



COUPLING RELAY, 2NO+2NC, DC 24 V,  
0.7...1.25\*US,  
WITH VARISTOR SCREW CONNECTION, SIZE S00

### General technical data:

|                                                                                 |    |                                                                                    |
|---------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------|
| product brand name                                                              |    | SIRIUS                                                                             |
| Product designation                                                             |    | Coupling relay for switching auxiliary circuits                                    |
| 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><br>• of the contactor / typical                                                                                           |                           | 30,000,000                                      |
| <b>Control circuit/ Control:</b>                                                                                                                                               |                           |                                                 |
| <b>Voltage type / of control feed voltage</b>                                                                                                                                  |                           | DC                                              |
| <b>Control supply voltage</b><br>• for DC / rated value                                                                                                                        | V                         | 24                                              |
| <b>Operating range factor control supply voltage rated value / of the magnet coil</b><br>• for DC                                                                              |                           | 0.7 ... 1.25                                    |
| <b>Pull-in power / of the solenoid / for DC</b>                                                                                                                                | W                         | 2.3                                             |
| <b>Holding power / of the solenoid / for DC</b>                                                                                                                                | W                         | 2.3                                             |
| <b>Design of the surge suppressor</b>                                                                                                                                          |                           | with varistor                                   |
| <b>Auxiliary circuit:</b>                                                                                                                                                      |                           |                                                 |
| <b>Product extension / auxiliary switch</b>                                                                                                                                    |                           | No                                              |
| <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><br>• delayed switching<br>• instantaneous switching<br>• asynchronous switching<br>• lagging switching                   |                           | 2<br>0<br>2<br>0<br>0                           |
| <b>Number of NO contacts / for auxiliary contacts</b><br>• instantaneous switching<br>• delayed switching<br>• asynchronous switching<br>• leading switching                   |                           | 2<br>2<br>0<br>0<br>0                           |
| <b>Number of changeover contacts</b><br>• for auxiliary contacts<br>• of the auxiliary contacts / instantaneous switching                                                      |                           | 0<br>0                                          |
| <b>Operating current</b><br>• at AC-12 / maximum<br>• at AC-15<br>• at 230 V / rated value<br>• at 400 V / rated value<br>• at 500 V / rated value<br>• at 690 V / rated value | A<br><br>A<br>A<br>A<br>A | 10<br><br>6<br>3<br>2<br>1                      |
| <b>Operating current / with 1 current path</b><br>• at DC-12<br>• at 24 V / rated value                                                                                        | A                         | 10                                              |

- 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 | 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:

|                                                                     |    |                                                                                                                                      |
|---------------------------------------------------------------------|----|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>mounting position</b>                                            |    | +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface |
| <b>Mounting type</b>                                                |    | screw and snap-on mounting                                                                                                           |
| <b>Width</b>                                                        | mm | 45                                                                                                                                   |
| <b>Height</b>                                                       | mm | 57.5                                                                                                                                 |
| <b>Depth</b>                                                        | mm | 72                                                                                                                                   |
| <b>Distance, to be maintained, to the ranks assembly / sideways</b> | 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 /<br>Safety of<br>Machinery | Declaration of<br>Conformity |
|--------------------------|-----------------------------------------------|------------------------------|



[Type Examination](#)



#### Test Certificates

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)

#### Shipping Approval



#### Shipping Approval

other



[other](#)

[Environmental  
Confirmations](#)

#### Safety related data:

|                                                                                    |   |               |
|------------------------------------------------------------------------------------|---|---------------|
| <b>Proportion of dangerous failures</b>                                            |   |               |
| • with high demand rate / according to SN 31920                                    | % | 75            |
| • with low demand rate / according to SN 31920                                     | % | 40            |
| <b>Protection against electrical shock</b>                                         |   | finger-safe   |
| <b>T1 value / for proof test interval or service life / according to IEC 61508</b> | a | 20            |
| <b>B10 value / with high demand rate</b>                                           |   |               |
| • according to SN 31920                                                            |   | 1,000,000     |
| • note                                                                             |   | 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**

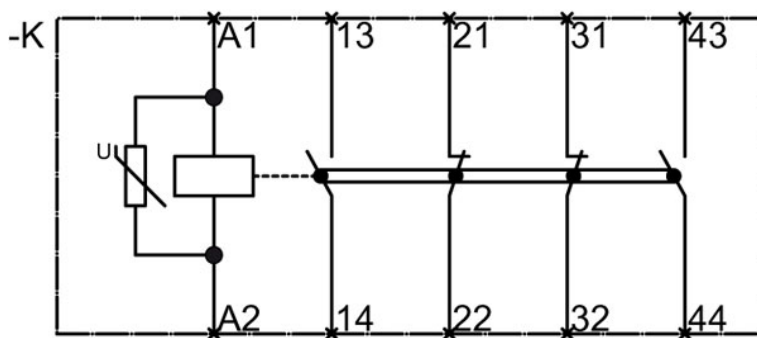
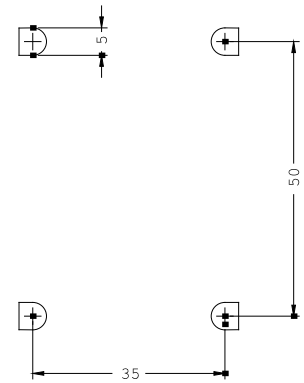
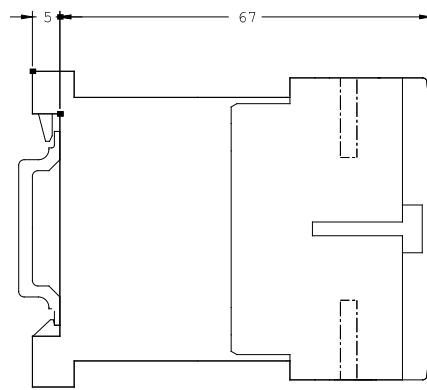
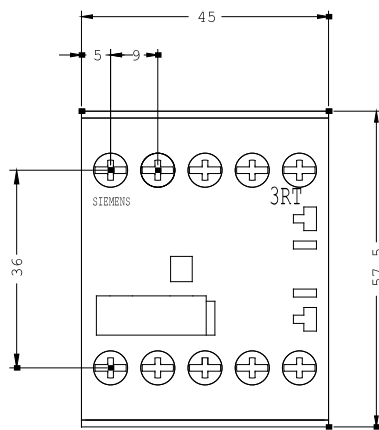
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RH1122-1KB40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH1122-1KB40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1122-1KB40)



last change:

Jul 21, 2014