



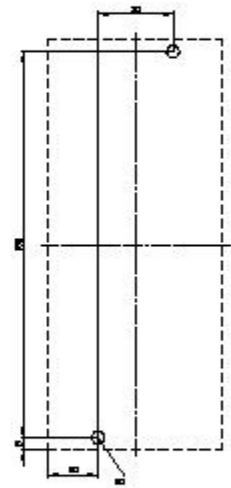
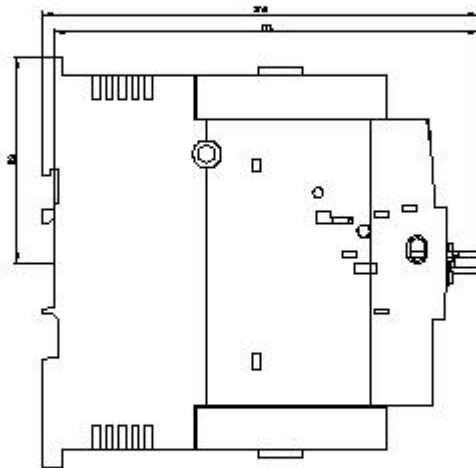
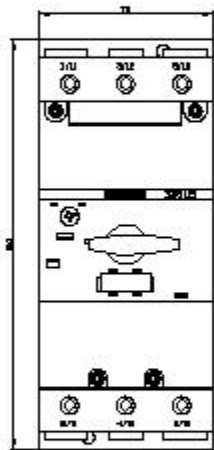
Circuit breaker size S3 for motor protection, CLASS 10 A-release 75...93 A  
N-release 1300 A screw terminal Standard switching capacity

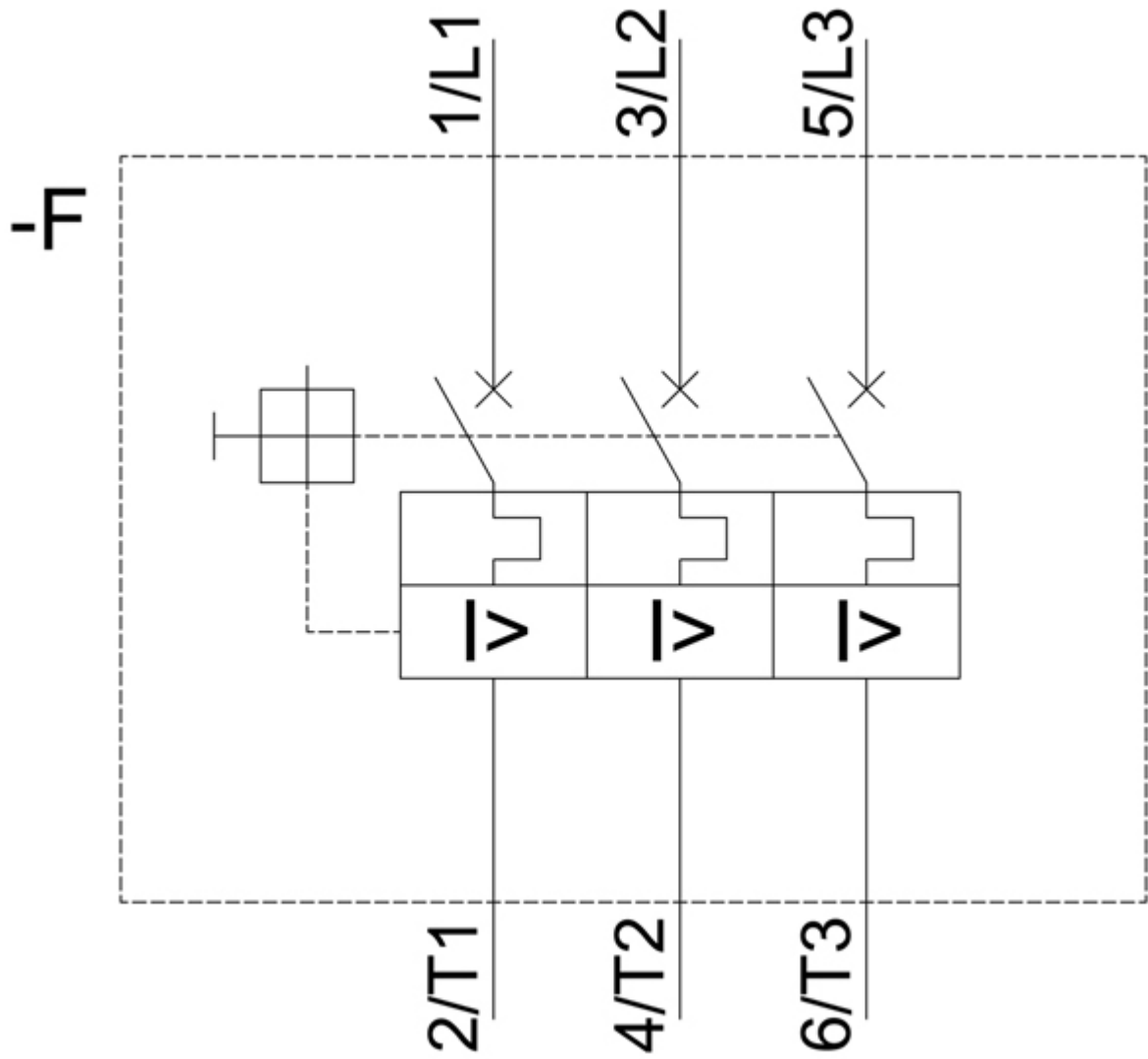
|  |                      |
|--|----------------------|
| <b>product brand name</b>  | SIRIUS               |
| <b>product designation</b>   | Circuit breaker      |
| <b>design of the product</b>   | For motor protection |
| <b>product type designation</b>  | 3RV2                 |
| <b>General technical data</b>  |                      |
| <b>size of the circuit-breaker</b>   | S3                   |
| <b>size of contactor can be combined company-specific</b>                                  | S3                   |
| product extension auxiliary switch   | Yes                  |
| <b>power loss [W] for rated value of the current</b>                                       |                      |
| • at AC in hot operating state   | 39 W                 |
| • at AC in hot operating state per pole  | 13 W                 |
| insulation voltage with degree of pollution 3 at AC rated value                            | 1 000 V              |
| <b>surge voltage resistance rated value</b>  | 8 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                |
| shock resistance acc. to IEC 60068-2-27  | 25g / 11 ms Sinus    |
| <b>mechanical service life (switching cycles)</b>  |                      |
| • of the main contacts typical   | 25 000               |
| • of auxiliary contacts typical  | 25 000               |
| electrical endurance (switching cycles) typical  | 25 000               |
| <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                    |
| <b>Ambient conditions</b>  |                      |
| installation altitude at height above sea level maximum                                    | 2 000 m              |
| • ambient temperature during operation   | -20 ... +60 °C       |
| • ambient temperature during storage   | -50 ... +80 °C       |
| • ambient temperature 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</b>                                    | 75 ... 93 A          |

|   |  |
|---|--|
| <b>current-dependent overload release</b>   |  |
| <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>  | 93 A   |
| operational current at AC-3 at 400 V rated value  | 93 A   |
| operating power at AC-3   |  |
| <ul style="list-style-type: none"> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul>  | 45 000 W<br>55 000 W<br>90 000 W   |
| operating frequency at AC-3 maximum   | 15 1/h   |
| <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>30 kA<br>4 kA<br>3 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>65 kA<br>8 kA<br>5 kA  |
| response value current of instantaneous short-circuit trip unit   | 1 300 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>  | 93 A<br>93 A   |
| <b>yielded mechanical performance [hp]</b>  |  |
| <ul style="list-style-type: none"> <li>for single-phase AC motor <ul style="list-style-type: none"> <li>at 110/120 V rated value</li> <li>at 230 V rated value</li> </ul> </li> <li>for 3-phase AC motor <ul style="list-style-type: none"> <li>at 200/208 V rated value</li> <li>at 220/230 V rated value</li> <li>at 460/480 V rated value</li> <li>at 575/600 V rated value</li> </ul> </li> </ul> | 7.5 hp<br>20 hp<br>30 hp<br>40 hp<br>75 hp<br>100 hp                                   |
| <b>Short-circuit protection</b>   |  |
| <b>product function short circuit protection</b>  | Yes  |
| <b>design of the short-circuit trip</b>   | magnetic   |
| <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>   | 165 mm   |
| <b>width</b>  | 70 mm  |
| <b>depth</b>  | 176 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> </ul>  | 70 mm<br>70 mm<br>10 mm  |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <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> | 70 mm<br>70 mm<br>10 mm<br><br>110 mm<br>110 mm<br>10 mm<br><br>110 mm<br>110 mm<br>10 mm<br><br>150 mm<br>150 mm<br>0 mm<br>30 mm<br>0 mm<br><br>150 mm<br>150 mm<br>0 mm<br>30 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</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>— finely stranded without core end processing</li> </ul> </li> </ul>   | 2x (2.5 ... 16 mm <sup>2</sup> )<br>2x (2,5 ... 50 mm <sup>2</sup> ), 1x (10 ... 70 mm <sup>2</sup> )<br>2x (2.5 ... 35 mm <sup>2</sup> ), 1x (2.5 ... 50 mm <sup>2</sup> )<br>2x (10 ... 35 mm <sup>2</sup> ), 1x (10 ... 50 mm <sup>2</sup> ) |
| <ul style="list-style-type: none"> <li>● <b>tightening torque</b> <ul style="list-style-type: none"> <li>— for main contacts for ring cable lug</li> </ul> </li> </ul>   | 4.5 ... 6 N·m   |
| <b>outer diameter of the usable ring cable lug maximum</b>   | 19 mm   |
| <ul style="list-style-type: none"> <li>● tightening torque for main contacts with screw-type terminals</li> </ul>  | 4.5 ... 6 N·m   |
| <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>T1 value for proof test interval or service life acc. to IEC 61508</b>  | 10 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 version for switching status   | Handle  |
| <b>Certificates/ approvals</b>   |   |
| <b>General Product Approval</b>  | <b>For use in hazardous locations</b>   |







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12/15/2020 