SIEMENS

## Data sheet 3RQ2000-1CW01


Coupling relay in industrial enclosure 3 hard gold-plated changeover contacts Wide voltage range 24 V to 240 V AC/DC Screw 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** | 2.5 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<br>Lead monoxide (lead oxide) - 1317-36-8<br>6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1 |
| **Weight** | 0.185 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** | |

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| ● initial value | 0.7 |
| ● 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** | AgNi + Au |
| **number of NC contacts for auxiliary contacts** | 0 |
| **number of NO contacts for auxiliary contacts** | 0 |
| number of CO contacts for auxiliary contacts | 3 |
| **contact reliability of auxiliary contacts** | one incorrect switching per 100 million (11 V, 2 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** | screw terminal |
| **type of connectable conductor cross-sections** | |
| ● solid | 1x (0.5 ... 4 mm²), 2x (0.5 ... 2.5 mm²) |
| ● finely stranded with core end processing | 1x (0.5 ... 4 mm²), 2x (0.5 ... 1.5 mm²) |
| ● for AWG cables solid | 1x (20 ... 12), 2x (20 ... 14) |
| **connectable conductor cross-section** | |
| ● solid | 0.5 ... 4 mm² |
| ● finely stranded with core end processing maximum | 4 mm² |
| ● finely stranded without core end processing minimum | 0.5 mm² |
| **AWG number as coded connectable conductor cross section** | |
| ● solid | 12 ... 20 |
| ● stranded | 12 ... 20 |
| tightening torque with screw-type terminals | 0.6 ... 0.8 N·m |

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| 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**

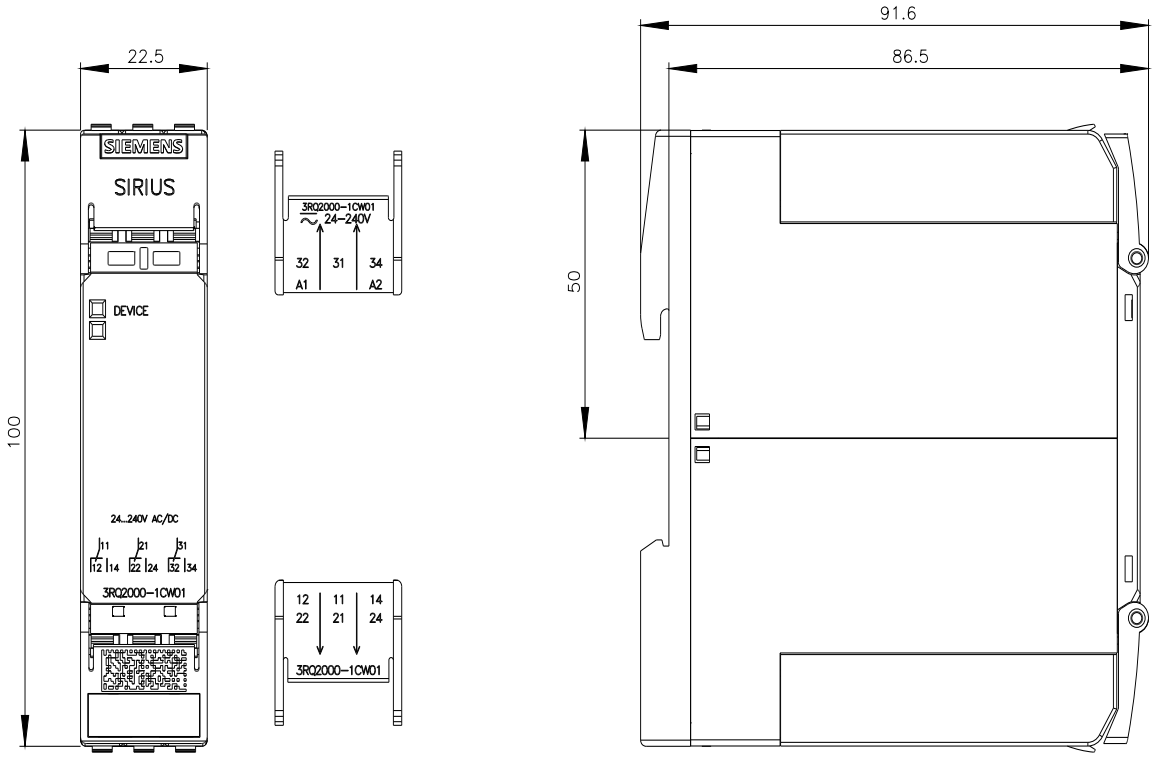
| General Product Approval | | | | | EMV |
|---|---|---|---|---|---|
| CCC | UKCA | CE EG-Konf. | UL | EAC | RCM |

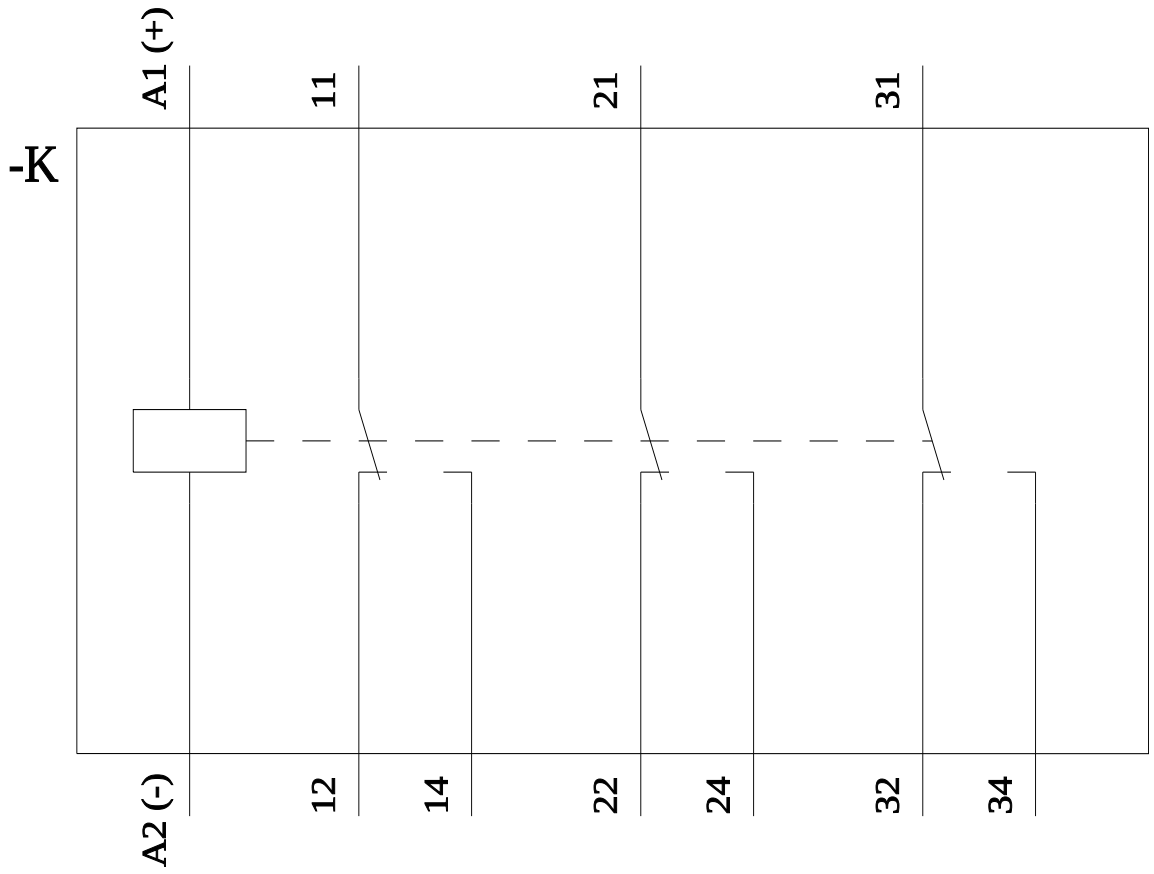
| EMV | Test Certificates | Maritime application | | | other |
|---|---|---|---|---|---|
| KC | Type Test Certific-ates/Test Report | DNV | RINA | RMRS | 产品合格 QC PASS |

| other | Railway | Environment |
|---|---|---|
| Confirmation | Confirmation | Environmental Con-firmations |

**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=3RQ2000-1CW01
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ2000-1CW01
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-1CW01
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ2000-1CW01&lang=en

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