



power contactor, AC-3e/AC-3 150 A, 75 kW / 400 V AC (50-60 Hz) / DC U<sub>c</sub>: 96-127 V PLC input 24 V DC 3-pole, auxiliary contacts 1 NO + 1 NC drive: electronic main circuit: busbar control and auxiliary circuit: screw terminal with remaining lifetime indicator

|                                                                                                              |                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| product brand name                                                                                           | SIRIUS                                                                                                                                                                             |
| product designation                                                                                          | Power contactor                                                                                                                                                                    |
| product type designation                                                                                     | 3RT1                                                                                                                                                                               |
| <b>General technical data</b>                                                                                |                                                                                                                                                                                    |
| size of contactor                                                                                            | S6                                                                                                                                                                                 |
| 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                                                                               | 27 W                                                                                                                                                                               |
| • at AC in hot operating state per pole                                                                      | 9 W                                                                                                                                                                                |
| • without load current share typical                                                                         | 2.8 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 (Date)                                                                                | 05/01/2012                                                                                                                                                                         |
| 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                                                                                                   | 3.915 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            | 185 A              |
| • at AC-1                                                              |                    |
| — up to 690 V at ambient temperature 40 °C rated value                 | 185 A              |
| — up to 690 V at ambient temperature 60 °C rated value                 | 160 A              |
| — up to 1000 V at ambient temperature 40 °C rated value                | 90 A               |
| — up to 1000 V at ambient temperature 60 °C rated value                | 90 A               |
| • at AC-3                                                              |                    |
| — at 400 V rated value                                                 | 150 A              |
| — at 500 V rated value                                                 | 150 A              |
| — at 690 V rated value                                                 | 150 A              |
| — at 1000 V rated value                                                | 65 A               |
| • at AC-3e                                                             |                    |
| — at 400 V rated value                                                 | 150 A              |
| — at 500 V rated value                                                 | 150 A              |
| — at 690 V rated value                                                 | 150 A              |
| — at 1000 V rated value                                                | 65 A               |
| • at AC-4 at 400 V rated value                                         | 132 A              |
| • at AC-5a up to 690 V rated value                                     | 162 A              |
| • at AC-5b up to 400 V rated value                                     | 124 A              |
| • at AC-6a                                                             |                    |
| — up to 230 V for current peak value n=20 rated value                  | 150 A              |
| — up to 400 V for current peak value n=20 rated value                  | 150 A              |
| — up to 500 V for current peak value n=20 rated value                  | 150 A              |
| — up to 690 V for current peak value n=20 rated value                  | 150 A              |
| — up to 1000 V for current peak value n=20 rated value                 | 65 A               |
| • at AC-6a                                                             |                    |
| — up to 230 V for current peak value n=30 rated value                  | 105 A              |
| — up to 400 V for current peak value n=30 rated value                  | 105 A              |
| — up to 500 V for current peak value n=30 rated value                  | 105 A              |
| — up to 690 V for current peak value n=30 rated value                  | 105 A              |
| — up to 1000 V for current peak value n=30 rated value                 | 65 A               |
| minimum cross-section in main circuit at maximum AC-1 rated value      | 95 mm <sup>2</sup> |
| <b>operational current for approx. 200000 operating cycles at AC-4</b> |                    |
| • at 400 V rated value                                                 | 68 A               |
| • at 690 V rated value                                                 | 57 A               |
| <b>operational current</b>                                             |                    |
| • at 1 current path at DC-1                                            |                    |
| — at 24 V rated value                                                  | 160 A              |

|                                                                    |         |
|--------------------------------------------------------------------|---------|
| — at 60 V rated value                                              | 160 A   |
| — at 110 V rated value                                             | 18 A    |
| — at 220 V rated value                                             | 3.4 A   |
| — at 440 V rated value                                             | 0.8 A   |
| — at 600 V rated value                                             | 0.5 A   |
| ● with 2 current paths in series at DC-1                           |         |
| — at 24 V rated value                                              | 160 A   |
| — at 60 V rated value                                              | 160 A   |
| — at 110 V rated value                                             | 160 A   |
| — at 220 V rated value                                             | 20 A    |
| — at 440 V rated value                                             | 3.2 A   |
| — at 600 V rated value                                             | 1.6 A   |
| ● with 3 current paths in series at DC-1                           |         |
| — at 24 V rated value                                              | 160 A   |
| — at 60 V rated value                                              | 160 A   |
| — at 110 V rated value                                             | 160 A   |
| — at 220 V rated value                                             | 160 A   |
| — at 440 V rated value                                             | 11.5 A  |
| — at 600 V rated value                                             | 4 A     |
| ● at 1 current path at DC-3 at DC-5                                |         |
| — at 24 V rated value                                              | 160 A   |
| — at 60 V rated value                                              | 7.5 A   |
| — at 220 V rated value                                             | 0.6 A   |
| — at 440 V rated value                                             | 0.17 A  |
| — at 600 V rated value                                             | 0.12 A  |
| ● with 2 current paths in series at DC-3 at DC-5                   |         |
| — at 24 V rated value                                              | 160 A   |
| — at 60 V rated value                                              | 160 A   |
| — at 110 V rated value                                             | 160 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                                              | 160 A   |
| — at 60 V rated value                                              | 160 A   |
| — at 110 V rated value                                             | 160 A   |
| — at 220 V rated value                                             | 160 A   |
| — at 440 V rated value                                             | 1.4 A   |
| — at 600 V rated value                                             | 0.75 A  |
| <b>operating power</b>                                             |         |
| ● at AC-3                                                          |         |
| — at 230 V rated value                                             | 45 kW   |
| — at 400 V rated value                                             | 75 kW   |
| — at 500 V rated value                                             | 90 kW   |
| — at 690 V rated value                                             | 132 kW  |
| — at 1000 V rated value                                            | 90 kW   |
| ● at AC-3e                                                         |         |
| — at 230 V rated value                                             | 45 kW   |
| — at 400 V rated value                                             | 75 kW   |
| — at 500 V rated value                                             | 90 kW   |
| — at 690 V rated value                                             | 132 kW  |
| — at 1000 V rated value                                            | 90 kW   |
| <b>operating power for approx. 200000 operating cycles at AC-4</b> |         |
| ● at 400 V rated value                                             | 38 kW   |
| ● at 690 V rated value                                             | 55 kW   |
| <b>operating apparent power at AC-6a</b>                           |         |
| ● up to 230 V for current peak value n=20 rated value              | 60 kVA  |
| ● up to 400 V for current peak value n=20 rated value              | 100 kVA |

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| <ul style="list-style-type: none"> <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>                                                                                                                                                                                          | 130 kVA<br>170 kVA<br>110 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>                   | 40 kVA<br>70 kVA<br>90 kVA<br>120 kVA<br>110 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> | 2 727 A; Use minimum cross-section acc. to AC-1 rated value<br>1 831 A; Use minimum cross-section acc. to AC-1 rated value<br>1 300 A; Use minimum cross-section acc. to AC-1 rated value<br>850 A; Use minimum cross-section acc. to AC-1 rated value<br>703 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>                                                                                                                                                                | 800 1/h<br>300 1/h<br>750 1/h<br>750 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>                                                                                                                                                                                                                                                                                    | 96 ... 127 V<br>96 ... 127 V                                                                                                                                                                                                                                                                                        |
| <b>control supply voltage at DC rated value</b>                                                                                                                                                                                                                                                                                                                                                                                 | 96 ... 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>type of PLC-control input according to IEC 60947-1</b>                                                                                                                                                                                                                                                                                                                                                                       | Type 2                                                                                                                                                                                                                                                                                                              |
| <b>consumed current at PLC-control input according to IEC 60947-1 maximum</b>                                                                                                                                                                                                                                                                                                                                                   | 20 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>                                                                    | 190 VA<br>190 VA<br>280 VA<br>280 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>                                                                                                                                                                                                                                                                                             | 280 VA<br>280 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>                                                                                                                                                                                                                                                                                   | 0.8<br>0.8                                                                                                                                                                                                                                                                                                          |
| <b>apparent holding power</b>                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                     |

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| <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at DC</li> </ul>                                                               | 2.1 VA                                          |
| <ul style="list-style-type: none"> <li>• at maximum rated control supply voltage at DC</li> </ul>                                                               | 2.8 VA                                          |
| <b>apparent holding power</b>                                                                                                                                   |                                                 |
| <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at AC <ul style="list-style-type: none"> <li>— at 50 Hz</li> </ul> </li> </ul> | 3.5 VA                                          |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 60 Hz</li> </ul> </li> </ul>                                                | 3.5 VA                                          |
| <ul style="list-style-type: none"> <li>• at maximum rated control supply voltage at AC <ul style="list-style-type: none"> <li>— at 50 Hz</li> </ul> </li> </ul> | 4.8 VA                                          |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 60 Hz</li> </ul> </li> </ul>                                                | 4.8 VA                                          |
| <b>inductive power factor with the holding power of the coil</b>                                                                                                |                                                 |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                    | 0.6                                             |
| <ul style="list-style-type: none"> <li>• at 60 Hz</li> </ul>                                                                                                    | 0.6                                             |
| <b>closing power of magnet coil at DC</b>                                                                                                                       | 320 W                                           |
| <b>holding power of magnet coil at DC</b>                                                                                                                       | 2.8 W                                           |
| <b>closing delay</b>                                                                                                                                            |                                                 |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                       | 35 ... 75 ms                                    |
| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                                                       | 35 ... 75 ms                                    |
| <b>opening delay</b>                                                                                                                                            |                                                 |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                       | 80 ... 90 ms                                    |
| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                                                       | 80 ... 90 ms                                    |
| <b>arcing time</b>                                                                                                                                              | 10 ... 15 ms                                    |
| <b>control version of the switch operating mechanism</b>                                                                                                        | PLC-IN or Standard A1 - A2 (adjustable)         |
| <b>Auxiliary circuit</b>                                                                                                                                        |                                                 |
| number of NC contacts for auxiliary contacts instantaneous contact                                                                                              | 1                                               |
| number of NO contacts for auxiliary contacts instantaneous contact                                                                                              | 1                                               |
| operational current at AC-12 maximum                                                                                                                            | 10 A                                            |
| <b>operational current at AC-15</b>                                                                                                                             |                                                 |
| <ul style="list-style-type: none"> <li>• at 230 V rated value</li> </ul>                                                                                        | 6 A                                             |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>                                                                                        | 3 A                                             |
| <ul style="list-style-type: none"> <li>• at 500 V rated value</li> </ul>                                                                                        | 2 A                                             |
| <ul style="list-style-type: none"> <li>• at 690 V rated value</li> </ul>                                                                                        | 1 A                                             |
| <b>operational current at DC-12</b>                                                                                                                             |                                                 |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> </ul>                                                                                         | 10 A                                            |
| <ul style="list-style-type: none"> <li>• at 48 V rated value</li> </ul>                                                                                         | 6 A                                             |
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>                                                                                         | 6 A                                             |
| <ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>                                                                                        | 3 A                                             |
| <ul style="list-style-type: none"> <li>• at 125 V rated value</li> </ul>                                                                                        | 2 A                                             |
| <ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>                                                                                        | 1 A                                             |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                        | 0.15 A                                          |
| <b>operational current at DC-13</b>                                                                                                                             |                                                 |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> </ul>                                                                                         | 10 A                                            |
| <ul style="list-style-type: none"> <li>• at 48 V rated value</li> </ul>                                                                                         | 2 A                                             |
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>                                                                                         | 2 A                                             |
| <ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>                                                                                        | 1 A                                             |
| <ul style="list-style-type: none"> <li>• at 125 V rated value</li> </ul>                                                                                        | 0.9 A                                           |
| <ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>                                                                                        | 0.3 A                                           |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                        | 0.1 A                                           |
| <b>contact reliability of auxiliary contacts</b>                                                                                                                | 1 faulty switching per 100 million (17 V, 1 mA) |
| <b>UL/CSA ratings</b>                                                                                                                                           |                                                 |
| <b>full-load current (FLA) for 3-phase AC motor</b>                                                                                                             |                                                 |
| <ul style="list-style-type: none"> <li>• at 480 V rated value</li> </ul>                                                                                        | 156 A                                           |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                        | 144 A                                           |
| <b>yielded mechanical performance [hp]</b>                                                                                                                      |                                                 |
| <ul style="list-style-type: none"> <li>• for single-phase AC motor <ul style="list-style-type: none"> <li>— at 230 V rated value</li> </ul> </li> </ul>         | 30 hp                                           |
| <ul style="list-style-type: none"> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> </ul> </li> </ul>          | 50 hp                                           |

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| — at 220/230 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 60 hp                                                                                                                                                                                            |
| — at 460/480 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 125 hp                                                                                                                                                                                           |
| — at 575/600 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 150 hp                                                                                                                                                                                           |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | A600 / Q600                                                                                                                                                                                      |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                  |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V                                                                                                                                                                                                                                                                                                                                                                                                                                             | C characteristic: 10 A; 0.4 kA                                                                                                                                                                   |
| <b>design of the fuse link</b> <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of coordination 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> <li>• for short-circuit protection of the RLT relay output required</li> </ul>                                                                                                                       | gG: 355 A (690 V, 100 kA)<br>gG: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 A (415 V, 50 kA)<br>gG: 10 A (500 V, 1 kA)<br>miniature fuse: 4 A FF (230 V, I <sub>k</sub> = 400 A) |
| <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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 172 mm                                                                                                                                                                                           |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 140 mm                                                                                                                                                                                           |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 170 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 17 mm                                                                                                                                                                                            |
| <b>thickness of connection bar</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3 mm                                                                                                                                                                                             |
| <b>diameter of holes</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 9 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>                                                                                                                                                                                                                                                                                                                                                                                                              | 4 ... 250 kcmil                                                                                                                                                                                  |
| <b>connectable conductor cross-section for main contacts</b> <ul style="list-style-type: none"> <li>• stranded</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                             | 25 ... 120 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 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
| • for AWG cables for auxiliary contacts                                               | 2x (20 ... 16), 2x (18 ... 14), 1x 12                                 |
| <b>AWG number as coded connectable conductor cross section for auxiliary contacts</b> | 18 ... 14                                                             |

#### 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; safety-related disconnection via A1 A2                              |
| <b>service life maximum</b>                                          | 20 a                                                                     |
| <b>test wear-related service life necessary</b>                      | Yes                                                                      |
| <b>proportion of dangerous failures</b>                              |                                                                          |
| • with low demand rate according to SN 31920                         | 40 %                                                                     |
| • with high demand rate according to SN 31920                        | 73 %                                                                     |
| <b>B10 value with high demand rate according to SN 31920</b>         | 1 000 000                                                                |
| <b>failure rate [FIT] with low demand rate according to SN 31920</b> | 100 FIT                                                                  |
| <b>ISO 13849</b>                                                     |                                                                          |
| <b>device type according to ISO 13849-1</b>                          | 3                                                                        |
| <b>overdimensioning according to ISO 13849-2 necessary</b>           | Yes                                                                      |
| <b>IEC 61508</b>                                                     |                                                                          |
| <b>safety device type according to IEC 61508-2</b>                   | Type A                                                                   |
| <b>Electrical Safety</b>                                             |                                                                          |
| <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

|                    |                                 |
|--------------------|---------------------------------|
| <b>Environment</b> | <b>General Product Approval</b> |
|--------------------|---------------------------------|

[Environmental Confirmations](#)



|                                 |            |                          |                          |
|---------------------------------|------------|--------------------------|--------------------------|
| <b>General Product Approval</b> | <b>EMV</b> | <b>Functional Safety</b> | <b>Test Certificates</b> |
|---------------------------------|------------|--------------------------|--------------------------|



[Type Examination Certificate](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

|                             |              |
|-----------------------------|--------------|
| <b>Maritime application</b> | <b>other</b> |
|-----------------------------|--------------|



[Confirmation](#)

[Miscellaneous](#)

[Confirmation](#)



|              |                |
|--------------|----------------|
| <b>other</b> | <b>Railway</b> |
|--------------|----------------|

[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=3RT1055-6PF35>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1055-6PF35>

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

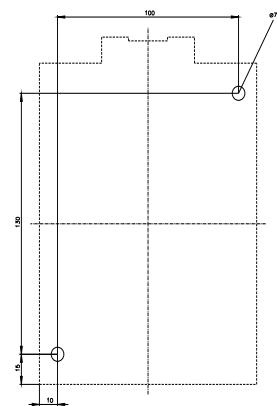
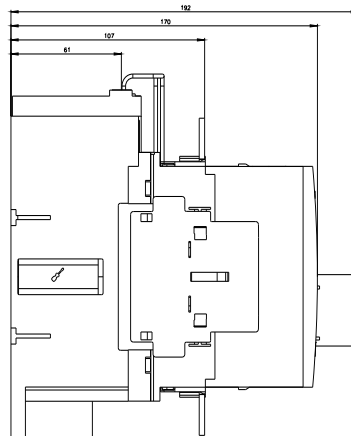
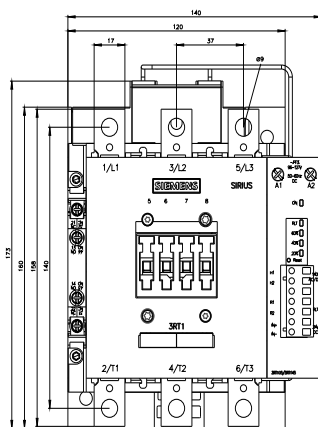
[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1055-6PF35&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1055-6PF35&lang=en)

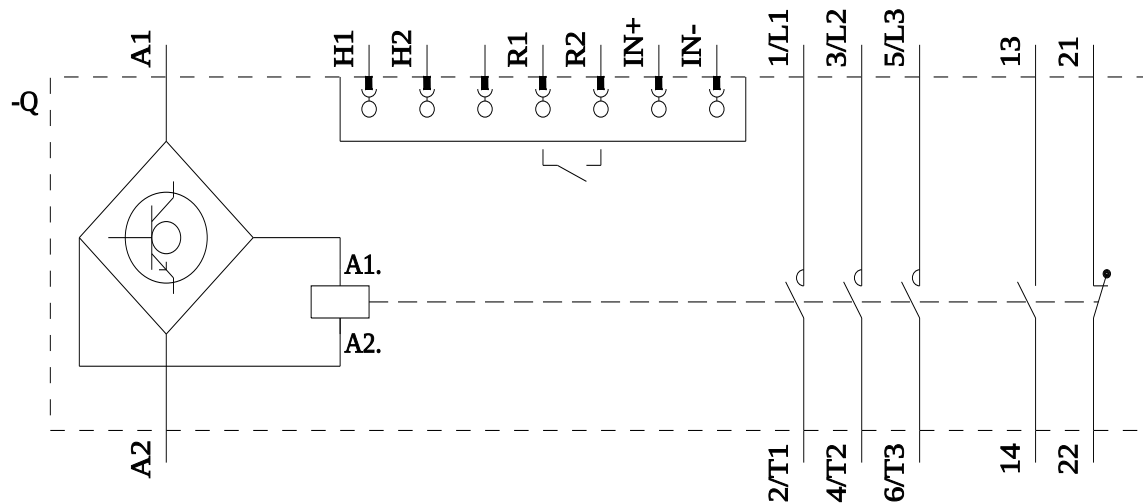
Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1055-6PF35>

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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