



COUPLING CONTACTOR RELAY RAIL, 4NO,  
DC 24V, 0,7...1,25\*US,  
VARISTOR INTEGRATED, 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 <ul style="list-style-type: none"><li>during storage</li><li>during operating</li><li>note</li></ul>                                                                                                | °C<br>°C | -55 ... +80<br>-40 ... +70<br>Railway application: -40 ... 70 °C with 10 mm clearance. See catalog for other rated conditions |
| Shock resistance <ul style="list-style-type: none"><li>at rectangular impulse<ul style="list-style-type: none"><li>at DC</li></ul></li><li>at sine pulse<ul style="list-style-type: none"><li>at DC</li></ul></li></ul> |          | 10g / 5 ms, 5g / 10 ms<br>15g / 5 ms, 8g / 10 ms                                                                              |

|                                                                                      |    |            |
|--------------------------------------------------------------------------------------|----|------------|
| <b>Impulse voltage resistance / rated value</b>                                      | kV | 6          |
| <b>Mechanical operating cycles as operating time</b><br>• of the contactor / typical |    | 30,000,000 |

|                                                                                                   |    |               |
|---------------------------------------------------------------------------------------------------|----|---------------|
| <b>Control circuit/ Control:</b>                                                                  |    |               |
| <b>Design of the surge suppressor</b>                                                             |    | with varistor |
| <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>Holding power / of the solenoid / for DC</b>                                                   | W  | 2.8           |
| <b>Pull-in power / of the solenoid / for DC</b>                                                   | W  | 2.8           |
| <b>Closing delay</b><br>• at DC                                                                   | ms | 30 ... 100    |
| <b>Opening delay</b><br>• at DC                                                                   | ms | 25 ... 90     |
| <b>Arcing time</b>                                                                                | s  | 10 ... 15     |

|                                                                                                                                                                                                                                                                                                              |                                          |                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------|
| <b>Auxiliary circuit:</b>                                                                                                                                                                                                                                                                                    |                                          |                                                 |
| <b>Contact reliability / of the auxiliary contacts</b>                                                                                                                                                                                                                                                       |                                          | 1 faulty switching per 100 million (17 V, 1 mA) |
| <b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>                                                                                                                                                                                                                              |                                          | 4                                               |
| <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>10<br>3<br>2<br>1                     |
| <b>Operating current</b><br>• with 1 current path / at DC-12<br>• at 24 V / rated value<br>• at 110 V / rated value<br>• at 220 V / rated value<br>• at 440 V / rated value<br>• at 600 V / rated value<br>• with 2 current paths in series / at DC-12<br>• at 24 V / rated value<br>• at 60 V / rated value | A<br>A<br>A<br>A<br>A<br>A<br><br>A<br>A | 10<br>3<br>1<br>0.3<br>0.15<br><br>10<br>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:

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

- required

fuse gL/gG: 10 A

##### Design of the miniature circuit breaker / for short-circuit protection of the auxiliary circuit / up to 230 V

C characteristic: 6 A; 0.4 kA

#### 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 onto 35 mm standard mounting rail

##### Width

mm

45

##### Height

mm

70

##### Depth

mm

73

#### Connections/ terminals:

##### Design of the electrical connection

- for auxiliary and control current circuit
- for auxiliary contacts / finely stranded / with conductor end processing
- for auxiliary contacts / finely stranded / without conductor final cutting
- for AWG conductors / for auxiliary contacts

spring-loaded terminals

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (0.5 ... 2.5 mm<sup>2</sup>)

2x (20 ... 12)

#### Certificates/ approvals:

##### General Product Approval

##### Functional Safety / Safety of Machinery

##### Declaration of Conformity

##### Test Certificates



[Type Examination](#)



EG-Konf.

[Special Test Certificate](#)

#### Shipping Approval



ABS



BUREAU VERITAS



DNV



GL



LRS



PRS

#### Shipping Approval

##### other



RINA



RMRS



VDE

[Environmental Confirmations](#)

#### 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

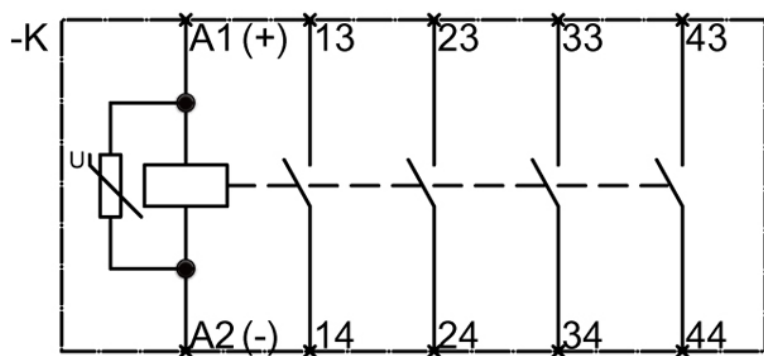
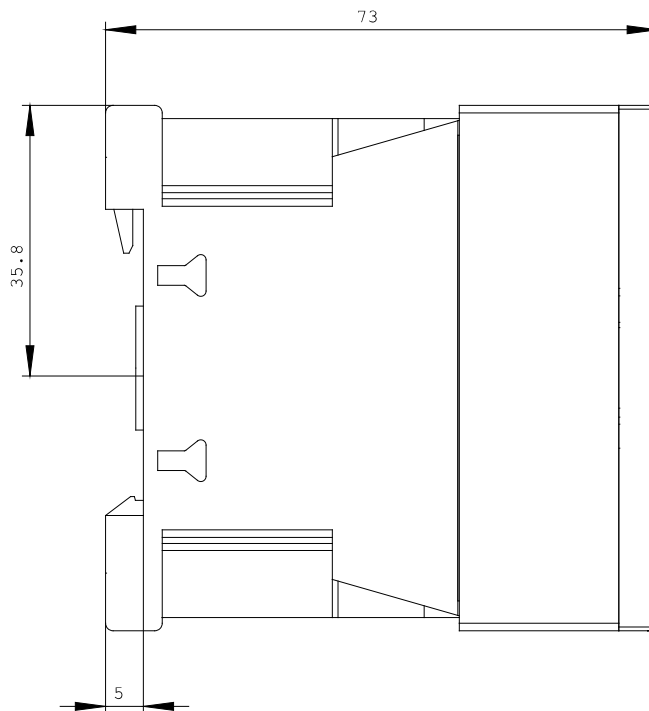
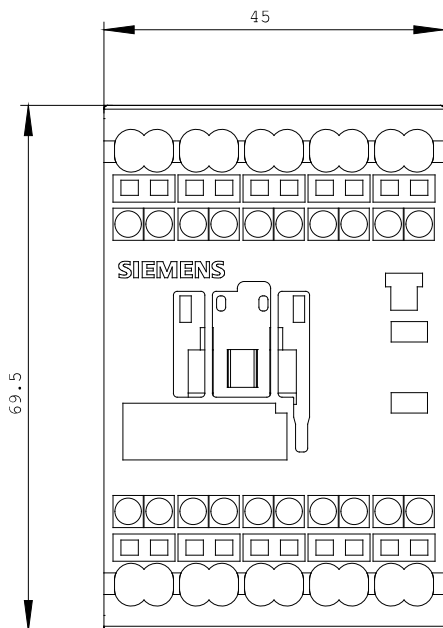
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RH2140-2LB40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RH2140-2LB40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH2140-2LB40)



last change:

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