



output coupler relay coupler, 1 change-over contact 110 V DC working range 0.7 to 1.25 x US width 6.2 mm spring-loaded terminal (push-in) thermal current 6 A (see derating characteristic) (with painted PCB)

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 feature protective coating on printed-circuit board	Yes; acc. to IPC-A-610
product component	
• relay output	Yes
• semi-conductor output	No
consumed active power	0.6 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 protective separation	
• between control and auxiliary circuit	300 V
percental drop-out voltage related to the input voltage	9.6 %
flammability class of enclosure material	UL94 V-0
shock resistance	
• for railway applications according to EN 61373	Category 1, Class B
vibration resistance	
• for railway applications according to EN 61373	Category 1, Class B
operating frequency maximum	72 000 1/h
switching behavior	monostable
mechanical service life (operating cycles) typical	10 000 000
thermal current	6 A; for derating see characteristics
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	03/25/2015
Weight	0.034 kg
Control circuit/ Control	
control supply voltage at DC rated value	110 V
operating range factor control supply voltage rated value at DC	
• initial value	0.7
• full-scale value	1.25
ON-delay time	
• at DC maximum	6 ms
OFF-delay time maximum	11 ms
Mechanical data	
product component plug-in socket	No

design of the relay operating mechanism	poled
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	AgSnO ₂
number of CO contacts for auxiliary contacts	1
operational current of auxiliary contacts at AC-15	
• at 24 V	3 A
• at 250 V	3 A
operational 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
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 according to IEC 60947-1	ambience A (industrial sector)
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
conducted interference	
• due to burst according to IEC 61000-4-4	2 kV
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according 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 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)
• for AWG cables solid	1 x (20 ... 14)
• for AWG cables 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
fastening method	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 maximum	2 000 m
ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
relative humidity during operation	10 ... 95 %

Approvals Certificates	
General Product Approval	



EG-Konf.

[Confirmation](#)



UL

General Product Approval	EMV	Marine / Shipping	other	Environment
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RCM

[KC](#)



DNV

[Confirmation](#)

[Environmental Confirmations](#)

Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

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=3RQ3018-2AN08-0AX0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3018-2AN08-0AX0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AN08-0AX0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3018-2AN08-0AX0&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3018-2AN08-0AX0/manual>



