

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



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	0.3 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	10 %
Protection class IP	IP20
Shock resistance	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms

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 AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
Control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
Control supply voltage at DC	
• rated value	24 V
Operating range factor control supply voltage rated value at DC	
• initial value	0.8
• Full-scale value	1.25
Operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.8
• Full-scale value	1.25
Operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.8
• Full-scale value	1.25
Switch-on delay time	
• at AC maximum	12 ms
• at DC maximum	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	fuse gG: 4 A
<ul style="list-style-type: none"> for short-circuit protection of the auxiliary switch required 	
Auxiliary circuit	
Type of switching contact	Changeover contact
Material of switching contacts	AgSnO ₂ -HTV
Number of CO contacts	1
<ul style="list-style-type: none"> for auxiliary contacts 	
Operating current of auxiliary contacts at AC-15	3 A
<ul style="list-style-type: none"> at 24 V at 250 V 	
Operating current of auxiliary contacts at DC-13	1 A 0.2 A 0.1 A
<ul style="list-style-type: none"> at 24 V at 125 V at 250 V 	
Contact reliability of auxiliary contacts	
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	3 A
<ul style="list-style-type: none"> at 250 V at 50/60 Hz 	
Ampacity of the output relay at DC-13	1 A 0.2 A 0.1 A
<ul style="list-style-type: none"> at 24 V at 125 V at 250 V 	
Electromagnetic compatibility	
EMC emitted interference	ambience A (industrial sector)
<ul style="list-style-type: none"> acc. to IEC 60947-1 	
EMI immunity	corresponds to degree of severity 3
<ul style="list-style-type: none"> acc. to IEC 60947-1 	
Conducted interference	2 kV 2 kV 1 kV
<ul style="list-style-type: none"> due to burst acc. to IEC 61000-4-4 due to conductor-earth surge acc. to IEC 61000-4-5 due to conductor-conductor surge acc. to IEC 61000-4-5 	
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	LED green
<ul style="list-style-type: none"> • as status display by LED 	
Connections/ Terminals	
Product function	No
<ul style="list-style-type: none"> • removable terminal 	
Type of electrical connection	screw-type terminals
<ul style="list-style-type: none"> • for auxiliary and control current circuit 	
Wire length	500 m
<ul style="list-style-type: none"> • at AC maximum • at DC maximum 	1 000 m
Type of connectable conductor cross-sections	1x (0.25 ... 2.5 mm ²)
<ul style="list-style-type: none"> • solid • finely stranded with core end processing • at AWG conductors solid 	1x (0.25 ... 1.5 mm ²) 1 x (20 ... 14)
Connectable conductor cross-section	0.25 ... 2.5 mm ²
<ul style="list-style-type: none"> • solid • finely stranded with core end processing 	0.25 ... 1.5 mm ²
AWG number as coded connectable conductor cross section	20 ... 14
<ul style="list-style-type: none"> • solid 	
Tightening torque	0.5 ... 0.6 N·m
<ul style="list-style-type: none"> • with screw-type terminals 	
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 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 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
Relative humidity	
• during operation	10 ... 95 %

Certificates/ approvals

General Product Approval			EMC	Declaration of Conformity
				
CCC	CSA	UL		EG-Konf.

Declaration of Conformity	Marine / Ship-ping	other
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[Miscellaneous](#)



[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?mlfb=3RQ3018-1AB01>

Cax online generator

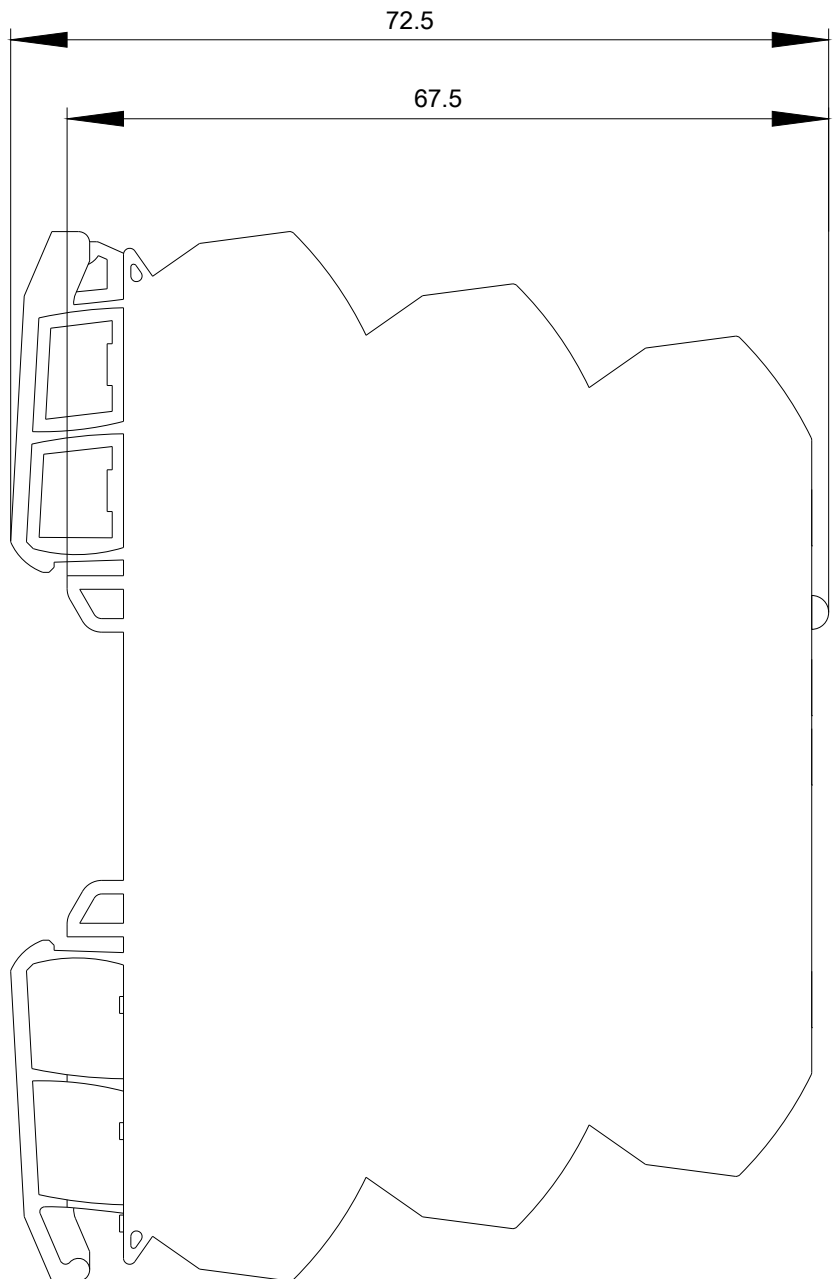
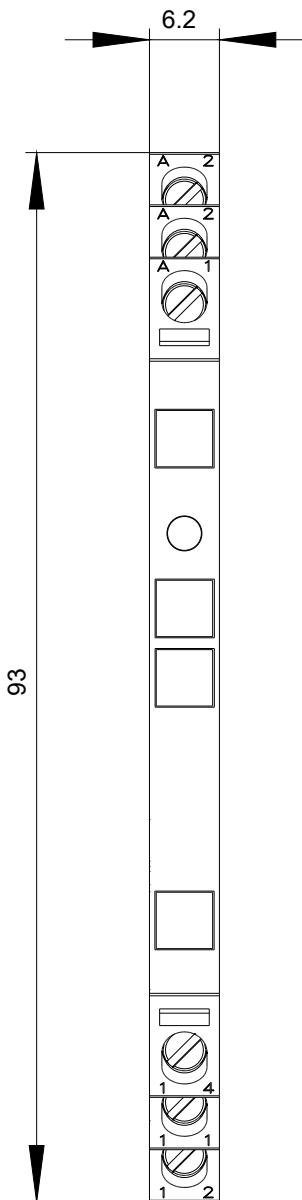
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-1AB01>

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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