



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 2 NO + 2 NC, 230 V AC, 50 Hz 3-pole, frame size S0 screw terminal removable auxiliary switch

|                                                                                                       |                            |
|-------------------------------------------------------------------------------------------------------|----------------------------|
| product brand name                                                                                    | SIRIUS                     |
| product designation                                                                                   | Power contactor            |
| product type designation                                                                              | 3RT2                       |
| General technical data                                                                                |                            |
| size of contactor                                                                                     | S0                         |
| product extension                                                                                     |                            |
| • function module for communication                                                                   | No                         |
| • auxiliary switch                                                                                    | No                         |
| power loss [W] for rated value of the current                                                         |                            |
| • at AC in hot operating state                                                                        | 0.6 W                      |
| • at AC in hot operating state per pole                                                               | 0.2 W                      |
| • without load current share typical                                                                  | 7.6 W                      |
| insulation voltage                                                                                    |                            |
| • of main circuit with degree of pollution 3 rated value                                              | 690 V                      |
| • of auxiliary circuit with degree of pollution 3 rated value                                         | 690 V                      |
| surge voltage resistance                                                                              |                            |
| • of main circuit rated value                                                                         | 6 kV                       |
| • of auxiliary circuit rated value                                                                    | 6 kV                       |
| maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1 | 400 V                      |
| shock resistance at rectangular impulse                                                               |                            |
| • at AC                                                                                               | 7,5g / 5 ms, 4,7g / 10 ms  |
| shock resistance with sine pulse                                                                      |                            |
| • at AC                                                                                               | 11,8g / 5 ms, 7,4g / 10 ms |
| mechanical service life (switching 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)                                                                         | 10/01/2009                 |
| Ambient conditions                                                                                    |                            |
| installation altitude at height above sea level maximum                                               | 2 000 m                    |
| ambient temperature                                                                                   |                            |
| • during operation                                                                                    | -25 ... +60 °C             |
| • during storage                                                                                      | -55 ... +80 °C             |
| relative humidity minimum                                                                             | 10 %                       |
| relative humidity at 55 °C according to IEC 60068-2-30 maximum                                        | 95 %                       |
| Main circuit                                                                                          |                            |

|                                                                        |                    |
|------------------------------------------------------------------------|--------------------|
| <b>number of poles for main current circuit</b>                        | 3                  |
| <b>number of NO contacts for main contacts</b>                         | 3                  |
| <b>operating voltage</b>                                               |                    |
| • at AC-3 rated value maximum                                          | 690 V              |
| • at AC-3e rated value maximum                                         | 690 V              |
| <b>operational current</b>                                             |                    |
| • at AC-1 at 400 V at ambient temperature 40 °C rated value            | 40 A               |
| • at AC-1                                                              |                    |
| — up to 690 V at ambient temperature 40 °C rated value                 | 40 A               |
| — up to 690 V at ambient temperature 60 °C rated value                 | 35 A               |
| • at AC-3                                                              |                    |
| — at 400 V rated value                                                 | 9 A                |
| — at 500 V rated value                                                 | 9 A                |
| — at 690 V rated value                                                 | 9 A                |
| • at AC-3e                                                             |                    |
| — at 400 V rated value                                                 | 9 A                |
| — at 500 V rated value                                                 | 9 A                |
| — at 690 V rated value                                                 | 9 A                |
| • at AC-4 at 400 V rated value                                         | 8.5 A              |
| • at AC-5a up to 690 V rated value                                     | 35.2 A             |
| • at AC-5b up to 400 V rated value                                     | 7.4 A              |
| • at AC-6a                                                             |                    |
| — up to 230 V for current peak value n=20 rated value                  | 11.4 A             |
| — up to 400 V for current peak value n=20 rated value                  | 11.4 A             |
| — up to 500 V for current peak value n=20 rated value                  | 9.1 A              |
| — up to 690 V for current peak value n=20 rated value                  | 9 A                |
| • at AC-6a                                                             |                    |
| — up to 230 V for current peak value n=30 rated value                  | 7.6 A              |
| — up to 400 V for current peak value n=30 rated value                  | 7.6 A              |
| — up to 500 V for current peak value n=30 rated value                  | 6.1 A              |
| — up to 690 V for current peak value n=30 rated value                  | 6.1 A              |
| minimum cross-section in main circuit at maximum AC-1 rated value      | 10 mm <sup>2</sup> |
| <b>operational current for approx. 200000 operating cycles at AC-4</b> |                    |
| • at 400 V rated value                                                 | 4.1 A              |
| • at 690 V rated value                                                 | 3.3 A              |
| <b>operational current</b>                                             |                    |
| • <b>at 1 current path at DC-1</b>                                     |                    |
| — at 24 V rated value                                                  | 35 A               |
| — at 110 V rated value                                                 | 4.5 A              |
| — at 220 V rated value                                                 | 1 A                |
| — at 440 V rated value                                                 | 0.4 A              |
| — at 600 V rated value                                                 | 0.25 A             |
| • <b>with 2 current paths in series at DC-1</b>                        |                    |
| — at 24 V rated value                                                  | 35 A               |
| — at 110 V rated value                                                 | 35 A               |
| — at 220 V rated value                                                 | 5 A                |
| — at 440 V rated value                                                 | 1 A                |
| — at 600 V rated value                                                 | 0.8 A              |
| • <b>with 3 current paths in series at DC-1</b>                        |                    |
| — at 24 V rated value                                                  | 35 A               |
| — at 110 V rated value                                                 | 35 A               |
| — at 220 V rated value                                                 | 35 A               |
| — at 440 V rated value                                                 | 2.9 A              |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>— at 600 V rated value</li> <li>• <b>at 1 current path at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>• <b>with 2 current paths in series at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>• <b>with 3 current paths in series at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul> | 1.4 A<br><br>20 A<br>1 A<br>0.09 A<br>0.06 A<br><br>35 A<br>15 A<br>3 A<br>0.27 A<br>0.16 A<br><br>35 A<br>35 A<br>10 A<br>0.6 A<br>0.6 A                                                                                                                                                                    |
| <b>operating power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> <li>• at AC-3e <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                       | 2.2 kW<br>4 kW<br>4 kW<br>7.5 kW<br><br>2.2 kW<br>4 kW<br>4 kW<br>7.5 kW                                                                                                                                                                                                                                     |
| <b>operating power for approx. 200000 operating cycles at AC-4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 2 kW<br>2.5 kW                                                                                                                                                                                                                                                                                               |
| <b>operating apparent power at AC-6a</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                              |
| <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> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4.5 kVA<br>7.8 kVA<br>7.8 kVA<br>10.7 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> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3 kVA<br>5.2 kVA<br>5.2 kVA<br>7.2 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 170 A; Use minimum cross-section acc. to AC-1 rated value<br>170 A; Use minimum cross-section acc. to AC-1 rated value<br>140 A; Use minimum cross-section acc. to AC-1 rated value<br>104 A; Use minimum cross-section acc. to AC-1 rated value<br>88 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> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5 000 1/h                                                                                                                                                                                                                                                                                                    |
| <b>operating frequency</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• at AC-1 maximum</li> <li>• at AC-2 maximum</li> <li>• at AC-3 maximum</li> <li>• at AC-3e maximum</li> <li>• at AC-4 maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 000 1/h<br>1 000 1/h<br>1 000 1/h<br>1 000 1/h<br>300 1/h                                                                                                                                                                                                                                                  |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                              |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | AC                                                                                                                                                                                                                                                                                                           |
| <b>control supply voltage at AC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                              |
| <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 230 V                                                                                                                                                                                                                                                                                                        |
| <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> </ul>                                                                                                                                                                                                                                                 | 0.8 ... 1.1                                                                                                                                                      |
| <b>apparent pick-up power of magnet coil at AC</b>                                                                                                                                                                                                                                                           |                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                                                                                                                                 | 65 VA                                                                                                                                                            |
| <b>inductive power factor with closing power of the coil</b>                                                                                                                                                                                                                                                 |                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                                                                                                                                 | 0.82                                                                                                                                                             |
| <b>apparent holding power of magnet coil at AC</b>                                                                                                                                                                                                                                                           |                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> </ul>                                                                                                                                                                                                                                                 | 7.6 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>                                                                                                                                                                                                                                                 | 0.25                                                                                                                                                             |
| <b>closing delay</b>                                                                                                                                                                                                                                                                                         |                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                                                                                                    | 8 ... 40 ms                                                                                                                                                      |
| <b>opening delay</b>                                                                                                                                                                                                                                                                                         |                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                                                                                                    | 4 ... 16 ms                                                                                                                                                      |
| <b>arcing time</b>                                                                                                                                                                                                                                                                                           | 10 ... 10 ms                                                                                                                                                     |
| <b>control version of the switch operating mechanism</b>                                                                                                                                                                                                                                                     | Standard A1 - A2                                                                                                                                                 |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                                     |                                                                                                                                                                  |
| number of NC contacts for auxiliary contacts instantaneous contact                                                                                                                                                                                                                                           | 2                                                                                                                                                                |
| number of NO contacts for auxiliary contacts instantaneous contact                                                                                                                                                                                                                                           | 2                                                                                                                                                                |
| operational current at AC-12 maximum                                                                                                                                                                                                                                                                         | 10 A                                                                                                                                                             |
| <b>operational current at AC-15</b>                                                                                                                                                                                                                                                                          |                                                                                                                                                                  |
| <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>                                                                                                                                                                                                                                      | 6 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>                                                                                                                                                                                                                                     | 7.6 A                                                                                                                                                            |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                                                                     | 9 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 110/120 V rated value</li> <li>— at 230 V rated value</li> </ul> </li> </ul>                                                                                                                  | 1 hp<br>1 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> <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>                                           | 2 hp<br>3 hp<br>5 hp<br>7.5 hp                                                                                                                                   |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                  | A600 / Q600                                                                                                                                                      |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                              |                                                                                                                                                                  |
| <b>design of the fuse link</b>                                                                                                                                                                                                                                                                               |                                                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch</li> </ul> | gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)<br>gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)<br>gG: 10 A (500 V, 1 kA) |

required

## Installation/ mounting/ dimensions

|                              |                                                                                                                                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>mounting position</b>     | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| <b>fastening method</b>      | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715                                               |
| • side-by-side mounting      | Yes                                                                                                                                  |
| <b>height</b>                | 85 mm                                                                                                                                |
| <b>width</b>                 | 45 mm                                                                                                                                |
| <b>depth</b>                 | 141 mm                                                                                                                               |
| <b>required spacing</b>      |                                                                                                                                      |
| • with side-by-side mounting |                                                                                                                                      |
| — forwards                   | 10 mm                                                                                                                                |
| — upwards                    | 10 mm                                                                                                                                |
| — downwards                  | 10 mm                                                                                                                                |
| — at the side                | 0 mm                                                                                                                                 |
| • for grounded parts         |                                                                                                                                      |
| — forwards                   | 10 mm                                                                                                                                |
| — upwards                    | 10 mm                                                                                                                                |
| — at the side                | 6 mm                                                                                                                                 |
| — downwards                  | 10 mm                                                                                                                                |
| • for live parts             |                                                                                                                                      |
| — forwards                   | 10 mm                                                                                                                                |
| — upwards                    | 10 mm                                                                                                                                |
| — downwards                  | 10 mm                                                                                                                                |
| — at the side                | 6 mm                                                                                                                                 |

## Connections/ Terminals

|                                                                   |                                                                                         |
|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <b>type of electrical connection</b>                              |                                                                                         |
| • for main current circuit                                        | screw-type terminals                                                                    |
| • for auxiliary and control circuit                               | screw-type terminals                                                                    |
| • at contactor for auxiliary contacts                             | Screw-type terminals                                                                    |
| • of magnet coil                                                  | Screw-type terminals                                                                    |
| <b>type of connectable conductor cross-sections</b>               |                                                                                         |
| • for main contacts                                               |                                                                                         |
| — solid                                                           | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )                       |
| — solid or stranded                                               | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 10 mm <sup>2</sup> )                       |
| — finely stranded with core end processing                        | 2x (1 ... 2.5 mm <sup>2</sup> ), 2x (2.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup> |
| • at AWG cables for main contacts                                 | 2x (16 ... 12), 2x (14 ... 8)                                                           |
| <b>connectable conductor cross-section for main contacts</b>      |                                                                                         |
| • solid                                                           | 1 ... 10 mm <sup>2</sup>                                                                |
| • stranded                                                        | 1 ... 10 mm <sup>2</sup>                                                                |
| • finely stranded with core end processing                        | 1 ... 10 mm <sup>2</sup>                                                                |
| <b>connectable conductor cross-section for auxiliary contacts</b> |                                                                                         |
| • solid or stranded                                               | 0.5 ... 2.5 mm <sup>2</sup>                                                             |
| • finely stranded with core end processing                        | 0.5 ... 2.5 mm <sup>2</sup>                                                             |
| <b>type of connectable conductor cross-sections</b>               |                                                                                         |
| • for auxiliary contacts                                          |                                                                                         |
| — solid or stranded                                               | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                   |
| — finely stranded with core end processing                        | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                   |
| • at AWG cables for auxiliary contacts                            | 2x (20 ... 16), 2x (18 ... 14)                                                          |
| <b>AWG number as coded connectable conductor cross section</b>    |                                                                                         |
| • for main contacts                                               | 16 ... 8                                                                                |
| • for auxiliary contacts                                          | 20 ... 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      |
| B10 value with high demand rate according to SN 31920    | 450 000 |
| <b>proportion of dangerous failures</b>                  |         |
| • with low demand rate according to SN 31920             | 40 %    |

- with high demand rate according to SN 31920
- failure rate [FIT] with low demand rate according to SN 31920
- T1 value for proof test interval or service life according to IEC 61508
- protection class IP on the front according to IEC 60529
- touch protection on the front according to IEC 60529
- suitability for use
  - safety-related switching OFF

73 %  
100 FIT  
  
20 y  
  
IP20  
  
finger-safe, for vertical contact from the front  
  
Yes

#### Certificates/ approvals

##### General Product Approval



[Confirmation](#)



[KC](#)



| EMC | Functional Safety/Safety of Machinery | Declaration of Conformity | Test Certificates |
|-----|---------------------------------------|---------------------------|-------------------|
|-----|---------------------------------------|---------------------------|-------------------|



[Type Examination Certificate](#)



EG-Konf.

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

##### Marine / Shipping



LRS



RINA



RMRS

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

[Confirmation](#)



VDE

[Confirmation](#)

[Vibration and Shock](#)

#### Further information

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=3RT2023-1AP04>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2023-1AP04>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-1AP04>

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

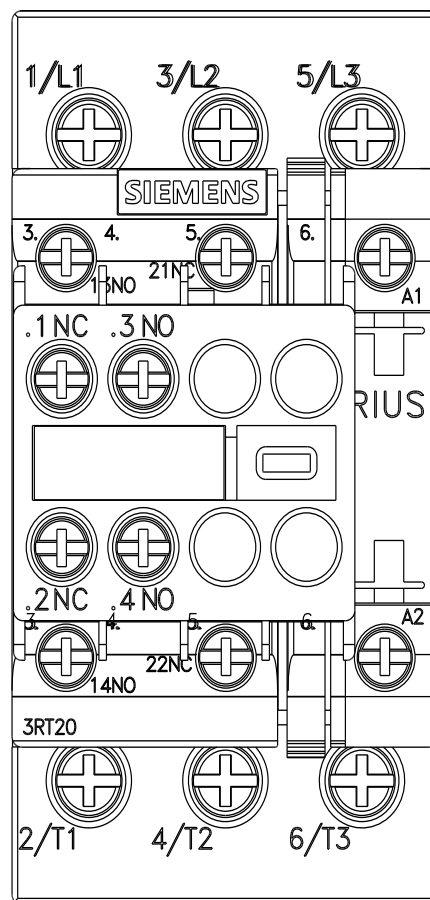
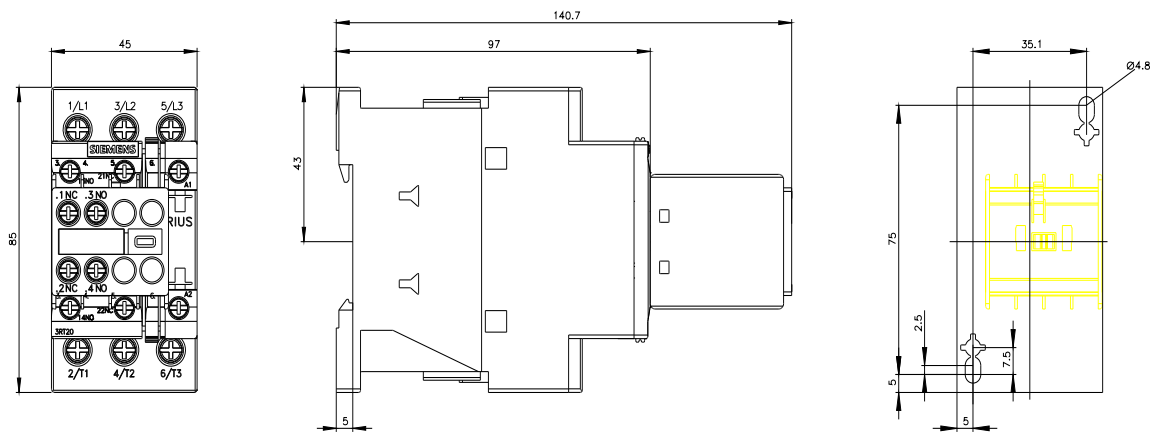
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2023-1AP04&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2023-1AP04&lang=en)

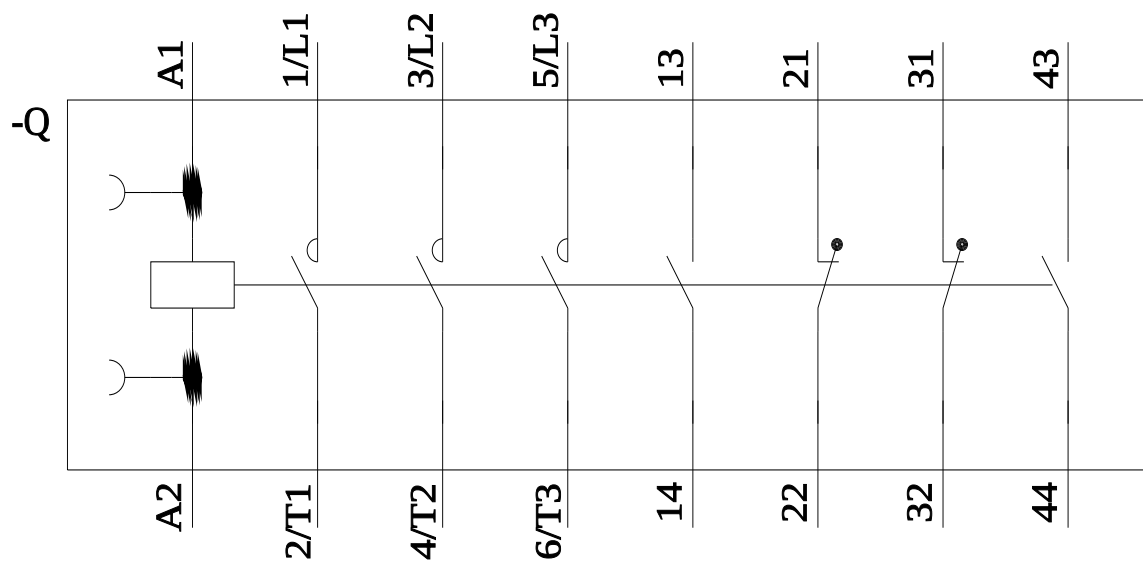
Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-1AP04/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2023-1AP04&objecttype=14&gridview=view1>





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