



COUPLING CONTACTOR RELAY, 4NO, DC 24V,  
0.85...1.85\*US, SZ S00,  
SPRING-LOADED 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                          |    | No                     |
| 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            |
| • during operating                                            | °C | -25 ... +60            |
| Shock resistance                                              |    |                        |
| • at rectangular impulse                                      |    |                        |
| • at DC                                                       |    | 10g / 5 ms, 5g / 10 ms |
| • at sine pulse                                               |    |                        |
| • at DC                                                       |    | 15g / 5 ms, 8g / 10 ms |
| Impulse voltage resistance / rated value                      | kV | 6                      |
| Mechanical operating cycles as operating time                 |    |                        |

- of the contactor / typical

30,000,000

#### Control circuit/ Control:

##### Voltage type / of control feed voltage

DC

##### Control supply voltage

- for DC / rated value

V

24

##### Operating range factor control supply voltage rated value / of the magnet coil

- for DC

0.85 ... 1.85

##### Holding power / of the solenoid / for DC

W

1.6

##### Pull-in power / of the solenoid / for DC

W

1.6

##### Closing delay

- at DC

ms

30 ... 100

##### Opening delay

- at DC

ms

25 ... 90

##### Arcing time

s

10 ... 15

#### Auxiliary circuit:

##### Contact reliability / of the auxiliary contacts

1 faulty switching per 100 million (17 V, 1 mA)

##### Number of NO contacts / for auxiliary contacts / instantaneous switching

4

##### Operating current

- at AC-12 / maximum

A

10

- at AC-15

- at 230 V / rated value

A

10

- at 400 V / rated value

A

3

- at 500 V / rated value

A

2

- at 690 V / rated value

A

1

##### Operating current

- with 1 current path / 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 440 V / rated value

A

0.3

- at 600 V / rated value

A

0.15

- 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>                    |     |        |
| • with 1 current path / at DC-13            |     |        |
| • at 24 V / rated value                     | A   | 10     |
| • at 110 V / rated value                    | A   | 1      |
| • at 220 V / rated value                    | A   | 0.3    |
| • at 440 V / rated value                    | A   | 0.14   |
| • at 600 V / rated value                    | A   | 0.1    |
| • 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                        | 1/h | 1,000  |
| • at DC-13 / maximum                        | 1/h | 1,000  |

**Short-circuit:**

|                                                                                                                      |  |                               |
|----------------------------------------------------------------------------------------------------------------------|--|-------------------------------|
| <b>Design of the fuse link / for short-circuit protection of the auxiliary switch</b>                                |  |                               |
| • required                                                                                                           |  | fuse gL/gG: 10 A              |
| <b>Design of the miniature circuit breaker / for short-circuit protection of the auxiliary circuit / up to 230 V</b> |  | C characteristic: 6 A; 0.4 kA |

#### 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 onto 35 mm standard mounting rail                                                                         |
| <b>Width</b>             | mm | 45                                                                                                                                   |
| <b>Height</b>            | mm | 70                                                                                                                                   |
| <b>Depth</b>             | mm | 73                                                                                                                                   |

#### Connections/ terminals:

|                                                                              |  |                                   |
|------------------------------------------------------------------------------|--|-----------------------------------|
| <b>Design of the electrical connection</b>                                   |  |                                   |
| • for auxiliary and control current circuit                                  |  | spring-loaded terminals           |
| • for auxiliary contacts / finely stranded / with conductor end processing   |  | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| • for auxiliary contacts / finely stranded / without conductor final cutting |  | 2x (0.5 ... 2.5 mm <sup>2</sup> ) |
| • for AWG conductors / for auxiliary contacts                                |  | 2x (20 ... 12)                    |

#### Certificates/ approvals:

|                                                                                            |                                                                                            |                                                                                                   |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>General Product Approval</b>                                                            | <b>Functional Safety / Safety of Machinery</b>                                             | <b>Declaration of Conformity</b>                                                                  |
| <br>CCC | <br>UL  | <br>EG-Konf. |
| <br>CSA | <br>EAC | <a href="#">Type Examination</a>                                                                  |

#### Test Certificates

[Special Test Certificate](#)

#### Shipping Approval

|                                                                                             |                                                                                                       |                                                                                            |                                                                                           |                                                                                              |                                                                                              |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <br>ABS  | <br>BUREAU VERITAS | <br>DNV | <br>GL | <br>LRS | <br>PRS |
| <b>Shipping Approval</b>                                                                    | <b>other</b>                                                                                          |                                                                                            |                                                                                           |                                                                                              |                                                                                              |
| <br>RINA | <br>RMRS           | <br>VDE | <a href="#">Environmental Confirmations</a>                                               |                                                                                              |                                                                                              |

#### UL/CSA ratings:

|                                                                       |  |             |
|-----------------------------------------------------------------------|--|-------------|
| Contact rating designation / for auxiliary contacts / according to UL |  | A600 / Q600 |
|-----------------------------------------------------------------------|--|-------------|

#### Safety related data:

|                                                                                                                                                                                                   |        |                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------------|
| <b>B10 value / with high demand rate</b> <ul style="list-style-type: none"> <li>• according to SN 31920</li> <li>• note</li> </ul>                                                                |        | 1,000,000<br>With 0.3 x Ie |
| <b>T1 value / for proof test interval or service life</b> <ul style="list-style-type: none"> <li>• according to IEC 61508</li> </ul>                                                              | a      | 20                         |
| <b>Proportion of dangerous failures</b> <ul style="list-style-type: none"> <li>• with low demand rate / according to SN 31920</li> <li>• with high demand rate / according to SN 31920</li> </ul> | %<br>% | 40<br>73                   |
| <b>Failure rate [FIT] / with low demand rate</b> <ul style="list-style-type: none"> <li>• according to SN 31920</li> </ul>                                                                        | FIT    | 100                        |
| <b>Product function / positively driven operation to IEC 60947-5-1</b> <ul style="list-style-type: none"> <li>• comment</li> </ul>                                                                |        | Yes<br>with 3RH29          |

#### Further information:

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

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

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

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

##### Cax online generator

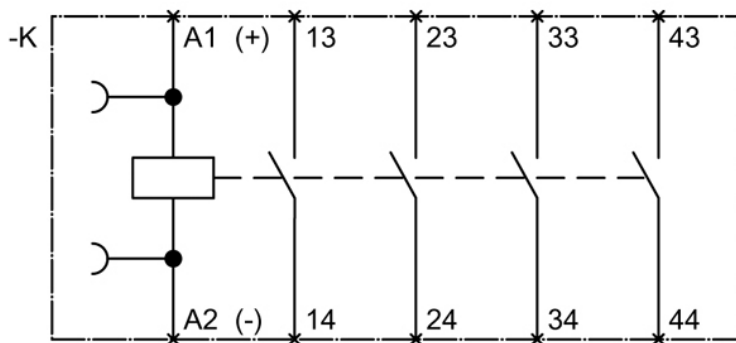
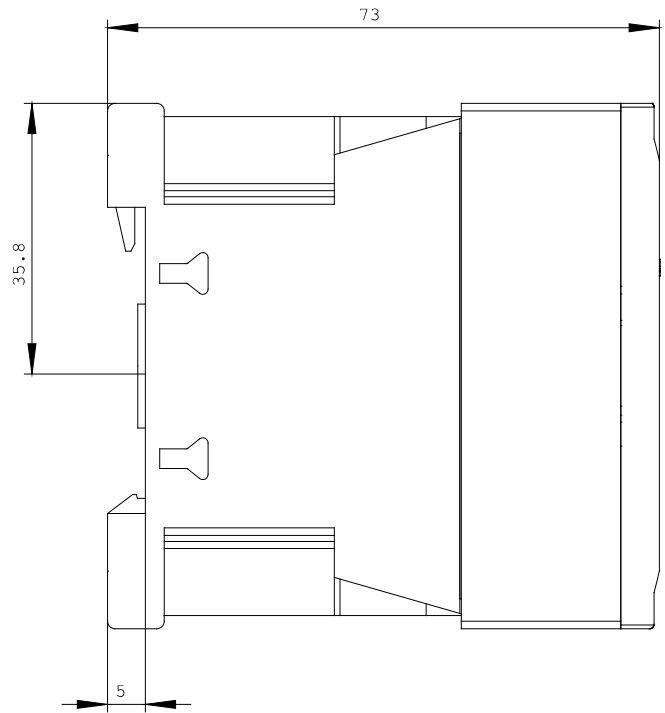
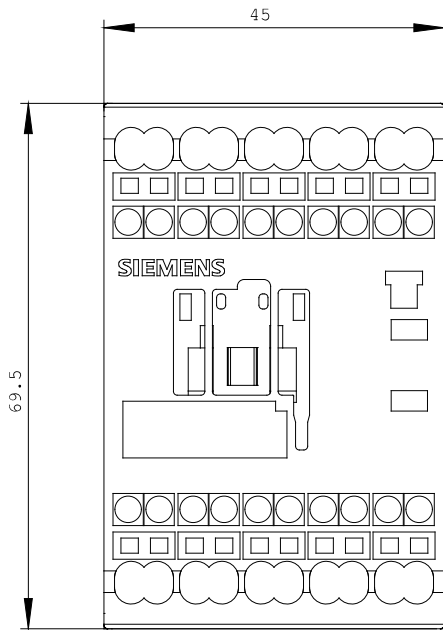
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RH2140-2MB40-0KT0/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH2140-2MB40-0KT0](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2140-2MB40-0KT0)



last change:

Aug 4, 2014