## **SIEMENS**

Data sheet 3RQ4018-1AB00



output coupler with integrated relay, 24 V AC/DC, 1 change-over contact, screw terminal, width 6.2 mm, thermal current 6 A  $\,$ 

product brand name	SIRIUS
product category	SIRIUS 3RQ4 coupling relay, narrow design
product designation	Coupling relay with integrated relay output
design of the product	output coupling link
product type designation	3RQ4
General technical data	
display version LED	Yes
product feature protective coating on printed-circuit board	No
product component	
relay output	Yes
<ul> <li>semi-conductor output</li> </ul>	No
power loss [W] maximum	0.25 W
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
<ul> <li>between control and auxiliary circuit according to IEC 60947-1</li> </ul>	300 V
percental drop-out voltage related to the input voltage	10 %
protection class IP	IP20
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
electrical endurance (operating cycles)	
at AC-15 at 250 V typical	100 000
thermal current	6 A
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	09/26/2024
Weight	0.04 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	0.85
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	
• at AC maximum	10 ms
at DC maximum	10 ms
OFF-delay time maximum	10 ms
Switching Function	Na
design of the switching function positively driven	No
Digital Outputs	N-
property of the output short-circuit proof	No
Mechanical data	No
product component plug-in socket	No
design of the relay operating mechanism	poled
Short-circuit protection	Fine 20: 4 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	4.0
• 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
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	
electromagnetic compatibility	acc. to EN 60947-5-1
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	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	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

afety related data	
B10d value	600 000
Connections/ Terminals	
product function removable terminal	No
type of electrical connection	
for auxiliary and control circuit	screw-type terminals
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 2.5 mm²), 2x (0.25 1.5 mm²)
for AWG cables solid	1x (20 14), 2x (20 16)
connectable conductor cross-section	
• solid	0.25 2.5 mm <sup>2</sup>
finely stranded with core end processing	0.25 2.5 mm <sup>2</sup>
AWG number as coded connectable conductor cross section	
• solid	20 14
tightening torque with screw-type terminals	0.5 0.6 N·m
size of the screwdriver tip	3,0 x 0,5 mm
stripped length	10 mm
nstallation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	93 mm
width	6.2 mm
depth	84.5 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	2,000 m
installation altitude at height above sea level maximum	2 000 m
ambient temperature	-25 +60 °C
during operation     during storage	-25 +60 C -40 +85 °C
during storage     during transport	-40 +85 °C
relative humidity during operation	10 95 %
Approvals Certificates	10 30 /0
General Product Approval	other
Ochoral Froduct Approval	Other











Environment





## 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)

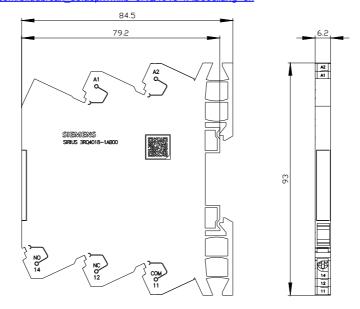
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ4018-1AB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4018-1AB00

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RQ4018-1AB00

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=3RQ4018-1AB00&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ4018-1AB00&lang=en</a>



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