

Output coupler Relay coupler, 1 change-over contact hard gold-plated contacts 24 V AC/DC Overall width 6.2 mm screw terminal Thermal current 6A



Figure similar

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	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	No

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 -HTV
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 (5 V, 1 mA)

Main circuit

Type of voltage	AC/DC
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Inputs/ Outputs

Property of the output Short-circuit proof	No
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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	72.5 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  CSA  UL	 EAC  CE EG-Konf.	 DNV-GL <small>DNVGL.COM/AF</small>

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=3RQ3018-1AB01>

Cax online generator

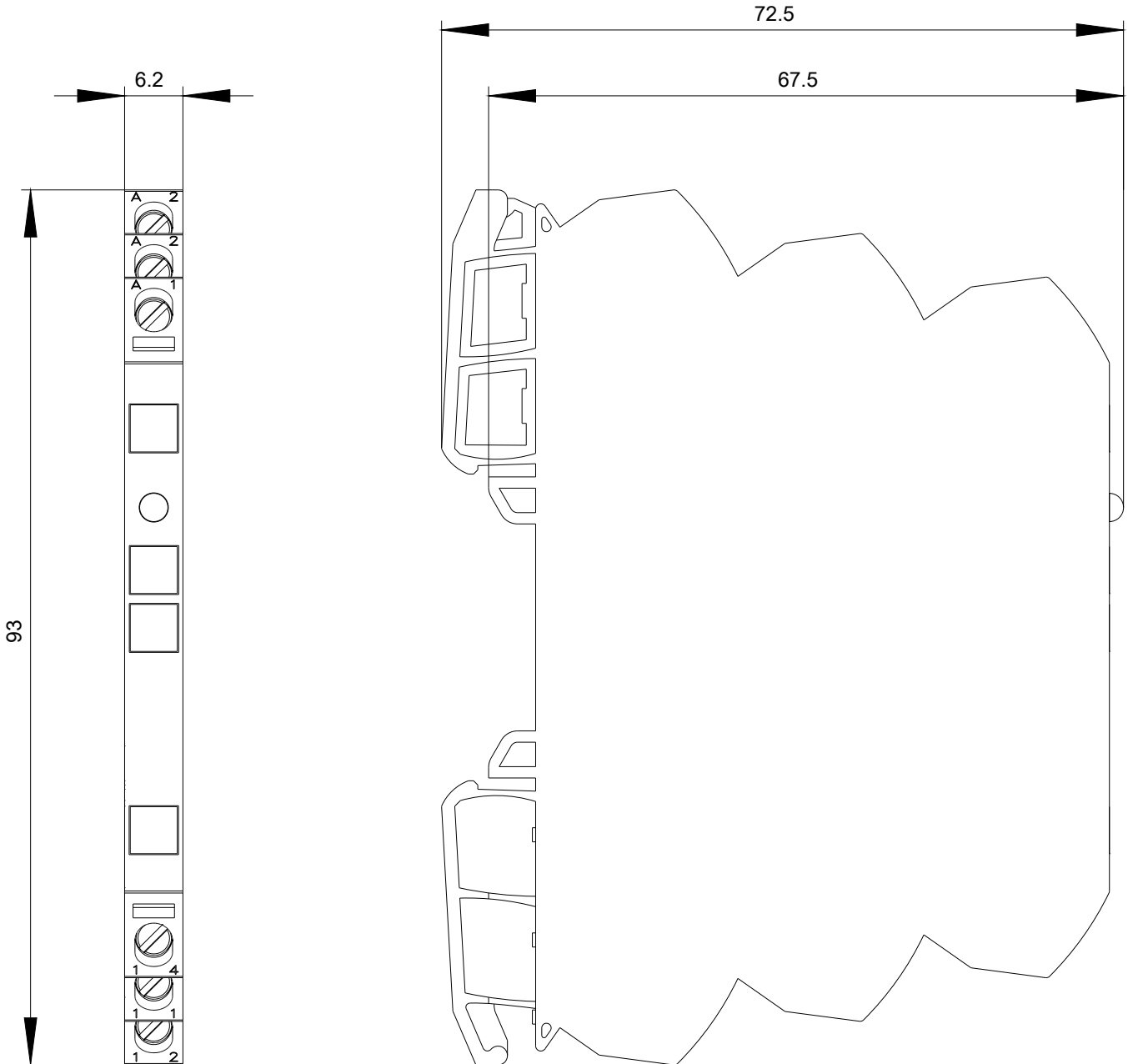
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-1AB01>

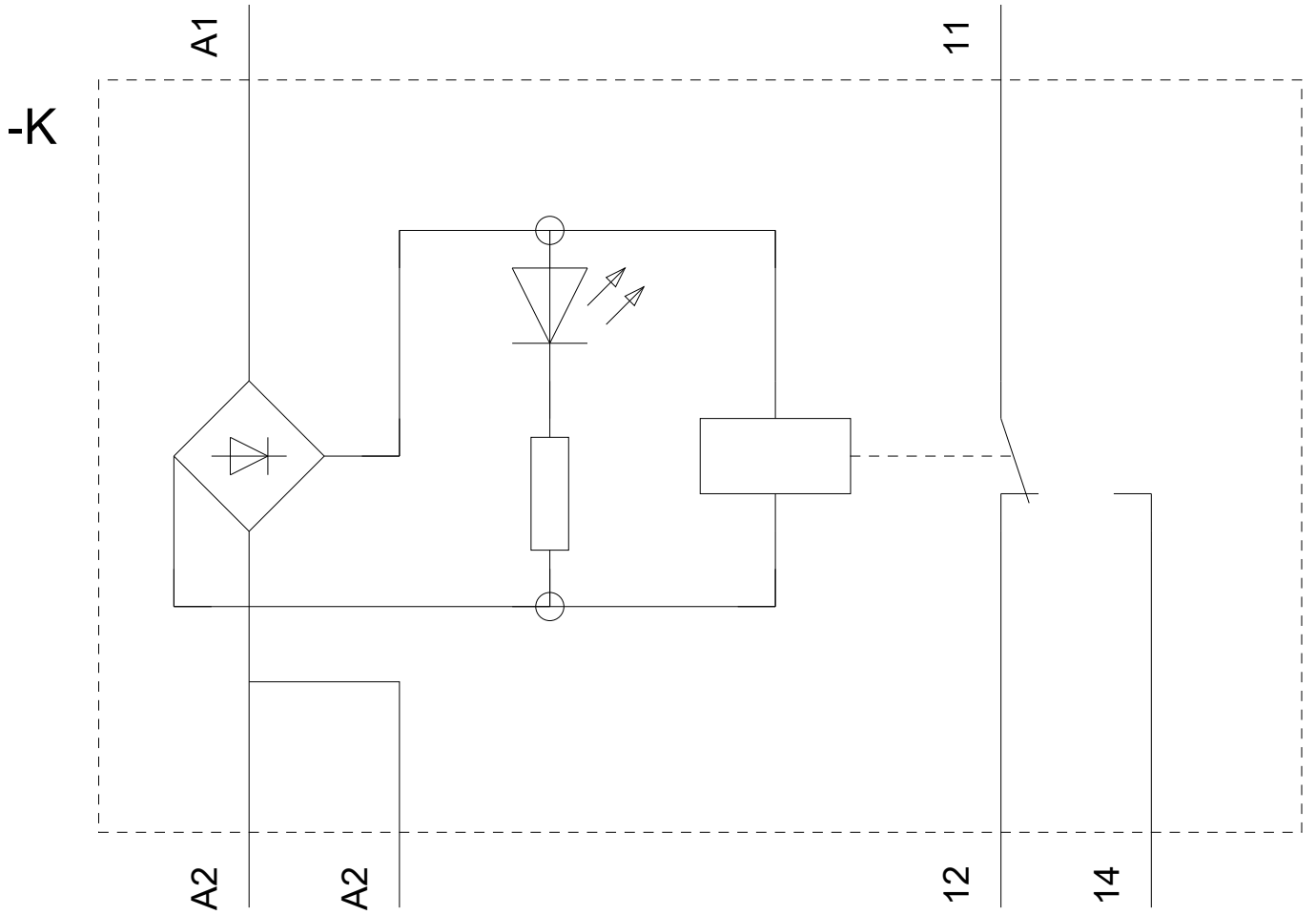
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AB01>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-1AB01&lang=en





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