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	
 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 protective separation	
between control and auxiliary circuit	300 V
percental drop-out voltage related to the input voltage	10 %
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
Weight	0.035 kg
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	1.25
at AC maximum	12 ms
at DC maximum	12 ms
	14 ms
OFF-delay time maximum Mechanical data	14 ms
	Ma
product component plug-in socket	No
design of the relay operating mechanism	poled
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
	AgSnO2 hard gold-plated
number of CO contacts for auxiliary contacts operational current of auxiliary contacts at AC-15	
•	2 A
• at 24 V	3 A 3 A
• at 250 V	SA
operational current of auxiliary contacts at DC-13	4.0
• at 24 V	1 A 0.2 A
• at 125 V	
• 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	
	AC/DC
type of voltage	
type of voltage Inputs/ Outputs	AC/DC
type of voltage Inputs/ Outputs property of the output short-circuit proof	AC/DC 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	AC/DC
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	AC/DC 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	AC/DC 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	AC/DC 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	AC/DC 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 Electromagnetic compatibility	AC/DC 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	AC/DC 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	AC/DC 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	AC/DC 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	AC/DC 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 conducted interference • due to burst according to IEC 61000-4-4	AC/DC 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-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5	AC/DC 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 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	AC/DC 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
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 electrostatic discharge according to IEC 61000-4-2 Display	AC/DC 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
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 display version as status display by LED Connections/ Terminals	AC/DC 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
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 display version as status display by LED Connections/ Terminals product function removable terminal	AC/DC 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
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 display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit	AC/DC 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
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 display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length	AC/DC 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 No screw-type terminals
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 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	AC/DC 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 No screw-type terminals 500 m
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 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	AC/DC 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 No screw-type terminals
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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 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	AC/DC 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 No screw-type terminals 500 m

for AWG cables solid	1 x (20 14)	
connectable conductor cross-section		
• solid	0.25 2.5 mm ²	
 finely stranded with core end processing 	0.25 1.5 mm²	
AWG number as coded connectable conductor cross section		
• solid	20 14	
tightening torque with screw-type terminals	0.5 0.6 N·m	
Installation/ mounting/ dimensions		
mounting position	any	
fastening method	snap-on mounting	
height	93 mm	
width	6.2 mm	
depth	72.5 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	
 for grounded parts 		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— at the side	0 mm	
— downwards	0 mm	
• for live parts		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— downwards	0 mm	
— at the side	0 mm	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
during operation	-25 +60 °C	
during storage	-40 +85 °C	
during transport	-40 +85 °C	
relative humidity during operation	10 95 %	
Approvals Certificates		

General Product Approval







Confirmation





General Product Approval EMV Test Certificates Marine / Shipping other





<u>KC</u> <u>Type Test Certificates/Test Report</u>



Confirmation

Environment

Environmental Confirmations

Further information

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

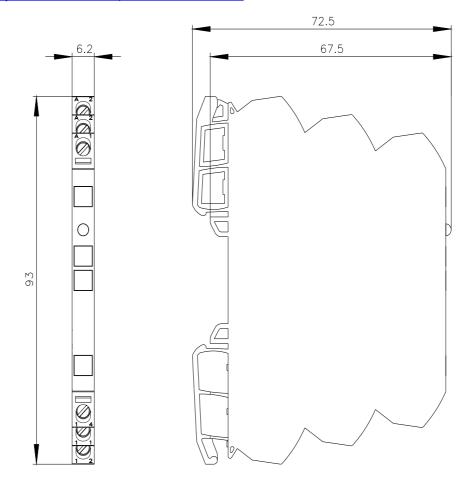
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

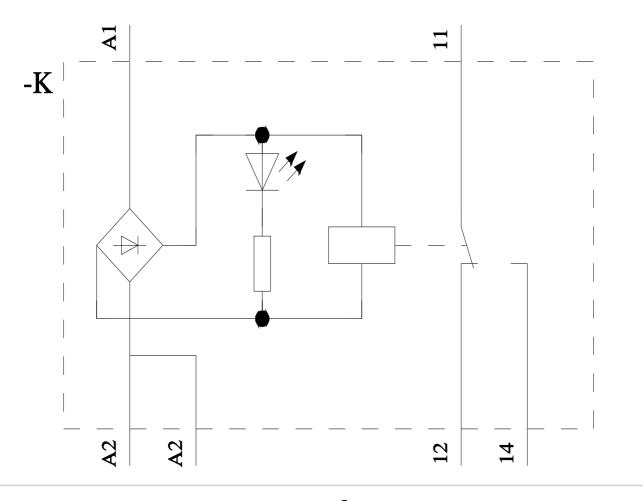
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AB0

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

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AB01/manual





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