SIEMENS

Data sheet 3RH2244-1BB40



Contactor relay, 4 NO + 4 NC, 24 V DC, Size S00, screw terminal, Captive auxiliary switch, for SUVA applications

| product brand name | SIRIUS |
|--|------------------------|
| product designation | Auxiliary contactor |
| product type designation | 3RH2 |
| General technical data | |
| size of contactor | S00 |
| product extension auxiliary switch | No |
| insulation voltage with degree of pollution 3 at AC rated value | 690 V |
| degree of pollution | 3 |
| surge voltage resistance rated value | _ 6 kV |
| shock resistance at rectangular impulse | |
| • at DC | 10g / 5 ms, 5g / 10 ms |
| shock resistance with sine pulse | |
| • at DC | 15g / 5 ms, 8g / 10 ms |
| mechanical service life (switching cycles) | |
| of contactor typical | 10 000 000 |
| reference code acc. to IEC 81346-2 | K |
| Substance Prohibitance (Date) | 01.10.2009 00:00:00 |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature during operation | -25 +60 °C |
| ambient temperature during storage | -55 +80 °C |
| Main circuit | |
| no-load switching frequency | |
| • at AC | 10 000 1/h |
| • at DC | 10 000 1/h |
| Control circuit/ Control | |
| type of voltage of the control supply voltage | DC |
| control supply voltage at DC | |
| rated value | 24 V |
| operating range factor control supply voltage rated value of magnet coil at DC | |
| initial value | 0.8 |
| full-scale value | 1.1 |
| closing power of magnet coil at DC | 4 W |
| holding power of magnet coil at DC | 4 W |
| closing delay | |
| • at DC | 30 100 ms |

| opening delay | |
|---|---|
| • at DC | 7 13 ms |
| arcing time | 10 15 ms |
| Auxiliary circuit | |
| number of NC contacts for auxiliary contacts | 4 |
| instantaneous contact | 4 |
| number of NO contacts for auxiliary contacts | 4 |
| instantaneous contact | 4 |
| identification number and letter for switching | _ · · · · · · · · · · · · · · · · · · · |
| elements | |
| operational current at AC-12 maximum | 10 A |
| operational current at AC-15 | |
| at 230 V rated value | 6 A |
| at 400 V rated value | 3 A |
| at 500 V rated value | 2 A |
| at 690 V rated value | 1 A |
| operational current at 1 current path at DC-12 | |
| at 24 V rated value | 10 A |
| at 110 V rated value | 3 A |
| • at 220 V rated value | 1 A |
| at 440 V rated value | 0.3 A |
| at 600 V rated value | 0.15 A |
| operational current with 2 current paths in series at | |
| DC-12 | 40.4 |
| • at 24 V rated value | 10 A |
| at 60 V rated value | 10 A |
| at 110 V rated value | 4 A |
| at 220 V rated value | 2 A |
| at 440 V rated value | 1.3 A |
| • at 600 V rated value | 0.65 A |
| operational current with 3 current paths in series at DC-12 | |
| at 24 V rated value | 10 A |
| at 60 V rated value | 10 A |
| at 110 V rated value | 10 A |
| at 220 V rated value | 3.6 A |
| at 440 V rated value | 2.5 A |
| at 600 V rated value | 1.8 A |
| operating frequency at DC-12 maximum | 1 000 1/h |
| operational current at 1 current path at DC-13 | |
| at 24 V rated value | 6 A |
| at 110 V rated value | 1 A |
| at 220 V rated value | 0.3 A |
| at 440 V rated value | 0.14 A |
| at 600 V rated value | 0.1 A |
| operational current with 2 current paths in series at DC-13 | |
| at 24 V rated value | 10 A |
| at 60 V rated value | 3.5 A |
| at 110 V rated value | 1.3 A |
| at 220 V rated value | 0.9 A |
| at 440 V rated value | 0.2 A |
| at 600 V rated value | 0.1 A |
| operational current with 3 current paths in series at DC-13 | |
| at 24 V rated value | 10 A |
| at 60 V rated value | 4.7 A |
| at 110 V rated value | 3 A |
| • at 110 v lated value | |

| at 440 V rated value | 0.5 A |
|---|---|
| at 600 V rated value | 0.26 A |
| operating frequency at DC-13 maximum | 1 000 1/h |
| design of the miniature circuit breaker for short-circuit | C characteristic: 6 A; 0.4 kA |
| protection of the auxiliary circuit up to 230 V | |
| contact reliability of auxiliary contacts | 1 faulty switching per 100 million (17 V, 1 mA) |
| UL/CSA ratings | |
| contact rating of auxiliary contacts according to UL | A600 / Q600 |
| Short-circuit protection | |
| design of the fuse link for short-circuit protection of the auxiliary switch required | fuse gL/gG: 10 A |
| 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 |
| fastening method | screw and snap-on mounting onto 35 mm standard mounting rail |
| height | 57.5 mm |
| width | 45 mm |
| depth | 117 mm |
| required spacing | |
| with side-by-side mounting | |
| — forwards | 10 mm |
| — upwards | 10 mm |
| — downwards | 10 mm |
| — at the side | 0 mm |
| for grounded parts | O Hilli |
| — forwards | 10 mm |
| | |
| — upwards | 10 mm |
| — at the side | 6 mm |
| — downwards | 10 mm |
| • for live parts | |
| — forwards | 10 mm |
| — upwards | 10 mm |
| — downwards | 10 mm |
| — at the side | 6 mm |
| Connections/ Terminals | |
| type of electrical connection for auxiliary and control circuit | screw-type terminals |
| type of connectable conductor cross-sections | |
| for auxiliary contacts | |
| — solid or stranded | 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm² |
| finely stranded with core end processing | 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) |
| at AWG cables for auxiliary contacts | 2x (20 16), 2x (18 14), 2x 12 |
| Safety related data | |
| B10 value with high demand rate acc. to SN 31920 | 1 000 000; With 0.3 x le |
| proportion of dangerous failures | |
| with low demand rate acc. to SN 31920 | 40 % |
| with high demand rate acc. to SN 31920 | 73 % |
| failure rate [FIT] with low demand rate acc. to SN 31920 | 100 FIT |
| product function positively driven operation acc. to IEC 60947-5-1 | Yes |
| T1 value for proof test interval or service life acc. to IEC 61508 | 20 y |
| protection class IP on the front acc. to IEC 60529 | IP20 |
| touch protection on the front acc. to IEC 60529 | finger-safe, for vertical contact from the front |
| Certificates/ approvals | migs. vals, for forded contact from the field |
| | FWO |
| General Product Approval | EMC |
| | |











Declaration of Conformity

Test Certificates

Marine / Shipping

Miscellaneous



Type Test Certificates/Test Report Special Test Certificate

<u>KC</u>





Marine / Shipping











Confirmation

other

other



Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH2244-1BB40

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RH2244-1BB40}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2244-1BB40

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

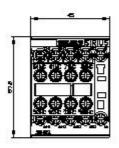
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2244-1BB40&lang=en

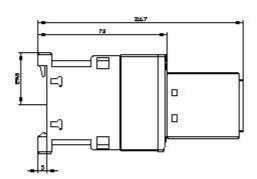
Characteristic: Tripping characteristics, I2t, Let-through current

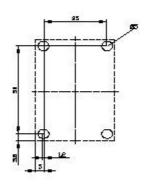
https://support.industry.siemens.com/cs/ww/en/ps/3RH2244-1BB40/char

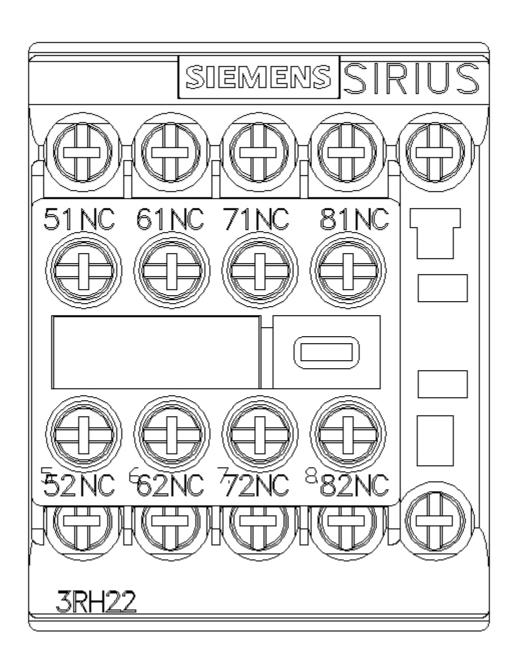
Further characteristics (e.g. electrical endurance, switching frequency)

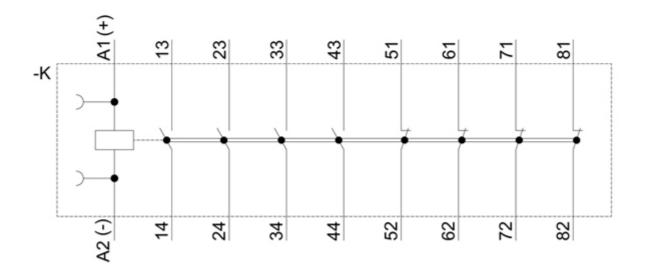
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