

Output coupler Relay coupler, 1 W, 24 V DC Operating range 0.7 to 1.25 x US Enclosure width 6.2 mm Spring-type terminal (push-in) 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	14.6 %
Protection class IP	IP20
Shock resistance • for railway applications acc. to DIN EN 61373	Category 1, Class B
Vibration 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 IEC 81346-2:2009 • acc. to DIN EN 61346-2	K K

Control circuit/ Control

Control supply voltage at DC • rated value	24 V
Operating range factor control supply voltage rated value at DC • initial value • Full-scale value	0.7 1.25
Switch-on delay time • at DC maximum	5 ms
Off-delay time	10 ms
Closing delay • at DC	6 ms
Opening delay • 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
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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	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
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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	
• 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	

<ul style="list-style-type: none"> • for auxiliary and control current circuit 	PUSH-IN connection (spring-loaded connection)
Wire length	
<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"> • finely stranded without core end processing 	1x (0.25 ... 2.5 mm ²)
<ul style="list-style-type: none"> • at AWG conductors solid 	1 x (20 ... 14)
<ul style="list-style-type: none"> • at AWG conductors stranded 	1x (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
<ul style="list-style-type: none"> • finely stranded without core end processing 	0.25 ... 2.5 mm ²
AWG number as coded connectable conductor cross section	
<ul style="list-style-type: none"> • solid 	20 ... 14
<ul style="list-style-type: none"> • stranded 	20 ... 14

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

— at the side


0 mm

Ambient conditions

Installation altitude at height above sea level <ul style="list-style-type: none">• maximum	2 000 m
Ambient temperature <ul style="list-style-type: none">• during operation• during storage• during transport	-40 ... +70 °C -40 ... +85 °C -40 ... +85 °C
Relative humidity <ul style="list-style-type: none">• during operation	10 ... 95 %

Certificates/approvals

General Product Approval	Declaration of Conformity	Test Certificates
 CCC	 EAC	 EG-Konf.
 CSA		Type Test Certificates/Test Report
 UL		

Marine / Shipping	other	Railway
 DNV-GL DNVGL.COM/AF	Confirmation	Vibration and Shock 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=3RQ3018-2AM08-0AA0>

Cax online generator

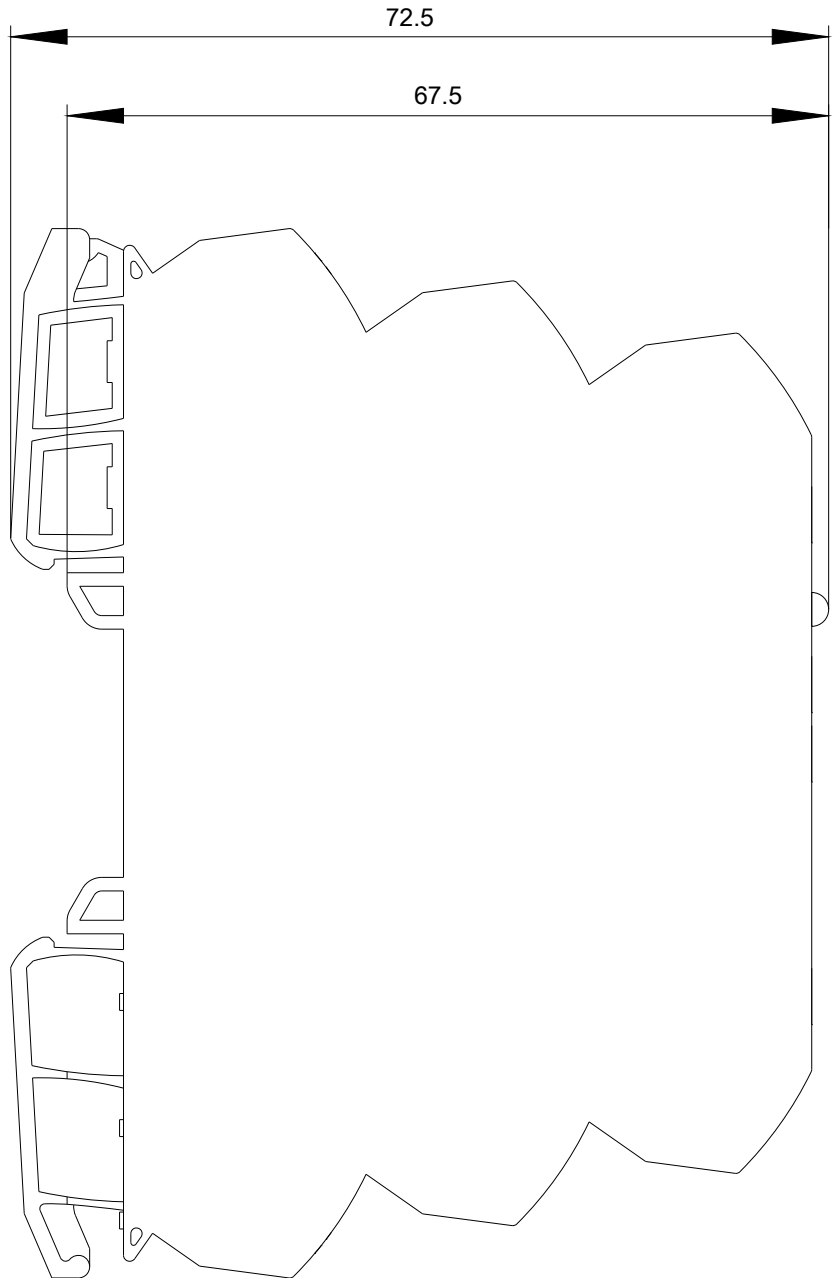
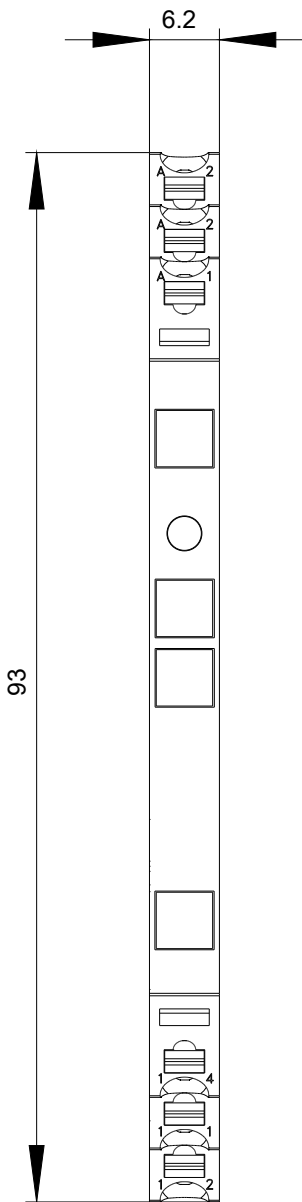
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AM08-0AA0>

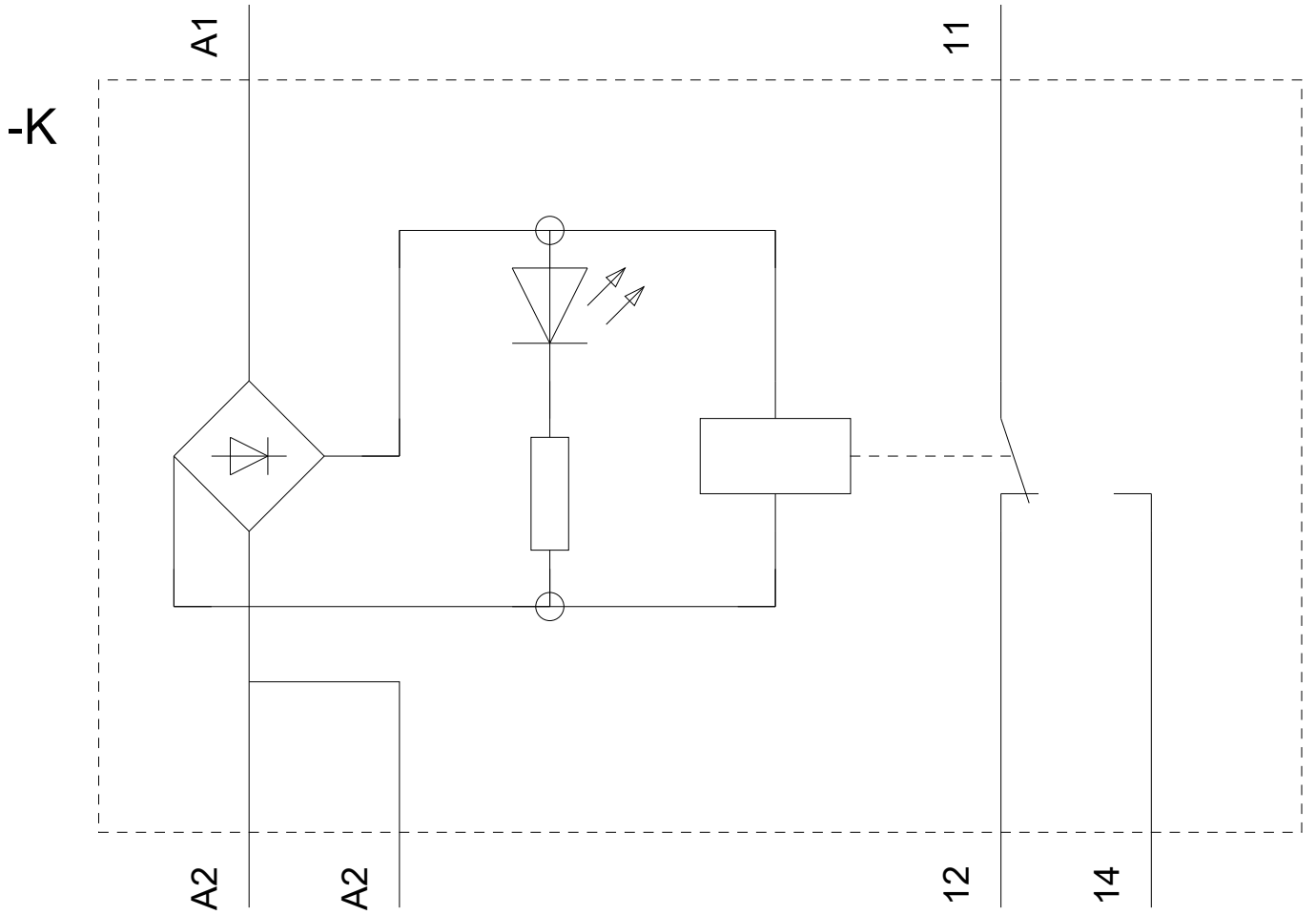
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AM08-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-2AM08-0AA0&lang=en





last modified:

05/17/2018