SIEMENS

Data sheet 3RQ3038-1AF01

Input coupler Relay coupler, 1 change-over contact hard gold-plated contacts 230 V AC/DC screw terminal Overall width 6.2 mm Thermal current 6A



Figure similar

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	Input coupling link
Product type designation	3RQ3

General technical data	
Display version LED	Yes
Product component	
Relay output	Yes
 semi-conductor output 	No
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

Developed dress and valence related to the insurt	40.0/
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 IEC 81346-2:2009	К
• acc. to DIN EN 61346-2	Κ
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	No

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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-HTV
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 (5 V, 1 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	corresponds to degree of severity o
• due to burst acc. to IEC 61000-4-4	2 kV
• due to conductor-earth surge acc. to IEC	2 kV
61000-4-5	
 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	screw-type terminals
Wire length	
• at AC maximum	500 m
• at DC maximum	1 000 m
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)
at AWG conductors solid	1 x (20 14)
Connectable conductor cross-section	
• solid	0.25 2.5 mm²
 finely stranded with core end processing 	0.25 1.5 mm²
AWG number as coded connectable conductor cross	
section	
• solid	20 14
Tightening torque	
 with screw-type terminals 	0.5 0.6 N·m
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		
• 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	Declaration of	Marine /
	Conformity	Shipping













other

Confirmation

Further information



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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3038-1AF01

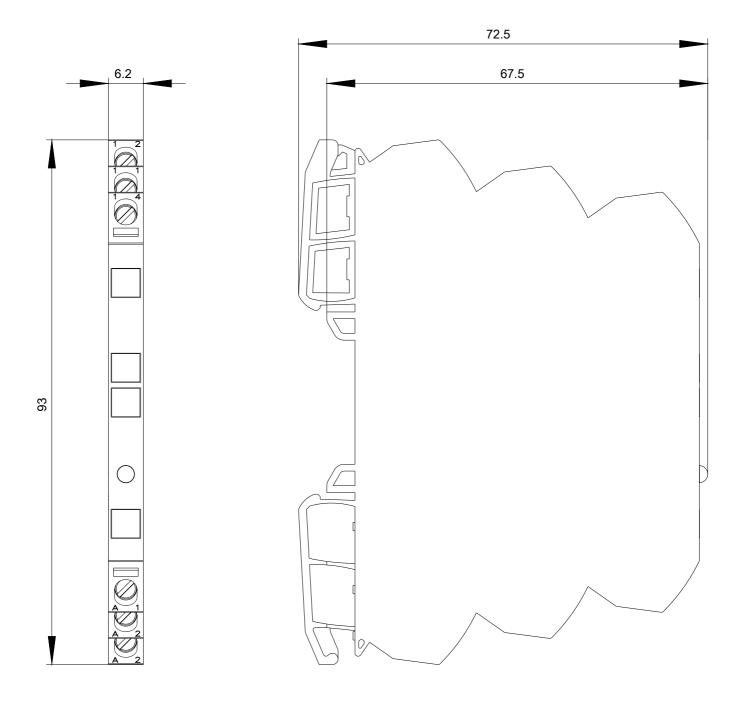
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3038-1AF01

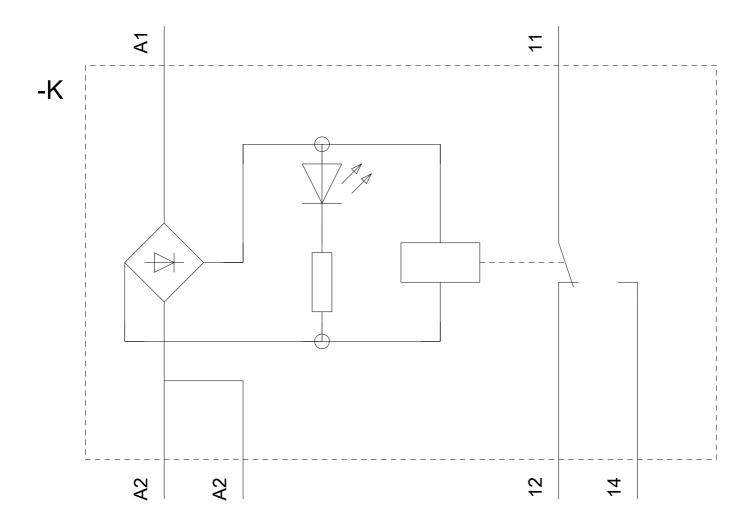
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3038-1AF01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3038-1AF01&lang=en







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