



Power contactor, AC-3 9 A, 4 kW / 400 V 1 NO, 24 V DC 3-pole, Size S00 screw terminal

|                          |                 |
|--------------------------|-----------------|
| product brand name       | SIRIUS          |
| product designation      | Power contactor |
| product type designation | 3RT2            |

### General technical data

|                                                                                                                                                                                                                                         |                                                      |
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| size of contactor                                                                                                                                                                                                                       | S00                                                  |
| product extension                                                                                                                                                                                                                       |                                                      |
| <ul style="list-style-type: none"> <li>function module for communication</li> <li>auxiliary switch</li> </ul>                                                                                                                           | <p>No</p> <p>Yes</p>                                 |
| power loss [W] for rated value of the current                                                                                                                                                                                           |                                                      |
| <ul style="list-style-type: none"> <li>at AC in hot operating state</li> <li>at AC in hot operating state per pole</li> <li>without load current share typical</li> </ul>                                                               | <p>0.9 W</p> <p>0.3 W</p> <p>4 W</p>                 |
| insulation voltage                                                                                                                                                                                                                      |                                                      |
| <ul style="list-style-type: none"> <li>of main circuit with degree of pollution 3 rated value</li> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>                                                           | <p>690 V</p> <p>690 V</p>                            |
| surge voltage resistance                                                                                                                                                                                                                |                                                      |
| <ul style="list-style-type: none"> <li>of main circuit rated value</li> <li>of auxiliary circuit rated value</li> </ul>                                                                                                                 | <p>6 kV</p> <p>6 kV</p>                              |
| maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1                                                                                                                                   | 400 V                                                |
| shock resistance at rectangular impulse                                                                                                                                                                                                 |                                                      |
| <ul style="list-style-type: none"> <li>at DC</li> </ul>                                                                                                                                                                                 | 6,7g / 5 ms, 4,2g / 10 ms                            |
| shock resistance with sine pulse                                                                                                                                                                                                        |                                                      |
| <ul style="list-style-type: none"> <li>at DC</li> </ul>                                                                                                                                                                                 | 10,5g / 5 ms, 6,6g / 10 ms                           |
| mechanical service life (switching cycles)                                                                                                                                                                                              |                                                      |
| <ul style="list-style-type: none"> <li>of contactor typical</li> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> </ul> | <p>30 000 000</p> <p>5 000 000</p> <p>10 000 000</p> |
| reference code according to IEC 81346-2                                                                                                                                                                                                 | Q                                                    |
| Substance Prohibitance (Date)                                                                                                                                                                                                           | 10/01/2009                                           |

### Ambient conditions

|                                                                                            |                                             |
|--------------------------------------------------------------------------------------------|---------------------------------------------|
| installation altitude at height above sea level maximum                                    | 2 000 m                                     |
| ambient temperature                                                                        |                                             |
| <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> </ul> | <p>-25 ... +60 °C</p> <p>-55 ... +80 °C</p> |
| relative humidity minimum                                                                  | 10 %                                        |
| relative humidity at 55 °C according to IEC 60068-2-30 maximum                             | 95 %                                        |

### Main circuit

|                                                                        |                   |
|------------------------------------------------------------------------|-------------------|
| <b>number of poles for main current circuit</b>                        | 3                 |
| <b>number of NO contacts for main contacts</b>                         | 3                 |
| <b>operating voltage</b>                                               |                   |
| • at AC-3 rated value maximum                                          | 690 V             |
| • at AC-3e rated value maximum                                         | 690 V             |
| <b>operational current</b>                                             |                   |
| • at AC-1 at 400 V at ambient temperature 40 °C rated value            | 22 A              |
| • at AC-1                                                              |                   |
| — up to 690 V at ambient temperature 40 °C rated value                 | 22 A              |
| — up to 690 V at ambient temperature 60 °C rated value                 | 20 A              |
| • at AC-3                                                              |                   |
| — at 400 V rated value                                                 | 9 A               |
| — at 500 V rated value                                                 | 7.7 A             |
| — at 690 V rated value                                                 | 6.7 A             |
| • at AC-3e                                                             |                   |
| — at 400 V rated value                                                 | 9 A               |
| — at 500 V rated value                                                 | 7.7 A             |
| — at 690 V rated value                                                 | 6.7 A             |
| • at AC-4 at 400 V rated value                                         | 8.5 A             |
| • at AC-5a up to 690 V rated value                                     | 19.4 A            |
| • at AC-5b up to 400 V rated value                                     | 7.4 A             |
| • at AC-6a                                                             |                   |
| — up to 230 V for current peak value n=20 rated value                  | 5.3 A             |
| — up to 400 V for current peak value n=20 rated value                  | 5.3 A             |
| — up to 500 V for current peak value n=20 rated value                  | 5.3 A             |
| — up to 690 V for current peak value n=20 rated value                  | 5 A               |
| • at AC-6a                                                             |                   |
| — up to 230 V for current peak value n=30 rated value                  | 3.5 A             |
| — up to 400 V for current peak value n=30 rated value                  | 3.5 A             |
| — up to 500 V for current peak value n=30 rated value                  | 3.6 A             |
| — up to 690 V for current peak value n=30 rated value                  | 3.3 A             |
| minimum cross-section in main circuit at maximum AC-1 rated value      | 4 mm <sup>2</sup> |
| <b>operational current for approx. 200000 operating cycles at AC-4</b> |                   |
| • at 400 V rated value                                                 | 4.1 A             |
| • at 690 V rated value                                                 | 3.3 A             |
| <b>operational current</b>                                             |                   |
| • <b>at 1 current path at DC-1</b>                                     |                   |
| — at 24 V rated value                                                  | 20 A              |
| — at 110 V rated value                                                 | 2.1 A             |
| — at 220 V rated value                                                 | 0.8 A             |
| — at 440 V rated value                                                 | 0.6 A             |
| — at 600 V rated value                                                 | 0.6 A             |
| • <b>with 2 current paths in series at DC-1</b>                        |                   |
| — at 24 V rated value                                                  | 20 A              |
| — at 110 V rated value                                                 | 12 A              |
| — at 220 V rated value                                                 | 1.6 A             |
| — at 440 V rated value                                                 | 0.8 A             |
| — at 600 V rated value                                                 | 0.7 A             |
| • <b>with 3 current paths in series at DC-1</b>                        |                   |
| — at 24 V rated value                                                  | 20 A              |
| — at 110 V rated value                                                 | 20 A              |
| — at 220 V rated value                                                 | 20 A              |
| — at 440 V rated value                                                 | 1.3 A             |

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| <ul style="list-style-type: none"> <li>— at 600 V rated value</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 110 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 110 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 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> | 1 A<br><br>20 A<br>0.15 A<br><br>20 A<br>0.35 A<br><br>20 A<br>20 A<br>1.5 A<br>0.2 A<br>0.2 A                                                                                                                                                                                                             |
| <b>operating power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> <li>• at AC-3e <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>                                                                                                                                                                                                                                                       | 2.2 kW<br>4 kW<br>4 kW<br>5.5 kW<br><br>2.2 kW<br>4 kW<br>4 kW<br>5 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2 kW<br>2.5 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> </ul>                                                                                                                                                                                                                                                                                                                                                                                      | 2 kVA<br>3.6 kVA<br>4.6 kVA<br>5.9 kVA                                                                                                                                                                                                                                                                     |
| <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> <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> </ul>                                                                                                                                                                                                                                                                                                                                                                                      | 1.3 kVA<br>2.4 kVA<br>3.1 kVA<br>4 kVA                                                                                                                                                                                                                                                                     |
| <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>                                                                                                                                                                                                                                                                                                                                   | 155 A; Use minimum cross-section acc. to AC-1 rated value<br>111 A; Use minimum cross-section acc. to AC-1 rated value<br>86 A; Use minimum cross-section acc. to AC-1 rated value<br>66 A; Use minimum cross-section acc. to AC-1 rated value<br>55 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 DC</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 10 000 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 000 1/h<br>750 1/h<br>750 1/h<br>750 1/h<br>250 1/h                                                                                                                                                                                                                                                      |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                            |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | DC                                                                                                                                                                                                                                                                                                         |
| <b>control supply voltage at DC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 24 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>closing power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4 W                                                                                                                                                                                                                                                                                                        |
| <b>holding power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4 W                                                                                                                                                                                                                                                                                                        |
| <b>closing delay</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                            |

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| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                                                                                                                                    | 30 ... 100 ms                                                                                                                            |
| <b>opening delay</b>                                                                                                                                                                                                                         |                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                                                                                                                                    | 7 ... 13 ms                                                                                                                              |
| <b>arcing time</b>                                                                                                                                                                                                                           | 10 ... 15 ms                                                                                                                             |
| <b>control version of the switch operating mechanism</b>                                                                                                                                                                                     | Standard A1 - A2                                                                                                                         |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                     |                                                                                                                                          |
| number of NO contacts for auxiliary contacts                                                                                                                                                                                                 | 1                                                                                                                                        |
| instantaneous contact                                                                                                                                                                                                                        |                                                                                                                                          |
| operational current at AC-12 maximum                                                                                                                                                                                                         | 10 A                                                                                                                                     |
| <b>operational current at AC-15</b>                                                                                                                                                                                                          |                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at 230 V rated value</li> </ul>                                                                                                                                                                     | 10 A                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>                                                                                                                                                                     | 3 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 500 V rated value</li> </ul>                                                                                                                                                                     | 2 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                     | 1 A                                                                                                                                      |
| <b>operational current at DC-12</b>                                                                                                                                                                                                          |                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> </ul>                                                                                                                                                                      | 10 A                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 48 V rated value</li> </ul>                                                                                                                                                                      | 6 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>                                                                                                                                                                      | 6 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>                                                                                                                                                                     | 3 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 125 V rated value</li> </ul>                                                                                                                                                                     | 2 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>                                                                                                                                                                     | 1 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                     | 0.15 A                                                                                                                                   |
| <b>operational current at DC-13</b>                                                                                                                                                                                                          |                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> </ul>                                                                                                                                                                      | 10 A                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 48 V rated value</li> </ul>                                                                                                                                                                      | 2 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>                                                                                                                                                                      | 2 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>                                                                                                                                                                     | 1 A                                                                                                                                      |
| <ul style="list-style-type: none"> <li>• at 125 V rated value</li> </ul>                                                                                                                                                                     | 0.9 A                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>                                                                                                                                                                     | 0.3 A                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                     | 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>                                                                                                                                                                                          |                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at 480 V rated value</li> </ul>                                                                                                                                                                     | 7.6 A                                                                                                                                    |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                     | 9 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> </ul> </li> </ul>                                                                                  | 0.33 hp                                                                                                                                  |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 230 V rated value</li> </ul> </li> </ul>                                                                                                                 | 1 hp                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> </ul> </li> </ul>                                                                                       | 2 hp                                                                                                                                     |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220/230 V rated value</li> </ul> </li> </ul>                                                                                                             | 3 hp                                                                                                                                     |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 460/480 V rated value</li> </ul> </li> </ul>                                                                                                             | 5 hp                                                                                                                                     |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 575/600 V rated value</li> </ul> </li> </ul>                                                                                                             | 7.5 hp                                                                                                                                   |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                  | A600 / Q600                                                                                                                              |
| <b>Short-circuit protection</b>                                                                                                                                                                                                              |                                                                                                                                          |
| <b>design of the fuse link</b>                                                                                                                                                                                                               |                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> </ul> | gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)<br>gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>                                                                                                                            | gG: 10 A (500 V, 1 kA)                                                                                                                   |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                    |                                                                                                                                          |
| <b>mounting position</b>                                                                                                                                                                                                                     | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface     |
| <b>fastening method</b>                                                                                                                                                                                                                      | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715                                                   |
| <ul style="list-style-type: none"> <li>• side-by-side mounting</li> </ul>                                                                                                                                                                    | Yes                                                                                                                                      |
| <b>height</b>                                                                                                                                                                                                                                | 58 mm                                                                                                                                    |
| <b>width</b>                                                                                                                                                                                                                                 | 45 mm                                                                                                                                    |
| <b>depth</b>                                                                                                                                                                                                                                 | 73 mm                                                                                                                                    |
| <b>required spacing</b>                                                                                                                                                                                                                      |                                                                                                                                          |
| <ul style="list-style-type: none"> <li>• with side-by-side mounting</li> </ul>                                                                                                                                                               |                                                                                                                                          |

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| <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10 mm<br>10 mm<br>10 mm<br>0 mm<br><br>10 mm<br>10 mm<br>6 mm<br>10 mm<br><br>10 mm<br>10 mm<br>10 mm<br>6 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>type of electrical connection</b> <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul> <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> </ul> </li> <li>• at AWG cables for main contacts</li> </ul> <b>connectable conductor cross-section for main contacts</b> <ul style="list-style-type: none"> <li>• solid</li> <li>• stranded</li> <li>• finely stranded with core end processing</li> </ul> <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> <b>type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG cables for auxiliary contacts</li> </ul> <b>AWG number as coded connectable conductor cross section</b> <ul style="list-style-type: none"> <li>• for main contacts</li> <li>• for auxiliary contacts</li> </ul> | screw-type terminals<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals<br><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 16), 2x (18 ... 14), 2x 12<br><br>0.5 ... 4 mm <sup>2</sup><br>0.5 ... 4 mm <sup>2</sup><br>0.5 ... 2.5 mm <sup>2</sup><br><br>0.5 ... 4 mm <sup>2</sup><br>0.5 ... 2.5 mm <sup>2</sup><br><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 16), 2x (18 ... 14), 2x 12<br><br>20 ... 12<br>20 ... 12 |
| <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> </ul> B10 value with high demand rate according to SN 31920<br><b>proportion of dangerous failures</b> <ul style="list-style-type: none"> <li>• with low demand rate according to SN 31920</li> <li>• with high demand rate according to SN 31920</li> </ul> failure rate [FIT] with low demand rate according to SN 31920<br>T1 value for proof test interval or service life according to IEC 61508<br><b>protection class IP on the front according to IEC 60529</b><br><b>touch protection on the front according to IEC 60529</b><br><b>suitability for use</b> <ul style="list-style-type: none"> <li>• safety-related switching OFF</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Yes; with 3RH29<br>1 000 000<br><br>40 %<br>73 %<br>100 FIT<br><br>20 y<br><br>IP20<br><br>finger-safe, for vertical contact from the front<br><br>Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Certificates/ approvals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>General Product Approval</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |



[Confirmation](#)



[KC](#)



|     |                                       |                           |                   |
|-----|---------------------------------------|---------------------------|-------------------|
| EMC | Functional Safety/Safety of Machinery | Declaration of Conformity | Test Certificates |
|-----|---------------------------------------|---------------------------|-------------------|



[Type Examination Certificate](#)



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

|                   |                   |
|-------------------|-------------------|
| Test Certificates | Marine / Shipping |
|-------------------|-------------------|

[Miscellaneous](#)



|                   |       |         |                |
|-------------------|-------|---------|----------------|
| Marine / Shipping | other | Railway | Dangerous Good |
|-------------------|-------|---------|----------------|



[Confirmation](#)



[Vibration and Shock](#)

[Transport Information](#)

#### Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2016-1BB41>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2016-1BB41>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1BB41>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2016-1BB41&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2016-1BB41&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2016-1BB41/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2016-1BB41&objecttype=14&gridview=view1>



