SIEMENS

Data sheet 3RQ3038-1AF01



Input coupler Relay coupler, 1 change-over contact hard gold-plated contacts 230 V AC/DC screw terminal Overall width 6.2 mm Thermal current 6A

| product brand name | SIRIUS |
|---|---|
| product category | SIRIUS 3RQ3 coupling relays in slim design |
| product designation | Coupling relays with relay output (not plug-in) |
| design of the product | Input coupling link |
| product type designation | 3RQ3 |
| General technical data | |
| display version LED | Yes |
| product component | |
| relay output | Yes |
| semi-conductor output | No |
| consumed active power | 1 W |
| insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value | 300 V |
| surge voltage resistance rated value | 4 kV |
| maximum permissible voltage for safe isolation | |
| between control and auxiliary circuit | 300 V |
| percental drop-out voltage related to the input voltage | 10 % |
| protection class IP | IP20 |
| shock resistance | |
| • acc. to IEC 60068-2-27 | sinusoidal half-wave 15g / 11 ms |
| vibration resistance | |
| • acc. to IEC 60068-2-6 | 6 150 Hz: 2 g |
| operating frequency maximum | 72 000 1/h |
| switching behavior | monostable |
| mechanical service life (switching cycles) typical | 10 000 000 |
| thermal current | 6 A |
| reference code acc. to IEC 81346-2 | K |
| Control circuit/ Control | |
| 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 |
| control supply voltage at DC | |
| rated value | 230 V |
| operating range factor control supply voltage rated value at DC | |

| initial value | 0.8 |
|---|--|
| full-scale value | 1.1 |
| operating range factor control supply voltage rated value at AC at 50 Hz | |
| • initial value | 0.8 |
| full-scale value | 1.1 |
| operating range factor control supply voltage rated value at AC at 60 Hz | |
| • initial value | 0.8 |
| full-scale value | 1.1 |
| switch ON delay time | |
| at AC maximum | 9 ms |
| at DC maximum | 8 ms |
| OFF delay time | 19 ms |
| design of the relay operating mechanism | poled |
| product component plug-in socket | No |
| Short-circuit protection | F |
| design of the fuse link for short-circuit protection of the auxiliary switch required | fuse gG: 4 A |
| Auxiliary circuit | |
| type of switching contact | Changeover contact |
| material of switching contacts | AgSnO2-HTV |
| number of CO contacts for auxiliary contacts | 1 |
| operational current of auxiliary contacts at AC-15 | |
| • at 24 V | 3 A |
| • at 250 V | 3 A |
| operational current of auxiliary contacts at DC-13 • at 24 V | 4.0 |
| • at 125 V | 1 A 0.2 A |
| • at 250 V | 0.1 A |
| contact reliability of auxiliary contacts | one incorrect switching operation of 100 million switching operations (5 |
| | V, 1 mA) |
| Main circuit | |
| type of voltage | AC/DC |
| Inputs/ Outputs | |
| property of the output short-circuit proof | No |
| Outputs | |
| ampacity of the output relay at AC-15 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 acc. to IEC 60947-1 | ambience A (industrial sector) |
| EMC immunity acc. to IEC 60947-1 | corresponds to degree of severity 3 |
| conducted interference | |
| • due to burst acc. to IEC 61000-4-4 | 2 kV |
| due to conductor-earth surge acc. to IEC 61000-4-5 | 2 kV |
| due to conductor-conductor surge acc. to IEC 61000-4-5 | 1 kV |
| field-based interference acc. to IEC 61000-4-3 | 10 V/m |
| electrostatic discharge acc. to IEC 61000-4-2 | 6 kV contact discharge / 8 kV air discharge |
| Display | |
| display version as status display by LED | LED green |
| Connections/ Terminals | |
| product function removable terminal | No |
| type of electrical connection for auxiliary and control circuit | screw-type terminals |
| wire length | |
| | |

| at AC maximum | 500 m | | |
|--|-------------------|-----|--|
| at DC maximum | 1 000 m | | |
| type of connectable conductor cross-sections | 1 000 111 | | |
| solid | 1x (0.25 2.5 mm²) | | |
| finely stranded with core end processing | 1x (0.25 1.5 mm²) | | |
| at AWG cables solid | 1 x (20 14) | | |
| | | | |
| connectable conductor cross-section solid | 0.25 2.5 mm² | | |
| connectable conductor cross-section finely stranded with core end processing | 0.25 1.5 mm² | | |
| AWG number as coded connectable conductor | 20 14 | | |
| cross section solid | 20 14 | | |
| tightening torque with screw-type terminals | 0.5 0.6 N·m | | |
| Installation/ mounting/ dimensions | | | |
| mounting position | any | | |
| fastening method | snap-on mounting | | |
| height | 93 mm | | |
| width | 6.2 mm | | |
| depth | 72.5 mm | | |
| required spacing | | | |
| with side-by-side mounting | | | |
| — forwards | 0 mm | | |
| — backwards | 0 mm | | |
| — upwards | 0 mm | | |
| — downwards | 0 mm | | |
| — at the side | 0 mm | | |
| for grounded parts | | | |
| — forwards | 0 mm | | |
| — backwards | 0 mm | | |
| — upwards | 0 mm | | |
| — at the side | 0 mm | | |
| — downwards | 0 mm | | |
| for live parts | | | |
| — forwards | 0 mm | | |
| — backwards | 0 mm | | |
| — upwards | 0 mm | | |
| — downwards | 0 mm | | |
| — at the side | 0 mm | | |
| Ambient conditions | 0.000 | | |
| installation altitude at height above sea level maximum | 2 000 m | | |
| ambient temperature during operation | -25 +60 °C | | |
| ambient temperature during storage | -40 +85 °C | | |
| ambient temperature during transport | -40 +85 °C | | |
| relative humidity during operation | 10 95 % | | |
| Certificates/ approvals | | | |
| General Product Approval | | EMC | |













Declaration of Conformity

Marine / Shipping

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=3RQ3038-1AF01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3038-1AF01

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

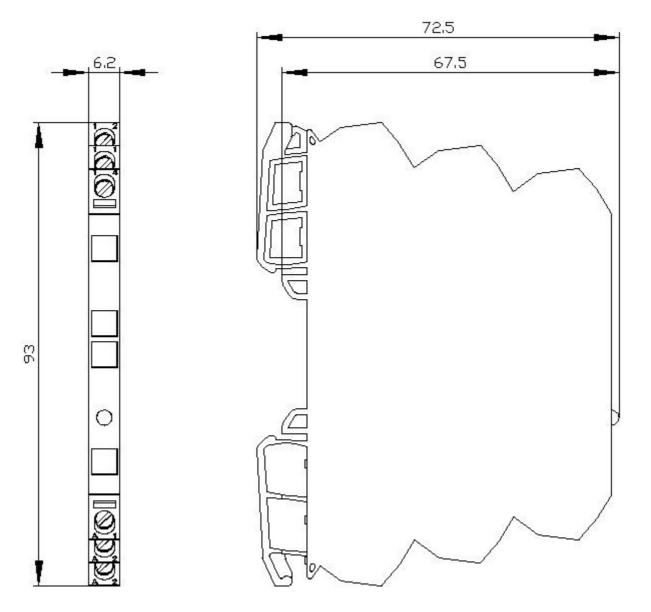
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3038-1AF01

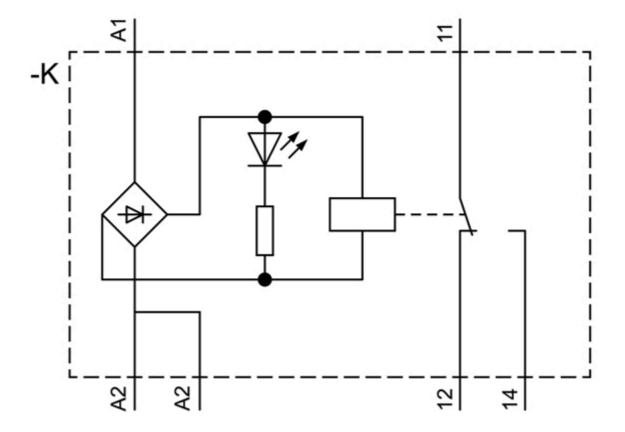
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3038-1AF01&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3038-1AF01/manual





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