



Circuit breaker size S00 for motor protection, CLASS 10 A-release  
0.9...1.25 A N-release 16 A Screw terminal Standard switching capacity

|  |                      |
|--|----------------------|
| <b>product brand name</b>  | SIRIUS               |
| <b>product designation</b>   | Circuit breaker      |
| <b>design of the product</b>   | For motor protection |
| <b>product type designation</b>  | 3RV1                 |
| <b>General technical data</b>  |                      |
| <b>size of the circuit-breaker</b>   | S00                  |
| <b>size of contactor can be combined company-specific</b>                                  | S00                  |
| product extension auxiliary switch   | Yes                  |
| <b>power loss [W] for rated value of the current</b>                                       |                      |
| • 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                |
| <b>surge voltage resistance rated value</b>  | 6 kV                 |
| <b>maximum permissible voltage for safe isolation in networks with grounded star point</b> |                      |
| • between main and auxiliary circuit   | 400 V                |
| • between main and auxiliary circuit   | 400 V                |
| <b>mechanical service life (switching cycles)</b>  |                      |
| • of the main contacts typical   | 100 000              |
| • of auxiliary contacts typical  | 100 000              |
| electrical endurance (switching cycles) typical  | 100 000              |
| <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 02 ATEX F 001    |
| <b>reference code acc. to IEC 81346-2</b>  | Q                    |
| Substance Prohibance (Date)  | 01.01.2013 00:00:00  |
| <b>Ambient conditions</b>  |                      |
| installation altitude at height above sea level maximum                                    | 2 000 m              |
| <b>ambient temperature</b>   |                      |
| • during operation   | -20 ... +60 °C       |
| • during storage   | -50 ... +80 °C       |
| • during transport   | -50 ... +80 °C       |
| <b>temperature compensation</b>  | -20 ... +60 °C       |
| relative humidity during operation   | 10 ... 95 %          |
| <b>Main circuit</b>  |                      |
| <b>number of poles for main current circuit</b>  | 3                    |

|   |  |
|---|--|
| <b>adjustable current response value current of the current-dependent overload release</b>  | 0.9 ... 1.25 A   |
| <b>operating voltage</b> <ul style="list-style-type: none"> <li>• rated value</li> <li>• 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>  | 1.25 A   |
| operational current at AC-3 at 400 V rated value  | 1.25 A   |
| <b>operating power at AC-3</b> <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>   | 0.18 kW<br>0.37 kW<br>0.55 kW<br>0.75 kW   |
| operating frequency at AC-3 maximum   | 15 1/h   |
| <b>Auxiliary circuit</b>  |  |
| number of CO contacts for auxiliary contacts  | 0  |
| <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>breaking capacity operating short-circuit current (Ics) 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>2 kA   |
| <b>breaking capacity maximum short-circuit current (Icu)</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>2 kA   |
| response value current of instantaneous short-circuit trip unit   | 16 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>  | 1.25 A<br>1.25 A   |
| <b>yielded mechanical performance [hp]</b> <ul style="list-style-type: none"> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul>                         | 0.5 hp<br>0.5 hp   |
| <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 for IT network for short-circuit protection of the main circuit</b> <ul style="list-style-type: none"> <li>• at 240 V</li> <li>• at 400 V</li> <li>• at 500 V</li> <li>• at 690 V</li> </ul>                                       | none required<br>gL/gG 20 A<br>gL/gG 16 A<br>gL/gG 16 A                                |
| <b>Installation/ mounting/ dimensions</b>   |  |
| <b>mounting position</b>  | any  |
| <b>fastening method</b>   | screw and snap-on mounting onto 35 mm standard mounting 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><br>20 mm<br>20 mm<br>9 mm<br><br>20 mm<br>20 mm<br>20 mm<br>9 mm<br><br>20 mm<br>20 mm<br>0 mm<br>9 mm<br>0 mm<br><br>20 mm<br>20 mm<br>0 mm<br>9 mm<br>0 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> </ul>   | 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 2  |
| <b>design of the thread of the connection screw</b>  |   |
| <ul style="list-style-type: none"> <li>for main contacts</li> </ul>  | M3  |
| <b>Safety related data</b>   |   |
| <b>B10 value</b>   |   |
| <ul style="list-style-type: none"> <li>with high demand rate acc. to SN 31920</li> </ul>   | 5 000   |
| <b>proportion of dangerous failures</b>  |   |
| <ul style="list-style-type: none"> <li>with low demand rate acc. to SN 31920</li> <li>with high demand rate acc. to SN 31920</li> </ul>  | 50 %<br>50 %  |
| <b>failure rate [FIT]</b>  |   |
| <ul style="list-style-type: none"> <li>with low demand rate acc. to SN 31920</li> </ul>  | 50 FIT  |
| <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 version for switching status

Rocker switch

## Certificates/ approvals

### General Product Approval



### Declaration of Conformity

Miscellaneous



### Test Certificates

Type Test  
Certificates/Test  
Report

Special Test  
Certificate

### Marine / Shipping



### Marine / Shipping

### other



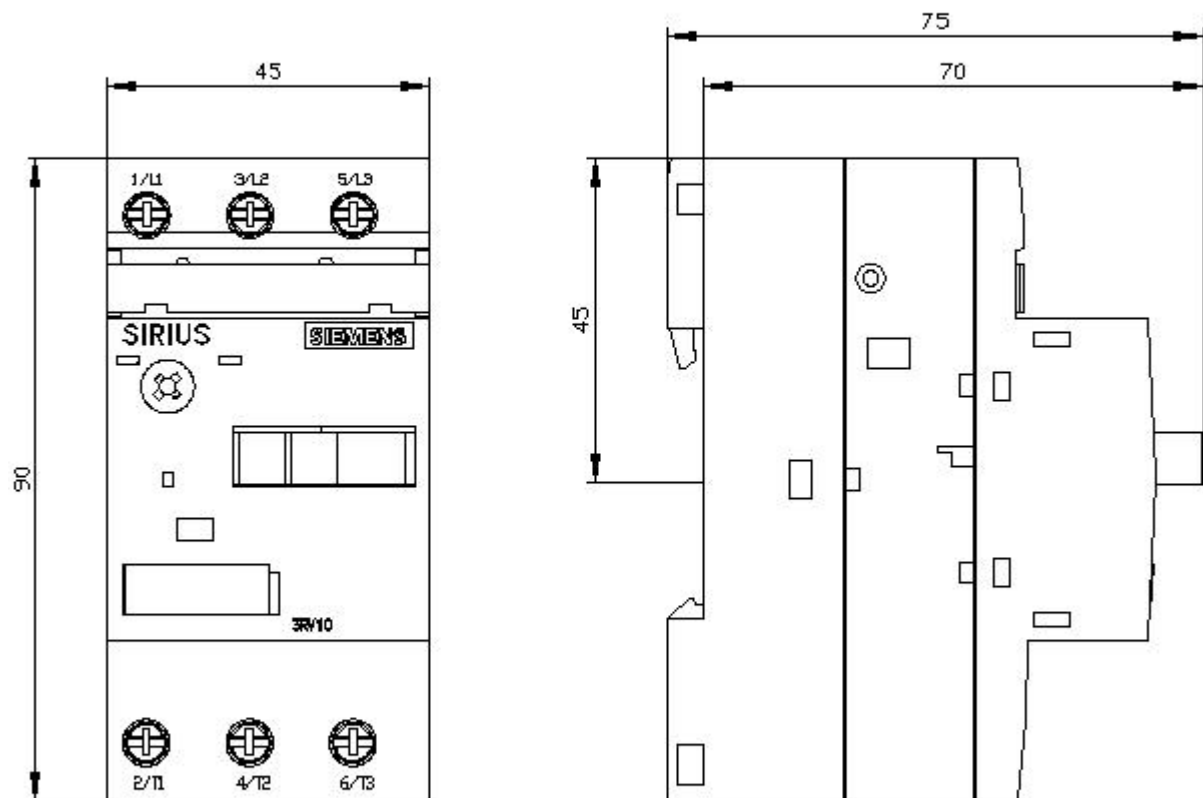
Miscellaneous

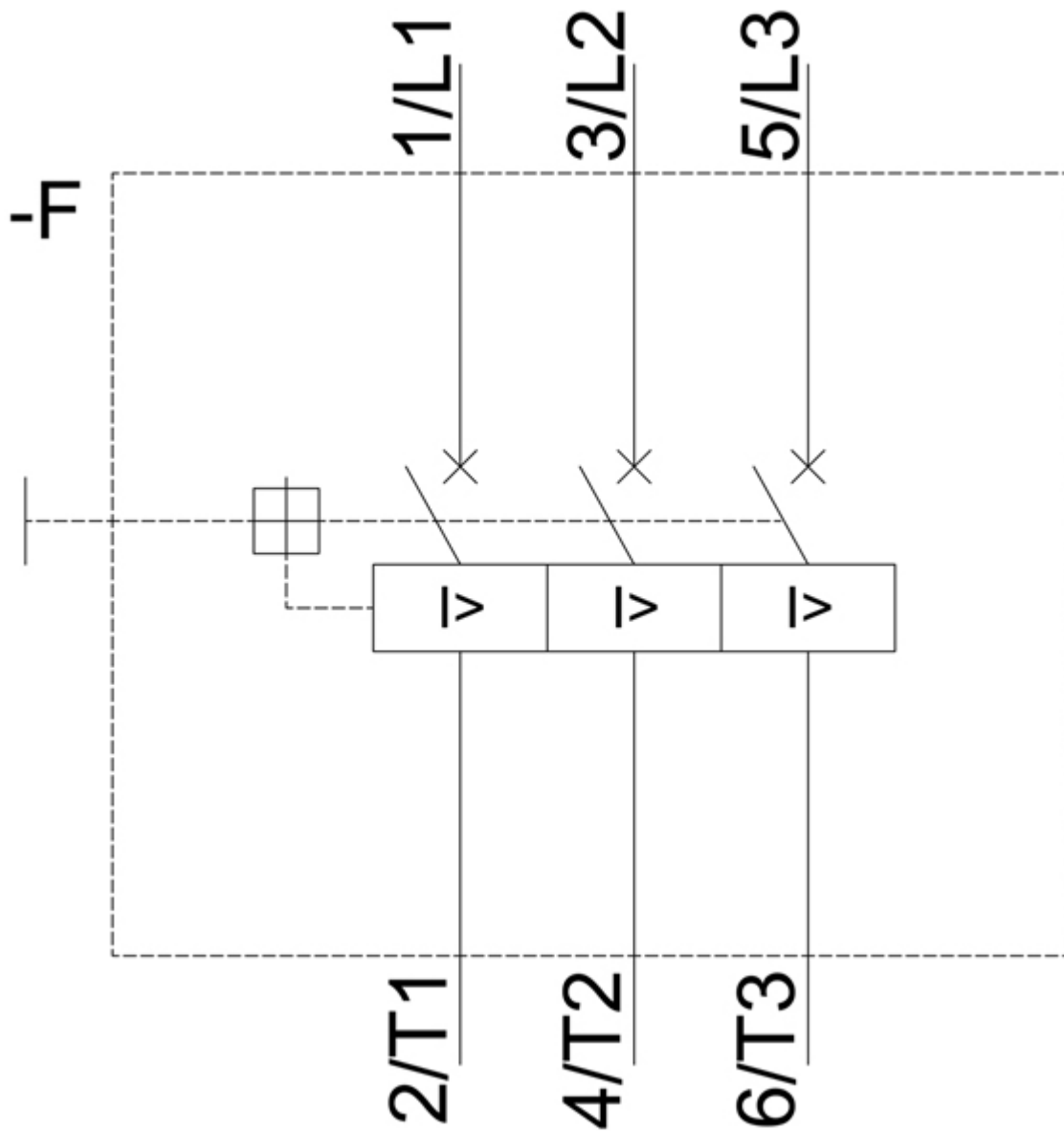
Confirmation

### Railway

Special Test Certificate

## Further information





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