## **SIEMENS**

Data sheet 3RQ3038-2AE01



Input coupler Relay coupler, 1 change-over contact hard gold-plated contacts 115 V AC/DC Spring-type terminal (push-in)) Overall width 6.2 mm 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	Input coupling link
product type designation	3RQ3
General technical data	
display version LED	Yes
product feature protective coating on printed-circuit board	No
product component	
<ul> <li>relay output</li> </ul>	Yes
• semi-conductor output	No
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	
<ul> <li>between control and auxiliary circuit</li> </ul>	300 V
percental drop-out voltage related to the input voltage	9.6 %
protection class IP	IP20
flammability class of enclosure material	UL94 V-0
shock resistance	
• according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
vibration resistance	
• according to IEC 60068-2-6	6 150 Hz: 2 g
operating frequency maximum	72 000 1/h
switching behavior	monostable
mechanical service life (operating cycles) typical	10 000 000
thermal current	6 A
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	03/25/2015
Control circuit/ Control	
control supply voltage at AC	
• at 50 Hz rated value	115 V
at 60 Hz rated value	115 V
control supply voltage frequency	
• 1 rated value	50 Hz
2 rated value	60 Hz
control supply voltage at DC	
rated value	115 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	
ON-delay time		
<ul> <li>at AC maximum</li> </ul>	8 ms	
at DC maximum	6 ms	
OFF-delay time	17 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	
Auxiliary circuit		
type of switching contact	Changeover contact	
material of switching contacts	AgSnO2 hard gold-plated	
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 (5 V, 1	
	mA)	
Main circuit	100	
type of voltage	AC/DC	
type of voltage Inputs/ Outputs		
type of voltage Inputs/ Outputs property of the output short-circuit proof	No	
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz		
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13	No 3 A	
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V	No 3 A 1 A	
type of voltage Inputs/ Outputs  property of the output short-circuit proof  ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V	No 3 A 1 A 0.2 A	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V	No 3 A 1 A	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility	No 3 A 1 A 0.2 A 0.1 A	
type of voltage Inputs/ Outputs property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector)	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility	No 3 A  1 A 0.2 A 0.1 A	
type of voltage Inputs/ Outputs  property of the output short-circuit proof  ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3	
type of voltage Inputs/ Outputs  property of the output short-circuit proof  ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3	
type of voltage Inputs/ Outputs  property of the output short-circuit proof  ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Display	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV  10 V/m 6 kV contact discharge / 8 kV air discharge	
type of voltage Inputs/ Outputs  property of the output short-circuit proof  ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  display version as status display by LED	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV  10 V/m 6 kV contact discharge / 8 kV air discharge	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Display display version as status display by LED  Connections/ Terminals	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV  10 V/m 6 kV contact discharge / 8 kV air discharge	
type of voltage Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Display  display version as status display by LED  Connections/ Terminals product function removable terminal	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV  10 V/m 6 kV contact discharge / 8 kV air discharge	
Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-2  Display  display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection for auxiliary and control circuit	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV  10 V/m 6 kV contact discharge / 8 kV air discharge	
Inputs/ Outputs  property of the output short-circuit proof  ampacity of the output relay at AC-15 at 250 V at 50/60 Hz  ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection for auxiliary and control circuit wire length	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV  10 V/m 6 kV contact discharge / 8 kV air discharge  LED green  No spring-loaded terminals (push-in)	
Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V • at 125 V • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2  Display  display version as status display by LED  Connections/ Terminals  product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV  10 V/m 6 kV contact discharge / 8 kV air discharge  LED green  No spring-loaded terminals (push-in)  500 m	
Inputs/ Outputs  property of the output short-circuit proof ampacity of the output relay at AC-15 at 250 V at 50/60 Hz ampacity of the output relay at DC-13  • at 24 V  • at 125 V  • at 250 V  Electromagnetic compatibility  EMC emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection for auxiliary and control circuit  wire length  • at AC maximum  • at DC maximum	No 3 A  1 A 0.2 A 0.1 A  ambience A (industrial sector) corresponds to degree of severity 3  2 kV 2 kV 1 kV  10 V/m 6 kV contact discharge / 8 kV air discharge  LED green  No spring-loaded terminals (push-in)  500 m	
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finely stranded without core end processing	1x (0.25 2.5 mm²)	
for AWG cables solid	1 x (20 14)	
for AWG cables solid     for AWG cables stranded	1 x (20 14) 1x (20 14)	
connectable conductor cross-section	18 (20 14)	
solid	0.25 2.5 mm²	
	0.25 1.5 mm <sup>2</sup>	
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul>	0.25 2.5 mm²	
AWG number as coded connectable conductor cross	0.23 2.3 11111	
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		
<ul> <li>with side-by-side mounting</li> </ul>		
— forwards	0 mm	
— backwards	0 mm	
— upwards	0 mm	
— downwards	0 mm	
— at the side	0 mm	
<ul> <li>for grounded parts</li> </ul>		
— 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		EMC

Confirmation







**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report



Confirmation

Further information

Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

## Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

## 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=3RQ3038-2AE01

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3038-2AE01

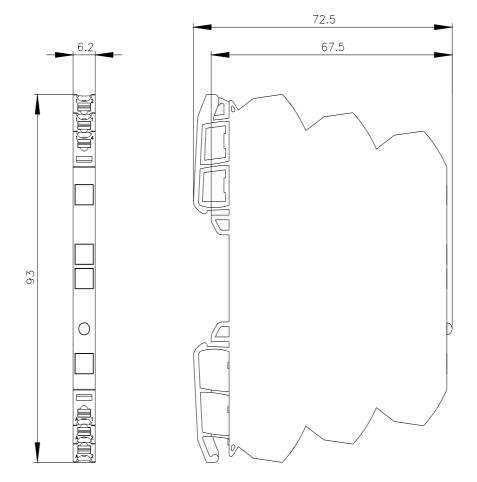
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

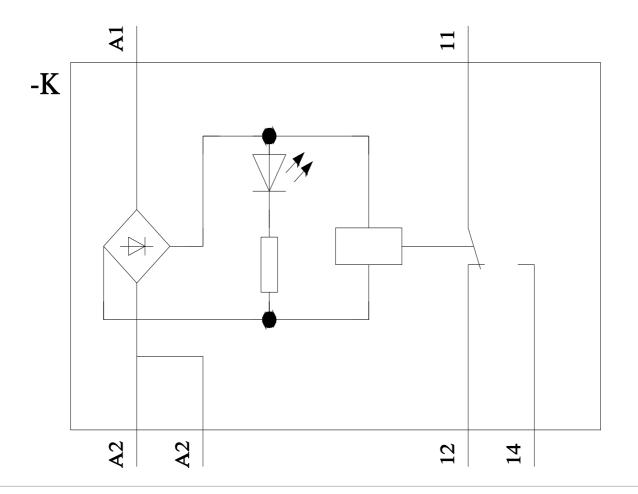
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3038-2AE01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3038-2AE01&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3038-2AE01&lang=en</a>

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3038-2AE01/manual





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