



Overload relay 20...25 A Thermal For motor protection Size S0, Class 10  
 Contactor mounting Main circuit: Screw Auxiliary circuit: Screw 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>  | S0                     |
| <b>size of contactor can be combined company-specific</b>                                  | 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                  |
| <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 acc. 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 acc. to IEC 81346-2</b>  | F                      |
| <b>Substance Prohibitance (Date)</b>   | 01.10.2009             |
| <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> | 20 ... 25 A            |
| operating voltage rated value  | 690 V                  |
| <b>operating frequency rated value</b>   | 50 ... 60 Hz           |
| <b>operational current rated value</b>   | 25 A                   |
| operating power at AC-3  |                        |

|   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>  | 11 kW<br>15 kW<br>22 kW   |
| <b>Auxiliary circuit</b>  |   |
| <b>design of the auxiliary switch</b>   | integrated  |
| <b>number of NC contacts for auxiliary contacts</b>   | 1   |
| <ul style="list-style-type: none"> <li>• note</li> </ul>  | for contactor disconnection   |
| <b>number of NO contacts for auxiliary contacts</b>   | 1   |
| <ul style="list-style-type: none"> <li>• note</li> </ul>  | for message "Tripped"   |
| number of CO contacts for auxiliary contacts  | 0   |
| <b>operational current of auxiliary contacts at AC-15</b>   |   |
| <ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 110 V</li> <li>• at 120 V</li> <li>• at 125 V</li> <li>• at 230 V</li> <li>• at 400 V</li> </ul>   | 3 A<br>3 A<br>3 A<br>3 A<br>2 A<br>1 A  |
| <b>operational current of auxiliary contacts at DC-13</b>   |   |
| <ul style="list-style-type: none"> <li>• at 24 V</li> <li>• at 60 V</li> <li>• at 110 V</li> <li>• at 125 V</li> <li>• at 220 V</li> </ul>  | 2 A<br>0.3 A<br>0.22 A<br>0.22 A<br>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>   |   |
| <ul style="list-style-type: none"> <li>• at 480 V rated value</li> <li>• at 600 V rated value</li> </ul>  | 25 A<br>25 A  |
| <b>Short-circuit protection</b>   |   |
| <b>design of the fuse link</b>  |   |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>   | 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>  |   |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> </ul>   | screw-type terminals<br>screw-type terminals  |
| <b>arrangement of electrical connectors for main current circuit</b>  | Top and bottom  |
| <b>type of connectable conductor cross-sections</b>   |   |
| <ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG cables for main contacts</li> </ul>           | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )<br>2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup><br>2x (16 ... 12), 2x (14 ... 8) |
| <b>type of connectable conductor cross-sections</b>   |   |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG cables for auxiliary contacts</li> </ul> | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 16), 2x (18 ... 14)              |
| <b>tightening torque</b>  |   |

|   |                                  |
|---|----------------------------------|
| <ul style="list-style-type: none"> <li>for main contacts with screw-type terminals</li> <li>for auxiliary contacts with screw-type terminals</li> </ul> | 2 ... 2.5 N·m<br>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>   |                                  |
| <ul style="list-style-type: none"> <li>for main contacts</li> <li>of the auxiliary and control contacts</li> </ul>                                      | M4<br>M3                         |

| Safety related data   |  |
|---|--|
| failure rate [FIT] with low demand rate acc. to SN 31920                  | 50 FIT   |
| <b>MTTF with high demand rate</b>   | 2 280 y  |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b> | 20 y   |
| <b>protection class IP on the front acc. to IEC 60529</b>                 | IP20   |
| <b>touch protection on the front acc. to IEC 60529</b>                    | 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     |
|---------------------------|--|-----------------------|
| EG-Konf.                  | <a href="#">UK Declaration of Conformity</a><br><a href="#">Type Test Certificates/Test Report</a><br><a href="#">Special Test Certificate</a> | ABS<br>BUREAU VERITAS |

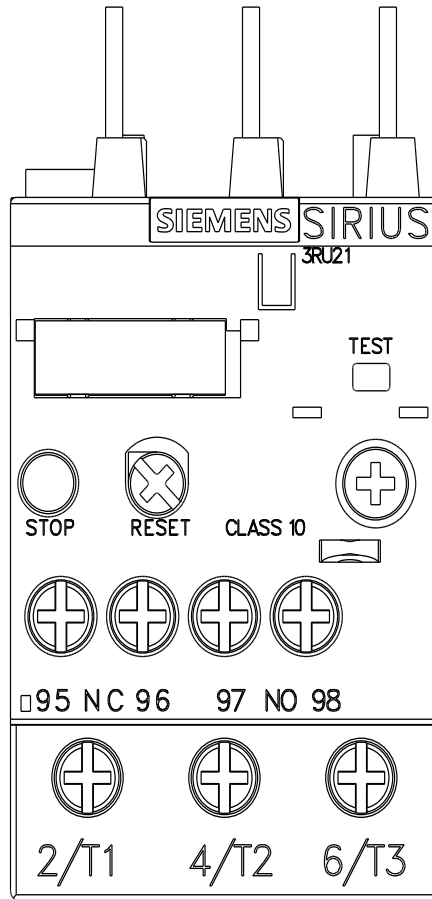
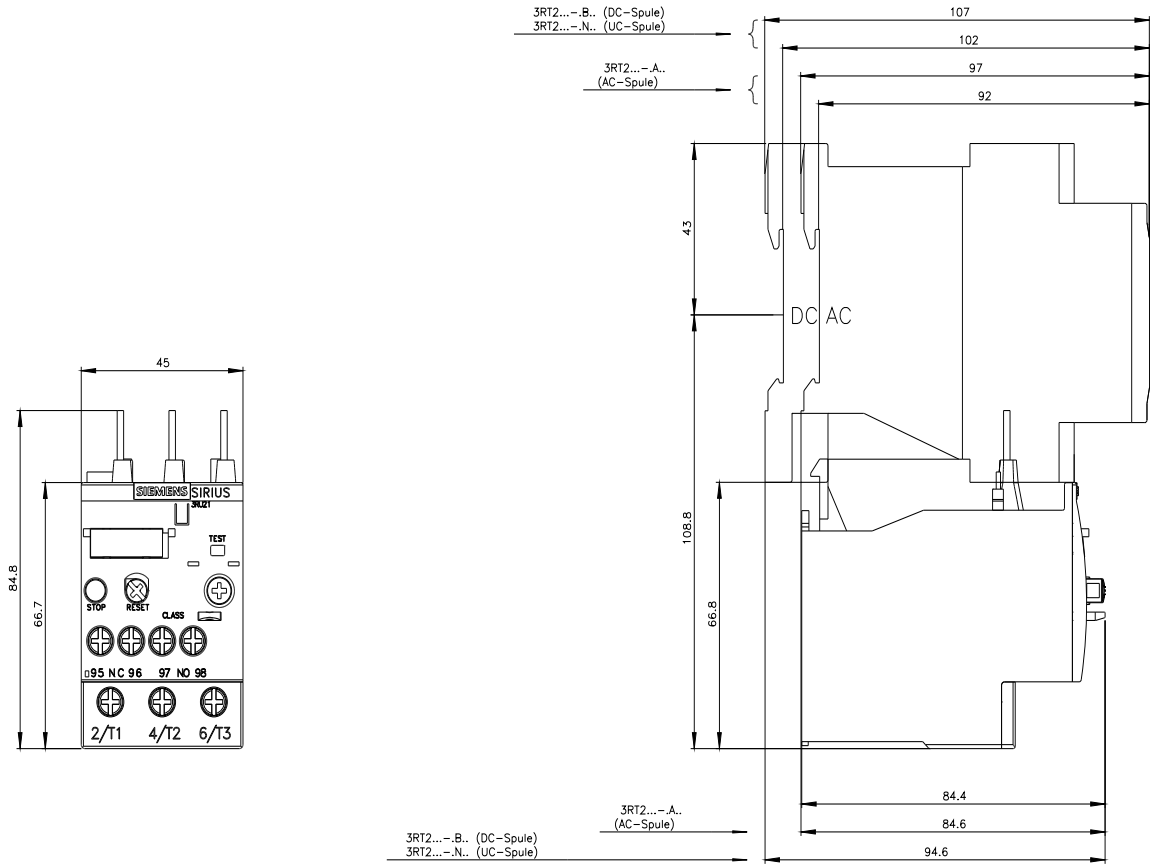
| Marine / Shipping                 | other                        |
|-----------------------------------|------------------------------|
| DNV<br>LRS<br>PRS<br>RINA<br>RMRS | <a href="#">Confirmation</a> |

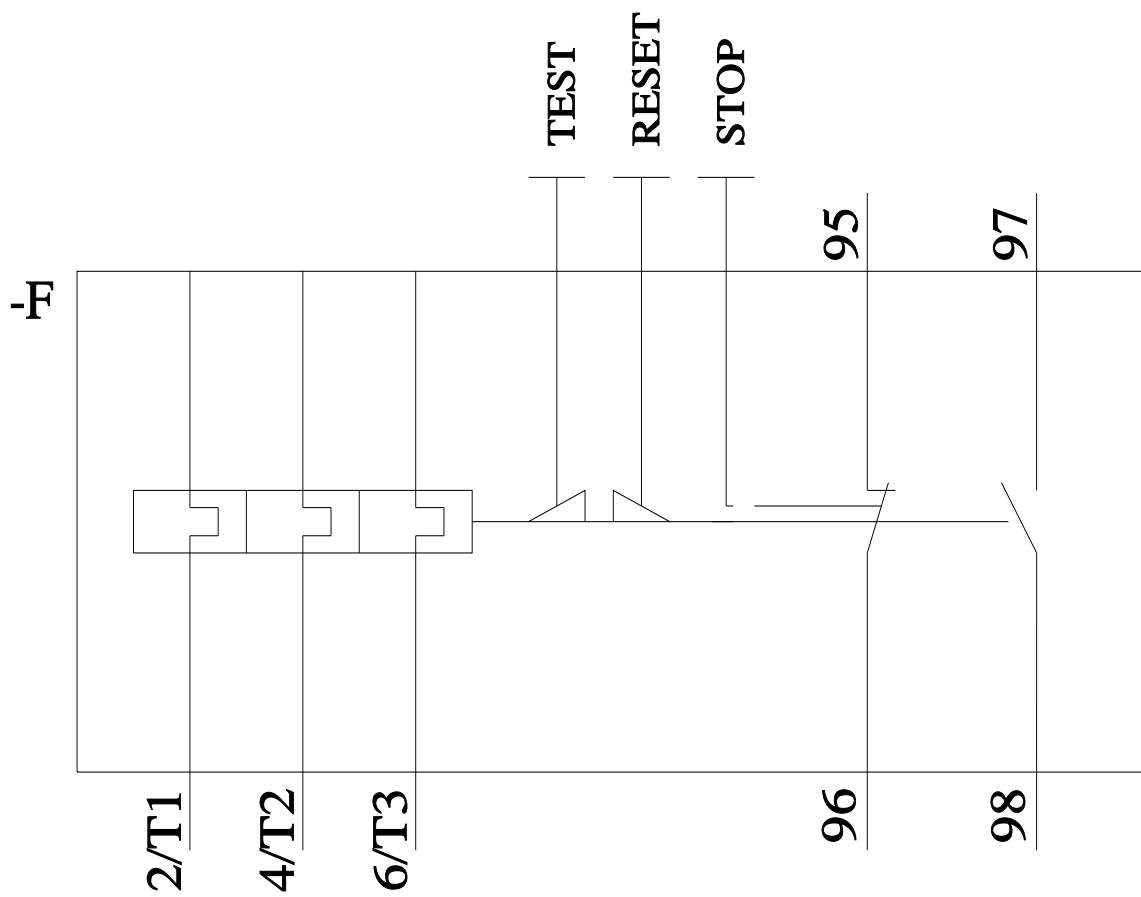
### Railway

[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=3RU2126-4DB0>
- 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](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4DB0&lang=en)
- Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current  
<https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4DB0/char>
- Further characteristics (e.g. electrical endurance, switching frequency)





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12/1/2021 