SIEMENS

Data sheet

3RQ1200-1EW00



force-guided coupling relay in industrial enclosure 1 NO contact / 1 NC contact 24 V to 240 V AC/DC SIL 3 / PL e screw terminal

product brand name	SIRIUS		
product designation	force-guided coupling relay		
design of the product	fail-safe up to SIL 3/PL e		
product type designation	3RQ1		
General technical data			
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		
protection class IP	IP20		
shock resistance			
according to IEC 60068-2-27	11g / 15 ms		
vibration resistance			
according to IEC 60068-2-6	10 55 Hz: 0.35 mm		
operating frequency maximum	360 1/h		
switching behavior	monostable		
mechanical service life (operating cycles) typical	10 000 000		
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		
Product Function			
suitability for operation device connector 3ZY12	No		
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 	0.85		
• full-scale value	1.1		
operating range factor control supply voltage rated value at AC at 60 Hz			
 initial value 	0.85		
• full-scale value	1.1		

ON-delay time	
● at AC maximum	50 ms
• at DC maximum	50 ms
OFF-delay time	70 ms
product component plug-in socket	No
Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary switch required	NO: fuse gL/gG: 6 A; NC: fuse gL/gG: 4 A
Auxiliary circuit	
material of switching contacts	AgNi + Au flash
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
type of voltage	AC/DC
ampacity of the output relay at AC-15	
• at 250 V at 50/60 Hz	2 A
ampacity of the output relay at DC-13	
• at 24 V	2 A
• at 125 V	0.2 A
• at 250 V	0.1 A
Electromagnetic compatibility	
	ambience A (industrial sector)
EMC emitted interference according to IEC 60947-1	
EMC immunity according to IEC 60947-1 conducted interference	corresponds to degree of severity 3
	214/
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	
Safety Integrity Level (SIL) according to IEC 61508	3
SIL Claim Limit (subsystem) according to EN 62061	3
performance level (PL) according to EN ISO 13849-1	е
performance level (PL) according to EN ISO 13849-1 PFHD	e
	e 5E-10 1/h
PFHD	
• with high demand rate according to IEC 61508	5E-10 1/h
 PFHD • with high demand rate according to IEC 61508 • with low demand rate according to IEC 61508 	5E-10 1/h 8E-7 1/h
 PFHD with high demand rate according to IEC 61508 with low demand rate according to IEC 61508 hardware fault tolerance according to IEC 61508 	5E-10 1/h 8E-7 1/h 1
 PFHD with high demand rate according to IEC 61508 with low demand rate according to IEC 61508 hardware fault tolerance according to IEC 61508 electromagnetic compatibility 	5E-10 1/h 8E-7 1/h 1
PFHD • with high demand rate according to IEC 61508 • with low demand rate according to IEC 61508 hardware fault tolerance according to IEC 61508 electromagnetic compatibility Connections/ Terminals product component removable terminal for auxiliary and	5E-10 1/h 8E-7 1/h 1 IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4
PFHD • with high demand rate according to IEC 61508 • with low demand rate according to IEC 61508 hardware fault tolerance according to IEC 61508 electromagnetic compatibility Connections/ Terminals product component removable terminal for auxiliary and control circuit	5E-10 1/h 8E-7 1/h 1 IEC 60947-1 / IEC 61000-6-2 / IEC 61000-6-4 Yes
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width	17.5 mm			
depth	90 mm			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature				
during operation	-25 +60 °C			
during storage	-40 +80 °C			
during transport	-40 +80 °C			
relative humidity during operation	10 95 %			
Certificates/ approvals				

General Product Approval

	CCC	<u>Confirmation</u>	TUV	(UL) III	EHC
EMC	Declaration of Confor	rmity	Marine / Shipping	other	Railway
RCM	CE EG-Konf.	UK CA		<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=3RQ1200-1EW00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ1200-1EW00

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

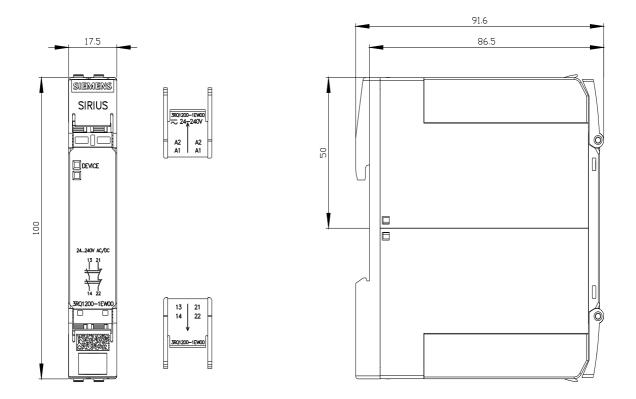
https://support.industry.siemens.com/cs/ww/en/ps/3RQ1200-1EW00

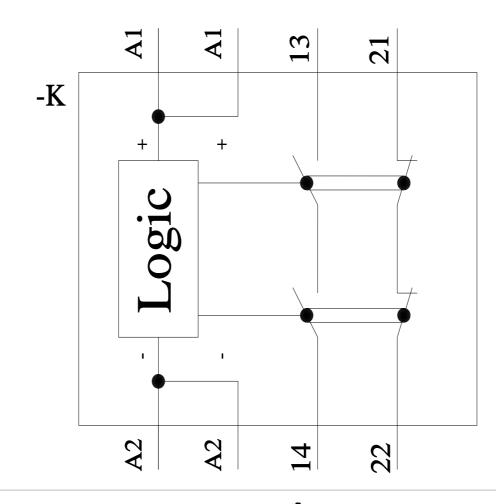
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ1200-1EW00&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ1200-1EW00/manual





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