



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 220 V DC, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0

|                                                                                                              |                          |
|--------------------------------------------------------------------------------------------------------------|--------------------------|
| 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                                                                                           | Yes                      |
| power loss [W] for rated value of the current                                                                |                          |
| • at AC in hot operating state                                                                               | 0.9 W                    |
| • at AC in hot operating state per pole                                                                      | 0.3 W                    |
| • without load current share typical                                                                         | 5.9 W                    |
| type of calculation of power loss depending on pole                                                          | quadratic                |
| 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 protective separation between coil and main contacts according to EN 60947-1 | 400 V                    |
| shock resistance at rectangular impulse                                                                      |                          |
| • at DC                                                                                                      | 10g / 5 ms, 7,5g / 10 ms |
| shock resistance with sine pulse                                                                             |                          |
| • at DC                                                                                                      | 15g / 5 ms, 10g / 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)                                                                                |                          |
| Weight                                                                                                       | 0.587 kg                 |
| 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 %                     |

| Environmental footprint                                           |                    |
|-------------------------------------------------------------------|--------------------|
| Environmental Product Declaration(EPD)                            | Yes                |
| Global Warming Potential [CO2 eq] total                           | 221 kg             |
| Global Warming Potential [CO2 eq] during manufacturing            | 2.65 kg            |
| Global Warming Potential [CO2 eq] during operation                | 219 kg             |
| Global Warming Potential [CO2 eq] after end of life               | -0.639 kg          |
| Main circuit                                                      |                    |
| number of poles for main current circuit                          | 3                  |
| number of NO contacts for main contacts                           | 3                  |
| operating voltage                                                 |                    |
| • at AC-3 rated value maximum                                     | 690 V              |
| • at AC-3e rated value maximum                                    | 690 V              |
| operational current                                               |                    |
| • 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                                            | 12 A               |
| — at 500 V rated value                                            | 12 A               |
| — at 690 V rated value                                            | 9 A                |
| • at AC-3e                                                        |                    |
| — at 400 V rated value                                            | 12 A               |
| — at 500 V rated value                                            | 12 A               |
| — at 690 V rated value                                            | 9 A                |
| • at AC-4 at 400 V rated value                                    | 12.5 A             |
| • at AC-5a up to 690 V rated value                                | 35.2 A             |
| • at AC-5b up to 400 V rated value                                | 9.9 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             | 11.3 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             | 7.6 A              |
| — up to 690 V for current peak value n=30 rated value             | 7.6 A              |
| minimum cross-section in main circuit at maximum AC-1 rated value | 10 mm <sup>2</sup> |
| operational current for approx. 200000 operating cycles at AC-4   |                    |
| • at 400 V rated value                                            | 5.5 A              |
| • at 690 V rated value                                            | 5.5 A              |
| operational current                                               |                    |
| • at 1 current path at DC-1                                       |                    |
| — at 24 V rated value                                             | 35 A               |
| — at 60 V rated value                                             | 20 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             |
| • with 2 current paths in series at DC-1                          |                    |
| — at 24 V rated value                                             | 35 A               |
| — at 60 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              |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• with 3 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 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>• at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 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>• with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 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>• with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 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> | 35 A<br>35 A<br>35 A<br>35 A<br>2.9 A<br>1.4 A<br><br>20 A<br>5 A<br>2.5 A<br>1 A<br>0.09 A<br>0.06 A<br><br>35 A<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>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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3 kW<br>5.5 kW<br>5.5 kW<br>7.5 kW<br><br>3 kW<br>5.5 kW<br>5.5 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2.6 kW<br>4.6 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>9.8 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>6.5 kVA<br>9 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 210 A; Use minimum cross-section acc. to AC-1 rated value<br>210 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>126 A; Use minimum cross-section acc. to AC-1 rated value<br>105 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 DC</li> </ul>                                                                                                                                   | 1 500 1/h                                       |
| <b>operating frequency</b>                                                                                                                                                                  |                                                 |
| <ul style="list-style-type: none"> <li>• at AC-1 maximum</li> </ul>                                                                                                                         | 1 000 1/h                                       |
| <ul style="list-style-type: none"> <li>• at AC-2 maximum</li> </ul>                                                                                                                         | 1 000 1/h                                       |
| <ul style="list-style-type: none"> <li>• at AC-3 maximum</li> </ul>                                                                                                                         | 1 000 1/h                                       |
| <ul style="list-style-type: none"> <li>• at AC-3e maximum</li> </ul>                                                                                                                        | 1 000 1/h                                       |
| <ul style="list-style-type: none"> <li>• at AC-4 maximum</li> </ul>                                                                                                                         | 300 1/h                                         |
| <b>Control circuit/ Control</b>                                                                                                                                                             |                                                 |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                        | DC                                              |
| <b>control supply voltage at DC rated value</b>                                                                                                                                             | 220 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> </ul>                                                                                                                           | 0.8                                             |
| <ul style="list-style-type: none"> <li>• full-scale value</li> </ul>                                                                                                                        | 1.1                                             |
| <b>closing power of magnet coil at DC</b>                                                                                                                                                   | 5.9 W                                           |
| <b>holding power of magnet coil at DC</b>                                                                                                                                                   | 5.9 W                                           |
| <b>closing delay</b>                                                                                                                                                                        |                                                 |
| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                                                                                   | 50 ... 170 ms                                   |
| <b>opening delay</b>                                                                                                                                                                        |                                                 |
| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                                                                                                                   | 15 ... 18 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                                                                                                                          | 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>                                                                                                                    | 10 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>                                                                                                                    | 11 A                                            |
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                    | 11 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>2 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> </ul> </li> </ul>  | 3 hp<br>3 hp                                    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                          |
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| — at 460/480 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 7.5 hp                                                                                                                                                                   |
| — at 575/600 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 10 hp                                                                                                                                                                    |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                     | A600 / P600                                                                                                                                                              |
| <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 required</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)         |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                          |
| <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 DIN rail according to DIN EN 60715                                                                                                 |
| <b>height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 85 mm                                                                                                                                                                    |
| <b>width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 45 mm                                                                                                                                                                    |
| <b>depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 107 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> | 10 mm<br>10 mm<br>10 mm<br>0 mm<br><br>10 mm<br>10 mm<br>6 mm<br>10 mm<br><br>10 mm<br>10 mm<br>10 mm<br>6 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>                                                                                                                                                                                                                                                                                                      | screw-type terminals<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals                                                                             |
| <b>type of connectable conductor cross-sections</b>                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>for main contacts <ul style="list-style-type: none"> <li>solid</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul> </li> <li>for AWG cables for main contacts</li> </ul>                                                                                                                                                                                                                                             | 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)<br>2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²)<br>2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²), 1x 10 mm²<br>2x (16 ... 12), 2x (14 ... 8) |
| <b>connectable conductor cross-section for main contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>solid</li> <li>stranded</li> <li>finely stranded with core end processing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                     | 1 ... 10 mm²<br>1 ... 10 mm²<br>1 ... 10 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 ... 2.5 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 or stranded</li> <li>finely stranded with core end processing</li> </ul> </li> <li>for AWG cables for auxiliary contacts</li> </ul>                                                                                                                                                                                                                                                  | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)<br>2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)<br>2x (20 ... 16), 2x (18 ... 14)                                             |
| <b>AWG number as coded connectable conductor cross section</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>for main contacts</li> <li>for auxiliary contacts</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                             | 16 ... 8<br>20 ... 14                                                                                                                                                    |
| <b>Safety related data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                          |

|                                                                      |                                                  |
|----------------------------------------------------------------------|--------------------------------------------------|
| <b>product function</b>                                              |                                                  |
| • mirror contact according to IEC 60947-4-1                          | Yes                                              |
| • positively driven operation according to IEC 60947-5-1             | No                                               |
| • suitable for safety function                                       | Yes                                              |
| suitability for use safety-related switching OFF                     | Yes                                              |
| <b>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>       | IP20                                             |
| <b>touch protection on the front according to IEC 60529</b>          | finger-safe, for vertical contact from the front |
| <b>Approvals Certificates</b>                                        |                                                  |
| <b>General Product Approval</b>                                      |                                                  |



[Confirmation](#)



[KC](#)

| General Product Approval | EMV | Functional Safety                            | Test Certificates                                  | Marine / Shipping                        |
|--------------------------|-----|----------------------------------------------|----------------------------------------------------|------------------------------------------|
|                          |     | <a href="#">Type Examination Certificate</a> | <a href="#">Type Test Certificates/Test Report</a> | <a href="#">Special Test Certificate</a> |
|                          |     |                                              |                                                    |                                          |

| Marine / Shipping | other |  |  |                               |                              |
|-------------------|-------|--|--|-------------------------------|------------------------------|
|                   |       |  |  | <a href="#">Miscellaneous</a> | <a href="#">Confirmation</a> |

| Railway                                  | Dangerous goods                       | Environment |                                             |  |  |
|------------------------------------------|---------------------------------------|-------------|---------------------------------------------|--|--|
| <a href="#">Special Test Certificate</a> | <a href="#">Transport Information</a> |             | <a href="#">Environmental Confirmations</a> |  |  |

| Further information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <p>Information on the packaging<br/> <a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a><br/> Information- and Downloadcenter (Catalogs, Brochures,...)<br/> <a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a><br/> Industry Mall (Online ordering system)<br/> <a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2024-1BM40">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2024-1BM40</a><br/> Cax online generator<br/> <a href="http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RT2024-1BM40">http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RT2024-1BM40</a><br/> Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)<br/> <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-1BM40">https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-1BM40</a><br/> Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)</p> |  |

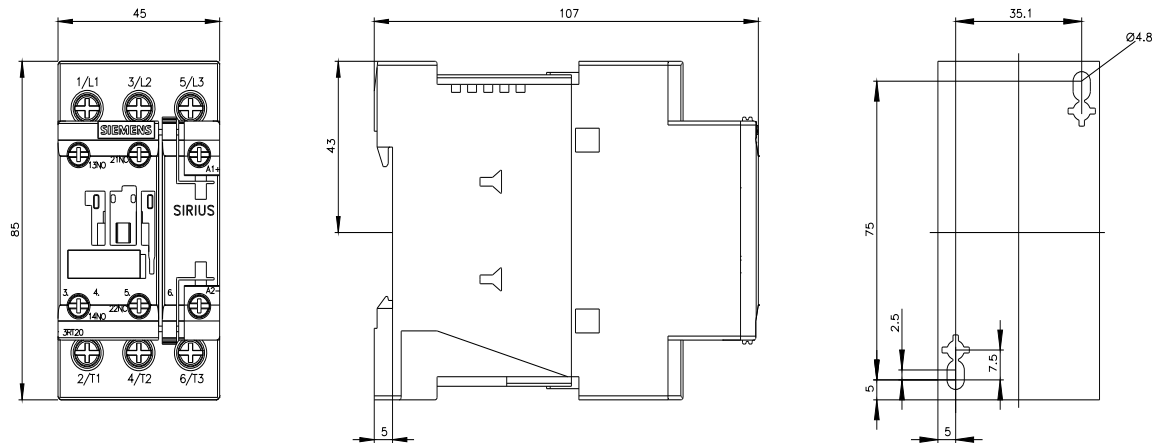
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2024-1BM40&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2024-1BM40&lang=en)

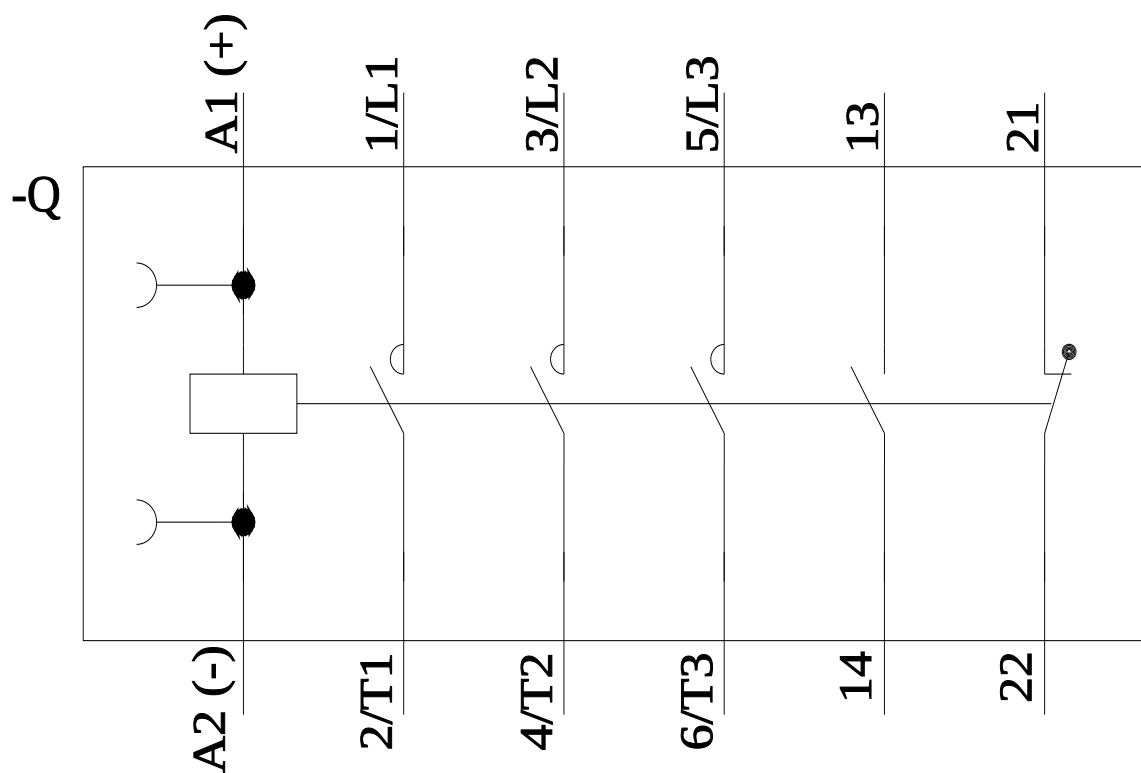
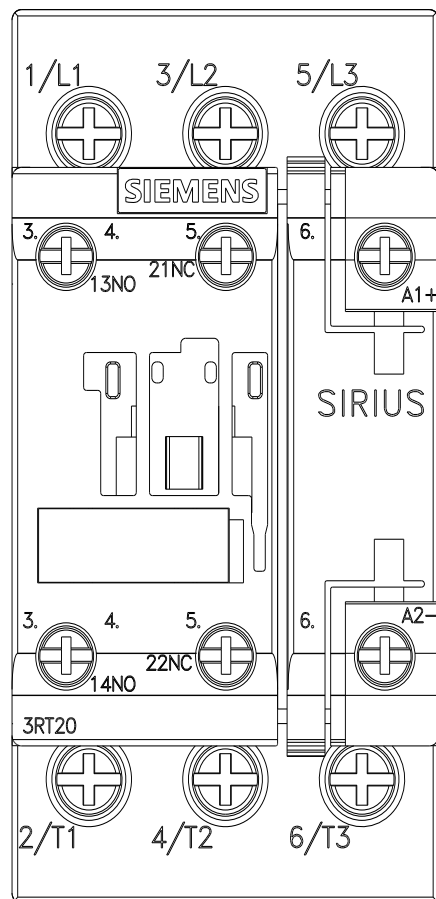
Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-1BM40/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2024-1BM40&objecttype=14&gridview=view1>





last modified:

