# SIEMENS

### Data sheet

## 3RQ3118-1AB01



Output coupler with plug-in Relay, 1 CO, hard gold-plated screw terminal 24 V AC/DC Enclosure width 6.2 mm Thermal current 6A

product brand name	SIRIUS		
product category	SIRIUS 3RQ3 coupling relays in slim design		
product designation	Coupling relays with plug-in relay		
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			
according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms		
vibration resistance			
according to IEC 60068-2-6	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			
• 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		
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	Yes		
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 hard gold-plated		
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 (5 V, 1 mA)		
Main circuit			
Main circuit	AC/DC		
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		
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 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		
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	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         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 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         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         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		
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         • field-based interference according to IEC 61000-4-3	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-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	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 25 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 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-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 61000-4-3         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		
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 61000-4-3         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	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         screw-type terminals		
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         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 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         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         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		
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 61000-4-4         • 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 61000-4-5         • 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	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		
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 61000-4-4         • 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         wire length         • at AC maximum         • at DC maximum         • at DC 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         1 kV         10 V/m         6 kV contact discharge / 8 kV air discharge         LED green         No         screw-type terminals         500 m         1 000 m		

<ul> <li>for AWG cables solid</li> </ul>		1 x (20 14)		
connectable conductor cross-section				
• solid		0.25 2.5 mm <sup>2</sup>		
<ul> <li>finely stranded with core end processing</li> </ul>		0.25 1.5 mm²		
AWG number as coded connectable conductor section	r cross			
• solid		20 14		
tightening torque with screw-type terminals		0.5 0.6 N·m		
stallation/ mounting/ dimensions		0.0 0.0 14 11		
		001/		
mounting position		any		
fastening method		snap-on mounting		
height		93 mm		
width		6.2 mm		
depth		76 mm		
required spacing				
• with side-by-side mounting				
— forwards		0 mm		
— backwards		0 mm		
— upwards		0 mm		
— downwards		0 mm		
— at the side		0 mm		
<ul> <li>for grounded parts</li> </ul>				
— forwards		0 mm		
— backwards		0 mm		
— upwards		0 mm		
— at the side		0 mm		
— downwards		0 mm		
<ul> <li>for live parts</li> </ul>				
— forwards		0 mm		
— backwards		0 mm		
— upwards		0 mm		
— downwards		0 mm		
— at the side		0 mm		
mbient conditions				
installation altitude at height above sea level maxi	mum	2 000 m		
ambient temperature				
<ul> <li>during operation</li> </ul>		-25 +60 °C		
during storage		-40 +85 °C		
during transport		-40 +85 °C		
relative humidity during operation		10 95 %		
ertificates/ approvals				
General Product Approval				EMC
	<u>Confirmatio</u>	•		<b>A</b>
		ų.	EAC	
		UL		RGM
CSA CCC				
CSA CCC Declaration of Conformity	Test Certificate	es Marine / Shipping	other	
CSA CCC Declaration of Conformity				
	Test Certificato	tific-	other <u>Confirmation</u>	
UK CE	Type Test Cer	tific- port		
	Type Test Cer	tific-		
	Type Test Cer	tific- port		
	<u>Type Test Cer</u> ates/Test Rep	tific- port		

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=3RQ3118-1AB01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-1AB01

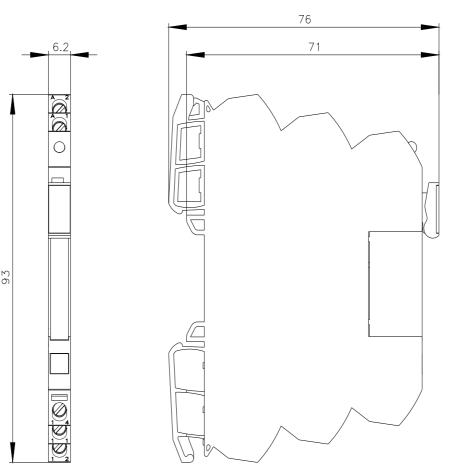
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

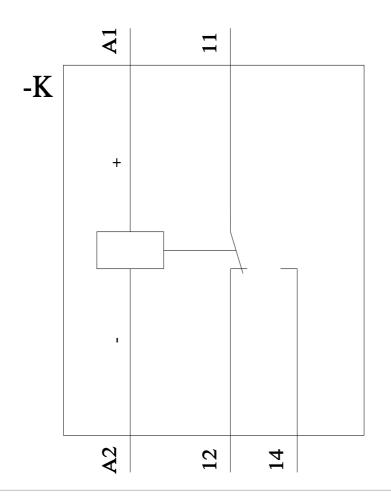
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3118-1AB01&lang=en

**Characteristic: Derating** 

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