SIEMENS

Data sheet

3RQ2000-2CW01



Coupling relay in industrial enclosure 3 hard gold-plated changeover contacts Wide voltage range 24 V to 240 V AC/DC Spring-type terminals

product brand name	SIRIUS		
product designation	Coupling relay in industrial enclosure		
product type designation	3RQ2		
General technical data			
consumed active power	5 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 safe isolation			
 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	К		
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		

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operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.7
• full-scale value	1.1
ON-delay time	10
• 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	AgNi + Au
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	3
contact reliability of auxiliary contacts	one incorrect switching per 100 million (11 V, 2 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	1 kV (line to line)
61000-4-5	
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	
electromagnetic compatibility	IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Connections/ Terminals	IEC 60947-17 IEC 61000-6-27 IEC 61000-6-4
	Yes
Connections/ Terminals product component removable terminal for auxiliary and	
Connections/ Terminals product component removable terminal for auxiliary and control circuit	Yes
Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	Yes
Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections • solid	Yes spring-loaded terminal (push-in)
Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection type of connectable conductor cross-sections	Yes spring-loaded terminal (push-in) 0.5 4 mm ²
Connections/ Terminals 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	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ²
Connections/ Terminals 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 • at AWG cables solid connectable conductor cross-section	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 20 12
Connections/ Terminals 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 • at AWG cables solid connectable conductor cross-section • solid	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 20 12 0.5 4 mm ²
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Connections/ Terminals 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 • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing • finely stranded without core section • solid • solid • stranded	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 20 12 0.5 4 mm ² 2.5 mm ² 0.5 mm ² 12 20 20 12
Connections/ Terminals 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 at AWG cables solid connectable conductor cross-section solid finely stranded with core end processing at AWG cables solid connectable conductor cross-section solid finely stranded with core end processing finely stranded with core end processing finely stranded without core end processing solid solid solid stranded stranded stripped length of the cable for auxiliary and control contacts	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 20 12 0.5 4 mm ² 2.5 mm ² 0.5 mm ² 12 20
Connections/ Terminals 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 at AWG cables solid connectable conductor cross-section solid finely stranded with core end processing at AWG cables solid connectable conductor cross-section solid finely stranded with core end processing finely stranded with core end processing finely stranded without core end processing solid solid solid stranded without core end processing solid stranded stranded stranded stranded stranded in the cable for auxiliary and control contacts Installation/ mounting/ dimensions	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 20 12 0.5 4 mm ² 2.5 mm ² 12 20 20 12 10 mm
Connections/ Terminals 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 • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing • finely stranded without core end processing • solid • stranded stripped length of the cable for auxiliary and control contacts Installation/ mounting/ dimensions mounting position	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 20 12 0.5 4 mm ² 2.5 mm ² 0.5 mm ² 12 20 20 12 10 mm any
Connections/ Terminals 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 • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing • finely stranded without core end processing • solid • stranded stripped length of the cable for auxiliary and control contacts Installation/ mounting/ dimensions mounting position fastening method	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 20 12 0.5 4 mm ² 2.5 mm ² 0.5 mm ² 12 20 20 12 10 mm any screw and snap-on mounting onto 35 mm DIN rail
Connections/ Terminals 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 • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing • finely stranded without core end processing • solid • stranded stripped length of the cable for auxiliary and control contacts Installation/ mounting/ dimensions mounting position	Yes spring-loaded terminal (push-in) 0.5 4 mm ² 0.5 2.5 mm ² 20 12 0.5 4 mm ² 2.5 mm ² 0.5 mm ² 12 20 20 12 10 mm any

depth	C	0 mm			
Ambient conditions	e				
installation altitude at height above sea level					
		2 000 m			
ambient temperature		-40 +60 °C			
during operation		-40 +60 C -40 +80 °C			
during storage					
o during transport		-40 +80 °C 10 95 %			
Certificates/ approvals				5140	
General Product Approval				EMC	
	<u>Confirmation</u>		EHC	RCM	
Declaration of Conformity	Test Certificates	Marine / Shipping			
CE UK EG-Konf. CA	Type Test Certific ates/Test Report		RMRS	DNV-GL EMMILEDIEM	
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/e Information- and Downloadcenter (Catalog https://www.siemens.com/ic10 Industry Mall (Online ordering system)					

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Cax online generator

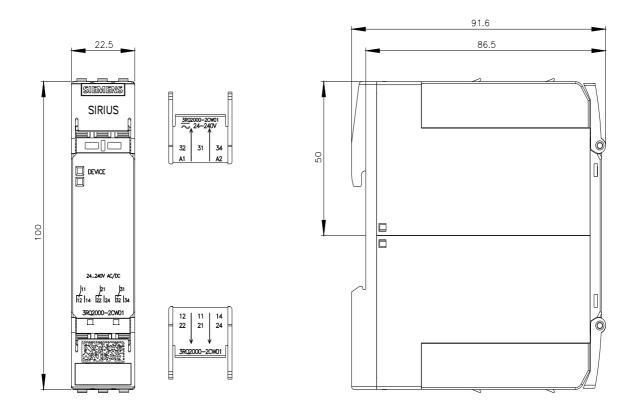
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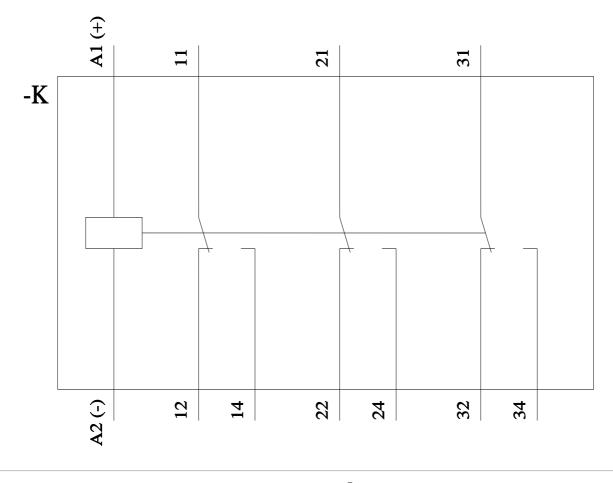
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-2CW01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ2000-2CW01&lang=en

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