



CONTACTOR RELAY, 4NO, AC 220V,  
50/60 HZ, SIZE S00, SCREW TERMINAL

### General technical data:

|   |    |                            |
|---|----|----------------------------|
| Product brand name  |    | SIRIUS                     |
| Size of the contactor   |    | S00                        |
| Identification number and letter for switching elements       |    | 40 E                       |
| Product extension / auxiliary switch                          |    | Yes                        |
| Protection class IP / on the front                            |    | IP20                       |
| Protection against electrical shock                           |    | finger-safe                |
| 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 storage                          | °C | -55 ... 80                 |
| Ambient temperature / during operating                        | °C | -25 ... 60                 |
| Shock resistance  |    |                            |
| • at rectangular impulse                                      |    |                            |
| • at AC   |    | 7,3g / 5 ms, 4,7g / 10 ms  |
| • at sine pulse   |    |                            |
| • at AC   |    | 11,4g / 5 ms, 7,3g / 10 ms |
| Impulse voltage resistance / rated value                      | kV | 6                          |
| Mechanical operating cycles as operating time                 |    |                            |
| • of the contactor / typical                                  |    | 30,000,000                 |

- of the contactor with added auxiliary switch block / typical
- of the contactor with added electronics-compatible auxiliary switch block / typical

10,000,000  
10,000,000

#### Control circuit:

|  |     |              |
|--|-----|--------------|
| <b>Type of voltage / of the controlled supply voltage</b>                          |     | AC           |
| <b>Control supply voltage / 1</b>  |     |              |
| • at 50 Hz / for AC / rated value  | V   | 220          |
| • at 60 Hz / for AC / rated value  | V   | 220          |
| <b>Operating range factor control supply voltage rated value / of the solenoid</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 | 37           |
| <b>Apparent holding power / of the solenoid / for AC</b>                           | V·A | 5.7          |
| <b>Inductive power factor</b>  |     |              |
| • with the pull-in power of the coil   |     | 0.8          |
| • with the pull-in power of the coil   |     | 0.25         |
| <b>Closing delay</b>   |     |              |
| • at AC  | ms  | 8 ... 33     |
| <b>Opening delay</b>   |     |              |
| • at AC  | ms  | 6 ... 25     |
| <b>Arcing time</b>   | s   | 10 ... 15    |

#### 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> |   | 4   |
| <b>Operating current / of the auxiliary contacts / at AC-12 / maximum</b>       | A | 10  |
| <b>Operating current / of the auxiliary contacts / at AC-15</b>                 |   |   |
| • at 230 V  | A | 6   |
| • at 400 V  | A | 3   |
| • at 500 V  | A | 2   |
| • at 690 V  | A | 1   |
| <b>Operating current</b>  |   |   |
| • of the auxiliary contacts / with 1 current path / at DC-12                    |   |   |
| • at 24 V   | A | 6   |
| • at 110 V  | A | 3   |
| • at 220 V  | A | 1   |

|  |     |        |
|--|-----|--------|
| • with 2 current paths in series / at DC-12                  |     |        |
| • at 24 V / rated value                                      | A   | 10     |
| • at 60 V / rated value                                      | A   | 10     |
| • at 110 V / rated value                                     | A   | 4      |
| • at 220 V / rated value                                     | A   | 2      |
| • at 440 V / rated value                                     | A   | 1.3    |
| • at 600 V / rated value                                     | A   | 0.65   |
| • with 3 current paths in series / at DC-12                  |     |        |
| • at 24 V / rated value                                      | A   | 10     |
| • at 60 V / rated value                                      | A   | 10     |
| • at 110 V / rated value                                     | A   | 10     |
| • at 220 V / rated value                                     | A   | 3.6    |
| • at 440 V / rated value                                     | A   | 2.5    |
| • at 600 V / rated value                                     | A   | 1.8    |
| <b>Operating current</b>                                     |     |        |
| • of the auxiliary contacts / with 1 current path / at DC-13 |     |        |
| • at 24 V  | A   | 6      |
| • at 110 V   | A   | 1      |
| • at 220 V   | A   | 0.3    |
| • with 2 current paths in series / at DC-13                  |     |        |
| • at 24 V / rated value                                      | A   | 10     |
| • at 60 V / rated value                                      | A   | 3.5    |
| • at 110 V / rated value                                     | A   | 1.3    |
| • at 220 V / rated value                                     | A   | 0.9    |
| • at 440 V / rated value                                     | A   | 0.2    |
| • at 600 V / rated value                                     | A   | 0.1    |
| • with 3 current paths in series / at DC-13                  |     |        |
| • at 24 V / rated value                                      | A   | 10     |
| • at 60 V / rated value                                      | A   | 4.7    |
| • at 110 V / rated value                                     | A   | 3      |
| • at 220 V / rated value                                     | A   | 1.2    |
| • at 440 V / rated value                                     | A   | 0.5    |
| • at 600 V / rated value                                     | A   | 0.26   |
| <b>Off-load operating frequency</b>                          |     |        |
| • at AC  | 1/h | 10,000 |
| • at DC  | 1/h | 10,000 |
| <b>Frequency of operation</b>                                |     |        |
| • at AC-12 / maximum   | 1/h | 1,000  |
| • at AC-14 / maximum   | 1/h | 1,000  |
| • at AC-15 / maximum   | 1/h | 1,000  |

- at DC-12 / maximum
- at DC-13 / maximum

|     |       |
|-----|-------|
| 1/h | 1,000 |
| 1/h | 1,000 |

#### Short-circuit:

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

- required

Fuse gL/gG: 10 A, miniature circuit breaker C 6 A  
(short-circuit current  $I_k < 400$  A)

#### Installation/mounting/dimensions:

##### Built in orientation

vertical

##### Type of mounting

screw and snap-on mounting onto 35 mm standard mounting rail

##### Width

mm 45

##### Height

mm 57.5

##### Depth

mm 73

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

mm 0

#### Connections:

##### 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), 2x 12

#### Certificates/approvals:

##### General Product Approval

##### Test Certificates



CQC



CSA

[ROSTEST](#)



UL

[Manufacturer](#)

##### Shipping Approval



ABS



DNV



GL



LRS



PRS



RINA

##### Shipping Approval

other



RMRS



VDE

#### UL/CSA ratings:

Contact rating designation / for auxiliary contacts / according to UL

A600 / Q600

#### Safety-related Parameter:

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

- according to SN 31920

1,000,000

##### T1 value / for proof test interval or service life

- according to IEC 61508

a

10

##### Proportion of dangerous failures

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

%

40

%

73

##### Failure rate (FIT value) / with low demand rate

- according to SN 31920

FIT

100

##### Product function / positively driven operation to IEC 60947-5-1

- comment

Yes

with 3RH29

#### Further information:

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

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

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

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

##### Cax online generator:

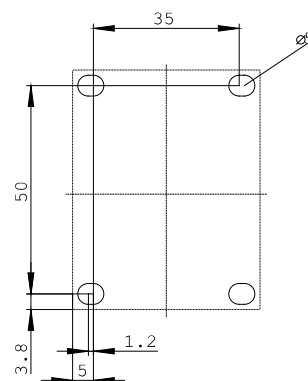
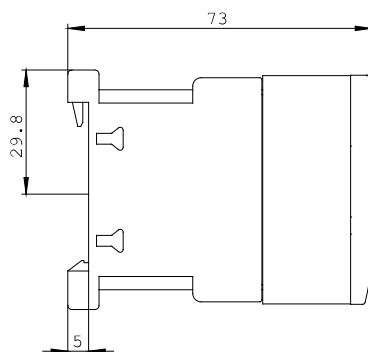
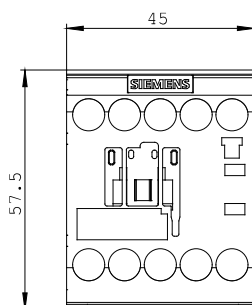
<http://www.siemens.com/cax>

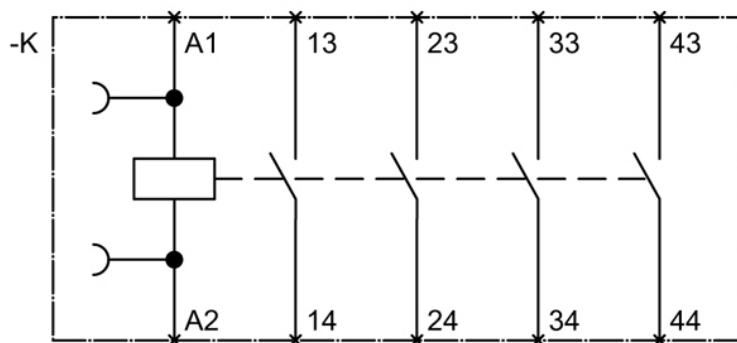
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RH2140-1AN20/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH2140-1AN20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2140-1AN20)





last change:

Oct 24, 2011