

Output coupler Relay coupler, 1 change-over contact 110 V DC
 Operating range 0.7 to 1.25 x US Overall width 6.2 mm Spring-type
 terminal (push-in) Thermal current 6A



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
Consumed active power	0.6 W
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	9.6 %
Protection class IP	IP20
Shock resistance	
• for railway applications acc. to DIN EN 61373	Category 1, Class B

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 DIN EN 81346-2	K
Reference code acc. to DIN EN 61346-2	K

Control circuit/ Control

Control supply voltage at DC	
• rated value	110 V
Operating range factor control supply voltage rated value at DC	
• initial value	0.7
• Full-scale value	1.25
Switch-on delay time	
• at DC maximum	6 ms
Off-delay time	11 ms
Closing delay	
• at DC	5 ms
Opening delay	
• at DC	10 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
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	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	
• 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 DC maximum	1 000 m
Type of connectable conductor cross-sections	
• solid	1x (0.25 ... 2.5 mm ²)
• finely stranded with core end processing	1x (0.25 ... 1.5 mm ²)
• finely stranded without core end processing	1x (0.25 ... 2.5 mm ²)

<ul style="list-style-type: none"> • at AWG conductors solid • at AWG conductors stranded 	<p>1 x (20 ... 14)</p> <p>1x (20 ... 14)</p>
Connectable conductor cross-section <ul style="list-style-type: none"> • solid • finely stranded with core end processing • finely stranded without core end processing 	<p>0.25 ... 2.5 mm²</p> <p>0.25 ... 1.5 mm²</p> <p>0.25 ... 2.5 mm²</p>
AWG number as coded connectable conductor cross section <ul style="list-style-type: none"> • solid • stranded 	<p>20 ... 14</p> <p>20 ... 14</p>

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 <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	<p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p>

Ambient conditions

Installation altitude at height above sea level <ul style="list-style-type: none"> • maximum 	2 000 m
Relative humidity <ul style="list-style-type: none"> • during operation 	10 ... 95 %

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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CCC



CSA



UL



RCM



EG-Konf.

Declaration of Conformity	Test Certificates	Marine / Shipping	other
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



[Confirmation](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mfb=3RQ3018-2AN08-0AA0>

Cax online generator

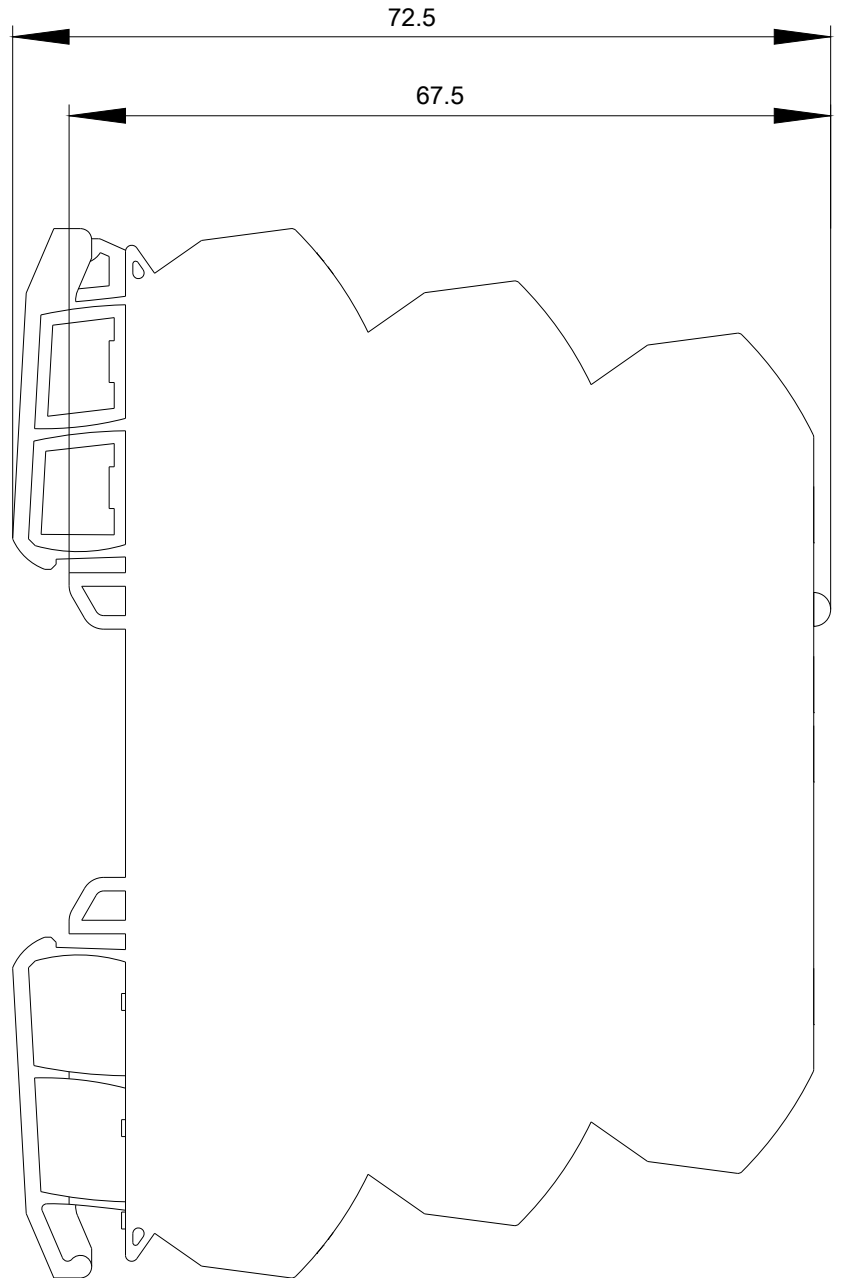
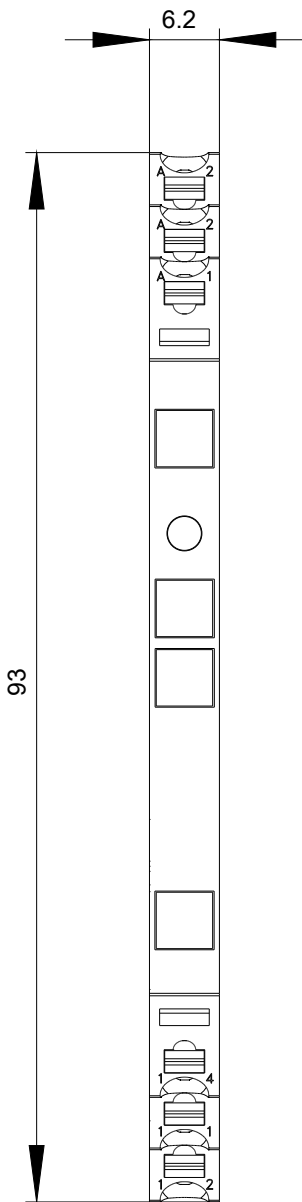
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3RQ3018-2AN08-0AA0>

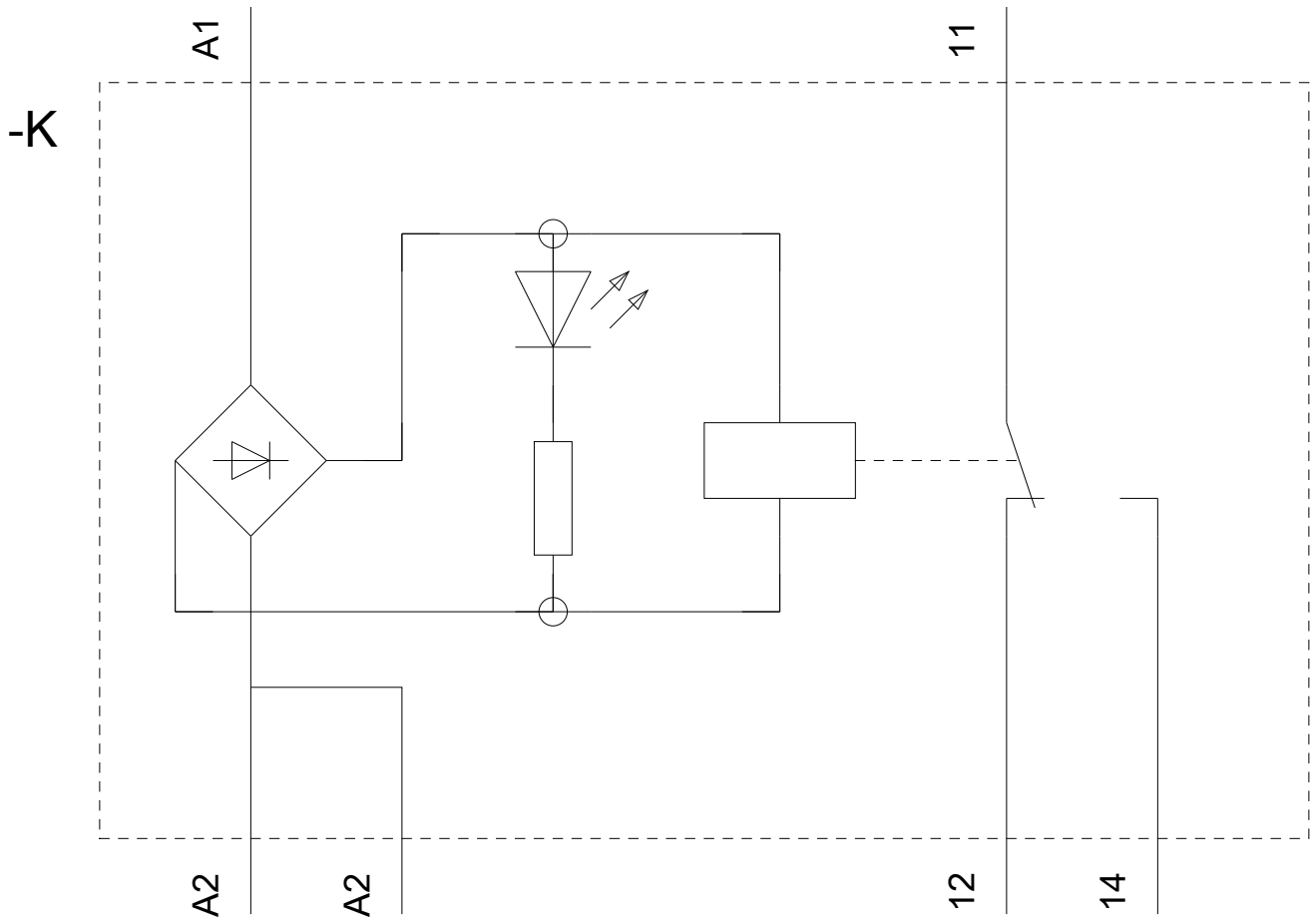
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AN08-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3RQ3018-2AN08-0AA0&lang=en





last modified:

09/04/2019