SIEMENS

Data sheet 3RQ3118-1AE01

Output coupler with plug-in Relay, 1 CO, hard gold-plated Screw terminal 115 V AC/DC Enclosure width 6.2 mm Thermal current 6A



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	
Relay output	Yes
 semi-conductor output 	No
Consumed active power	0.5 W
Surge voltage resistance rated value	4 kV
maximum permissible voltage for safe isolation	
 between control and auxiliary circuit 	300 V
Percental drop-out voltage related to the input	9.6 %
voltage	
Protection class IP	IP20
Shock resistance	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms

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 DIN EN 81346-2	К
Reference code acc. to DIN EN 61346-2	К
Control circuit/ Control	
Control supply voltage at AC	
● at 50 Hz rated value	115 V
● at 60 Hz rated value	115 V
Control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
Control supply voltage at DC	
• rated value	115 V
Operating range factor control supply voltage rated value at DC	
• initial value	0.8
Full-scale value	1.1
Operating range factor control supply voltage rated	1
value at AC at 50 Hz	
• initial value	0.8
Full-scale value	1.1
Operating range factor control supply voltage rated	
value at AC at 60 Hz	
• initial value	0.8
Full-scale value	1.1
Switch-on delay time	
• at AC maximum	8 ms
at DC maximum	6 ms
Off-delay time	17 ms
Closing delay	
• at AC	12 ms
• at DC	5 ms
Opening delay	40
• at AC	12 ms
• at DC	10 ms
Design of the relay operating mechanism	poled
Product component Plug-in socket	Yes

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-HTV
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 (5 V, 1 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	
, angulary of the suspections at 10-10	
• at 250 V at 50/60 Hz	3 A
	3 A
• at 250 V at 50/60 Hz	3 A 1 A
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13	
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V	1 A
 at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V at 250 V 	1 A 0.2 A
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V	1 A 0.2 A
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V at 250 V Electromagnetic compatibility	1 A 0.2 A
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V at 250 V Electromagnetic compatibility EMC emitted interference	1 A 0.2 A 0.1 A
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1	1 A 0.2 A 0.1 A
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMI immunity	1 A 0.2 A 0.1 A ambience A (industrial sector)
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMI immunity acc. to IEC 60947-1	1 A 0.2 A 0.1 A ambience A (industrial sector)
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMI immunity acc. to IEC 60947-1 Conducted interference	1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3
at 250 V at 50/60 Hz Ampacity of the output relay at DC-13 at 24 V at 125 V at 250 V Electromagnetic compatibility EMC emitted interference acc. to IEC 60947-1 EMI immunity acc. to IEC 60947-1 Conducted interference due to burst acc. to IEC 61000-4-4 due to conductor-earth surge acc. to IEC	1 A 0.2 A 0.1 A ambience A (industrial sector) corresponds to degree of severity 3

Electrostatic discharge acc.	to IFC 61000-4-2

6 kV contact discharge / 8 kV air discharge

Display	
Display version	
 as status display by LED 	LED green

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 mm ²
 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	
Mounting position	any
Mounting type	snap-on mounting
Height	93 mm
Width	6.2 mm
Depth	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

0 mm
0 mm
0 mm

Ambient conditions

Installation altitude at height above sea level

• maximum 2 000 m

Relative humidity

• during operation 10 ... 95 %

Certificates/ approvals

General Product Approval

EMC Declaration of Conformity













Declaration of	Marine A
Conformity	ping

arine / Ship- ot

other

Miscellaneous



Confirmation

Further information

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

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

 $\underline{ https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3118-1AE01} \\$

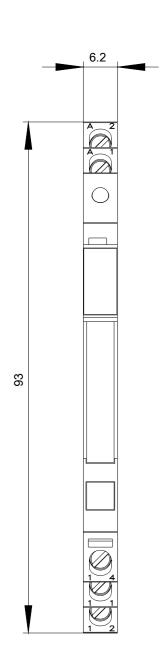
Cax online generator

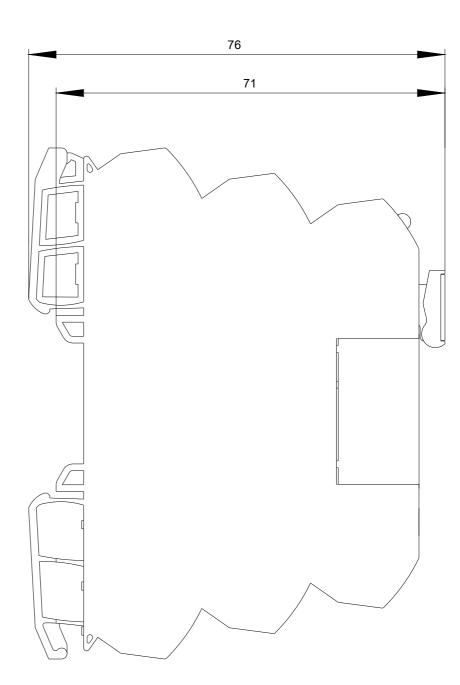
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-1AE01

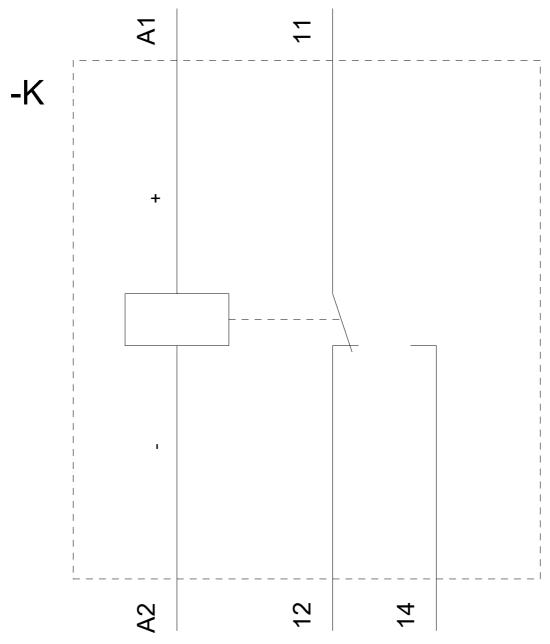
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-1AE01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-1AE01&lang=en







last modified: 09/04/2019