# **SIEMENS**

Data sheet 3RQ3118-1AB00

Output coupler with plug-in Relay, 1 change-over contact screw terminal 24 V AC/DC Enclosure width 6.2 mm Thermal current 6A



Figure similar

Product brand name	SIRIUS
Product category	SIRIUS 3RQ3 coupling relays in slim design
Product designation	Coupling relays with plug-in relay
Design of the product	Output coupling link
Product type designation	3RQ3

General technical data	
Display version LED	Yes
Product component	
<ul> <li>Relay output</li> </ul>	Yes
• semi-conductor output	No
Insulation voltage	
<ul> <li>for overvoltage category III according to IEC 60664</li> </ul>	
— 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
Electrical endurance (switching cycles)	
● at AC-15 at 230 V typical	100 000
Thermal current	6 A
Reference code	
• acc. to IEC 81346-2:2009	К
• acc. to DIN EN 61346-2	К
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	
• 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
Switch-on delay time	
• at AC maximum	12 ms
• at DC maximum	12 ms
Off-delay time	14 ms

Closing delay			
● at AC	12 ms		
• at DC	6 ms		
Opening delay			
• at AC	14 ms		
• at DC	13 ms		
Design of the relay operating mechanism	poled		
Product component Plug-in socket	Yes		
Short-circuit protection			
Design of the fuse link			
• for short-circuit protection of the auxiliary switch	fuse gG: 4 A		
required			
Auxiliary circuit			
Type of switching contact	Changeover contact		
Material of switching contacts	AgSnO2		
Number of CO contacts			
● for auxiliary contacts	1		
Operating current of auxiliary contacts at AC-15			
● at 24 V	3 A		
● at 250 V	3 A		
Operating 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)		

Conducted interference	corresponds to degree of severity 3  2 kV	
	2 kV	
• due to burst acc. to IEC 61000-4-4	2 kV	
	2 kV	
<ul> <li>due to conductor-earth surge acc. to IEC</li> <li>61000-4-5</li> </ul>	2 kV	
<ul> <li>due to conductor-conductor surge acc. to IEC</li> <li>61000-4-5</li> </ul>	1 kV	
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m	
Electrostatic discharge acc. 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 current circuit	screw-type terminals	
Wire length		
• at AC maximum	500 m	
• at DC maximum	1 000 m	
Type of connectable conductor cross-sections		
• solid	1x (0.25 2.5 mm²)	
• finely stranded with core end processing	1x (0.25 1.5 mm²)	
• at AWG conductors solid	1 x (20 14)	
Connectable conductor cross-section		
• solid	0.25 2.5 mm²	
• finely stranded with core end processing	0.25 1.5 mm²	
AWG number as coded connectable conductor cross		
section		
• solid	20 14	
Tightening torque		
with screw-type terminals	0.5 0.6 N·m	
Installation/ mounting/ dimensions		
	any	
	snap-on mounting	
•	93 mm	
	6.2 mm	
·	76 mm	
Required spacing		
with side-by-side mounting		
— forwards	0 mm	

— Backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— 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>	-25 +60 °C	
during storage	-40 +85 °C	
during transport	-40 +85 °C	
Relative humidity		
<ul><li>during operation</li></ul>	10 95 %	

# Certificates/approvals

General Product Approval	Declaration of	Marine /
	Conformity	Shipping













## other

Confirmation

#### Further information

### Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

#### Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3118-1AB00

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-1AB00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-1AB00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3118-1AB00&lang=en



