3RQ3018-2AM08-0AX0

## **Data sheet**



output coupler relay coupler, 1 CO, 24 V DC working range 0.7 to 1.25 x US enclosure width 6.2 mm spring-loaded terminal (push-in) thermal current 6 A (see derating characteristic) (with painted PCB)

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	Yes; acc. to IPC-A-610
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	14.6 %
flammability class of enclosure material	UL94 V-0
shock resistance	
<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
vibration resistance	
<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B
operating frequency maximum	72 000 1/h
switching behavior	monostable
mechanical service life (operating cycles) typical	10 000 000
thermal current	6 A; for derating see characteristics
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	03/25/2015
Weight	0.034 kg
Control circuit/ Control	
control supply voltage at DC rated value	24 V
operating range factor control supply voltage rated value at DC	
• initial value	0.7
• full-scale value	1.25
ON-delay time	
at DC maximum	5 ms
OFF-delay time maximum	10 ms
Mechanical data	
product component plug-in socket	No

design of the relay operating mechanism	noled
Short-circuit protection	poled
	fund aC: A A
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
Main sinsuit	mA)
Main circuit	DC
type of voltage Inputs/ Outputs	
	No
property of the output short-circuit proof	No
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
• at 24 V	1 A
• at 24 V	0.2 A
• at 250 V	0.1 A
Electromagnetic compatibility	0.174
EMC emitted interference according to IEC 60947-1	ambience A (industrial sector)
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
conducted interference	consoponad to dogree of coverity o
due to burst according to IEC 61000-4-4	2 kV
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV
due to conductor-conductor surge according to IEC	1 kV
61000-4-5	
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
Display	
display version as status display by LED	LED green
Connections/ Terminals	
product function removable terminal	No No
type of electrical connection for auxiliary and control circuit	spring-loaded terminals (push-in)
wire length	
at DC maximum	1 000 m
type of connectable conductor cross-sections	4 (0.05 0.5 3)
• solid	1x (0.25 2.5 mm²)
finely stranded with core end processing	1x (0.25 1.5 mm²)
finely stranded without core end processing	1x (0.25 2.5 mm²)
for AWC cables stranded	1 x (20 14)
for AWG cables stranded  connectable conductor cross section	1x (20 14)
connectable conductor cross-section  • solid	0.25 2.5 mm²
finely stranded with core end processing	0.25 2.5 mm²
finely stranded with core end processing     finely stranded without core end processing	0.25 2.5 mm <sup>2</sup>
AWG number as coded connectable conductor cross section	0.20 2.0 Hilli
• solid	20 14
• stranded	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	
• 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		
<ul> <li>during operation</li> </ul>	-40 +70 °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 Ap-EMV Marine / Shipping other **Environment** 





<u>KC</u>



Confirmation

**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)

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AM08-0AX0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AM08-0AX0

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3018-2AM08-0AX0&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AM08-0AX0/manual



