

OVERLOAD RELAY 40... 50 A FOR MOTOR PROTECTION SIZE S2, CLASS 10 FOR MOUNTING ONTO CONTACTORS MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET.



Figure similar

| | |
|--|-----------------------------|
| product brand name | SIRIUS |
| Product designation | 3RU2 thermal overload relay |
| General technical data: | |
| Size of overload relay | S2 |
| Size of contactor can be combined company-specific | S2 |
| Power loss [W] total typical | 11 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 | 415 V |
| <ul style="list-style-type: none"> in networks with grounded star point between auxiliary and auxiliary circuit | 415 V |
| <ul style="list-style-type: none"> in networks with grounded star point between main and auxiliary circuit | 690 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 | 8g / 11 ms |
| Recovery time | |
| • after overload trip with automatic reset typical | 10 min |
| • after overload trip with remote-reset | 10 min |
| • after overload trip with manual reset | 10 min |
| Type of protection | Ex e |
| Certificate of suitability relating to ATEX | DMT 98 ATEX G 001 |
| 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 | -40 ... +70 °C |
| • during storage | -55 ... +80 °C |
| • during transport | -55 ... +80 °C |
| Temperature compensation | -40 ... +60 °C |

| Main circuit: | |
|---|--------------|
| Number of poles for main current circuit | 3 |
| Adjustable pick-up value current of the current-dependent overload release | 40 ... 50 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 | 50 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 | |
| • at 24 V | 3 A |
| • at 110 V | 3 A |

| | |
|---|---|
| <ul style="list-style-type: none"> • at 120 V • at 125 V • at 230 V • at 400 V | 3 A 3 A 2 A 1 A |
| Operating current of auxiliary contacts at DC-13 <ul style="list-style-type: none"> • at 24 V • at 110 V • at 125 V • at 220 V | 2 A 0.22 A 0.22 A 0.11 A |
| Design of the miniature circuit breaker <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required | 6A (SCC less than equal to 0.5 kA; U less than equal to 260V) |

Protective and monitoring functions:

| | |
|---------------------------------------|----------|
| Trip class | CLASS 10 |
| Design of the overload release | thermal |

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 | 50 A 50 A |
| Contact rating of auxiliary contacts according to UL | B600 / R300 |

Short-circuit protection

| | |
|--|---------------------------|
| Design of the fuse link <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required | fuse gG: 6 A, quick: 10 A |
|--|---------------------------|

Installation/ mounting/ dimensions:

| | |
|--|-----------------|
| Mounting position | any |
| Mounting type | direct mounting |
| Height | 90 mm |
| Width | 55 mm |
| Depth | 105 mm |
| Required spacing <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards 10 mm — Backwards 0 mm — upwards 10 mm — downwards 10 mm — at the side 10 mm • for grounded parts <ul style="list-style-type: none"> — forwards 10 mm — Backwards 0 mm — upwards 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 | No |
| 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 | 2x (1 ... 35 mm ²), 1x (1 ... 50 mm ²) |
| — finely stranded with core end processing | 2x (1 ... 25 mm ²), 1x (1 ... 35 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 | 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) |
| • at AWG conductors for auxiliary contacts | 2x (20 ... 16), 2x (18 ... 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 | 5 to 6 mm diameter |
| Design of the thread of the connection screw | |
| • for main contacts | M6 |
| • of the auxiliary and control contacts | M3 |

Safety related data:

| | |
|---|------|
| T1 value for proof test interval or service life acc. to IEC 61508 | 20 y |
|---|------|

Display:

| | |
|------------------------|--------------|
| Display version | |
| • for switching status | Slide switch |

Certificates/approvals



Declaration of Conformity

Test Certificates

other



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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=3RU21364HB0>

Cax online generator

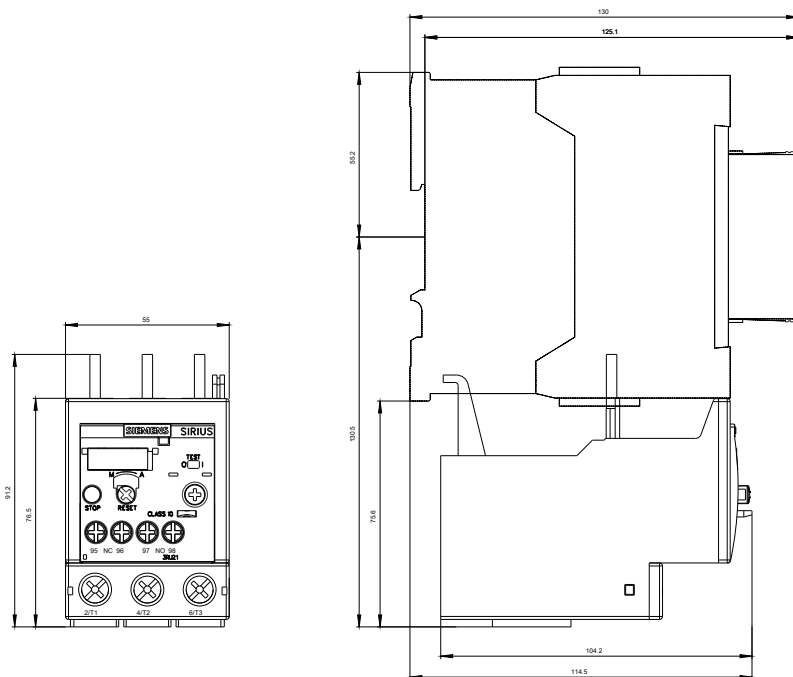
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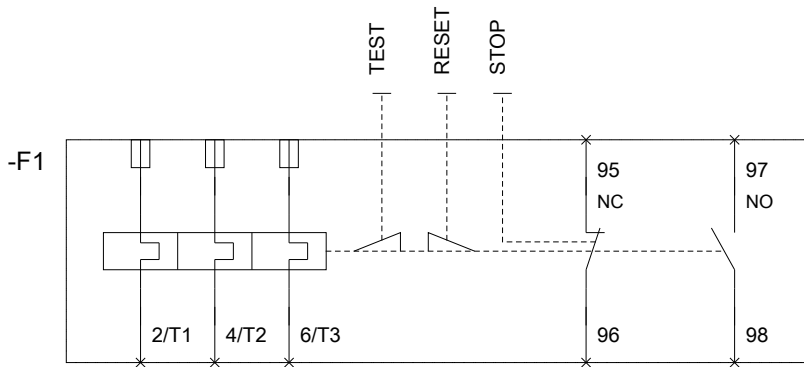
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RU21364HB0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU21364HB0&lang=en





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