

Output coupler Relay coupler, 1 W, 24 V DC Operating range 0.7 to 1.25 x US Enclosure width 6.2 mm Spring-type terminal (push-in) Thermal current 6A



Product brand name	SIRIUS
Product category	SIRIUS 3RQ3 coupling relays in slim design
Product designation	Coupling relays with relay output (not plug-in)
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	0.3 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	14.6 %
Protection class IP	IP20
Shock resistance • for railway applications acc. to DIN EN 61373	Category 1, Class B
Vibration resistance • for railway applications acc. to DIN EN 61373	Category 1, Class B
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 DC • rated value	24 V
Operating range factor control supply voltage rated value at DC • initial value • Full-scale value	0.7 1.25
Switch-on delay time • at DC maximum	5 ms
Off-delay time	10 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	No

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

<ul style="list-style-type: none"> • at 250 V 	3 A
Operating current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> • 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	DC
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Inputs/ Outputs

Property of the output Short-circuit proof	No
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Outputs

Ampacity of the output relay at AC-15	
<ul style="list-style-type: none"> • at 250 V at 50/60 Hz 	3 A
Ampacity of the output relay at DC-13	
<ul style="list-style-type: none"> • at 24 V • at 125 V • at 250 V 	1 A 0.2 A 0.1 A

Electromagnetic compatibility

EMC emitted interference	
<ul style="list-style-type: none"> • acc. to IEC 60947-1 	ambience A (industrial sector)
EMI immunity	
<ul style="list-style-type: none"> • acc. to IEC 60947-1 	corresponds to degree of severity 3
Conducted interference	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • as status display by LED 	LED green

Connections/ Terminals

Product function	
<ul style="list-style-type: none"> • removable terminal 	No
Type of electrical connection	
<ul style="list-style-type: none"> • for auxiliary and control current circuit 	spring-loaded terminals (push-in)
Wire length	

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

Installation/ mounting/ dimensions	
Mounting position	any
Mounting type	snap-on mounting
Height	93 mm
Width	6.2 mm
Depth	72.5 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	
<ul style="list-style-type: none"> • maximum 	2 000 m
Relative humidity	
<ul style="list-style-type: none"> • during operation 	10 ... 95 %

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
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Declaration of Conformity	Test Certificates	Marine / Shipping	other
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[Miscellaneous](#)

[Type Test Certificates/Test Report](#)



[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=3RQ3018-2AM08-0AA0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AM08-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AM08-0AA0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-2AM08-0AA0&lang=en



