



CONTACTOR RELAY, 2NO+2NC, AC 48 V,  
50/60 HZ, CAGE-CLAMP 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  |

| Control circuit/ Control:                                                             |     |              |
|---------------------------------------------------------------------------------------|-----|--------------|
| <b>Voltage type / of control feed voltage</b>                                         |     | AC           |
| <b>Control supply voltage frequency</b>                                               |     |              |
| • 1 / rated value                                                                     | Hz  | 50           |
| • 2 / rated value                                                                     | Hz  | 60           |
| <b>Control supply voltage</b>                                                         |     |              |
| • at 50 Hz / at AC / rated value                                                      | V   | 48           |
| • at 60 Hz / at AC / rated value                                                      | V   | 48           |
| <b>Operating range factor control supply voltage rated value / of the magnet coil</b> |     |              |
| • at 50 Hz                                                                            |     |              |
| • for AC                                                                              |     | 0.8 ... 1.1  |
| • at 60 Hz                                                                            |     |              |
| • for AC                                                                              |     | 0.85 ... 1.1 |
| <b>Apparent pull-in power / of the solenoid / for AC</b>                              | V·A | 27           |
| <b>Apparent holding power / of the solenoid / for AC</b>                              | V·A | 4.6          |
| <b>Inductive power factor</b>                                                         |     |              |
| • with the pull-in power of the coil                                                  |     | 0.8          |
| • with the pull-in power of the coil                                                  |     | 0.27         |

| Auxiliary circuit:                                             |  |                                                 |
|----------------------------------------------------------------|--|-------------------------------------------------|
| <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                               | A | 10   |
| • at 110 V / rated value                              | A | 3    |
| • at 220 V / rated value                              | A | 1    |
| • at DC-13                                            |   |      |
| • at 24 V / rated value                               | A | 10   |
| • at 110 V / rated value                              | A | 1    |
| • at 220 V / rated value                              | 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;<br>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 | 60                                                                                                                                      |
| <b>Depth</b>                                                        | mm | 73                                                                                                                                      |
| <b>Distance, to be maintained, to the ranks assembly / sideways</b> | mm | 0                                                                                                                                       |

#### Connections/ terminals:

|                                                                                        |  |                       |
|----------------------------------------------------------------------------------------|--|-----------------------|
| <b>Design of the electrical connection / for auxiliary and control current circuit</b> |  | Cage Clamp terminals  |
| <b>Type of the connectable conductor cross-section</b>                                 |  |                       |
| • for auxiliary contacts                                                               |  |                       |
| • solid                                                                                |  | 2x (0.25 ... 2.5 mm²) |
| • finely stranded                                                                      |  |                       |
| • with conductor end processing                                                        |  | 2x (0.25 ... 1.5 mm²) |
| • without conductor final cutting                                                      |  | 2x (0.25 ... 2.5 mm²) |

• for AWG conductors / for auxiliary contacts

2x (24 ... 14)

## 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



CCC



CSA



UL

[Type Examination](#)



EG-Konf.

### Test Certificates

[Special Test  
Certificate](#)

[Type Test  
Certificates/Test  
Report](#)

### Shipping Approval



ABS



BUREAU  
VERITAS



DNV



GL



LRS



PRS

### Shipping Approval

other



RINA



RMRS

[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)

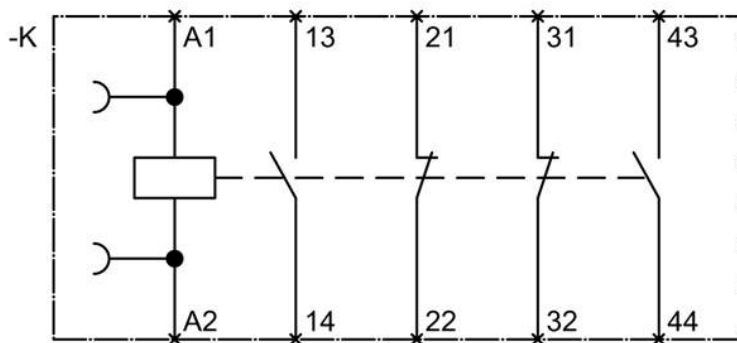
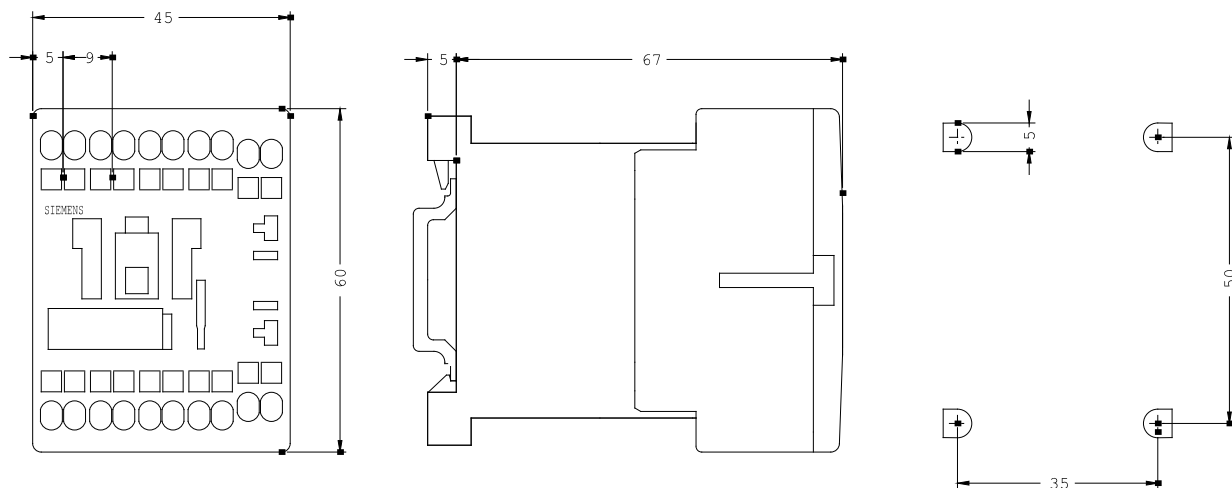
<https://mall.industry.siemens.com/>

### Cax online generator

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

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

<http://support.automation.siemens.com/WW/view/en/3RH1122-2AH00/all>



last change:

Aug 4, 2014