



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         |
| ● with 3 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                                             | 11 A        |
| — at 600 V rated value                                             | 5.2 A       |
| ● at 1 current path at DC-3 at DC-5                                |             |
| — 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     |
| ● with 2 current paths in series at DC-3 at DC-5                   |             |
| — 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      |
| ● with 3 current paths in series at DC-3 at DC-5                   |             |
| — 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              | 110 000 kVA |
| ● up to 400 V for current peak value n=20 rated value              | 200 000 VA  |
| ● up to 500 V for current peak value n=20 rated value              | 250 000 VA  |
| ● up to 690 V for current peak value n=20 rated value              | 330 000 VA  |
| ● up to 1000 V for current peak value n=20 rated value             | 160 000 VA  |
| <b>operating apparent power at AC-6a</b>                           |             |
| ● up to 230 V for current peak value n=30 rated value              | 70 000 VA   |
| ● up to 400 V for current peak value n=30 rated value              | 130 000 VA  |
| ● up to 500 V for current peak value n=30 rated value              | 160 000 VA  |
| ● up to 690 V for current peak value n=30 rated value              | 230 000 VA  |

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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>                                                                                                                                                                                                                                                                                                                        | 160 000 VA                                                                                                                                                                                                                                                                                                              |
| <b>short-time withstand current in cold operating state up to 40 °C</b> <ul style="list-style-type: none"> <li>• limited to 1 s switching at zero current maximum</li> <li>• limited to 5 s switching at zero current maximum</li> <li>• limited to 10 s switching at zero current maximum</li> <li>• limited to 30 s switching at zero current maximum</li> <li>• limited to 60 s switching at zero current maximum</li> </ul> | 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 maximum</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> </ul>                                                                                                                                                                                                                                                                                                                                                  | 30 ... 95 ms                                                                                                                                                                                                                                                                                                            |

|                                                                                                                                                                                                                                                                    |                                                                                                                          |
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| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                                                                                                                                                          | 30 ... 95 ms                                                                                                             |
| <b>opening delay</b>                                                                                                                                                                                                                                               |                                                                                                                          |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                                                          | 40 ... 80 ms                                                                                                             |
| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                                                                                                                                                          | 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> </ul>                                                                                                                                                                                           | 6 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>                                                                                                                                                                                           | 302 A                                                                                                                    |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                           | 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>                                                                                                                                                                                                                                    |                                                                                                                          |
| <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: 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)             |
| <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>                                                                                                                                                                                                                                           | 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>                                                                                                                                                                                                                                            |                                                                                                                          |

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| <ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </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> | 20 mm<br>10 mm<br>10 mm<br>0 mm<br><br>20 mm<br>10 mm<br>10 mm<br>10 mm<br><br>20 mm<br>10 mm<br>10 mm<br>10 mm |
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## Connections/ Terminals

|                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                |
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| <b>type of electrical connection</b>                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul>                                                                      | Connection bar<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals                                                                                                                                                                                                                                                         |
| <b>width of connection bar</b>                                                                                                                                                                                                                                          | 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>                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• for AWG cables for main contacts</li> </ul>                                                                                                                                                                                    | 2/0 ... 500 kcmil                                                                                                                                                                                                                                                                                                                              |
| <b>connectable conductor cross-section for main contacts</b>                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• stranded</li> </ul>                                                                                                                                                                                                            | 70 ... 240 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                     |
| <b>connectable conductor cross-section for auxiliary contacts</b>                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> </ul>                                                                                                                                               | 0.5 ... 4 mm <sup>2</sup><br>0.5 ... 2.5 mm <sup>2</sup>                                                                                                                                                                                                                                                                                       |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG cables for auxiliary contacts</li> </ul> | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), max. 2x (0.75 ... 4 mm <sup>2</sup> )<br>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> )<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), 1x 12 |
| <b>AWG number as coded connectable conductor cross section</b>                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>                                                                                                                                                                                              | 18 ... 14                                                                                                                                                                                                                                                                                                                                      |

## Safety related data

|                                                                                                                                                                                                         |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>product function</b>                                                                                                                                                                                 |                  |
| <ul style="list-style-type: none"> <li>• mirror contact according to IEC 60947-4-1</li> <li>• positively driven operation according to IEC 60947-5-1</li> <li>• suitable for safety function</li> </ul> | Yes<br>No<br>Yes |
| suitability for use safety-related switching OFF                                                                                                                                                        | Yes              |
| <b>service life maximum</b>                                                                                                                                                                             | 20 a             |
| <b>test wear-related service life necessary</b>                                                                                                                                                         | Yes              |
| <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>                                                   | 40 %<br>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          |
| ISO 13849                                                                                                                                                                                               |                  |
| <b>device type according to ISO 13849-1</b>                                                                                                                                                             | 3                |
| <b>overdimensioning according to ISO 13849-2 necessary</b>                                                                                                                                              | Yes              |
| IEC 61508                                                                                                                                                                                               |                  |
| <b>safety device type according to IEC 61508-2</b>                                                                                                                                                      | 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 |
| <b>Approvals Certificates</b>                           |                                                                          |
| <b>General Product Approval</b>                         |                                                                          |



[Confirmation](#)



EG-Konf.



UL

[KC](#)

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



RCM

[Type Examination Certificate](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Miscellaneous](#)

|                   |       |
|-------------------|-------|
| Marine / Shipping | other |
|-------------------|-------|



ABS



DNV



LRS



PRS



RMRS

[Miscellaneous](#)

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

[Confirmation](#)

[Confirmation](#)

[Miscellaneous](#)

[Special Test Certificate](#)

[Environmental Confirmations](#)

## Further information

### Information on the packaging

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

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

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

### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=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<sup>2</sup>t, 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>





