



Coupling relay in industrial enclosure 1 changeover contact Wide voltage range 24 V to 240 V AC/DC Spring-type terminals

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|---|--|
| product brand name | SIRIUS |
| product designation | Coupling relay in industrial enclosure |
| product type designation | 3RQ2 |
| General technical data | |
| product feature protective coating on printed-circuit board | No |
| consumed active power | 1.5 W |
| insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value | 300 V |
| degree of pollution | 3 |
| surge voltage resistance rated value | 4 kV |
| maximum permissible voltage for protective separation | |
| • between auxiliary and auxiliary circuit | 300 V |
| • between control and auxiliary circuit according to IEC 60947-1 | 300 V |
| shock resistance | |
| • according to IEC 60068-2-27 | 11g / 15 ms |
| • for railway applications according to EN 61373 | Category 1, Class B |
| vibration resistance | |
| • according to IEC 60068-2-6 | 10 ... 55 Hz: 0.35 mm |
| • for railway applications according to EN 61373 | Category 1, Class B |
| switching behavior | monostable |
| mechanical service life (operating cycles) typical | 10 000 000 |
| electrical endurance (operating cycles) at AC-15 at 230 V typical | 100 000 |
| thermal current of the switching element with contacts maximum | 5 A |
| reference code according to IEC 81346-2 | K |
| Substance Prohibitance (Date) | 05/31/2018 |
| SVHC substance name | Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 |
| Weight | 0.148 kg |
| Control circuit/ Control | |
| control supply voltage at AC | |
| • at 50 Hz | 24 ... 240 V |
| • at 60 Hz | 24 ... 240 V |
| control supply voltage at DC | 24 ... 240 V |
| operating range factor control supply voltage rated value at DC | |
| • initial value | 0.7 |
| • full-scale value | 1.1 |
| operating range factor control supply voltage rated value at AC at 50 Hz | |
| • initial value | 0.7 |

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|---|--|
| • full-scale value | 1.1 |
| operating range factor control supply voltage rated value at AC at 60 Hz | |
| • initial value | 0.7 |
| • full-scale value | 1.1 |
| ON-delay time | |
| • at AC maximum | 10 ms |
| • at DC maximum | 10 ms |
| OFF-delay time maximum | 100 ms |
| Switching Function | |
| design of the switching function | CO contact |
| Mechanical data | |
| product component plug-in socket | No |
| design of the relay operating mechanism | poled |
| Short-circuit protection | |
| design of the fuse link for short-circuit protection of the auxiliary switch required | fuse gL/gG: 6 A |
| Auxiliary circuit | |
| material of switching contacts | AgSnO2 |
| number of NC contacts for auxiliary contacts | 0 |
| number of NO contacts for auxiliary contacts | 0 |
| number of CO contacts for auxiliary contacts | 1 |
| contact reliability of auxiliary contacts | one incorrect switching operation of 100 million switching operations (17 V, 5 mA) |
| type of voltage | AC/DC |
| ampacity of the output relay at AC-15 | |
| • at 24 V at 50/60 Hz | 3 A |
| • at 110 V at 50/60 Hz | 3 A |
| • at 250 V at 50/60 Hz | 3 A |
| ampacity of the output relay at DC-13 | |
| • at 24 V | 1 A |
| • at 125 V | 0.2 A |
| • at 250 V | 0.1 A |
| Electromagnetic compatibility | |
| EMC emitted interference according to IEC 60947-1 | ambience A (industrial sector) |
| EMC immunity according to IEC 60947-1 | corresponds to degree of severity 3 |
| conducted interference | |
| • due to burst according to IEC 61000-4-4 | 2 kV |
| • due to conductor-earth surge according to IEC 61000-4-5 | 2 kV (line to ground) |
| • due to conductor-conductor surge according to IEC 61000-4-5 | 1 kV (line to line) |
| field-based interference according to IEC 61000-4-3 | 10 V/m |
| electrostatic discharge according to IEC 61000-4-2 | 4 kV contact discharging, 8 kV air discharging |
| Display | |
| product component LED | Yes |
| Connections/ Terminals | |
| product component removable terminal for auxiliary and control circuit | Yes |
| type of electrical connection | spring-loaded terminal (push-in) |
| type of connectable conductor cross-sections | |
| • solid | 1x (0.5 ... 4 mm ²) |
| • finely stranded with core end processing | 1x (0.5 ... 2.5 mm ²) |
| • for AWG cables solid | 1x (20 ... 12) |
| connectable conductor cross-section | |
| • solid | 0.5 ... 4 mm ² |
| • finely stranded with core end processing maximum | 2.5 mm ² |
| • finely stranded without core end processing minimum | 0.5 mm ² |
| AWG number as coded connectable conductor cross section | |
| • solid | 12 ... 20 |
| • stranded | 12 ... 20 |
| stripped length of the cable for auxiliary and control contacts | 10 mm |

| Installation/ mounting/ dimensions | |
|------------------------------------|--|
| mounting position | any |
| fastening method | screw and snap-on mounting onto 35 mm DIN rail |
| height | 100 mm |
| width | 22.5 mm |
| depth | 90 mm |

| Ambient conditions | |
|---|----------------|
| installation altitude at height above sea level maximum | 2 000 m |
| ambient temperature | |
| • during operation | -40 ... +60 °C |
| • during storage | -40 ... +80 °C |
| • during transport | -40 ... +80 °C |
| relative humidity during operation | 10 ... 95 % |

| Approvals Certificates | |
|--------------------------|-----|
| General Product Approval | EMV |



| EMV | Test Certificates | Maritime application |
|-----|-------------------|----------------------|
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[KC](#)

[Type Test Certificates/Test Report](#)



| other | Railway | Environment |
|-------|---------|-------------|
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[Confirmation](#)

[Confirmation](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

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

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3RQ2000-2AW00>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ2000-2AW00>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-2AW00>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ2000-2AW00&lang=en



