



power contactor, AC-3e/AC-3 300 A, 160 kW / 400 V, AC (50-60 Hz) / DC 200-277 V x (0.8-1.1) F-PLC input 24 V DC 3-pole, auxiliary contacts 2 NO + 2 NC permanently mounted drive: electronic 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                                                                         | 3.4 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)                                                                      | 03/01/2017                                                                                                                                                                         |
| SVHC substance name                                                                                          | Lead CAS-No. 7439-92-1<br>Lead monoxide (lead oxide) CAS-No. 1317-36-8<br>2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one CAS-No. 71868-10-5<br>Melamine CAS-No. 108-78-1 |
| Net Weight                                                                                                   | 6.56 kg                                                                                                                                                                            |
| <b>Ambient conditions</b>                                                                                    |                                                                                                                                                                                    |

|                                                                        |                     |
|------------------------------------------------------------------------|---------------------|
| 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 %                |
| <b>Main circuit</b>                                                    |                     |
| <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 mm <sup>2</sup> |
| <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   |
| ● 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 110 V rated value                                             | 3 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>                           |         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                         |
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| <ul style="list-style-type: none"> <li>• up to 230 V for current peak value n=20 rated value</li> <li>• up to 400 V for current peak value n=20 rated value</li> <li>• up to 500 V for current peak value n=20 rated value</li> <li>• up to 690 V for current peak value n=20 rated value</li> <li>• up to 1000 V for current peak value n=20 rated value</li> </ul>                                                            | 110 kVA<br>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>                                                                                                                                                                                                                                                                                                                   | 1 000 1/h<br>1 000 1/h                                                                                                                                                                                                                                                                                                  |
| <b>operating frequency</b> <ul style="list-style-type: none"> <li>• at AC-1 maximum</li> <li>• at AC-2 maximum</li> <li>• at AC-3 maximum</li> <li>• at AC-3e <ul style="list-style-type: none"> <li>— maximum</li> </ul> </li> <li>• at AC-4 maximum</li> </ul>                                                                                                                                                                | 500 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>                                                                                                                                                                                                                                                                                    | 200 ... 277 V<br>200 ... 277 V                                                                                                                                                                                                                                                                                          |
| <b>control supply voltage at DC rated value</b>                                                                                                                                                                                                                                                                                                                                                                                 | 200 ... 277 V                                                                                                                                                                                                                                                                                                           |
| <b>operating range factor control supply voltage rated value of magnet coil at DC</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>                                                                                                                                                                                                                                             | 0.8<br>1.1                                                                                                                                                                                                                                                                                                              |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                          | 0.8 ... 1.1<br>0.8 ... 1.1                                                                                                                                                                                                                                                                                              |
| <b>type of PLC-control input according to IEC 60947-1</b>                                                                                                                                                                                                                                                                                                                                                                       | Type 1                                                                                                                                                                                                                                                                                                                  |
| <b>consumed current at PLC-control input according to IEC 60947-1 maximum</b>                                                                                                                                                                                                                                                                                                                                                   | 14 mA                                                                                                                                                                                                                                                                                                                   |
| <b>voltage at PLC-control input rated value</b>                                                                                                                                                                                                                                                                                                                                                                                 | 24 V                                                                                                                                                                                                                                                                                                                    |
| <b>operating range factor of the voltage at PLC-control input</b>                                                                                                                                                                                                                                                                                                                                                               | 0.8 ... 1.1                                                                                                                                                                                                                                                                                                             |
| <b>design of the surge suppressor</b>                                                                                                                                                                                                                                                                                                                                                                                           | with varistor                                                                                                                                                                                                                                                                                                           |
| <b>apparent pick-up power</b> <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at AC <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> <li>• at maximum rated control supply voltage at AC <ul style="list-style-type: none"> <li>— at 60 Hz</li> <li>— at 50 Hz</li> </ul> </li> </ul>                                                                    | 400 VA<br>400 VA<br>530 VA<br>530 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>                                                                                                                                                                                                                                                                                             | 530 VA<br>530 VA                                                                                                                                                                                                                                                                                                        |
| <b>inductive power factor with closing power of the coil</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                                                                                                                                                                                       | 0.8                                                                                                                                                                                                                                                                                                                     |

|                                                                    |                                                 |
|--------------------------------------------------------------------|-------------------------------------------------|
| • at 60 Hz                                                         | 0.8                                             |
| <b>apparent holding power</b>                                      |                                                 |
| • at minimum rated control supply voltage at DC                    | 2.8 VA                                          |
| • at maximum rated control supply voltage at DC                    | 3.4 VA                                          |
| <b>apparent holding power</b>                                      |                                                 |
| • at minimum rated control supply voltage at AC                    |                                                 |
| — at 50 Hz                                                         | 5.5 VA                                          |
| — at 60 Hz                                                         | 5.5 VA                                          |
| • at maximum rated control supply voltage at AC                    |                                                 |
| — at 50 Hz                                                         | 8.5 VA                                          |
| — at 60 Hz                                                         | 8.5 VA                                          |
| <b>inductive power factor with the holding power of the coil</b>   |                                                 |
| • at 50 Hz                                                         | 0.5                                             |
| • at 60 Hz                                                         | 0.4                                             |
| <b>closing power of magnet coil at DC</b>                          | 580 W                                           |
| <b>holding power of magnet coil at DC</b>                          | 3.4 W                                           |
| <b>closing delay</b>                                               |                                                 |
| • at AC                                                            | 60 ... 75 ms                                    |
| • at DC                                                            | 60 ... 75 ms                                    |
| <b>opening delay</b>                                               |                                                 |
| • at AC                                                            | 115 ... 130 ms                                  |
| • at DC                                                            | 115 ... 130 ms                                  |
| <b>recovery time after power failure typical</b>                   | 2 s                                             |
| <b>arcing time</b>                                                 | 10 ... 15 ms                                    |
| <b>control version of the switch operating mechanism</b>           | Fail-safe PLC input (F-PLC-IN)                  |
| <b>Auxiliary circuit</b>                                           |                                                 |
| <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>                                |                                                 |
| • 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>                         |                                                 |

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| <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 / P600                                                                                                                                    |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V                                                                                                                                                                                                                                                                                                                                                                                                                                             | C characteristic: 10 A; 0.4 kA                                                                                                                 |
| <b>design of the fuse link</b> <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of coordination 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>                                                                                                                                                                                                | gG: 500 A (690 V, 100 kA)<br>gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50 kA)<br>gG: 10 A (500 V, 1 kA)         |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back                       |
| fastening method side-by-side mounting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Yes                                                                                                                                            |
| <b>fastening method</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | screw fixing                                                                                                                                   |
| <b>height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 210 mm                                                                                                                                         |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 145 mm                                                                                                                                         |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 202 mm                                                                                                                                         |
| <b>required spacing</b> <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 terminal                                                               |
| <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> </ul> </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) |

|                                                                                       |                                             |
|---------------------------------------------------------------------------------------|---------------------------------------------|
| — finely stranded with core end processing                                            | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) |
| • for AWG cables for auxiliary contacts                                               | 2x (20 ... 16), 2x (18 ... 14), 1x 12       |
| <b>AWG number as coded connectable conductor cross section for auxiliary contacts</b> | 18 ... 14                                   |

#### Safety related data

|                                                                      |           |
|----------------------------------------------------------------------|-----------|
| <b>product function</b>                                              |           |
| • mirror contact according to IEC 60947-4-1                          | Yes       |
| • positively driven operation according to IEC 60947-5-1             | No        |
| • suitable for safety function                                       | Yes       |
| suitability for use safety-related switching OFF                     | Yes       |
| <b>safe state</b>                                                    | off       |
| <b>test wear-related service life necessary</b>                      | Yes       |
| <b>stop category according to IEC 60204-1</b>                        | 0         |
| <b>proportion of dangerous failures</b>                              |           |
| • with low demand rate according to SN 31920                         | 40 %      |
| • with high demand rate according to SN 31920                        | 73 %      |
| <b>B10 value with high demand rate according to SN 31920</b>         | 1 000 000 |
| <b>failure rate [FIT] with low demand rate according to SN 31920</b> | 100 FIT   |
| <b>MTBF</b>                                                          | 75 a      |

#### IEC 62061

|                                                            |            |
|------------------------------------------------------------|------------|
| <b>Safety Integrity Level (SIL) according to IEC 62061</b> | SIL 2      |
| PFHD with high demand rate according to IEC 62061          | 4.5E-7 1/h |

#### ISO 13849

|                                                            |      |
|------------------------------------------------------------|------|
| <b>performance level (PL) according to ISO 13849-1</b>     | PL c |
| <b>category according to ISO 13849-1</b>                   | 2    |
| <b>device type according to ISO 13849-1</b>                | 1    |
| <b>overdimensioning according to ISO 13849-2 necessary</b> | Yes  |

#### IEC 61508

|                                                          |            |
|----------------------------------------------------------|------------|
| Safety Integrity Level (SIL) according to IEC 61508      | 2          |
| <b>safety device type according to IEC 61508-2</b>       | Type B     |
| <b>PFHD with high demand rate according to IEC 61508</b> | 4.5E-7 1/h |
| PFDavg with low demand rate according to IEC 61508       | 0.007      |
| <b>Safe failure fraction (SFF)</b>                       | 93 %       |
| hardware fault tolerance according to IEC 61508          | 0          |
| T1 value of service life according to IEC 61508          | 20 a       |

#### Electrical Safety

|                                                                |                                                                          |
|----------------------------------------------------------------|--------------------------------------------------------------------------|
| <b>protection class IP on the front according to IEC 60529</b> | IP00; IP20 with box terminal/cover                                       |
| <b>touch protection on the front according to IEC 60529</b>    | finger-safe, for vertical contact from the front with box terminal/cover |

#### Approvals Certificates

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

[Environmental Confirmations](#)



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



[Type Examination Certificate](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

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

[Miscellaneous](#)

[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=3RT1066-6SP36-3PA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6SP36-3PA0>

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

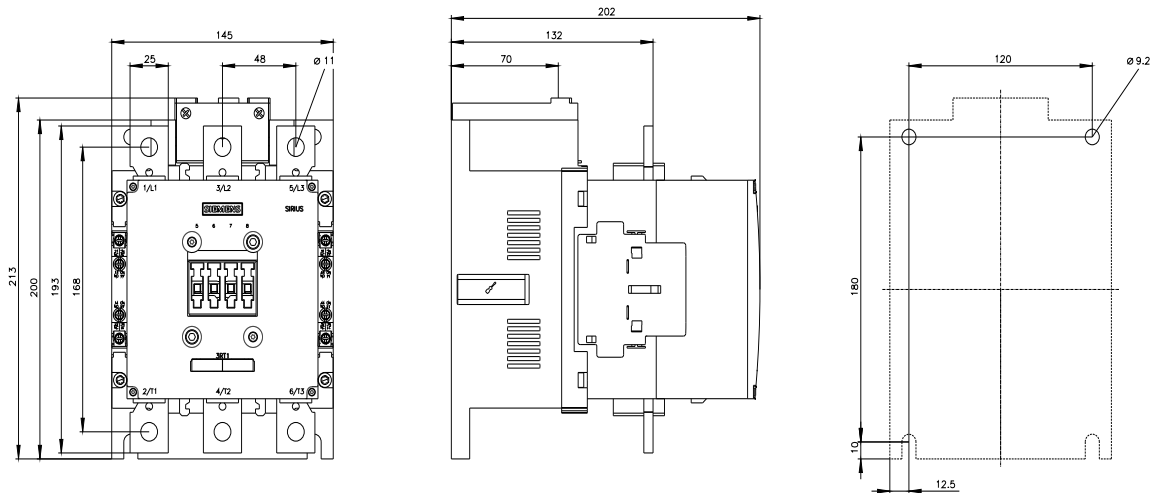
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1066-6SP36-3PA0&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1066-6SP36-3PA0&lang=en)

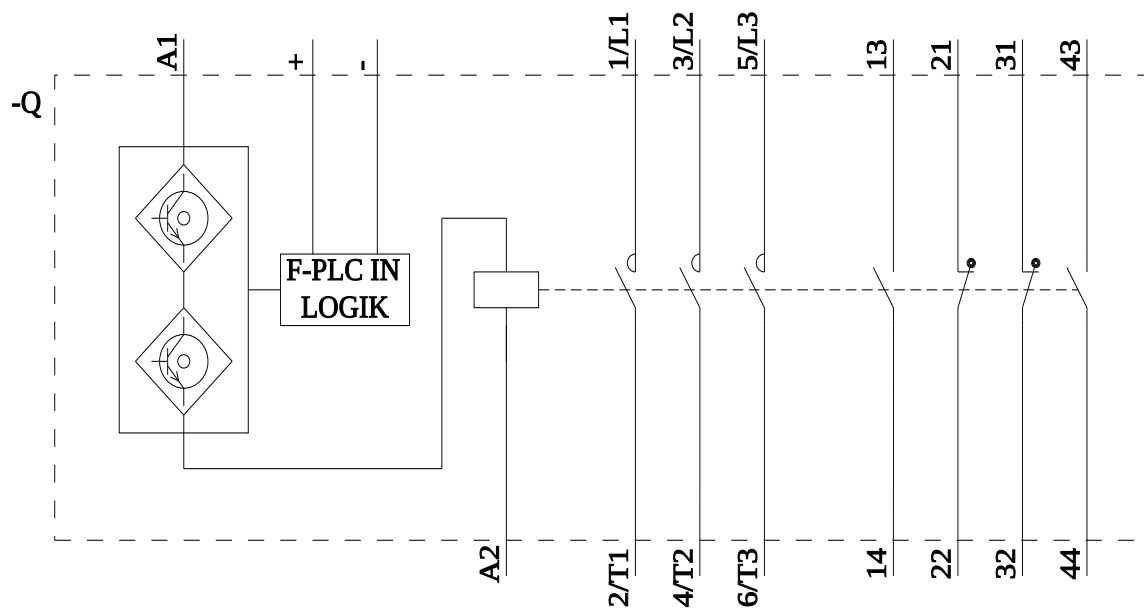
### Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1066-6SP36-3PA0>

### 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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