SIEMENS

## Data sheet 3RQ3118-2AE00

Output coupler with plug-in relay, 1 CO Spring-type terminal (push-in) 115 V AC/DC Enclosure width 6.2 mm Thermal current 6 A

Figure similar

| Article number | | |
|---|---|---|
| **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 links |
| **Product type designation** | | 3RQ3 |

| General technical data | | |
|---|---|---|
| **Display version LED** | | Yes |
| **Product component** | | |
| • Relay output | | Yes |
| • semi-conductor output | | No |
| **Consumed active power** | W | 0.5 |
| **Insulation voltage** | | |
| • **for overvoltage category III according to IEC 60664** | | |
| — with degree of pollution 3 rated value | V | 300 |
| **Surge voltage resistance rated value** | kV | 4 |
| **maximum permissible voltage for safe isolation** | | |

| | | |
|---|---|---|
| • between control and auxiliary circuit | V | 300 |
| **Percental drop-out voltage related to the input voltage** | % | 9.6 |
| **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** | 1/h | 72 000 |
| **Switching behavior** | | monostable |
| **Mechanical service life (switching cycles)** | | |
| • typical | | 10 000 000 |
| **Electrical endurance (switching cycles)** | | |
| • at AC-15 at 230 V typical | | 100 000 |
| **Thermal current** | A | 6 |
| **Equipment marking** | | |
| • acc. to DIN EN 61346-2 | | K |
| • acc. to DIN EN 81346-2 | | K |

| Control circuit/ Control | | |
|---|---|---|
| **Control supply voltage at AC** | | |
| • at 50 Hz rated value | V | 115 |
| • at 60 Hz rated value | V | 115 |
| **Control supply voltage at DC** | | |
| • rated value | V | 115 |
| **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 |
| **Off-delay time** | ms | 17 |
| **Closing delay** | | |
| • at AC | ms | 12 |
| • at DC | ms | 5 |
| **Opening delay** | | |
| • at AC | ms | 12 |

| | | |
|---|---|---|
| • at DC | ms | 10 |
| **Design of the relay operating mechanism** | | poled |
| **Product component Plug-in socket** | | Yes |

## Short-circuit protection

| | | |
|---|---|---|
| **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 |
| **Number of CO contacts** | | |
| • for auxiliary contacts | | 1 |
| **Operating current of auxiliary contacts at AC-15** | | |
| • at 24 V | A | 3 |
| • at 250 V | A | 3 |
| **Operating current of auxiliary contacts at DC-13** | | |
| • at 24 V | A | 1 |
| • at 125 V | A | 0.2 |
| • at 250 V | A | 0.1 |
| **Contact reliability of auxiliary contacts** | | one incorrect switching operation of 100 million switching operations (17 V, 5 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 | A | 3 |
| **Ampacity of the output relay at DC-13** | | |
| • at 24 V | A | 1 |
| • at 125 V | A | 0.2 |
| • at 250 V | A | 0.1 |

## Electromagnetic compatibility

| | | |
|---|---|---|
| **EMC emitted interference** | | |
| • acc. to IEC 60947-1 | | ambience A (industrial sector) |
| **EMI 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-bound parasitic coupling 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 current circuit | | PUSH-IN connection (spring-loaded connection) |
| **Wire length** | | |
| • at AC maximum | m | 500 |
| • at DC maximum | m | 1 000 |
| **Type of connectable conductor cross-sections** | | |
| • solid | | 1x (0.25 ... 2.5 mm²) |
| • finely stranded with core end processing | | 1x (0.25 ... 1.5 mm²) |
| • finely stranded without core end processing | | 1x (0.25 ... 2.5 mm²) |
| • at AWG conductors solid | | 1 x (20 ... 14) |
| • at AWG conductors stranded | | 1x (20 ... 14) |
| **Connectable conductor cross-section** | | |
| • solid | mm² | 0.25 ... 2.5 |
| • finely stranded with core end processing | mm² | 0.25 ... 1.5 |
| • finely stranded without core end processing | mm² | 0.25 ... 2.5 |
| **AWG number as coded connectable conductor cross section** | | |
| • solid | | 20 ... 14 |
| • stranded | | 20 ... 14 |

## Installation/ mounting/ dimensions

| | | |
|---|---|---|
| **Mounting position** | | any |
| **Mounting type** | | snap-on mounting |
| **Height** | mm | 93 |
| **Width** | mm | 6.2 |
| **Depth** | mm | 76 |
| **Required spacing** | | |
| • with side-by-side mounting | | |
| — forwards | mm | 0 |
| — Backwards | mm | 0 |

| | | |
|---|---|---|
| — upwards | mm | 0 |
| — downwards | mm | 0 |
| — at the side | mm | 0 |
| • for grounded parts | | |
| — forwards | mm | 0 |
| — Backwards | mm | 0 |
| — upwards | mm | 0 |
| — at the side | mm | 0 |
| — downwards | mm | 0 |
| • for live parts | | |
| — forwards | mm | 0 |
| — Backwards | mm | 0 |
| — upwards | mm | 0 |
| — downwards | mm | 0 |
| — at the side | mm | 0 |

## Ambient conditions

| | | |
|---|---|---|
| **Installation altitude at height above sea level** | | |
| • maximum | m | 2 000 |
| **Ambient temperature** | | |
| • during operation | °C | -25 ... +60 |
| • during storage | °C | -40 ... +85 |
| • during transport | °C | -40 ... +85 |
| **Relative humidity** | | |
| • during operation | % | 10 ... 95 |

## Certificates/approvals

| General Product Approval | | | | Declaration of Conformity | other |
|---|---|---|---|---|---|
| CCC | CSA | UL | EAC | EG-Konf. | Confirmation |

## Further information

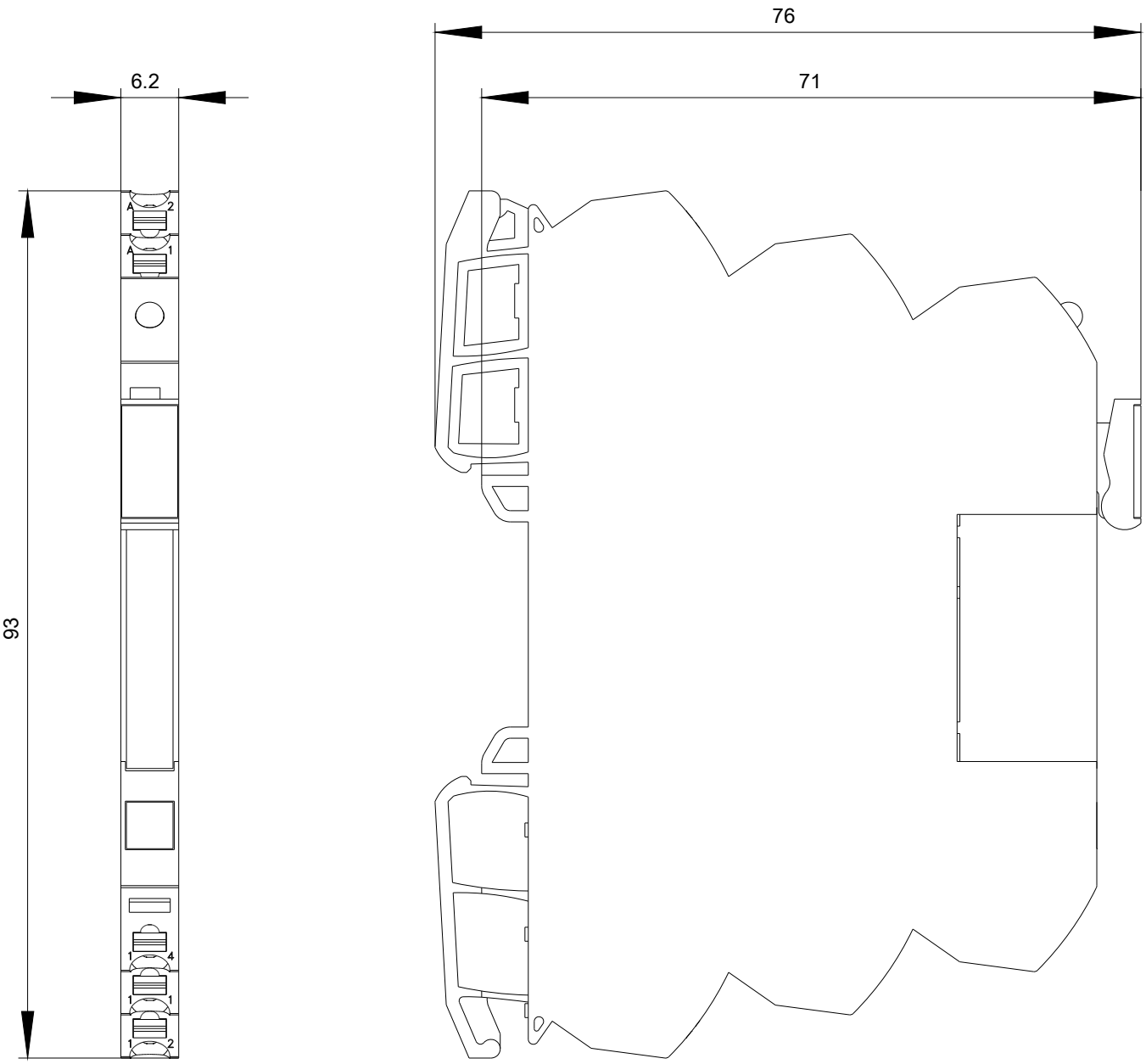
**Information- and Downloadcenter (Catalogs, Brochures,…)**
http://www.siemens.com/industrial-controls/catalogs

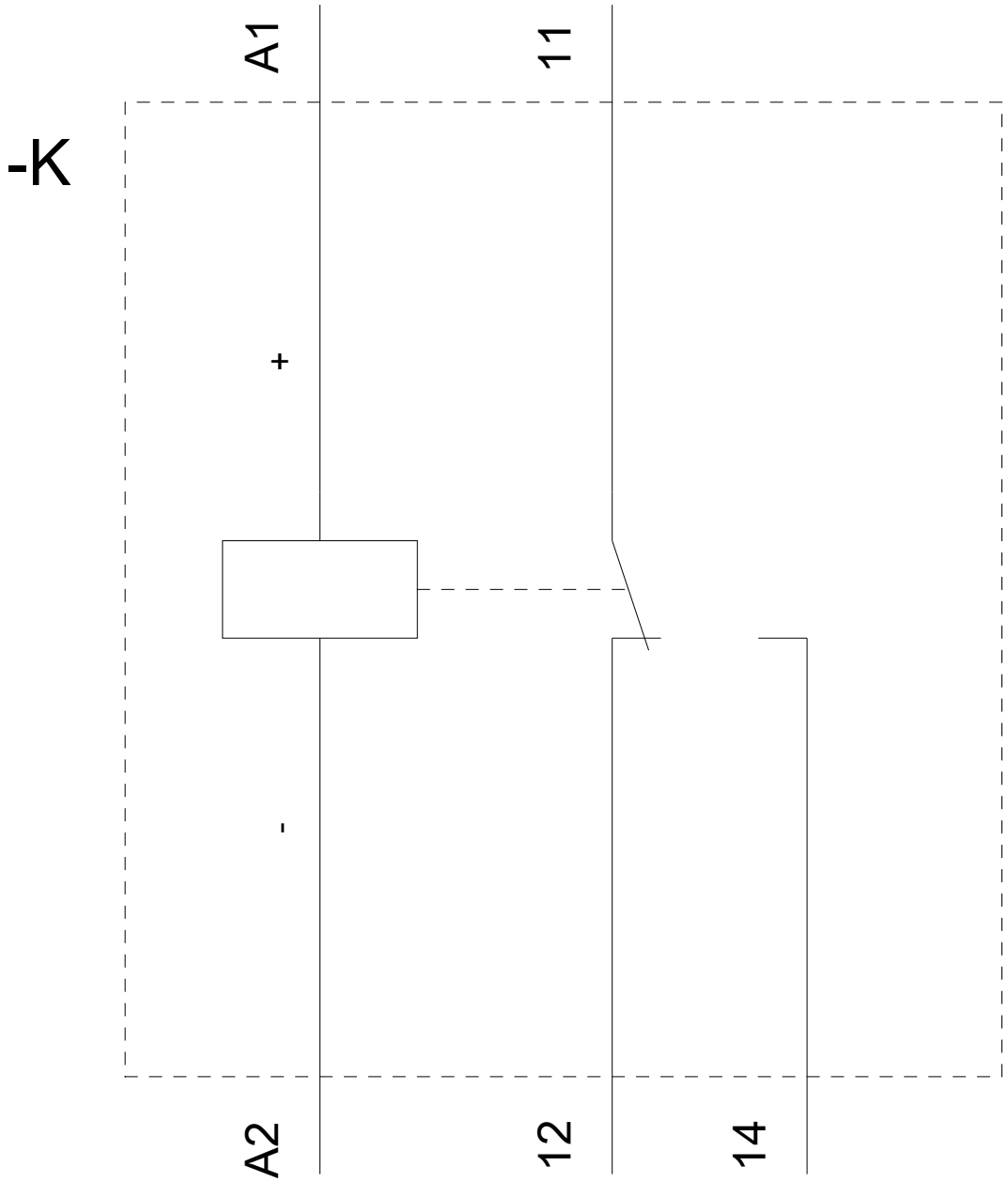
**Industry Mall (Online ordering system)**
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3118-2AE00

**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-2AE00

**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-2AE00

**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-2AE00&lang=en



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