

Output coupler with plug-in Relay, 1 change-over contact screw terminal 230 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	1 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 voltage	10 %
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	K
Reference code acc. to DIN EN 61346-2	K

Control circuit/ Control

Control supply voltage at AC	
• at 50 Hz rated value	230 V
• at 60 Hz rated value	230 V
Control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
Control supply voltage at DC	
• rated value	230 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 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	9 ms
• at DC maximum	8 ms
Off-delay time	19 ms
Closing delay	
• at AC	12 ms
• at DC	8 ms
Opening delay	
• at AC	20 ms
• at DC	18 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
- at 250 V

3 A

3 A

Operating current of auxiliary contacts at DC-13

- at 24 V
- at 125 V
- at 250 V

1 A

0.2 A

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
- at 125 V
- at 250 V

1 A

0.2 A

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
- due to conductor-earth surge acc. to IEC 61000-4-5
- due to conductor-conductor surge acc. to IEC 61000-4-5

2 kV

2 kV

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	LED green
<ul style="list-style-type: none"> • as status display by LED 	
Connections/ Terminals	
Product function	No
<ul style="list-style-type: none"> • removable terminal 	
Type of electrical connection	screw-type terminals
<ul style="list-style-type: none"> • for auxiliary and control current circuit 	
Wire length	500 m
<ul style="list-style-type: none"> • at AC maximum • at DC maximum 	1 000 m
Type of connectable conductor cross-sections	1x (0.25 ... 2.5 mm ²)
<ul style="list-style-type: none"> • solid • finely stranded with core end processing • at AWG conductors solid 	1x (0.25 ... 1.5 mm ²) 1 x (20 ... 14)
Connectable conductor cross-section	0.25 ... 2.5 mm ²
<ul style="list-style-type: none"> • solid • finely stranded with core end processing 	0.25 ... 1.5 mm ²
AWG number as coded connectable conductor cross section	20 ... 14
<ul style="list-style-type: none"> • solid 	
Tightening torque	0.5 ... 0.6 N·m
<ul style="list-style-type: none"> • with screw-type terminals 	
Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	snap-on mounting
Height	93 mm
Width	6.2 mm
Depth	76 mm
Required spacing	
<ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards 	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 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
Relative humidity	
• during operation	10 ... 95 %

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
 CCC  CSA  UL	 EAC  RCM	 EG-Konf.

Declaration of Conformity	Marine / Ship-ping	other
Miscellaneous		Confirmation

Further information

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

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3118-1AF00>

Cax online generator

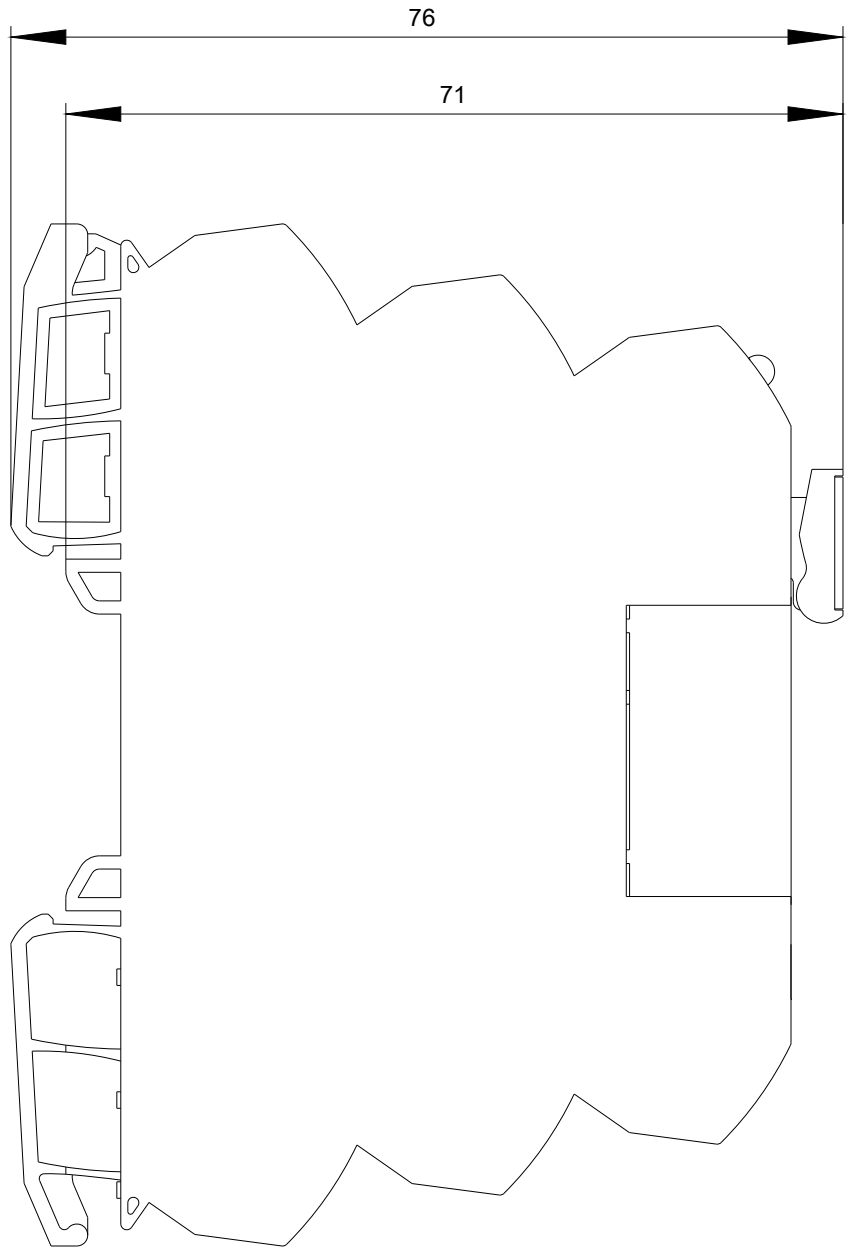
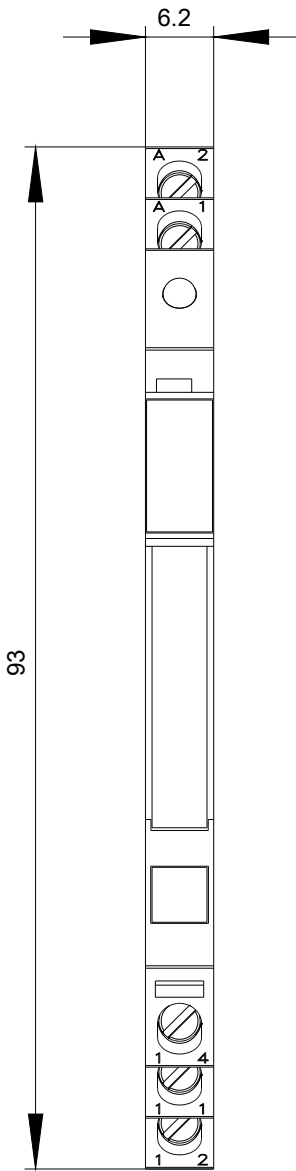
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3118-1AF00>

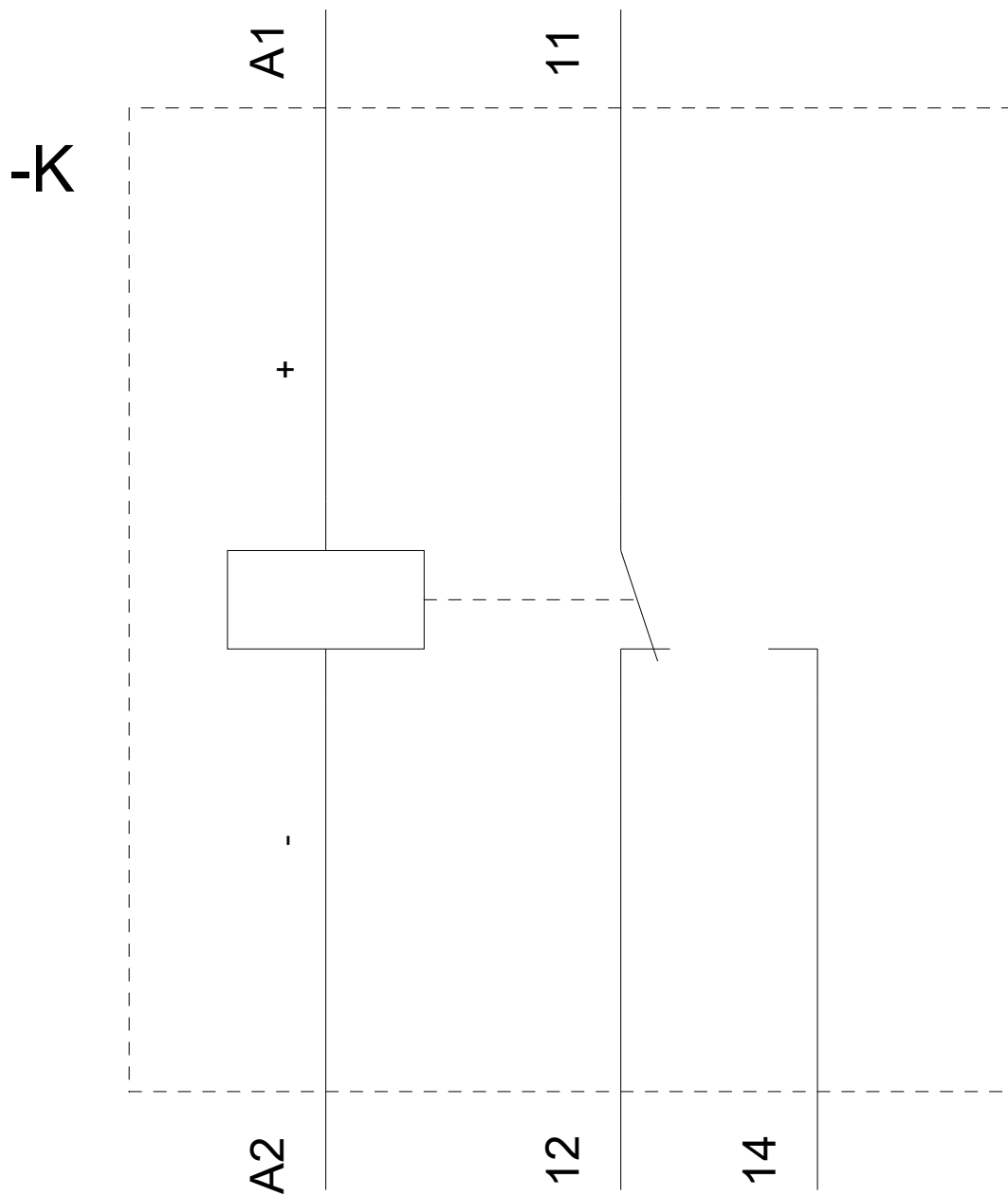
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3118-1AF00>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-1AF00&lang=en





last modified:

07/26/2019