# SIEMENS

### Data sheet

## 3RQ3018-1AB01



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 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	
• 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	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 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 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	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 • 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         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	No 3 A 1 A 0.2 A 0.1 A
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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	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         • 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
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         • 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	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         • 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
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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-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 1 kV 10 V/m 6 kV contact discharge / 8 kV air discharge LED green
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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 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 61000-4-3         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 <td>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</td>	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

0.25 2.5 mm <sup>2</sup> 0.25 1.5 mm <sup>2</sup> 20 14 0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm
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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=3RQ3018-1AB01

Cax online generator

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

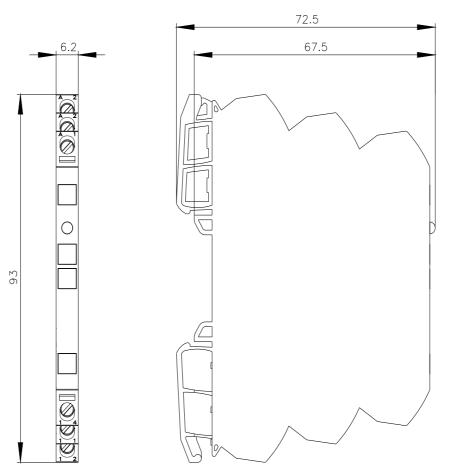
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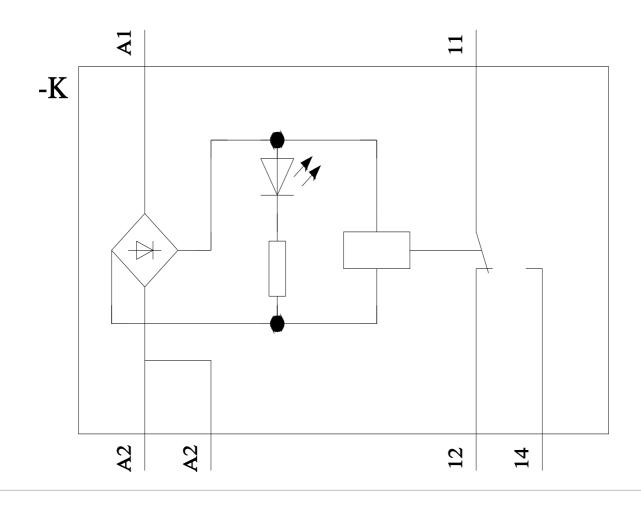
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Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3018-1AB01&lang=en

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