## SIEMENS

## Data sheet

## 3RT1016-1AP61



CONTACTOR, AC-3 4 KW/400 V, 1 NO, AC 220V 50HZ/ 240V 60HZ, 3-POLE, SIZE S00, SCREW CONNECTION

| - gold of the  |                 |
|--|-----------------|
| product brand name   | SIRIUS          |
| Product designation  | power contactor |
| General technical data:  |                 |
| Size of contactor  | S00             |
| Degree of pollution  | 3               |
| Mechanical service life (switching cycles)                       |                 |
| <ul> <li>of the contactor typical</li> </ul>                     | 30 000 000      |
| <ul> <li>of the contactor with added electronics-</li> </ul>     | 5 000 000       |
| compatible auxiliary switch block typical                        |                 |
| <ul> <li>of the contactor with added auxiliary switch</li> </ul> | 10 000 000      |
| block typical  |                 |
| Protection class IP  |                 |
| • on the front   | IP20            |
| • of the terminal  | IP20            |
| Equipment marking  |                 |
| • acc. to DIN EN 61346-2   | Q               |
| • acc. to DIN EN 81346-2   | Q               |
| Ambient conditions:  |                 |
| Installation altitude at height above sea level                  | 2 000 m         |
| maximum  |                 |
| Ambient temperature  |                 |
| • during operation   | -25 +60 °C      |
| Main circuit:  |                 |
| Number of poles for main current circuit                         | 3               |
| Number of NC contacts for main contacts                          | 0               |
|  |                 |

| Operating current <ul> <li>et AC-1 it 400 V</li> <li>et AC-1 it 0 680 V</li> <li>et AC-1 up to 680 V</li> <li>et AC-1 up to 680 V</li> <li>et AC-3</li> <li>et adout up to 680 V</li> <li>et AC-3</li> <li>et adout up to 680 V</li> <li>et AC-4</li>             &lt;</ul>  | Number of NO contacts for main contacts                            | 3        |
|--|--|----------|
| at ambient temperature 40 °C Rated value22 A at ambient temperature 60 °C Rated value20 A at ambient temperature 60 °C Rated value20 A at 400 V Rated value9 A at 400 V Rated value9 A at 400 V Rated value8.5 AOperating current20 A at 24 V Rated value20 A at 110 V Rated value20 A at 110 V Rated value20 A at 110 V Rated value20 A at 24 V Rated value20 A at 110 V Rated value0.15 A at 110 V Rated value0.35 A at 110 V Rated value0.35 A at 24 V Rated value20 A at 24 V Rated value20 A at 110 V Rated value0.35 A at 110 V Rated value20 A at 110 V Rated value20 A at 110 V Rated value20 A at 24 V Rated value20   | Operating current  |          |
| at AC-1 up to 590 V22 A- at ambient temperature 60 °C Rated value22 A- at ambient temperature 60 °C Rated value20 A• at AC-320 A• at AC-3 at 400 V Rated value9 A• at AC-4 at 400 V Rated value9 A• at AC-4 at 400 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value21 A• with 2 current paths in series at DC-120 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value<   | • at AC-1 at 400 V   |          |
| - at ambient temperature 40 °C Rated value22 Å- at ambient temperature 60 °C Rated value20 Å• at AC-39 Å- at 400 V Rated value9 Å• at A00 V Rated value8.5 ÅOperating current20 Å- at 24 V Rated value20 Å- at 110 V Rated value20 Å- at 110 V Rated value20 Å- at 24 V Rated value20 Å- at 110 V Rated value20 Å- at 24 V Rated value20 Å- at 24 V Rated value0.35 Å- at 24 V Rated value0.35 Å- at 110 V Rated value0.35 Å- at 24 V Rated value20 Å- at 10 V Rated value20 Å- at 24 V R   | — at ambient temperature 40 °C Rated value                         | 22 A     |
| Industry particle of "C Rated value20 A• at AC-39 A• at AC-3 t4 00 V Rated value9 A• at AC-4 at 400 V Rated value85 AOperating current85 A• with 1 current path at DC-120 A- at 24 V Rated value20 A- at 110 V Rated value0.15 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value<   | • at AC-1 up to 690 V  |          |
| <ul> <li>at AC-3         <ul> <li>at 400 V Rated value</li> <li>9 A</li> <li>at AC-4 at 400 V Rated value</li> <li>8.5 A</li> </ul> </li> <li>Operating current         <ul> <li>with 1 current path at DC-1</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>21 A</li> </ul> </li> <li>with 2 current paths in series at DC-1         <ul> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 3 current paths in series at DC-1         <ul> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>Operating current         <ul> <li>at 10 V Rated value</li> <li>20 A</li> </ul> </li> <li>Operating current         <ul> <li>with 1 current path at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>35 A</li> <li>at 124 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 10 V Ra</li></ul></li></ul>   | — at ambient temperature 40 °C Rated value                         | 22 A     |
|  | — at ambient temperature 60 °C Rated value                         | 20 A     |
| • at AC-4 at 400 V Rated value8.5 ÅOperating current• with 1 current path at DC-120 Å- at 24 V Rated value20 Å- at 110 V Rated value2.1 Å• with 2 current paths in series at DC-120 Å- at 24 V Rated value20 Å- at 110 V Rated value20 Å- at 24 V Rated value20 Å- at 110 V Rated value20 Å- at 24 V Rated value0.15 Å- at 24 V Rated value0.35 Å- at 24 V Rated value20 Å- at 100 V Rated value20 Å- at 24 V  | • at AC-3  |          |
| Operating currentImage: control supply voltage• with 1 current path at DC-120 A- at 24 V Rated value20 A- at 110 V Rated value21 A• with 2 current paths in series at DC-1- at 24 V Rated value- at 24 V Rated value20 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-5- at 110 V Rated value0.35 A- at 110 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5- at 110 V Rated value20 A- at 24 V Rated value0.35 A- at 24 V Rated value20 A- at 24 V Rated value0.7 W- at 24 V Rated value20 A- at 10 V Rated value20 A- at 24 V Rated value20 A <th>— at 400 V Rated value</th> <th>9 A</th>  | — at 400 V Rated value   | 9 A      |
| <ul> <li>with 1 current path at DC-1</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>21 A</li> <li>with 2 current paths in series at DC-1</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 10 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-1</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>Operating current</li> <li>with 1 current path at DC-3 at DC-5</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>Operating current</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>0.15 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 10 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 10 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 10 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 10 V Rated value</li> <li>20 A</li> <li>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Control supply voltage of the control supply voltage</li> <li>AC</li> <li>Control supply voltag</li></ul> | • at AC-4 at 400 V Rated value                                     | 8.5 A    |
| - at 24 V Rated value20 A- at 110 V Rated value2.1 A• with 2 current paths in series at DC-1- at 24 V Rated value- at 24 V Rated value12 A• with 3 current paths in series at DC-1- at 24 V Rated value- at 24 V Rated value20 A- at 110 V Rated value0.15 A- at 110 V Rated value0.35 A- at 110 V Rated value20 A- at 110 V Rated value20 A- at 110 V Rated value0.35 A- at 110 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value0.0 A- at 24 V Rated value20 A- at 24 V Rated value20 A- at 24 V Rated value0.35 A- at 24 V Rated value20 A- at 24 V R  | Operating current  |          |
|  | <ul> <li>with 1 current path at DC-1</li> </ul>                    |          |
| <ul> <li>with 2 current paths in series at DC-1</li> <li>at 24 V Rated value</li> <li>at 110 V Rated value</li> <li>at 110 V Rated value</li> <li>at 24 V Rated value</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>0.15 A</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>0.35 A</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Control supply voltage of the control supply voltage</li> <li>AC</li> <li>Control supply voltage with AC</li> <li>at 50 Hz Rated value</li> <li>240 V</li> <li>Rated value</li> <li>50 Hz</li> <li>Control supply voltage frequency 2 Rated value</li> <li>50 Hz</li> <li>Control supply voltage frequency 2 Rated value</li> <li>50 Hz</li> <li>Control supply voltage frequency 2 Rated value</li>     &lt;</ul>                               | — at 24 V Rated value  | 20 A     |
| - at 24 V Rated value20 A- at 110 V Rated value12 A• with 3 current paths in series at DC-120 A- at 24 V Rated value20 A- at 110 V Rated value20 AOperating current20 A• with 1 current path at DC-3 at DC-5- at 24 V Rated value- at 110 V Rated value20 A- at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-5- at 110 V Rated value- at 110 V Rated value0.35 A- at 24 V Rated value20 V- at 24 V Rated value20 V- at  | — at 110 V Rated value   | 2.1 A    |
| at 110 V Rated value12 A• with 3 current paths in series at DC-120 A at 24 V Rated value20 A at 110 V Rated value20 AOperating current20 A• with 1 current path at DC-3 at DC-5 at 24 V Rated value at 110 V Rated value20 A at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-5 at 110 V Rated value at 110 V Rated value0.35 A at 24 V Rated value20 A at 110 V Rated value20 A at 24 V Rated value20 V at 24 V Rated value20 V at 24 V Rated value20 V at 26 V Rated value20 V at 26 V Rated valu  | <ul> <li>with 2 current paths in series at DC-1</li> </ul>         |          |
| <ul> <li>with 3 current paths in series at DC-1         <ul> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>at 110 V Rated value</li> <li>20 A</li> <li>Operating current         <ul> <li>with 1 current path at DC-3 at DC-5</li> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>Operating current         <ul> <li>with 1 current path at DC-3 at DC-5</li> <li>at 24 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 2 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 110 V Rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 3 current paths in series at DC-3 at DC-5</li> <li>at 110 V Rated value</li> <li>20 A</li> </ul> <li>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Control circuit/ Control:</li> <li>Control supply voltage with AC         <ul> <li>at 50 Hz Rated value</li> <li>20 V</li> <li>at 60 Hz Rated value</li> <li>20 Hz</li> <li>Control supply voltage frequency 2 Rated value</li> <li>50 Hz</li> </ul> <li>Control supply voltage frequency 2 Rated value</li> <li>60 Hz<th>— at 24 V Rated value</th><th>20 A</th></li></li>   | — at 24 V Rated value  | 20 A     |
| - at 24 V Rated value20 A- at 110 V Rated value20 AOperating current20 A• with 1 current path at DC-3 at DC-520 A- at 24 V Rated value20 A- at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-5 at 110 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5 at 24 V Rated value20 A- at 50 V Rated value20 A- at 50 Hz Rated value220 V• at 60 Hz Rated value240 V• at 60 Hz Rated value50 HzControl supply voltage frequency 2 Rated value60 HzOperating range factor control supply voltage rated<br>value of the magnet coil with AC60 Hz  | — at 110 V Rated value   | 12 A     |
| Instant of the definition of the magnet coll with AC20 AOperating current<br>• with 1 current path at DC-3 at DC-5<br>- at 24 V Rated value20 A0.15 A0.15 A• with 2 current paths in series at DC-3 at DC-5<br>- at 110 V Rated value0.35 A- at 24 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5<br>- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5<br>- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5<br>- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5<br>- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5<br>- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-5<br>- at 24 V Rated value20 A• at 50 V Rated valueACControl supply voltage of the control supply voltageACControl supply voltage frequency 2 Rated value20 V• at 60 Hz Rated value20 HzOperating range factor control supply voltage rated<br>value of the magnet coll with AC60 Hz  | <ul> <li>with 3 current paths in series at DC-1</li> </ul>         |          |
| Operating current• with 1 current path at DC-3 at DC-5- at 24 V Rated value20 A- at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-50.35 A- at 110 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A- at 50 Hz Rated value220 V- at 50 Hz Rated value220 V- at 50 Hz Rated value20 HzControl supply voltage frequency 2 Rated value50 HzControl supply voltage frequency 2 Rated value60 HzOperating range factor control supply voltage rated60 Hz   | — at 24 V Rated value  | 20 A     |
| <ul> <li>with 1 current path at DC-3 at DC-5         <ul> <li>at 24 V Rated value</li> <li>at 10 V Rated value</li> <li>0.15 A</li> </ul> </li> <li>with 2 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>0.35 A</li> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>20 A</li> </ul> </li> <li>control VRated value</li> <li>Control supply voltage vith AC</li> <li>at 50 Hz Rated value</li> <li>220 V</li> </ul> <li>at 60 Hz Rated value</li> <li>20 Hz</li> <li>Control supply voltage frequency 2 Rated value</li> <li>60 Hz</li> <li>Operating range factor control supply voltage rated value</li> <li>with 4C</li>   | — at 110 V Rated value   | 20 A     |
| - at 24 V Rated value20 A- at 110 V Rated value0.15 A• with 2 current paths in series at DC-3 at DC-50.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-520 A- at 110 V Rated value20 A• at 110 V Rated value20 A- at 24 V Rated value20 A- at 50 Hz Rated value20 A- at 50 Hz Rated value220 V- at 50 Hz Rated value220 V- at 60 Hz Rated value200 Hz- at 60 Hz Rated value60 Hz- at 60 Hz Rated value60 Hz- at 60 Hz Rated value60 Hz   | Operating current  |          |
| at 110 V Rated value0.15 A with 2 current paths in series at DC-3 at DC-5  | <ul> <li>with 1 current path at DC-3 at DC-5</li> </ul>            |          |
| <ul> <li>with 2 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>20 A</li> </ul> </li> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Control circuit/ Control:</li> </ul> Control circuit/ Control Type of voltage of the control supply voltage <ul> <li>AC</li> <li>Control supply voltage with AC</li> <li>at 50 Hz Rated value</li> <li>20 V</li> <li>at 60 Hz Rated value</li> <li>20 V</li> <li>at 60 Hz Rated value</li> <li>50 Hz</li> <li>Control supply voltage frequency 2 Rated value</li> <li>60 Hz</li> <li>Operating range factor control supply voltage rated value</li> <li>out of the magnet coil with AC</li> </ul>  | — at 24 V Rated value  | 20 A     |
| - at 110 V Rated value0.35 A- at 24 V Rated value20 A• with 3 current paths in series at DC-3 at DC-520 A- at 110 V Rated value20 A- at 24 V Rated value0.7 W- at 24 V Rated value0.7 WControl circuit/ Control:0.7 WControl circuit/ Control supply voltageACControl supply voltage with AC220 V• at 60 Hz Rated value240 V• Rated value50 HzControl supply voltage frequency 2 Rated value60 HzOperating range factor control supply voltage rated value of the magnet coil with AC60 Hz   | — at 110 V Rated value   | 0.15 A   |
|  | <ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul> |          |
| <ul> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V Rated value</li> <li>20 A</li> <li>at 24 V Rated value</li> <li>20 A</li> </ul> </li> <li>Active power loss at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Control circuit/ Control:</li> <li>Control supply voltage of the control supply voltage</li> <li>AC</li> <li>Control supply voltage with AC</li> <li>at 50 Hz Rated value</li> <li>20 V</li> <li>at 60 Hz Rated value</li> <li>50 Hz</li> <li>Control supply voltage frequency 2 Rated value</li> <li>60 Hz</li> </ul> <li>Operating range factor control supply voltage rated value</li> <li>of Hz</li>  | — at 110 V Rated value   | 0.35 A   |
| - at 110 V Rated value20 A- at 24 V Rated value20 AActive power loss at AC-3 at 400 V for rated value of<br>the operating current per conductor0.7 WControl circuit/ Control:ACControl circuit/ Control:ACControl supply voltage with AC220 V• at 50 Hz Rated value220 V• at 60 Hz Rated value50 Hz• Rated value60 Hz• Rated value60 Hz  | — at 24 V Rated value  | 20 A     |
|  | <ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul> |          |
| Active power loss at AC-3 at 400 V for rated value of the operating current per conductor       0.7 W         Control circuit/ Control:       AC         Type of voltage of the control supply voltage       AC         Control supply voltage with AC       220 V         • at 50 Hz Rated value       240 V         • at 60 Hz Rated value       50 Hz         • Rated value       60 Hz         Operating range factor control supply voltage rated value       60 Hz   | — at 110 V Rated value   | 20 A     |
| the operating current per conductor Control circuit/ Control: Type of voltage of the control supply voltage Outrol supply voltage with AC Outrol supply voltage with AC Outrol supply voltage frequency 2 Rated value Control supply voltage frequency 2 Rated value Operating range factor control supply voltage rated value of the magnet coil with AC  | — at 24 V Rated value  | 20 A     |
| Control circuit/ Control:       AC         Type of voltage of the control supply voltage       AC         Control supply voltage with AC       220 V         • at 50 Hz Rated value       240 V         • at 60 Hz Rated value       50 Hz         • Rated value       50 Hz         Control supply voltage frequency 2 Rated value       60 Hz  | -  | 0.7 W    |
| Type of voltage of the control supply voltageACControl supply voltage with AC220 V• at 50 Hz Rated value220 V• at 60 Hz Rated value240 V• Rated value50 Hz• Control supply voltage frequency 2 Rated value60 HzOperating range factor control supply voltage rated<br>value of the magnet coil with AC60 Hz  | the operating current per conductor                                |          |
| Control supply voltage with AC       220 V         • at 50 Hz Rated value       220 V         • at 60 Hz Rated value       240 V         • Rated value       50 Hz         • Control supply voltage frequency 2 Rated value       60 Hz         Operating range factor control supply voltage rated value       60 Hz  | Control circuit/ Control:  |          |
| • at 50 Hz Rated value220 V• at 60 Hz Rated value240 V• Rated value50 Hz• Rated value60 HzControl supply voltage frequency 2 Rated value60 HzOperating range factor control supply voltage rated<br>value of the magnet coil with AC• • • • • • • • • • • • • • • • • • •  | Type of voltage of the control supply voltage                      | AC       |
| • at 60 Hz Rated value         240 V           • Rated value         50 Hz           Control supply voltage frequency 2 Rated value         60 Hz           Operating range factor control supply voltage rated value of the magnet coil with AC         60 Hz   | Control supply voltage with AC                                     |          |
| Rated value     Rated value     S0 Hz     Control supply voltage frequency 2 Rated value     Operating range factor control supply voltage rated     value of the magnet coil with AC  | ● at 50 Hz Rated value   | 220 V    |
| Control supply voltage frequency 2 Rated value       60 Hz         Operating range factor control supply voltage rated       value of the magnet coil with AC  | ● at 60 Hz Rated value   | 240 V    |
| Operating range factor control supply voltage rated<br>value of the magnet coil with AC  | Rated value  | 50 Hz    |
| value of the magnet coil with AC   |  | 60 Hz    |
| • at 50 Hz 0.85 1.1  |  |          |
|  | ● at 50 Hz   | 0.85 1.1 |

| ● at 60 Hz   | 0.8 1.1  |
|--|--|
| Apparent pick-up power of the magnet coil with AC                        | 31.7 V·A   |
| Inductive power factor with closing power of the coil                    | 0.77   |
| Apparent holding power of the magnet coil with AC                        | 5.1 V·A  |
| Inductive power factor with the holding power of the                     | 0.27   |
| coil   |  |
| Auxiliary circuit:   |  |
| Number of NC contacts  |  |
| <ul> <li>for auxiliary contacts</li> </ul>                               |  |
| — instantaneous contact  | 0  |
| Number of NO contacts  |  |
| <ul> <li>for auxiliary contacts</li> </ul>                               |  |
| — instantaneous contact  | 1  |
| Operating current at AC-12 maximum                                       | 10 A   |
| Operating current at AC-15   |  |
| • at 230 V Rated value   | 6 A  |
| • at 400 V Rated value   | 3 A  |
| Operating current at DC-12   |  |
| • at 60 V Rated value  | 6 A  |
| • at 110 V Rated value   | 3 A  |
| • at 220 V Rated value   | 1 A  |
| Operating current at DC-13   |  |
| • at 24 V Rated value  | 10 A   |
| • at 60 V Rated value  | 2 A  |
| • at 110 V Rated value   | 1 A  |
| • at 220 V Rated value   | 0.3 A  |
| Contact reliability of the auxiliary contacts                            | 1 faulty switching per 100 million (17 V, 1 mA)  |
| Short-circuit:   |  |
| Design of the fuse link  |  |
| <ul> <li>for short-circuit protection of the main circuit</li> </ul>     |  |
| — with type of assignment 1 required                                     | fuse gL/gG: 35 A   |
| — with type of assignment 2 required                                     | fuse gL/gG: 20 A   |
| <ul> <li>for short-circuit protection of the auxiliary switch</li> </ul> | fuse gL/gG: 10 A   |
| required   |  |
| nstallation/ mounting/ dimensions:                                       |  |
| Mounting type  | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022 |
| <ul> <li>Side-by-side mounting</li> </ul>                                | Yes  |
| Height   | 57.5 mm  |
| Width  | 45 mm  |
| Depth  | 72 mm  |

| Required spacing                     |                       |                    |  |                               |                |  |
|--------------------------------------|-----------------------|--------------------|--|-------------------------------|----------------|--|
| <ul> <li>for grounded</li> </ul>     | parts                 |                    |  |                               |                |  |
| — at the side                        |                       | 6 mm               |  |                               |                |  |
| Connections/ Tern                    | ninals:               |                    |  |                               |                |  |
| Type of electrical c                 | onnection             |                    |  |                               |                |  |
| <ul> <li>for main current</li> </ul> | ent circuit           |                    | screw-type terminals   |                               |                |  |
| <ul> <li>for auxiliary a</li> </ul>  | and control current c | ircuit             | screw-type terminals   |                               |                |  |
| Type of connectab                    | le conductor cross-s  | ection             |  |                               |                |  |
| <ul> <li>for main cont</li> </ul>    | acts                  |                    |  |                               |                |  |
| — solid                              |                       |                    | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)  |                               |                |  |
| — single or                          | multi-stranded        |                    | 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)  |                               |                |  |
| — finely str                         | anded with core end   | l processing       | 2x (0.5 1.5 mm²), 2x   | (0.75 2.5 mm²)                |                |  |
| <ul> <li>for AWG con</li> </ul>      | ductors for main cor  | ntacts             | 2x (20 16), 2x (18   | 14), 1x 12                    |                |  |
| Type of connectab                    | le conductor cross-s  | ection             |  |                               |                |  |
| <ul> <li>for auxiliary of</li> </ul> | contacts              |                    |  |                               |                |  |
| — solid                              |                       |                    | 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> ), max. 2x (0.75 4 mm <sup>2</sup> ) |                               |                |  |
| — finely str                         | anded with core end   | l processing       | 2x (0.5 1.5 mm²), 2x   | (0.75 2.5 mm²)                |                |  |
| <ul> <li>for AWG con</li> </ul>      | ductors for auxiliary | contacts           | 2x (20 16), 2x (18 14), 1x 12  |                               |                |  |
| Certificates/ appro<br>General Produ |                       | _                  | _  | Functional                    | Declaration of |  |
|                                      |                       |                    |  | Safety/Safety<br>of Machinery | Conformity     |  |
| CSA                                  | <b>GAU</b> ®<br>UR    |                    | EHC  | Type Examination              | EG-Konf.       |  |
| Test<br>Certificates                 | Shipping Appr         | roval              |  |                               |                |  |
| Special Test<br>Certificate          | ABS                   |                    | GL   | Lloyd's<br>Register<br>Irs    | PRS            |  |
| Shipping Appro                       | oval                  | other              |  |                               |                |  |
| RINA                                 | RMRS                  | <u>Confirmatic</u> | on Environmental<br>Confirmations  | <u>other</u>                  |                |  |
| Further information                  | n                     |                    |  |                               |                |  |

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAX order/default.aspx?lang=en&mlfb=3RT10161AP61

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT10161AP61

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10161AP61&lang=en



