



OVERLOAD RELAY 20...80 A FOR MOTOR PROTECTION SIZE S2, CLASS 10E FOR MOUNTING ONTO CONTACTORS MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

Figure similar

| | | |
|---------------------|--|----------------------------|
| product brand name | | SIRIUS |
| Product designation | | solid-state overload relay |

General technical data:

| | | |
|--|-----|--|
| Active power loss total typical | W | 4.6 |
| Insulation voltage | V | 690 |
| <ul style="list-style-type: none"> with degree of pollution 3 Rated value | | |
| Shock resistance | | 15g / 11 ms |
| <ul style="list-style-type: none"> acc. to IEC 60068-2-27 | | |
| Vibration resistance | | 1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles |
| Surge voltage resistance Rated value | kV | 6 |
| Temperature compensation | °C | 60 ... -25 |
| Recovery time | | |
| <ul style="list-style-type: none"> after overload trip with automatic reset typical | min | 3 |
| <ul style="list-style-type: none"> after overload trip with remote-reset | min | 0 |
| <ul style="list-style-type: none"> after overload trip with manual reset | min | 0 |
| Size of contactor can be combined company-specific | | S2 |
| Type of assignment | | 2 |
| Protection class IP | | |
| <ul style="list-style-type: none"> on the front | | IP20 |
| <ul style="list-style-type: none"> of the terminal | | IP00 |
| Type of protection | | II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p] |
| Equipment marking | | |
| <ul style="list-style-type: none"> acc. to DIN EN 81346-2 | | F |

Main circuit:

| | | |
|---|--|---|
| Number of poles for main current circuit | | 3 |
|---|--|---|

| | | |
|--|----|-----------|
| Adjustable response value current of the current-dependent overload release | A | 20 ... 80 |
| Operating voltage | | |
| • Rated value | V | 690 |
| • at AC-3 Rated value maximum | V | 690 |
| Operating frequency Rated value | Hz | 50 ... 60 |
| Operating current | | |
| • at AC-3 | | |
| — at 400 V Rated value | A | 80 |

Auxiliary circuit:

| | | |
|---|---|-----------------------------|
| Number of NC contacts | | |
| • for auxiliary contacts | | 1 |
| — Note | | for contactor disconnection |
| Number of NO contacts | | |
| • for auxiliary contacts | | 1 |
| — Note | | for message "tripped" |
| Number of CO contacts | | |
| • for auxiliary contacts | | 0 |
| Design of the auxiliary switch | | integrated |
| Operating current 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 |
| Operating current of the auxiliary contacts 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 |

Protective and monitoring functions:

| | | |
|--|----|------------|
| Trip class | | CLASS 10E |
| Design of the overload circuit breaker | | electronic |
| Response time of the ground fault protection in settled state | ms | 1 000 |

UL/CSA ratings:

| | | |
|--|---|-------------|
| Full-load current (FLA) for three-phase AC motor | | |
| • at 480 V Rated value | A | 80 |
| • at 600 V Rated value | A | 80 |
| Contact rating of the auxiliary contacts acc. to UL | | B600 / R300 |

Short-circuit:**Design of the fuse link**

- for short-circuit protection of the main circuit
 - required
- for short-circuit protection of the auxiliary switch required

Fuse gG: 250 A
fuse gG: 6 A

Installation/ mounting/ dimensions:

| | | |
|--|----|--|
| mounting position | | any |
| Mounting type | | direct mounting |
| Height | mm | 99 |
| Width | mm | 55 |
| Depth | mm | 104 |
| Required spacing | | |
| <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side | mm | 0 0 0 10 0 10 0 10 10 10 10 0 10 10 10 |

Connections/ Terminals:

| | | |
|---|--|--|
| Type of electrical connection | | |
| <ul style="list-style-type: none"> • for main current circuit • for auxiliary and control current circuit | | screw-type terminals screw-type terminals |
| Arrangement of electrical connectors for main current circuit | | Top and bottom |
| Product function | | |
| <ul style="list-style-type: none"> • removable terminal for auxiliary and control circuit | | Yes |
| Type of connectable conductor cross-section | | |

| | | |
|--|-----|--|
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • for AWG conductors for main contacts • for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing • for AWG conductors for auxiliary contacts | | 1x (1 ... 50 mm ²), 2x (1 ... 35 mm ²) 1x (1 ... 35 mm ²), 2x (1 ... 25 mm ²) 2x (18 ... 2), 1x (18 ... 1) |
| Tightening torque | | |
| <ul style="list-style-type: none"> • for main contacts with screw-type terminals | N·m | 3 ... 4.5 |
| Design of screwdriver shaft | | Diameter 5 to 6 mm |
| Design of the thread of the connection screw | | |
| <ul style="list-style-type: none"> • for main contacts • of the auxiliary and control contacts | | M6 M3 |

Safety related data:

| | | |
|---|---|--|
| Proportion of dangerous failures | | |
| <ul style="list-style-type: none"> • with low demand rate acc. to SN 31920 | % | 35 |
| Protection against electrical shock | | finger-safe when touched vertically from front acc. to IEC 60529 |

Mechanical data:

| | | |
|-------------------------------|--|----|
| Size of overload relay | | S2 |
|-------------------------------|--|----|

Communication/ Protocol:

| | | |
|--|--|----|
| Protocol is supported | | |
| <ul style="list-style-type: none"> • IO-Link protocol | | No |
| Type of voltage supply via input/output link master | | No |

Ambient conditions:

| | | |
|--|----|---|
| Installation altitude at height above sea level maximum | m | 2 000 |
| Ambient temperature | | |
| <ul style="list-style-type: none"> • during operation • during storage • during transport | °C | -25 ... +60 -40 ... +80 -40 ... +80 |
| Relative humidity during operation | % | 0 ... 95 |

Electromagnetic compatibility:




| | | |
|--|--|--|
| EMC emitted interference | | |
| <ul style="list-style-type: none"> • acc. to IEC 60947-1 | | CISPR 11, environment B (residential area) |
| EMI immunity acc. to IEC 60947-1 | | corresponds to degree of severity 3 |
| Conducted interference due to burst acc. to IEC 61000-4-4 | | 2 kV (power ports), 1 kV (signal ports) |
| Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5 | | 2 kV (line to ground) |

| | | |
|---|--|---|
| Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5 | | 1 kV (line to line) |
| Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6 | | 10 V in frequency range 0.15 to 80 MHz, modulation 80 % AM with 1 kHz |
| Field-bound parasitic coupling acc. to IEC 61000-4-3 | | 10 V/m |
| Electrostatic discharge acc. to IEC 61000-4-2 | | 6 kV contact discharge / 8 kV air discharge |

Display:

| | | |
|--|--|--------------|
| Display version | | |
| <ul style="list-style-type: none"> • for switching status | | Slide switch |

Certificates/ approvals:

| General Product Approval | For use in hazardous locations | Test Certificates | other | | |
|---|---|---|--|------------------------------|---|
|  |  |  | Type Test Certificates/Test Report | Confirmation | 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

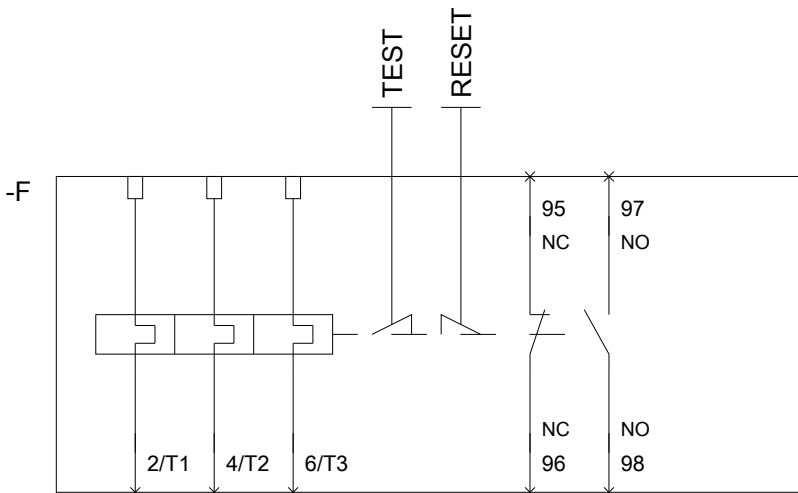
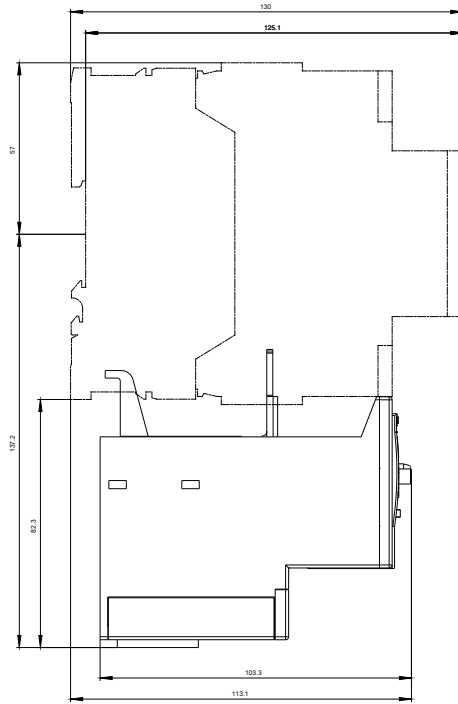
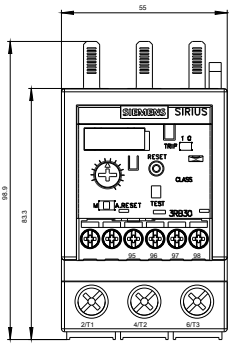
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB30361WB0>

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

<http://support.automation.siemens.com/WW/view/en/3RB30361WB0/all>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RB30361WB0&lang=en



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