SIEMENS

## Product data sheet 3RB3016-1SB0


OVERLOAD RELAY 3...12 A FOR MOTOR PROTECTION SIZE S00,
CLASS 10 CONTACTOR ASS. MAIN CIRCUIT: SCREW CONN. AUX.CIRCUIT: SCREW CONN. MANUAL-AUTOM.-RESET

| General technical data: | | |
|---|---|---|
| **product brand name** | | SIRIUS |
| **Product designation** | | solid-state overload relay |
| **Size of overload relay** | | S00 |
| **Number of poles / for main current circuit** | | 3 |
| **Product function / removable terminal for auxiliary and control circuit** | | Yes |
| **Product function** | | |
| • overload protection | | Yes |
| • phase disturbance recognition | | Yes |
| • short-circuit to earth recognition | | No |
| **Product component** | | |
| • auxiliary switch | | Yes |
| • trip indicator | | Yes |
| **Insulation voltage / with degree of pollution 3 / rated value** | V | 690 |
| **Impulse voltage resistance / rated value** | kV | 6 |
| **Protection class IP** | | |
| • of the terminal | | IP20 |
| • on the front | | IP20 |
| **Protection against electrical shock** | | finger-safe |

| | | |
|---|---|---|
| **Installation altitude / at a height over sea level / maximum** | m | 2,000 |
| **Resistance against vibration** | | 1-6 Hz, 15 mm; 6-500 Hz, 20 m/s²; 10 cycles |
| **Ambient temperature** | | |
| • during transport | °C | -40 … +80 |
| • during storage | °C | -40 … +80 |
| • during operating | °C | -25 … +60 |
| **Relative humidity** | | |
| • during operating phase | / % | 95 |
| **EMC immunity to interference / according to IEC 60947-1** | | corresponds to degree of severity 3 |
| **EMC emitted interference / according to IEC 60947-1** | | CISPR 11, environment B (residential area) |
| **Electrostatic discharge / according to IEC 61000-4-2** | | 6 kV contact discharge / 8 kV air discharge |
| **Field-bound parasitic coupling / according to IEC 61000-4-3** | | 10 V/m |
| **Conductor-bound parasitic coupling BURST / according to IEC 61000-4-4** | | 2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3 |
| **Conductor-bound parasitic coupling conductor-earth SURGE** | | 2 kV (line to earth) corresponds to degree of severity 3 |
| **Conductor-bound parasitic coupling conductor-conductor SURGE** | | 1 kV (line to line) corresponds to degree of severity 3 |
| **Type of protection** | | PTB 09 ATEX 3001 Ex II (2) G [Ex e] [Ex d] [Ex px] D [Ex t] [Ex p] |
| **Active power loss / total / typical** | W | 0.6 |
| **Size of the contactor / can be combined / company-specific** | | S00 |

## Main circuit:

| | | |
|---|---|---|
| **Operating current** | | |
| • at AC-3 / at 400 V / rated value | A | 12 |
| • of the auxiliary contacts | | |
| • at AC-15 | | |
| • at 24 V | A | 4 |
| • at 110 V | A | 4 |
| • at 120 V | A | 4 |
| • at 125 V | A | 4 |
| • at 230 V | A | 3 |
| • at DC-13 | | |
| • at 24 V | A | 2 |
| • at 60 V | A | 0.55 |
| • at 110 V | A | 0.3 |
| • at 125 V | A | 0.3 |
| • at 220 V | A | 0.11 |
| **Type of assignement** | | 2 |

## Control circuit/ Control:

| | | |
|---|---|---|
| **Type of voltage supply / via input/ output link master** | | No |
| **Voltage type / for auxiliary and control circuit** | | AC/DC |

## Auxiliary circuit:

| | | |
|---|---|---|
| **Number of NC contacts / for auxiliary contacts** | | 1 |
| **Number of NO contacts / for auxiliary contacts** | | 1 |
| **Number of changeover contacts / for auxiliary contacts** | | 0 |
| **Design of the fuse link / for short-circuit protection of the auxiliary switch / required** | | fuse gL/gG: 6 A |

## Protective and monitoring functions:

| | | |
|---|---|---|
| **Trip class** | | CLASS 10 |
| **Adjustable response current** | | |
| • of the current-dependent overload release | A | 3 ... 12 |

## Installation/ mounting/ dimensions:

| | | |
|---|---|---|
| **Mounting type** | | direct mounting |
| **mounting position** | | any |
| **Depth** | mm | 73 |
| **Height** | mm | 79 |
| **Width** | mm | 45 |
| **Arrangement of electrical connectors / for main current circuit** | | Top and bottom |

## Connections/ terminals:

| | | |
|---|---|---|
| **Design of the electrical connection** | | |
| • for main current circuit | | screw-type terminals |
| • for auxiliary and control current circuit | | screw-type terminals |
| **Type of the connectable conductor cross-section** | | |
| • for main contacts | | |
| • solid or multi-stranded | | 1x (0,5 ... 4 mm²), 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 4 mm²) |
| • finely stranded | | |
| • with conductor end processing | | 1x (0.5 ... 2.5 mm²), 2x (0.5 ... 2.5 mm²) |
| • for AWG conductors / for main contacts | | 1x (20 ... 12), 2x (20 ... 12) |
| • for auxiliary contacts | | |
| • solid or multi-stranded | | 1x (0,5 ... 4 mm²), 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²) |
| • finely stranded | | |
| • with conductor end processing | | 1x (0.5 ... 1.5 mm²), 2x (0.5 ... 1.5 mm²), 1x (0.5 ... 2.5 mm²) |
| • for AWG conductors / for auxiliary contacts | | 1x (20 ... 14), 2x (20 ... 14) |

## UL/CSA ratings:

| | | |
|---|---|---|
| **Contact rating designation / for auxiliary contacts / according to UL** | | B600 / R300 |

## Certificates/ approvals:

| General Product Approval | | | | EMC | For use in hazardous locations |
|---|---|---|---|---|---|
| CCC | CSA | EAC | UL | C-TICK | ATEX |

**Test Certificates**

| | |
|---|---|
| Special Test Certificate | Type Test Certificates/Test Report |

**Shipping Approval**

| | | | | |
|---|---|---|---|---|
| ABS | BUREAU VERITAS | GL | LRS | RINA |

**other**

| | |
|---|---|
| Declaration of Conformity | Environmental Confirmations |

## Further information:

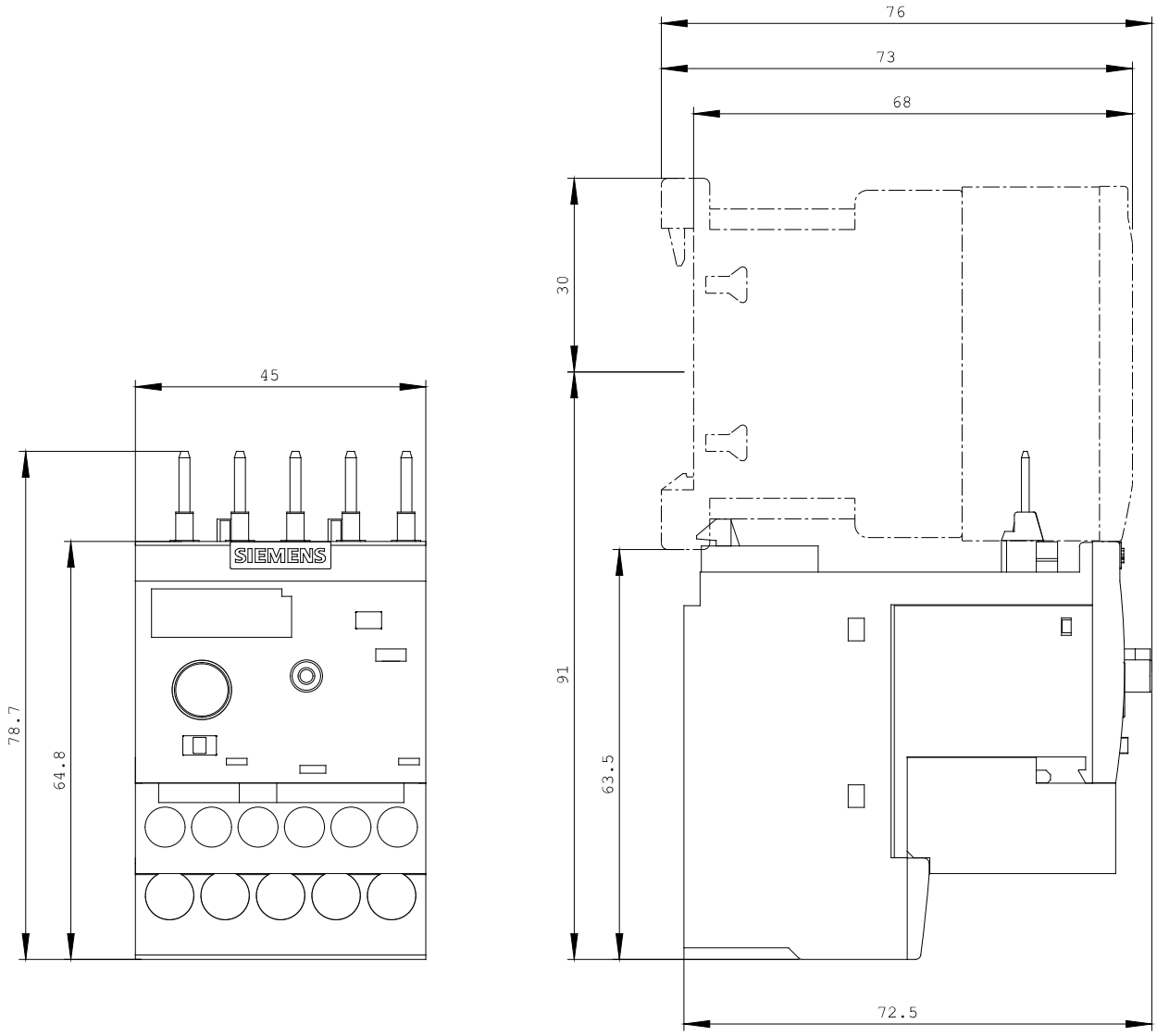
**Information- and Downloadcenter (Catalogs, Brochures,…)**
http://www.siemens.com/industrial-controls/catalogs

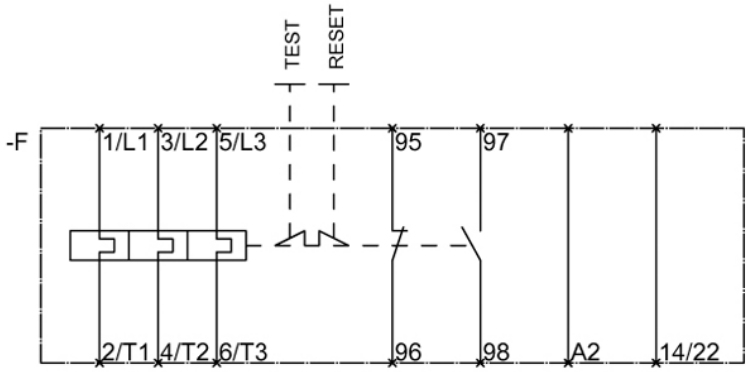
**Industry Mall (Online ordering system)**
http://www.siemens.com/industrymall

**Cax online generator**
http://www.siemens.com/cax

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
http://support.automation.siemens.com/WW/view/en/3RB3016-1SB0/all

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)**
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB3016-1SB0



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