



CONTACTOR RELAY, 2NO+2NC, AC 24 V,  
50 HZ, SCREW CONNECTION,  
SIZES00 MOUNTING POSITION VERTICAL

| 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   | 24           |
| • at 60 Hz / at AC / rated value                                                      | V   | 24           |
| <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:

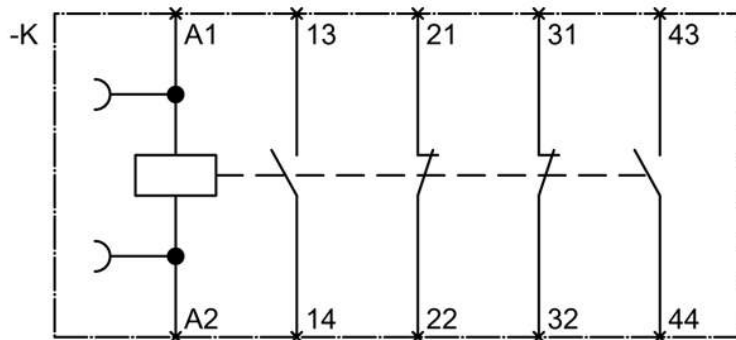
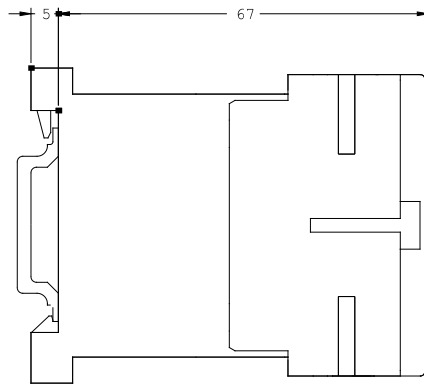
|                                                                     |    |                                          |
|---------------------------------------------------------------------|----|------------------------------------------|
| <b>mounting position</b>                                            |    | standing, on horizontal mounting surface |
| <b>Mounting type</b>                                                |    | screw and snap-on mounting               |
| <b>Width</b>                                                        | mm | 45                                       |
| <b>Height</b>                                                       | mm | 57.5                                     |
| <b>Depth</b>                                                        | mm | 72                                       |
| <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> |  | screw-type terminals                                                                        |
| <b>Type of the connectable conductor cross-section</b>                                 |  |                                                                                             |
| • for auxiliary contacts                                                               |  |                                                                                             |
| • solid                                                                                |  | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup> |
| • finely stranded                                                                      |  |                                                                                             |
| • with conductor end processing                                                        |  | 2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )                       |
| • for AWG conductors / for auxiliary contacts                                          |  | 2x (20 ... 16), 2x (18 ... 14), 1x 12                                                       |

#### 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 |
| <br>CCC <br>CSA <br>EAC <br>UL <a href="#">Type Examination</a> <br>EG-Konf.                                                                 |                                                    |                           |
| Test Certificates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                    |                           |
| <a href="#">Special Test Certificate</a><br><a href="#">Type Test Certificates/Test Report</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                    |                           |
| Shipping Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                    |                           |
| <br>ABS <br>BUREAU VERITAS <br>DNV <br>GL <br>LRS <br>PRS |                                                    |                           |
| Shipping Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | other                                              |                           |
| <br>RINA <br>RMRS <a href="#">other</a> <a href="#">Environmental Confirmations</a>                                                                                                                                                                                                                                                                                                               |                                                    |                           |
| Safety related data:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                    |                           |
| Proportion of dangerous failures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                    |                           |
| • with high demand rate / according to SN 31920                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | %                                                  | 75                        |
| • with low demand rate / according to SN 31920                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | %                                                  | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                    | 1,000,000                 |
| • note                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                    | With 0.3 x Ie             |
| Further information:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                    |                           |
| <b>Information- and Downloadcenter (Catalogs, Brochures,...)</b><br><a href="http://www.siemens.com/industrial-controls/catalogs">http://www.siemens.com/industrial-controls/catalogs</a>                                                                                                                                                                                                                                                                                                                                                                           |                                                    |                           |
| <b>Industry Mall (Online ordering system)</b><br><a href="https://mall.industry.siemens.com/">https://mall.industry.siemens.com/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                    |                           |
| <b>Cax online generator</b><br><a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                    |                           |
| <b>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)</b><br><a href="http://support.automation.siemens.com/WW/view/en/3RH1122-1AB00-1AA0/all">http://support.automation.siemens.com/WW/view/en/3RH1122-1AB00-1AA0/all</a>                                                                                                                                                                                                                                                                                                                      |                                                    |                           |
| <b>Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)</b><br><a href="http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1122-1AB00-1AA0">http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1122-1AB00-1AA0</a>                                                                                                                                                                                                                                                                                   |                                                    |                           |



last change:

Jul 21, 2014