SIEMENS

Data sheet 3RQ2000-1BW00



Coupling relay in industrial enclosure 2 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	
product feature protective coating on printed-circuit board	No
consumed active power	2 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
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
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	0.165 kg
Control circuit/ Control	
control supply voltage at AC	
● at 50 Hz	24 240 V
● at 60 Hz	24 240 V
control supply voltage 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 maximum	100 ms	
Switching Function		
design of the switching function	CO contact	
Mechanical data		
product component plug-in socket	No	
design of the relay operating mechanism	poled	
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	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		
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	
Display		
product component LED	Yes	
Connections/ Terminals		
product component removable terminal for auxiliary and control circuit	Yes	
type of electrical connection	screw terminal	
type of connectable conductor cross-sections		
• solid	1x (0.5 4 mm²), 2x (0.5 2.5 mm²)	
 finely stranded with core end processing 	1x (0.5 4 mm²), 2x (0.5 1.5 mm²)	
for AWG cables solid	1x (20 12), 2x (20 14)	
connectable conductor cross-section		
• solid	0.5 4 mm²	
 finely stranded with core end processing maximum 	4 mm ²	
finely stranded without core end processing minimum	0.5 mm²	
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 contacts	10 mm		
Installation/ mounting/ dimensions			
mounting position	any		
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 %		
Approvals Certificates			
General Product Approval		EMV	











EMV

Test Certificates

Maritime application

<u>KC</u>

Type Test Certificates/Test Report









other

Railway

Environment

Confirmation

Confirmation

Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information for data generation and storage

https://support.industry.siemens.com/cs/ww/en/view/109995012

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=3RQ2000-1BW00

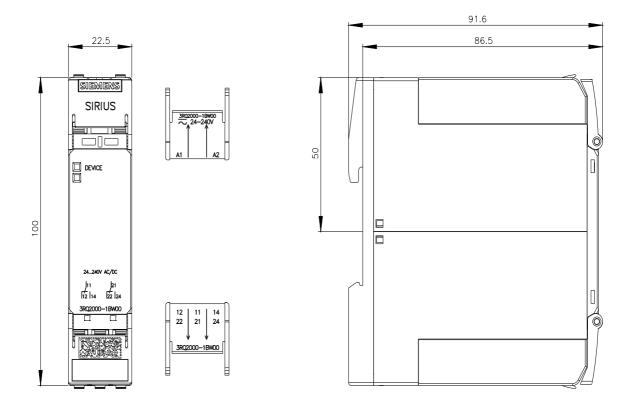
Cax online generator

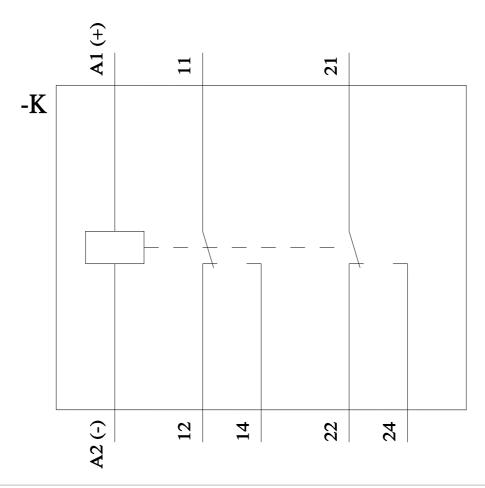
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ2000-1BW00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-1BW00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ2000-1BW00&lang=en





last modified: 7/14/2025 🖸

