SIEMENS

Data sheet 3RQ3118-1AM00

Output coupler with plug-in Relay, 1 change-over contact screw terminal 24 V 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	
 Relay output 	Yes
• semi-conductor output	No
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 safe isolation	
 between control and auxiliary circuit 	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	K

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
Switch-on delay time	
• at DC maximum	12 ms
Off-delay time	13 ms
Closing delay	
• at DC	6 ms
Opening delay	
• 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 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



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	DC
Inputs/ Outputs	
Property of the output Short-circuit proof	No
Outputs	
Ampacity of the output relay at AC-15	2.4
• at 250 V at 50/60 Hz	3 A
Ampacity of the output relay at DC-13	1 A
• at 24 V	
• 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)
EMI immunity	
● acc. to IEC 60947-1	corresponds to degree of severity 3
Conducted interference	
• due to burst acc. to IEC 61000-4-4	2 kV
 due to conductor-earth surge acc. to IEC 61000-4-5 	2 kV
 due to conductor-conductor surge acc. to IEC 61000-4-5 	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 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

notallation/ mounting/ dimensions	
nstallation/ 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
— 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	
during operation	-25 +60 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
Relative humidity	
during operation	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)

 $\underline{\text{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3118-1AM00}}$

Cax online generator

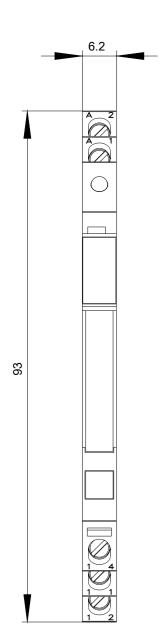
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-1AM00

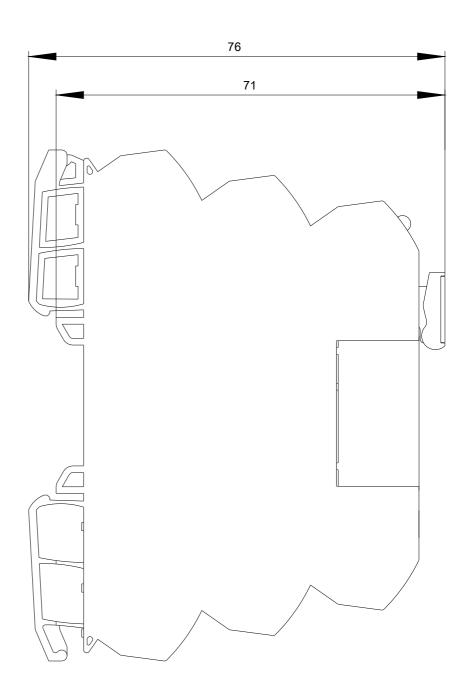
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

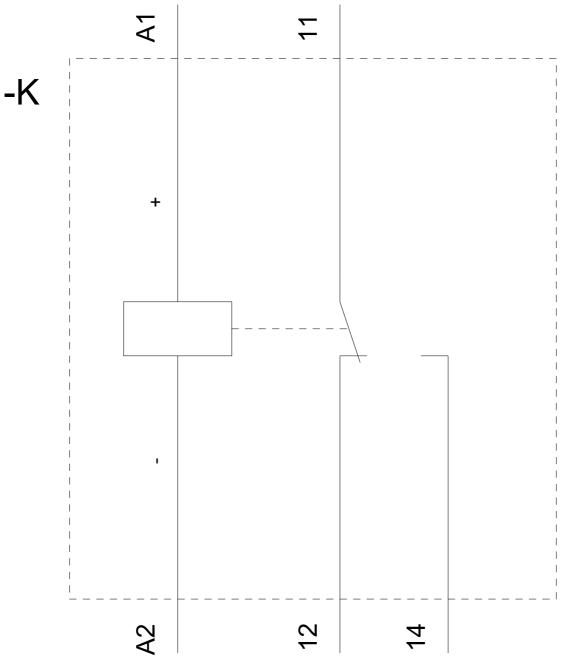
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-1AM00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-1AM00&lang=en









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