RU21 thermal overload relay.

#### *Ambient conditions*

The devices are insensitive to external influences such as shocks, corrosive environments, ageing and temperature fluctuation.

For the temperature range from –25 to +60 °C, the 3RB30/3RB31 solid-state overload relays compensate the temperature according to IEC 60947-4-1.

### Accessories

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 all sizes
- Mechanical RESET for all sizes
- Cable release for resetting devices which are difficult to access for all sizes
- Sealable cover for all sizes

### More information

#### *Order No. scheme*

| Digit of the Order No. | 1. - 3. | 4. | 5. | 6. | 7. | | 8. | 9. | 10. | 11. |
|---|---|---|---|---|---|---|---|---|---|---|
| | □□□ | □ | □ | □ | □ | – | □ | □ | □ | □ |
| **Solid-state overload relays** | **3 R B** | | | | | | | | | |
| **SIRIUS 3rd generation** | | **3** | | | | | | | | |
| **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** | **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 under the Selection and ordering data section.*

| | | | | |
|---|---|---|---|---|
| **Type** | | | **3RB30 1.,<br>3RB31 1.** | **3RB30 2.,<br>3RB31 2.** |
| Size | | | S00 | S0 |
| Dimensions (W x H x D)<br>(overload relay with stand-alone installation support) | | | | |
| • Screw terminals | | mm | 45 x 89 x 80 | 45 x 97 x 94 |
| • Spring-type terminals | | mm | 45 x 102 x 80 | 45 x 116 x 95 |
| **General technical specifications** | | | | |
| **Trips in the event of** | | | Overload, phase failure, and phase unbalance<br>+ ground fault (for 3RB31 only) | |
| **Trip class** acc. to IEC 60947-4-1 | | CLASS | 3RB30: 10, 20;<br>3RB31: 5, 10, 20 and 30 adjustable | |
| **Phase failure sensitivity** | | | Yes | |
| **Overload warning** | | | No | |
| **Reset and recovery** | | | | |
| • Reset options after tripping | | | Manual, automatic and remote RESET (depending on the version) | |
| • Recovery time | | | | |
| - For automatic RESET | | min | Approx. 3 | |
| - For manual RESET | | min | Immediately | |
| - For remote RESET | | min | Immediately | |
| **Features** | | | | |
| • Display of operating state on device | | | Yes, by means of switch position indicator slide | |
| • TEST function | | | Yes, test of electronics by pressing the TEST button /<br>Test of auxiliary contacts and wiring of control circuit by actuating the switch position indicator slide /<br>Self-monitoring | |
| • RESET button | | | Yes | |
| • STOP button | | | No | |
| **Explosion protection – Safe operation of motors with "increased safety" type of protection** | | | | |
| EC type test certificate number acc. to directive 94/9/EC (ATEX) | | | PTB 09 ATEX 3001 Ex II (2) GD | |
| **Ambient temperatures** | | | | |
| • Storage/transport | | °C | -40 ... +80 | |
| • Operation | | °C | -25 ... +60 | |
| • Temperature compensation | | °C | +60 | |
| • Permissible rated current at | | | | |
| - Temperature inside control cabinet 60 °C | | % | 100 | 100[1] |
| - Temperature inside control cabinet 70 °C | | % | On request | |
| **Repeat terminals** | | | | |
| • Coil repeat terminals | | | Yes | Not required |
| • Auxiliary contact repeat terminal | | | Yes | Not required |
| **Degree of protection** acc. to IEC 60529 | | | IP20 | |
| **Touch protection** acc. to IEC 61140 | | | Finger-safe | |
| **Shock resistance with sine** acc. to IEC 60068-2-27 | | *g*/ms | 15/11[2] | |
| **Electromagnetic compatibility (EMC) – Interference immunity** | | | | |
| • Conductor-related interference | | | | |
| - Burst acc. to IEC 61000-4-4<br>(corresponds to degree of severity 3) | | kV | 2 (power ports), 1 (signal ports) | |
| - Surge acc. to IEC 61000-4-5<br>(corresponds to degree of severity 3) | | kV | 2 (line to earth), 1 (line to line) | |
| • Electrostatic discharge acc. to IEC 61000-4-2<br>(corresponds to degree of severity 3) | | kV | 8 (air discharge), 6 (contact discharge) | |
| • Field-related interference acc. to IEC 61000-4-3<br>(corresponds to degree of severity 3) | | V/m | 10 | |
| **Electromagnetic compatibility (EMC) – Emitted interference** | | | Degree of severity B according to EN 55011 (CISPR 11) and EN 55022 (CISPR 22) | |
| **Resistance to extreme climates – Air humidity** | | % | 95 | |
| **Dimensions** | | | For "Dimensional drawings" see the note on Technical Information on page 5/1. | |
| **Installation altitude above sea level** | | m | Up to 2000 | |
| **Mounting position** | | | Any | |
| **Type of mounting** | | | Direct mounting/stand-alone installation with terminal bracket | |

1) Permissible rated current for heavy starting
Size S0 at 10 to 40 A:
- CLASS 20, $I_{e\ max}$ = 32 A,
- CLASS 30, $I_{e\ max}$ = 25 A.

2) Signaling contact 97/98 in position "tripped": 4/11 *g*/ms.

## General data

| Type | | 3RB30 1., 3RB31 1. | 3RB30 2., 3RB31 2. |
|---|---|---|---|
| Size | | S00 | S0 |
| Width | | 45 mm | 45 mm |
| **Main circuit** | | | |
| **Rated insulation voltage $U_i$** (pollution degree 3) | V | 690 | |
| **Rated impulse withstand voltage $U_{imp}$** | kV | 6 | |
| **Rated operational voltage $U_e$** | V | 690 | |
| **Type of current** | | | |
| • Direct current | | No | |
| • Alternating current | | Yes, 50/60 Hz ±5 % | |
| **Current setting** | A<br><br>A | 0.1 ... 0.4<br>to<br>4 ... 16 | 0.1 ... 0.4<br>to<br>10 ... 40 |
| **Power loss per unit (max.)** | W | 0.05 ... 0.2 | |
| **Short-circuit protection** | | | |
| • With fuse without contactor | | See "Selection and ordering data" | |
| • With fuse and contactor | | See "Technical specifications" --> "Short-circuit protection with fuses/motor starter protectors for motor starters", see note on Technical Information on page 5/1. | |
| **Protective separation between main and auxiliary conducting path** acc. to IEC 60947-1 (pollution degree 2) | V | 690[1] | |
| **Conductor cross-sections of main circuit** | | | |
| **Connection type screw terminals** | | **Screw terminals** | |
| **Terminal screw** | | M3, Pozidriv size 2 | M4, Pozidriv size 2 |
| **Operating devices** | mm | ⌀ 5 ... 6 | ⌀ 5 ... 6 |
| **Prescribed tightening torque** | Nm | 0.8 ... 1.2 | 2 ... 2.5 |
| **Conductor cross-sections (min./max.),** 1 or 2 conductors can be connected | | | |
| • Solid | $mm^2$ | 2 x (0.5 ... 1.5)[2],<br>2 x (0.75 ... 2.5)[2],<br>2 x (0.5 ... 4)[2] | 2 x (1 ... 2.5)[2],<br>2 x (2.5 ... 10)[2] |
| • Finely stranded with end sleeves (DIN 46228 T1) | $mm^2$ | 2 x (0.5 ... 1.5)[2],<br>2 x (0.75 ... 2.5)[2] | 2 x (1 ... 2.5)[2],<br>2 x (2.5 ... 6)[2];<br>max. 1 x 10 |
| • AWG cables, solid or stranded | AWG | 2 x (20 ... 16)[2],<br>2 x (18 ... 14)[2],<br>2 x 12 | 2 x (16 ... 12)[2],<br>2 x (14 ... 8)[2] |
| **Connection type spring-type terminals** | | **Spring-type terminals** | |
| **Operating devices** | mm | 3.0 x 0.5 and 3.5 x 0.5 | |
| **Conductor cross-sections (min./max.)** | | | |
| • Solid | $mm^2$ | 1 x (0.5 ... 4) | 1 x (1 ... 10) |
| • Finely stranded without end sleeve | $mm^2$ | 1 x (0.5 ... 2.5) | 1 x (1 ... 6) |
| • Finely stranded with end sleeves (DIN 46228 T1) | $mm^2$ | 1 x (0.5 ... 2.5) | 1 x (1 ... 6) |
| • AWG cables, solid or stranded | AWG | 1 x (20 ... 12) | 1 x (18 ... 8) |

1) For grounded networks, otherwise 600 V.

2) If two different conductor cross-sections are connected to one clamping point, both cross-sections must lie in the range specified. If identical cross-sections are used, this restriction does not apply.

| Type | | 3RB30 1., 3RB31 1. | 3RB30 2., 3RB31 2. |
|---|---|---|---|
| Size | | S00 | S0 |
| Width | | 45 mm | 45 mm |
| **Auxiliary circuit** | | | |
| **Number of NO contacts** | | 1 | |
| **Number of NC contacts** | | 1 | |
| **Auxiliary contacts – Assignment** | | 1 NO for the signal "tripped",<br>1 NC for disconnecting the contactor | |
| **Rated insulation voltage $U_i$**<br>(pollution degree 3) | V | 300 | |
| **Rated impulse withstand voltage $U_{imp}$** | kV | 4 | |
| **Auxiliary contacts – Contact rating** | | | |
| • NC contact with alternating current AC-14/AC-15<br>Rated operational current $I_e$ at $U_e$: | | | |
| - 24 V | A | 4 | |
| - 120 V | A | 4 | |
| - 125 V | A | 4 | |
| - 250 V | A | 3 | |
| • NO contact with alternating current AC-14/AC-15:<br>Rated operational current $I_e$ at $U_e$: | | | |
| - 24 V | A | 4 | |
| - 120 V | A | 4 | |
| - 125 V | A | 4 | |
| - 250 V | A | 3 | |
| • NC, NO contact with direct current DC-13:<br>Rated operational current $I_e$ at $U_e$: | | | |
| - 24 V | A | 2 | |
| - 60 V | A | 0.55 | |
| - 110 V | A | 0.3 | |
| - 125 V | A | 0.3 | |
| - 250 V | A | 0.11 | |
| • Conventional thermal current $I_{th}$ | A | 5 | |
| • Contact reliability<br>(suitability for PLC control; 17 V, 5 mA) | | Yes | |
| **Short-circuit protection** | | | |
| • With fuse, gG operational class | A | 6 | |
| **Ground-fault protection (only 3RB31)** | | The information refers to sinusoidal residual currents at 50/60 Hz | |
| • Tripping value $I_\Delta$ | | > 0.75 × $I_{motor}$ | |
| • Operating range $I$ | | Lower current setting value < $I_{motor}$ < 3.5 × upper current setting value | |
| • Response time $t_{trip}$ (in steady-state condition) | s | < 1 | |
| **Integrated electrical remote RESET (only 3RB31)** | | | |
| Connecting terminals A3, A4 | | 24 V DC, max. 200 mA for approx. 20 ms, then < 10 mA | |
| **Protective separation between main and auxiliary conducting path**<br>acc. to IEC 60947-1 | V | 300 | |
| **CSA, UL, UR rated data** | | | |
| **Auxiliary circuit – Switching capacity** | | 3RB30: B600, R300; 3RB31: B300, R300 | |
| **Conductor cross-sections for auxiliary circuit** | | | |
| **Connection type screw terminals** | | **Screw terminals** | |
| **Terminal screw** | | M3, Pozidriv size 2 | |
| **Operating devices** | mm | ⌀ 5 ... 6 | |
| **Prescribed tightening torque** | Nm | 0.8 ... 1.2 | |
| **Conductor cross-sections (min./max.),**<br>1 or 2 conductors can be connected | | | |
| • Solid | $mm^2$ | 1 × (0.5 ... 4), 2 × (0.5 ... 2.5) | |
| • Finely stranded with end sleeve | $mm^2$ | 1 × (0.5 ... 2.5), 2 × (0.5 ... 1.5) | |
| • AWG cables, solid or stranded | AWG | 2 × (20 ... 14) | |
| **Connection type spring-type terminals** | | **Spring-type terminals** | |
| **Operating devices** | mm | 3.0 x 0.5 | |
| **Conductor cross-sections (min./max.),**<br>1 or 2 conductors can be connected | | | |
| • Solid | $mm^2$ | 2 × (0.25 ... 1.5) | |
| • Finely stranded without end sleeve | $mm^2$ | 2 × (0.25 ... 1.5) | |
| • Finely stranded with end sleeve | $mm^2$ | 2 × (0.25 ... 1.5) | |
| • AWG cables, solid or stranded | AWG | 2 × (24 ... 16) | |

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

### Selection and ordering data

***3RB30 solid-state overload relays for mounting onto contactor[1], 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 indicators
- TEST function and self-monitoring
- Sealable covers (optional accessory)


3RB30 16-1TB0


3RB30 16-1TE0


3RB30 26-1VB0


3RB30 26-1VE0

| Size of contactor[2] | Set current value of the inverse-time delayed overload release | Screw terminals | Weight approx. | Spring-type terminals | Weight approx. |
|---|---|---|---|---|---|
| | | Order No. | | Order No. | |
| | A | | kg | | kg |
| **Size S00[1]** | | | | | |
| S00 | 0.1 … 0.4 | **3RB30 16-1RB0** | 0.172 | **3RB30 16-1RE0** | 0.172 |
| | 0.32 … 1.25 | **3RB30 16-1NB0** | 0.172 | **3RB30 16-1NE0** | 0.172 |
| | 1 … 4 | **3RB30 16-1PB0** | 0.172 | **3RB30 16-1PE0** | 0.172 |
| | 3 … 12 | **3RB30 16-1SB0** | 0.172 | **3RB30 16-1SE0** | 0.172 |
| | 4 ... 16 | **3RB30 16-1TB0** | 0.172 | **3RB30 16-1TE0** | 0.172 |
| **Size S0[1]** | | | | | |
| S0 | 0.1 … 0.4 | **3RB30 26-1RB0** | 0.250 | **3RB30 26-1RE0** | 0.240 |
| | 0.32 … 1.25 | **3RB30 26-1NB0** | 0.250 | **3RB30 26-1NE0** | 0.240 |
| | 1 … 4 | **3RB30 26-1PB0** | 0.250 | **3RB30 26-1PE0** | 0.240 |
| | 3 … 12 | **3RB30 26-1SB0** | 0.250 | **3RB30 26-1SE0** | 0.240 |
| | 6 … 25 | **3RB30 26-1QB0** | 0.250 | **3RB30 26-1QE0** | 0.240 |
| | 10 ... 40 | **3RB30 26-1VB0** | 0.250 | **3RB30 26-1VE0** | 0.240 |

1) With the suitable terminal brackets (see "Accessories", page 5/55), these overload relays can also be installed as stand-alone units.

2) Observe maximum rated operational current of the devices.



Illustrations are approximate

### *3RB30 solid-state overload relays for mounting onto contactor[1], 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 indicators
- TEST function and self-monitoring
- Sealable covers (optional accessory)


3RB30 16-2TB0


3RB30 16-2TE0


3RB30 26-2VB0


3RB30 26-2VE0

| Size of contactor[2] | Set current value of the inverse-time delayed overload release | Screw terminals | Weight approx. | Spring-type terminals | Weight approx. |
|---|---|---|---|---|---|
| | | Order No. | | Order No. | |
| | A | | kg | | kg |
| **Size S00[1]** | | | | | |
| S00 | 0.1 … 0.4 | **3RB30 16-2RB0** | 0.172 | **3RB30 16-2RE0** | 0.172 |
| | 0.32 … 1.25 | **3RB30 16-2NB0** | 0.172 | **3RB30 16-2NE0** | 0.172 |
| | 1 … 4 | **3RB30 16-2PB0** | 0.172 | **3RB30 16-2PE0** | 0.172 |
| | 3 … 12 | **3RB30 16-2SB0** | 0.172 | **3RB30 16-2SE0** | 0.172 |
| | 4 ... 16 | **3RB30 16-2TB0** | 0.172 | **3RB30 16-2TE0** | 0.172 |
| **Size S0[1]** | | | | | |
| S0 | 0.1 … 0.4 | **3RB30 26-2RB0** | 0.200 | **3RB30 26-2RE0** | 0.250 |
| | 0.32 … 1.25 | **3RB30 26-2NB0** | 0.200 | **3RB30 26-2NE0** | 0.250 |
| | 1 … 4 | **3RB30 26-2PB0** | 0.200 | **3RB30 26-2PE0** | 0.250 |
| | 3 … 12 | **3RB30 26-2SB0** | 0.200 | **3RB30 26-2SE0** | 0.250 |
| | 6 … 25 | **3RB30 26-2QB0** | 0.200 | **3RB30 26-2QE0** | 0.250 |
| | 10 ... 40 | **3RB30 26-2VB0** | 0.200 | **3RB30 26-2VE0** | 0.250 |

[1] With the suitable terminal brackets (see "Accessories", page 5/55), these overload relays can also be installed as stand-alone units.

[2] Observe maximum rated operational current of the devices.

# SIRIUS 3RB3 Solid-State Overload Relays

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

### *3RB31 solid-state overload relays for mounting onto contactor[1], 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 (requires activation)
- Internal power supply
- Auxiliary contacts 1 NO + 1 NC
- Manual and automatic RESET
- Electrical remote RESET integrated
- Switch position indicators
- TEST function and self-monitoring
- Sealable covers (optional accessory)


3RB31 13-4TB0


3RB31 13-4TE0


3RB31 23-4VB0


3RB31 23-4VE0

| Size of contactor[2] | Set current value of the inverse-time delayed overload release | Screw terminals | Weight approx. | Spring-type terminals | Weight approx. |
|---|---|---|---|---|---|
| | | Order No. | | Order No. | |
| | A | | kg | | kg |
| **Size S00[1]** | | | | | |
| S00 | 0.1 … 0.4 | **3RB31 13-4RB0** | 0.175 | **3RB31 13-4RE0** | 0.175 |
| | 0.32 … 1.25 | **3RB31 13-4NB0** | 0.175 | **3RB31 13-4NE0** | 0.175 |
| | 1 … 4 | **3RB31 13-4PB0** | 0.175 | **3RB31 13-4PE0** | 0.175 |
| | 3 … 12 | **3RB31 13-4SB0** | 0.175 | **3RB31 13-4SE0** | 0.175 |
| | 4 ... 16 | **3RB31 13-4TB0** | 0.175 | **3RB31 13-4TE0** | 0.175 |
| **Size S0[1]** | | | | | |
| S0 | 0.1 … 0.4 | **3RB31 23-4RB0** | 0.200 | **3RB31 23-4RE0** | 0.250 |
| | 0.32 … 1.25 | **3RB31 23-4NB0** | 0.175 | **3RB31 23-4NE0** | 0.175 |
| | 1 … 4 | **3RB31 23-4PB0** | 0.200 | **3RB31 23-4PE0** | 0.250 |
| | 3 … 12 | **3RB31 23-4SB0** | 0.200 | **3RB31 23-4SE0** | 0.250 |
| | 6 … 25 | **3RB31 23-4QB0** | 0.200 | **3RB31 23-4QE0** | 0.250 |
| | 10 ... 40 | **3RB31 23-4VB0** | 0.200 | **3RB31 23-4VE0** | 0.250 |

1) With the suitable terminal brackets (see "Accessories", page 5/55), these overload relays can also be installed as stand-alone units.

2) Observe maximum rated operational current of the devices.



**Illustrations are approximate**

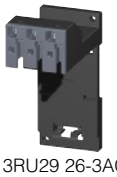
## Overview

*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 all sizes
- 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

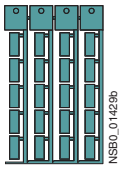
| | Version | Size | Order No. | Weight approx. kg |
|---|---|---|---|---|
| **Terminal brackets for stand-alone installation**[1] | | | | |
|  3RU29 16-3AA01 | Terminal brackets for overload relays with screw terminals | | **Screw terminals** | |
|  3RU29 26-3AA01 | For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail | S00<br>S0 | **3RU29 16-3AA01**<br>**3RU29 26-3AA01** | 0.040<br>0.050 |
|  3RU29 16-3AC01 | **Terminal brackets for overload relays with spring-type terminals** | | **Spring-type terminals** | |
|  3RU29 26-3AC01 | For separate mounting of the overload relays; screw and snap-on mounting onto TH 35 standard mounting rail | S00<br>S0 | **3RU29 16-3AC01**<br>**3RU29 26-3AC01** | 0.040<br>0.060 |
| **Mechanical RESET** | | | | |
|  3RB39 80-0A with pushbutton and extension plunger | **Resetting plungers, holders and formers** | S00, S0 | **3RB39 80-0A** | 0.038 |
| | **Pushbuttons with extended stroke** (12 mm), IP65, ⌀ 22 mm | S00, S0 | **3SB30 00-0EA11** | 0.020 |
| | **Extension plungers** For compensation of the distance between a pushbutton and the unlatching button of the relay | S00, S0 | **3SX1 335** | 0.004 |
| **Cable releases with holder for RESET** | | | | |
|  3RB39 80-0. | For ⌀ 6.5 mm holes in the control panel; max. control panel thickness 8 mm | | | |
| | • Length 400 mm | S00, S0 | **3RB39 80-0B** | 0.063 |
| | • Length 600 mm | S00, S0 | **3RB39 80-0C** | 0.073 |
| **Sealable covers** | | | | |
|  3RB39 84-0 | For covering the setting knobs | S00, S0 | **3RB39 84-0** | 0.001 |

[1] The accessories are identical to those of the 3RU21 thermal overload relays.

**Illustrations are approximate**

## Accessories

### *General accessories*

| | Version | Use | Order No. | PU (UNIT, SET, M) | PS* | Weight approx. |
|---|---|---|---|---|---|---|
| | | | | | | kg |
| **Tools for opening spring-type terminals** | | | | | | |
|  3RA29 08-1A | **Screwdrivers** for all SIRIUS devices with spring-type terminals<br>Length approx. 200 mm, 3.0 mm x 0.5 mm, titanium gray/black, partially insulated | Main and auxiliary circuit connection: 3RU2, 3RB3 | **Spring-type terminals**  <br>**3RA29 08-1A** | 1 | 1 unit | 0.045 |
| **Blank labels** | | | | | | |
|  3RT19 00-1SB20 | **Unit labeling plates**[1] for SIRIUS devices<br>20 mm x 7 mm, pastel turquoise | 3RU2, 3RB3 | **3RT19 00-1SB20** | 100 | 340 units | 0.200 |

[1] PC labeling system for individual inscription of unit labeling plates available from: murrplastik Systems, Inc. www.murrplastik.com .



* You can order this quantity or a multiple thereof.
**Illustrations are approximate**