SIEMENS

Data sheet 3RQ3038-2AF01

Input coupler Relay coupler, 1 CO contact hard gold-plated 230 V AC/DC Spring-type terminal (push-in) Overall width 6.2 mm Thermal current 6 A

Figure similar

Article number		
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 links
Product type designation		3RQ3

General technical data		
Display version LED		Yes
Product component		
• Relay output		Yes
• semi-conductor output		No
Consumed active power	W	1
Insulation voltage		
• **for overvoltage category III according to IEC 60664**		
— with degree of pollution 3 rated value	V	300
Surge voltage resistance rated value	kV	4
maximum permissible voltage for safe isolation		

• between control and auxiliary circuit	V	300
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	1/h	72 000
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	A	6
Equipment marking		
• acc. to DIN EN 61346-2		K
• acc. to DIN EN 81346-2		K

Control circuit/ Control		
Control supply voltage at AC		
• at 50 Hz rated value	V	230
• at 60 Hz rated value	V	230
Control supply voltage at DC		
• rated value	V	230
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
Off-delay time	ms	19
Closing delay		
• at AC	ms	12
• at DC	ms	8
Opening delay		
• at AC	ms	20

• at DC	ms	18
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

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	A	3
• at 250 V	A	3
Operating current of auxiliary contacts at DC-13		
• at 24 V	A	1
• at 125 V	A	0.2
• at 250 V	A	0.1
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	A	3
Ampacity of the output relay at DC-13		
• at 24 V	A	1
• at 125 V	A	0.2
• at 250 V	A	0.1

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		PUSH-IN connection (spring-loaded connection)
Wire length		
• at AC maximum	m	500
• at DC maximum	m	1 000
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)
• at AWG conductors solid		1 x (20 ... 14)
• at AWG conductors stranded		1x (20 ... 14)
Connectable conductor cross-section		
• solid	mm²	0.25 ... 2.5
• finely stranded with core end processing	mm²	0.25 ... 1.5
• finely stranded without core end processing	mm²	0.25 ... 2.5
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	mm	93
Width	mm	6.2
Depth	mm	72.5
Required spacing		
• with side-by-side mounting		
— forwards	mm	0
— Backwards	mm	0

— upwards	mm	0
— downwards	mm	0
— at the side	mm	0
• for grounded parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— at the side	mm	0
— downwards	mm	0
• for live parts		
— forwards	mm	0
— Backwards	mm	0
— upwards	mm	0
— downwards	mm	0
— at the side	mm	0

Ambient conditions

Installation altitude at height above sea level		
• maximum	m	2 000
Ambient temperature		
• during operation	°C	-25 ... +60
• during storage	°C	-40 ... +85
• during transport	°C	-40 ... +85
Relative humidity		
• during operation	%	10 ... 95

Certificates/approvals

General Product Approval				Declaration of Conformity	other
CCC	CSA	UL	EAC	EG-Konf.	Confirmation

Further information

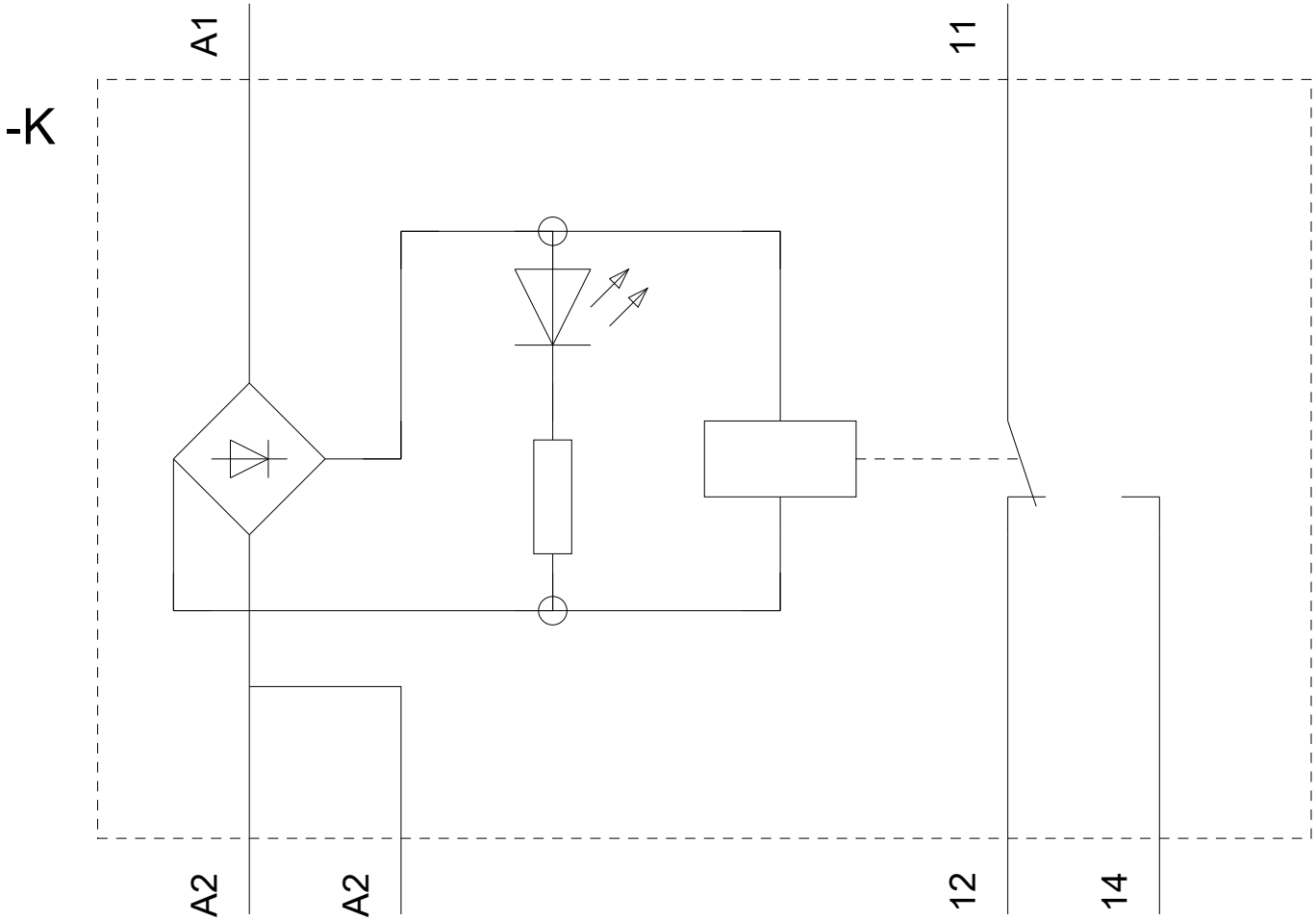
Information- and Downloadcenter (Catalogs, Brochures,…)
http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ3038-2AF01

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3038-2AF01

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3038-2AF01

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



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