



power contactor, AC-3e/AC-3 400 A, 200 kW / 400 V AC (50-60 Hz) / DC U<sub>c</sub>: 96-127 V PLC input 24 V DC 3-pole, auxiliary contacts 2 NO + 2 NC drive: electronic main circuit: busbar control and auxiliary circuit: screw terminal

|                                                                                                              |                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| product brand name                                                                                           | SIRIUS                                                                                                                                                                               |
| product designation                                                                                          | Power contactor                                                                                                                                                                      |
| product type designation                                                                                     | 3RT1                                                                                                                                                                                 |
| <b>General technical data</b>                                                                                |                                                                                                                                                                                      |
| size of contactor                                                                                            | S12                                                                                                                                                                                  |
| 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                                                                               | 105 W                                                                                                                                                                                |
| • at AC in hot operating state per pole                                                                      | 35 W                                                                                                                                                                                 |
| • without load current share typical                                                                         | 3.6 W                                                                                                                                                                                |
| type of calculation of power loss depending on pole                                                          | quadratic                                                                                                                                                                            |
| insulation voltage                                                                                           |                                                                                                                                                                                      |
| • of main circuit with degree of pollution 3 rated value                                                     | 1 000 V                                                                                                                                                                              |
| • of auxiliary circuit with degree of pollution 3 rated value                                                | 500 V                                                                                                                                                                                |
| surge voltage resistance                                                                                     |                                                                                                                                                                                      |
| • of main circuit rated value                                                                                | 8 kV                                                                                                                                                                                 |
| • of auxiliary circuit rated value                                                                           | 6 kV                                                                                                                                                                                 |
| maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 | 690 V                                                                                                                                                                                |
| shock resistance at rectangular impulse                                                                      |                                                                                                                                                                                      |
| • at AC                                                                                                      | 8,5g / 5 ms, 4,2g / 10 ms                                                                                                                                                            |
| • at DC                                                                                                      | 8,5g / 5 ms, 4,2g / 10 ms                                                                                                                                                            |
| shock resistance with sine pulse                                                                             |                                                                                                                                                                                      |
| • at AC                                                                                                      | 13,4g / 5 ms, 6,5g / 10 ms                                                                                                                                                           |
| • at DC                                                                                                      | 13,4g / 5 ms, 6,5g / 10 ms                                                                                                                                                           |
| mechanical service life (operating cycles)                                                                   |                                                                                                                                                                                      |
| • of contactor typical                                                                                       | 10 000 000                                                                                                                                                                           |
| • of the contactor with added electronically optimized auxiliary switch block typical                        | 5 000 000                                                                                                                                                                            |
| • of the contactor with added auxiliary switch block typical                                                 | 10 000 000                                                                                                                                                                           |
| reference code according to IEC 81346-2                                                                      | Q                                                                                                                                                                                    |
| Substance Prohibitation (Date)                                                                               | 05/01/2012                                                                                                                                                                           |
| SVHC substance name                                                                                          | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8<br>2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7<br>6,6'-di-tert-butyl-2,2'-methylene-di-p-cresol - 119-47-1 |
| Weight                                                                                                       | 10.38 kg                                                                                                                                                                             |
| <b>Ambient conditions</b>                                                                                    |                                                                                                                                                                                      |
| installation altitude at height above sea level maximum                                                      | 2 000 m                                                                                                                                                                              |
| ambient temperature                                                                                          |                                                                                                                                                                                      |

|                                                                                                                                                                       |                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| <ul style="list-style-type: none"> <li>• during operation</li> </ul>                                                                                                  | -25 ... +60 °C      |
| <ul style="list-style-type: none"> <li>• during storage</li> </ul>                                                                                                    | -55 ... +80 °C      |
| <b>relative humidity minimum</b>                                                                                                                                      | 10 %                |
| <b>relative humidity at 55 °C according to IEC 60068-2-30 maximum</b>                                                                                                 | 95 %                |
| <b>Main circuit</b>                                                                                                                                                   |                     |
| <b>number of poles for main current circuit</b>                                                                                                                       | 3                   |
| <b>number of NO contacts for main contacts</b>                                                                                                                        | 3                   |
| <b>operating voltage</b>                                                                                                                                              |                     |
| <ul style="list-style-type: none"> <li>• at AC-3 rated value maximum</li> </ul>                                                                                       | 1 000 V             |
| <ul style="list-style-type: none"> <li>• at AC-3e rated value maximum</li> </ul>                                                                                      | 1 000 V             |
| <b>operational current</b>                                                                                                                                            |                     |
| <ul style="list-style-type: none"> <li>• at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>                                                         | 430 A               |
| <ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 40 °C rated value</li> </ul> </li> </ul> | 430 A               |
| <ul style="list-style-type: none"> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul>                                                              | 400 A               |
| <ul style="list-style-type: none"> <li>— up to 1000 V at ambient temperature 40 °C rated value</li> </ul>                                                             | 200 A               |
| <ul style="list-style-type: none"> <li>— up to 1000 V at ambient temperature 60 °C rated value</li> </ul>                                                             | 200 A               |
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>                                 | 400 A               |
| <ul style="list-style-type: none"> <li>— at 500 V rated value</li> </ul>                                                                                              | 400 A               |
| <ul style="list-style-type: none"> <li>— at 690 V rated value</li> </ul>                                                                                              | 400 A               |
| <ul style="list-style-type: none"> <li>— at 1000 V rated value</li> </ul>                                                                                             | 180 A               |
| <ul style="list-style-type: none"> <li>• at AC-3e <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>                                | 400 A               |
| <ul style="list-style-type: none"> <li>— at 500 V rated value</li> </ul>                                                                                              | 400 A               |
| <ul style="list-style-type: none"> <li>— at 690 V rated value</li> </ul>                                                                                              | 400 A               |
| <ul style="list-style-type: none"> <li>— at 1000 V rated value</li> </ul>                                                                                             | 180 A               |
| <ul style="list-style-type: none"> <li>• at AC-4 at 400 V rated value</li> </ul>                                                                                      | 350 A               |
| <ul style="list-style-type: none"> <li>• at AC-5a up to 690 V rated value</li> </ul>                                                                                  | 378 A               |
| <ul style="list-style-type: none"> <li>• at AC-5b up to 400 V rated value</li> </ul>                                                                                  | 332 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> | 395 A               |
| <ul style="list-style-type: none"> <li>— up to 400 V for current peak value n=20 rated value</li> </ul>                                                               | 395 A               |
| <ul style="list-style-type: none"> <li>— up to 500 V for current peak value n=20 rated value</li> </ul>                                                               | 395 A               |
| <ul style="list-style-type: none"> <li>— up to 690 V for current peak value n=20 rated value</li> </ul>                                                               | 395 A               |
| <ul style="list-style-type: none"> <li>— up to 1000 V for current peak value n=20 rated value</li> </ul>                                                              | 180 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> | 264 A               |
| <ul style="list-style-type: none"> <li>— up to 400 V for current peak value n=30 rated value</li> </ul>                                                               | 264 A               |
| <ul style="list-style-type: none"> <li>— up to 500 V for current peak value n=30 rated value</li> </ul>                                                               | 264 A               |
| <ul style="list-style-type: none"> <li>— up to 690 V for current peak value n=30 rated value</li> </ul>                                                               | 264 A               |
| <ul style="list-style-type: none"> <li>— up to 1000 V for current peak value n=30 rated value</li> </ul>                                                              | 180 A               |
| minimum cross-section in main circuit at maximum AC-1 rated value                                                                                                     | 300 mm <sup>2</sup> |
| <b>operational current for approx. 200000 operating cycles at AC-4</b>                                                                                                |                     |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>                                                                                              | 150 A               |
| <ul style="list-style-type: none"> <li>• at 690 V rated value</li> </ul>                                                                                              | 135 A               |
| <b>operational 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>                | 400 A               |
| <ul style="list-style-type: none"> <li>— at 60 V rated value</li> </ul>                                                                                               | 330 A               |
| <ul style="list-style-type: none"> <li>— at 110 V rated value</li> </ul>                                                                                              | 33 A                |
| <ul style="list-style-type: none"> <li>— at 220 V rated value</li> </ul>                                                                                              | 3.8 A               |
| <ul style="list-style-type: none"> <li>— at 440 V rated value</li> </ul>                                                                                              | 0.9 A               |
| <ul style="list-style-type: none"> <li>— at 600 V rated value</li> </ul>                                                                                              | 0.6 A               |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| <ul style="list-style-type: none"> <li>● <b>with 2 current paths in series at DC-1</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>● <b>with 3 current paths in series at DC-1</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>● <b>at 1 current path at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>● <b>with 2 current paths in series at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> <li>● <b>with 3 current paths in series at DC-3 at DC-5</b> <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 110 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> </ul> </li> </ul> | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 4 A     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2 A     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 11 A    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 5.2 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 11 A    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.6 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.18 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.125 A |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2.5 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.65 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.37 A  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 400 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1.4 A   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.75 A  |
| <b>operating power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |         |
| ● at AC-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |         |
| — at 230 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 132 kW  |
| — at 400 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 200 kW  |
| — at 500 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 250 kW  |
| — at 690 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 400 kW  |
| — at 1000 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 250 kW  |
| ● at AC-3e                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |
| — at 230 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 132 kW  |
| — at 400 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 200 kW  |
| — at 500 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 250 kW  |
| — at 690 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 400 kW  |
| — at 1000 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 250 kW  |
| <b>operating power for approx. 200000 operating cycles at AC-4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |         |
| ● at 400 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 85 kW   |
| ● at 690 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 133 kW  |
| <b>operating apparent power at AC-6a</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         |
| ● up to 230 V for current peak value n=20 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 150 kVA |
| ● up to 400 V for current peak value n=20 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 270 kVA |
| ● up to 500 V for current peak value n=20 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 340 kVA |
| ● up to 690 V for current peak value n=20 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 470 kVA |
| ● up to 1000 V for current peak value n=20 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 310 kVA |
| <b>operating apparent power at AC-6a</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |         |
| ● up to 230 V for current peak value n=30 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 100 kVA |
| ● up to 400 V for current peak value n=30 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 180 kVA |
| ● up to 500 V for current peak value n=30 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 220 kVA |

|                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <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>                                                                                                                                                                                                                                                         | 310 kVA<br>310 kVA                                                                                                                                                                                                                                                                                                      |
| <b>short-time withstand current in cold operating state up to 40 °C</b> <ul style="list-style-type: none"> <li>• limited to 1 s switching at zero current maximum</li> <li>• limited to 5 s switching at zero current maximum</li> <li>• limited to 10 s switching at zero current maximum</li> <li>• limited to 30 s switching at zero current maximum</li> <li>• limited to 60 s switching at zero current maximum</li> </ul> | 6 600 A; Use minimum cross-section acc. to AC-1 rated value<br>5 761 A; Use minimum cross-section acc. to AC-1 rated value<br>4 143 A; Use minimum cross-section acc. to AC-1 rated value<br>2 635 A; Use minimum cross-section acc. to AC-1 rated value<br>2 088 A; Use minimum cross-section acc. to AC-1 rated value |
| <b>no-load switching frequency</b> <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                                                                                                   | 1 000 1/h<br>1 000 1/h                                                                                                                                                                                                                                                                                                  |
| <b>operating frequency</b> <ul style="list-style-type: none"> <li>• at AC-1 maximum</li> <li>• at AC-2 maximum</li> <li>• at AC-3 maximum</li> <li>• at AC-3e maximum</li> <li>• at AC-4 maximum</li> </ul>                                                                                                                                                                                                                     | 700 1/h<br>200 1/h<br>500 1/h<br>500 1/h<br>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> <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>                                                                                                                                                                                                                                                                                    | 96 ... 127 V<br>96 ... 127 V                                                                                                                                                                                                                                                                                            |
| <b>control supply voltage at DC rated value</b>                                                                                                                                                                                                                                                                                                                                                                                 | 96 ... 127 V                                                                                                                                                                                                                                                                                                            |
| <b>operating range factor control supply voltage rated value of magnet coil at DC</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>                                                                                                                                                                                                                                             | 0.8<br>1.1                                                                                                                                                                                                                                                                                                              |
| <b>operating range factor control supply voltage rated value of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                          | 0.8 ... 1.1<br>0.8 ... 1.1                                                                                                                                                                                                                                                                                              |
| <b>type of PLC-control input according to IEC 60947-1</b>                                                                                                                                                                                                                                                                                                                                                                       | Type 2                                                                                                                                                                                                                                                                                                                  |
| <b>consumed current at PLC-control input according to IEC 60947-1 maximum</b>                                                                                                                                                                                                                                                                                                                                                   | 20 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>design of the surge suppressor</b>                                                                                                                                                                                                                                                                                                                                                                                           | with varistor                                                                                                                                                                                                                                                                                                           |
| <b>apparent pick-up power</b> <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at AC             <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> <li>• at maximum rated control supply voltage at AC             <ul style="list-style-type: none"> <li>— at 60 Hz</li> <li>— at 50 Hz</li> </ul> </li> </ul>                                            | 560 VA<br>560 VA<br>750 VA<br>750 VA                                                                                                                                                                                                                                                                                    |
| <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>                                                                                                                                                                                                                                                                                             | 750 VA<br>750 VA                                                                                                                                                                                                                                                                                                        |
| <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>                                                                                                                                                                                                                                                                                   | 0.8<br>0.8                                                                                                                                                                                                                                                                                                              |
| <b>apparent holding power</b> <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at DC</li> <li>• at maximum rated control supply voltage at DC</li> </ul>                                                                                                                                                                                                                                        | 3 VA<br>3.6 VA                                                                                                                                                                                                                                                                                                          |
| <b>apparent holding power</b> <ul style="list-style-type: none"> <li>• at minimum rated control supply voltage at AC             <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> <li>• at maximum rated control supply voltage at AC             <ul style="list-style-type: none"> <li>— at 50 Hz</li> <li>— at 60 Hz</li> </ul> </li> </ul>                                            | 5.6 VA<br>5.6 VA<br>9 VA<br>9 VA                                                                                                                                                                                                                                                                                        |
| <b>inductive power factor with the holding power of the coil</b>                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                         |

|                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>                                                                                                                                                                                                                                                                     | 0.5<br>0.4                                                                                                                             |
| <b>closing power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                            | 800 W                                                                                                                                  |
| <b>holding power of magnet coil at DC</b>                                                                                                                                                                                                                                                                                                            | 3.6 W                                                                                                                                  |
| <b>closing delay</b> <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                                      | 60 ... 90 ms<br>60 ... 90 ms                                                                                                           |
| <b>opening delay</b> <ul style="list-style-type: none"> <li>• at AC</li> <li>• at DC</li> </ul>                                                                                                                                                                                                                                                      | 80 ... 100 ms<br>80 ... 100 ms                                                                                                         |
| <b>arcing time</b>                                                                                                                                                                                                                                                                                                                                   | 10 ... 15 ms                                                                                                                           |
| <b>control version of the switch operating mechanism</b>                                                                                                                                                                                                                                                                                             | PLC-IN or Standard A1 - A2 (adjustable)                                                                                                |
| <b>Auxiliary circuit</b>                                                                                                                                                                                                                                                                                                                             |                                                                                                                                        |
| number of NC contacts for auxiliary contacts instantaneous contact                                                                                                                                                                                                                                                                                   | 2                                                                                                                                      |
| number of NO contacts for auxiliary contacts instantaneous contact                                                                                                                                                                                                                                                                                   | 2                                                                                                                                      |
| operational current at AC-12 maximum                                                                                                                                                                                                                                                                                                                 | 10 A                                                                                                                                   |
| <b>operational current at AC-15</b> <ul style="list-style-type: none"> <li>• at 230 V rated value</li> <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>operational 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>operational 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)                                                                                        |
| <b>UL/CSA ratings</b>                                                                                                                                                                                                                                                                                                                                |                                                                                                                                        |
| <b>full-load current (FLA) for 3-phase AC motor</b> <ul style="list-style-type: none"> <li>• at 480 V rated value</li> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                         | 361 A<br>382 A                                                                                                                         |
| <b>yielded mechanical performance [hp]</b> <ul style="list-style-type: none"> <li>• for 3-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul>                                        | 125 hp<br>150 hp<br>300 hp<br>400 hp                                                                                                   |
| <b>contact rating of auxiliary contacts according to UL</b>                                                                                                                                                                                                                                                                                          | A600 / Q600                                                                                                                            |
| <b>Short-circuit protection</b>                                                                                                                                                                                                                                                                                                                      |                                                                                                                                        |
| design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V                                                                                                                                                                                                                                            | C characteristic: 10 A; 0.4 kA                                                                                                         |
| <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: 630 A (690 V, 100 kA)<br>gG: 500 A (690 V, 100 kA), aM: 400 A (690 V, 50 kA), BS88: 450 A (415 V, 50 kA)<br>gG: 10 A (500 V, 1 kA) |
| <b>Installation/ mounting/ dimensions</b>                                                                                                                                                                                                                                                                                                            |                                                                                                                                        |
| <b>mounting position</b>                                                                                                                                                                                                                                                                                                                             | with vertical mounting surface +/-90° rotatable, with vertical mounting surface                                                        |

|                                                                   |                                                                       |
|-------------------------------------------------------------------|-----------------------------------------------------------------------|
|                                                                   | +/- 22.5° tiltable to the front and back                              |
| fastening method side-by-side mounting                            | Yes                                                                   |
| <b>fastening method</b>                                           | screw fixing                                                          |
| <b>height</b>                                                     | 214 mm                                                                |
| <b>width</b>                                                      | 160 mm                                                                |
| <b>depth</b>                                                      | 225 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                                                                 |
| <b>Connections/ Terminals</b>                                     |                                                                       |
| <b>type of electrical connection</b>                              |                                                                       |
| • for main current circuit                                        | Connection bar                                                        |
| • for auxiliary and control circuit                               | screw-type terminals                                                  |
| • at contactor for auxiliary contacts                             | Screw-type terminals                                                  |
| • of magnet coil                                                  | Screw-type terminals                                                  |
| <b>width of connection bar</b>                                    | 25 mm                                                                 |
| <b>thickness of connection bar</b>                                | 6 mm                                                                  |
| <b>diameter of holes</b>                                          | 11 mm                                                                 |
| <b>number of holes</b>                                            | 1                                                                     |
| <b>type of connectable conductor cross-sections</b>               |                                                                       |
| • for AWG cables for main contacts                                | 2/0 ... 500 kcmil                                                     |
| <b>connectable conductor cross-section for main contacts</b>      |                                                                       |
| • stranded                                                        | 70 ... 240 mm²                                                        |
| <b>connectable conductor cross-section for auxiliary contacts</b> |                                                                       |
| • solid or stranded                                               | 0.5 ... 4 mm²                                                         |
| • finely stranded with core end processing                        | 0.5 ... 2.5 mm²                                                       |
| <b>type of connectable conductor cross-sections</b>               |                                                                       |
| • for auxiliary contacts                                          |                                                                       |
| — solid                                                           | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²) |
| — solid or stranded                                               | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²) |
| — finely stranded with core end processing                        | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)                           |
| • for AWG cables for auxiliary contacts                           | 2x (20 ... 16), 2x (18 ... 14), 1x 12                                 |
| <b>AWG number as coded connectable conductor cross section</b>    |                                                                       |
| • for auxiliary contacts                                          | 18 ... 14                                                             |
| <b>Safety related data</b>                                        |                                                                       |
| <b>product function</b>                                           |                                                                       |
| • mirror contact according to IEC 60947-4-1                       | Yes                                                                   |
| • positively driven operation according to IEC 60947-5-1          | No                                                                    |
| • suitable for safety function                                    | Yes                                                                   |
| suitability for use safety-related switching OFF                  | Yes; safety-related disconnection via A1 A2                           |
| <b>service life maximum</b>                                       | 20 a                                                                  |
| <b>test wear-related service life necessary</b>                   | Yes                                                                   |
| <b>proportion of dangerous failures</b>                           |                                                                       |
| • with low demand rate according to SN 31920                      | 40 %                                                                  |
| • with high demand rate according to SN 31920                     | 73 %                                                                  |
| <b>B10 value with high demand rate according to SN 31920</b>      | 1 000 000                                                             |
| <b>failure rate [FIT] with low demand rate according to SN</b>    | 100 FIT                                                               |

|                                                         |                                                                          |
|---------------------------------------------------------|--------------------------------------------------------------------------|
| 31920                                                   |                                                                          |
| ISO 13849                                               |                                                                          |
| device type according to ISO 13849-1                    | 3                                                                        |
| overdimensioning according to ISO 13849-2 necessary     | Yes                                                                      |
| IEC 61508                                               |                                                                          |
| safety device type according to IEC 61508-2             | Type A                                                                   |
| Electrical Safety                                       |                                                                          |
| protection class IP on the front according to IEC 60529 | IP00; IP20 with box terminal/cover                                       |
| touch protection on the front according to IEC 60529    | finger-safe, for vertical contact from the front with box terminal/cover |

#### Approvals Certificates

|                          |     |
|--------------------------|-----|
| General Product Approval | EMV |
|--------------------------|-----|



|                   |                   |                   |
|-------------------|-------------------|-------------------|
| Functional Safety | Test Certificates | Marine / Shipping |
|-------------------|-------------------|-------------------|

[Type Examination Certificate](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



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



[Miscellaneous](#)

[Confirmation](#)

[Miscellaneous](#)

[Confirmation](#)

|         |             |
|---------|-------------|
| Railway | Environment |
|---------|-------------|

[Special Test Certificate](#)

[Environmental Confirmations](#)

#### Further information

Information on the packaging

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

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1075-6NF36>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1075-6NF36>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1075-6NF36>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1075-6NF36&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1075-6NF36&lang=en)

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1075-6NF36/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1075-6NF36&objecttype=14&gridview=view1>



