# SIEMENS

### Data sheet

## 3RQ3018-1AB00



Output coupler Relay coupler, 1 change-over contact 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 feature protective coating on printed-circuit board	No		
product component			
<ul> <li>relay output</li> </ul>	Yes		
<ul> <li>semi-conductor output</li> </ul>	No		
consumed active power	0.3 W		
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 protective separation			
<ul> <li>between control and auxiliary circuit</li> </ul>	300 V		
percental drop-out voltage related to the input voltage	10 %		
protection class IP	IP20		
flammability class of enclosure material	UL94 V-0		
shock resistance			
<ul> <li>according to IEC 60068-2-27</li> </ul>	sinusoidal half-wave 15g / 11 ms		
vibration resistance			
<ul> <li>according to IEC 60068-2-6</li> </ul>	6 150 Hz: 2 g		
operating frequency maximum	72 000 1/h		
switching behavior	monostable		
mechanical service life (operating cycles) typical	10 000 000		
thermal current	6 A		
reference code according to IEC 81346-2	К		
Substance Prohibitance (Date)	03/25/2015		
Control circuit/ Control			
control supply voltage at AC			
<ul> <li>at 50 Hz rated value</li> </ul>	24 V		
<ul> <li>at 60 Hz rated value</li> </ul>	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				
<ul> <li>initial value</li> </ul>	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			
ON-delay time				
• at AC maximum	12 ms			
• at DC maximum	12 ms			
OFF-delay time	14 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	AgSnO2			
number of CO contacts for auxiliary contacts	1			
operational current of auxiliary contacts at AC-15				
• at 24 V	3 A			
• at 250 V	3 A			
operational 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				
Main circuit				
type of voltage	AC/DC			
type of voltage Inputs/ Outputs				
type of voltage Inputs/ Outputs property of the output short-circuit proof	No			
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz				
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13	No 3 A			
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V	No 3 A 1 A			
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V	No 3 A 1 A 0.2 A			
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13 • at 24 V • at 125 V • at 250 V	No 3 A 1 A			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V	No 3 A 1 A 0.2 A 0.1 A			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector)			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1	No 3 A 1 A 0.2 A 0.1 A			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         enducted interference         • due to burst according to IEC 61000-4-4	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV			
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type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 10 V/m			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 1 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge			
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type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-earth surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to scharge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge LED green No			
type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         field-based interference according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal         type of electrical connection for auxiliary and control circuit	No 3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV 2 kV 2 kV 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge LED green No			
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type of voltage         Inputs/ Outputs         property of the output short-circuit proof         ampacity of the output relay at AC-15 at 250 V at 50/60 Hz         ampacity of the output relay at DC-13         • at 24 V         • at 125 V         • at 250 V         Electromagnetic compatibility         EMC emitted interference according to IEC 60947-1         EMC immunity according to IEC 60947-1         conducted interference         • due to burst according to IEC 61000-4-4         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-5         • due to conductor-conductor surge according to IEC 61000-4-3         electrostatic discharge according to IEC 61000-4-2         Display         display version as status display by LED         Connections/ Terminals         product function removable terminal         type of electrical connection for auxiliary and control circuit         wire length         • at AC maximum	No         3 A         1 A         0.2 A         0.1 A         ambience A (industrial sector)         corresponds to degree of severity 3         2 kV         2 kV         2 kV         10 V/m         6 kV contact discharge / 8 kV air discharge         LED green         No         screw-type terminals         500 m			
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	<u>Type Test Cer</u> ates/Test Re		DNV-GL Ewolucion	<u>Confirmation</u>	
Declaration of Conformity	Test Certificat		Marine / Shipping	other	
	_		01		TVG MI
	<u>Confirmatic</u>	<u>on</u>	(h)	EHC	
General Product Approval					EMC
ertificates/ approvals					
elative humidity during operation		10 9	95 %		
during transport			+85 °C		
• during storage		-40	+85 °C		
during operation		-25	+60 °C		
ambient temperature					
nstallation altitude at height above sea level max	mum	2 000	m		
nbient conditions					
— at the side		0 mm			
— dpwards — downwards		0 mm			
— backwards — upwards		0 mm 0 mm			
— forwards		0 mm			
for live parts		0			
— downwards		0 mm			
— at the side		0 mm			
— upwards		0 mm			
— backwards		0 mm			
— forwards		0 mm			
<ul> <li>for grounded parts</li> </ul>					
— at the side		0 mm			
— downwards		0 mm			
— upwards		0 mm			
— backwards		0 mm			
— forwards		0 mm			
• with side-by-side mounting					
required spacing					
depth		72.5 n			
height width		93 mn 6.2 mi			
fastening method		93 mn	on mounting		
mounting position		any			
stallation/ mounting/ dimensions			_	_	
ightening torque with screw-type terminals		0.5	0.6 N·m		
• solid		20 *			
section					
AWG number as coded connectable conducto	r cross				
• finely stranded with core end processing		0.25 1.5 mm <sup>2</sup>			
• solid		0.25	2.5 mm²		

Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

#### https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3018-1AB00

Cax online generator

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

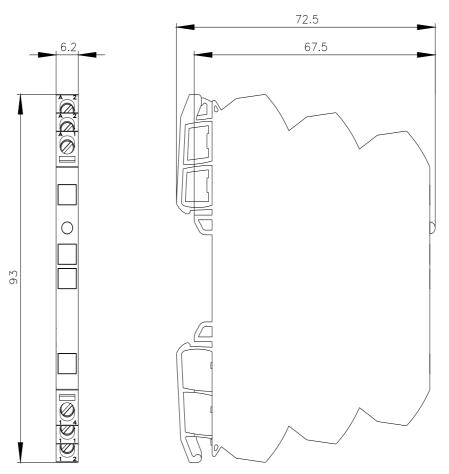
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

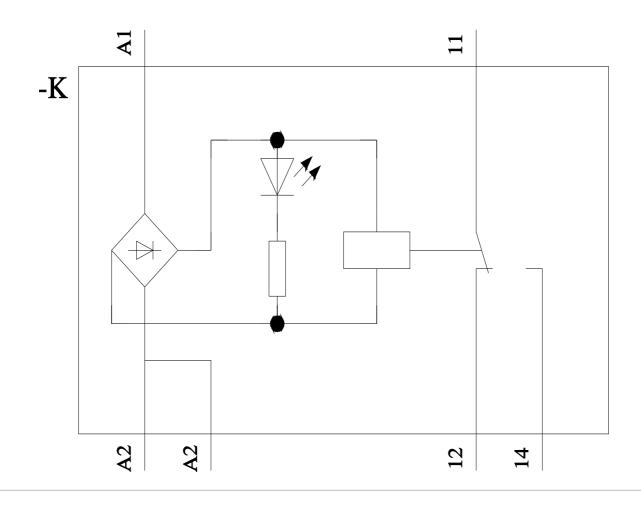
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AB00

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

**Characteristic: Derating** 

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





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