## SIEMENS

## Data sheet

## 3RQ2000-1CW01



Coupling relay in industrial enclosure 3 hard gold-plated changeover contacts 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						
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						
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	300 V					
<ul> <li>between control and auxiliary circuit according to IEC 60947-1</li> </ul>	300 V					
protection class IP	IP20					
shock resistance						
<ul> <li>according to IEC 60068-2-27</li> </ul>	11g / 15 ms					
<ul> <li>for railway applications according to EN 61373</li> </ul>	Category 1, Class B					
vibration resistance						
<ul> <li>according to IEC 60068-2-6</li> </ul>	10 55 Hz: 0.35 mm					
<ul> <li>for railway applications according to EN 61373</li> </ul>	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					
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	1.1				
• at AC maximum	10 ms				
• at DC maximum	10 ms				
	100 ms				
OFF-delay time					
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)				
0					
EMC immunity according to IEC 60947-1 conducted interference	corresponds to degree of severity 3				
	2 kV				
<ul> <li>due to burst according to IEC 61000-4-4</li> <li>due to conductor-earth surge according to IEC</li> </ul>	2 kV (line to ground)				
<ul> <li>due to conductor-conductor surge according to IEC</li> <li>due to conductor-conductor surge according to IEC</li> </ul>	1 kV (line to line)				
61000-4-5					
field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2	10 V/m 4 kV contact discharging, 8 kV air discharging				
	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					
product component removable terminal for auxiliary and control circuit	Yes				
type of electrical connection	screw-type terminals				
type of connectable conductor cross-sections					
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)				
<ul> <li>finely stranded with core end processing</li> </ul>	1x (0.5 4 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )				
<ul> <li>at AWG cables solid</li> </ul>	1x (20 12), 2x (20 14)				
connectable conductor cross-section					
• solid	0.5 4 mm²				
<ul> <li>finely stranded with core end processing</li> </ul>	4 mm <sup>2</sup>				
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 mm <sup>2</sup>				
AWG number as coded connectable conductor cross					
section					
• solid	12 20				
• stranded	12 20				
tightening torque with screw-type terminals	0.6 0.8 N·m				
stripped length of the cable for auxiliary and control	10 mm				
contacts					
Installation/ mounting/ dimensions					
mounting position	any				
fastening method	screw and snap-on mounting onto 35 mm DIN rail				
height	100 mm				

width depth			22.5 mm 90 mm			
Ambient conditions		_	90 M			
installation altitude at height above sea level maximum ambient temperature		2 000 m				
during operation		-40 +60 °C				
during storage		-40 +80 °C				
• during transport		-40 +80 °C 10 95 %				
relative humidity during operation Certificates/ approvals		10	95 %	_	_	
General Product A			_			EMC
General Product A	oprovar					LING
SP SM	<u>Confirmation</u>				EHC	
Declaration of Conformity Test Certifica		tes	Marine / Shipping			
CE EG-Konf.	UK CA	<u>Type Test Cert</u> ates/Test Rep	<u>tific-</u> port	RINA	RMRS RMRS	DNV-GL
other	Railway					
<b>Confirmation</b>	<b>Confirmation</b>					
Further information						
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)						

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ2000-1CW01

Cax online generator

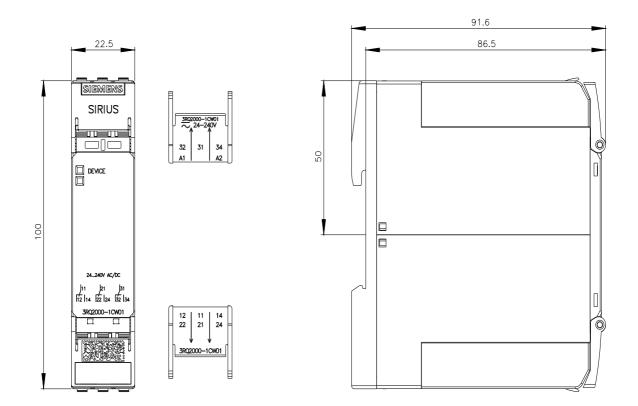
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ2000-1CW01 Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

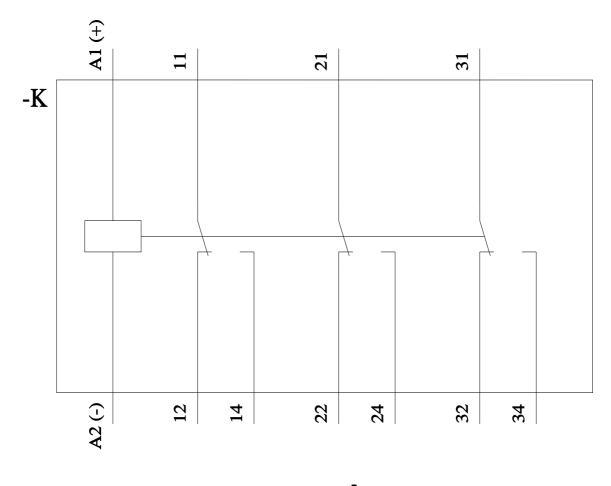
https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-1CW01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ2000-1CW01&lang=en

Characteristic: Derating

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