



Overload relay 0.22...0.32 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Ring cable lug Auxiliary circuit: ring cable lug Manual-Automatic-Reset

|  |                        |
|--|------------------------|
| <b>product brand name</b>  | SIRIUS                 |
| <b>product designation</b>   | thermal overload relay |
| <b>product type designation</b>  | 3RU2                   |
| <b>General technical data</b>  |                        |
| <b>size of overload relay</b>  | S00                    |
| <b>size of contactor can be combined company-specific</b>                                  | S00                    |
| power loss [W] for rated value of the current at AC in hot operating state                 | 4.8 W                  |
| • per pole   | 1.6 W                  |
| insulation voltage with degree of pollution 3 at AC rated value                            | 690 V                  |
| <b>surge voltage resistance rated value</b>  | 6 kV                   |
| <b>maximum permissible voltage for safe isolation in networks with grounded star point</b> |                        |
| • between auxiliary and auxiliary circuit  | 440 V                  |
| • between auxiliary and auxiliary circuit  | 440 V                  |
| • between main and auxiliary circuit   | 440 V                  |
| • between main and auxiliary circuit   | 440 V                  |
| shock resistance according to IEC 60068-2-27   | 8g / 11 ms             |
| <b>type of protection according to ATEX directive 2014/34/EU</b>                           | Ex II (2) GD           |
| certificate of suitability according to ATEX directive 2014/34/EU                          | DMT 98 ATEX G 001      |
| <b>reference code according to IEC 81346-2</b>   | F                      |
| <b>Substance Prohibitance (Date)</b>   | 10/01/2009             |
| <b>Ambient conditions</b>  |                        |
| installation altitude at height above sea level maximum                                    | 2 000 m                |
| <b>ambient temperature</b>   |                        |
| • during operation   | -40 ... +70 °C         |
| • during storage   | -55 ... +80 °C         |
| • during transport   | -55 ... +80 °C         |
| <b>temperature compensation</b>  | -40 ... +60 °C         |
| relative humidity during operation   | 10 ... 95 %            |
| <b>Main circuit</b>  |                        |
| <b>number of poles for main current circuit</b>  | 3                      |
| <b>adjustable current response value current of the current-dependent overload release</b> | 0.22 ... 0.32 A        |
| <b>operating voltage</b>   |                        |
| • rated value  | 690 V                  |
| • at AC-3e rated value maximum   | 690 V                  |
| <b>operating frequency rated value</b>   | 50 ... 60 Hz           |

|   |                              |
|---|------------------------------|
| <b>operational current rated value</b>  | 0.32 A                       |
| operational current at AC-3e at 400 V rated value                             | 0.32 A                       |
| <b>operating power</b>  |                              |
| • at AC-3   |                              |
| — at 400 V rated value  | 0.09 kW                      |
| — at 500 V rated value  | 0.12 kW                      |
| — at 690 V rated value  | 0.12 kW                      |
| • at AC-3e  |                              |
| — at 400 V rated value  | 0.09 kW                      |
| — at 500 V rated value  | 0.12 kW                      |
| — at 690 V rated value  | 0.12 kW                      |
| <b>Auxiliary circuit</b>  |                              |
| <b>design of the auxiliary switch</b>   | integrated                   |
| <b>number of NC contacts for auxiliary contacts</b>                           | 1                            |
| • note  | for contactor disconnection  |
| <b>number of NO contacts for auxiliary contacts</b>                           | 1                            |
| • note  | for message "Tripped"        |
| number of CO contacts for auxiliary contacts                                  | 0                            |
| <b>operational current of auxiliary contacts at AC-15</b>                     |                              |
| • 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                          |
| <b>operational current of auxiliary contacts at DC-13</b>                     |                              |
| • 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                       |
| <b>contact rating of auxiliary contacts according to UL</b>                   | B600 / R300                  |
| <b>Protective and monitoring functions</b>                                    |                              |
| <b>trip class</b>   | CLASS 10                     |
| <b>design of the overload release</b>   | thermal                      |
| <b>UL/CSA ratings</b>   |                              |
| <b>full-load current (FLA) for 3-phase AC motor</b>                           |                              |
| • at 480 V rated value  | 0.32 A                       |
| • at 600 V rated value  | 0.32 A                       |
| <b>Short-circuit protection</b>   |                              |
| <b>design of the fuse link</b>  |                              |
| • for short-circuit protection of the auxiliary switch required               | fuse gG: 6 A, quick: 10 A    |
| <b>Installation/ mounting/ dimensions</b>                                     |                              |
| <b>mounting position</b>  | any                          |
| <b>fastening method</b>   | Contactormounting            |
| <b>height</b>   | 76 mm                        |
| <b>width</b>  | 45 mm                        |
| <b>depth</b>  | 70 mm                        |
| <b>Connections/ Terminals</b>   |                              |
| <b>product component removable terminal for auxiliary and control circuit</b> | No                           |
| <b>type of electrical connection</b>  |                              |
| • for main current circuit  | Ring cable lug connection    |
| • for auxiliary and control circuit   | ring terminal lug connection |
| <b>arrangement of electrical connectors for main current circuit</b>          | Top and bottom               |
| <b>tightening torque</b>  |                              |
| • for main contacts for ring cable lug  | 1.2 ... 0.8 N·m              |
| • for auxiliary contacts for ring cable lug                                   | 0.8 ... 1.2 N·m              |

|   |                     |
|---|---------------------|
| outer diameter of the usable ring cable lug maximum | 7.5 mm              |
| design of screwdriver shaft                         | Diameter 5 ... 6 mm |
| size of the screwdriver tip                         | Pozidriv PZ 2       |
| design of the thread of the connection screw        |                     |
| • for main contacts                                 | M3                  |
| • of the auxiliary and control contacts             | M3                  |

| Safety related data   |         |
|---|---------|
| failure rate [FIT] with low demand rate according to SN 31920           | 50 FIT  |
| MTTF with high demand rate  | 2 280 y |
| T1 value for proof test interval or service life according to IEC 61508 | 20 y    |
| protection class IP on the front according to IEC 60529                 | IP00    |

| 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 |
|--------------------------------|---------------------------|-------------------|-------------------|
|--------------------------------|---------------------------|-------------------|-------------------|



[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



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



| other | Railway |
|-------|---------|
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[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=3RU2116-0DJ0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-0DJ0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0DJ0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RU2116-0DJ0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-0DJ0&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0DJ0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-0DJ0&objecttype=14&gridview=view1>

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