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 product category product designation design of the product SIRIUS SIRIUS 3RQ3 coupling relays in slim design Coupling relays with relay output (not plug-in)

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	
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 safe isolation		
 between control and auxiliary circuit 	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	K	
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	

value at DC

control supply voltage at DC

operating range factor control supply voltage rated

rated value

• initial value

• full-scale value

24 V

8.0

1.25

operating range factor control supply voltage rated	
value at AC at 50 Hz	0.0
• 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
	1.25
ON-delay time	40
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	Ay51102
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	10.70
type of voltage	AC/DC
7. 0	
Inputs/ Outputs	
7. 0	No
Inputs/ Outputs	No 3 A
Inputs/ Outputs property of the output short-circuit proof	
Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz	
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	3 A
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	3 A 1 A
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	3 A 1 A 0.2 A
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	3 A 1 A 0.2 A 0.1 A
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	3 A 1 A 0.2 A 0.1 A ambience A (industrial sector)
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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	3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3 2 kV
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	3 A 1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3
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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 electrostatic discharge according to IEC 61000-4-2 Display	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
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solid • finely stranded with core end processing

AWG number as coded connectable conductor cross section

solid tightening torque with screw-type terminals 0.25 ... 2.5 mm² 0.25 ... 1.5 mm²

20 ... 14 0.5 ... 0.6 N·m

snap-on mounting

93 mm

6.2 mm

72.5 mm

0 mm

nstallation/	mounting/	dimensions

mounting position fastening method height

depth required spacing

width

• with side-by-side mounting

- forwards - backwards - upwards - downwards - at the side • for grounded parts

- forwards - backwards - upwards - at the side - downwards

• for live parts - forwards - backwards

> - upwards - downwards - at the side

> > 2 000 m

installation altitude at height above sea level maximum ambient temperature • during operation -25 ... +60 °C -40 ... +85 °C • during storage -40 ... +85 °C • during transport relative humidity during operation 10 ... 95 %

Certificates/ approvals

Ambient conditions

General Product Approval

EMC





Confirmation







Declaration of Conformity

Test Certificates

Marine / Shipping

other



Type Test Certificates/Test Report



Confirmation

Further information

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

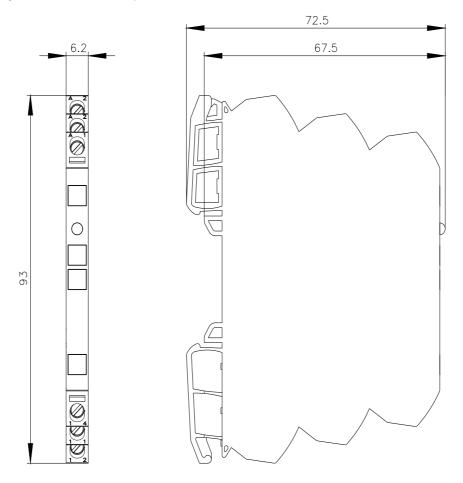
Cax online generator

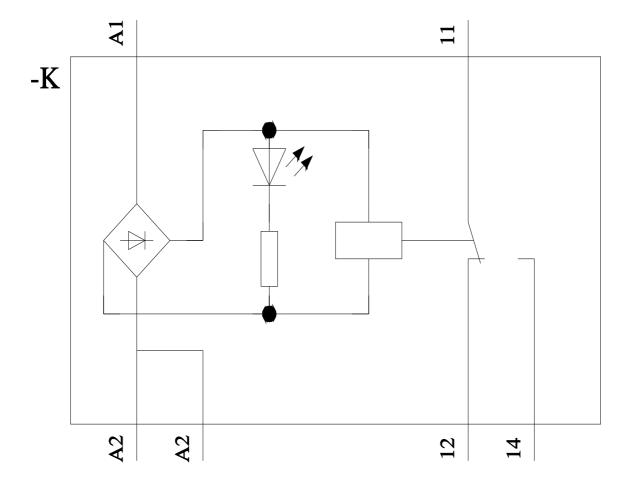
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-1AB00

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

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





last modified: 5/6/2021 🖸