



CONTACTOR, AC-3 4 kW/400 V, AC-1 18 A,  
DC 230 V, 4-POLE, 2 NO + 2 NC,  
SIZE S00, SCREW CONNECTION

### General technical data:

|                                                                                       |    |             |
|---------------------------------------------------------------------------------------|----|-------------|
| product brand name                                                                    |    | SIRIUS      |
| Size of the contactor                                                                 |    | S00         |
| Protection class IP / on the front                                                    |    | IP20        |
| Protection against electrical shock                                                   |    | finger-safe |
| Degree of pollution                                                                   |    | 3           |
| Installation altitude / at a height over sea level / maximum                          | m  | 2,000       |
| Ambient temperature                                                                   |    |             |
| • during storage                                                                      | °C | -55 ... +80 |
| • during operating                                                                    | °C | -25 ... +60 |
| Insulation voltage / rated value                                                      | V  | 690         |
| Mechanical operating cycles as operating time                                         |    |             |
| • of the contactor / typical                                                          |    | 30,000,000  |
| • of the contactor with added auxiliary switch block / typical                        |    | 10,000,000  |
| • of the contactor with added electronics-compatible auxiliary switch block / typical |    | 5,000,000   |

### Main circuit:

|                                             |  |   |
|---------------------------------------------|--|---|
| Number of NC contacts / for main contacts   |  | 2 |
| Number of NO contacts / for main contacts   |  | 2 |
| Operational current / at AC-1 / up to 690 V |  |   |

|                                                      |    |       |
|------------------------------------------------------|----|-------|
| • at 40 °C ambient temperature / rated value         | A  | 18    |
| • at 60 °C ambient temperature / rated value         | A  | 16    |
| <b>Operating current / at AC-2 / at AC-3</b>         |    |       |
| • at 400 V                                           |    |       |
| • per NO contact / rated value                       | A  | 9     |
| • per NC contact / rated value                       | A  | 9     |
| <b>Operating current</b>                             |    |       |
| • with 1 current path / at DC-1                      |    |       |
| • at 24 V / rated value                              | A  | 16    |
| • at 110 V / rated value                             | A  | 2.1   |
| • at 220 V / rated value                             | A  | 0.8   |
| • at 440 V / rated value                             | A  | 0.6   |
| • with 2 current paths in series / at DC-1           |    |       |
| • at 24 V / rated value                              | A  | 16    |
| • at 110 V / rated value                             | A  | 12    |
| • at 220 V / rated value                             | A  | 1.6   |
| • at 440 V / rated value                             | A  | 0.8   |
| <b>Operating current</b>                             |    |       |
| • with 1 current path / at DC-3 / at DC-5            |    |       |
| • at 24 V                                            |    |       |
| • per NO contact / rated value                       | A  | 16    |
| • per NC contact / rated value                       | A  | 16    |
| • at 110 V                                           |    |       |
| • per NO contact / rated value                       | A  | 0.15  |
| • per NC contact / rated value                       | A  | 0.075 |
| • at 220 V                                           |    |       |
| • per NO contact / rated value                       | A  | 0.75  |
| • per NC contact / rated value                       | A  | 0.375 |
| • with 2 current paths in series / at DC-3 / at DC-5 |    |       |
| • at 24 V                                            |    |       |
| • per NO contact / rated value                       | A  | 16    |
| • per NC contact / rated value                       | A  | 16    |
| • at 110 V                                           |    |       |
| • per NO contact / rated value                       | A  | 0.35  |
| • per NC contact / rated value                       | A  | 0.175 |
| <b>Operating performance</b>                         |    |       |
| • at AC-1                                            |    |       |
| • at 230 V / rated value                             | kW | 6.5   |
| • at 400 V / rated value                             | kW | 11    |
| • at AC-2 / at AC-3                                  |    |       |

|                                                                                                                                                                                                                                                                                                                                      |     |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------|
| <ul style="list-style-type: none"> <li>• at 230 V <ul style="list-style-type: none"> <li>• per NO contact / rated value</li> <li>• per NC contact / rated value</li> </ul> </li> <li>• at 400 V <ul style="list-style-type: none"> <li>• per NO contact / rated value</li> <li>• per NC contact / rated value</li> </ul> </li> </ul> | kW  | 3     |
|                                                                                                                                                                                                                                                                                                                                      | kW  | 3     |
|                                                                                                                                                                                                                                                                                                                                      | kW  | 4     |
|                                                                                                                                                                                                                                                                                                                                      | kW  | 4     |
| <b>Active power loss / at AC-3 / at 400 V / with rated Operating current value / per conductor</b>                                                                                                                                                                                                                                   | W   | 0.7   |
| <b>Frequency of operation</b>                                                                                                                                                                                                                                                                                                        |     |       |
| <ul style="list-style-type: none"> <li>• with AC-1 / maximum</li> </ul>                                                                                                                                                                                                                                                              | 1/h | 1,000 |
| <ul style="list-style-type: none"> <li>• at AC-2 / at AC-3 / maximum</li> </ul>                                                                                                                                                                                                                                                      | 1/h | 750   |

| Control circuit/ Control:                                                                   |    |              |
|---------------------------------------------------------------------------------------------|----|--------------|
| <b>Voltage type / of control feed voltage</b>                                               |    | DC           |
| <b>Control supply voltage</b>                                                               |    |              |
| <ul style="list-style-type: none"> <li>• for DC / rated value</li> </ul>                    | V  | 230          |
| <b>operating range factor control supply voltage rated value / of the magnet coil</b>       |    |              |
| <ul style="list-style-type: none"> <li>• for DC</li> </ul>                                  |    | 0.85 ... 1.1 |
| <b>Pull-in power / of the solenoid / for DC</b>                                             | W  | 3.3          |
| <b>Holding power / of the solenoid / for DC</b>                                             | W  | 3.3          |
| <b>Closing delay</b>                                                                        |    |              |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                   | ms | 8 ... 35     |
| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                   | ms | 25 ... 100   |
| <b>Opening delay</b>                                                                        |    |              |
| <ul style="list-style-type: none"> <li>• at AC</li> </ul>                                   | ms | 4 ... 30     |
| <ul style="list-style-type: none"> <li>• at DC</li> </ul>                                   | ms | 7 ... 10     |
| <b>Arcing time</b>                                                                          | ms | 10 ... 15    |
| <b>Residual current / of electronics / for control with signal &lt;0&gt;</b>                |    |              |
| <ul style="list-style-type: none"> <li>• at 24 V / with DC / maximum permissible</li> </ul> | A  | 0.01         |

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

|                                     |   |     |
|-------------------------------------|---|-----|
| • at 60 V / rated value             | A | 6   |
| • at 110 V / rated value            | A | 3   |
| • at 220 V / rated value            | A | 1   |
| <b>Operating current / at DC-13</b> |   |     |
| • at 24 V / rated value             | A | 10  |
| • at 60 V / rated value             | A | 2   |
| • at 110 V / rated value            | A | 1   |
| • at 220 V / rated value            | A | 0.3 |

#### Short-circuit:

##### Design of the fuse link

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

fuse gL/gG: 10 A

fuse gL/gG: 35 A

fuse gL/gG: 20 A

#### Installation/ mounting/ dimensions:

|                                            |    |                                                                                                                         |
|--------------------------------------------|----|-------------------------------------------------------------------------------------------------------------------------|
| <b>mounting position</b>                   |    | with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back |
| <b>Mounting type</b>                       |    | screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022                                  |
| <b>Mounting type / series installation</b> |    | Yes                                                                                                                     |
| <b>Width</b>                               | mm | 45                                                                                                                      |
| <b>Height</b>                              | mm | 57.5                                                                                                                    |
| <b>Depth</b>                               | mm | 72                                                                                                                      |

#### Connections/ terminals:

|                                                        |  |                                                                       |
|--------------------------------------------------------|--|-----------------------------------------------------------------------|
| <b>Design of the electrical connection</b>             |  |                                                                       |
| • for main current circuit                             |  | screw-type terminals                                                  |
| • for auxiliary and control current circuit            |  | screw-type terminals                                                  |
| <b>Type of the connectable conductor cross-section</b> |  |                                                                       |
| • for main contacts                                    |  |                                                                       |
| • solid                                                |  | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²) |
| • finely stranded                                      |  |                                                                       |
| • with conductor end processing                        |  | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)                           |
| • for AWG conductors / for main contacts               |  | 2x (20 ... 16), 2x (18 ... 14), 1x 12                                 |
| • for auxiliary contacts                               |  |                                                                       |
| • solid                                                |  | 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²) |
| • finely stranded                                      |  |                                                                       |

- with conductor end processing
- for AWG conductors / for auxiliary contacts

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



CCC



CSA



UL



UR

[Type Examination](#)

### Declaration of Conformity

### Test Certificates



EG-Konf.

[Special Test  
Certificate](#)

### Shipping Approval



ABS



GL



LRS



RINA



RMRS

### other

[Confirmation](#)

[other](#)

[Environmental  
Confirmations](#)

## Further information:

### 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

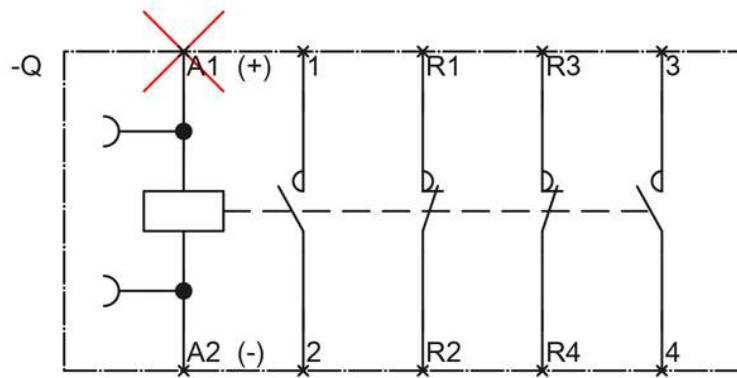
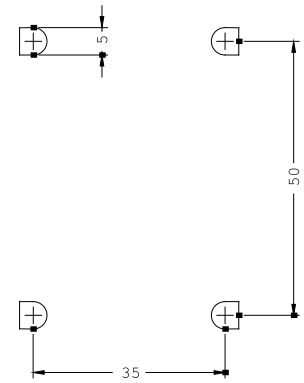
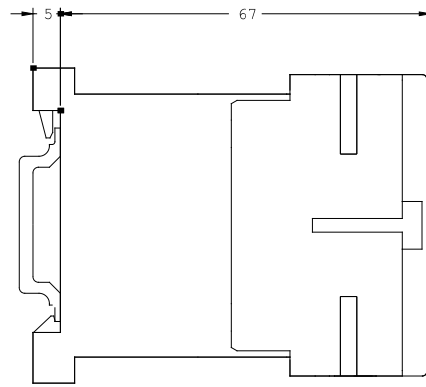
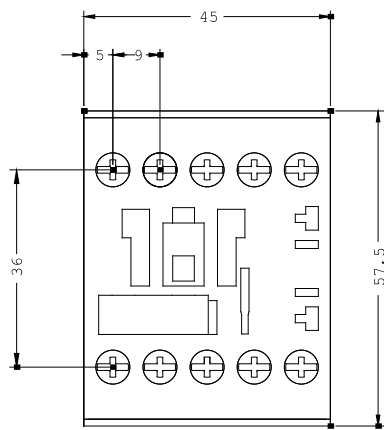
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT1516-1BP40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1516-1BP40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1516-1BP40)



last change:

Aug 4, 2014