## **SIEMENS**

Data sheet 3RQ3118-1AM00



Output coupler with plug-in Relay, 1 change-over contact screw terminal 24 V DC Enclosure 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 plug-in relay         |
| design of the product   | Output coupling link                       |
| product type designation  | 3RQ3                                       |
| General technical data  |  |
| display version LED   | Yes  |
| product feature protective coating on printed-circuit board   | No   |
| product component   |  |
| <ul> <li>relay output</li> </ul>  | Yes  |
| <ul> <li>semi-conductor output</li> </ul>   | No   |
| consumed active power   | 0.3 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 protective separation   |  |
| <ul> <li>between control and auxiliary circuit</li> </ul>   | 300 V                                      |
| percental drop-out voltage related to the input voltage   | 10 %                                       |
| protection class IP   | IP20                                       |
| flammability class of enclosure material  | UL94 V-0                                   |
| shock resistance  |  |
| <ul> <li>according to IEC 60068-2-27</li> </ul>   | sinusoidal half-wave 15g / 11 ms           |
| operating frequency maximum   | 72 000 1/h                                 |
| switching behavior  | monostable                                 |
| mechanical service life (operating cycles) typical  | 10 000 000                                 |
| thermal current   | 6 A  |
| reference code according to IEC 81346-2   | K  |
| Substance Prohibitance (Date)   | 03/25/2015                                 |
| Control circuit/ Control  |  |
| control supply voltage at DC rated value  |  |
| •   | 24 V                                       |
| operating range factor control supply voltage rated value at DC   |  |
| • initial value   | 0.8  |
| full-scale value  | 1.25                                       |
| ON-delay time   |  |
| at DC maximum   | 12 ms                                      |
| OFF-delay time maximum  | 13 ms                                      |
| Mechanical data   |  |
| product component plug-in socket  | Yes  |
| design of the relay operating mechanism   | poled                                      |

| Short-circuit protection  |  |
|---|--|
| design of the fuse link for short-circuit protection of the auxiliary       | fuse gG: 4 A   |
| switch required   |  |
| Auxiliary circuit   |  |
| type of switching contact   | Changeover contact   |
| material of switching contacts  | AgSnO2   |
| 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                          | 4.4  |
| • at 24 V   | 1 A  |
| at 125 V     at 250 V   | 0.2 A<br>0.1 A   |
| contact reliability of auxiliary contacts                                   | one incorrect switching operation of 100 million switching operations (17 V, 5 |
| Contact renability of auxiliary contacts                                    | mA)  |
| Main circuit  |  |
| type of voltage   | DC   |
| Inputs/ Outputs   |  |
| property of the output short-circuit proof                                  | No   |
| 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 according to IEC 60947-1                           | ambience A (industrial sector)   |
| EMC immunity according to IEC 60947-1                                       | corresponds to degree of severity 3  |
| conducted interference  |  |
| <ul> <li>due to burst according to IEC 61000-4-4</li> </ul>                 | 2 kV   |
| <ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul> | 2 kV   |
| due to conductor-conductor surge according to IEC 61000-4-5                 | 1 kV   |
| field-based interference according to IEC 61000-4-3                         | 10 V/m   |
| electrostatic discharge according to IEC 61000-4-2                          | 6 kV contact discharge / 8 kV air discharge                                    |
| Display   | 150  |
| display version as status display by LED  Connections/ Terminals            | LED green  |
| product function removable terminal   | No   |
| type of electrical connection for auxiliary and control circuit             | screw-type terminals   |
| wire length   |  |
| at DC maximum   | 1 000 m  |
| type of connectable conductor cross-sections                                |  |
| • solid   | 1x (0.25 2.5 mm²)  |
| <ul> <li>finely stranded with core end processing</li> </ul>                | 1x (0.25 1.5 mm²)  |
| for AWG cables solid  | 1 x (20 14)  |
| connectable conductor cross-section   |  |
| • solid   | 0.25 2.5 mm²   |
| finely stranded with core end processing                                    | 0.25 1.5 mm²   |
| AWG number as coded connectable conductor cross section                     |  |
| • solid   | 20 14  |
| tightening torque with screw-type terminals                                 | 0.5 0.6 N·m  |
| Installation/ mounting/ dimensions  | 5.5 5.6 i i ii   |
| mounting position   | any  |
| fastening method  | snap-on mounting   |
| height  | 93 mm  |
| width   | 6.2 mm   |
| depth   | 76 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       |
| <ul> <li>for grounded parts</li> </ul>                  |            |
| — 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                                      |            |
| installation altitude at height above sea level maximum | 2 000 m    |
| ambient temperature                                     |            |
| <ul> <li>during operation</li> </ul>                    | -25 +60 °C |
| during storage  | -40 +85 °C |
| during transport  | -40 +85 °C |
| relative humidity during operation                      | 10 95 %    |
| Approvals Certificates                                  |            |

## General Product Approval









Confirmation



General Product Approval EMV Test Certificates Marine / Shipping other





<u>KC</u>

Type Test Certificates/Test Report



Confirmation

## **Environment**

Environmental Confirmations

## Further information

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=3RQ3118-1AM00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-1AM00

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

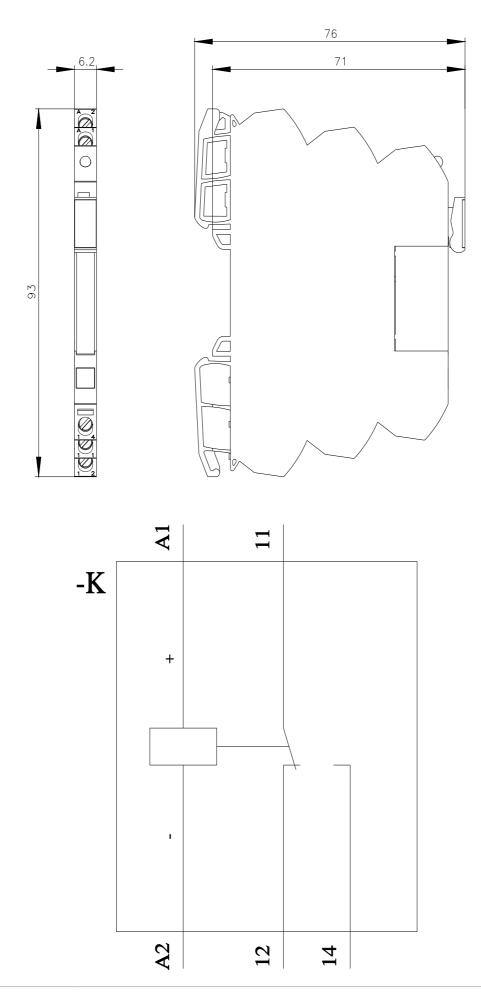
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-1AM00

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3118-1AM00&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-1AM00/manual



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