



COUPLING RELAY F. AUXILIARY CIRCUITS,  
3NO+1 NC, 24V DC, SIZE S00,  
0.85...1.85XUS, 1.4W,  
CAGE CLAMP CONNECTION, DIODE BUILT-IN

### 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                                      |
| <b>Control circuit/ Control:</b>                                                      |   |                                                 |
| <b>Voltage type / of control feed voltage</b>                                         |   | DC                                              |
| <b>Control supply voltage</b>                                                         |   |                                                 |
| • for DC / rated value                                                                | V | 24                                              |
| <b>Operating range factor control supply voltage rated value / of the magnet coil</b> |   |                                                 |
| • for DC                                                                              |   | 0.85 ... 1.85                                   |
| <b>Pull-in power / of the solenoid / for DC</b>                                       | W | 1.4                                             |
| <b>Holding power / of the solenoid / for DC</b>                                       | W | 1.4                                             |
| <b>Design of the surge suppressor</b>                                                 |   | with diode                                      |
| <b>Auxiliary circuit:</b>                                                             |   |                                                 |
| <b>Product extension / auxiliary switch</b>                                           |   | No                                              |
| <b>Identification number and letter for switching elements</b>                        |   | 31 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>                                 |   | 1                                               |
| • delayed switching                                                                   |   | 0                                               |
| • instantaneous switching                                                             |   | 1                                               |
| • asynchronous switching                                                              |   | 0                                               |
| • lagging switching                                                                   |   | 0                                               |
| <b>Number of NO contacts / for auxiliary contacts</b>                                 |   | 3                                               |
| • instantaneous switching                                                             |   | 3                                               |
| • 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                                                               | 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:

**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 60

**Depth**

mm 73

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

mm 0

#### Connections/ terminals:

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

Cage Clamp terminals

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

- for auxiliary contacts
  - solid
  - finely stranded
    - with conductor end processing
    - without conductor final cutting
- for AWG conductors / for auxiliary contacts

2x (0.25 ... 2.5 mm<sup>2</sup>)

2x (0.25 ... 1.5 mm<sup>2</sup>)

2x (0.25 ... 2.5 mm<sup>2</sup>)

2x (24 ... 14)

#### 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 | Shipping Approval |
|-------------------|-------------------|

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)



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

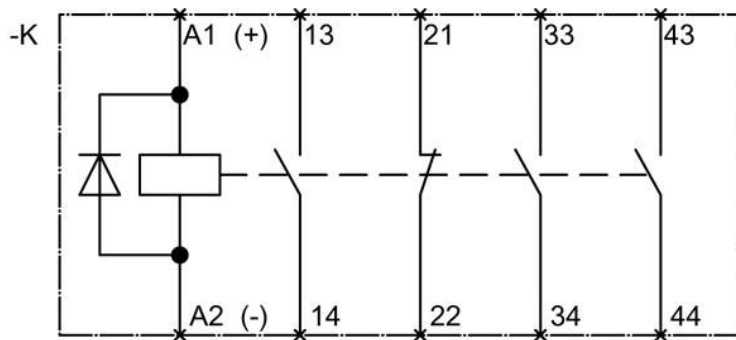
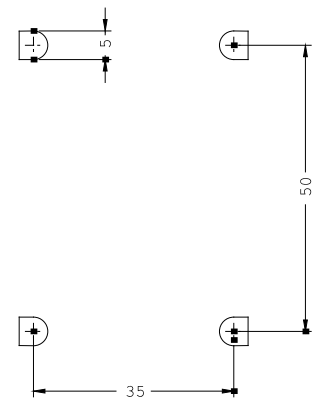
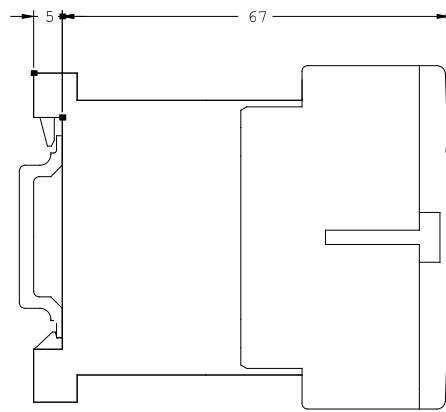
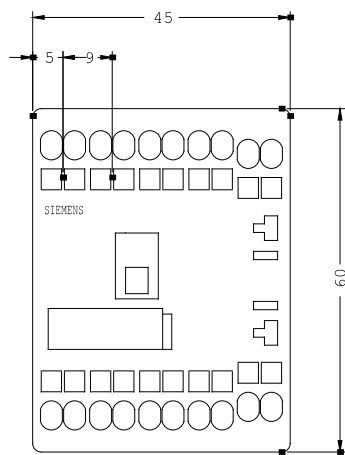
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RH1131-2VB40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH1131-2VB40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1131-2VB40)



last change:

Jul 21, 2014