

Output coupler with plug-in Relay, 1 change-over contact Spring-type terminal (push-in) 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
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 DIN EN 81346-2	K

Control circuit/ Control

Control supply voltage at AC	
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• at 50 Hz rated value • at 60 Hz rated value	230 V 230 V
Control supply voltage frequency • 1 rated value • 2 rated value	50 Hz 60 Hz
Control supply voltage at DC • rated value	230 V
Operating range factor control supply voltage rated value at DC • initial value • Full-scale value	0.8 1.1
Operating range factor control supply voltage rated value at AC at 50 Hz • initial value • Full-scale value	0.8 1.1
Operating range factor control supply voltage rated value at AC at 60 Hz • initial value • Full-scale value	0.8 1.1
Switch-on delay time • at AC maximum • at DC maximum	9 ms 8 ms
Off-delay time	19 ms
Closing delay • at AC • at DC	12 ms 8 ms
Opening delay • at AC • at DC	20 ms 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
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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)
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	spring-loaded terminals (push-in)
Wire length	

• at AC maximum • at DC maximum	500 m 1 000 m
Type of connectable conductor cross-sections	
• solid • finely stranded with core end processing • finely stranded without core end processing • at AWG conductors solid • at AWG conductors stranded	1x (0.25 ... 2.5 mm ²) 1x (0.25 ... 1.5 mm ²) 1x (0.25 ... 2.5 mm ²) 1 x (20 ... 14) 1x (20 ... 14)
Connectable conductor cross-section	
• solid • finely stranded with core end processing • finely stranded without core end processing	0.25 ... 2.5 mm ² 0.25 ... 1.5 mm ² 0.25 ... 2.5 mm ²
AWG number as coded connectable conductor cross section	
• solid • stranded	20 ... 14 20 ... 14

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 — Backwards — upwards — downwards — at the side • for grounded parts — forwards — Backwards — upwards — at the side — downwards • for live parts — forwards — Backwards — upwards — downwards — at the side	0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 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			EMC	Declaration of Conformity	
					
CCC	CSA	UL		RCM	EG-Konf.

Declaration of Conformity	Marine / Ship-ping	other
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[Miscellaneous](#)



[Confirmation](#)

Further information

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

<https://www.siemens.com/ic10>

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>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3118-2AF00&lang=en

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