## **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 component	
<ul><li>relay output</li></ul>	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	
<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
shock resistance	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance	
• acc. to IEC 60068-2-6	6 150 Hz: 2 g
operating frequency maximum	72 000 1/h
switching behavior	monostable
mechanical service life (switching cycles) typical	10 000 000
thermal current	6 A
reference code acc. to IEC 81346-2	K
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	
switch 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	
4 dt 120 V		
• at 250 V	0 1 A	
at 250 V  contact reliability of auxiliary contacts	0.1 A  one incorrect switching operation of 100 million switching operations (17)	
• at 250 V  contact reliability of auxiliary contacts	0.1 A one incorrect switching operation of 100 million switching operations (17 V, 5 mA)	
	one incorrect switching operation of 100 million switching operations (17	
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17	
contact reliability of auxiliary contacts  Main circuit	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)	
contact reliability of auxiliary contacts  Main circuit type of voltage	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)	
contact reliability of auxiliary contacts  Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)  AC/DC	
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contact reliability of auxiliary contacts  Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)  AC/DC	
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contact reliability of auxiliary contacts  Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof  Outputs 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	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)  AC/DC  No  3 A	
contact reliability of auxiliary contacts  Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs 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	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)  AC/DC  No  3 A  1 A  0.2 A	
contact reliability of auxiliary contacts  Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof  Outputs 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	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)  AC/DC  No  1 A  1 A  0.2 A  0.1 A	
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contact reliability of auxiliary contacts  Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof  Outputs 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 acc. to IEC 60947-1  EMC immunity acc. to IEC 60947-1	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)  AC/DC  No  3 A  1 A  0.2 A  0.1 A  ambience A (industrial sector)	
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contact reliability of auxiliary contacts  Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)  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	
contact reliability of auxiliary contacts  Main circuit type of voltage Inputs/ Outputs property of the output short-circuit proof Outputs ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13	one incorrect switching operation of 100 million switching operations (17 V, 5 mA)  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	
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at AC maximum	500 m	
at DC maximum	1 000 m	
type of connectable conductor cross-sections	1 000 111	
solid	1x (0.25 2.5 mm²)	
finely stranded with core end processing	1x (0.25 1.5 mm²)	
at AWG cables solid	1 x (20 14)	
connectable conductor cross-section solid	0.25 2.5 mm <sup>2</sup>	
<ul> <li>connectable conductor cross-section finely stranded with core end processing</li> </ul>	0.25 1.5 mm²	
AWG number as coded connectable conductor	20 14	
cross section solid	20 17	
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		
<ul><li>with side-by-side mounting</li></ul>		
— 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	
for live parts		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
<ul><li>— downwards</li><li>— at the side</li></ul>	0 mm	
Ambient conditions	O IIIIII	
installation altitude at height above sea level maximum	2 000 m	
ambient temperature during operation	-25 +60 °C	
ambient temperature during operation     ambient temperature during storage	-40 +85 °C	
ambient temperature during storage     ambient temperature during transport	-40 +85 °C	
relative humidity during operation	10 95 %	
Certificates/ approvals		
General Product Approval		EMC
- Indian Country of the Country of t		













**Declaration of Conformity** 

Marine / Shipping

other



## 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

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$ 

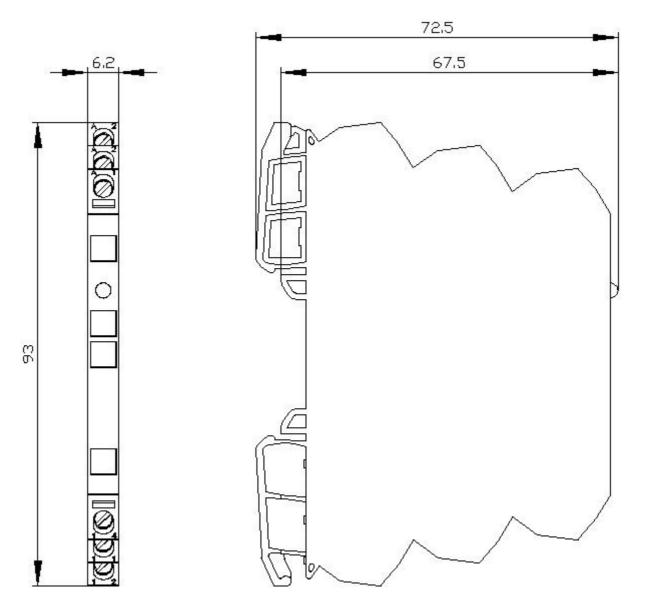
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-1AB00

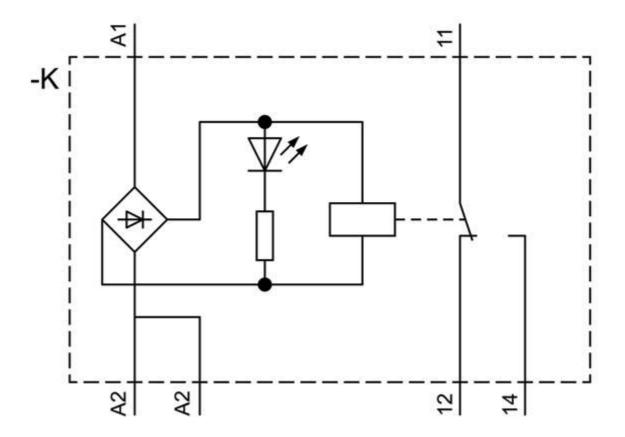
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**Characteristic: Derating** 

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