



CONTACTOR RELAY, 2NO+2NC, DC 42 V,  
SCREW CONNECTION, SIZE S00

| General technical data:                                                         |    |                                                                                    |
|---------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------|
| product brand name                                                              |    | SIRIUS                                                                             |
| Product designation                                                             |    | contactor relay                                                                    |
| Size of the contactor                                                           |    | S00                                                                                |
| Protection class IP / on the front                                              |    | IP20                                                                               |
| Degree of pollution                                                             |    | 3                                                                                  |
| Insulation voltage / with degree of pollution 3 / rated value                   | V  | 690                                                                                |
| Installation altitude / at a height over sea level / maximum                    | m  | 2,000                                                                              |
| Ambient temperature                                                             |    |                                                                                    |
| • during transport                                                              | °C | -55 ... +80                                                                        |
| • during storage                                                                | °C | -55 ... +80                                                                        |
| • during operating                                                              | °C | -25 ... +60                                                                        |
| Contact reliability                                                             |    | one incorrect switching operation of 100 million switching operations (17 V, 1 mA) |
| Resistance against shock                                                        |    | 10g / 5 ms and 5g / 10 ms                                                          |
| Impulse voltage resistance / rated value                                        | kV | 6                                                                                  |
| Reference code                                                                  |    |                                                                                    |
| • according to DIN EN 61346-2                                                   |    | K                                                                                  |
| • according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 |    | K                                                                                  |
| • according to DIN EN 81346-2                                                   |    | K                                                                                  |

|                                                                                       |   |                                                 |
|---------------------------------------------------------------------------------------|---|-------------------------------------------------|
| <b>Mechanical operating cycles as operating time</b>                                  |   |                                                 |
| • 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                                       |
| <b>Control circuit/ Control:</b>                                                      |   |                                                 |
| <b>Voltage type / of control feed voltage</b>                                         |   | DC                                              |
| <b>Control supply voltage</b>                                                         |   |                                                 |
| • for DC / rated value                                                                | V | 42                                              |
| <b>Operating range factor control supply voltage rated value / of the magnet coil</b> |   |                                                 |
| • for DC                                                                              |   | 0.8 ... 1.1                                     |
| <b>Pull-in power / of the solenoid / for DC</b>                                       | W | 3.2                                             |
| <b>Holding power / of the solenoid / for DC</b>                                       | W | 3.2                                             |
| <b>Auxiliary circuit:</b>                                                             |   |                                                 |
| <b>Product extension / auxiliary switch</b>                                           |   | Yes                                             |
| <b>Identification number and letter for switching elements</b>                        |   | 22 E                                            |
| <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</b>                                 |   | 2                                               |
| • delayed switching                                                                   |   | 0                                               |
| • instantaneous switching                                                             |   | 2                                               |
| • asynchronous switching                                                              |   | 0                                               |
| • lagging switching                                                                   |   | 0                                               |
| <b>Number of NO contacts / for auxiliary contacts</b>                                 |   | 2                                               |
| • instantaneous switching                                                             |   | 2                                               |
| • delayed switching                                                                   |   | 0                                               |
| • asynchronous switching                                                              |   | 0                                               |
| • leading switching                                                                   |   | 0                                               |
| <b>Number of changeover contacts</b>                                                  |   |                                                 |
| • for auxiliary contacts                                                              |   | 0                                               |
| • of the auxiliary contacts / instantaneous switching                                 |   | 0                                               |
| <b>Operating current</b>                                                              |   |                                                 |
| • at AC-12 / maximum                                                                  | A | 10                                              |
| • at AC-15                                                                            |   |                                                 |
| • at 230 V / rated value                                                              | A | 6                                               |
| • at 400 V / rated value                                                              | A | 3                                               |
| • at 500 V / rated value                                                              | A | 2                                               |
| • at 690 V / rated value                                                              | A | 1                                               |
| <b>Operating current / with 1 current path</b>                                        |   |                                                 |

- at DC-12
  - at 24 V / rated value
  - at 110 V / rated value
  - at 220 V / rated value
- at DC-13
  - at 24 V / rated value
  - at 110 V / rated value
  - at 220 V / rated value

|   |      |
|---|------|
| A | 10   |
| A | 3    |
| A | 1    |
| A | 10   |
| A | 1    |
| A | 0.27 |

#### Short-circuit:

**Design of the fuse link / for short-circuit protection of the auxiliary switch / required**

fuse gL/gG: 10 A

#### Installation/ mounting/ dimensions:

**mounting position**

+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface

**Mounting type**

screw and snap-on mounting

**Width**

mm 45

**Height**

mm 57.5

**Depth**

mm 72

**Distance, to be maintained, to the ranks assembly / sideways**

mm 0

#### Connections/ terminals:

**Design of the electrical connection / for auxiliary and control current circuit**

screw-type terminals

**Type of the connectable conductor cross-section**

- for auxiliary contacts
  - solid
  - 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 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:

**Verification of suitability**

CSA / UL / CCC / GL / LRS / BV / DNV / RMRS / RINA

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



[Type Examination](#)



#### Test Certificates

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

#### Shipping Approval



#### Shipping Approval

other



[other](#)

[Environmental Confirmations](#)

#### Safety related data:

##### Proportion of dangerous failures

- with high demand rate / according to SN 31920
- with low demand rate / according to SN 31920

%

75

%

40

##### Protection against electrical shock

finger-safe

##### T1 value / for proof test interval or service life / according to IEC 61508

a

20

##### B10 value / with high demand rate

- according to SN 31920
- note

1,000,000

With 0.3 x Ie

#### Further information:

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

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

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/>

##### Cax online generator

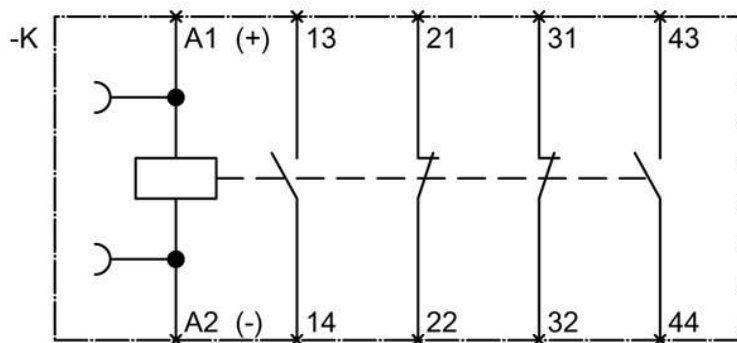
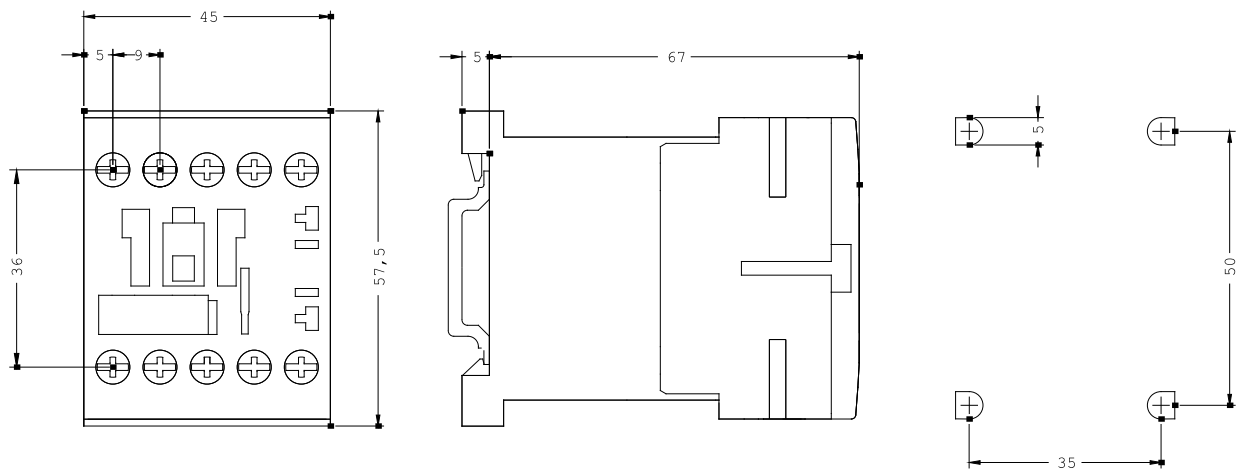
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RH1122-1BD40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH1122-1BD40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1122-1BD40)



last change:

Jul 21, 2014