

Output coupler with plug-in Relay, 1 change-over contact screw terminal 24 V AC/DC Enclosure width 6.2 mm Thermal current 6A



Figure similar

| | |
|---------------------------------|--|
| 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 |
| 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 |
| Electrical endurance (switching cycles) • at AC-15 at 230 V typical | 100 000 |
| Thermal current | 6 A |
| Reference code • acc. to IEC 81346-2:2009 • acc. to DIN EN 61346-2 | K K |

| Control circuit/ Control | |
|--|----------------|
| Control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value | 24 V 24 V |
| Control supply voltage frequency • 1 rated value • 2 rated value | 50 Hz 60 Hz |
| Control supply voltage at DC • rated value | 24 V |
| Operating range factor control supply voltage rated value at DC • initial value • Full-scale value | 0.8 1.25 |
| Operating range factor control supply voltage rated value at AC at 50 Hz • initial value • Full-scale value | 0.8 1.25 |
| Operating range factor control supply voltage rated value at AC at 60 Hz • initial value • Full-scale value | 0.8 1.25 |
| Switch-on delay time • at AC maximum • at DC maximum | 12 ms 12 ms |
| Off-delay time | 14 ms |

| | |
|--|-------|
| Closing delay | |
| • at AC | 12 ms |
| • at DC | 6 ms |
| Opening delay | |
| • at AC | 14 ms |
| • at DC | 13 ms |
| 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 | AgSnO ₂ |
| Number of CO contacts | |
| • for auxiliary contacts | 1 |
| Operating current of auxiliary contacts at AC-15 | |
| • at 24 V | 3 A |
| • at 250 V | 3 A |
| Operating current of auxiliary contacts at DC-13 | |
| • at 24 V | 1 A |
| • at 125 V | 0.2 A |
| • at 250 V | 0.1 A |
| 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 | 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) |

| | |
|--|---|
| EMI immunity | |
| <ul style="list-style-type: none"> • acc. to IEC 60947-1 | corresponds to degree of severity 3 |
| Conducted interference | |
| <ul style="list-style-type: none"> • due to burst acc. to IEC 61000-4-4 | 2 kV |
| <ul style="list-style-type: none"> • due to conductor-earth surge acc. to IEC 61000-4-5 | 2 kV |
| <ul style="list-style-type: none"> • 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 | |
| <ul style="list-style-type: none"> • as status display by LED | LED green |

Connections/Terminals

| | |
|---|------------------------------------|
| Product function | |
| <ul style="list-style-type: none"> • removable terminal | No |
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for auxiliary and control current circuit | screw-type terminals |
| Wire length | |
| <ul style="list-style-type: none"> • at AC maximum | 500 m |
| <ul style="list-style-type: none"> • at DC maximum | 1 000 m |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • solid | 1x (0.25 ... 2.5 mm ²) |
| <ul style="list-style-type: none"> • finely stranded with core end processing | 1x (0.25 ... 1.5 mm ²) |
| <ul style="list-style-type: none"> • at AWG conductors solid | 1 x (20 ... 14) |
| Connectable conductor cross-section | |
| <ul style="list-style-type: none"> • solid | 0.25 ... 2.5 mm ² |
| <ul style="list-style-type: none"> • finely stranded with core end processing | 0.25 ... 1.5 mm ² |
| AWG number as coded connectable conductor cross section | |
| <ul style="list-style-type: none"> • solid | 20 ... 14 |
| Tightening torque | |
| <ul style="list-style-type: none"> • with screw-type terminals | 0.5 ... 0.6 N·m |

Installation/ mounting/ dimensions

| | |
|--|------------------|
| Mounting position | any |
| Mounting type | snap-on mounting |
| Height | 93 mm |
| Width | 6.2 mm |
| Depth | 76 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • 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

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

Certificates/approvals

| General Product Approval | Declaration of Conformity | Marine / Shipping |
|--|--|---|
|  CCC |  EAC |  DNV-GL DNVGL.COM/AF |
|  CSA |  UL |  EG-Konf. |

other

[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=3RQ3118-1AB00>

Cax online generator

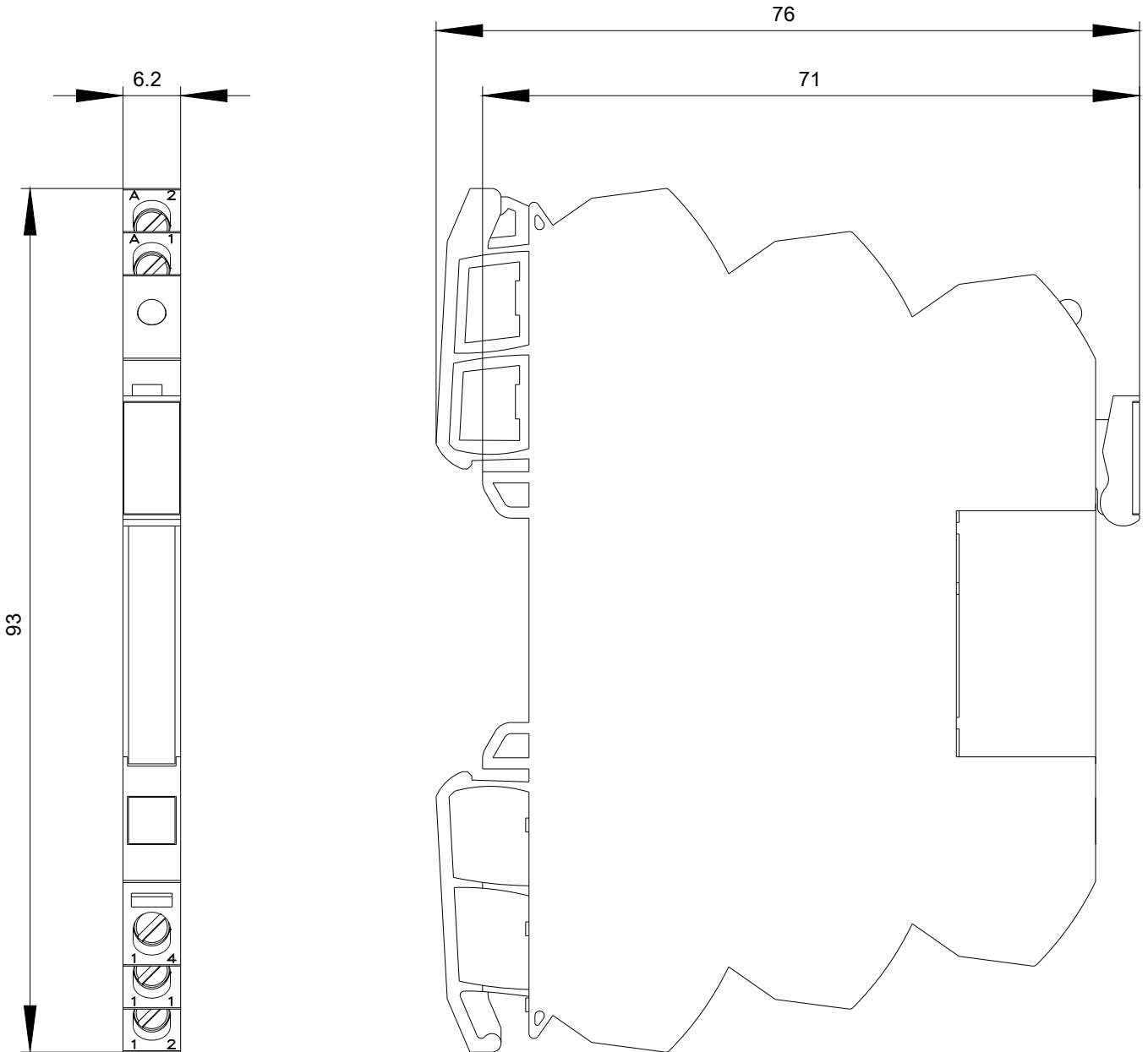
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-1AB00>

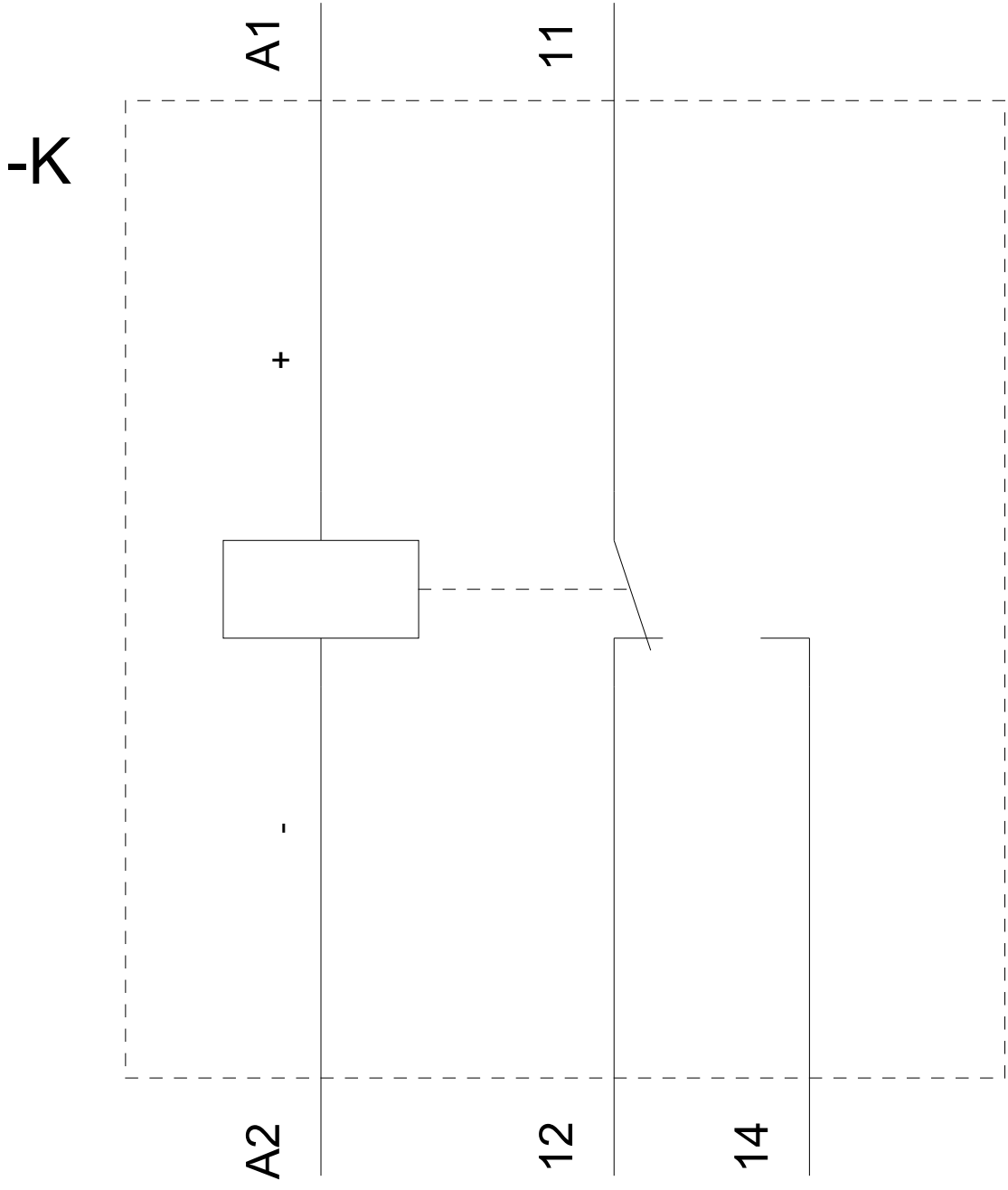
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-1AB00>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-1AB00&lang=en





last modified:

05/19/2018