SIEMENS

Product data sheet 3RH1140-1BF40



CONTACTOR RELAY, 4NO, DC 110 V, SCREW CONNECTION, SIZE S00

| General details: | | |
|--|----|--|
| 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 |
| Item designation | | |
| according to DIN EN 61346-2 | | К |
| according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 | | К |
| Mechanical operating cycles as operating time | | |

| 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: | | |
|--|---|---------|
| Type of voltage / of the controlled supply voltage | | DC |
| Control supply voltage / 1 | | |
| • for DC / rated value | V | 110 |
| Working range factor supply voltage rated value / of the magnet coil | | |
| • for DC | | 0.8 1.1 |
| Pull-in power / of the solenoid / for DC | W | 3.2 |
| Holding power / of the solenoid / for DC | W | 3.2 |

| Auxiliary circuit: | | V |
|---|---|---|
| Product extension / auxiliary switch | | Yes |
| Identification number and letter for switching elements | | 40 E |
| Contact reliability / of the auxiliary contacts | | 1 faulty switching per 100 million (17 V, 1 mA) |
| Number of NC contacts / for auxiliary contacts | | 0 |
| delayed switching | | 0 |
| instantaneous switching | | 0 |
| asynchronous switching | | 0 |
| lagging switching | | 0 |
| Number of NO contacts / for auxiliary contacts | | 4 |
| • instantaneous switching | | 4 |
| delayed switching | | 0 |
| asynchronous switching | | 0 |
| leading switching | | 0 |
| Number of changeover contacts | | |
| • for auxiliary contacts | | 0 |
| of the auxiliary contacts / instantaneous switching | | 0 |
| Operating current / of the auxiliary contacts | | |
| • at AC-12 / maximum | Α | 10 |
| • at AC-15 | | |
| • at 230 V | А | 6 |
| • at 400 V | Α | 3 |
| • at 500 V | Α | 2 |
| • at 690 V | Α | 1 |
| • with 1 current path | | |
| • at DC-12 | | |

| • at 24 V | Α | 10 |
|------------|---|------|
| • at 110 V | А | 3 |
| • at 220 V | А | 1 |
| • at DC-13 | | |
| • at 24 V | А | 10 |
| • at 110 V | А | 1 |
| • at 220 V | Α | 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: | | |
| Built in orientation | | with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back |
| Type of mounting | | screw and snap-on mounting |
| Width | mm | 45 |
| Height | mm | 57.5 |
| Depth | mm | 72 |
| Distance, to be maintained, to the ranks assembly / sidewards | mm | 0 |
| Connections: | | |
| Design of the electrical connection / for auxiliary and control current circuit | | screw-type terminals |
| Tune of the connectable conductor erect continu | | |

| 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 | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² |
| • finely stranded | |
| with conductor end processing | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) |
| • 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 **Test Certificates**





ROSTEST



SUVA

Manufacturer

Shipping Approval













Shipping Approval

other



Manufacturer

| Safety: | | |
|---|---|-------------|
| Proportion of dangerous failures | | |
| with high demand rate / according to SN 31920 | % | 75 |
| with low demand rate / according to SN 31920 | % | 40 |
| T1 value / for proof test interval or service life / according to IEC 61508 | а | 20 |
| Protection against electrical shock | | finger-safe |
| B10 value / with high demand rate / according to SN 31920 | | 1,000,000 |

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

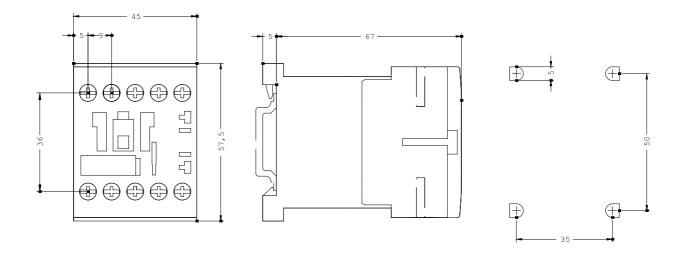
http://www.siemens.com/cax

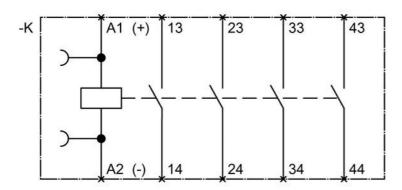
 ${\bf Service \& Support \ (Manuals, \, Certificates, \, Characteristics, \, FAQs, ...)}$

 $\underline{\text{http://support.automation.siemens.com/WW/view/en/3RH1140-1BF40/all}}$

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RH1140-1BF40





last change: Feb 6, 2012