## **SIEMENS**

Data sheet 3RU2126-1DB0



Overload relay 2.2...3.2 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             | 5.7 W                  |
| • per pole   | 1.9 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<br>networks with grounded star point |                        |
| <ul> <li>between auxiliary and auxiliary circuit</li> </ul>                            | 440 V                  |
| <ul> <li>between auxiliary and auxiliary circuit</li> </ul>                            | 440 V                  |
| <ul> <li>between main and auxiliary circuit</li> </ul>                                 | 440 V                  |
| between main and auxiliary circuit   | 440 V                  |
| shock resistance 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 IEC 81346-2   | F                      |
| Substance Prohibitance (Date)  | 01.10.2009             |
| Ambient conditions   |                        |
| installation altitude at height above sea level maximum                                | 2 000 m                |
| ambient temperature  |                        |
| <ul><li>during operation</li></ul>   | -40 +70 °C             |
| <ul><li>during storage</li></ul>   | -55 +80 °C             |
| 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 current response value current of the current-dependent overload release    | 2.2 3.2 A              |
| operating voltage  |                        |
| rated value  | 690 V                  |
| at AC-3e rated value maximum   | 690 V                  |
| operating frequency rated value  | 50 60 Hz               |

| anavational august sated value  | 2.2.4                           |
|---|---------------------------------|
| operational current at AC 22 at 400 V rated value                                     | 3.2 A                           |
| operational current at AC-3e at 400 V rated value                                     | 3.2 A                           |
| operating power  • at AC-3  |                                 |
| at AC-3  — at 400 V rated value   | 1.1 kW                          |
|   |                                 |
| — at 500 V rated value  | 1.5 kW<br>2.2 kW                |
| — at 690 V rated value  • at AC-3e  | Z.Z KVV                         |
|   | 1.1 kW                          |
| — at 400 V rated value  | 1.1 kW<br>1.5 kW                |
| — at 500 V rated value<br>— at 690 V rated value                                      | 2.2 kW                          |
|   | Z.Z RVV                         |
| Auxiliary circuit   | intermeted                      |
| design of the auxiliary switch  | integrated 1                    |
| number of NC contacts for auxiliary contacts  |                                 |
| • note  | for contactor disconnection     |
| number of NO contacts for auxiliary contacts  | 1                               |
| • note  | for message "Tripped"           |
| number of CO contacts for auxiliary contacts  | 0                               |
| operational current of auxiliary contacts at AC-15                                    | 2 A                             |
| • at 24 V   | 3 A                             |
| • at 110 V  | 3 A                             |
| • at 120 V  | 3 A                             |
| • at 125 V  | 3 A                             |
| • at 230 V  | 2 A                             |
| • at 400 V  | 1 A                             |
| operational current of auxiliary contacts at DC-13                                    | 0.4                             |
| • at 24 V   | 2 A                             |
| • at 60 V   | 0.3 A                           |
| • at 110 V  | 0.22 A                          |
| • at 125 V  | 0.22 A                          |
| at 220 V  contact rating of auxiliary contacts according to UL                        | 0.11 A<br>B600 / R300           |
| Protective and monitoring functions   | B000 / R300                     |
|   | OLACC 40                        |
| trip class  design of the overload release  | CLASS 10                        |
|   | thermal                         |
| UL/CSA ratings  |                                 |
| full-load current (FLA) for 3-phase AC motor  | 0.0.4                           |
| at 480 V rated value  | 3.2 A                           |
| at 600 V rated value  | 3.2 A                           |
| Short-circuit protection  |                                 |
| design of the fuse link   | 6.50 mOx 0 0 0 0 middly 40 0    |
| <ul> <li>for short-circuit protection of the auxiliary switch<br/>required</li> </ul> | fuse gG: 6 A, quick: 10 A       |
| Installation/ mounting/ dimensions  |                                 |
| mounting position   | any                             |
| fastening method  | Contactor mounting              |
| height  | 85 mm                           |
| width   | 45 mm                           |
| depth   | 85 mm                           |
| Connections/ Terminals  |                                 |
| product component removable terminal for auxiliary                                    | No                              |
| and control circuit   |                                 |
| type of electrical connection   |                                 |
| for main current circuit  | screw-type terminals            |
| for auxiliary and control circuit   | screw-type terminals            |
| arrangement of electrical connectors for main current circuit                         | Top and bottom                  |
| type of connectable conductor cross-sections  |                                 |
| for main contacts   |                                 |
| <ul><li>— solid or stranded</li></ul>   | 2x (1 2.5 mm²), 2x (2.5 10 mm²) |
|   |                                 |

| <ul> <li>finely stranded with core end processing</li> </ul>         | 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²        |
|--|--|
| at AWG cables for main contacts                                      | 2x (16 12), 2x (14 8)                            |
| type of connectable conductor cross-sections                         |  |
| <ul> <li>for auxiliary contacts</li> </ul>                           |  |
| <ul> <li>solid or stranded</li> </ul>                                | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)              |
| <ul> <li>finely stranded with core end processing</li> </ul>         | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)              |
| <ul> <li>at AWG cables for auxiliary contacts</li> </ul>             | 2x (20 16), 2x (18 14)                           |
| tightening torque  |  |
| <ul> <li>for main contacts with screw-type terminals</li> </ul>      | 2 2.5 N·m  |
| <ul> <li>for auxiliary contacts with screw-type terminals</li> </ul> | 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> <li>for main contacts</li> </ul>                                | M4   |
| <ul> <li>of the auxiliary and control contacts</li> </ul>            | M3   |
| Safety related data  |  |
| failure rate [FIT] with low demand rate acc. to SN 31920             | 50 FIT   |
| MTTF with high demand rate   | 2 280 y  |
| protection class IP on the front acc. to IEC 60529                   | IP20   |
| touch protection on the front acc. to IEC 60529                      | finger-safe, for vertical contact from the front |
| Display  |  |
| display version for switching status                                 | Slide switch                                     |
| Certificates/ approvals  |  |

General Product Approval

For use in hazardous locations



Confirmation









For use in hazardous locations

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



UK Declaration of Conformity



Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping













other

Railway

Confirmation

Vibration and Shock

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...) <a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a>

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2126-1DB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-1DB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1DB0

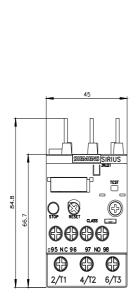
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax">http://www.automation.siemens.com/bilddb/cax</a> de.aspx?mlfb=3RU2126-1DB0&lang=en

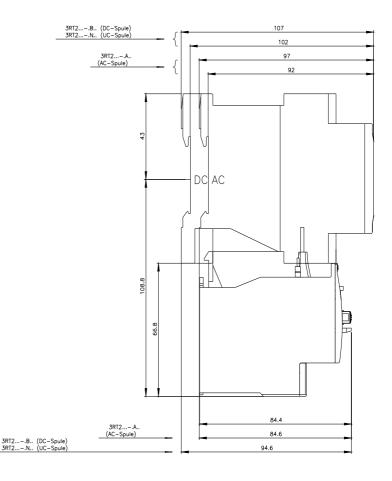
Characteristic: Tripping characteristics, I2t, Let-through current

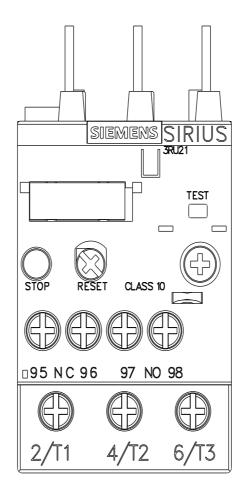
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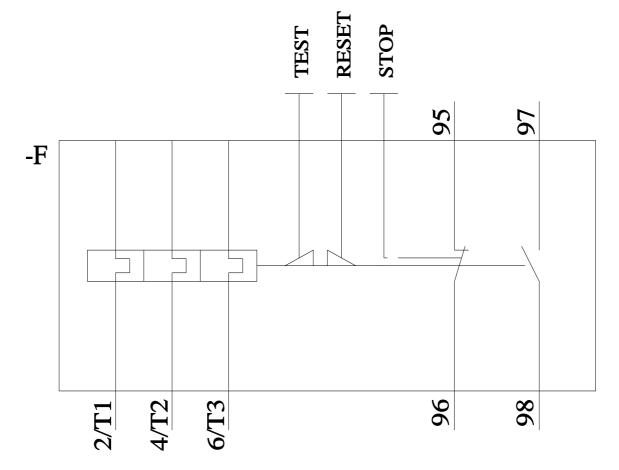
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1DB0&objecttype=14&gridview=view1









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