

Power contactor, AC-3 9 A, 4 kW / 400 V 1 NC, 230 V AC, 50 / 60 Hz  
3-pole, size S00 screw terminal



Figure similar

|   |                 |
|---|-----------------|
| <b>Product brand name</b>   | SIRIUS          |
| <b>Product designation</b>  | power contactor |
| <b>General technical data</b>   |                 |
| <b>Size of contactor</b>  | S00             |
| <b>Degree of pollution</b>  | 3               |
| <b>Protection class IP</b>  |                 |
| • on the front  | IP20            |
| • of the terminal   | IP20            |
| <b>Mechanical service life (switching cycles)</b>                                   |                 |
| • of contactor typical  | 30 000 000      |
| • of the contactor with added electronics-compatible auxiliary switch block typical | 5 000 000       |
| • of the contactor with added auxiliary switch block typical                        | 10 000 000      |
| <b>Ambient conditions</b>   |                 |
| <b>Installation altitude at height above sea level</b>                              |                 |
| • maximum   | 2 000 m         |

|   |                |
|---|----------------|
| <b>Ambient temperature</b>  |                |
| <ul style="list-style-type: none"> <li>during operation</li> </ul>  | -25 ... +60 °C |
| <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>Number of NC contacts for main contacts</b>  | 0              |
| <b>Operating current</b>  |                |
| <ul style="list-style-type: none"> <li>at AC-1 at 400 V <ul style="list-style-type: none"> <li>— at ambient temperature 40 °C rated value</li> </ul> </li> </ul>  | 22 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> <li>— up to 690 V at ambient temperature 60 °C rated value</li> </ul> </li> </ul> | 22 A<br>20 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>   | 9 A            |
| <ul style="list-style-type: none"> <li>at AC-4 at 400 V rated value</li> </ul>  | 8.5 A          |
| <b>Operating current</b>  |                |
| <ul style="list-style-type: none"> <li>at 1 current path at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>  | 20 A<br>2.1 A  |
| <ul style="list-style-type: none"> <li>with 2 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>                                   | 20 A<br>12 A   |
| <ul style="list-style-type: none"> <li>with 3 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>                                   | 20 A<br>20 A   |
| <b>Operating current</b>  |                |
| <ul style="list-style-type: none"> <li>at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>  | 20 A<br>0.15 A |
| <ul style="list-style-type: none"> <li>with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>                           | 20 A<br>0.35 A |
| <ul style="list-style-type: none"> <li>with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>                           | 20 A<br>20 A   |
| <b>Operating power</b>  |                |
| <ul style="list-style-type: none"> <li>at AC-1 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> </ul> </li> </ul>   | 13 kW          |
| <ul style="list-style-type: none"> <li>at AC-2 at 400 V rated value</li> </ul>  | 4 kW           |

|   |                          |
|---|--------------------------|
| <ul style="list-style-type: none"> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> </ul> </li> </ul> | 4 kW<br>4.5 kW<br>5.5 kW |
| <b>Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor</b>   | 0.7 W                    |

| Control circuit/ Control   |                             |
|--|-----------------------------|
| <b>Type of voltage of the control supply voltage</b>   | AC                          |
| <b>Control supply voltage at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>                           | 230 V<br>230 V              |
| <b>Control supply voltage frequency</b>  | 50 Hz, 60 Hz                |
| <b>Operating range factor control supply voltage rated value of magnet coil at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul> | 0.8 ... 1.1<br>0.85 ... 1.1 |
| <b>Apparent pick-up power of magnet coil at AC</b>   | 27 V·A                      |
| <b>Inductive power factor with closing power of the coil</b>   | 0.8                         |
| <b>Apparent holding power of magnet coil at AC</b>   | 4.4 V·A                     |
| <b>Inductive power factor with the holding power of the coil</b>   | 0.27                        |

| Auxiliary circuit  |   |
|--|---|
| <b>Number of NC contacts</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul>                       | 1   |
| <b>Number of NO contacts</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul>                       | 0   |
| <b>Operating current at AC-12 maximum</b>  | 10 A  |
| <b>Operating current at AC-15</b> <ul style="list-style-type: none"> <li>• at 230 V rated value</li> <li>• at 400 V rated value</li> </ul>   | 6 A<br>3 A                                      |
| <b>Operating current at DC-12</b> <ul style="list-style-type: none"> <li>• at 60 V rated value</li> <li>• at 110 V rated value</li> <li>• at 220 V rated value</li> </ul>                                | 6 A<br>3 A<br>1 A                               |
| <b>Operating current at DC-13</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> </ul> | 10 A<br>2 A<br>1 A<br>0.3 A                     |
| <b>Contact reliability of auxiliary contacts</b>   | 1 faulty switching per 100 million (17 V, 1 mA) |

## Short-circuit protection

### Design of the fuse link

- for short-circuit protection of the main circuit
  - with type of coordination 1 required
  - with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

fuse gL/gG: 35 A  
fuse gL/gG: 20 A  
fuse gL/gG: 10 A

## Installation/ mounting/ dimensions

### Mounting type

- Side-by-side mounting

screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022

Yes

### Height

57.5 mm

### Width

45 mm

### Depth

72 mm

### Required spacing

- for grounded parts
  - at the side

6 mm

## Connections/Terminals

### Type of electrical connection

- for main current circuit
- for auxiliary and control current circuit

screw-type terminals

screw-type terminals

### Type of connectable conductor cross-sections

- for main contacts
  - solid
  - single or multi-stranded
  - finely stranded with core end processing
- at AWG conductors for main contacts

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>)

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>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14), 1x 12

### Type of connectable conductor cross-sections

- for auxiliary contacts
  - solid
  - finely stranded with core end processing
- at AWG conductors for auxiliary contacts

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>)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14), 1x 12

## Certificates/approvals

|                          |                                       |                           |
|--------------------------|---------------------------------------|---------------------------|
| General Product Approval | Functional Safety/Safety of Machinery | Declaration of Conformity |
|--------------------------|---------------------------------------|---------------------------|



[Type Examination Certificate](#)



|                   |                   |
|-------------------|-------------------|
| Test Certificates | Marine / Shipping |
|-------------------|-------------------|

[Special Test Certificate](#)



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



[Miscellaneous](#)

[Confirmation](#)

### Further information

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

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

**Industry Mall (Online ordering system)**

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1016-1AP02>

**Cax online generator**

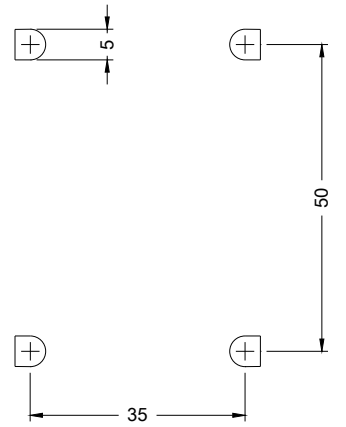
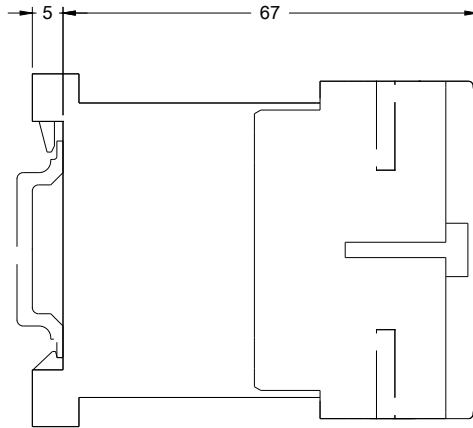
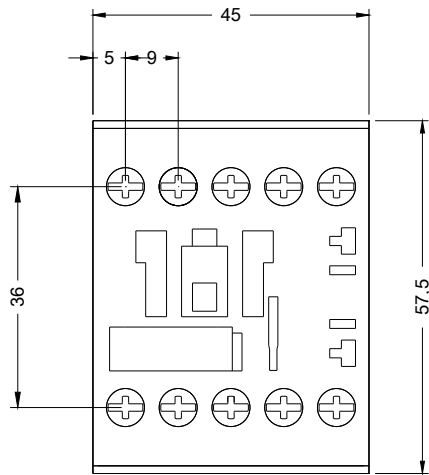
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1016-1AP02>

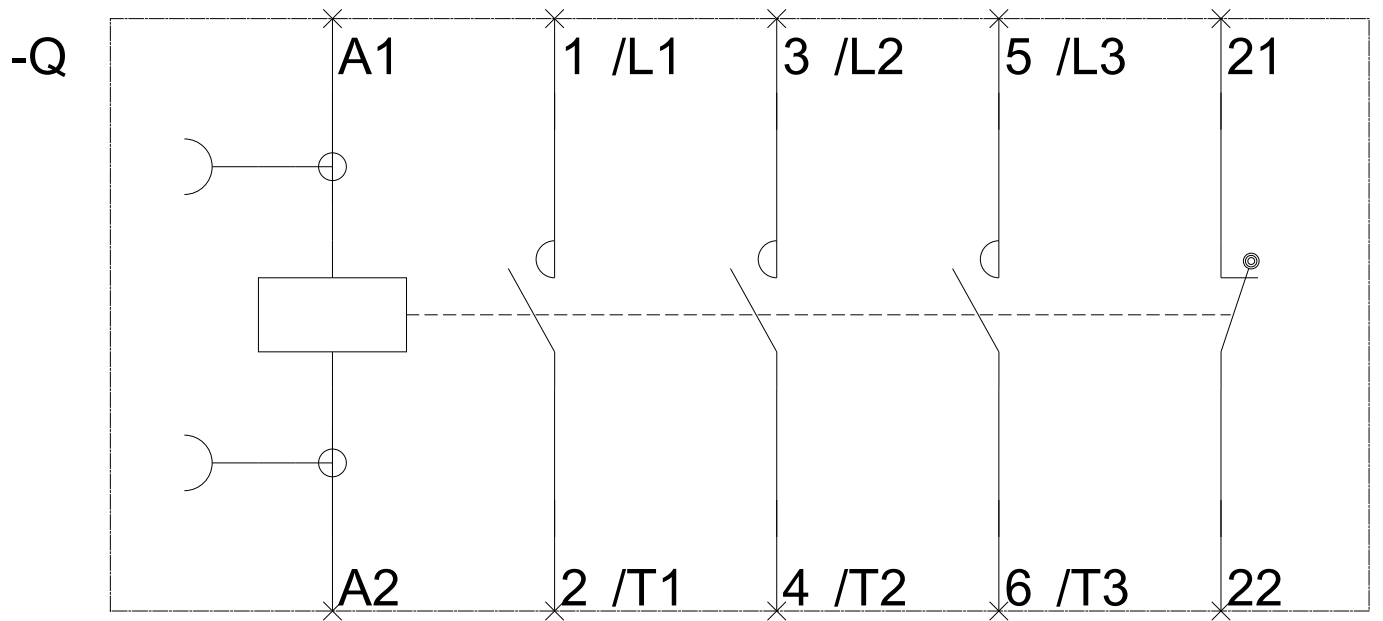
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1AP02>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1016-1AP02&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1016-1AP02&lang=en)





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