

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: | |
| Size of overload relay | S2 |
| Size of contactor can be combined company-specific | S2 |
| Power loss [W] total typical | 4.6 W |
| Insulation voltage with degree of pollution 3 rated value | 690 V |
| Surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for safe isolation | |
| <ul style="list-style-type: none"> in networks with grounded star point between auxiliary and auxiliary circuit | 300 V |
| <ul style="list-style-type: none"> in networks with grounded star point between auxiliary and auxiliary circuit | 300 V |
| <ul style="list-style-type: none"> in networks with grounded star point between main and auxiliary circuit | 600 V |
| <ul style="list-style-type: none"> in networks with grounded star point between main and auxiliary circuit | 690 V |
| Protection class IP | |
| <ul style="list-style-type: none"> on the front | IP20 |

| | |
|--|--|
| • of the terminal | IP00 |
| Shock resistance | |
| • acc. to IEC 60068-2-27 | 15g / 11 ms |
| Vibration resistance | 1-6 Hz, 15 mm; 6-500 Hz, 20 m/s ² ; 10 cycles |
| Thermal current | 80 A |
| Recovery time | |
| • after overload trip with automatic reset typical | 3 min |
| • after overload trip with remote-reset | 0 min |
| • after overload trip with manual reset | 0 min |
| Type of protection | II (2) G [Ex e] [Ex d] [Ex px] II (2) D [Ex t] [Ex p] |
| Certificate of suitability relating to ATEX | PTB 09 ATEX 3001 |
| Protection against electrical shock | finger-safe when touched vertically from front acc. to IEC 60529 |
| Equipment marking acc. to DIN EN 81346-2 | F |

Ambient conditions:

| | |
|--|----------------|
| Installation altitude at height above sea level maximum | 2 000 m |
| Ambient temperature | |
| • during operation | -25 ... +60 °C |
| • during storage | -40 ... +80 °C |
| • during transport | -40 ... +80 °C |
| Temperature compensation | 60 ... -25 °C |
| Relative humidity during operation | 10 ... 95 % |

Main circuit:

| | |
|---|--------------|
| Number of poles for main current circuit | 3 |
| Adjustable pick-up value current of the current-dependent overload release | 20 ... 80 A |
| Operating voltage | |
| • rated value | 690 V |
| • at AC-3 rated value maximum | 690 V |
| Operating frequency rated value | 50 ... 60 Hz |
| Operating current rated value | 80 A |

Auxiliary circuit:

| | |
|---|-----------------------------|
| Design of the auxiliary switch | integrated |
| 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 |
| Operating current of auxiliary contacts at AC-15 | |

| | |
|---|---|
| <ul style="list-style-type: none"> • at 24 V • at 110 V • at 120 V • at 125 V • at 230 V | 4 A 4 A 4 A 4 A 3 A |
| Operating current of auxiliary contacts at DC-13 | |
| <ul style="list-style-type: none"> • at 24 V • at 60 V • at 110 V • at 125 V • at 220 V | 2 A 0.55 A 0.3 A 0.3 A 0.11 A |

Protective and monitoring functions:

| | |
|---------------------------------------|------------|
| Trip class | CLASS 10E |
| Design of the overload release | electronic |

UL/CSA ratings:

| | |
|--|--------------|
| Full-load current (FLA) for three-phase AC motor | |
| <ul style="list-style-type: none"> • at 480 V rated value • at 600 V rated value | 80 A 80 A |
| Contact rating of auxiliary contacts according to UL | B600 / R300 |

Short-circuit protection

| | |
|---|--------------|
| Design of the fuse link | fuse gG: 6 A |
| <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required | |

Installation/ mounting/ dimensions:

| | |
|--|---|
| Mounting position | any |
| Mounting type | direct mounting |
| Height | 99 mm |
| Width | 55 mm |
| Depth | 104 mm |
| 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 | 0 mm 0 mm 0 mm 10 mm 0 mm 10 mm 0 mm 10 mm |

| | |
|------------------|-------|
| — at the side | 10 mm |
| — downwards | 10 mm |
| • for live parts | |
| — forwards | 10 mm |
| — Backwards | 0 mm |
| — upwards | 10 mm |
| — downwards | 10 mm |
| — at the side | 10 mm |

Connections/ Terminals:

| | |
|--|--|
| Product function | |
| • removable terminal for auxiliary and control circuit | Yes |
| Type of electrical connection | |
| • for main current circuit | screw-type terminals |
| • for auxiliary and control current circuit | screw-type terminals |
| Arrangement of electrical connectors for main current circuit | Top and bottom |
| Type of connectable conductor cross-sections | |
| • for main contacts | |
| — single or multi-stranded | 1x (1 ... 50 mm ²), 2x (1 ... 35 mm ²) |
| — finely stranded with core end processing | 1x (1 ... 35 mm ²), 2x (1 ... 25 mm ²) |
| • at AWG conductors for main contacts | 2x (18 ... 2), 1x (18 ... 1) |
| Type of connectable conductor cross-sections | |
| • for auxiliary contacts | |
| — single or multi-stranded | 1x (0,5 ... 4 mm ²), 2x (0,5 ... 2,5 mm ²) |
| — finely stranded with core end processing | 1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²) |
| • at AWG conductors for auxiliary contacts | 1x (20 ... 14), 2x (20 ... 14) |
| Tightening torque | |
| • for main contacts with screw-type terminals | 3 ... 4.5 N·m |
| • for auxiliary contacts with screw-type terminals | 0.8 ... 1.2 N·m |
| Design of screwdriver shaft | Diameter 5 to 6 mm |
| Design of the thread of the connection screw | |
| • for main contacts | M6 |
| • of the auxiliary and control contacts | M3 |

Communication/ Protocol:

| | |
|--|----|
| Type of voltage supply via input/output link master | No |
|--|----|

Electromagnetic compatibility:

| | |
|--|---|
| Conducted interference due to burst acc. to IEC 61000-4-4 | 2 kV (power ports), 1 kV (signal ports) corresponds to degree of severity 3 |
| Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5 | 2 kV (line to earth) corresponds to degree of severity 3 |

| | |
|---|---|
| Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5 | 1 kV (line to line) corresponds to degree of severity 3 |
| 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

- for switching status

Slide switch

Certificates/approvals

| General Product Approval | For use in hazardous locations | Declaration of Conformity | Test Certificates |
|---|--|--|---|
|  CCC |  CSA |  EAC |  ATEX |
|  EG-Konf. | | | Typprüfbescheinigung/Werkszeugnis |

other

[Umweltbestätigung](#)

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RB30361WB0>

Cax online generator

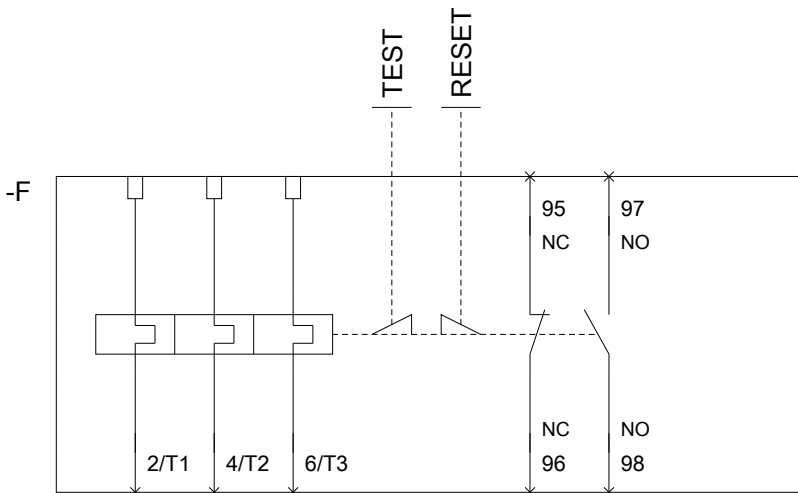
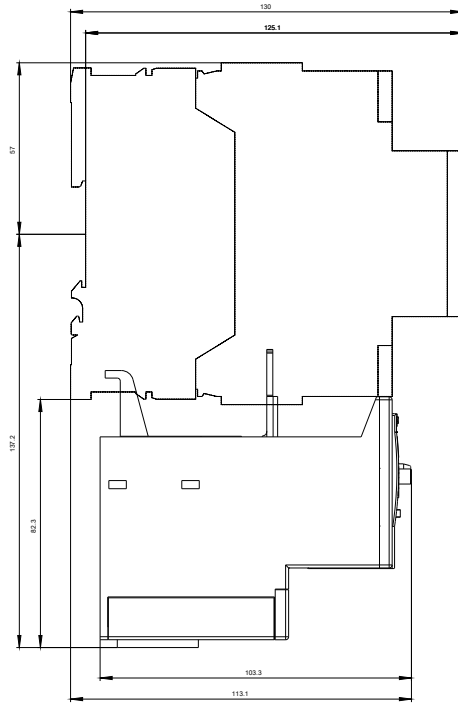
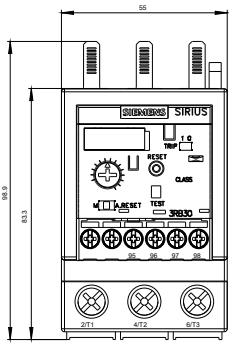
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RB30361WB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RB30361WB0>

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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