SIEMENS

Data sheet 3RQ3118-2AF00

Output coupler with plug-in relay, 1 CO Spring-type terminal (push-in) 230 V AC/DC Enclosure width 6.2 mm Thermal current 6 A

Figure similar

product brandname		SIRIUS
Product designation		Coupling relays with plug-in relay
Design of the product		Output coupling links

General technical data		
Product component Plug-in socket		Yes
Product component Relay output		Yes
Product component semi-conductor output		No
Consumed active power	W	1
Insulation voltage for overvoltage category III according to IEC 60664		
• with degree of pollution 3 rated value	V	300
Type of voltage		AC/DC
maximum permissible voltage for safe isolation		
• between control and auxiliary circuit	V	300
Percental drop-out voltage related to the input voltage	%	10
Thermal current	A	6
Opening delay		

• at AC	ms	20
• at DC	ms	18
Closing delay		
• at AC	ms	12
• at DC	ms	8
Design of the switching function positively driven		No
Operating frequency maximum	1/h	72 000
Electrical endurance (switching cycles)		
• at AC-15 at 230 V typical		100 000
Mechanical service life (switching cycles) typical		10 000 000
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
Surge voltage resistance rated value	kV	4
Protection class IP		IP20
Equipment marking		
• acc. to DIN EN 81346-2		K
• acc. to DIN EN 61346-2		K
Display version LED		Yes

Control circuit/ Control

Control supply voltage		
• at AC		
— at 50 Hz rated value	V	230
— at 60 Hz rated value	V	230
• at DC rated value	V	230
Operating range factor control supply voltage rated value		
• at AC at 50 Hz		0.8 ... 1.1
• at AC at 60 Hz		0.8 ... 1.1
• at DC		0.8 ... 1.1

Auxiliary circuit

Type of switching contact		Changeover contact
Material of switching contacts		AgSnO2
Type of electrical connection for auxiliary and control current circuit		PUSH-IN connection (spring-loaded connection)
Contact reliability of auxiliary contacts		one incorrect switching operation of 100 million switching operations (17 V, 5 mA)
Number of CO contacts for auxiliary contacts		1
Operating current of auxiliary contacts		
• at DC-13 at 24 V	A	1
• at DC-13 at 125 V	A	0.2
• at DC-13 at 250 V	A	0.1
• at AC-15 at 24 V	A	3

• at AC-15 at 250 V	A	3

Short-circuit protection		
Design of the fuse link for short-circuit protection of the auxiliary switch required		fuse gG: 4 A

Inputs/ Outputs		
Property of the output Short-circuit proof		No
Ampacity of the output relay		
• at AC-15 at 250 V at 50/60 Hz	A	3
• at DC-13		
— at 24 V	A	1
— at 125 V	A	0.2
— at 250 V	A	0.1

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
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Conducted interference		
• 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
• due to burst acc. to IEC 61000-4-4		2 kV
Electrostatic discharge acc. to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge

Connections/Terminals		
Design of the snap-on socket base		SNR
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)
• finely stranded without core end processing		1x (0.25 ... 2.5 mm²)
• at AWG conductors solid		1 x (20 ... 14)
• at AWG conductors stranded		1x (20 ... 14)
Connectable conductor cross-section		
• solid	mm²	0.25 ... 2.5
• finely stranded with core end processing	mm²	0.25 ... 1.5
• finely stranded without core end processing	mm²	0.25 ... 2.5
AWG number as coded connectable conductor cross section		
• stranded		20 ... 14
• solid		20 ... 14
Wire length		
• at AC maximum	m	500

• at DC maximum	m	1 000

Installation/ mounting/ dimensions

Mounting position		any
Mounting type		snap-on mounting
Height	mm	93
Width	mm	6.2
Depth	mm	76
Required spacing		
• with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0

Ambient conditions

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
Relative humidity during operation	%	10 ... 95

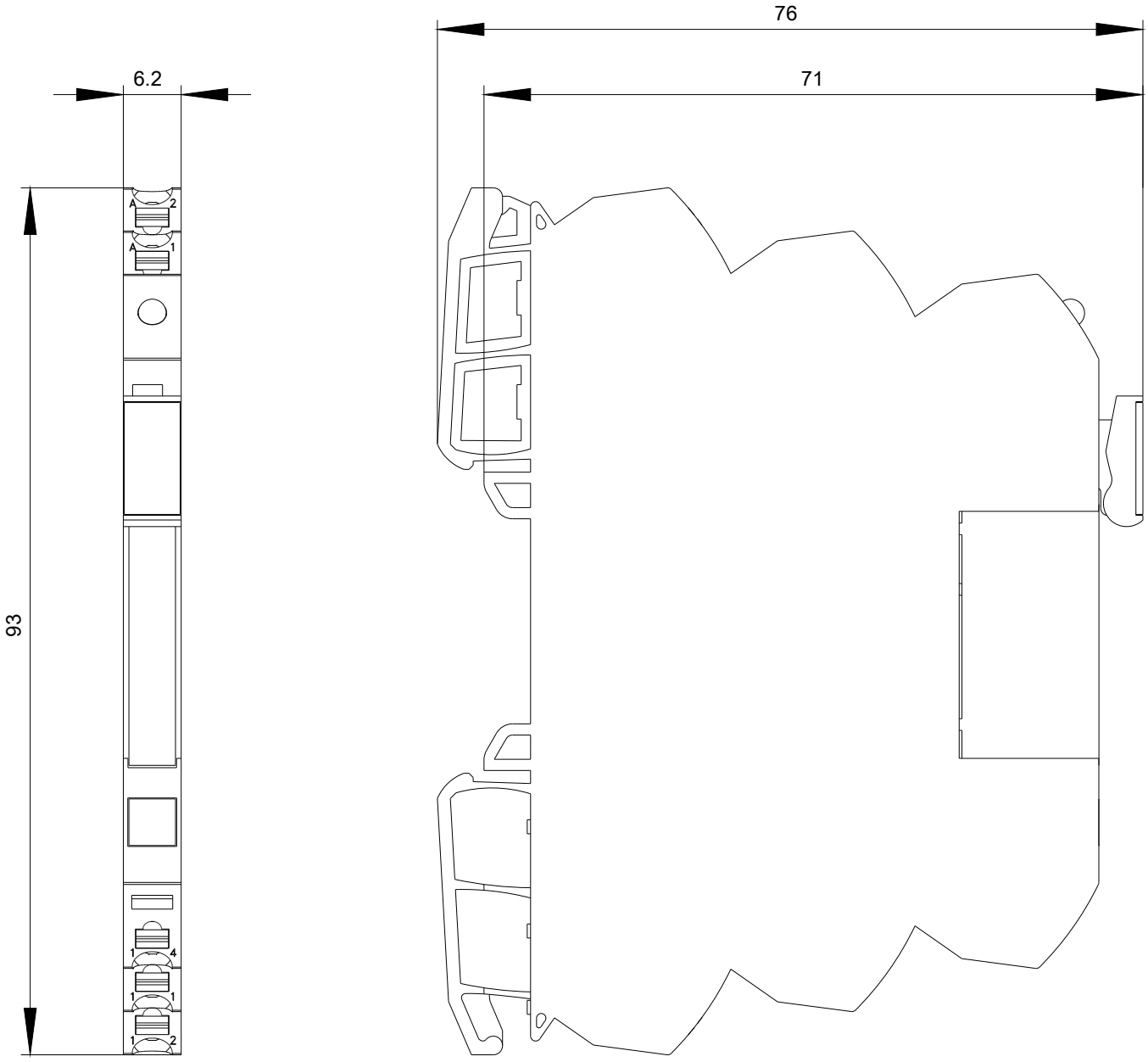
Further information

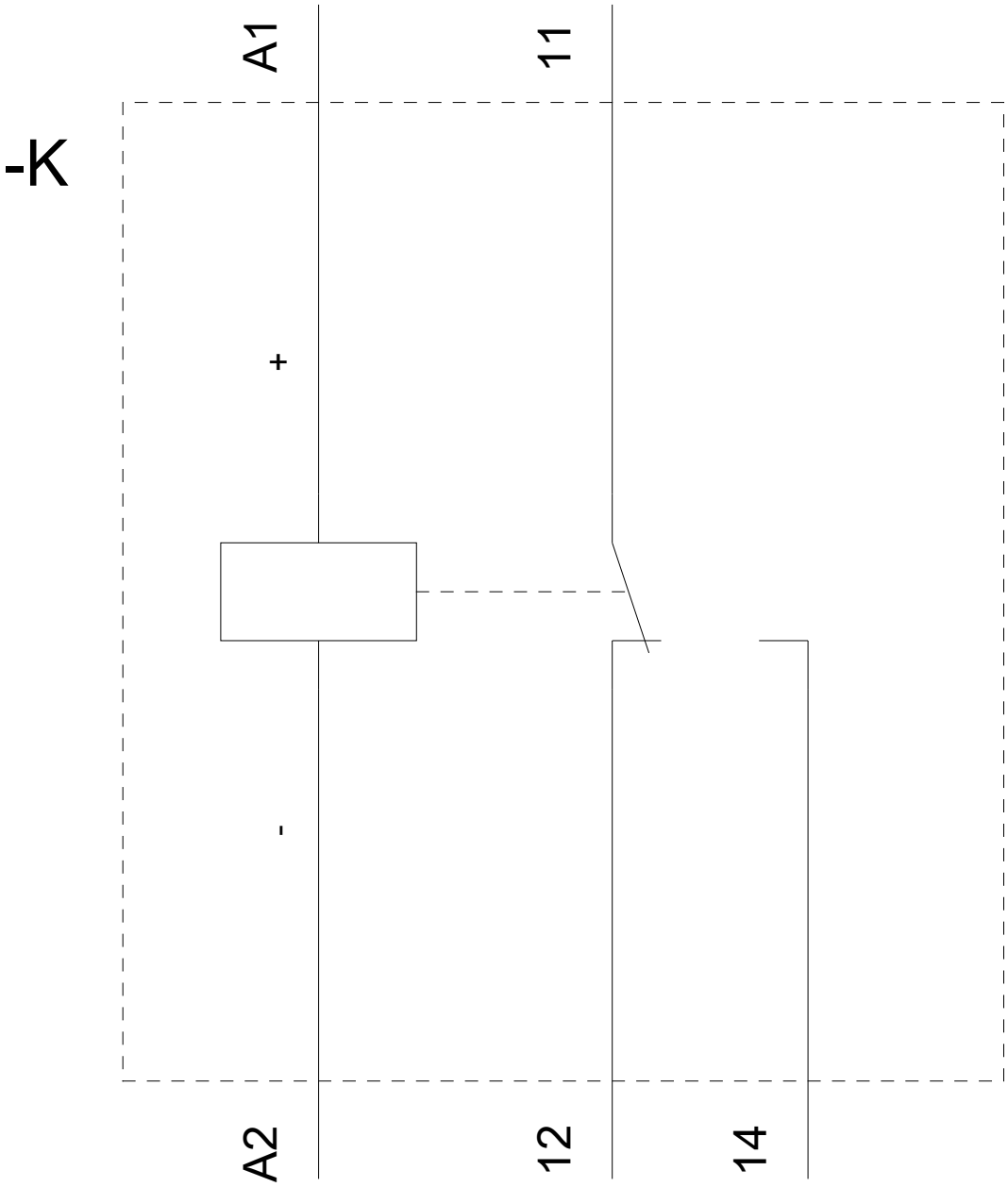
Information- and Downloadcenter (Catalogs, Brochures,...)
http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3118-2AF00

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-2AF00

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-2AF00





last modified: 05/31/2017