## **SIEMENS**

Data sheet 3RQ4118-1AM00



output coupler with plug-in relay, 24 V 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 plug-in relay
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
semi-conductor output	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 %
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	39 g
Control circuit/ Control	
control supply voltage at DC rated value	24 V
operating range factor control supply voltage rated value at DC	
• initial value	0.8
• 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	
design of the switching function positively driven	No
Digital Outputs	
property of the output short-circuit proof	No
Mechanical data	
product component plug-in socket	Yes
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
	mA)
Main circuit	
type of voltage	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	
• due to burst according to IEC 61000-4-4	2 kV
due to conductor-earth surge according to IEC 61000-4-5	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	screw-type terminals
type of connectable conductor cross-sections	S. S. Typo torrininalo
solid	1x (0.25 2.5 mm²)
finely stranded with core end processing	1x (0.25 2.5 mm²), 2x (0.25 1.5 mm²)
for AWG cables solid	1x (20 14), 2x (20 16)
> 101 / 111 C GGD100 GGHG	( 1), ( 10)
connectable conductor cross-section	
connectable conductor cross-section	0.25 2.5 mm²
• solid	0.25 2.5 mm <sup>2</sup>
	0.25 2.5 mm <sup>2</sup> 0.25 2.5 mm <sup>2</sup>
solid     finely stranded with core end processing  AWG number as coded connectable conductor cross	

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
Installation/ mounting/ dimensions		
mounting position		any
fastening method		snap-on mounting
height		93 mm
width		6.2 mm
depth		88.5 mm
required spacing		
<ul><li>with side-by-side mounting</li></ul>		
— forwards		0 mm
— backwards		0 mm
— upwards		0 mm
<ul><li>downwards</li></ul>		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		
during operation		-25 +60 °C
during storage		-40 +85 °C
during transport		-40 +85 °C
relative humidity during operation		10 95 %
Approvals Certificates		
General Product Approval	Environment	



Confirmation



## 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=3RQ4118-1AM00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4118-1AM00

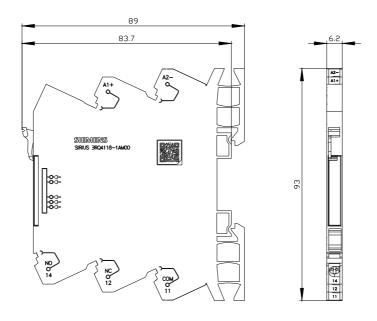
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RQ4118-1AM00">https://support.industry.siemens.com/cs/ww/en/ps/3RQ4118-1AM00</a>

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ4118-1AM00&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ4118-1AM00/manual



last modified: 5/16/2025 🖸