



power contactor, AC-3e/AC-3 300 A, 160 kW / 400 V, AC (50-60 Hz) / DC U<sub>c</sub>: 110-127 V 3-pole, auxiliary contacts 2 NO + 2 NC 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 current-dependent                                                          | 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                                                                                                      | 8,5 g / 5 ms, 4,2 g / 10 ms  |
| • at DC                                                                                                      | 8,5 g / 5 ms, 4,2 g / 10 ms  |
| shock resistance with sine pulse                                                                             |                              |
| • at AC                                                                                                      | 13,4 g / 5 ms, 6,5 g / 10 ms |
| • at DC                                                                                                      | 13,4 g / 5 ms, 6,5 g / 10 ms |
| mechanical service life (operating cycles)                                                                   |                              |
| • of contactor typical                                                                                       | 10 000 000                   |
| • of the contactor with added electronically optimized auxiliary switch block typical                        | 5 000 000                    |
| • of the contactor with added auxiliary switch block typical                                                 | 10 000 000                   |
| reference code according to IEC 81346-2                                                                      | Q                            |
| Substance Prohibitance (day/month/year)                                                                      | 05/01/2012                   |
| SVHC substance name                                                                                          | Lead CAS-No. 7439-92-1       |
| Net Weight                                                                                                   | 6.589 kg                     |

| Ambient conditions                                                     |                |
|------------------------------------------------------------------------|----------------|
| installation altitude at height above sea level maximum                | 2 000 m        |
| <b>ambient temperature</b>                                             |                |
| • during operation                                                     | -25 ... +60 °C |
| • during storage                                                       | -55 ... +80 °C |
| <b>relative humidity minimum</b>                                       | 10 %           |
| <b>relative humidity at 55 °C according to IEC 60068-2-30 maximum</b>  | 95 %           |
| Main circuit                                                           |                |
| <b>number of poles for main current circuit</b>                        | 3              |
| <b>number of NO contacts for main contacts</b>                         | 3              |
| <b>number of NC contacts for main contacts</b>                         | 0              |
| <b>operating voltage</b>                                               |                |
| • at AC-3 rated value maximum                                          | 1 000 V        |
| • at AC-3e rated value maximum                                         | 1 000 V        |
| <b>operational current</b>                                             |                |
| • 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 mm²        |
| <b>operational current for approx. 200000 operating cycles at AC-4</b> |                |
| • at 400 V rated value                                                 | 125 A          |
| • at 690 V rated value                                                 | 115 A          |
| <b>operational current</b>                                             |                |
| • 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   |
| <b>• with 2 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                                             | 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>                                             |         |
| <b>• at AC-3</b>                                                   |         |
| — 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>• at AC-3e</b>                                                  |         |
| — 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> |         |
| <b>• at 400 V rated value</b>                                      | 71 kW   |
| <b>• at 690 V rated value</b>                                      | 112 kW  |
| <b>operating apparent power at AC-6a</b>                           |         |
| <b>• up to 230 V for current peak value n=20 rated value</b>       | 110 kVA |

|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                         |
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| <ul style="list-style-type: none"> <li>• up to 400 V for current peak value n=20 rated value</li> <li>• up to 500 V for current peak value n=20 rated value</li> <li>• up to 690 V for current peak value n=20 rated value</li> <li>• up to 1000 V for current peak value n=20 rated value</li> </ul>                                                                                                                           | 200 kVA<br>250 kVA<br>330 kVA<br>160 kVA                                                                                                                                                                                                                                                                                |
| <b>operating apparent power at AC-6a</b> <ul style="list-style-type: none"> <li>• up to 230 V for current peak value n=30 rated value</li> <li>• up to 400 V for current peak value n=30 rated value</li> <li>• up to 500 V for current peak value n=30 rated value</li> <li>• up to 690 V for current peak value n=30 rated value</li> <li>• up to 1000 V for current peak value n=30 rated value</li> </ul>                   | 70 kVA<br>130 kVA<br>160 kVA<br>230 kVA<br>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</li> </ul>                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                         |

|                                                                                                           |                                                 |
|-----------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| — at 50 Hz                                                                                                | 5.6 VA                                          |
| — at 60 Hz                                                                                                | 5.6 VA                                          |
| ● at maximum rated control supply voltage at AC                                                           |                                                 |
| — at 50 Hz                                                                                                | 6.7 VA                                          |
| — at 60 Hz                                                                                                | 6.7 VA                                          |
| <b>inductive power factor with the holding power of the coil</b>                                          |                                                 |
| ● at 50 Hz                                                                                                | 0.9                                             |
| ● at 60 Hz                                                                                                | 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>                                                                                      |                                                 |
| ● at AC                                                                                                   | 30 ... 95 ms                                    |
| ● at DC                                                                                                   | 30 ... 95 ms                                    |
| <b>opening delay</b>                                                                                      |                                                 |
| ● at AC                                                                                                   | 40 ... 80 ms                                    |
| ● at DC                                                                                                   | 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>                                                                                  |                                                 |
| number of NC contacts for auxiliary contacts instantaneous contact                                        | 2                                               |
| number of NO contacts for auxiliary contacts instantaneous contact                                        | 2                                               |
| operational current at AC-12 maximum                                                                      | 10 A                                            |
| <b>operational current at AC-15</b>                                                                       |                                                 |
| ● at 230 V rated value                                                                                    | 6 A                                             |
| ● at 400 V rated value                                                                                    | 3 A                                             |
| ● at 500 V rated value                                                                                    | 2 A                                             |
| ● at 690 V rated value                                                                                    | 1 A                                             |
| <b>operational current at DC-12</b>                                                                       |                                                 |
| ● at 24 V rated value                                                                                     | 10 A                                            |
| ● at 48 V rated value                                                                                     | 6 A                                             |
| ● at 60 V rated value                                                                                     | 6 A                                             |
| ● at 110 V rated value                                                                                    | 3 A                                             |
| ● at 125 V rated value                                                                                    | 2 A                                             |
| ● at 220 V rated value                                                                                    | 1 A                                             |
| ● at 600 V rated value                                                                                    | 0.15 A                                          |
| <b>operational current at DC-13</b>                                                                       |                                                 |
| ● at 24 V rated value                                                                                     | 10 A                                            |
| ● at 48 V rated value                                                                                     | 2 A                                             |
| ● at 60 V rated value                                                                                     | 2 A                                             |
| ● at 110 V rated value                                                                                    | 1 A                                             |
| ● at 125 V rated value                                                                                    | 0.9 A                                           |
| ● at 220 V rated value                                                                                    | 0.3 A                                           |
| ● at 600 V rated value                                                                                    | 0.1 A                                           |
| <b>contact reliability of auxiliary contacts</b>                                                          | 1 faulty switching per 100 million (17 V, 1 mA) |
| <b>UL/CSA ratings</b>                                                                                     |                                                 |
| <b>full-load current (FLA) for 3-phase AC motor</b>                                                       |                                                 |
| ● at 480 V rated value                                                                                    | 302 A                                           |
| ● at 600 V rated value                                                                                    | 289 A                                           |
| <b>yielded mechanical performance [hp]</b>                                                                |                                                 |
| ● for 3-phase AC motor                                                                                    |                                                 |
| — at 200/208 V rated value                                                                                | 100 hp                                          |
| — at 220/230 V rated value                                                                                | 125 hp                                          |
| — at 460/480 V rated value                                                                                | 250 hp                                          |
| — at 575/600 V rated value                                                                                | 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                  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                        |
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| <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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                        |
| <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                                                                                                                        |
| <b>Connections/ Terminals</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                        |
| <b>type of electrical connection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul>                                                                                                                                                                                                                                                                                                                            | Connection bar<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals                                                                                                                                                 |
| <b>width of connection bar</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 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 mm²                                                                                                                                                                                                                         |
| <b>connectable conductor cross-section for auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                     | 0.5 ... 4 mm²<br>0.5 ... 2.5 mm²                                                                                                                                                                                                       |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG cables for auxiliary contacts</li> </ul>                                                                                                                                                                                                                                                       | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)<br>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)<br>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)<br>2x (20 ... 16), 2x (18 ... 14), 1x 12 |
| <b>AWG number as coded connectable conductor cross section for auxiliary contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                         | 18 ... 14                                                                                                                                                                                                                              |
| <b>Safety related data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                        |
| <b>product function</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                        |
| <ul style="list-style-type: none"> <li>• mirror contact according to IEC 60947-4-1</li> <li>• positively driven operation according to IEC 60947-5-1</li> <li>• suitable for safety function</li> </ul>                                                                                                                                                                                                                                                                                                                       | Yes<br>No<br>Yes                                                                                                                                                                                                                       |

|                                                               |           |
|---------------------------------------------------------------|-----------|
| suitability for use safety-related switching OFF              | Yes       |
| service life maximum                                          | 20 a      |
| test wear-related service life necessary                      | Yes       |
| proportion of dangerous failures                              |           |
| • with low demand rate according to SN 31920                  | 40 %      |
| • with high demand rate according to SN 31920                 | 73 %      |
| B10 value with high demand rate according to SN 31920         | 1 000 000 |
| failure rate [FIT] with low demand rate according to SN 31920 | 100 FIT   |

|                                                     |     |
|-----------------------------------------------------|-----|
| ISO 13849                                           |     |
| device type according to ISO 13849-1                | 3   |
| overdimensioning according to ISO 13849-2 necessary | Yes |

|                                             |        |
|---------------------------------------------|--------|
| IEC 61508                                   |        |
| 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

|                                                            |          |
|------------------------------------------------------------|----------|
| Environmental Product Declaration                          |          |
| • global warming potential [CO2 eq] / during manufacturing | 31.5 kg  |
| • global warming potential [CO2 eq] / during sales         | 2.6 kg   |
| • global warming potential [CO2 eq] / during operation     | 521 kg   |
| • global warming potential [CO2 eq] / after end of life    | -7.22 kg |
| • global warming potential [CO2 eq] / total                | 548 kg   |

|             |                          |
|-------------|--------------------------|
| Environment | General Product Approval |
|-------------|--------------------------|

[Environmental Confirmations](#)



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



EG-Konf.



[Type Examination Certificate](#)

|                   |                      |       |
|-------------------|----------------------|-------|
| Test Certificates | Maritime application | other |
|-------------------|----------------------|-------|

[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



[Miscellaneous](#)

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

[Confirmation](#)

[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)



[Special Test Certificate](#)

#### 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>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6AF36>

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

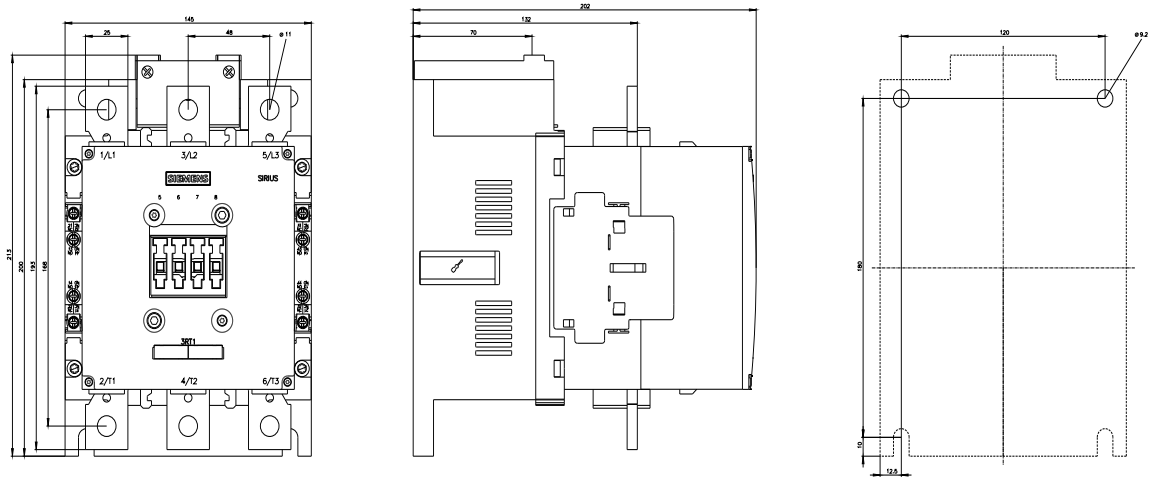
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1066-6AF36&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1066-6AF36&lang=en)

## Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1066-6AF36>

### Characteristic curves

[https://curves.simaris.siemens.com/curves/<mmp\\_prod\\_noCOMP="HAUPT"></mmp\\_prod\\_no>](https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP="HAUPT"></mmp_prod_no>)





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