## **SIEMENS**

Data sheet 3RQ3018-2AB00



Output coupler Relay coupler, 1 change-over contact 24 V AC/DC Overall width 6.2 mm Spring-type terminal (push-in) 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	01100
display version LED	Yes
product component	163
• 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	
<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
Substance Prohibitance (Date)	25.03.2015 00:00:00
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	
<ul> <li>initial value</li> </ul>	0.8
full-scale value	1.25
operating range factor control supply voltage rated	
value at AC at 60 Hz	0.0
• initial value	0.8 1.25
full-scale value     ON-delay time	1.25
at AC maximum	12 ms
at AC maximum     at DC maximum	12 ms
OFF-delay time	14 ms
design of the relay operating mechanism	poled
product component plug-in socket	No
	NO
Short-circuit protection	· 0.44
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
• 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	
type of voltage	AC/DC
Inputs/ Outputs	
property of the output short-circuit proof	No
Outputs	
ampacity of the output relay at AC-15 at 250 V at 50/60 Hz	3 A
ampacity of the output relay at DC-13	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
Electromagnetic compatibility	
EMC emitted interference acc. to IEC 60947-1	ambience A (industrial sector)
EMC immunity acc. to IEC 60947-1	corresponds to degree of severity 3
conducted interference	
<ul><li>due to burst acc. to IEC 61000-4-4</li></ul>	2 kV
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
due to conductor-conductor surge acc. to IEC     61000 4 5	1 kV
61000-4-5 field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-2  Display	6 kV contact discharge / 8 kV air discharge
display version as status display by LED	LED green
Connections/ Terminals	
	No
product function removable terminal type of electrical connection for auxiliary and control circuit	No spring-loaded terminals (push-in)

wire length	=00	
• at AC maximum	500 m	
at DC maximum	1 000 m	
type of connectable conductor cross-sections		
• solid	1x (0.25 2.5 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.25 1.5 mm²)	
<ul> <li>finely stranded without core end processing</li> </ul>	1x (0.25 2.5 mm²)	
<ul> <li>at AWG cables solid</li> </ul>	1 x (20 14)	
at AWG cables stranded	1x (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 mm <sup>2</sup>	
finely stranded without core end processing	0.25 2.5 mm²	
AWG number as coded connectable conductor cross section		
• solid	20 14	
<ul><li>stranded</li></ul>	20 14	
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	
<ul> <li>for live parts</li> </ul>		
— 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		
<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 %	
Certificates/ approvals		
General Product Approval		EMC













**Miscellaneous** 





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=3RQ3018-2AB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AB00

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

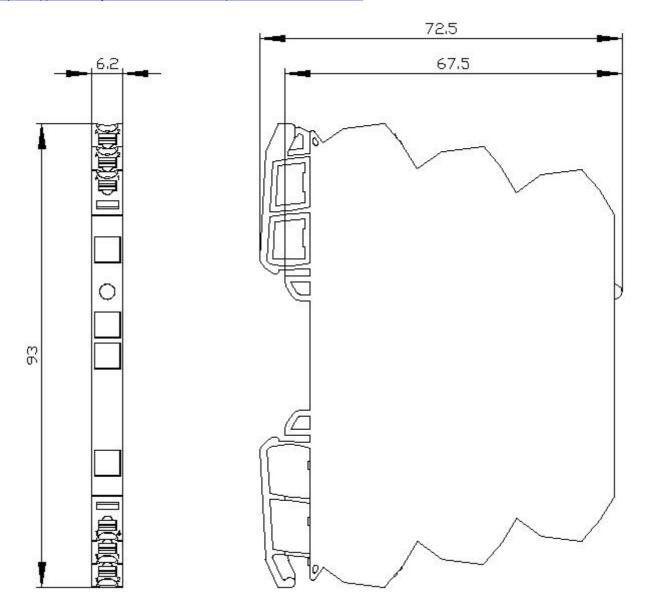
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AB00

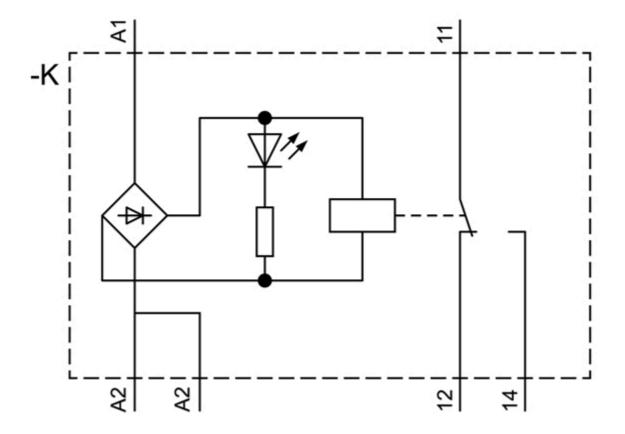
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$ 

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3018-2AB00&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AB00/manual





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