SIEMENS

Data sheet 3RQ2000-1AW00



Coupling relay in industrial enclosure 1 changeover contact Wide voltage range 24 V to 240 V AC/DC Screw terminals

product brand name	SIRIUS	
product designation	Coupling relay in industrial enclosure	
product type designation	3RQ2	
General technical data		
product feature protective coating on printed-circuit board	No	
consumed active power	4 W	
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V	
degree of pollution	3	
surge voltage resistance rated value	4 kV	
maximum permissible voltage for protective separation		
 between auxiliary and auxiliary circuit 	300 V	
 between control and auxiliary circuit according to IEC 60947-1 	300 V	
protection class IP	IP20	
shock resistance		
 according to IEC 60068-2-27 	11g / 15 ms	
 for railway applications according to EN 61373 	Category 1, Class B	
vibration resistance		
 according to IEC 60068-2-6 	10 55 Hz: 0.35 mm	
 for railway applications according to EN 61373 	Category 1, Class B	
switching behavior	monostable	
mechanical service life (operating cycles) typical	10 000 000	
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000	
thermal current of the switching element with contacts maximum	5 A	
reference code according to IEC 81346-2	K	
Substance Prohibitance (Date)	05/31/2018	
Control circuit/ Control		
control supply voltage 1 at AC		
● at 50 Hz	24 240 V	
• at 60 Hz	24 240 V	
control supply voltage 1		
• at DC	24 240 V	
operating range factor control supply voltage rated value at DC		
• initial value	0.7	
full-scale value	1.1	
operating range factor control supply voltage rated value at AC at 50 Hz		
• initial value	0.7	

full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
	0.7
• initial value	0.7
• full-scale value ON delay time	1.1
ON-delay time	40
• at AC maximum	10 ms
at DC maximum	10 ms
OFF-delay time	100 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 gL/gG: 6 A
Auxiliary circuit	
material of switching contacts	AgSnO2
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	1
contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (17 V, 5 mA) $$
type of voltage	AC/DC
ampacity of the output relay at AC-15	
• at 24 V at 50/60 Hz	3 A
• at 110 V at 50/60 Hz	3 A
• 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 (line to ground)
 due to conductor-conductor surge according to IEC 61000-4-5 	1 kV (line to line)
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharging, 8 kV air discharging
Safety related data	
electromagnetic compatibility	IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Connections/ Terminals	
Some Strong, Terminals	
product component removable terminal for auxiliary and control circuit	Yes
product component removable terminal for auxiliary and	Yes screw-type terminals
product component removable terminal for auxiliary and control circuit	
product component removable terminal for auxiliary and control circuit type of electrical connection	
product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections	screw-type terminals
product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid	screw-type terminals 1x (0.5 4 mm²), 2x (0.5 2.5 mm²)
product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing	screw-type terminals 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • for AWG cables solid	screw-type terminals 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²)
product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections	screw-type terminals 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14)
product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid • finely stranded with core end processing • for AWG cables solid connectable conductor cross-section	screw-type terminals 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 0.5 4 mm²
product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections	screw-type terminals 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 0.5 4 mm² 4 mm²
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product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections	screw-type terminals 1x (0.5 4 mm²), 2x (0.5 2.5 mm²) 1x (0.5 4 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 0.5 4 mm² 4 mm² 0.5 mm² 12 20 12 20 0.6 0.8 N·m

fastening method	screw and snap-on mounting onto 35 mm DIN rail	
height	100 mm	
width	22.5 mm	
depth	90 mm	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
 during operation 	-40 +60 °C	
during storage	-40 +80 °C	
during transport	-40 +80 °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







Marine / Shipping

other

Railway



Confirmation

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=3RQ2000-1AW00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ2000-1AW00

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

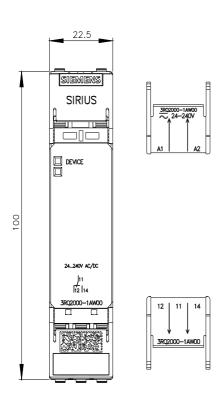
https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-1AW00

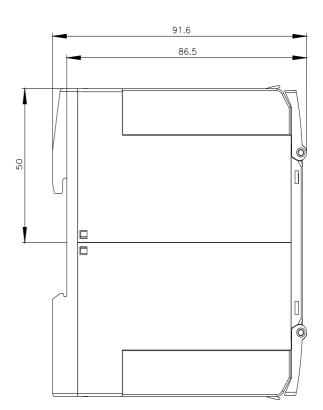
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

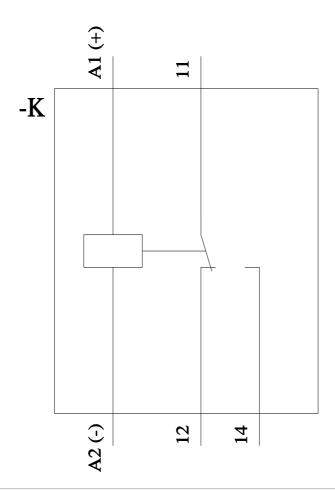
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ2000-1AW00\&lang=en}}$

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-1AW00/manual







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