

Product data sheet 3RB3016-1RE0

OVERLOAD RELAY 0.1...0.4 A FOR MOTOR PROTECTION SIZE S00, CLASS 10 CONTACTOR ASS. MAIN CIRCUIT: SPR.-LOAD.TERM.

| General technical data: | | |
|--|-----|---|
| Product brand name | | SIRIUS |
| Product designation | | solid-state overload relay |
| Protection class IP / frontal/front side | | IP20 |
| Insulation voltage / with degree of pollution 3 / rated value | V | 690 |
| Altitude of installation site / at a height over sea level / maximum | m | 2,000 |
| Ambient temperature | | |
| during storage | °C | -40 80 |
| during transport | °C | -40 80 |
| during the operating phase | °C | -25 60 |
| Relative humidity | | |
| during the 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) |
| 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 | | |
| according to IEC 61000-4-5 | | 2 kV (line to earth) corresponds to degree of severity 3 |
| Conductor-bound parasitic coupling conductor-conductor SURGE | | |
| according to IEC 61000-4-5 | | 1 kV (line to line) corresponds to degree of severity 3 |
| 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 |
| Resistance against shock | | 15g / 11 ms |
| Impulse voltage resistance / rated value | kV | 6 |
| Real loss power / total / typical | W | 0.05 |

| F |
|-------------------------------|
| F |
| S00 |
| S00 |
| PTB 09 ATEX 3001 Ex II (2) GD |
| 2 |
| CLASS 10 |
| |

| Main circuit: | | |
|--|----|-----------|
| Number of poles / for main current circuit | | 3 |
| Operating voltage / at 3 AC / rated value | | |
| • maximum | V | 690 |
| Operating current / at AC-3 / at 400 V | | |
| • rated value | Α | 0.4 |
| Adjustable response current | | |
| of the current-dependent overload release | Α | 0.1 0.4 |
| Service power / for three-phase servomotors / at 400 V / at 50 Hz $$ | | |
| • for AC three-phase | kW | 0.04 0.09 |
| Operating current / of the fuse link | | |
| rated value | Α | 4 |

| Auxiliary circuit: | | |
|--|---|--|
| Contact reliability / of the auxiliary contacts | | acceptability for PLC control (17 V, 5 mA) |
| Number of NC contacts / for auxiliary contact | | 1 |
| Number of NO contacts / for auxiliary contact | | 1 |
| Number of change-over switches / for auxiliary contact | | 0 |
| Operating current / of the auxiliary contacts | | |
| • at AC-15 | | |
| • at 24 V | Α | 4 |
| • at 110 V | Α | 4 |
| • at 120 V | Α | 4 |
| • at 125 V | Α | 4 |
| • at 230 V | Α | 3 |
| • at DC-13 | | |
| • at 24 V | Α | 2 |
| • at 60 V | Α | 1 |
| • at 110 V | Α | 0.3 |
| • at 125 V | Α | 0.3 |
| • at 220 V | Α | 1 |

| Short-circuit: | | |
|---|----|-------------------------|
| Design of the fuse link / for short-circuit protection of the auxiliary switch / required | | fuse gL/gG: 6 A |
| Installation/mounting/dimensions: | | |
| built in orientation | | any |
| Type of fixing/fixation | | direct mounting |
| Width | mm | 45 |
| Height | mm | 75.9 |
| Depth | mm | 72.5 |
| distance, to be maintained, to the ranks assembly | | |
| • forwards | mm | 0 |
| • backwards | mm | 0 |
| • upwards | mm | 0 |
| • downwards | mm | 0 |
| • sidewards | mm | 0 |
| distance, to be maintained, to earthed part | | |
| • forwards | mm | 6 |
| • backwards | mm | 0 |
| • upwards | mm | 0 |
| • downwards | mm | 0 |
| • sidewards | mm | 6 |
| distance, to be maintained, conductive elements | | |
| • forwards | mm | 6 |
| • backwards | mm | 0 |
| • upwards | mm | 0 |
| • downwards | mm | 0 |
| • sidewards | mm | 6 |
| Connections: | | |
| design of the electrical connection | | |
| for main current circuit | | spring-loaded terminals |
| for auxiliary and control current circuit | | spring-loaded terminals |
| Product function / removable terminal for auxiliary and control circuit | | Yes |
| Type of the connectable conductor cross-section | | |
| • for main contacts | | |
| • unifilar | | 1x (0.5 4 mm2) |

• stranded wire

• stranded wire

• with conductor end processing

1x (0.5 ... 4 mm2)

1x (0.5 ... 2.5 mm2)

| without conductor final cutting | 1x (0.5 2.5 mm2) |
|---|--------------------------------------|
| at AWG-conductors / for main contacts | 1x (20 12) |
| for auxiliary contact | |
| • solid | 1x (0.5 1.5 mm2), 2x (0.5 1.5 mm2) |
| • stranded wire | |
| with wire end processing | 1x (0.25 1.5 mm2), 2x (0.25 1.5 mm2) |
| without conductor final cutting | 1x (0.25 1.5 mm2), 2x (0.25 1.5 mm2) |
| for AWG conductors / for auxiliary contacts | 1x (24 16), 2x (24 16) |

| Certificates/approvals: | | |
|-----------------------------|-------|---|
| verification of suitability | UL/CS | A |
| • ATEX | Yes | |
| | | |

| Safety: | |
|-------------------------------------|-------------|
| Protection against electrical shock | finger-safe |

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Global Industry Mall (Online ordering system)

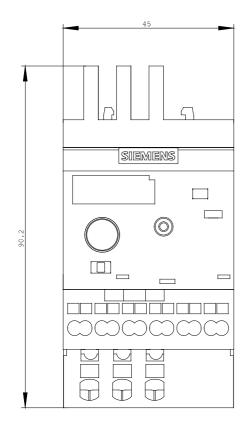
http://www.siemens.com/industrial-controls/mall

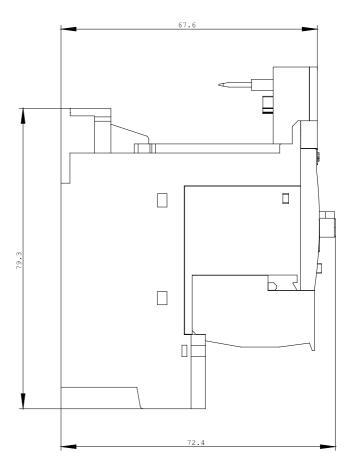
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

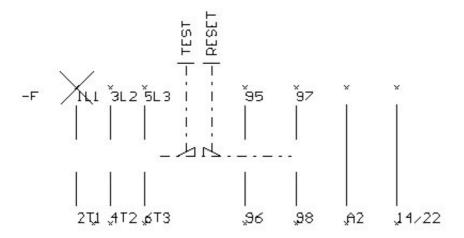
http://support.automation.siemens.com/WW/view/en/3RB3016-1RE0/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RB3016-1RE0}$







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