

Power contactor, AC-3 185 A, 90 kW / 400 V Coil AC 50/60 Hz and DC 200-277 V x (0.8-1.1) F-PLC input 24 V DC 3-pole size S6  
Auxiliary contacts 2 NO + 2 NC Main circuit: Busbar Control and auxiliary circuit: screw terminal



|                                                                                  |                 |
|----------------------------------------------------------------------------------|-----------------|
| Product brand name                                                               | SIRIUS          |
| Product designation                                                              | Power contactor |
| Product type designation                                                         | 3RT1            |
| General technical data                                                           |                 |
| Size of contactor                                                                | S6              |
| Product extension                                                                |                 |
| • function module for communication                                              | No              |
| • Auxiliary switch                                                               | Yes             |
| Power loss [W] for rated value of the current                                    |                 |
| • at AC in hot operating state                                                   | 39 W            |
| • at AC in hot operating state per pole                                          | 13 W            |
| Power loss [W] for rated value of the current without load current share typical | 2.8 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           |

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| <b>Protection class IP</b>                                                                                                                                                                                                                  |                                                           |
| <ul style="list-style-type: none"> <li>• on the front</li> <li>• of the terminal</li> </ul>                                                                                                                                                 | IP00; IP20 on the front with cover / box terminal<br>IP00 |
| <b>Shock resistance at rectangular impulse</b>                                                                                                                                                                                              |                                                           |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                  | 8,5g / 5 ms, 4,2g / 10 ms<br>8,5g / 5 ms, 4,2g / 10 ms    |
| <b>Shock resistance with sine pulse</b>                                                                                                                                                                                                     |                                                           |
| <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                  | 13,4g / 5 ms, 6,5g / 10 ms<br>13,4g / 5 ms, 6,5g / 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 40719 extended according to IEC 204-2 acc. to IEC 750</b>                                                                                                                                                     | K                                                         |
| <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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                    |
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| <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> </ul> | 215 A<br>215 A<br>185 A<br>100 A<br>100 A<br>185 A |

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| <ul style="list-style-type: none"> <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> <li>— at 1000 V rated value</li> </ul> </li> <li>• at AC-4 at 400 V rated value</li> <li>• at AC-5a up to 690 V rated value</li> <li>• at AC-5b up to 400 V rated value</li> <li>• at AC-6a <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> <li>— up to 1000 V for current peak value n=20 rated value</li> </ul> </li> <li>• at AC-6a <ul style="list-style-type: none"> <li>— up to 230 V for current peak value n=30 rated value</li> <li>— up to 400 V for current peak value n=30 rated value</li> <li>— up to 500 V for current peak value n=30 rated value</li> <li>— up to 690 V for current peak value n=30 rated value</li> <li>— up to 1000 V for current peak value n=30 rated value</li> </ul> </li> </ul> | 185 A<br>185 A<br>170 A<br>65 A<br>160 A<br>189 A<br>153 A<br>148 A<br>148 A<br>148 A<br>148 A<br>68 A<br>99 A<br>99 A<br>99 A<br>99 A<br>68 A |
| <b>Minimum cross-section in main circuit</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                |
| <ul style="list-style-type: none"> <li>• at maximum AC-1 rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 95 mm <sup>2</sup>                                                                                                                             |
| <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> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 81 A<br>65 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> <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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 160 A<br>18 A<br>3.4 A<br>0.8 A<br>0.5 A                                                                                                       |

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| <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> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>• with 3 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                       | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 20 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 3.2 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1.6 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 11.5 A |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4 A    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |
| <b>Operating current</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |        |
| <ul style="list-style-type: none"> <li>• at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>• with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>• with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 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> | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.5 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.6 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.17 A |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.12 A |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2.5 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.65 A |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.37 A |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 160 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1.4 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.75 A |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |
| <b>Operating power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |
| <ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 230 V at 60 °C rated value</li> <li>— at 400 V rated value</li> <li>— at 400 V at 60 °C rated value</li> <li>— at 690 V rated value</li> <li>— at 690 V at 60 °C rated value</li> <li>— at 1000 V at 60 °C rated value</li> </ul> </li> <li>• at AC-2 at 400 V rated value</li> <li>• at AC-3</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                | 70 kW  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 121 kW |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 121 kW |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 215 kW |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 210 kW |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 165 kW |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 90 kW  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |        |
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|-------------------------------------------------------------------------|-------------------------------------------------------------|
| — at 230 V rated value                                                  | 55 kW                                                       |
| — at 400 V rated value                                                  | 90 kW                                                       |
| — at 500 V rated value                                                  | 132 kW                                                      |
| — at 690 V rated value                                                  | 160 kW                                                      |
| — at 1000 V rated value                                                 | 90 kW                                                       |
| <b>Operating power for approx. 200000 operating cycles at AC-4</b>      |                                                             |
| • at 400 V rated value                                                  | 45 kW                                                       |
| • at 690 V rated value                                                  | 65 kW                                                       |
| <b>Operating apparent output at AC-6a</b>                               |                                                             |
| • up to 230 V for current peak value n=20 rated value                   | 58 000 V·A                                                  |
| • up to 400 V for current peak value n=20 rated value                   | 102 000 V·A                                                 |
| • up to 500 V for current peak value n=20 rated value                   | 128 000 V·A                                                 |
| • up to 690 V for current peak value n=20 rated value                   | 176 000 V·A                                                 |
| • up to 1000 V for current peak value n=20 rated value                  | 117 000 V·A                                                 |
| <b>Operating apparent output at AC-6a</b>                               |                                                             |
| • up to 230 V for current peak value n=30 rated value                   | 39 000 V·A                                                  |
| • up to 400 V for current peak value n=30 rated value                   | 68 000 V·A                                                  |
| • up to 500 V for current peak value n=30 rated value                   | 85 000 V·A                                                  |
| • up to 690 V for current peak value n=30 rated value                   | 118 000 V·A                                                 |
| • up to 1000 V for current peak value n=30 rated value                  | 117 000 V·A                                                 |
| <b>Short-time withstand current in cold operating state up to 40 °C</b> |                                                             |
| • limited to 1 s switching at zero current maximum                      | 2 900 A; Use minimum cross-section acc. to AC-1 rated value |
| • limited to 5 s switching at zero current maximum                      | 2 084 A; Use minimum cross-section acc. to AC-1 rated value |
| • limited to 10 s switching at zero current maximum                     | 1 480 A; Use minimum cross-section acc. to AC-1 rated value |
| • limited to 30 s switching at zero current maximum                     | 968 A; Use minimum cross-section acc. to AC-1 rated value   |
| • limited to 60 s switching at zero current maximum                     | 801 A; Use minimum cross-section acc. to AC-1 rated value   |
| <b>No-load switching frequency</b>                                      |                                                             |
| • at AC                                                                 | 1 000 1/h                                                   |

|                                                                                       |               |
|---------------------------------------------------------------------------------------|---------------|
| • at DC                                                                               | 1 000 1/h     |
| <b>Operating frequency</b>                                                            |               |
| • at AC-1 maximum                                                                     | 800 1/h       |
| • at AC-2 maximum                                                                     | 300 1/h       |
| • at AC-3 maximum                                                                     | 750 1/h       |
| • at AC-4 maximum                                                                     | 130 1/h       |
| <b>Control circuit/ Control</b>                                                       |               |
| <b>Type of voltage of the control supply voltage</b>                                  | AC/DC         |
| <b>Control supply voltage at AC</b>                                                   |               |
| • at 50 Hz rated value                                                                | 200 ... 277 V |
| • at 60 Hz rated value                                                                | 200 ... 277 V |
| <b>Control supply voltage at DC</b>                                                   |               |
| • rated value                                                                         | 200 ... 277 V |
| <b>Type of PLC-control input acc. to IEC 60947-1</b>                                  | Type 1        |
| <b>Consumed current at PLC-control input acc. to IEC 60947-1 maximum</b>              | 14 mA         |
| <b>Voltage at PLC-control input rated value</b>                                       | 24 V          |
| <b>Operating range factor of the voltage at PLC-control input</b>                     | 0.8 ... 1.1   |
| <b>Operating range factor control supply voltage rated value of magnet coil at DC</b> |               |
| • initial value                                                                       | 0.8           |
| • Full-scale value                                                                    | 1.1           |
| <b>Operating range factor control supply voltage rated value of magnet coil at AC</b> |               |
| • at 50 Hz                                                                            | 0.8 ... 1.1   |
| • at 60 Hz                                                                            | 0.8 ... 1.1   |
| <b>Design of the surge suppressor</b>                                                 | with varistor |
| <b>Apparent pick-up power of magnet coil at AC</b>                                    |               |
| • at 50 Hz                                                                            | 280 V·A       |
| <b>Inductive power factor with closing power of the coil</b>                          |               |
| • at 50 Hz                                                                            | 0.8           |
| <b>Apparent holding power of magnet coil at AC</b>                                    |               |
| • at 50 Hz                                                                            | 4.4 V·A       |
| <b>Inductive power factor with the holding power of the coil</b>                      |               |
| • at 50 Hz                                                                            | 0.5           |
| <b>Closing power of magnet coil at DC</b>                                             | 320 W         |
| <b>Holding power of magnet coil at DC</b>                                             | 2.8 W         |
| <b>Closing delay</b>                                                                  |               |
| • at AC                                                                               | 60 ... 75 ms  |
| • at DC                                                                               | 60 ... 75 ms  |
| <b>Opening delay</b>                                                                  |               |

|                                                          |                                |
|----------------------------------------------------------|--------------------------------|
| • at AC                                                  | 115 ... 130 ms                 |
| • at DC                                                  | 115 ... 130 ms                 |
| <b>Recovery time after power failure typical</b>         | 2 s                            |
| <b>Arcing time</b>                                       | 10 ... 15 ms                   |
| <b>Control version of the switch operating mechanism</b> | Fail-safe PLC input (F-PLC-IN) |

#### Auxiliary circuit

|                                                     |                                                 |
|-----------------------------------------------------|-------------------------------------------------|
| <b>Number of NC contacts for auxiliary contacts</b> |                                                 |
| • instantaneous contact                             | 2                                               |
| <b>Number of NO contacts for auxiliary contacts</b> |                                                 |
| • instantaneous contact                             | 2                                               |
| Operating current at AC-12 maximum                  | 10 A                                            |
| <b>Operating 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>Operating 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>Operating current at DC-13</b>                   |                                                 |
| • at 24 V rated value                               | 10 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) |

#### UL/CSA ratings

|                                                         |       |
|---------------------------------------------------------|-------|
| <b>Full-load current (FLA) for three-phase AC motor</b> |       |
| • at 480 V rated value                                  | 180 A |
| • at 600 V rated value                                  | 192 A |
| <b>Yielded mechanical performance [hp]</b>              |       |
| • for single-phase AC motor                             |       |
| — at 230 V rated value                                  | 30 hp |
| • for three-phase AC motor                              |       |

|                                                             |             |
|-------------------------------------------------------------|-------------|
| — at 200/208 V rated value                                  | 60 hp       |
| — at 220/230 V rated value                                  | 75 hp       |
| — at 460/480 V rated value                                  | 150 hp      |
| — at 575/600 V rated value                                  | 200 hp      |
| <b>Contact rating of auxiliary contacts according to UL</b> | A600 / P600 |

## Short-circuit protection

|                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Design of the fuse link</b> <ul style="list-style-type: none"> <li>• for short-circuit protection of the main circuit <ul style="list-style-type: none"> <li>— with type of coordination 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> <li>• for short-circuit protection of the auxiliary switch required</li> </ul> | gG: 355 A (690 V, 100 kA)<br>gG: 315 A (690 V, 100 kA), aM: 200 A (690 V, 100 kA), BS88: 315 A (415 V, 50 kA)<br>gG: 10 A (500 V, 1 kA) |
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## Installation/ mounting/ dimensions

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| <b>Mounting position</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back |
| <b>Mounting type</b> <ul style="list-style-type: none"> <li>• Side-by-side mounting</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                        | screw fixing<br>Yes                                                                                                      |
| <b>Height</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 172 mm                                                                                                                   |
| <b>Width</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 120 mm                                                                                                                   |
| <b>Depth</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 170 mm                                                                                                                   |
| <b>Required spacing</b> <ul style="list-style-type: none"> <li>• with side-by-side mounting <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> <li>• for grounded parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> </ul> </li> <li>• for live parts <ul style="list-style-type: none"> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> </li> </ul> | 20 mm<br>10 mm<br>10 mm<br>0 mm<br><br>20 mm<br>10 mm<br>10 mm<br>10 mm<br><br>20 mm<br>10 mm<br>10 mm<br>10 mm          |

## Connections/ Terminals

|                                    |       |
|------------------------------------|-------|
| <b>Width of connection bar</b>     | 17 mm |
| <b>Thickness of connection bar</b> | 3 mm  |
| <b>Diameter of holes</b>           | 9 mm  |

|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Number of holes</b>                                                                                                                                                                                                                                                                                                                | 1                                                                                                                                                                                                                                                                                                                                              |
| <b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> <li>• at contactor for auxiliary contacts</li> <li>• of magnet coil</li> </ul>                                                                                       | Connection bar<br>screw-type terminals<br>Screw-type terminals<br>Screw-type terminals                                                                                                                                                                                                                                                         |
| <b>Type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>• at AWG conductors for main contacts</li> </ul>                                                                                                                                                                                           | 2x 1/0                                                                                                                                                                                                                                                                                                                                         |
| <b>Connectable conductor cross-section for main contacts</b> <ul style="list-style-type: none"> <li>• stranded</li> </ul>                                                                                                                                                                                                             | 25 ... 120 mm <sup>2</sup>                                                                                                                                                                                                                                                                                                                     |
| <b>Connectable conductor cross-section for auxiliary contacts</b> <ul style="list-style-type: none"> <li>• single or multi-stranded</li> <li>• finely stranded with core end processing</li> </ul>                                                                                                                                    | 0.5 ... 4 mm <sup>2</sup><br>0.5 ... 2.5 mm <sup>2</sup>                                                                                                                                                                                                                                                                                       |
| <b>Type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— single or multi-stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG conductors for auxiliary contacts</li> </ul> | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), max. 2x (0.75 ... 4 mm <sup>2</sup> )<br>2x (0,5 ... 1,5 mm <sup>2</sup> ), 2x (0,75 ... 2,5 mm <sup>2</sup> ), max. 2x (0,75 ... 4 mm <sup>2</sup> )<br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 16), 2x (18 ... 14), 1x 12 |
| <b>AWG number as coded connectable conductor cross section</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>                                                                                                                                                                                             | 18 ... 14                                                                                                                                                                                                                                                                                                                                      |

| Safety related data                                                                                                                                                           |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Safety device type acc. to IEC 61508-2</b>                                                                                                                                 | Type B         |
| <b>B10 value</b> <ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul>                                                                   | 1 000 000      |
| Safety Integrity Level (SIL) acc. to IEC 61508                                                                                                                                | 2              |
| SIL Claim Limit (subsystem) acc. to EN 62061                                                                                                                                  | 2              |
| Performance level (PL) acc. to EN ISO 13849-1                                                                                                                                 | c              |
| Category acc. to EN ISO 13849-1                                                                                                                                               | 2              |
| <b>Stop category acc. to DIN EN 60204-1</b>                                                                                                                                   | 0              |
| <b>Product function</b> <ul style="list-style-type: none"> <li>• Mirror contact acc. to IEC 60947-4-1</li> <li>• positively driven operation acc. to IEC 60947-5-1</li> </ul> | Yes<br>No      |
| <b>PFHD with high demand rate acc. to EN 62061</b>                                                                                                                            | 0.00000045 1/h |
| <b>PFDavg with low demand rate acc. to IEC 61508</b>                                                                                                                          | 0.007          |
| <b>MTBF</b>                                                                                                                                                                   | 75 y           |
| <b>Hardware fault tolerance acc. to IEC 61508</b>                                                                                                                             | 0              |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b>                                                                                                     | 20 y           |

Protection against electrical shock

finger-safe when touched vertically from front acc. to IEC 60529

## Certificates/ approvals

| General Product Approval                                                                 |                                                                                          |                                                                                         | EMC                                                                               | Functional Safety/Safety of Machinery                                                      |
|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <br>CCC | <br>CSA | <br>UL |  | <br>RCM |

[Type Examination Certificate](#)

| Declaration of Conformity                                                                     | Test Certificates             |                                          |                                                    | other                        |                               |
|-----------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------|----------------------------------------------------|------------------------------|-------------------------------|
| <br>EG-Konf. | <a href="#">Miscellaneous</a> | <a href="#">Special Test Certificate</a> | <a href="#">Type Test Certificates/Test Report</a> | <a href="#">Confirmation</a> | <a href="#">Miscellaneous</a> |

## Railway

[Special Test Certificate](#)

## 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=3RT1056-6SP36>

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1056-6SP36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6SP36>

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

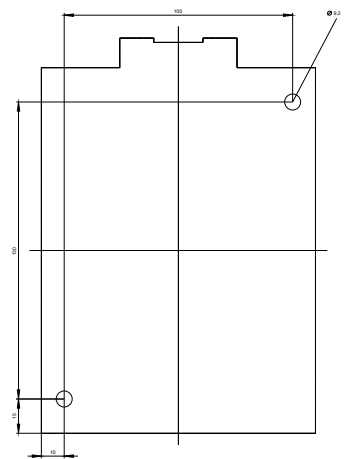
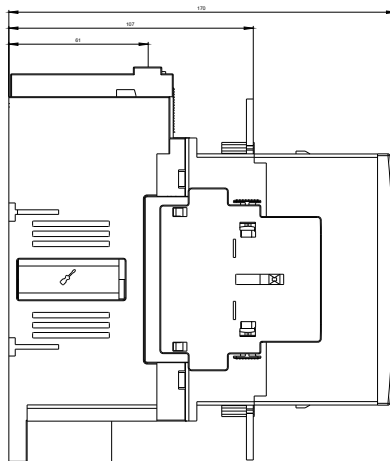
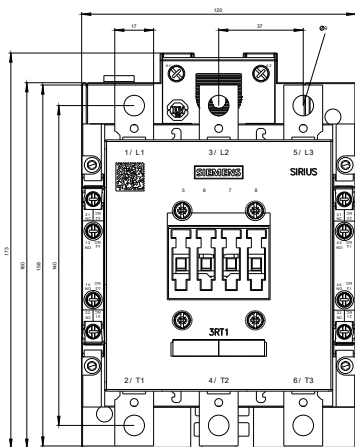
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1056-6SP36&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1056-6SP36&lang=en)

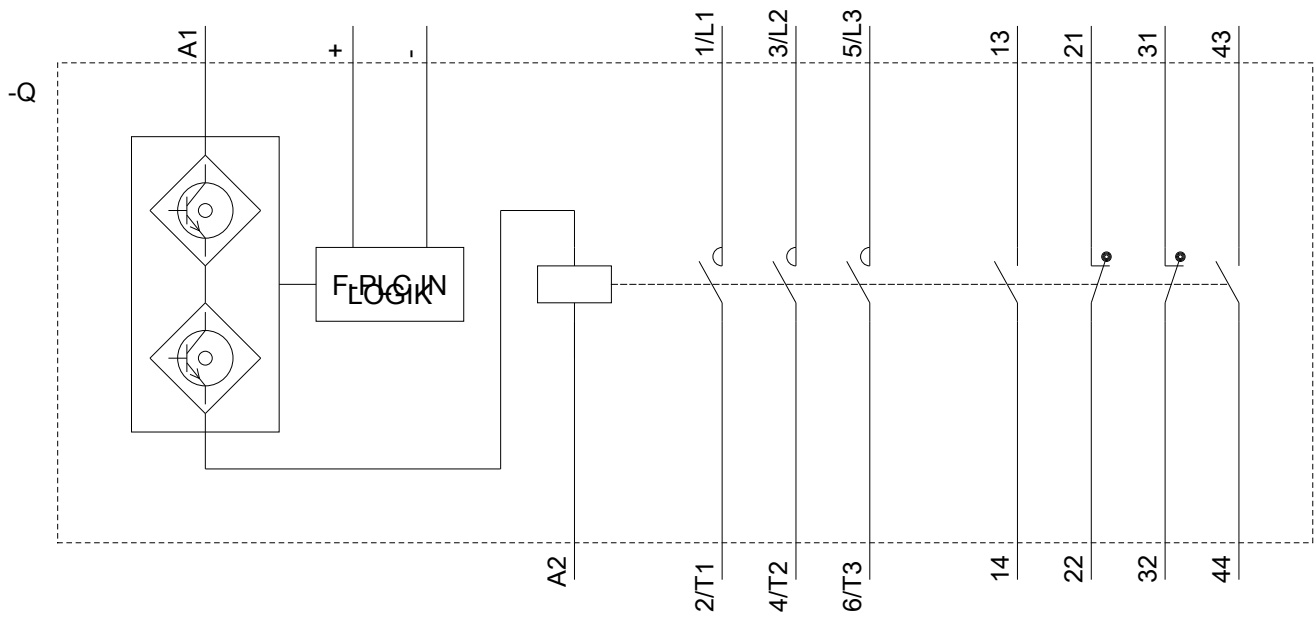
**Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6SP36/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1056-6SP36&objecttype=14&gridview=view1>





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03/20/2020