

Output coupler with plug-in Relay, 1 CO, hard gold-plated screw terminal 230 V AC/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 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 |

|                                                                               |                                  |
|-------------------------------------------------------------------------------|----------------------------------|
| <b>Percental drop-out voltage related to the input voltage</b>                | 10 %                             |
| <b>Protection class IP</b>                                                    | IP20                             |
| <b>Shock resistance</b><br>• acc. to IEC 60068-2-27                           | sinusoidal half-wave 15g / 11 ms |
| <b>Vibration resistance</b><br>• acc. to IEC 60068-2-6                        | 6 ... 150 Hz: 2 g                |
| <b>Operating frequency maximum</b>                                            | 72 000 1/h                       |
| <b>Switching behavior</b>                                                     | monostable                       |
| <b>Mechanical service life (switching cycles)</b><br>• typical                | 10 000 000                       |
| <b>Electrical endurance (switching cycles)</b><br>• at AC-15 at 230 V typical | 100 000                          |
| <b>Thermal current</b>                                                        | 6 A                              |
| <b>Reference code acc. to DIN EN 81346-2</b>                                  | K                                |

#### Control circuit/ Control

|                                                                                                                          |                |
|--------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Control supply voltage at AC</b><br>• at 50 Hz rated value<br>• at 60 Hz rated value                                  | 230 V<br>230 V |
| <b>Control supply voltage frequency</b><br>• 1 rated value<br>• 2 rated value                                            | 50 Hz<br>60 Hz |
| <b>Control supply voltage at DC</b><br>• rated value                                                                     | 230 V          |
| <b>Operating range factor control supply voltage rated value at DC</b><br>• initial value<br>• Full-scale value          | 0.8<br>1.1     |
| <b>Operating range factor control supply voltage rated value at AC at 50 Hz</b><br>• initial value<br>• Full-scale value | 0.8<br>1.1     |
| <b>Operating range factor control supply voltage rated value at AC at 60 Hz</b><br>• initial value<br>• Full-scale value | 0.8<br>1.1     |
| <b>Switch-on delay time</b><br>• at AC maximum<br>• at DC maximum                                                        | 9 ms<br>8 ms   |
| <b>Off-delay time</b>                                                                                                    | 19 ms          |
| <b>Closing delay</b><br>• at AC                                                                                          | 12 ms          |

|                                                |       |
|------------------------------------------------|-------|
| • at DC                                        | 8 ms  |
| <b>Opening delay</b>                           |       |
| • at AC                                        | 20 ms |
| • at DC                                        | 18 ms |
| <b>Design of the relay operating mechanism</b> | poled |
| <b>Product component Plug-in socket</b>        | Yes   |

#### Short-circuit protection

|                                                                 |              |
|-----------------------------------------------------------------|--------------|
| <b>Design of the fuse link</b>                                  |              |
| • for short-circuit protection of the auxiliary switch required | fuse gG: 4 A |

#### Auxiliary circuit

|                                                         |                                                                                   |
|---------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>Type of switching contact</b>                        | Changeover contact                                                                |
| <b>Material of switching contacts</b>                   | AgSnO2-HTV                                                                        |
| <b>Number of CO contacts</b>                            |                                                                                   |
| • for auxiliary contacts                                | 1                                                                                 |
| <b>Operating current of auxiliary contacts at AC-15</b> |                                                                                   |
| • at 24 V                                               | 3 A                                                                               |
| • at 250 V                                              | 3 A                                                                               |
| <b>Operating current of auxiliary contacts at DC-13</b> |                                                                                   |
| • at 24 V                                               | 1 A                                                                               |
| • at 125 V                                              | 0.2 A                                                                             |
| • at 250 V                                              | 0.1 A                                                                             |
| <b>Contact reliability of auxiliary contacts</b>        | one incorrect switching operation of 100 million switching operations (5 V, 1 mA) |

#### Main circuit

|                        |       |
|------------------------|-------|
| <b>Type of voltage</b> | AC/DC |
|------------------------|-------|

#### Inputs/ Outputs

|                                                   |    |
|---------------------------------------------------|----|
| <b>Property of the output Short-circuit proof</b> | No |
|---------------------------------------------------|----|

#### Outputs

|                                              |       |
|----------------------------------------------|-------|
| <b>Ampacity of the output relay at AC-15</b> |       |
| • at 250 V at 50/60 Hz                       | 3 A   |
| <b>Ampacity of the output relay at DC-13</b> |       |
| • at 24 V                                    | 1 A   |
| • at 125 V                                   | 0.2 A |
| • at 250 V                                   | 0.1 A |

#### Electromagnetic compatibility

|                                 |                                     |
|---------------------------------|-------------------------------------|
| <b>EMC emitted interference</b> |                                     |
| • acc. to IEC 60947-1           | ambience A (industrial sector)      |
| <b>EMI immunity</b>             |                                     |
| • acc. to IEC 60947-1           | corresponds to degree of severity 3 |

|                                                             |                                             |
|-------------------------------------------------------------|---------------------------------------------|
| <b>Conducted interference</b>                               |                                             |
| • 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                                        |
| <b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b> | 10 V/m                                      |
| <b>Electrostatic discharge acc. to IEC 61000-4-2</b>        | 6 kV contact discharge / 8 kV air discharge |

## Display

|                            |           |
|----------------------------|-----------|
| <b>Display version</b>     |           |
| • as status display by LED | LED green |

## Connections/ Terminals

|                                                                |                                    |
|----------------------------------------------------------------|------------------------------------|
| <b>Product function</b>                                        |                                    |
| • removable terminal                                           | No                                 |
| <b>Type of electrical connection</b>                           |                                    |
| • for auxiliary and control current circuit                    | screw-type terminals               |
| <b>Wire length</b>                                             |                                    |
| • at AC maximum                                                | 500 m                              |
| • at DC maximum                                                | 1 000 m                            |
| <b>Type of connectable conductor cross-sections</b>            |                                    |
| • solid                                                        | 1x (0.25 ... 2.5 mm <sup>2</sup> ) |
| • finely stranded with core end processing                     | 1x (0.25 ... 1.5 mm <sup>2</sup> ) |
| • at AWG conductors solid                                      | 1 x (20 ... 14)                    |
| <b>Connectable conductor cross-section</b>                     |                                    |
| • solid                                                        | 0.25 ... 2.5 mm <sup>2</sup>       |
| • finely stranded with core end processing                     | 0.25 ... 1.5 mm <sup>2</sup>       |
| <b>AWG number as coded connectable conductor cross section</b> |                                    |
| • solid                                                        | 20 ... 14                          |
| <b>Tightening torque</b>                                       |                                    |
| • with screw-type terminals                                    | 0.5 ... 0.6 N·m                    |

## Installation/ mounting/ dimensions

|                              |                  |
|------------------------------|------------------|
| <b>Mounting position</b>     | any              |
| <b>Mounting type</b>         | snap-on mounting |
| <b>Height</b>                | 93 mm            |
| <b>Width</b>                 | 6.2 mm           |
| <b>Depth</b>                 | 76 mm            |
| <b>Required spacing</b>      |                  |
| • 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

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

#### Certificates/ approvals

| General Product Approval                                                                   | EMC                                                                                        | Declaration of Conformity                                                                         |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <br>CCC | <br>EAC | <br>EG-Konf. |
| <br>CSA | <br>UL  | <br>RCM      |

| Declaration of Conformity | Marine / Ship-ping | other |
|---------------------------|--------------------|-------|
|---------------------------|--------------------|-------|

[Miscellaneous](#)



[Confirmation](#)

#### 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=3RQ3118-1AF01>

**Cax online generator**

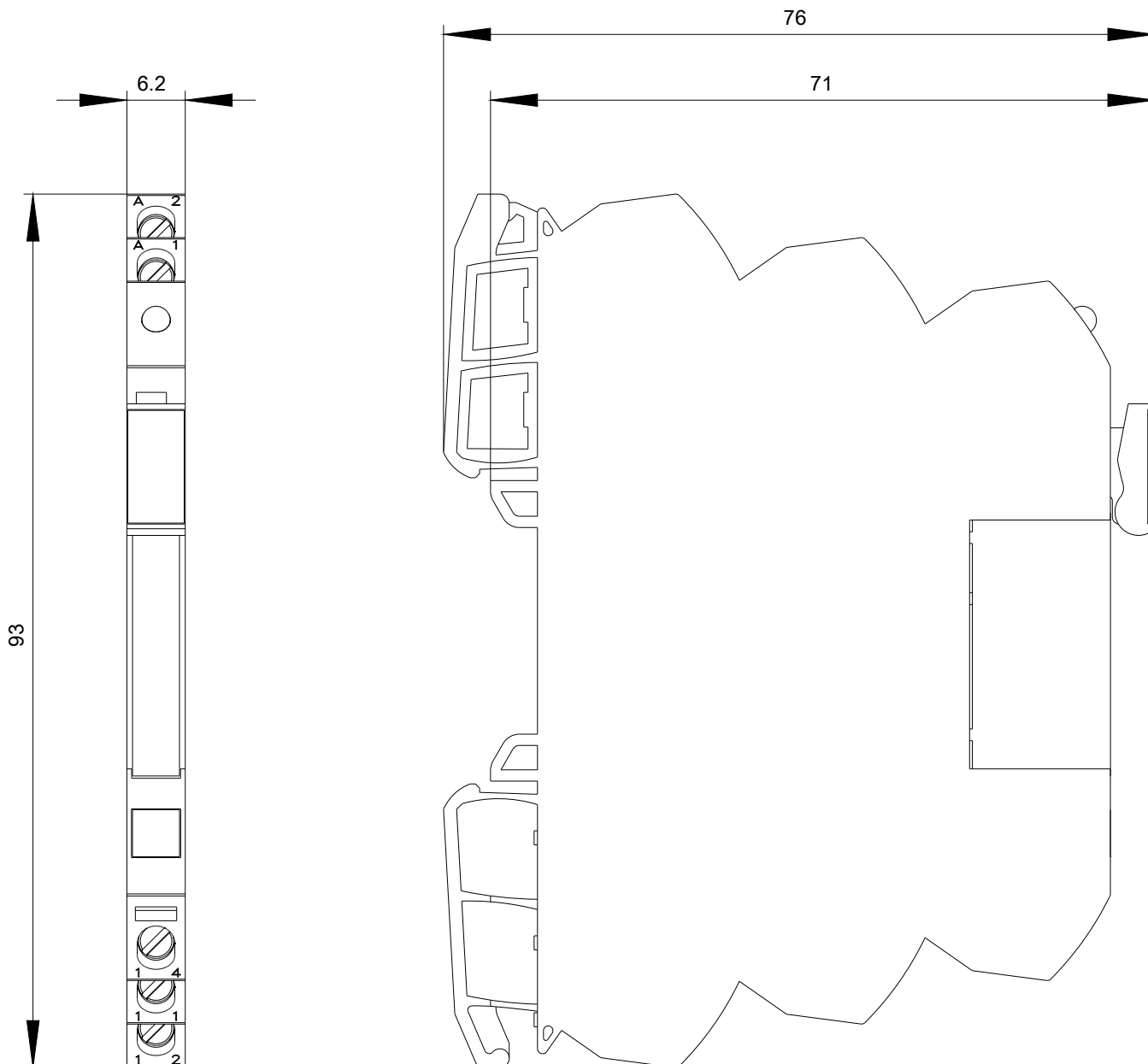
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-1AF01>

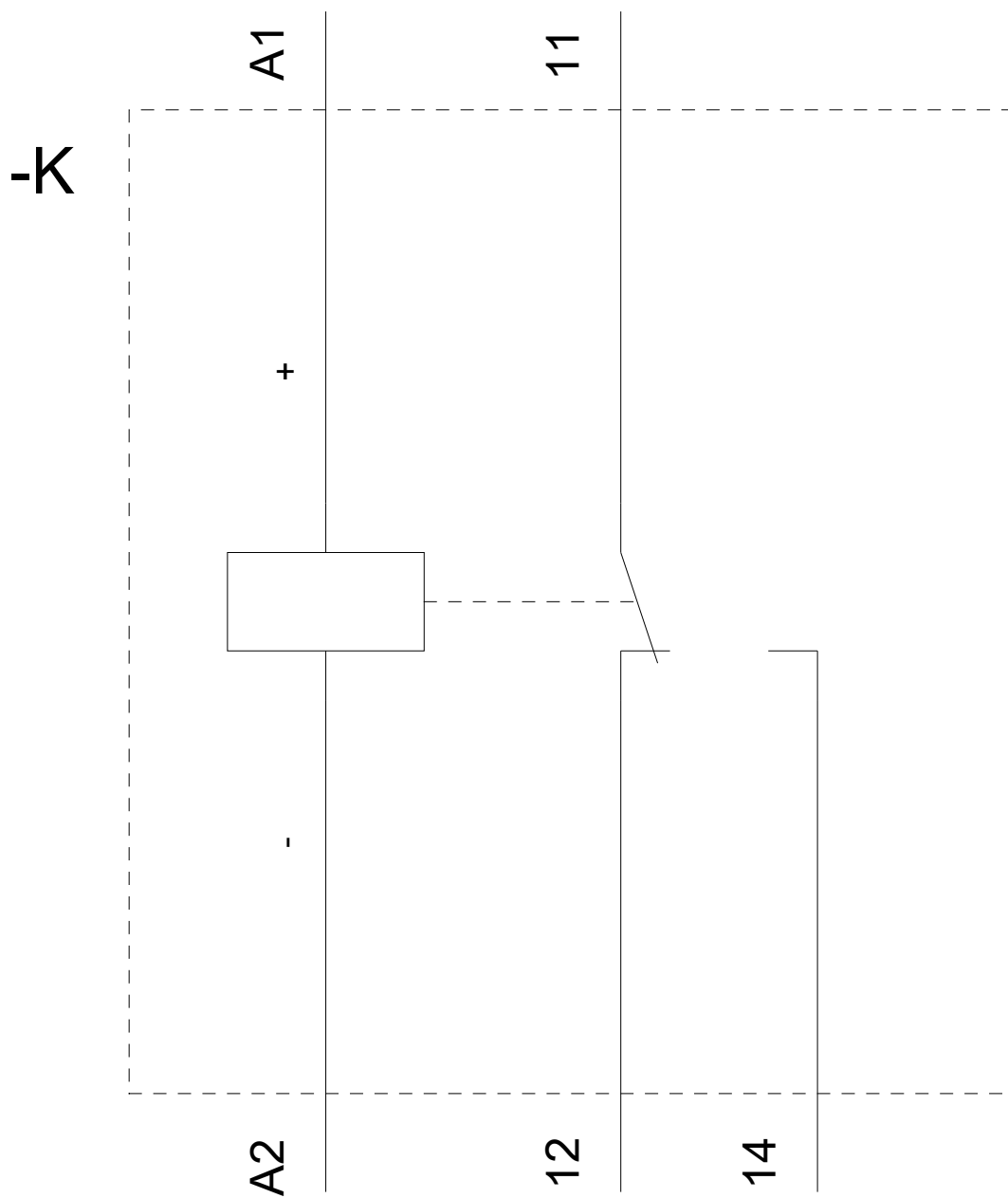
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-1AF01>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RQ3118-1AF01&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-1AF01&lang=en)





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