SIEMENS

Data sheet 3RH2244-1AP00



contactor relay, 4 NO + 4 NC, 230 V AC, 50 / 60 Hz, size S00, screw terminal, captive auxiliary switch

| product brand name | SIRIUS |
|--|----------------------------|
| product designation | Auxiliary contactor |
| product type designation | 3RH2 |
| General technical data | |
| size of contactor | S00 |
| product extension auxiliary switch | No |
| power loss [W] for rated value of the current without load current share typical | 1.43 W |
| 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 AC | 7,3g / 5 ms, 4,7g / 10 ms |
| shock resistance with sine pulse | |
| • at AC | 11,4g / 5 ms, 7,3g / 10 ms |
| mechanical service life (operating cycles) | |
| of contactor typical | 10 000 000 |
| reference code according to IEC 81346-2 | K |
| Substance Prohibitance (Date) | 10/01/2009 |
| Ambient conditions | |
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| during operation | -25 +60 °C |
| during storage | -55 +80 °C |
| relative humidity minimum | 10 % |
| relative humidity at 55 °C according to IEC 60068-2-30 maximum | 95 % |
| 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 | AC |
| control supply voltage at AC | |
| • at 50 Hz rated value | 230 V |
| at 60 Hz rated value | 230 V |
| control supply voltage frequency | |
| • 1 rated value | 50 Hz |
| 2 rated value | 60 Hz |
| operating range factor control supply voltage rated value of magnet coil at AC | |

| a at 50 Hz | 0.0 4.4 |
|---|---------------------|
| • at 50 Hz • at 60 Hz | 0.8 1.1 0.85 1.1 |
| | 0.85 1.1 37 VA |
| apparent pick-up power of magnet coil at AC | |
| inductive power factor with closing power of the coil | 0.8 |
| apparent holding power of magnet coil at AC | 5.7 VA |
| inductive power factor with the holding power of the coil | 0.25 |
| closing delay • at AC | 0 00 |
| | 8 33 ms |
| opening delay | 4 15 ms |
| at AC arcing time | 10 15 ms |
| Auxiliary circuit | 10 15 1115 |
| 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 | 44 E |
| 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 at 500 V rated value | 2 A |
| at 690 V rated value 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 | |
| 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 | 40.4 |
| at 24 V rated value at 60 V rated value | 10 A |
| at 60 V rated value at 110 V rated value | 3.5 A |
| • at 110 V rated value | 1.3 A |
| at 220 V rated value at 440 V rated value | 0.9 A |
| at 600 V rated value at 600 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 | 10 A |
| at 24 V rated valueat 60 V rated value | 10 A 4.7 A |
| at 100 V rated value at 110 V rated value | 4.7 A 3 A |
| ■ at 110 v lateu value | J ∩ |

| at 220 V rated value | 1.2 A |
|---|--|
| 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 protection of the auxiliary circuit up to 230 V | C characteristic: 6 A; 0.4 kA |
| 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 DIN 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 | |
| — 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) |
| for AWG cables for auxiliary contacts | 2x (20 16), 2x (18 14), 2x 12 |
| Safety related data | |
| product function positively driven operation according to IEC 60947-5-1 | Yes |
| B10 value with high demand rate according to SN 31920 | 1 000 000; With 0.3 x le |
| proportion of dangerous failures | |
| with low demand rate according to SN 31920 | 40 % |
| with high demand rate according to SN 31920 | 73 % |
| failure rate [FIT] with low demand rate according to SN 31920 | 100 FIT |
| T1 value for proof test interval or service life according to IEC 61508 | 20 a |
| protection class IP on the front according to IEC 60529 | IP20 |
| touch protection on the front according to IEC 60529 | finger-safe, for vertical contact from the front |
| Certificates/ approvals | |
| General Product Approval | |





Confirmation



<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Railway



Confirmation



Vibration and Shock

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RH2244-1AP00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2244-1AP00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2244-1AP00

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

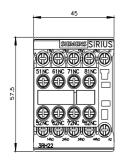
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2244-1AP00&lang=en

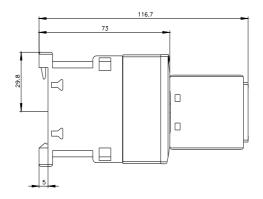
Characteristic: Tripping characteristics, I²t, Let-through current

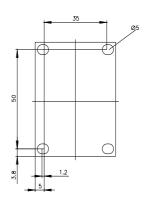
https://support.industry.siemens.com/cs/ww/en/ps/3RH2244-1AP00/char

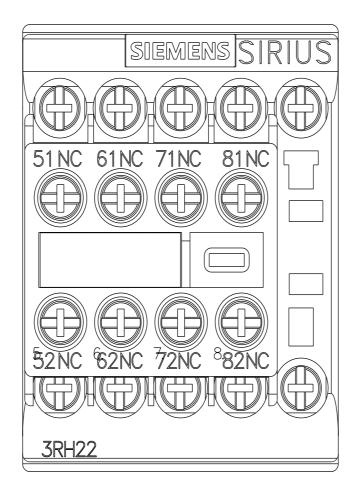
Further characteristics (e.g. electrical endurance, switching frequency)

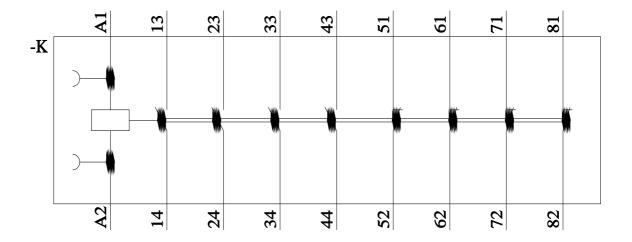
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2244-1AP00&objecttype=14&gridview=view1











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