



power contactor, AC-3e/AC-3 185 A, 90 kW / 400 V AC (50-60 Hz) / DC U<sub>c</sub>: 96-127 V x (0.8-1.1) F-PLC input 24 V DC 3-pole, auxiliary contacts 2 NO + 2 NC  
drive: electronic main circuit: busbar control and auxiliary circuit: screw terminal

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| product brand name                                                                                           | SIRIUS                                                                                                                                                                                        |
| product designation                                                                                          | Power contactor                                                                                                                                                                               |
| product type designation                                                                                     | 3RT1                                                                                                                                                                                          |
| <b>General technical data</b>                                                                                |                                                                                                                                                                                               |
| size of contactor                                                                                            | S6                                                                                                                                                                                            |
| product extension                                                                                            |                                                                                                                                                                                               |
| • function module for communication                                                                          | No                                                                                                                                                                                            |
| • auxiliary switch                                                                                           | Yes                                                                                                                                                                                           |
| power loss [W] for rated value of the current                                                                |                                                                                                                                                                                               |
| • at AC in hot operating state                                                                               | 39 W                                                                                                                                                                                          |
| • at AC in hot operating state per pole                                                                      | 13 W                                                                                                                                                                                          |
| • without load current share typical                                                                         | 2.8 W                                                                                                                                                                                         |
| type of calculation of power loss depending on pole                                                          | quadratic                                                                                                                                                                                     |
| insulation voltage                                                                                           |                                                                                                                                                                                               |
| • of main circuit with degree of pollution 3 rated value                                                     | 1 000 V                                                                                                                                                                                       |
| • of auxiliary circuit with degree of pollution 3 rated value                                                | 500 V                                                                                                                                                                                         |
| surge voltage resistance                                                                                     |                                                                                                                                                                                               |
| • of main circuit rated value                                                                                | 8 kV                                                                                                                                                                                          |
| • of auxiliary circuit rated value                                                                           | 6 kV                                                                                                                                                                                          |
| maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 | 690 V                                                                                                                                                                                         |
| shock resistance at rectangular impulse                                                                      |                                                                                                                                                                                               |
| • at AC                                                                                                      | 8,5g / 5 ms, 4,2g / 10 ms                                                                                                                                                                     |
| • at DC                                                                                                      | 8,5g / 5 ms, 4,2g / 10 ms                                                                                                                                                                     |
| shock resistance with sine pulse                                                                             |                                                                                                                                                                                               |
| • at AC                                                                                                      | 13,4g / 5 ms, 6,5g / 10 ms                                                                                                                                                                    |
| • at DC                                                                                                      | 13,4g / 5 ms, 6,5g / 10 ms                                                                                                                                                                    |
| mechanical service life (operating cycles)                                                                   |                                                                                                                                                                                               |
| • of contactor typical                                                                                       | 10 000 000                                                                                                                                                                                    |
| • of the contactor with added electronically optimized auxiliary switch block typical                        | 5 000 000                                                                                                                                                                                     |
| • of the contactor with added auxiliary switch block typical                                                 | 10 000 000                                                                                                                                                                                    |
| reference code according to IEC 81346-2                                                                      | Q                                                                                                                                                                                             |
| Substance Prohibitance (Date)                                                                                |                                                                                                                                                                                               |
| SVHC substance name                                                                                          | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5<br>Perfluorobutane sulfonic acid (PFBS) and its salts - - |
| Weight                                                                                                       | 3.348 kg                                                                                                                                                                                      |
| <b>Ambient conditions</b>                                                                                    |                                                                                                                                                                                               |
| installation altitude at height above sea level maximum                                                      | 2 000 m                                                                                                                                                                                       |
| ambient temperature                                                                                          |                                                                                                                                                                                               |



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| <ul style="list-style-type: none"> <li>● <b>with 2 current paths in series at DC-1</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>● <b>with 3 current paths in series at DC-1</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>● <b>at 1 current path at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>● <b>with 2 current paths in series at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>● <b>with 3 current paths in series at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul> | 160 A<br>160 A<br>160 A<br>20 A<br>3.2 A<br>1.6 A<br><br>160 A<br>160 A<br>160 A<br>160 A<br>11.5 A<br>4 A<br><br>160 A<br>7.5 A<br>2.5 A<br>0.6 A<br>0.17 A<br>0.12 A<br><br>160 A<br>160 A<br>160 A<br>2.5 A<br>0.65 A<br>0.37 A<br><br>160 A<br>160 A<br>160 A<br>160 A<br>1.4 A<br>0.75 A |
| <b>operating power</b> <ul style="list-style-type: none"> <li>● at AC-2 at 400 V rated value</li> <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> <li>— at 1000 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> <li>— at 1000 V rated value</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 90 kW<br><br>55 kW<br>90 kW<br>132 kW<br>160 kW<br>90 kW<br><br>55 kW<br>90 kW<br>132 kW<br>160 kW<br>90 kW                                                                                                                                                                                   |
| <b>operating power for approx. 200000 operating cycles at AC-4</b> <ul style="list-style-type: none"> <li>● at 400 V rated value</li> <li>● at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 45 kW<br>65 kW                                                                                                                                                                                                                                                                                |
| <b>operating apparent power at AC-6a</b> <ul style="list-style-type: none"> <li>● up to 230 V for current peak value n=20 rated value</li> <li>● up to 400 V for current peak value n=20 rated value</li> <li>● up to 500 V for current peak value n=20 rated value</li> <li>● up to 690 V for current peak value n=20 rated value</li> <li>● up to 1000 V for current peak value n=20 rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 60 000 kVA<br>100 000 VA<br>130 000 VA<br>180 000 VA<br>110 000 VA                                                                                                                                                                                                                            |
| <b>operating apparent power at AC-6a</b> <ul style="list-style-type: none"> <li>● up to 230 V for current peak value n=30 rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 40 000 VA                                                                                                                                                                                                                                                                                     |

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| <ul style="list-style-type: none"> <li>• up to 400 V for current peak value n=30 rated value</li> <li>• up to 500 V for current peak value n=30 rated value</li> <li>• up to 690 V for current peak value n=30 rated value</li> <li>• up to 1000 V for current peak value n=30 rated value</li> </ul>                                                                                                                           | 70 000 VA<br>90 000 VA<br>120 000 VA<br>110 000 VA                                                                                                                                                                                                                                                                  |
| <b>short-time withstand current in cold operating state up to 40 °C</b> <ul style="list-style-type: none"> <li>• limited to 1 s switching at zero current maximum</li> <li>• limited to 5 s switching at zero current maximum</li> <li>• limited to 10 s switching at zero current maximum</li> <li>• limited to 30 s switching at zero current maximum</li> <li>• limited to 60 s switching at zero current maximum</li> </ul> | 2 900 A; Use minimum cross-section acc. to AC-1 rated value<br>2 084 A; Use minimum cross-section acc. to AC-1 rated value<br>1 480 A; Use minimum cross-section acc. to AC-1 rated value<br>968 A; Use minimum cross-section acc. to AC-1 rated value<br>801 A; Use minimum cross-section acc. to AC-1 rated value |
| <b>no-load switching frequency</b> <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                                                                                                   | 1 000 1/h<br>1 000 1/h                                                                                                                                                                                                                                                                                              |
| <b>operating frequency</b> <ul style="list-style-type: none"> <li>• at AC-1 maximum</li> <li>• at AC-2 maximum</li> <li>• at AC-3 maximum</li> <li>• at AC-3e maximum</li> <li>• at AC-4 maximum</li> </ul>                                                                                                                                                                                                                     | 750 1/h<br>300 1/h<br>750 1/h<br>750 1/h<br>130 1/h                                                                                                                                                                                                                                                                 |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                     |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                                                                                                                                                                                                                                                            | AC/DC                                                                                                                                                                                                                                                                                                               |
| <b>control supply voltage at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>                                                                                                                                                                                                                                                                                    | 96 ... 127 V<br>96 ... 127 V                                                                                                                                                                                                                                                                                        |
| <b>control supply voltage at DC rated value</b>                                                                                                                                                                                                                                                                                                                                                                                 | 96 ... 127 V                                                                                                                                                                                                                                                                                                        |
| <b>operating range factor control supply voltage rated value of magnet coil at DC</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>                                                                                                                                                                                                                                             | 0.8<br>1.1                                                                                                                                                                                                                                                                                                          |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                          | 0.8 ... 1.1<br>0.8 ... 1.1                                                                                                                                                                                                                                                                                          |
| <b>type of PLC-control input according to IEC 60947-1</b>                                                                                                                                                                                                                                                                                                                                                                       | Type 1                                                                                                                                                                                                                                                                                                              |
| <b>consumed current at PLC-control input according to IEC 60947-1 maximum</b>                                                                                                                                                                                                                                                                                                                                                   | 14 mA                                                                                                                                                                                                                                                                                                               |
| <b>voltage at PLC-control input rated value</b>                                                                                                                                                                                                                                                                                                                                                                                 | 24 V                                                                                                                                                                                                                                                                                                                |
| <b>operating range factor of the voltage at PLC-control input</b>                                                                                                                                                                                                                                                                                                                                                               | 0.8 ... 1.1                                                                                                                                                                                                                                                                                                         |
| <b>design of the surge suppressor</b>                                                                                                                                                                                                                                                                                                                                                                                           | with varistor                                                                                                                                                                                                                                                                                                       |
| <b>apparent pick-up power</b> <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at AC <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> <li>• at maximum rated control supply voltage at AC <ul style="list-style-type: none"> <li>— at 60 Hz</li> <li>— at 50 Hz</li> </ul> </li> </ul>                                                                    | 190 VA<br>190 VA<br>280 VA<br>280 VA                                                                                                                                                                                                                                                                                |
| <b>apparent pick-up power of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                                             | 280 VA<br>280 VA                                                                                                                                                                                                                                                                                                    |
| <b>inductive power factor with closing power of the coil</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                                   | 0.8<br>0.8                                                                                                                                                                                                                                                                                                          |
| <b>apparent holding power</b> <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at DC</li> <li>• at maximum rated control supply voltage at DC</li> </ul>                                                                                                                                                                                                                                        | 2.1 VA<br>2.8 VA                                                                                                                                                                                                                                                                                                    |
| <b>apparent holding power</b> <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at AC <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> <li>• at maximum rated control supply voltage at AC <ul style="list-style-type: none"> <li>— at 50 Hz</li> </ul> </li> </ul>                                                                                        | 3.5 VA<br>3.5 VA<br>4.8 VA                                                                                                                                                                                                                                                                                          |

|                                                                    |                                                                             |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------|
| — at 60 Hz                                                         | 4.8 VA                                                                      |
| <b>inductive power factor with the holding power of the coil</b>   |                                                                             |
| • at 50 Hz                                                         | 0.6                                                                         |
| • at 60 Hz                                                         | 0.6                                                                         |
| <b>closing power of magnet coil at DC</b>                          | 320 W                                                                       |
| <b>holding power of magnet coil at DC</b>                          | 2.8 W                                                                       |
| <b>closing delay</b>                                               |                                                                             |
| • at AC                                                            | 60 ... 75 ms                                                                |
| • at DC                                                            | 60 ... 75 ms                                                                |
| <b>opening delay</b>                                               |                                                                             |
| • at AC                                                            | 115 ... 130 ms                                                              |
| • at DC                                                            | 115 ... 130 ms                                                              |
| <b>recovery time after power failure typical</b>                   | 2 s                                                                         |
| <b>arcing time</b>                                                 | 10 ... 15 ms                                                                |
| <b>control version of the switch operating mechanism</b>           | Fail-safe PLC input (F-PLC-IN)                                              |
| <b>Auxiliary circuit</b>                                           |                                                                             |
| number of NC contacts for auxiliary contacts instantaneous contact | 2                                                                           |
| number of NO contacts for auxiliary contacts instantaneous contact | 2                                                                           |
| operational current at AC-12 maximum                               | 10 A                                                                        |
| <b>operational current at AC-15</b>                                |                                                                             |
| • at 230 V rated value                                             | 6 A                                                                         |
| • at 400 V rated value                                             | 3 A                                                                         |
| • at 500 V rated value                                             | 2 A                                                                         |
| • at 690 V rated value                                             | 1 A                                                                         |
| <b>operational current at DC-12</b>                                |                                                                             |
| • at 24 V rated value                                              | 10 A                                                                        |
| • at 48 V rated value                                              | 6 A                                                                         |
| • at 60 V rated value                                              | 6 A                                                                         |
| • at 110 V rated value                                             | 3 A                                                                         |
| • at 125 V rated value                                             | 2 A                                                                         |
| • at 220 V rated value                                             | 1 A                                                                         |
| • at 600 V rated value                                             | 0.15 A                                                                      |
| <b>operational current at DC-13</b>                                |                                                                             |
| • at 24 V rated value                                              | 10 A                                                                        |
| • at 48 V rated value                                              | 2 A                                                                         |
| • at 60 V rated value                                              | 2 A                                                                         |
| • at 110 V rated value                                             | 1 A                                                                         |
| • at 125 V rated value                                             | 0.9 A                                                                       |
| • at 220 V rated value                                             | 0.3 A                                                                       |
| • at 600 V rated value                                             | 0.1 A                                                                       |
| <b>contact reliability of auxiliary contacts</b>                   | 1 faulty switching per 100 million (17 V, 1 mA)                             |
| <b>UL/CSA ratings</b>                                              |                                                                             |
| <b>full-load current (FLA) for 3-phase AC motor</b>                |                                                                             |
| • at 480 V rated value                                             | 180 A                                                                       |
| • at 600 V rated value                                             | 192 A                                                                       |
| <b>yielded mechanical performance [hp]</b>                         |                                                                             |
| • for single-phase AC motor                                        |                                                                             |
| — at 230 V rated value                                             | 30 hp                                                                       |
| • for 3-phase AC motor                                             |                                                                             |
| — at 200/208 V rated value                                         | 60 hp                                                                       |
| — at 220/230 V rated value                                         | 75 hp                                                                       |
| — at 460/480 V rated value                                         | 150 hp                                                                      |
| — at 575/600 V rated value                                         | 200 hp                                                                      |
| <b>contact rating of auxiliary contacts according to UL</b>        | A600 / P600                                                                 |
| <b>Short-circuit protection</b>                                    |                                                                             |
| <b>design of the fuse link</b>                                     |                                                                             |
| • for short-circuit protection of the main circuit                 |                                                                             |
| — with type of coordination 1 required                             | gG: 355 A (690 V, 100 kA)                                                   |
| — with type of assignment 2 required                               | gG: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 A (415 V, 50 |

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| <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | kA)<br>gG: 10 A (500 V, 1 kA)                                                                                                                                                                                                          |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                        |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back                                                                                                               |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | screw fixing                                                                                                                                                                                                                           |
| <b>height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 172 mm                                                                                                                                                                                                                                 |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 120 mm                                                                                                                                                                                                                                 |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 170 mm                                                                                                                                                                                                                                 |
| <b>required spacing</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• with side-by-side mounting               <ul style="list-style-type: none"> <li>— forwards 20 mm</li> <li>— upwards 10 mm</li> <li>— downwards 10 mm</li> <li>— at the side 0 mm</li> </ul> </li> <li>• for grounded parts               <ul style="list-style-type: none"> <li>— forwards 20 mm</li> <li>— upwards 10 mm</li> <li>— at the side 10 mm</li> <li>— downwards 10 mm</li> </ul> </li> <li>• for live parts               <ul style="list-style-type: none"> <li>— forwards 20 mm</li> <li>— upwards 10 mm</li> <li>— downwards 10 mm</li> <li>— at the side 10 mm</li> </ul> </li> </ul> |                                                                                                                                                                                                                                        |
| <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> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                             | Connection bar<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals                                                                                                                                                 |
| <b>width of connection bar</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 17 mm                                                                                                                                                                                                                                  |
| <b>thickness of connection bar</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3 mm                                                                                                                                                                                                                                   |
| <b>diameter of holes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 9 mm                                                                                                                                                                                                                                   |
| <b>number of holes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1                                                                                                                                                                                                                                      |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• for AWG cables for main contacts</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2x 1/0                                                                                                                                                                                                                                 |
| <b>connectable conductor cross-section for main contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• stranded</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 25 ... 120 mm²                                                                                                                                                                                                                         |
| <b>connectable conductor cross-section for auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.5 ... 4 mm²<br>0.5 ... 2.5 mm²                                                                                                                                                                                                       |
| <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</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG cables for auxiliary contacts</li> </ul>                                                                                                                                                                                                                                                                                                                                                          | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)<br>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)<br>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)<br>2x (20 ... 16), 2x (18 ... 14), 1x 12 |
| <b>AWG number as coded connectable conductor cross section</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 18 ... 14                                                                                                                                                                                                                              |
| <b>Safety related data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                        |
| <b>product function</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• mirror contact according to IEC 60947-4-1</li> <li>• positively driven operation according to IEC 60947-5-1</li> <li>• suitable for safety function</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                        | Yes<br>No<br>Yes                                                                                                                                                                                                                       |
| suitability for use safety-related switching OFF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Yes                                                                                                                                                                                                                                    |
| <b>safe state</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | off                                                                                                                                                                                                                                    |
| <b>test wear-related service life necessary</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Yes                                                                                                                                                                                                                                    |
| <b>stop category according to IEC 60204-1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0                                                                                                                                                                                                                                      |
| <b>proportion of dangerous failures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                        |

|                                                                      |                                                                          |
|----------------------------------------------------------------------|--------------------------------------------------------------------------|
| • with low demand rate according to SN 31920                         | 40 %                                                                     |
| • with high demand rate according to SN 31920                        | 73 %                                                                     |
| <b>B10 value with high demand rate according to SN 31920</b>         | 1 000 000                                                                |
| <b>failure rate [FIT] with low demand rate according to SN 31920</b> | 100 FIT                                                                  |
| <b>MTBF</b>                                                          | 75 a                                                                     |
| IEC 62061                                                            |                                                                          |
| PFHD with high demand rate according to IEC 62061                    | 4.5E-7 1/h                                                               |
| ISO 13849                                                            |                                                                          |
| <b>performance level (PL) according to ISO 13849-1</b>               | c                                                                        |
| <b>overdimensioning according to ISO 13849-2 necessary</b>           | Yes                                                                      |
| IEC 61508                                                            |                                                                          |
| Safety Integrity Level (SIL) according to IEC 61508                  | 2                                                                        |
| <b>safety device type according to IEC 61508-2</b>                   | Type B                                                                   |
| <b>PFHD with high demand rate according to IEC 61508</b>             | 4.5E-7 1/h                                                               |
| PFDavg with low demand rate according to IEC 61508                   | 0.007                                                                    |
| <b>Safe failure fraction (SFF)</b>                                   | 93 %                                                                     |
| hardware fault tolerance according to IEC 61508                      | 0                                                                        |
| T1 value of service life according to IEC 61508                      | 20 a                                                                     |
| Electrical Safety                                                    |                                                                          |
| <b>protection class IP on the front according to IEC 60529</b>       | IP00; IP20 with box terminal/cover                                       |
| <b>touch protection on the front according to IEC 60529</b>          | finger-safe, for vertical contact from the front with box terminal/cover |

#### Approvals Certificates

##### General Product Approval



[Confirmation](#)



[KC](#)

| General Product Approval | EMV | Functional Safety | Test Certificates | other |
|--------------------------|-----|-------------------|-------------------|-------|
|--------------------------|-----|-------------------|-------------------|-------|



[Type Examination Certificate](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Confirmation](#)

| other | Railway | Environment |
|-------|---------|-------------|
|-------|---------|-------------|

[Miscellaneous](#)

[Special Test Certificate](#)

[Environmental Confirmations](#)

#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### 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=3RT1056-6SF36>

##### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1056-6SF36>

##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6SF36>

##### Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1056-6SF36&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1056-6SF36&lang=en)

##### Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6SF36/char>

##### Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1056-6SF36&objecttype=14&gridview=view1>



