

Power contactor, AC-3 110 A, 55 kW / 400 V 1 NO + 1 NC, 230 V  
AC, 50/60 Hz 3-pole, 3 NO, Size S3 screw terminal



|                                                                                  |                 |
|----------------------------------------------------------------------------------|-----------------|
| product brand name                                                               | SIRIUS          |
| Product designation                                                              | Power contactor |
| Product type designation                                                         | 3RT2            |
| General technical data                                                           |                 |
| Size of contactor                                                                | S3              |
| 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                                                   | 23.7 W          |
| • at AC in hot operating state per pole                                          | 7.9 W           |
| Power loss [W] for rated value of the current without load current share typical | 25 W            |
| Surge voltage resistance                                                         |                 |
| • of main circuit rated value                                                    | 8 kV            |
| • of auxiliary circuit rated value                                               | 6 kV            |
| maximum permissible voltage for safe isolation                                   |                 |
| • between coil and main contacts acc. to EN 60947-1                              | 690 V           |

|                                                                                                                                                                                                                                                                                               |                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|
| <ul style="list-style-type: none"> <li>• protection class IP on the front</li> <li>• Protection class IP of the terminal</li> </ul>                                                                                                                                                           | IP20<br>IP00                          |
| <b>Shock resistance at rectangular impulse</b> <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                                      | 6.7 g / 5 ms, 4.0 g / 10 ms           |
| <b>Shock resistance with sine pulse</b> <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                                             | 10.6 g / 5 ms, 6.3 g / 10 ms          |
| <b>Mechanical service life (switching cycles)</b> <ul style="list-style-type: none"> <li>• of contactor typical</li> <li>• of the contactor with added electronics-compatible auxiliary switch block typical</li> <li>• of the contactor with added auxiliary switch block typical</li> </ul> | 10 000 000<br>5 000 000<br>10 000 000 |
| <b>Reference code acc. to DIN EN 81346-2</b>                                                                                                                                                                                                                                                  | Q                                     |

#### Ambient conditions

|                                                                                                                           |                                  |
|---------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| <b>Installation altitude at height above sea level</b> <ul style="list-style-type: none"> <li>• maximum</li> </ul>        | 2 000 m                          |
| <b>Ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> </ul> | -25 ... +60 °C<br>-55 ... +80 °C |

#### Main circuit

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| <b>Number of poles for main current circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 3                                                                                  |
| <b>Number of NO contacts for main contacts</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 3                                                                                  |
| <b>Operating voltage</b> <ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1 000 V                                                                            |
| <b>Operating current</b> <ul style="list-style-type: none"> <li>• at AC-1 at 400 V <ul style="list-style-type: none"> <li>— at ambient temperature 40 °C rated value</li> </ul> </li> <li>• at AC-1 <ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 40 °C rated value</li> <li>— up to 690 V at ambient temperature 60 °C rated value</li> <li>— up to 1000 V at ambient temperature 40 °C rated value</li> <li>— up to 1000 V at ambient temperature 60 °C rated value</li> </ul> </li> <li>• at AC-2 at 400 V rated value</li> <li>• at AC-3 <ul style="list-style-type: none"> <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-4 at 400 V rated value</li> </ul> | 130 A<br>130 A<br>110 A<br>70 A<br>60 A<br>110 A<br>110 A<br>110 A<br>98 A<br>97 A |

|                                                                                                                                                                       |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| <ul style="list-style-type: none"> <li>• at AC-5a up to 690 V rated value</li> </ul>                                                                                  | 120 A  |
| <ul style="list-style-type: none"> <li>• at AC-5b up to 400 V rated value</li> </ul>                                                                                  | 110 A  |
| <ul style="list-style-type: none"> <li>• at AC-6a <ul style="list-style-type: none"> <li>— up to 230 V for current peak value n=20 rated value</li> </ul> </li> </ul> | 98 A   |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— up to 400 V for current peak value n=20 rated value</li> </ul> </li> </ul>           | 98 A   |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— up to 500 V for current peak value n=20 rated value</li> </ul> </li> </ul>           | 98 A   |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— up to 690 V for current peak value n=20 rated value</li> </ul> </li> </ul>           | 98 A   |
| <ul style="list-style-type: none"> <li>• at AC-6a <ul style="list-style-type: none"> <li>— up to 230 V for current peak value n=30 rated value</li> </ul> </li> </ul> | 65.3 A |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— up to 400 V for current peak value n=30 rated value</li> </ul> </li> </ul>           | 65.3 A |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— up to 500 V for current peak value n=30 rated value</li> </ul> </li> </ul>           | 65.3 A |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— up to 690 V for current peak value n=30 rated value</li> </ul> </li> </ul>           | 65.3 A |
| <b>Minimum cross-section in main circuit</b>                                                                                                                          |        |
| <ul style="list-style-type: none"> <li>• at maximum AC-1 rated value</li> </ul>                                                                                       | 50 mm² |
| <b>Operating current for approx. 200000 operating cycles at AC-4</b>                                                                                                  |        |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>                                                                                              | 46 A   |
| <ul style="list-style-type: none"> <li>• at 690 V rated value</li> </ul>                                                                                              | 36 A   |
| <b>Operating current</b>                                                                                                                                              |        |
| <ul style="list-style-type: none"> <li>• at 1 current path at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>                | 100 A  |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>                                          | 9 A    |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>                                          | 2 A    |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul> </li> </ul>                                          | 0.6 A  |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 600 V rated value</li> </ul> </li> </ul>                                          | 0.4 A  |
| <ul style="list-style-type: none"> <li>• with 2 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> </ul> </li> </ul>   | 100 A  |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>                                          | 100 A  |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>                                          | 10 A   |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul> </li> </ul>                                          | 1.8 A  |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 600 V rated value</li> </ul> </li> </ul>                                          | 1 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> </ul> </li> </ul>   | 100 A  |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul> </li> </ul>                                          | 100 A  |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul> </li> </ul>                                          | 80 A   |

|                                                                    |          |
|--------------------------------------------------------------------|----------|
| — at 440 V rated value                                             | 4.5 A    |
| — at 600 V rated value                                             | 2.6 A    |
| <b>Operating current</b>                                           |          |
| • at 1 current path at DC-3 at DC-5                                |          |
| — at 24 V rated value                                              | 40 A     |
| — at 110 V rated value                                             | 2.5 A    |
| — at 220 V rated value                                             | 1 A      |
| — at 440 V rated value                                             | 0.15 A   |
| — at 600 V rated value                                             | 0.06 A   |
| • with 2 current paths in series at DC-3 at DC-5                   |          |
| — at 24 V rated value                                              | 100 A    |
| — at 110 V rated value                                             | 100 A    |
| — at 220 V rated value                                             | 7 A      |
| — at 440 V rated value                                             | 0.42 A   |
| — at 600 V rated value                                             | 0.16 A   |
| • with 3 current paths in series at DC-3 at DC-5                   |          |
| — at 24 V rated value                                              | 100 A    |
| — at 110 V rated value                                             | 100 A    |
| — at 220 V rated value                                             | 35 A     |
| — at 440 V rated value                                             | 0.8 A    |
| — at 600 V rated value                                             | 0.35 A   |
| <b>Operating power</b>                                             |          |
| • at AC-2 at 400 V rated value                                     | 55 kW    |
| • at AC-3                                                          |          |
| — at 230 V rated value                                             | 30 kW    |
| — at 400 V rated value                                             | 55 kW    |
| — at 500 V rated value                                             | 75 kW    |
| — at 690 V rated value                                             | 90 kW    |
| <b>Operating power for approx. 200000 operating cycles at AC-4</b> |          |
| • at 400 V rated value                                             | 24.3 kW  |
| • at 690 V rated value                                             | 32.9 kW  |
| <b>Operating apparent output at AC-6a</b>                          |          |
| • up to 230 V for current peak value n=20 rated value              | 39 kV·A  |
| • up to 400 V for current peak value n=20 rated value              | 67 kV·A  |
| • up to 500 V for current peak value n=20 rated value              | 84 kV·A  |
| • up to 690 V for current peak value n=20 rated value              | 117 kV·A |
| <b>Operating apparent output 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>                                                                                                                            | 26 kV·A<br><br>45.2 kV·A<br><br>56.5 kV·A<br><br>78 kV·A                                                                                                                                                                                                                                                                            |
| <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> | 1 960 A; Use minimum cross-section acc. to AC-1 rated value<br><br>1 502 A; Use minimum cross-section acc. to AC-1 rated value<br><br>1 095 A; Use minimum cross-section acc. to AC-1 rated value<br><br>707 A; Use minimum cross-section acc. to AC-1 rated value<br><br>562 A; Use minimum cross-section acc. to AC-1 rated value |
| <b>No-load switching frequency</b> <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                                                                                                                                                                                                                                                                                                                    | 5 000 1/h                                                                                                                                                                                                                                                                                                                           |
| <b>Operating frequency</b> <ul style="list-style-type: none"> <li>• at AC-1 maximum</li> <li>• at AC-2 maximum</li> <li>• at AC-3 maximum</li> <li>• at AC-4 maximum</li> </ul>                                                                                                                                                                                                                                                 | 900 1/h<br>350 1/h<br>850 1/h<br>200 1/h                                                                                                                                                                                                                                                                                            |
| <b>Control circuit/ Control</b>                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                     |
| <b>Type of voltage of the control supply voltage</b>                                                                                                                                                                                                                                                                                                                                                                            | AC                                                                                                                                                                                                                                                                                                                                  |
| <b>Control supply voltage at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>                                                                                                                                                                                                                                                                                    | 230 V<br>230 V                                                                                                                                                                                                                                                                                                                      |
| <b>Operating range factor control supply voltage rated value of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                          | 0.8 ... 1.1<br>0.85 ... 1.1                                                                                                                                                                                                                                                                                                         |
| <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>                                                                                                                                                                                                                                                                                             | 348 V·A<br>296 V·A                                                                                                                                                                                                                                                                                                                  |
| <b>Inductive power factor with closing power of the coil</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                                   | 0.62<br>0.55                                                                                                                                                                                                                                                                                                                        |
| <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> | 25 V·A<br>18 V·A |
| <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> | 0.35<br>0.41     |
| <b>Closing delay</b>                                                             |                  |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                        | 13 ... 50 ms     |
| <b>Opening delay</b>                                                             |                  |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                        | 10 ... 21 ms     |
| <b>Arcing time</b>                                                               | 10 ... 20 ms     |
| <b>Control version of the switch operating mechanism</b>                         | Standard A1 - A2 |

#### Auxiliary circuit

|                                                                                                                                                                                                                                                                       |                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <b>Number of NC contacts for auxiliary contacts</b>                                                                                                                                                                                                                   |                                                      |
| <ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>                                                                                                                                                                                             | 1                                                    |
| <b>Number of NO contacts for auxiliary contacts</b>                                                                                                                                                                                                                   |                                                      |
| <ul style="list-style-type: none"> <li>• instantaneous contact</li> </ul>                                                                                                                                                                                             | 1                                                    |
| Operating current at AC-12 maximum                                                                                                                                                                                                                                    | 10 A                                                 |
| <b>Operating current at AC-15</b>                                                                                                                                                                                                                                     |                                                      |
| <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>                                                                                              | 6 A<br>3 A<br>2 A<br>1 A                             |
| <b>Operating current at DC-12</b>                                                                                                                                                                                                                                     |                                                      |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 48 V rated value</li> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 125 V rated value</li> <li>• at 220 V rated value</li> <li>• at 600 V rated value</li> </ul> | 10 A<br>6 A<br>6 A<br>3 A<br>2 A<br>1 A<br>0.15 A    |
| <b>Operating current at DC-13</b>                                                                                                                                                                                                                                     |                                                      |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> <li>• at 48 V rated value</li> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 125 V rated value</li> <li>• at 220 V rated value</li> <li>• at 600 V rated value</li> </ul> | 10 A<br>2 A<br>2 A<br>1 A<br>0.9 A<br>0.3 A<br>0.1 A |
| <b>contact reliability of auxiliary contacts</b>                                                                                                                                                                                                                      | 1 faulty switching per 100 million (17 V, 1 mA)      |

#### UL/CSA ratings

|                                                             |        |
|-------------------------------------------------------------|--------|
| <b>Full-load current (FLA) for three-phase AC motor</b>     |        |
| • at 480 V rated value                                      | 96 A   |
| • at 600 V rated value                                      | 99 A   |
| <b>Yielded mechanical performance [hp]</b>                  |        |
| • for single-phase AC motor                                 |        |
| — at 110/120 V rated value                                  | 10 hp  |
| — at 230 V rated value                                      | 20 hp  |
| • for three-phase AC motor                                  |        |
| — at 200/208 V rated value                                  | 30 hp  |
| — at 220/230 V rated value                                  | 40 hp  |
| — at 460/480 V rated value                                  | 75 hp  |
| — at 575/600 V rated value                                  | 100 hp |
| <b>Contact rating of auxiliary contacts according to UL</b> |        |
| A600 / P600                                                 |        |

## Short-circuit protection

### Design of the fuse link

- 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: 200A (690V,100kA), aM: 100A (690V,100kA), BS88: 160A (415V,80kA)
- for short-circuit protection of the auxiliary switch required  
gG: 10 A (500 V, 1 kA)

## Installation/ mounting/ dimensions

|                              |                                                                                                                                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| • <b>mounting position</b>   | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| <b>Mounting type</b>         | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715                                               |
| • Side-by-side mounting      | Yes                                                                                                                                  |
| <b>Height</b>                | 140 mm                                                                                                                               |
| <b>Width</b>                 | 70 mm                                                                                                                                |
| <b>Depth</b>                 | 152 mm                                                                                                                               |
| <b>Required spacing</b>      |                                                                                                                                      |
| • with side-by-side mounting |                                                                                                                                      |
| — forwards                   | 20 mm                                                                                                                                |
| — upwards                    | 10 mm                                                                                                                                |
| — downwards                  | 10 mm                                                                                                                                |
| — at the side                | 0 mm                                                                                                                                 |
| • for grounded parts         |                                                                                                                                      |
| — forwards                   | 20 mm                                                                                                                                |
| — upwards                    | 10 mm                                                                                                                                |
| — at the side                | 10 mm                                                                                                                                |

|                  |       |
|------------------|-------|
| — downwards      | 10 mm |
| • for live parts |       |
| — forwards       | 20 mm |
| — upwards        | 10 mm |
| — downwards      | 10 mm |
| — at the side    | 10 mm |

## Connections/ Terminals

|                                                                           |                                                                       |
|---------------------------------------------------------------------------|-----------------------------------------------------------------------|
| • Type of electrical connection for main current circuit                  | screw-type terminals                                                  |
| • Type of electrical connection for auxiliary and control current circuit | screw-type terminals                                                  |
| • Type of electrical connection at contactor for auxiliary contacts       | Screw-type terminals                                                  |
| • Type of electrical connection of magnet coil                            | Screw-type terminals                                                  |
| <b>Type of connectable conductor cross-sections</b>                       |                                                                       |
| • for main contacts                                                       |                                                                       |
| — finely stranded with core end processing                                | 2x (2.5 ... 35 mm <sup>2</sup> ), 1x (2.5 ... 50 mm <sup>2</sup> )    |
| • at AWG conductors for main contacts                                     | 2x (10 ... 1/0), 1x (10 ... 2)                                        |
| <b>Connectable conductor cross-section for main contacts</b>              |                                                                       |
| • solid                                                                   | 2.5 ... 16 mm <sup>2</sup>                                            |
| • stranded                                                                | 6 ... 70 mm <sup>2</sup>                                              |
| • finely stranded with core end processing                                | 2.5 ... 50 mm <sup>2</sup>                                            |
| <b>Connectable conductor cross-section for auxiliary contacts</b>         |                                                                       |
| • single or multi-stranded                                                | 0.5 ... 2.5 mm <sup>2</sup>                                           |
| • finely stranded with core end processing                                | 0.5 ... 2.5 mm <sup>2</sup>                                           |
| <b>Type of connectable conductor cross-sections</b>                       |                                                                       |
| • for auxiliary contacts                                                  |                                                                       |
| — single or multi-stranded                                                | 2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ) |
| — finely stranded with core end processing                                | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ) |
| • at AWG conductors for auxiliary contacts                                | 2x (20 ... 16), 2x (18 ... 14)                                        |
| <b>AWG number as coded connectable conductor cross section</b>            |                                                                       |
| • for main contacts                                                       | 10 ... 2                                                              |
| • for auxiliary contacts                                                  | 20 ... 14                                                             |

## Safety related data

|                                          |           |
|------------------------------------------|-----------|
| <b>B10 value</b>                         |           |
| • with high demand rate acc. to SN 31920 | 1 000 000 |
| <b>Proportion of dangerous failures</b>  |           |
| • with low demand rate acc. to SN 31920  | 40 %      |
| • with high demand rate acc. to SN 31920 | 73 %      |



|                                                                           |                                                                  |
|---------------------------------------------------------------------------|------------------------------------------------------------------|
| <b>Failure rate [FIT]</b>                                                 |                                                                  |
| • with low demand rate acc. to SN 31920                                   | 100 FIT                                                          |
| <b>Product function</b>                                                   |                                                                  |
| • Mirror contact acc. to IEC 60947-4-1                                    | Yes                                                              |
| • positively driven operation acc. to IEC 60947-5-1                       | No                                                               |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b> | 20 y                                                             |
| <b>Protection against electrical shock</b>                                | finger-safe when touched vertically from front acc. to IEC 60529 |
| Suitability for use safety-related switching OFF                          | Yes                                                              |

#### Certificates/ approvals

| General Product Approval                                                          |                                                                                   |                                                                                   |                    |                                                                                     | EMC                                                                                 |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  | <a href="#">KC</a> |  |  |
| CCC                                                                               | CSA                                                                               | UL                                                                                |                    |                                                                                     | RCM                                                                                 |

| Declaration of Conformity                                                          | Test Certificates             |                                                    | Marine / Shipping                        |                                                                                      |
|------------------------------------------------------------------------------------|-------------------------------|----------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------|
|  | <a href="#">Miscellaneous</a> | <a href="#">Type Test Certificates/Test Report</a> | <a href="#">Special Test Certificate</a> |  |
| EG-Konf.                                                                           |                               |                                                    |                                          |  |
|                                                                                    |                               |                                                    |                                          | ABS                                                                                  |
|                                                                                    |                               |                                                    |                                          | LRS                                                                                  |

| Marine / Shipping                                                                   |                                                                                     |                                                                                     |                                                                                     | other                        | Railway                             |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------|-------------------------------------|
|  |  |  |  | <a href="#">Confirmation</a> | <a href="#">Vibration and Shock</a> |
| PRS                                                                                 | RINA                                                                                | RMRS                                                                                | DNV-GL<br>DNVGL.COM/AF                                                              |                              |                                     |

#### Further information

**Information- and Downloadcenter (Catalogs, Brochures,...)**

<https://www.siemens.com/ic10>

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2047-1AL20>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2047-1AL20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AL20>

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

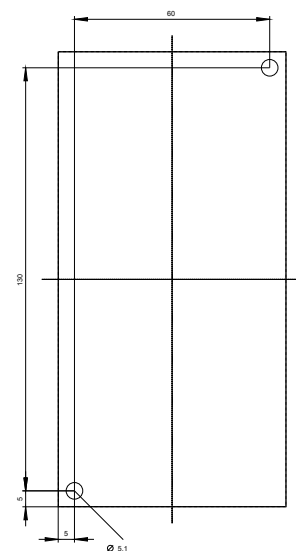
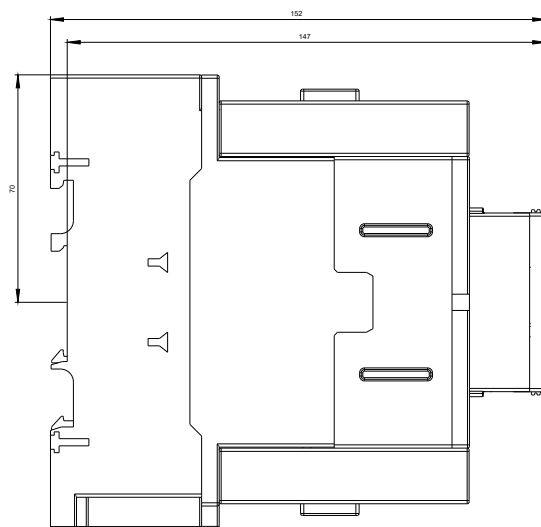
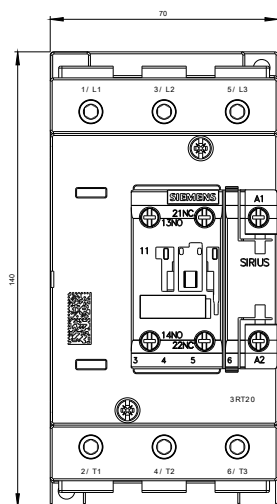
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT2047-1AL20&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2047-1AL20&lang=en)

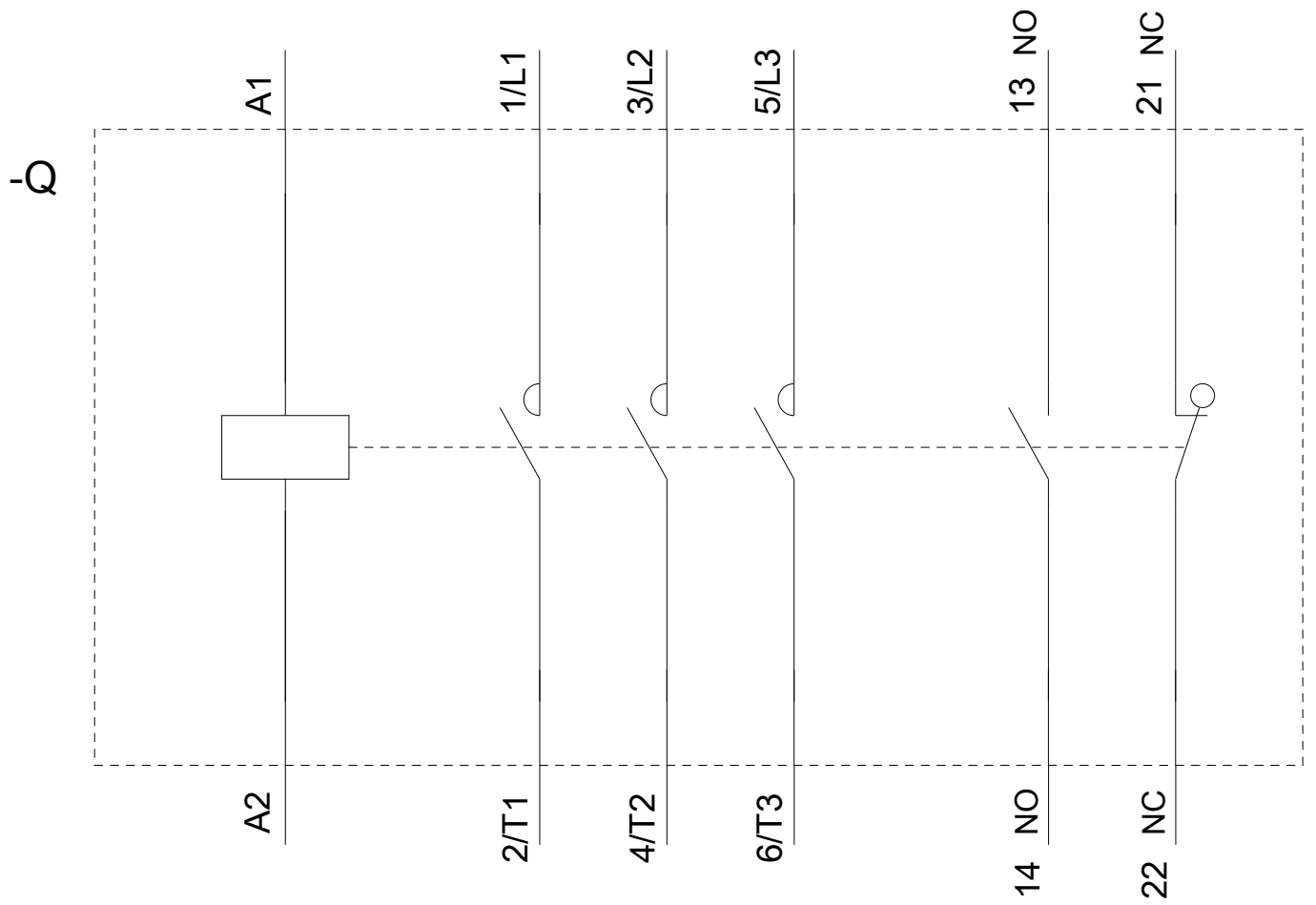
**Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AL20/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2047-1AL20&objecttype=14&gridview=view1>





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08/13/2020