



Overload relay 5.5...8.0 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                   |
| <b>General technical data</b>   |                        |
| 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          | 6.6 W                  |
| • per pole  | 2.2 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 protective separation                               |                        |
| • in networks with ungrounded 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 ungrounded star point between main and auxiliary circuit         | 440 V                  |
| • in networks with grounded star point between main and auxiliary circuit           | 440 V                  |
| shock resistance according to IEC 60068-2-27  | 8g / 11 ms             |
| reference code according to IEC 81346-2   | F                      |
| Substance Prohibitance (Date)   | 10/01/2009             |
| SVHC substance name   | Lead - 7439-92-1       |
| Weight  | 0.187 kg               |
| <b>Ambient conditions</b>   |                        |
| 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         |
| temperature compensation  | -40 ... +60 °C         |
| relative humidity during operation  | 10 ... 95 %            |
| <b>Main circuit</b>   |                        |
| number of poles for main current circuit  | 3                      |
| adjustable current response value current of the current-dependent overload release | 5.5 ... 8 A            |
| operating voltage   |                        |
| • rated value   | 690 V                  |
| • at AC-3e rated value maximum  | 690 V                  |
| operating frequency rated value   | 50 ... 60 Hz           |
| operational current rated value   | 8 A                    |

|   |   |
|---|---|
| operational current at AC-3e at 400 V rated value                             | 8 A   |
| <b>operating power</b>  |   |
| • at AC-3   |   |
| — at 400 V rated value  | 3 kW  |
| — at 500 V rated value  | 4 kW  |
| — at 690 V rated value  | 5.5 kW  |
| • at AC-3e  |   |
| — at 400 V rated value  | 3 kW  |
| — at 500 V rated value  | 4 kW  |
| — at 690 V rated value  | 5.5 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   |
| • at 690 V  | 0.75 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  | 8 A   |
| • at 600 V rated value  | 8 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>   | Contactor mounting  |
| <b>height</b>   | 85 mm   |
| <b>width</b>  | 45 mm   |
| <b>depth</b>  | 85 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  | screw-type terminals  |
| • for auxiliary and control circuit   | screw-type terminals  |
| <b>arrangement of electrical connectors for main current circuit</b>          | Top and bottom  |
| <b>type of connectable conductor cross-sections</b>                           |   |
| • for main contacts   |   |
| — solid or stranded   | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )                       |
| — finely stranded with core end processing                                    | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup> |
| • for AWG cables for main contacts  | 2x (16 ... 12), 2x (14 ... 8)   |

|  |   |
|--|---|
| <b>type of connectable conductor cross-sections</b>              |   |
| • for auxiliary contacts   |   |
| — solid or stranded  | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
| — finely stranded with core end processing                       | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
| • for AWG cables for auxiliary contacts                          | 2x (20 ... 16), 2x (18 ... 14)  |
| <b>tightening torque</b>   |   |
| • for main contacts with screw-type terminals                    | 2 ... 2.5 N·m   |
| • for auxiliary contacts with screw-type terminals               | 0.8 ... 1.2 N·m   |
| <b>design of screwdriver shaft</b>                               | Diameter 5 ... 6 mm   |
| <b>size of the screwdriver tip</b>                               | Pozidriv PZ 2   |
| <b>design of the thread of the connection screw</b>              |   |
| • for main contacts  | M4  |
| • of the auxiliary and control contacts                          | M3  |
| <b>Safety related data</b>                                       |   |
| failure rate [FIT] with low demand rate according to SN 31920    | 50 FIT  |
| <b>MTTF with high demand rate</b>                                | 2 280 a   |
| IEC 61508  |   |
| <b>T1 value</b>  |   |
| • for proof test interval or service life according to IEC 61508 | 20 a  |
| Electrical Safety  |   |
| <b>protection class IP on the front according to IEC 60529</b>   | IP20  |
| <b>touch protection on the front according to IEC 60529</b>      | finger-safe, for vertical contact from the front                      |
| <b>Display</b>   |   |
| display version for switching status                             | Slide switch  |
| <b>Approvals Certificates</b>                                    |   |
| <b>General Product Approval</b>                                  |   |

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**Further information**

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RU2126-1HB0>

Cax online generator

<http://support.automation.siemens.com/WW/CAxorder/default.aspx?lang=en&mlfb=3RU2126-1HB0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1HB0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RU2126-1HB0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-1HB0&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1HB0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1HB0&objecttype=14&gridview=view1>



