



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.35...0.5 A N-release 6.5 A Screw terminal Standard switching capacity with transverse auxiliary switch 1 NO+1 NC

|                                                                                     |                      |
|-------------------------------------------------------------------------------------|----------------------|
| product brand name                                                                  | SIRIUS               |
| product designation                                                                 | Circuit breaker      |
| design of the product                                                               | For motor protection |
| product type designation                                                            | 3RV1                 |
| <b>General technical data</b>                                                       |                      |
| size of the circuit-breaker                                                         | S00                  |
| size of contactor can be combined company-specific                                  | S00                  |
| product extension auxiliary switch                                                  | Yes                  |
| power loss [W] for rated value of the current                                       |                      |
| • at AC in hot operating state                                                      | 5.5 W                |
| • at AC in hot operating state per pole                                             | 1.8 W                |
| insulation voltage with degree of pollution 3 at AC rated value                     | 690 V                |
| surge voltage resistance rated value                                                | 6 kV                 |
| mechanical service life (operating cycles)                                          |                      |
| • of the main contacts typical                                                      | 100 000              |
| • of auxiliary contacts typical                                                     | 100 000              |
| electrical endurance (operating cycles) typical                                     | 100 000              |
| reference code according to IEC 81346-2                                             | Q                    |
| Substance Prohibitance (Date)                                                       | 01/01/2013           |
| SVHC substance name                                                                 | Lead - 7439-92-1     |
| Weight                                                                              | 0.245 kg             |
| <b>Ambient conditions</b>                                                           |                      |
| installation altitude at height above sea level maximum                             | 2 000 m              |
| ambient temperature                                                                 |                      |
| • during operation                                                                  | -20 ... +60 °C       |
| • during storage                                                                    | -50 ... +80 °C       |
| • during transport                                                                  | -50 ... +80 °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 | 0.35 ... 0.5 A       |
| operating voltage                                                                   |                      |
| • rated value                                                                       | 20 ... 690 V         |
| • at AC-3 rated value maximum                                                       | 690 V                |
| • at AC-3e rated value maximum                                                      | 690 V                |
| operating frequency rated value                                                     | 50 ... 60 Hz         |
| operational current rated value                                                     | 0.5 A                |
| operational current                                                                 |                      |
| • at AC-3 at 400 V rated value                                                      | 0.5 A                |

|                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at AC-3e at 400 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                   | 0.5 A                                                                                         |
| <b>operating power</b>                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                               |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> <li>• at AC-3e <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul> | 0.1 kW<br>0.12 kW<br>0.2 kW<br>0.3 kW<br><br>0.1 kW<br>0.12 kW<br>0.2 kW<br>0.3 kW            |
| <b>operating frequency</b>                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                               |
| <ul style="list-style-type: none"> <li>• at AC-3 maximum</li> <li>• at AC-3e maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                     | 15 1/h<br>15 1/h                                                                              |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                               |
| <b>design of the auxiliary switch</b>                                                                                                                                                                                                                                                                                                                                                                                               | transverse                                                                                    |
| <b>number of NC contacts for auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                                                                 | 1                                                                                             |
| <ul style="list-style-type: none"> <li>• note</li> </ul>                                                                                                                                                                                                                                                                                                                                                                            | 1                                                                                             |
| <b>number of NO contacts for auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                                                                 | 1                                                                                             |
| <ul style="list-style-type: none"> <li>• note</li> </ul>                                                                                                                                                                                                                                                                                                                                                                            | 1                                                                                             |
| 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> </ul>                                                                                                                                                                                                                                                                                         | 2 A<br>2 A<br>2 A<br>2 A<br>0.5 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> </ul>                                                                                                                                                                                                                                                                                                                                                      | 1 A<br>0.15 A                                                                                 |
| <b>Protective and monitoring functions</b>                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                               |
| <b>product function</b>                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                               |
| <ul style="list-style-type: none"> <li>• ground fault detection</li> <li>• phase failure detection</li> </ul>                                                                                                                                                                                                                                                                                                                       | No<br>Yes                                                                                     |
| <b>trip class</b>                                                                                                                                                                                                                                                                                                                                                                                                                   | CLASS 10                                                                                      |
| <b>design of the overload release</b>                                                                                                                                                                                                                                                                                                                                                                                               | thermal                                                                                       |
| <b>maximum short-circuit current breaking capacity (I<sub>cu</sub>)</b>                                                                                                                                                                                                                                                                                                                                                             |                                                                                               |
| <ul style="list-style-type: none"> <li>• at AC at 240 V rated value</li> <li>• at AC at 400 V rated value</li> <li>• at AC at 500 V rated value</li> <li>• at AC at 690 V rated value</li> </ul>                                                                                                                                                                                                                                    | 100 kA<br>100 kA<br>100 kA<br>100 kA                                                          |
| <b>operating short-circuit current breaking capacity (I<sub>cs</sub>) at AC</b>                                                                                                                                                                                                                                                                                                                                                     |                                                                                               |
| <ul style="list-style-type: none"> <li>• at 240 V rated value</li> <li>• at 400 V rated value</li> <li>• at 500 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                            | 100 kA<br>100 kA<br>100 kA<br>100 kA                                                          |
| response value current of instantaneous short-circuit trip unit                                                                                                                                                                                                                                                                                                                                                                     | 6.5 A                                                                                         |
| <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>                                                                                                                                                                                                                                                                                                                            | 0.5 A<br>0.5 A                                                                                |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                                                                                                         | C300 / R300                                                                                   |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                               |
| <b>product function short circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                    | Yes                                                                                           |
| <b>design of the short-circuit trip</b>                                                                                                                                                                                                                                                                                                                                                                                             | magnetic                                                                                      |
| <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: 10 A, miniature circuit breaker C 6 A (short-circuit current I <sub>k</sub> < 400 A) |
| <b>design of the fuse link for IT network for short-circuit protection of the main circuit</b>                                                                                                                                                                                                                                                                                                                                      |                                                                                               |
| <ul style="list-style-type: none"> <li>• at 240 V</li> </ul>                                                                                                                                                                                                                                                                                                                                                                        | none required                                                                                 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                               |
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| <ul style="list-style-type: none"> <li>• at 400 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | None required<br>None required<br>gL/gG 4 A                                                                                                                                   |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                               |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | any                                                                                                                                                                           |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715                                                                                                      |
| <b>height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 90 mm                                                                                                                                                                         |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 45 mm                                                                                                                                                                         |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 75 mm                                                                                                                                                                         |
| <b>required spacing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                               |
| <ul style="list-style-type: none"> <li>• for grounded parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for live parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for live parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts at 690 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— backwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> <li>• for live parts at 690 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— backwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> </ul> | 20 mm<br>20 mm<br>9 mm<br>20 mm<br>20 mm<br>9 mm<br>20 mm<br>20 mm<br>9 mm<br>20 mm<br>20 mm<br>0 mm<br>9 mm<br>0 mm<br>20 mm<br>20 mm<br>0 mm<br>9 mm<br>0 mm                |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                               |
| <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> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ), 2x (1 ... 4 mm <sup>2</sup> )<br>2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ) |
| <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> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> )                                                                                                         |
| <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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0,8 ... 1,2 N·m<br>0,8 ... 1,2 N·m                                                                                                                                            |
| <b>size of the screwdriver tip</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Pozidriv size 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | M3<br>M3                                                                                                                                                                      |
| <b>Safety related data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                               |
| <b>product function suitable for safety function</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Yes                                                                                                                                                                           |
| <b>suitability for use</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                               |

|                                                               |                                                  |
|---------------------------------------------------------------|--------------------------------------------------|
| • safety-related switching on                                 | No                                               |
| • safety-related switching OFF                                | Yes                                              |
| service life maximum                                          | 10 a                                             |
| test wear-related service life necessary                      | Yes                                              |
| proportion of dangerous failures                              |                                                  |
| • with low demand rate according to SN 31920                  | 40 %                                             |
| • with high demand rate according to SN 31920                 | 50 %                                             |
| B10 value with high demand rate according to SN 31920         | 5 000                                            |
| failure rate [FIT] with low demand rate according to SN 31920 | 50 FIT                                           |
| ISO 13849                                                     |                                                  |
| device type according to ISO 13849-1                          | 3                                                |
| overdimensioning according to ISO 13849-2 necessary           | Yes                                              |
| IEC 61508                                                     |                                                  |
| safety device type according to IEC 61508-2                   | Type A                                           |
| Electrical Safety                                             |                                                  |
| protection class IP on the front according to IEC 60529       | IP20                                             |
| touch protection on the front according to IEC 60529          | finger-safe, for vertical contact from the front |
| Display                                                       |                                                  |
| display version for switching status                          | Rocker switch                                    |
| Approvals Certificates                                        |                                                  |
| General Product Approval                                      |                                                  |



[Confirmation](#)



[KC](#)

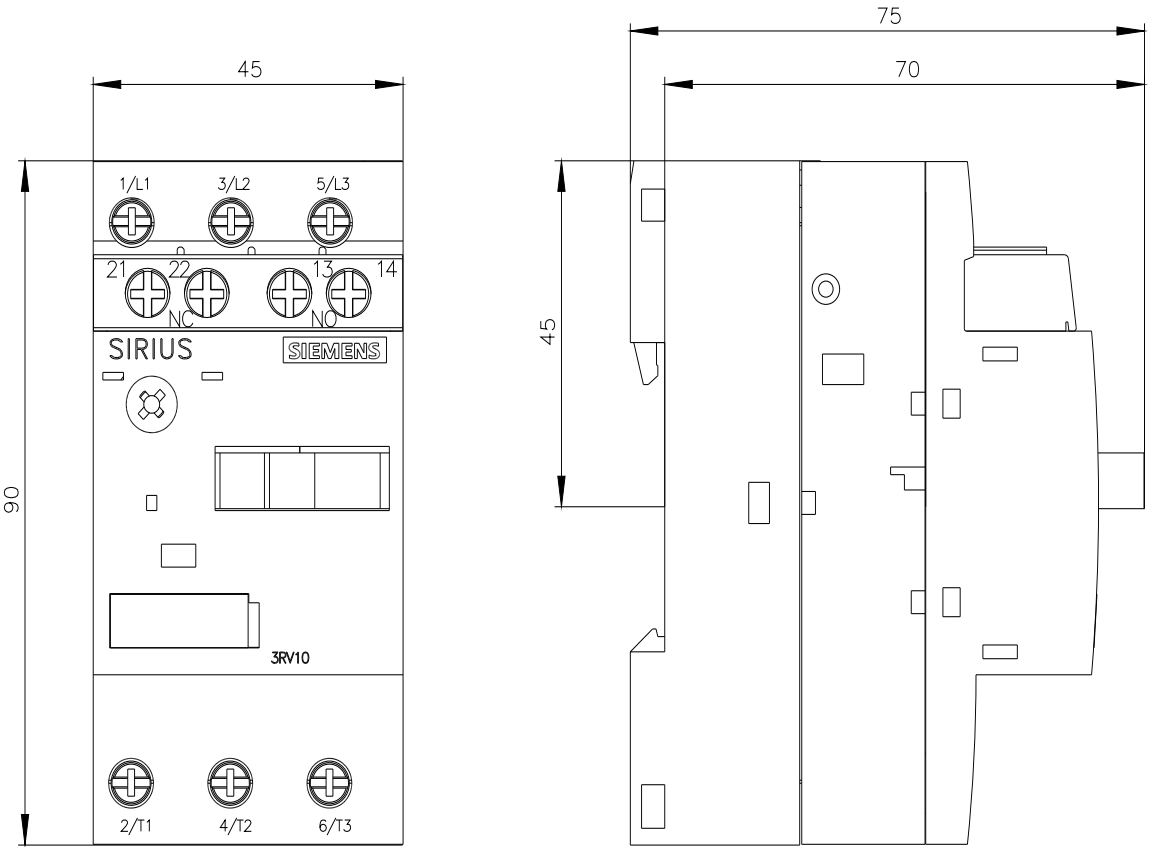
| General Product Approval | For use in hazardous locations | Test Certificates                                  | Marine / Shipping                        |
|--------------------------|--------------------------------|----------------------------------------------------|------------------------------------------|
|                          |                                |                                                    |                                          |
|                          |                                | <a href="#">Type Test Certificates/Test Report</a> | <a href="#">Special Test Certificate</a> |

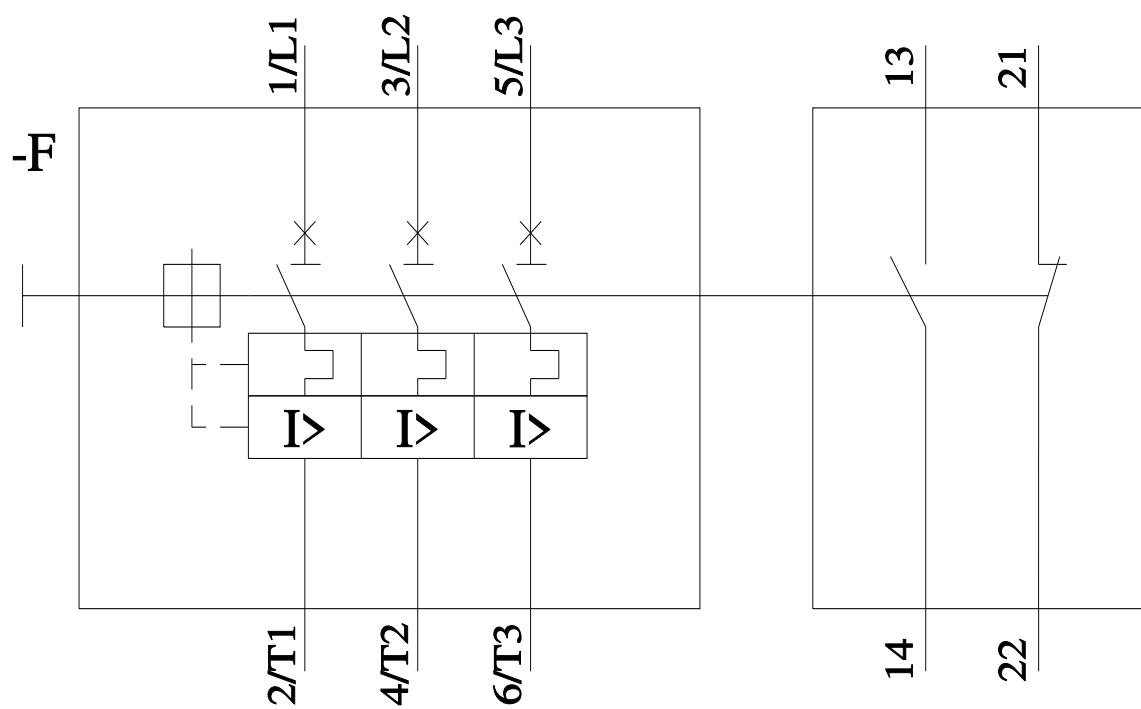
| Marine / Shipping |  |  |  |  |  |
|-------------------|--|--|--|--|--|
|                   |  |  |  |  |  |

| other                         | Railway                                  | Environment                                 |
|-------------------------------|------------------------------------------|---------------------------------------------|
| <a href="#">Confirmation</a>  | <a href="#">Special Test Certificate</a> | <a href="#">Environmental Confirmations</a> |
| <a href="#">Miscellaneous</a> |                                          |                                             |

| Further information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <p>Information on the packaging<br/> <a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a></p> <p>Information- and Downloadcenter (Catalogs, Brochures,...)<br/> <a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a></p> <p>Industry Mall (Online ordering system)<br/> <a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1011-0FA15">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RV1011-0FA15</a></p> <p>Cax online generator<br/> <a href="http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RV1011-0FA15">http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RV1011-0FA15</a></p> <p>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)<br/> <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0FA15">https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0FA15</a></p> <p>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)<br/> <a href="http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0FA15&amp;lang=en">http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV1011-0FA15&amp;lang=en</a></p> |

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current  
<https://support.industry.siemens.com/cs/ww/en/ps/3RV1011-0FA15/char>  
Further characteristics (e.g. electrical endurance, switching frequency)  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV1011-0FA15&objecttype=14&gridview=view1>





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