

Overload relay 20...25 A Thermal For motor protection Size S0,
Class 10 Contactor mounting Main circuit: Screw Auxiliary circuit:
Screw Manual-Automatic-Reset



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

| General technical data | |
|--|-------|
| Size of overload relay | S0 |
| Size of contactor can be combined company-specific | S0 |
| Power loss [W] for rated value of the current | |
| • at AC in hot operating state | 8.1 W |
| • at AC in hot operating state per pole | 2.7 W |
| Insulation voltage with degree of pollution 3 at AC rated value | 690 V |
| Surge voltage resistance rated value | 6 kV |
| maximum permissible voltage for safe isolation | |
| • in networks with grounded star point between auxiliary and auxiliary circuit | 440 V |
| • in networks with grounded star point between auxiliary and auxiliary circuit | 440 V |
| • in networks with grounded star point between main and auxiliary circuit | 440 V |

| | |
|---|-------------------|
| <ul style="list-style-type: none"> • in networks with grounded star point between main and auxiliary circuit | 440 V |
| <ul style="list-style-type: none"> • protection class IP on the front | IP20 |
| <ul style="list-style-type: none"> • Protection class IP of the terminal | IP20 |
| Shock resistance | |
| <ul style="list-style-type: none"> • acc. to IEC 60068-2-27 | 8g / 11 ms |
| Type of protection according to ATEX directive 2014/34/EU | Ex II (2) GD |
| Certificate of suitability according to ATEX directive 2014/34/EU | DMT 98 ATEX G 001 |
| Reference code acc. to DIN EN 81346-2 | F |

Ambient conditions

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|--|----------------|
| Installation altitude at height above sea level | |
| <ul style="list-style-type: none"> • maximum | 2 000 m |
| Ambient temperature | |
| <ul style="list-style-type: none"> • during operation | -40 ... +70 °C |
| <ul style="list-style-type: none"> • during storage | -55 ... +80 °C |
| <ul style="list-style-type: none"> • during transport | -55 ... +80 °C |
| Temperature compensation | -40 ... +60 °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 ... 25 A |
| Operating voltage | |
| <ul style="list-style-type: none"> • rated value | 690 V |
| <ul style="list-style-type: none"> • at AC-3 rated value maximum | 690 V |
| Operating frequency rated value | 50 ... 60 Hz |
| Operating current rated value | 25 A |
| Operating power at AC-3 | |
| <ul style="list-style-type: none"> • at 400 V rated value | 11 kW |
| <ul style="list-style-type: none"> • at 500 V rated value | 15 kW |
| <ul style="list-style-type: none"> • at 690 V rated value | 22 kW |

Auxiliary circuit

| | |
|--|-----------------------------|
| Design of the auxiliary switch | integrated |
| Number of NC contacts for auxiliary contacts | 1 |
| <ul style="list-style-type: none"> • Note | for contactor disconnection |
| Number of NO contacts for auxiliary contacts | 1 |
| <ul style="list-style-type: none"> • Note | for message "Tripped" |
| Number of CO contacts | |
| <ul style="list-style-type: none"> • for auxiliary contacts | 0 |

| | |
|---|-------------|
| • operating current of auxiliary contacts at AC-15 at 24 V | 3 A |
| • Operating current of auxiliary contacts at AC-15 at 110 V | 3 A |
| • Operating current of auxiliary contacts at AC-15 at 120 V | 3 A |
| • Operating current of auxiliary contacts at AC-15 at 125 V | 3 A |
| • Operating current of auxiliary contacts at AC-15 at 230 V | 2 A |
| • operating current of auxiliary contacts at AC-15 at 400 V | 1 A |
| • operating current of auxiliary contacts at DC-13 at 24 V | 2 A |
| • Operating current of auxiliary contacts at DC-13 at 60 V | 0.3 A |
| • Operating current of auxiliary contacts at DC-13 at 110 V | 0.22 A |
| • operating current of auxiliary contacts at DC-13 at 125 V | 0.22 A |
| • Operating current of auxiliary contacts at DC-13 at 220 V | 0.11 A |
| Contact rating of auxiliary contacts according to UL | B600 / R300 |

| 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 | |
| • at 480 V rated value | 25 A |
| • at 600 V rated value | 25 A |

| Short-circuit protection | |
|---|---------------------------|
| Design of the fuse link | |
| • for short-circuit protection of the auxiliary switch required | fuse gG: 6 A, quick: 10 A |

| Installation/ mounting/ dimensions | |
|------------------------------------|---------------------|
| • mounting position | any |
| Mounting type | Contacteur mounting |
| Height | 85 mm |
| Width | 45 mm |
| Depth | 85 mm |

| Connections/ Terminals | |
|-------------------------|--|
| Product function | |

| | |
|--|---|
| <ul style="list-style-type: none"> removable terminal for auxiliary and control circuit | No |
| <ul style="list-style-type: none"> Type of electrical connection for main current circuit | screw-type terminals |
| <ul style="list-style-type: none"> Type of electrical connection 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 | |
| <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 at AWG conductors for main contacts | 2x (1 ... 2,5 mm ²), 2x (2,5 ... 10 mm ²) 2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), 1x 10 mm ² 2x (16 ... 12), 2x (14 ... 8) |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> for auxiliary contacts <ul style="list-style-type: none"> — single or multi-stranded — finely stranded with core end processing at AWG conductors for auxiliary contacts | 2x (0,5 ... 1,5 mm ²), 2x (0,75 ... 2,5 mm ²) 2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²) 2x (20 ... 16), 2x (18 ... 14) |
| Tightening torque | |
| <ul style="list-style-type: none"> for main contacts with screw-type terminals for auxiliary contacts with screw-type terminals | 2 ... 2.5 N·m 0.8 ... 1.2 N·m |
| Design of screwdriver shaft | Diameter 5 ... 6 mm |
| Size of the screwdriver tip | Pozidriv PZ 2 |
| Design of the thread of the connection screw | |
| <ul style="list-style-type: none"> for main contacts of the auxiliary and control contacts | M4 M3 |

Safety related data

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|---|---------|
| Failure rate [FIT] | |
| <ul style="list-style-type: none"> with low demand rate acc. to SN 31920 | 50 FIT |
| MTTF with high demand rate | 2 280 y |
| T1 value for proof test interval or service life acc. to IEC 61508 | 20 y |

Display

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

Certificates/ approvals

| | |
|--------------------------|--------------------------------|
| General Product Approval | For use in hazardous locations |
|--------------------------|--------------------------------|



CCC



CSA



UL



ATEX



IECEX

| | | |
|---------------------------|-------------------|-------------------|
| Declaration of Conformity | Test Certificates | Marine / Shipping |
|---------------------------|-------------------|-------------------|



EG-Konf.

[Miscellaneous](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



ABS



BUREAU VERITAS

| | |
|-------------------|-------|
| Marine / Shipping | other |
|-------------------|-------|



LRS



PRS



RINA



RMRS



DNVGL.COM/AF

[Confirmation](#)

| |
|---------|
| Railway |
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[Vibration and Shock](#)

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| Further information |
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Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2126-4DB0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4DB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4DB0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4DB0&lang=en

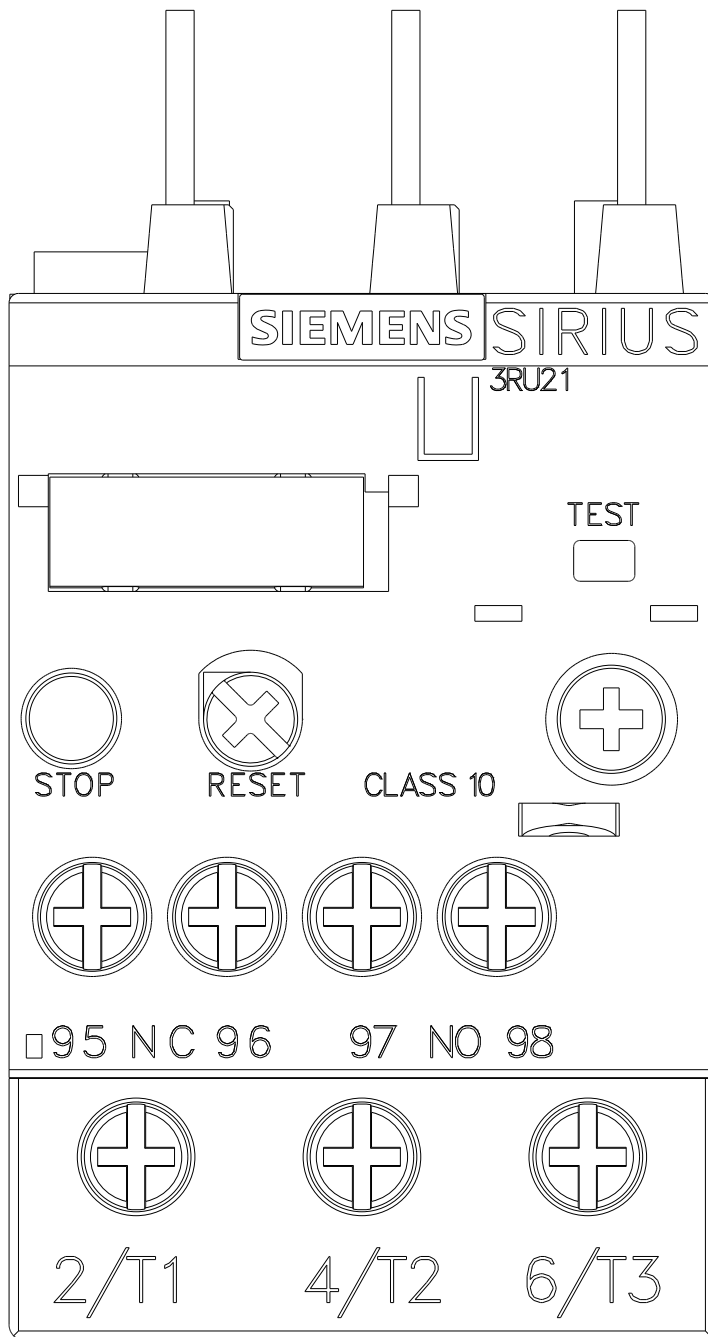
Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4DB0/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4DB0&objecttype=14&gridview=view1>







last modified:

08/19/2020