## **SIEMENS**

## **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-type terminal (push-in) thermal current 6 A (see derating characteristic)

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	
<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 %
protection class IP	IP20
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
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
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	poled

Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary	fuse gG: 4 A
switch required	
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 circuit	mA)
type of voltage	DC
Inputs/ Outputs	
property of the output short-circuit proof	No
	3 A
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	1 A
at 24 V     at 125 V	1 A 0.2 A
• at 250 V	0.1 A
	0.1 A
Electromagnetic compatibility	
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	214/
due to burst according to IEC 61000-4-4  due to supplied to supplied to IEC 64000-4-5  due to supplied to supplied to IEC 64000-4-5  due to burst according to IEC 61000-4-4	2 kV
due to conductor-earth surge according to IEC 61000-4-5      due to conductor earth surge according to IEC.	2 kV
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	1 kV
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
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	
• 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>for AWG cables solid</li> </ul>	1 x (20 14)
for AWG cables stranded	1x (20 14)
connectable conductor cross-section	
• solid	0.25 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.25 1.5 mm <sup>2</sup>
<ul> <li>finely stranded without core end processing</li> </ul>	0.25 1.5 mm
• linely strained without core end processing	0.25 2.5 mm <sup>2</sup>
AWG number as coded connectable conductor cross section	
AWG number as coded connectable conductor cross	
AWG number as coded connectable conductor cross section	0.25 2.5 mm²
AWG number as coded connectable conductor cross section  • solid	0.25 2.5 mm <sup>2</sup> 20 14
AWG number as coded connectable conductor cross section  • solid • stranded	0.25 2.5 mm <sup>2</sup> 20 14
AWG number as coded connectable conductor cross section  • solid  • stranded  Installation/ mounting/ dimensions	0.25 2.5 mm <sup>2</sup> 20 14 20 14
AWG number as coded connectable conductor cross section  • solid • stranded  Installation/ mounting/ dimensions mounting position	0.25 2.5 mm <sup>2</sup> 20 14 20 14

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>	-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 Approval EMV Test Certificates Marine / Shipping other





KC Type Test Certificates/Test Report



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=3RQ3018-2AM08-0AA0

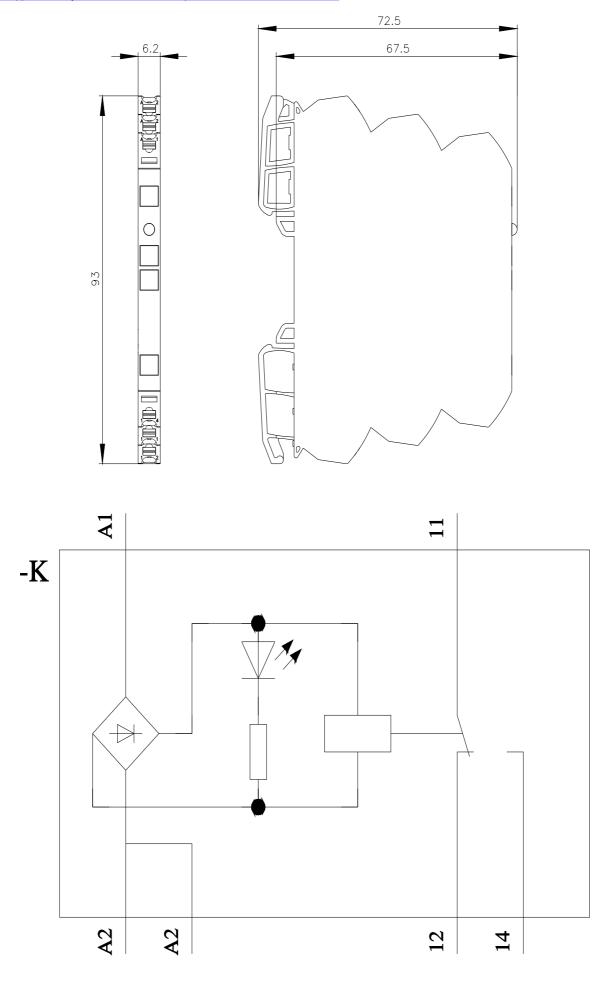
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AM08-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AM08-0AA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3018-2AM08-0AA0&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3018-2AM08-0AA0&lang=en</a>



last modified: 6/30/2023 🖸