



Overload relay 22...32 A Thermal For motor protection Size S2, Class 10  
 Contactor mounting Main circuit: Screw Auxiliary circuit: spring-type  
 terminal 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                                                              | S2                     |
| size of contactor can be combined company-specific                                  | S2                     |
| power loss [W] for rated value of the current at AC in hot operating state          | 13.8 W                 |
| • per pole                                                                          | 4.6 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 networks with grounded star point |                        |
| • between auxiliary and auxiliary circuit                                           | 415 V                  |
| • between auxiliary and auxiliary circuit                                           | 415 V                  |
| • between main and auxiliary circuit                                                | 690 V                  |
| • between main and auxiliary circuit                                                | 690 V                  |
| shock resistance acc. to IEC 60068-2-27                                             | 8g / 11 ms             |
| recovery time after overload trip                                                   |                        |
| • with automatic reset typical                                                      | 10 min                 |
| • with remote-reset                                                                 | 10 min                 |
| • with manual reset                                                                 | 10 min                 |
| 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)                                                       | 15.10.2014 00:00:00    |
| <b>Ambient conditions</b>                                                           |                        |
| installation altitude at height above sea level maximum                             | 2 000 m                |
| • ambient temperature during operation                                              | -40 ... +70 °C         |
| • ambient temperature during storage                                                | -55 ... +80 °C         |
| • ambient temperature 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                      |

|                                                                                                                                                                                            |                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>adjustable current response value current of the current-dependent overload release</b>                                                                                                 | 22 ... 32 A                                                                                                                      |
| <ul style="list-style-type: none"> <li>operating voltage rated value</li> <li>operating voltage at AC-3 rated value maximum</li> </ul>                                                     | 690 V<br>690 V                                                                                                                   |
| <b>operating frequency rated value</b>                                                                                                                                                     | 50 ... 60 Hz                                                                                                                     |
| <b>operational current rated value</b>                                                                                                                                                     | 32 A                                                                                                                             |
| <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                                                                                       |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required                                                                                      | 6A (SCC less than equal to 0.5 kA; U less than equal to 260V)                                                                    |
| <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>                                                                                       | 32 A<br>32 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>                                                                                                                                                                              | 90 mm                                                                                                                            |
| <b>width</b>                                                                                                                                                                               | 55 mm                                                                                                                            |
| <b>depth</b>                                                                                                                                                                               | 105 mm                                                                                                                           |
| <b>Connections/ Terminals</b>                                                                                                                                                              |                                                                                                                                  |
| product function removable terminal for auxiliary and control circuit                                                                                                                      | 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>spring-loaded 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> </ul> | 2x (1 ... 35 mm <sup>2</sup> ), 1x (1 ... 50 mm <sup>2</sup> )<br>2x (1 ... 25 mm <sup>2</sup> ), 1x (1 ... 35 mm <sup>2</sup> ) |

|                                                                                                                                                                                                                                                                                                          |                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>at AWG cables for main contacts</li> </ul>                                                                                                                                                                                                                        | 2x (18 ... 2), 1x (18 ... 1)                                                                                                  |
| <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> <li>— finely stranded without core end processing</li> </ul> </li> <li>at AWG cables for auxiliary contacts</li> </ul> | 2x (0.5 ... 2.5 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> )<br>2x (0.5 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 14) |
| <ul style="list-style-type: none"> <li>tightening torque for main contacts with screw-type terminals</li> </ul>                                                                                                                                                                                          | 3 ... 4.5 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> </ul>                                                                                                                                                                                                                                      | M6                                                                                                                            |

#### Safety related data

|                                                                           |                                                  |
|---------------------------------------------------------------------------|--------------------------------------------------|
| <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

|                                 |                                       |
|---------------------------------|---------------------------------------|
| <b>General Product Approval</b> | <b>For use in hazardous locations</b> |
|---------------------------------|---------------------------------------|



|                                  |                          |                          |
|----------------------------------|--------------------------|--------------------------|
| <b>Declaration of Conformity</b> | <b>Test Certificates</b> | <b>Marine / Shipping</b> |
|----------------------------------|--------------------------|--------------------------|



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|                          |              |
|--------------------------|--------------|
| <b>Marine / Shipping</b> | <b>other</b> |
|--------------------------|--------------|



[Confirmation](#)

|                |
|----------------|
| <b>Railway</b> |
|----------------|

[Special Test  
Certificate](#)

#### 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=3RU2136-4ED0>

Cax online generator

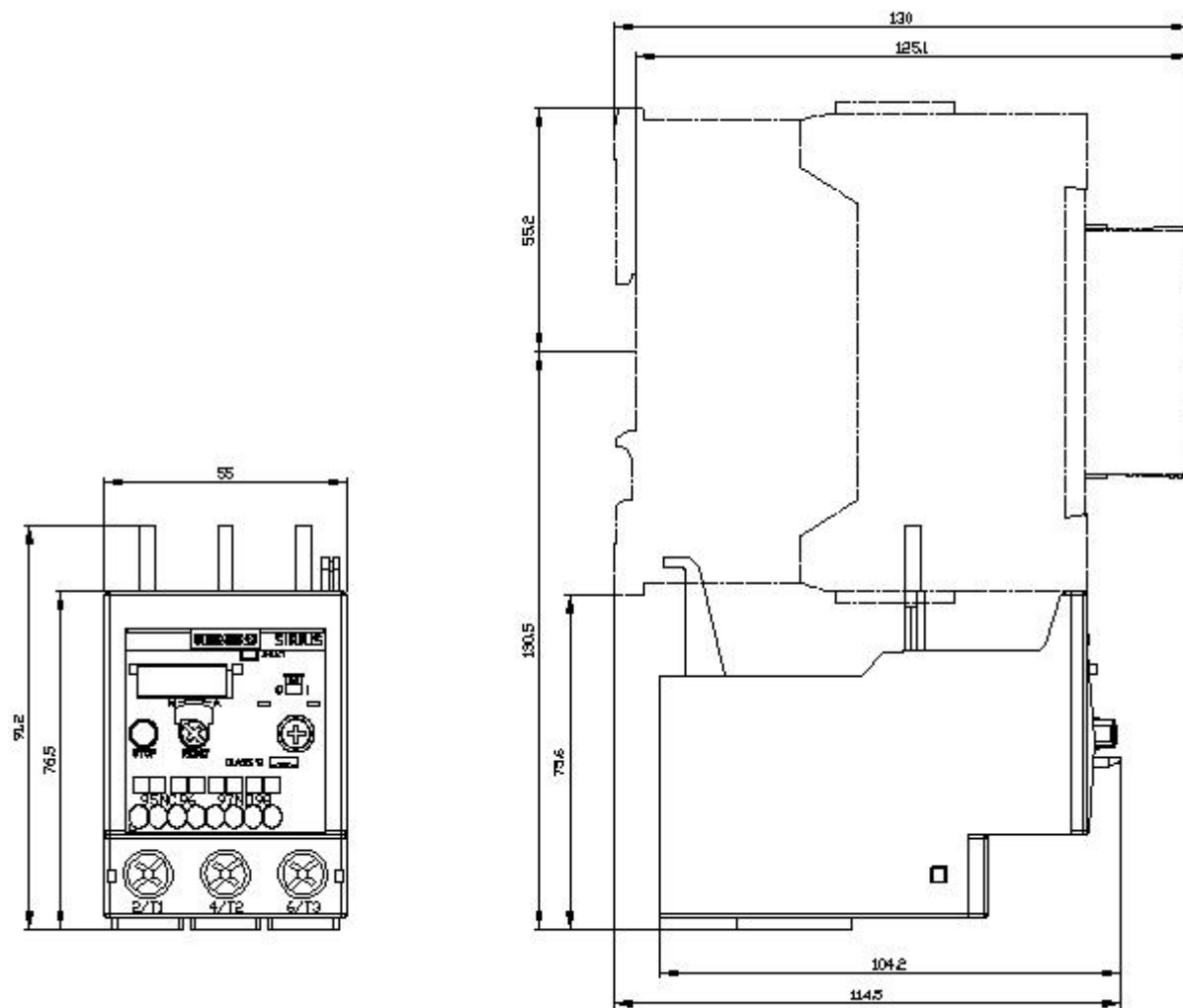
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2136-4ED0>

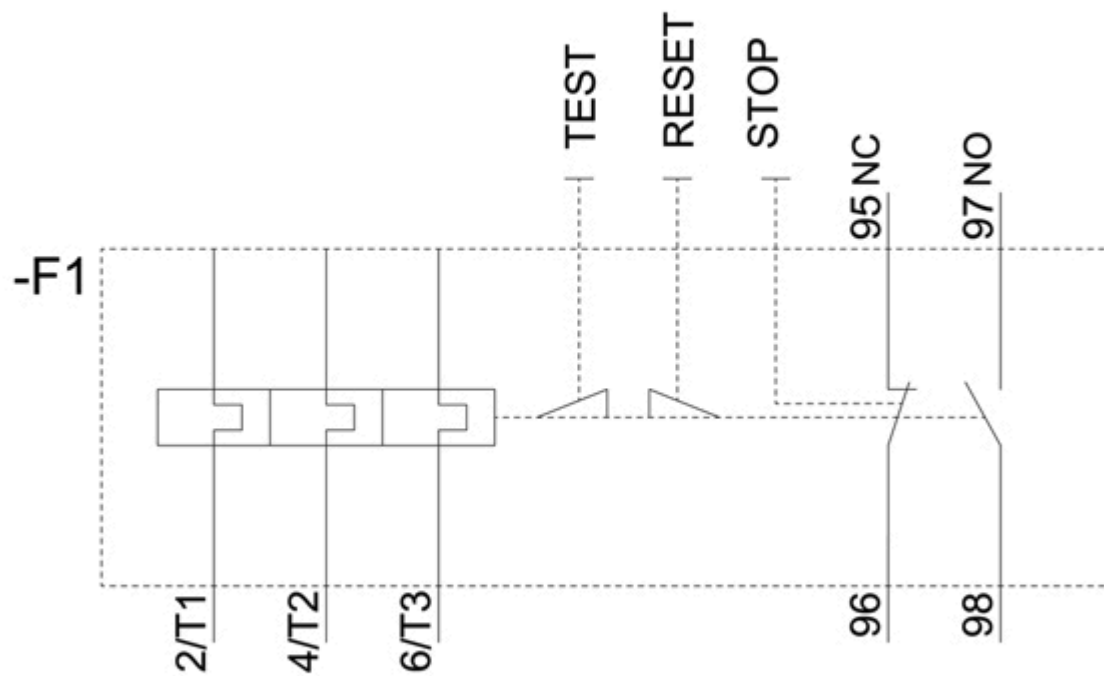
<https://support.industry.siemens.com/cs/ww/en/ps/3RU2136-4ED0>

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RU2136-4ED0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2136-4ED0&lang=en)

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<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2136-4ED0&objecttype=14&gridview=view1>





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