



OVERLOAD RELAY 2.2...3.2 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

| | |
|---------------------|-----------------------------|
| product brand name | SIRIUS |
| Product designation | 3RU2 thermal overload relay |

General technical data:

| | |
|--|-------------------|
| Active power loss total typical | 5.2 W |
| Insulation voltage | 690 V |
| <ul style="list-style-type: none"> with degree of pollution 3 Rated value | |
| Surge voltage resistance Rated value | 6 kV |
| Temperature compensation | -40 ... +60 °C |
| Size of contactor can be combined company-specific | S00 |
| Type of assignment | 2 |
| Protection class IP | IP20 |
| <ul style="list-style-type: none"> on the front of the terminal | IP20 |
| Type of protection | DMT 98 ATEX G 001 |
| Equipment marking | F |
| <ul style="list-style-type: none"> acc. to DIN EN 81346-2 | |

Main circuit:

| | |
|--|---------------|
| Number of poles for main current circuit | 3 |
| Adjustable response value current of the current-dependent overload release | 2.2 ... 3.2 A |
| Operating voltage | 690 V |
| <ul style="list-style-type: none"> Rated value at AC-3 Rated value maximum | 690 V |
| Operating frequency Rated value | 50 ... 60 Hz |
| Operating current Rated value | 3.2 A |

| | |
|---|-------|
| Operating current | |
| <ul style="list-style-type: none"> • at AC-3 — at 400 V Rated value | 3.2 A |

Auxiliary circuit:

| | |
|---|--|
| Number of NC contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts — Note | 1 for contactor disconnection |
| Number of NO contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts — Note | 1 for message "Tripped" |
| Number of CO contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts | 0 |
| Design of the auxiliary switch | integrated |
| Operating current of the 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 • at 400 V | 3 A 3 A 3 A 3 A 2 A 1 A |
| Operating current of the 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 |

Protective and monitoring functions:

| | |
|---|----------|
| Trip class | CLASS 10 |
| Design of the overload circuit breaker | 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 | 3.2 A 3.2 A |
| Contact rating of the auxiliary contacts acc. to UL | B600 / R300 |

Installation/ mounting/ dimensions:

| | |
|--|-----------------|
| mounting position | any |
| Mounting type | direct mounting |
| Height | 76 mm |
| Width | 45 mm |
| Depth | 70 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • with side-by-side mounting | |

| | |
|----------------------|------|
| — forwards | 0 mm |
| — Backwards | 0 mm |
| — upwards | 6 mm |
| — downwards | 6 mm |
| — at the side | 6 mm |
| • for grounded parts | |
| — forwards | 0 mm |
| — Backwards | 0 mm |
| — upwards | 6 mm |
| — at the side | 6 mm |
| — downwards | 6 mm |
| • for live parts | |
| — forwards | 0 mm |
| — Backwards | 0 mm |
| — upwards | 6 mm |
| — downwards | 6 mm |
| — at the side | 6 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-section | |
| • for main contacts | |
| — single or multi-stranded | 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²), 2x 4 mm ² |
| — finely stranded with core end processing | 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) |
| • for AWG conductors for main contacts | 2x (20 ... 16), 2x (20 ... 18), 2x 12 |
| • 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) |
| • for AWG conductors for auxiliary contacts | 2x (20 ... 16), 2x (18 ... 14) |
| Design of screwdriver shaft | 5 to 6 mm diameter |
| Design of the thread of the connection screw | |
| • for main contacts | M3 |
| • of the auxiliary and control contacts | M3 |

Safety related data:

| | |
|---|--|
| Proportion of dangerous failures | |
|---|--|

| | |
|---|-------------|
| • with low demand rate acc. to SN 31920 | 50 % |
| • with high demand rate acc. to SN 31920 | 50 % |
| MTTF with high demand rate | 2 280 y |
| T1 value for proof test interval or service life acc. to IEC 61508 | 20 y |
| Protection against electrical shock | finger-safe |

| | |
|-------------------------------|-----|
| Mechanical data: | |
| Size of overload relay | S00 |

| | |
|--|----------------|
| 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 |
| Relative humidity during operation | 0 ... 90 % |

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

| | | |
|---------------------------------|---------------------------------------|----------------------------------|
| Certificates/ approvals: | | |
| General Product Approval | For use in hazardous locations | Declaration of Conformity |



| | |
|--------------------------|--------------------------|
| Test Certificates | Shipping Approval |
|--------------------------|--------------------------|

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



| | |
|--------------------------|--------------|
| Shipping Approval | other |
|--------------------------|--------------|



[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

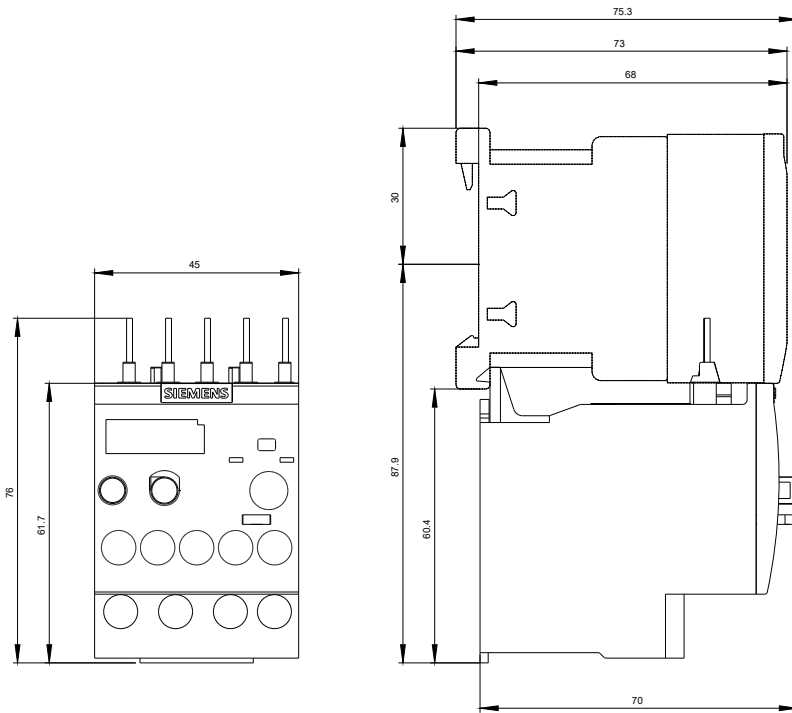
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RU21161DB0>

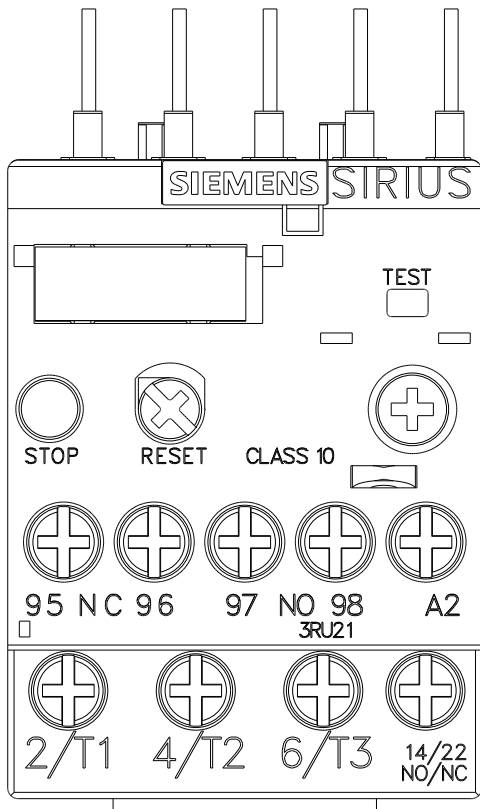
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RU21161DB0>

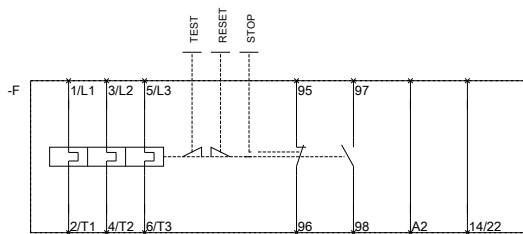
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RU21161DB0&lang=en





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