



power contactor, AC-3e/AC-3 300 A, 160 kW / 400 V, AC (50-60 Hz) / DC Uc: 110-127 V 3-pole, auxiliary contacts 2 NO + 2 NC permanently mounted drive: conventional main circuit: busbar control and auxiliary circuit: screw terminal

|                                                                                                              |                            |
|--------------------------------------------------------------------------------------------------------------|----------------------------|
| product brand name                                                                                           | SIRIUS                     |
| product designation                                                                                          | Power contactor            |
| product type designation                                                                                     | 3RT1                       |
| <b>General technical data</b>                                                                                |                            |
| size of contactor                                                                                            | S10                        |
| 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                                                                               | 66 W                       |
| • at AC in hot operating state per pole                                                                      | 22 W                       |
| • without load current share typical                                                                         | 7.4 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 Prohibition (Date)                                                                                 | 05/01/2012                 |
| SVHC substance name                                                                                          | Lead - 7439-92-1           |
| Weight                                                                                                       | 6.57 kg                    |
| <b>Ambient conditions</b>                                                                                    |                            |
| installation altitude at height above sea level maximum                                                      | 2 000 m                    |
| ambient temperature                                                                                          |                            |
| • during operation                                                                                           | -25 ... +60 °C             |
| • during storage                                                                                             | -55 ... +80 °C             |

|                                                                   |                     |
|-------------------------------------------------------------------|---------------------|
| relative humidity minimum                                         | 10 %                |
| relative humidity at 55 °C according to IEC 60068-2-30 maximum    | 95 %                |
| <b>Main circuit</b>                                               |                     |
| number of poles for main current circuit                          | 3                   |
| number of NO contacts for main contacts                           | 3                   |
| operating voltage                                                 |                     |
| • at AC-3 rated value maximum                                     | 1 000 V             |
| • at AC-3e rated value maximum                                    | 1 000 V             |
| operational current                                               |                     |
| • at AC-1 at 400 V at ambient temperature 40 °C rated value       | 330 A               |
| • at AC-1                                                         |                     |
| — up to 690 V at ambient temperature 40 °C rated value            | 330 A               |
| — up to 690 V at ambient temperature 60 °C rated value            | 300 A               |
| — up to 1000 V at ambient temperature 40 °C rated value           | 150 A               |
| — up to 1000 V at ambient temperature 60 °C rated value           | 150 A               |
| • at AC-3                                                         |                     |
| — at 400 V rated value                                            | 300 A               |
| — at 500 V rated value                                            | 300 A               |
| — at 690 V rated value                                            | 280 A               |
| — at 1000 V rated value                                           | 95 A                |
| • at AC-3e                                                        |                     |
| — at 400 V rated value                                            | 300 A               |
| — at 500 V rated value                                            | 300 A               |
| — at 690 V rated value                                            | 280 A               |
| — at 1000 V rated value                                           | 95 A                |
| • at AC-4 at 400 V rated value                                    | 280 A               |
| • at AC-5a up to 690 V rated value                                | 290 A               |
| • at AC-5b up to 400 V rated value                                | 249 A               |
| • at AC-6a                                                        |                     |
| — up to 230 V for current peak value n=20 rated value             | 292 A               |
| — up to 400 V for current peak value n=20 rated value             | 292 A               |
| — up to 500 V for current peak value n=20 rated value             | 292 A               |
| — up to 690 V for current peak value n=20 rated value             | 280 A               |
| — up to 1000 V for current peak value n=20 rated value            | 95 A                |
| • at AC-6a                                                        |                     |
| — up to 230 V for current peak value n=30 rated value             | 195 A               |
| — up to 400 V for current peak value n=30 rated value             | 195 A               |
| — up to 500 V for current peak value n=30 rated value             | 195 A               |
| — up to 690 V for current peak value n=30 rated value             | 195 A               |
| — up to 1000 V for current peak value n=30 rated value            | 95 A                |
| minimum cross-section in main circuit at maximum AC-1 rated value | 185 mm <sup>2</sup> |
| operational current for approx. 200000 operating cycles at AC-4   |                     |
| • at 400 V rated value                                            | 125 A               |
| • at 690 V rated value                                            | 115 A               |
| operational current                                               |                     |
| • at 1 current path at DC-1                                       |                     |
| — at 24 V rated value                                             | 300 A               |
| — at 60 V rated value                                             | 300 A               |
| — at 110 V rated value                                            | 33 A                |
| — at 220 V rated value                                            | 3.8 A               |
| — at 440 V rated value                                            | 0.9 A               |
| — at 600 V rated value                                            | 0.6 A               |
| • with 2 current paths in series at DC-1                          |                     |
| — at 24 V rated value                                             | 300 A               |

|                                                                    |         |
|--------------------------------------------------------------------|---------|
| — at 60 V rated value                                              | 300 A   |
| — at 110 V rated value                                             | 300 A   |
| — at 220 V rated value                                             | 300 A   |
| — at 440 V rated value                                             | 4 A     |
| — at 600 V rated value                                             | 2 A     |
| ● <b>with 3 current paths in series at DC-1</b>                    |         |
| — at 24 V rated value                                              | 300 A   |
| — at 60 V rated value                                              | 300 A   |
| — at 110 V rated value                                             | 300 A   |
| — at 220 V rated value                                             | 300 A   |
| — at 440 V rated value                                             | 11 A    |
| — at 600 V rated value                                             | 5.2 A   |
| ● <b>at 1 current path at DC-3 at DC-5</b>                         |         |
| — at 24 V rated value                                              | 300 A   |
| — at 60 V rated value                                              | 11 A    |
| — at 220 V rated value                                             | 0.6 A   |
| — at 440 V rated value                                             | 0.18 A  |
| — at 600 V rated value                                             | 0.125 A |
| ● <b>with 2 current paths in series at DC-3 at DC-5</b>            |         |
| — at 24 V rated value                                              | 300 A   |
| — at 60 V rated value                                              | 300 A   |
| — at 110 V rated value                                             | 300 A   |
| — at 220 V rated value                                             | 2.5 A   |
| — at 440 V rated value                                             | 0.65 A  |
| — at 600 V rated value                                             | 0.37 A  |
| ● <b>with 3 current paths in series at DC-3 at DC-5</b>            |         |
| — at 24 V rated value                                              | 300 A   |
| — at 60 V rated value                                              | 300 A   |
| — at 110 V rated value                                             | 300 A   |
| — at 220 V rated value                                             | 300 A   |
| — at 440 V rated value                                             | 1.4 A   |
| — at 600 V rated value                                             | 0.75 A  |
| <b>operating power</b>                                             |         |
| ● at AC-2 at 400 V rated value                                     | 160 kW  |
| ● at AC-3                                                          |         |
| — at 230 V rated value                                             | 90 kW   |
| — at 400 V rated value                                             | 160 kW  |
| — at 500 V rated value                                             | 200 kW  |
| — at 690 V rated value                                             | 250 kW  |
| — at 1000 V rated value                                            | 132 kW  |
| ● at AC-3e                                                         |         |
| — at 230 V rated value                                             | 90 kW   |
| — at 400 V rated value                                             | 160 kW  |
| — at 500 V rated value                                             | 200 kW  |
| — at 690 V rated value                                             | 250 kW  |
| — at 1000 V rated value                                            | 132 kW  |
| <b>operating power for approx. 200000 operating cycles at AC-4</b> |         |
| ● at 400 V rated value                                             | 71 kW   |
| ● at 690 V rated value                                             | 112 kW  |
| <b>operating apparent power at AC-6a</b>                           |         |
| ● up to 230 V for current peak value n=20 rated value              | 110 kVA |
| ● up to 400 V for current peak value n=20 rated value              | 200 kVA |
| ● up to 500 V for current peak value n=20 rated value              | 250 kVA |
| ● up to 690 V for current peak value n=20 rated value              | 330 kVA |
| ● up to 1000 V for current peak value n=20 rated value             | 160 kVA |
| <b>operating apparent power at AC-6a</b>                           |         |
| ● up to 230 V for current peak value n=30 rated value              | 70 kVA  |
| ● up to 400 V for current peak value n=30 rated value              | 130 kVA |
| ● up to 500 V for current peak value n=30 rated value              | 160 kVA |
| ● up to 690 V for current peak value n=30 rated value              | 230 kVA |

|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                         |
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| <ul style="list-style-type: none"> <li>• up to 1000 V for current peak value n=30 rated value</li> </ul>                                                                                                                                                                                                                                                                                                                        | 160 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> | 5 524 A; Use minimum cross-section acc. to AC-1 rated value<br>4 579 A; Use minimum cross-section acc. to AC-1 rated value<br>3 153 A; Use minimum cross-section acc. to AC-1 rated value<br>1 883 A; Use minimum cross-section acc. to AC-1 rated value<br>1 445 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>                                                                                                                                                                                                                                                                                                                   | 2 000 1/h<br>2 000 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               <ul style="list-style-type: none"> <li>— maximum</li> </ul> </li> <li>• at AC-4 maximum</li> </ul>                                                                                                                                                  | 750 1/h<br>250 1/h<br>500 1/h<br>500 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>                                                                                                                                                                                                                                                                                    | 110 ... 127 V<br>110 ... 127 V                                                                                                                                                                                                                                                                                          |
| <b>control supply voltage at DC rated value</b>                                                                                                                                                                                                                                                                                                                                                                                 | 110 ... 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>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>                                        | 490 VA<br>490 VA<br>590 VA<br>590 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>                                                                                                                                                                                                                                                                                             | 590 VA<br>590 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>                                                                                                                                                                                                                                                                                   | 0.9<br>0.9                                                                                                                                                                                                                                                                                                              |
| <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>                                                                                                                                                                                                                                        | 6.1 VA<br>7.4 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> <li>— at 60 Hz</li> </ul> </li> </ul>                                        | 5.6 VA<br>5.6 VA<br>6.7 VA<br>6.7 VA                                                                                                                                                                                                                                                                                    |
| <b>inductive power factor with the holding power of the coil</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                               | 0.9<br>0.9                                                                                                                                                                                                                                                                                                              |
| <b>closing power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                                                                                                       | 650 W                                                                                                                                                                                                                                                                                                                   |
| <b>holding power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                                                                                                       | 7.4 W                                                                                                                                                                                                                                                                                                                   |
| <b>closing delay</b>                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                         |

|                                                                                                                                                                                                                                                                                                                         |                                                                                                                                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                              | 30 ... 95 ms<br>30 ... 95 ms                                                                                                           |
| <b>opening delay</b>                                                                                                                                                                                                                                                                                                    |                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                              | 40 ... 80 ms<br>40 ... 80 ms                                                                                                           |
| <b>arcing time</b>                                                                                                                                                                                                                                                                                                      | 10 ... 15 ms                                                                                                                           |
| <b>control version of the switch operating mechanism</b>                                                                                                                                                                                                                                                                | Standard A1 - A2                                                                                                                       |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                                                |                                                                                                                                        |
| <b>design of the auxiliary switch</b>                                                                                                                                                                                                                                                                                   | lateral, permanently connected                                                                                                         |
| 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>                                                                                                                                                                                                                                                                                     |                                                                                                                                        |
| <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>                                                                                                                                                | 6 A<br>3 A<br>2 A<br>1 A                                                                                                               |
| <b>operational current at DC-12</b>                                                                                                                                                                                                                                                                                     |                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 48 V rated value</li> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 125 V rated value</li> <li>• at 220 V rated value</li> <li>• at 600 V rated value</li> </ul>                                                   | 10 A<br>6 A<br>6 A<br>3 A<br>2 A<br>1 A<br>0.15 A                                                                                      |
| <b>operational current at DC-13</b>                                                                                                                                                                                                                                                                                     |                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 48 V rated value</li> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 125 V rated value</li> <li>• at 220 V rated value</li> <li>• at 600 V rated value</li> </ul>                                                   | 10 A<br>2 A<br>2 A<br>1 A<br>0.9 A<br>0.3 A<br>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> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                                                | 302 A<br>289 A                                                                                                                         |
| <b>yielded mechanical performance [hp]</b>                                                                                                                                                                                                                                                                              |                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul>                                                      | 100 hp<br>125 hp<br>250 hp<br>300 hp                                                                                                   |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                             | A600 / Q600                                                                                                                            |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                         |                                                                                                                                        |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V                                                                                                                                                                                                               | C characteristic: 10 A; 0.4 kA                                                                                                         |
| <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 coordination 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul> | gG: 500 A (690 V, 100 kA)<br>gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 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               |
| fastening method side-by-side mounting                                                                                                                                                                                                                                                                                  | Yes                                                                                                                                    |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                 | screw fixing                                                                                                                           |
| <b>height</b>                                                                                                                                                                                                                                                                                                           | 210 mm                                                                                                                                 |

|                                                                                       |                                                                                                              |
|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>width</b>                                                                          | 145 mm                                                                                                       |
| <b>depth</b>                                                                          | 202 mm                                                                                                       |
| <b>required spacing</b>                                                               |                                                                                                              |
| • with side-by-side mounting                                                          |                                                                                                              |
| — forwards                                                                            | 20 mm                                                                                                        |
| — upwards                                                                             | 10 mm                                                                                                        |
| — downwards                                                                           | 10 mm                                                                                                        |
| — at the side                                                                         | 0 mm                                                                                                         |
| • for grounded parts                                                                  |                                                                                                              |
| — forwards                                                                            | 20 mm                                                                                                        |
| — upwards                                                                             | 10 mm                                                                                                        |
| — at the side                                                                         | 10 mm                                                                                                        |
| — downwards                                                                           | 10 mm                                                                                                        |
| • for live parts                                                                      |                                                                                                              |
| — forwards                                                                            | 20 mm                                                                                                        |
| — upwards                                                                             | 10 mm                                                                                                        |
| — downwards                                                                           | 10 mm                                                                                                        |
| — at the side                                                                         | 10 mm                                                                                                        |
| <b>Connections/ Terminals</b>                                                         |                                                                                                              |
| <b>type of electrical connection</b>                                                  |                                                                                                              |
| • for main current circuit                                                            | Connection bar                                                                                               |
| • for auxiliary and control circuit                                                   | screw-type terminals                                                                                         |
| • at contactor for auxiliary contacts                                                 | Screw-type terminals                                                                                         |
| • of magnet coil                                                                      | Screw-type terminals                                                                                         |
| <b>width of connection bar</b>                                                        | 25 mm                                                                                                        |
| <b>thickness of connection bar</b>                                                    | 6 mm                                                                                                         |
| <b>diameter of holes</b>                                                              | 11 mm                                                                                                        |
| <b>number of holes</b>                                                                | 1                                                                                                            |
| <b>type of connectable conductor cross-sections</b>                                   |                                                                                                              |
| • for AWG cables for main contacts                                                    | 2/0 ... 500 kcmil                                                                                            |
| <b>connectable conductor cross-section for main contacts</b>                          |                                                                                                              |
| • stranded                                                                            | 70 ... 240 mm <sup>2</sup>                                                                                   |
| <b>connectable conductor cross-section for auxiliary contacts</b>                     |                                                                                                              |
| • solid or stranded                                                                   | 0.5 ... 4 mm <sup>2</sup>                                                                                    |
| • finely stranded with core end processing                                            | 0.5 ... 2.5 mm <sup>2</sup>                                                                                  |
| <b>type of connectable conductor cross-sections</b>                                   |                                                                                                              |
| • for auxiliary contacts                                                              |                                                                                                              |
| — solid                                                                               | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), max. 2x (0.75 ... 4 mm <sup>2</sup> ) |
| — solid or stranded                                                                   | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), max. 2x (0.75 ... 4 mm <sup>2</sup> ) |
| — finely stranded with core end processing                                            | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                                        |
| • for AWG cables for auxiliary contacts                                               | 2x (20 ... 16), 2x (18 ... 14), 1x 12                                                                        |
| <b>AWG number as coded connectable conductor cross section for auxiliary contacts</b> | 18 ... 14                                                                                                    |
| <b>Safety related data</b>                                                            |                                                                                                              |
| <b>product function</b>                                                               |                                                                                                              |
| • mirror contact according to IEC 60947-4-1                                           | Yes                                                                                                          |
| • positively driven operation according to IEC 60947-5-1                              | No                                                                                                           |
| • suitable for safety function                                                        | Yes                                                                                                          |
| suitability for use safety-related switching OFF                                      | Yes                                                                                                          |
| <b>service life maximum</b>                                                           | 20 a                                                                                                         |
| <b>test wear-related service life necessary</b>                                       | Yes                                                                                                          |
| <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>ISO 13849</b>                                                                      |                                                                                                              |
| <b>device type according to ISO 13849-1</b>                                           | 3                                                                                                            |
| <b>overdimensioning according to ISO 13849-2 necessary</b>                            | Yes                                                                                                          |
| <b>IEC 61508</b>                                                                      |                                                                                                              |

|                                                         |                                                                          |
|---------------------------------------------------------|--------------------------------------------------------------------------|
| safety device type according to IEC 61508-2             | Type A                                                                   |
| Electrical Safety                                       |                                                                          |
| protection class IP on the front according to IEC 60529 | IP00; IP20 with box terminal/cover                                       |
| touch protection on the front according to IEC 60529    | finger-safe, for vertical contact from the front with box terminal/cover |
| Approvals Certificates                                  |                                                                          |
| General Product Approval                                |                                                                          |



[KC](#)



| EMV | Functional Safety                            | Test Certificates                                  |                                          |                               | Maritime application |
|-----|----------------------------------------------|----------------------------------------------------|------------------------------------------|-------------------------------|----------------------|
|     | <a href="#">Type Examination Certificate</a> | <a href="#">Type Test Certificates/Test Report</a> | <a href="#">Special Test Certificate</a> | <a href="#">Miscellaneous</a> |                      |

| Maritime application | other |  |  |                               |                              |
|----------------------|-------|--|--|-------------------------------|------------------------------|
|                      |       |  |  | <a href="#">Miscellaneous</a> | <a href="#">Confirmation</a> |

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

#### Further information

Information on the packaging  
<https://support.industry.siemens.com/cs/ww/en/view/109813875>  
Information for data generation and storage  
<https://support.industry.siemens.com/cs/ww/en/view/109995012>  
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=3RT1066-6AF36-3PA0>  
Cax online generator  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1066-6AF36-3PA0>  
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)  
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6AF36-3PA0>  
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)  
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1066-6AF36-3PA0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1066-6AF36-3PA0&lang=en)  
Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current  
<https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6AF36-3PA0/char>  
Further characteristics (e.g. electrical endurance, switching frequency)  
<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1066-6AF36-3PA0&objecttype=14&gridview=view1>



