# **SIEMENS**

Data sheet 3RQ3018-1AB00



Output coupler Relay coupler, 1 CO contact 24 V AC/DC Overall width 6.2 mm Screw terminal Thermal current 6 A

## Figure similar

### Article number

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 links
Product type designation	3RQ3

General technical data		
Display version LED		Yes
Product component		
Relay output		Yes
<ul> <li>semi-conductor output</li> </ul>		No
Consumed active power	W	0.3
Insulation voltage		
<ul> <li>for overvoltage category III according to IEC 60664</li> </ul>		
— with degree of pollution 3 rated value	V	300
Surge voltage resistance rated value	kV	4
maximum permissible voltage for safe isolation		

	V	300
between control and auxiliary circuit		
Percental drop-out voltage related to the input voltage	%	10
Protection class IP		IP20
Shock resistance		11 20
• acc. to IEC 60068-2-27		sinusoidal half-wave 15g / 11 ms
Vibration resistance		Sinusoidal Hall-wave Tog / 11 ms
		6 150 Hz: 2 a
• acc. to IEC 60068-2-6	4.0-	6 150 Hz: 2 g
Operating frequency maximum	1/h	72 000
Switching behavior		monostable
Mechanical service life (switching cycles)		40,000,000
• typical		10 000 000
Electrical endurance (switching cycles)		
• at AC-15 at 230 V typical		100 000
Thermal current	Α	6
Equipment marking		
• acc. to DIN EN 61346-2		K
• acc. to DIN EN 81346-2		K
Control circuit/ Control		
Control supply voltage at AC		
● at 50 Hz rated value	V	24
• at 60 Hz rated value	V	24
Control supply voltage at DC		
• rated value	V	24
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
Off-delay time	ms	14
Closing delay		
● at AC	ms	12
• at DC	ms	6
Opening delay		
• at AC	ms	14

• at DC	ms	13
Design of the relay operating mechanism		poled
Product component Plug-in socket		No
Short-circuit protection		
Design of the fuse link		
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>		fuse gG: 4 A
Auxiliary circuit		
Type of switching contact		Changeover contact
Material of switching contacts		AgSnO2
Number of CO contacts		
<ul> <li>for auxiliary contacts</li> </ul>		1
Operating current of auxiliary contacts at AC-15		
• at 24 V	Α	3
● at 250 V	Α	3
Operating current of auxiliary contacts at DC-13		
● at 24 V	Α	1
● at 125 V	Α	0.2
● at 250 V	Α	0.1
Contact reliability of auxiliary contacts		one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
		Switching operations (17-4, 5-11).
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	Α	3
Ampacity of the output relay at DC-13		
● at 24 V	Α	1
● at 125 V	Α	0.2
● at 250 V	Α	0.1
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

<ul> <li>due to conductor-earth surge acc. to IEC</li> </ul>		2 kV
61000-4-5		
<ul> <li>due to conductor-conductor surge acc. to IEC</li> <li>61000-4-5</li> </ul>		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> <li>for auxiliary and control current circuit</li> </ul>		screw-type terminals
Wire length		
• at AC maximum	m	500
• at DC maximum	m	1 000
Type of connectable conductor cross-sections	-	
• solid		1x (0.25 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>		1x (0.25 1.5 mm²)
<ul> <li>at AWG conductors solid</li> </ul>		1 x (20 14)
Connectable conductor cross-section	-	
• solid	mm²	0.25 2.5
<ul> <li>finely stranded with core end processing</li> </ul>	mm²	0.25 1.5
AWG number as coded connectable conductor cross section		
• solid		20 14
Tightening torque	_	
with screw-type terminals	N·m	0.5 0.6
Installation/ mounting/ dimensions		
Mounting position		any
Mounting type	_	snap-on mounting
Height	mm	93
Width	mm	6.2
Depth	mm	72.5

Required spacing

• with side-by-side mounting

— forwards

— upwards

- Backwards

— downwards

0

0 0

0

mm

mm

mm

mm

— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	0
— downwards	mm	0
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0

Ambient conditions			
Installation altitude at height above sea level			
• maximum	m	2 000	
Ambient temperature			
<ul><li>during operation</li></ul>	°C	-25 +60	
during storage	°C	-40 <b>+</b> 85	
during transport	°C	-40 +85	
Relative humidity			
<ul><li>during operation</li></ul>	%	10 95	

General Product Approval	Declaration of	other
	Conformity	











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=3RQ3018-1AB00

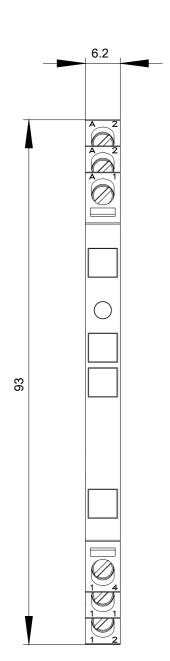
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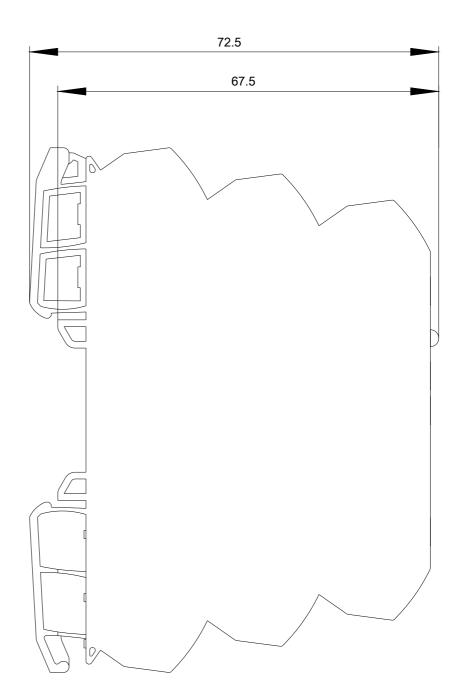
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-1AB00

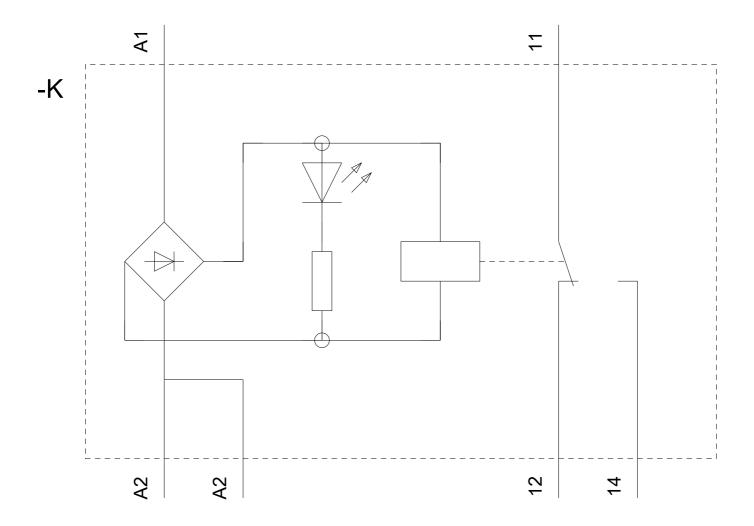
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AB00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3018-1AB00&lang=en







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