

CONTACTOR, AC-3 4 KW/400 V, 1 NO, AC 110V 50HZ/ 120V 60HZ, 3-POLE, SIZE S00, SCREW CONNECTION



Figure similar

|                                                                                     |                 |
|-------------------------------------------------------------------------------------|-----------------|
| product brand name                                                                  | SIRIUS          |
| Product designation                                                                 | power contactor |
| General technical data                                                              |                 |
| Size of contactor                                                                   | S00             |
| Degree of pollution                                                                 | 3               |
| Protection class IP                                                                 |                 |
| • on the front                                                                      | IP20            |
| • of the terminal                                                                   | IP20            |
| Mechanical service life (switching cycles)                                          |                 |
| • 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      |
| Ambient conditions                                                                  |                 |
| Installation altitude at height above sea level 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> </ul> </li> </ul>        | 22 A           |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul> </li> </ul>               | 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            |
| <b>Operating current</b>                                                                                                                                                 |                |
| <ul style="list-style-type: none"> <li>at 1 current path at DC-1 <ul style="list-style-type: none"> <li>at 24 V rated value</li> </ul> </li> </ul>                       | 20 A           |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at 110 V rated value</li> </ul> </li> </ul>                                               | 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> </ul> </li> </ul>          | 20 A           |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at 110 V rated value</li> </ul> </li> </ul>                                               | 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> </ul> </li> </ul>          | 20 A           |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at 110 V rated value</li> </ul> </li> </ul>                                               | 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> </ul> </li> </ul>               | 20 A           |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at 110 V rated value</li> </ul> </li> </ul>                                               | 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 110 V rated value</li> </ul> </li> </ul> | 0.35 A         |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at 24 V rated value</li> </ul> </li> </ul>                                                | 20 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 110 V rated value</li> </ul> </li> </ul> | 20 A           |
| <ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>at 24 V rated value</li> </ul> </li> </ul>                                                | 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</li> </ul>                                                                                                                |                |

|                                                                                               |        |
|-----------------------------------------------------------------------------------------------|--------|
| — at 400 V rated value                                                                        | 4 kW   |
| — at 500 V rated value                                                                        | 4.5 kW |
| — at 690 V rated value                                                                        | 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>                                                   |              |
| • at 50 Hz rated value                                                                | 110 V        |
| • at 60 Hz rated value                                                                | 120 V        |
| <b>Control supply voltage frequency 1 rated value</b>                                 | 50 Hz        |
| <b>Control supply voltage frequency 2 rated value</b>                                 | 60 Hz        |
| <b>Operating range factor control supply voltage rated value of magnet coil at AC</b> |              |
| • at 50 Hz                                                                            | 0.85 ... 1.1 |
| • at 60 Hz                                                                            | 0.8 ... 1.1  |
| <b>Apparent pick-up power of magnet coil at AC</b>                                    | 31.7 V·A     |
| <b>Inductive power factor with closing power of the coil</b>                          | 0.77         |
| <b>Apparent holding power of magnet coil at AC</b>                                    | 5.1 V·A      |
| <b>Inductive power factor with the holding power of the coil</b>                      | 0.27         |

#### Auxiliary circuit

|                                                  |                                                 |
|--------------------------------------------------|-------------------------------------------------|
| <b>Number of NC contacts</b>                     |                                                 |
| • for auxiliary contacts                         |                                                 |
| — instantaneous contact                          | 0                                               |
| <b>Number of NO contacts</b>                     |                                                 |
| • for auxiliary contacts                         |                                                 |
| — instantaneous contact                          | 1                                               |
| <b>Operating current at AC-12 maximum</b>        | 10 A                                            |
| <b>Operating current at AC-15</b>                |                                                 |
| • at 230 V rated value                           | 6 A                                             |
| • at 400 V rated value                           | 3 A                                             |
| <b>Operating current at DC-12</b>                |                                                 |
| • at 60 V rated value                            | 6 A                                             |
| • at 110 V rated value                           | 3 A                                             |
| • at 220 V rated value                           | 1 A                                             |
| <b>Operating current at DC-13</b>                |                                                 |
| • 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                                           |
| <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

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

- Side-by-side mounting

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>)

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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                                                                       | Test Certificates                             |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------|
|  |  |  | <a href="#">Baumusterprüfbescheinigung</a> | <br>EG-Konf. | <a href="#">spezielle Prüfbescheinigungen</a> |

| Shipping Approval                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| ABS                                                                               | DNV                                                                               | GL                                                                                | LRS                                                                               | PRS                                                                                 | RINA                                                                                |

| Shipping Approval                                                                 | other                   |                                   |                               |
|-----------------------------------------------------------------------------------|-------------------------|-----------------------------------|-------------------------------|
|  | <a href="#">sonstig</a> | <a href="#">Umweltbestätigung</a> | <a href="#">Bestätigungen</a> |
| RMRS                                                                              |                         |                                   |                               |

## 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=3RT1016-1AK61-Z X95>

### Cax online generator

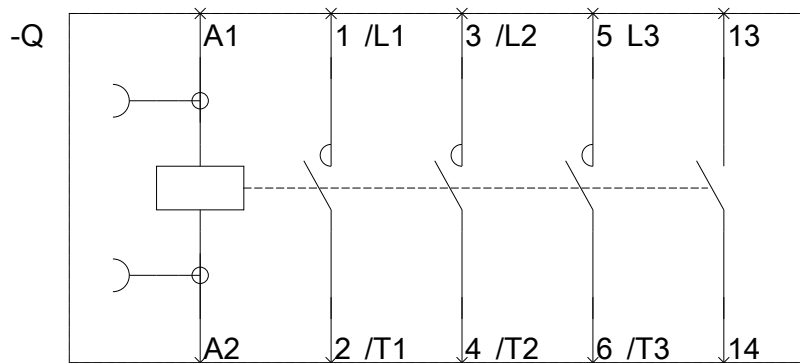
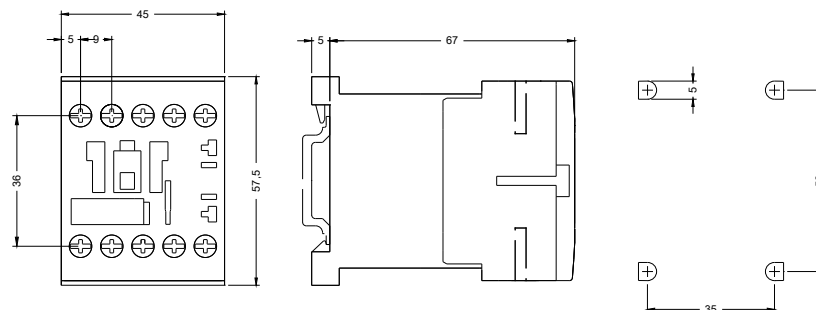
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1016-1AK61-Z X95>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1016-1AK61-Z X95>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1016-1AK61-Z X95&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1016-1AK61-Z X95&lang=en)



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