



power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 20-33 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 2 NO + 2 NC, main circuit: screw terminal, control and auxiliary circuit: spring-loaded terminal, size: S2, captive auxiliary switch

|                                                                                                              |                                                            |
|--------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| product brand name                                                                                           | SIRIUS                                                     |
| product designation                                                                                          | Power contactor                                            |
| product type designation                                                                                     | 3RT2                                                       |
| General technical data                                                                                       |                                                            |
| size of contactor                                                                                            | S2                                                         |
| 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                                                                               | 17.1 W                                                     |
| • at AC in hot operating state per pole                                                                      | 5.7 W                                                      |
| • without load current share typical                                                                         | 1 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 AC                                                                                                      | 6.1g / 5 ms, 3.7g / 10 ms                                  |
| • at DC                                                                                                      | 6.1g / 5 ms, 3.7g / 10 ms                                  |
| shock resistance with sine pulse                                                                             |                                                            |
| • at AC                                                                                                      | 9.6g / 5 ms, 5.8g / 10 ms                                  |
| • at DC                                                                                                      | 9.6g / 5 ms, 5.8g / 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)                                                                                |                                                            |
| SVHC substance name                                                                                          | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8 |
| Weight                                                                                                       | 1.189 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     |
| <b>relative humidity minimum</b>                                       | 10 %               |
| <b>relative humidity at 55 °C according to IEC 60068-2-30 maximum</b>  | 95 %               |
| <b>Environmental footprint</b>                                         |                    |
| Environmental Product Declaration(EPD)                                 | Yes                |
| Global Warming Potential [CO2 eq] total                                | 107 kg             |
| Global Warming Potential [CO2 eq] during manufacturing                 | 5.88 kg            |
| Global Warming Potential [CO2 eq] during operation                     | 102 kg             |
| Global Warming Potential [CO2 eq] after end of life                    | -0.988 kg          |
| <b>Main circuit</b>                                                    |                    |
| <b>number of poles for main current circuit</b>                        | 3                  |
| <b>number of NO contacts for main contacts</b>                         | 3                  |
| <b>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            | 90 A               |
| • at AC-1                                                              |                    |
| — up to 690 V at ambient temperature 40 °C rated value                 | 90 A               |
| — up to 690 V at ambient temperature 60 °C rated value                 | 80 A               |
| • at AC-3                                                              |                    |
| — at 400 V rated value                                                 | 80 A               |
| — at 500 V rated value                                                 | 80 A               |
| — at 690 V rated value                                                 | 58 A               |
| • at AC-3e                                                             |                    |
| — at 400 V rated value                                                 | 80 A               |
| — at 500 V rated value                                                 | 80 A               |
| — at 690 V rated value                                                 | 58 A               |
| • at AC-4 at 400 V rated value                                         | 55 A               |
| • at AC-5a up to 690 V rated value                                     | 79.2 A             |
| • at AC-5b up to 400 V rated value                                     | 66.4 A             |
| • at AC-6a                                                             |                    |
| — up to 230 V for current peak value n=20 rated value                  | 70 A               |
| — up to 400 V for current peak value n=20 rated value                  | 70 A               |
| — up to 500 V for current peak value n=20 rated value                  | 70 A               |
| — up to 690 V for current peak value n=20 rated value                  | 58 A               |
| • at AC-6a                                                             |                    |
| — up to 230 V for current peak value n=30 rated value                  | 46.7 A             |
| — up to 400 V for current peak value n=30 rated value                  | 46.7 A             |
| — up to 500 V for current peak value n=30 rated value                  | 46.7 A             |
| — up to 690 V for current peak value n=30 rated value                  | 46.7 A             |
| minimum cross-section in main circuit at maximum AC-1 rated value      | 35 mm <sup>2</sup> |
| <b>operational current for approx. 200000 operating cycles at AC-4</b> |                    |
| • at 400 V rated value                                                 | 30 A               |
| • at 690 V rated value                                                 | 24 A               |
| <b>operational current</b>                                             |                    |
| • <b>at 1 current path at DC-1</b>                                     |                    |
| — at 24 V rated value                                                  | 55 A               |
| — at 60 V rated value                                                  | 23 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                                                  | 55 A               |
| — at 60 V rated value                                                  | 45 A               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                          |
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| <ul style="list-style-type: none"> <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>                                                                                                                                                                                                                                                                                                                           | 45 A<br>5 A<br>1 A<br>0.8 A                                                                                              |
| <ul style="list-style-type: none"> <li>● <b>with 3 current paths in series at DC-1</b> <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>                                                                                                                                                          | 55 A<br>55 A<br>55 A<br>45 A<br>2.9 A<br>1.4 A                                                                           |
| <ul style="list-style-type: none"> <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 60 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>6 A<br>1 A<br>0.1 A<br>0.06 A                                                                                    |
| <ul style="list-style-type: none"> <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 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>                                                                                                                                                  | 55 A<br>45 A<br>25 A<br>5 A<br>0.27 A<br>0.16 A                                                                          |
| <ul style="list-style-type: none"> <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 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>                                                                                                                                                  | 55 A<br>55 A<br>55 A<br>25 A<br>0.6 A<br>0.35 A                                                                          |
| <b>operating power</b> <ul style="list-style-type: none"> <li>● at AC-2 at 400 V rated value</li> <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> | 37 kW<br><br>22 kW<br>37 kW<br>37 kW<br>45 kW<br><br>22 kW<br>37 kW<br>37 kW<br>45 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>                                                                                                                                                                                                                                                                                                                        | <br><br>15.8 kW<br>21.8 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>                                                                                                                                                      | 27.8 kVA<br>48.4 kVA<br>60.6 kVA<br>69.3 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>                                                                                                                                                      | 18.6 kVA<br>32.3 kVA<br>40.4 kVA<br>55.8 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> </ul>                                                                                                                                                                                                                                                           | 1 298 A; Use minimum cross-section acc. to AC-1 rated value<br>898 A; Use minimum cross-section acc. to AC-1 rated value |

|                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                     |
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| <ul style="list-style-type: none"> <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>                                                                                                                        | 640 A; Use minimum cross-section acc. to AC-1 rated value<br>414 A; Use minimum cross-section acc. to AC-1 rated value<br>333 A; Use minimum cross-section acc. to AC-1 rated value |
| <b>no-load switching frequency</b>                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                                                             | 1 500 1/h<br>1 500 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>                                                                                                                                                                       | 700 1/h<br>350 1/h<br>500 1/h<br>500 1/h<br>150 1/h                                                                                                                                 |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                     |
| <b>type of voltage of the control supply voltage</b>                                                                                                                                                                                                                                                                                                   | AC/DC                                                                                                                                                                               |
| <b>control supply voltage at AC</b>                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>                                                                                                                                                                                                                                               | 20 ... 33 V<br>20 ... 33 V                                                                                                                                                          |
| <b>control supply voltage at DC rated value</b>                                                                                                                                                                                                                                                                                                        | 20 ... 33 V                                                                                                                                                                         |
| <b>operating range factor control supply voltage rated value of magnet coil at DC</b>                                                                                                                                                                                                                                                                  |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>                                                                                                                                                                                                                                                          | 0.8<br>1.1                                                                                                                                                                          |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b>                                                                                                                                                                                                                                                                  |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                       | 0.8 ... 1.1<br>0.8 ... 1.1                                                                                                                                                          |
| <b>design of the surge suppressor</b>                                                                                                                                                                                                                                                                                                                  | with varistor                                                                                                                                                                       |
| <b>inrush current peak</b>                                                                                                                                                                                                                                                                                                                             | 3 A                                                                                                                                                                                 |
| <b>duration of inrush current peak</b>                                                                                                                                                                                                                                                                                                                 | 50 µs                                                                                                                                                                               |
| <b>locked-rotor current mean value</b>                                                                                                                                                                                                                                                                                                                 | 1 A                                                                                                                                                                                 |
| <b>locked-rotor current peak</b>                                                                                                                                                                                                                                                                                                                       | 2.6 A                                                                                                                                                                               |
| <b>duration of locked-rotor current</b>                                                                                                                                                                                                                                                                                                                | 230 ms                                                                                                                                                                              |
| <b>holding current mean value</b>                                                                                                                                                                                                                                                                                                                      | 40 mA                                                                                                                                                                               |
| <b>apparent pick-up power of magnet coil at AC</b>                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                       | 40 VA<br>40 VA                                                                                                                                                                      |
| <b>apparent holding power</b>                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at DC</li> <li>• at maximum rated control supply voltage at DC</li> </ul>                                                                                                                                                                                             | 2 VA<br>2 VA                                                                                                                                                                        |
| <b>apparent holding power</b>                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at AC             <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> <li>• at maximum rated control supply voltage at AC             <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> </ul> | 2 VA<br>2 VA<br>2 VA<br>2 VA                                                                                                                                                        |
| <b>apparent holding power of magnet coil at AC</b>                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                       | 2 VA<br>2 VA                                                                                                                                                                        |
| <b>inductive power factor with the holding power of the coil</b>                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                       | 0.95<br>0.95                                                                                                                                                                        |
| <b>closing power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                              | 23 W                                                                                                                                                                                |
| <b>holding power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                              | 1 W                                                                                                                                                                                 |
| <b>closing delay</b>                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                                                             | 35 ... 110 ms<br>35 ... 110 ms                                                                                                                                                      |
| <b>opening delay</b>                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                                                             | 30 ... 55 ms<br>30 ... 55 ms                                                                                                                                                        |
| <b>arcing time</b>                                                                                                                                                                                                                                                                                                                                     | 10 ... 20 ms                                                                                                                                                                        |

|                                                                    |                                                                                                                                      |
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| <b>control version of the switch operating mechanism</b>           | Standard A1 - A2                                                                                                                     |
| <b>Auxiliary circuit</b>                                           |                                                                                                                                      |
| <b>design of the auxiliary switch</b>                              | on the front, non-detachable                                                                                                         |
| number of NC contacts for auxiliary contacts instantaneous contact | 2                                                                                                                                    |
| number of NO contacts for auxiliary contacts instantaneous contact | 2                                                                                                                                    |
| operational current at AC-12 maximum                               | 10 A                                                                                                                                 |
| <b>operational current at AC-15</b>                                |                                                                                                                                      |
| • at 230 V rated value                                             | 6 A                                                                                                                                  |
| • at 400 V rated value                                             | 3 A                                                                                                                                  |
| • at 500 V rated value                                             | 2 A                                                                                                                                  |
| • at 690 V rated value                                             | 1 A                                                                                                                                  |
| <b>operational current at DC-12</b>                                |                                                                                                                                      |
| • at 24 V rated value                                              | 10 A                                                                                                                                 |
| • at 48 V rated value                                              | 6 A                                                                                                                                  |
| • at 60 V rated value                                              | 6 A                                                                                                                                  |
| • at 110 V rated value                                             | 3 A                                                                                                                                  |
| • at 125 V rated value                                             | 2 A                                                                                                                                  |
| • at 220 V rated value                                             | 1 A                                                                                                                                  |
| • at 600 V rated value                                             | 0.15 A                                                                                                                               |
| <b>operational current at DC-13</b>                                |                                                                                                                                      |
| • at 24 V rated value                                              | 6 A                                                                                                                                  |
| • at 48 V rated value                                              | 2 A                                                                                                                                  |
| • at 60 V rated value                                              | 2 A                                                                                                                                  |
| • at 110 V rated value                                             | 1 A                                                                                                                                  |
| • at 125 V rated value                                             | 0.9 A                                                                                                                                |
| • at 220 V rated value                                             | 0.3 A                                                                                                                                |
| • at 600 V rated value                                             | 0.1 A                                                                                                                                |
| <b>contact reliability of auxiliary contacts</b>                   | 1 faulty switching per 100 million (17 V, 1 mA)                                                                                      |
| <b>UL/CSA ratings</b>                                              |                                                                                                                                      |
| <b>full-load current (FLA) for 3-phase AC motor</b>                |                                                                                                                                      |
| • at 480 V rated value                                             | 65 A                                                                                                                                 |
| • at 600 V rated value                                             | 62 A                                                                                                                                 |
| <b>yielded mechanical performance [hp]</b>                         |                                                                                                                                      |
| • for single-phase AC motor                                        |                                                                                                                                      |
| — at 110/120 V rated value                                         | 5 hp                                                                                                                                 |
| — at 230 V rated value                                             | 15 hp                                                                                                                                |
| • for 3-phase AC motor                                             |                                                                                                                                      |
| — at 200/208 V rated value                                         | 20 hp                                                                                                                                |
| — at 220/230 V rated value                                         | 25 hp                                                                                                                                |
| — at 460/480 V rated value                                         | 50 hp                                                                                                                                |
| — at 575/600 V rated value                                         | 60 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>                                     |                                                                                                                                      |
| • for short-circuit protection of the main circuit                 |                                                                                                                                      |
| — with type of coordination 1 required                             | gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)                                                     |
| — with type of assignment 2 required                               | gG: 160A (690V,100kA), aM: 80A (690V,100kA), BS88: 125A (415V,80kA)                                                                  |
| • for short-circuit protection of the auxiliary switch required    | 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>                                                      | 114 mm                                                                                                                               |
| <b>width</b>                                                       | 55 mm                                                                                                                                |
| <b>depth</b>                                                       | 178 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                                                           |
| <b>Connections/ Terminals</b>                                        |                                                                |
| <b>type of electrical connection</b>                                 |                                                                |
| • for main current circuit                                           | screw-type terminals                                           |
| • for auxiliary and control circuit                                  | spring-loaded terminals                                        |
| • at contactor for auxiliary contacts                                | Spring-type terminals                                          |
| • of magnet coil                                                     | Spring-type terminals                                          |
| <b>type of connectable conductor cross-sections</b>                  |                                                                |
| • for main contacts                                                  |                                                                |
| — solid or stranded                                                  | 2x (1 ... 35 mm <sup>2</sup> ), 1x (1 ... 50 mm <sup>2</sup> ) |
| — finely stranded with core end processing                           | 2x (1 ... 25 mm <sup>2</sup> ), 1x (1 ... 35 mm <sup>2</sup> ) |
| • for AWG cables for main contacts                                   | 2x (18 ... 2), 1x (18 ... 1)                                   |
| <b>connectable conductor cross-section for main contacts</b>         |                                                                |
| • finely stranded with core end processing                           | 1 ... 35 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 ... 1.5 mm <sup>2</sup>                                    |
| <b>type of connectable conductor cross-sections</b>                  |                                                                |
| • for auxiliary contacts                                             |                                                                |
| — solid or stranded                                                  | 2x (0.5 ... 2.5 mm <sup>2</sup> )                              |
| — finely stranded with core end processing                           | 2x (0.5 ... 1.5 mm <sup>2</sup> )                              |
| — finely stranded without core end processing                        | 2x (0.5 ... 2.5 mm <sup>2</sup> )                              |
| • for AWG cables for auxiliary contacts                              | 2x (20 ... 14)                                                 |
| <b>AWG number as coded connectable conductor cross section</b>       |                                                                |
| • for main contacts                                                  | 18 ... 1                                                       |
| • for auxiliary contacts                                             | 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>                                        |                                                                |

## General Product Approval



[Confirmation](#)



[KC](#)

| General Product Approval | EMV | Functional Safety | Test Certificates | Marine / Shipping |
|--------------------------|-----|-------------------|-------------------|-------------------|
|--------------------------|-----|-------------------|-------------------|-------------------|



[Type Examination Certificate](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



| Marine / Shipping | other |
|-------------------|-------|
|-------------------|-------|



[Confirmation](#)

| other | Railway | Dangerous goods | Environment |
|-------|---------|-----------------|-------------|
|-------|---------|-----------------|-------------|

[Confirmation](#)

[Special Test Certificate](#)

[Transport Information](#)



[Environmental Confirmations](#)

## Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RT2038-3NB34-3MA0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2038-3NB34-3MA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-3NB34-3MA0>

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

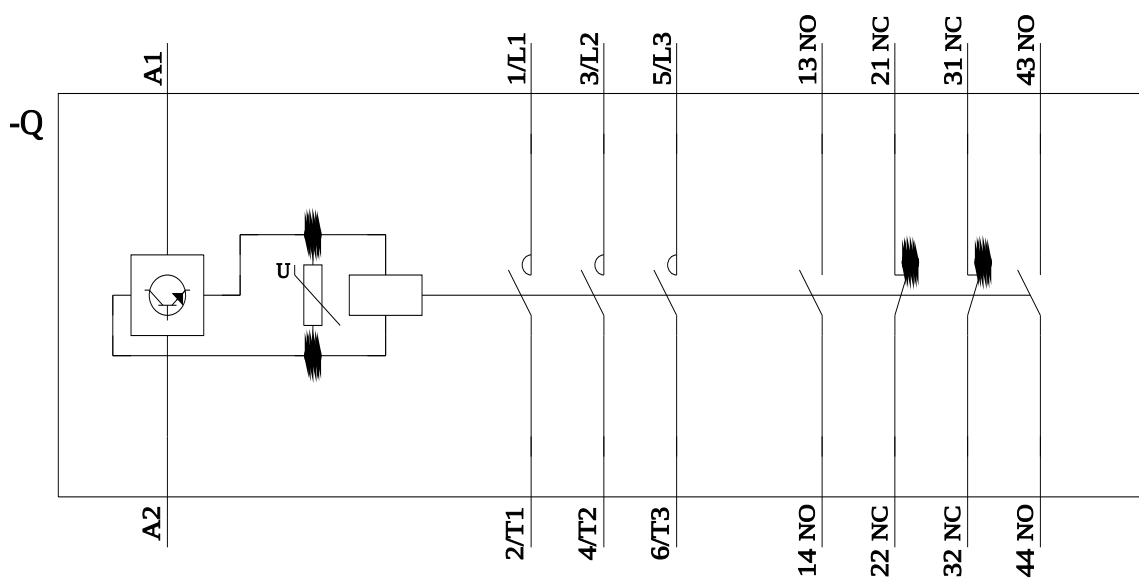
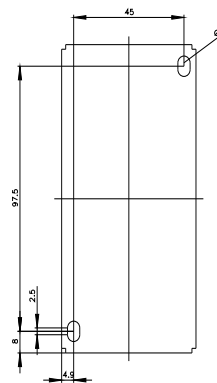
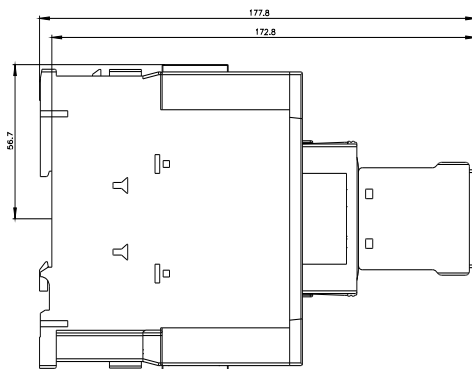
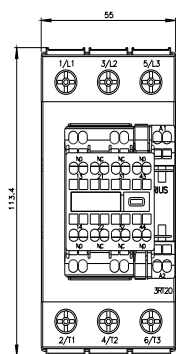
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2038-3NB34-3MA0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2038-3NB34-3MA0&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-3NB34-3MA0/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2038-3NB34-3MA0&objecttype=14&gridview=view1>



last modified:



