SIEMENS

Data sheet 3RQ4018-2AN08-0AX0

output coupler with integrated relay, 110 V DC (0.7-1.25 x Us) 1 change-over contact, spring-loaded terminal (push-in), width 6.2 mm, thermal current 6 A (with painted APCB)

product brand name	SIRIUS
product category	SIRIUS 3RQ4 coupling relay, narrow design
product designation	Coupling relay with integrated relay output
design of the product	output coupling link
product type designation	3RQ4
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
power loss [W] maximum	0.8 W
consumed active power	0.5 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
● between control and auxiliary circuit according to IEC 60947-1	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
electrical endurance (operating cycles)	
● at AC-15 at 250 V typical	100 000
thermal current	6 A; for derating see characteristics
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	09/26/2024
SVHC substance name	Lead - 7439-92-1
Weight	34 g
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
design of the surge suppressor at input	Varistor
ON-delay time	
● at DC maximum	6 ms
OFF-delay time maximum	10 ms
Switching Function	
design of the switching function positively driven	No
Digital Outputs	
property of the output short-circuit proof	No
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	AgSnO2
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
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	
electromagnetic compatibility	acc. to DIN EN 50121-3-2
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
Safety related data	
B10d value	1 200 000
Connections/ Terminals	
product function removable terminal	No
type of electrical connection	
● for auxiliary and control circuit	spring-loaded terminals (push-in)
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)
● for AWG cables solid	1 x (20 ... 14)
● for AWG cables stranded	1x (20 ... 14)
connectable conductor cross-section	

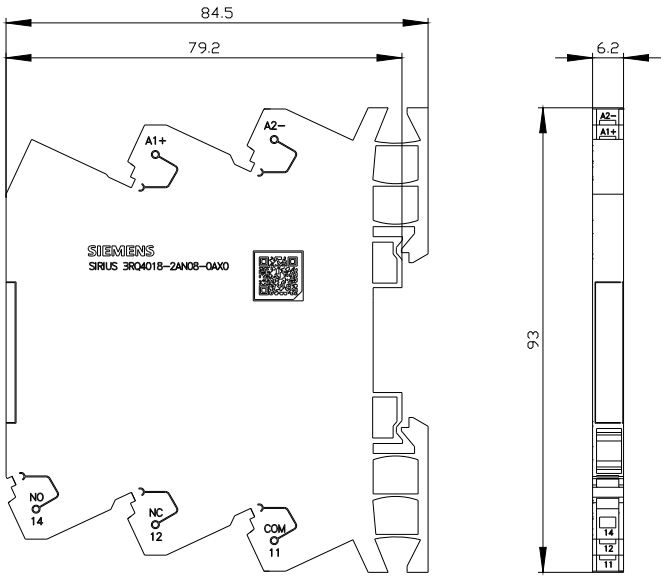
● solid	0.25 ... 2.5 mm²
● finely stranded with core end processing	0.25 ... 1.5 mm²
● finely stranded without core end processing	0.25 ... 2.5 mm²
AWG number as coded connectable conductor cross section	
● solid	20 ... 14
● stranded	20 ... 14
size of the screwdriver tip	PZ1
stripped length	10 mm
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting
height	93 mm
width	6.2 mm
depth	84.5 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	other	Environment
	Confirmation	

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=3RQ4018-2AN08-0AX0
Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4018-2AN08-0AX0
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RQ4018-2AN08-0AX0
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ4018-2AN08-0AX0&lang=en
Characteristic: Derating
https://support.industry.siemens.com/cs/ww/en/ps/3RQ4018-2AN08-0AX0/manual



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