## **SIEMENS**

Data sheet 3RU2126-4AB0



Overload relay 11...16 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                  |
| • 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<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 00:00:00    |
| 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    | 11 16 A                |
| operating voltage  |                        |
| rated value  | 690 V                  |
| at AC-3 rated value maximum  | 690 V                  |
| operating frequency rated value  | 50 60 Hz               |

|  | 40.0                                      |  |  |
|--|---|--|--|
| operational current rated value                              | 16 A                                      |  |  |
| operating power at AC-3                                      |   |  |  |
| <ul> <li>at 400 V rated value</li> </ul>                     | 7.5 kW                                    |  |  |
| <ul> <li>at 500 V rated value</li> </ul>                     | 7.5 kW                                    |  |  |
| at 690 V rated value   | 11 kW                                     |  |  |
| 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   |  |  |
| operational current of auxiliary contacts at AC-15           |   |  |  |
| • 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           |   |  |  |
| • 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   | 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 3-phase AC motor                 |   |  |  |
| • at 480 V rated value                                       | 16 A                                      |  |  |
| at 600 V rated value   | 16 A                                      |  |  |
| Short-circuit protection                                     |   |  |  |
| design of the fuse link                                      |   |  |  |
| for short-circuit protection of the auxiliary switch         | fuse gG: 6 A, quick: 10 A                 |  |  |
| required   | ruse go. o A, quion. To 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                      |  |  |
| <ul> <li>for auxiliary and control circuit</li> </ul>        | screw-type terminals                      |  |  |
| arrangement of electrical connectors for main current        | Top and bottom                            |  |  |
| circuit  |   |  |  |
| 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  |  |                                |  |
| for main contacts with screw-type terminals                          | 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  |                                |  |
| T1 value for proof test interval or service life acc. to IEC 61508   | 20 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 |  |













Declaration of Conformity

**Test Certificates** 

Marine / Shipping



Special Test Certificate Type Test Certificates/Test Report







Marine / Shipping other Railway









Confirmation

Vibration and Shock

## **Further information**

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=3RU2126-4AB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4AB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4AB0

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

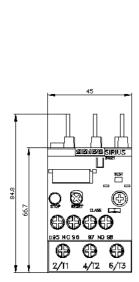
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-4AB0&lang=en

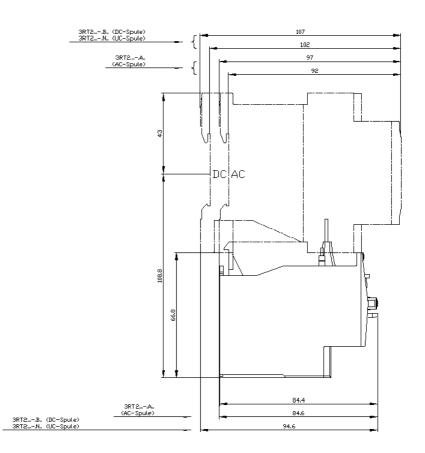
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

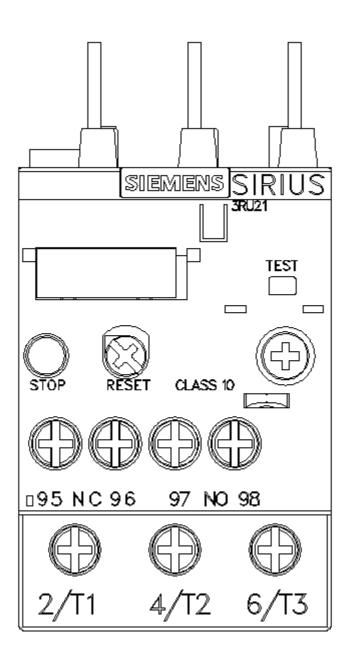
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4AB0/char

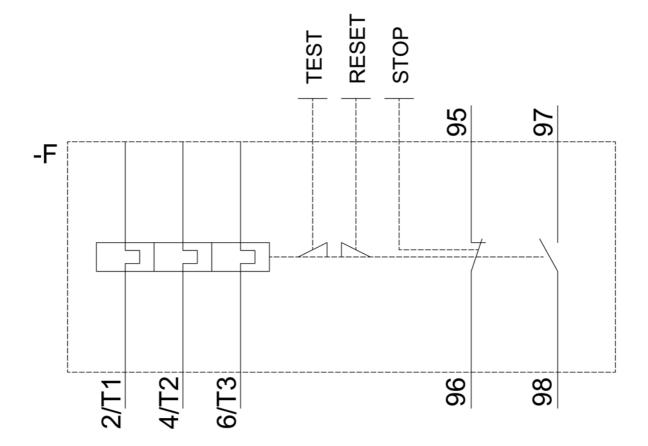
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4AB0&objecttype=14&gridview=view1









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