## **SIEMENS**

Data sheet 3RQ2000-2BW00



Coupling relay in industrial enclosure 2 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	4.5 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	
• 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

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	
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	fuse gL/gG: 6 A
switch required	
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	2
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	0.174
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	corresponds to degree or severity 5
due to burst according to IEC 61000-4-4	2 kV
<ul> <li>due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV (line to ground)
due to conductor-conductor surge according to IEC	1 kV (line to line)
61000-4-5	The time to mic)
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	
Safety related data	4 kV contact discharging, 8 kV air discharging
-	4 kV contact discharging, 8 kV air discharging
electromagnetic compatibility	4 kV contact discharging, 8 kV air discharging  IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
electromagnetic compatibility Connections/ Terminals	
Connections/ Terminals product component removable terminal for auxiliary and	
Connections/ Terminals  product component removable terminal for auxiliary and control circuit	IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4  Yes
Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection	IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection  type of connectable conductor cross-sections	IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4  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  • solid	Yes spring-loaded terminal (push-in)  0.5 4 mm <sup>2</sup>
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 mm² 0.5 2.5 mm²
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width	22.5 mm	
depth	90 mm	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
<ul> <li>during operation</li> </ul>	-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



<u>Confirmation</u> <u>Confirmation</u>

## 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=3RQ2000-2BW00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ2000-2BW00

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

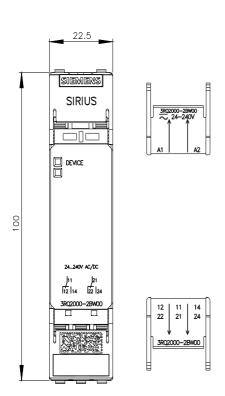
https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-2BW00

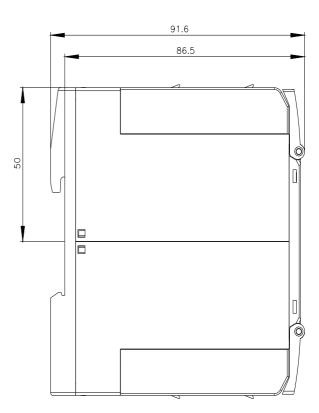
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

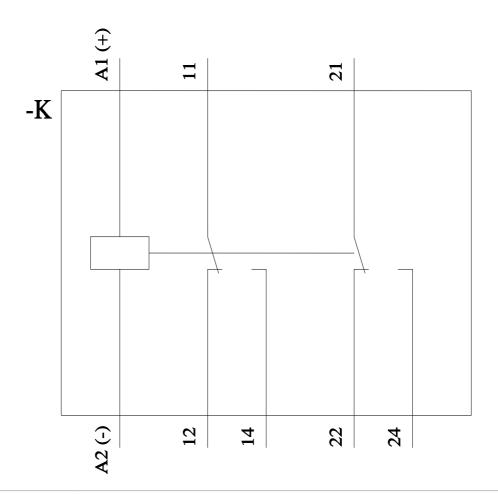
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ2000-2BW00&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-2BW00/manual







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