SIEMENS

Data sheet 3RQ1200-1EB00



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

product designation design of the product product type designation General technical data product feature protective coating on printed-circuit board consumed active power insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value degree of pollution surge voltage resistance rated value protection class IP shock resistance • according to IEC 60068-2-27 operating frequency maximum switching behavior mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2,6,6-tetrabromo-4,4-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes Control circuit/ Control	design of the product	
design of the product product type designation 3RQ1 General technical data product feature protective coating on printed-circuit board consumed active power insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 300 V 60664 with degree of pollution 3 4 kV 60664 with degree of pollution 3 5 surge voltage resistance rated value 4 kV 60665 protection class IP 60665 protection class IP 60666 protection class IP 706666 protection class IP 706666 protection class IP 7076 protection class IP 7086 protection class IP 7096 protection class IP 7096 protection class IP 7096 protection class IP 7096 protection class IP 7097 protection class IP 7098 protec	design of the product	
product feature protective coating on printed-circuit board consumed active power 0.9 W insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value 4 kV protection class IP IP20 shock resistance	product type designation	idil-3dic up to oil on L c
product feature protective coating on printed-circuit board consumed active power 0.9 W insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value degree of pollution 3 rated value 4 kV protection class IP IP20 shock resistance	p , po accignation	3RQ1
consumed active power insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value 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 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 7 reference code according to IEC 81346-2 K Substance Prohibitance (Date) 05/31/2018 SVHC substance name	eneral technical data	
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value degree of pollution 3 asurge voltage resistance rated value 4 kV protection class IP IP20 shock resistance • according to IEC 60068-2-27 11g / 15 ms 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 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 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	product feature protective coating on printed-circuit board	No
degree of pollution 3 rated value degree of pollution surge voltage resistance rated value protection class IP shock resistance • according to IEC 60068-2-27 operating frequency maximum switching behavior mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	consumed active power	0.9 W
surge voltage resistance rated value protection class IP shock resistance • according to IEC 60068-2-27 11g / 15 ms operating frequency maximum 360 1/h switching behavior mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes		300 V
protection class IP shock resistance according to IEC 60068-2-27 11g / 15 ms operating frequency maximum switching behavior mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	degree of pollution	3
shock resistance	surge voltage resistance rated value	4 kV
according to IEC 60068-2-27 operating frequency maximum 360 1/h switching behavior mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	protection class IP	IP20
operating frequency maximum switching behavior mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	shock resistance	
switching behavior mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 K Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	• according to IEC 60068-2-27	11g / 15 ms
mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 K Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	operating frequency maximum	360 1/h
thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	switching behavior	monostable
maximum reference code according to IEC 81346-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	mechanical service life (operating cycles) typical	10 000 000
Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes		5 A
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Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 Product Function suitability for operation device connector 3ZY12 Yes	Substance Prohibitance (Date)	05/31/2018
suitability for operation device connector 3ZY12 Yes	SVHC substance name	Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5
,,,,,,	oduct Function	
Control circuit/ Control	suitability for operation device connector 3ZY12	Yes
	ontrol circuit/ Control	
control supply voltage 1 at DC	control supply voltage 1 at DC	
• rated value 24 V	• rated value	24 V
• 24 24 V	•	24 24 V
operating range factor control supply voltage rated value at DC		
• initial value 0.8	• initial value	0.8
• full-scale value 1.2	• full-scale value	1.2
ON-delay time	ON-delay time	
• at AC maximum 15 ms	at AC maximum	15 ms
• at DC maximum 15 ms	at DC maximum	15 ms
OFF-delay time maximum 35 ms	OFF-delay time maximum	35 ms
Switching Function	* 1: E #	
design of the switching function NO contact	witching Function	
Mechanical data		NO contact

product component plus in cocket	No
product component plug-in socket	No poled
design of the relay operating mechanism Short-circuit protection	poled
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	AqNi + Au flash
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
type of voltage	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	
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 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
IEC 62061	
SIL Claim Limit (subsystem) according to EN 62061	3
ISO 13849	
performance level (PL) according to EN ISO 13849-1	е
IEC 61508	
Safety Integrity Level (SIL) according to IEC 61508	3
PFHD with high demand rate according to IEC 61508	5E-10 1/h
PFHD with low demand rate according to IEC 61508 Connections/ Terminals	8E-7 1/h
	Yes
product component removable terminal for auxiliary and control circuit	165
type of electrical connection	screw terminal
wire length at DC maximum	2 000 m
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	17.5 mm
depth	120 mm
Ambient conditions	0.000
installation altitude at height above sea level maximum	2 000 m

ambient temperature

during operation

• during storage

• during transport

-25 ... +60 °C

-40 ... +80 °C

-40 ... +80 °C 10 ... 95 %

relative humidity during operation

Approvals Certificates

General Product Approval





Confirmation







General Product Approval

EMV

Marine / Shipping

other

Environment







Confirmation

Environmental Confirmations

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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ1200-1EB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ1200-1EB00

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

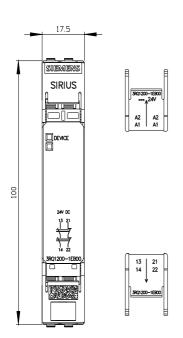
https://support.industry.siemens.com/cs/ww/en/ps/3RQ1200-1EB00

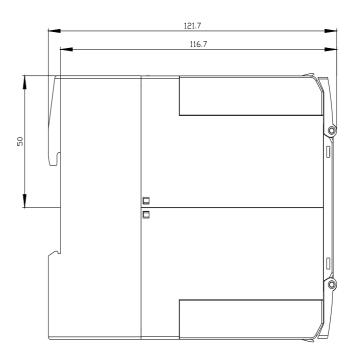
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

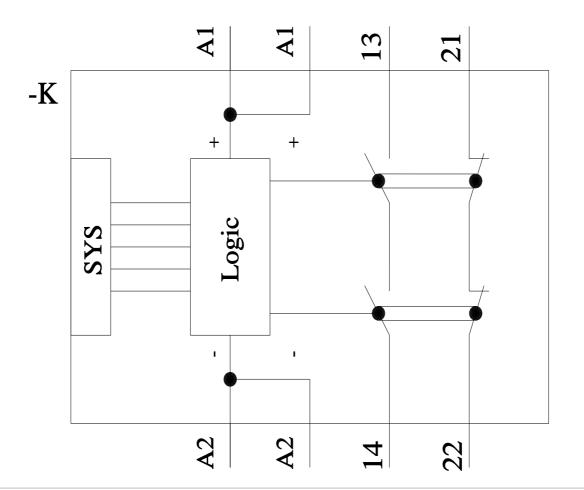
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ1200-1EB00&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ1200-1EB00/manual







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