SIEMENS

Data sheet 3RQ1200-2EB00



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

product designation SRQ1 S	product brand name	SIRIUS		
Product feature protective coating on printed-circuit board consumed active power 0.9 W insulation voltage for overvoltage category III according to IEC 60064 with degree of pollution 3 rated value degree of pollution 3 rated value 4 kV shock resistance according to IEC 60068-2-27 11g / 15 ms 4 kV shock resistance - according to IEC 60068-2-27 11g / 15 ms 4 kV shock resistance - according to IEC 60068-2-6 10 55 Hz: 0.35 mm 4 coording to IEC 60068-2-6 10 55 Hz: 0.35 mm 4 coording to IEC 60068-2-6 10 55 Hz: 0.35 mm 4 coording to IEC 60068-2-6 10 55 Hz: 0.35 mm 5 coording to IEC 60068-2-6 10 55 Hz: 0.35 mm 6 coording to I	product designation	force-guided coupling relay		
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 shock resistance • according to IEC 60068-2-27 11g / 15 ms vibration 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 sol 01 hr switching behavior mechanical service life (operating cycles) typical 1000 000 thermal current of the switching element with contacts maximum reference code according to IEC 81346-2 K Substance Prohibitance (Date) 05731/2018 SVHC substance name Weight 0.166 kg Weight 0.166 kg Weight 0.166 kg Product Function suitability for operation device connector 3ZY12 Yes Control supply voltage 1 at DC rated value control supply voltage 1 at DC control supply voltage 1 at DC operating range factor control supply voltage rated value • Initial value • Initi	product type designation	3RQ1		
insulation voltage for overvoltage category III according to IEC 0.9 W insulation voltage for overvoltage category III according to IEC 00664 with degree of pollution 3 surge voltage resistance rated value 4 kV shock resistance • according to IEC 60068-2-27 11g / 15 ms vibration resistance • according to IEC 60068-2-65 10 55 Hz: 0.35 mm operating frequency maximum 360 1/h switching behavior 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) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2/6,6/-letratorome-4,4'-sopropylidenediphenol - 79-94-7 2,-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight Double of the switching of the Control supply voltage 1 at DC Control supply voltage 1 at DC Control supply voltage 1 at DC Operating range factor control supply voltage rated value 10 e initial value 11 initial value 12 e initial value 13 ms 15 ms 16 control supply woltage nations 15 ms 15 ms 15 ms 16 control suprised to the switching function NO contact Woltenday fire maximum Systehing Function Uncertained on the switching function NO contact	General technical data			
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value degree of pollution 3 a surge voltage resistance rated value 4 kV shock resistance	product feature protective coating on printed-circuit board	No		
degree of pollution 3 rated value 4 kV 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 menorated value 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	consumed active power	0.9 W		
surge voltage resistance rated value 4 kV shock resistance • according to IEC 60068-2-27 vibration resistance • according to IEC 60068-2-6 10 55 Hz: 0.35 mm 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 K Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2_2,2.6.6-tetrabromo-4,4-isopropylidened/phenol - 79-94-7 2_methyl-1(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.166 kg Product Function suitability for operation device connector 3ZY12 Control supply voltage 1 at DC operating range factor control supply voltage rated value at DC initial value full-scale value 0.8 full-scale value 0.8 operating range factor control supply voltage rated value at DC operating range factor control supply voltage rated value at AC maximum 15 ms at DC maximum 15 ms ot PCF-delay time at DC maximum 5 ms Switching Function Vocantact Vocantact Vocantact Vocantact Vocantact NO contact		300 V		
shock resistance	degree of pollution	3		
* according to IEC 60068-2-27 vibration resistance * according to IEC 60068-2-6 0 10 55 Hz: 0.35 mm operating frequency maximum switching behavior monostable 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 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight O.166 kg Product Function suitability for operation device connector 3ZY12 Control circuit/ Control control supply voltage 1 at DC rated value 24 V control supply voltage 1 at DC rated value at DC initial value full-scale value 0.8 full-scale value 0.8 at DC maximum 15 ms o At DC maximum 15 ms OF-delay time at DC maximum 5 ms Switching Function Mo contact	surge voltage resistance rated value	4 kV		
vibration resistance • according to IEC 60068-2-6 operating frequency maximum 360 1/h monostable mechanical service life (operating cycles) typical thermal current of the switching element with contacts maximum reference code according to IEC 81348-2 Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight Product Function suitability for operation device connector 3ZY12 Yes Control circuit/ Control control supply voltage 1 at DC 24 24 V operating range factor control supply voltage rated value at DC • initial value • full-scale value 0.8 • full-scale value 1.2 ON-delay time • at AC maximum • at DC maximum 15 ms oFF-delay time maximum Switching Function design of the switching function NO contact	shock resistance			
• according to IEC 60068-2-6 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 Kubstance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead - 22,6,6-1etrabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight Ontrol Supply voltage 1 at DC rated value control supply voltage 1 at DC rated value initial value initial value initial value at AC maximum at AC maximum at AC maximum at DC OF-delay time at DC maximum 35 ms Switching Function Wiching Function 10 000 000 1	• 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 K Substance Prohibitance (Date) SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2.2.6.6-tetrabromo-4.4'-isopropylidenediphenol - 79-94-7 2.2.6.1-tetrabromo-4.4'-isopropylidenediphenol - 79-94-7 2.2.6.1-tetrabromo-4	vibration resistance			
switching behavior monostable 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 2.2.6,6.1-terbabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight Product Function suitability for operation device connector 3ZY12 Yes Control circuit/ Control control supply voltage 1 at DC rated value 24 V control supply voltage 1 at DC operating range factor control supply voltage rated value at DC • initial value • full-scale value 0.8 • full-scale value 15 ms • at DC maximum Symbol Symb	• according to IEC 60068-2-6	10 55 Hz: 0.35 mm		
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 2,2,6,6*-tetrabromo-4,4*-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight Neight Product Function suitability for operation device connector 3ZY12 Yes Control circuit/ Control control supply voltage 1 at DC rated value 24 V control supply voltage 1 at DC operating range factor control supply voltage rated value at DC initial value initial value at AC maximum at DC AC maximum 15 ms at DC maximum at DC maximum 35 ms Switching Function Witching Function NO contact	operating frequency maximum	360 1/h		
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 2,2°,6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight 0.166 kg Product Function suitability for operation device connector 3ZY12 Yes Control circuit/ Control control supply voltage 1 at DC rated value 24 V control supply voltage 1 at DC 24 24 V operating range factor control supply voltage rated value at DC initial value 0.8 initial value 0.8 initial value 1.2 ON-delay time at AC maximum 15 ms at DC maximum 35 ms Switching Function design of the switching function NO contact	switching behavior	monostable		
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	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 2.2.6.6-tetrabromo-4.4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight Double Function suitability for operation device connector 3ZY12 Yes Control circuit/ Control control supply voltage 1 at DC rated value 24 V control supply voltage 1 at DC 24 24 V operating range factor control supply voltage rated value at DC initial value initial value full-scale value 0.8 full-scale value 0.8 other full-scale value 1.2 ON-delay time at AC maximum 15 ms at DC maximum 15 ms OFF-delay time maximum 35 ms Switching Function design of the switching function NO contact		5 A		
SVHC substance name Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetraloromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Weight Product Function suitability for operation device connector 3ZY12 Yes Control circuit/ Control control supply voltage 1 at DC rated value 24 V control supply voltage 1 at DC operating range factor control supply voltage rated value at DC initial value initial value of till-scale value 0.8 full-scale value 0.8 ot AC maximum 15 ms ot DC maximum 15 ms OFF-delay time maximum 35 ms Switching Function MO contact	reference code according to IEC 81346-2	K		
Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 2,2'',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 2,2'',6,6'-tetrabromo-4,2'-isopropylidenediphenol - 79-94-7 2,2'',6,6'-tetrabromo-4,2'',6'',6'',6'',6'',6'',6'',6'',6'',6''	Substance Prohibitance (Date)	05/31/2018		
suitability for operation device connector 3ZY12 Control circuit/ Control control supply voltage 1 at DC rated value control supply voltage 1 at DC control supply voltage 1 at DC operating range factor control supply voltage rated value at DC initial value initial value of ull-scale value ON-delay time at AC maximum of at DC maximum of at D	SVHC substance name	Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7		
suitability for operation device connector 3ZY12 Control circuit/ Control control supply voltage 1 at DC rated value control supply voltage 1 at DC operating range factor control supply voltage rated value at DC o initial value ofull-scale value ON-delay time of at AC maximum of at DC max	Weight	0.166 kg		
control circuit/ Control control supply voltage 1 at DC rated value 24 V control supply voltage 1 at DC 24 24 V operating range factor control supply voltage rated value at DC • initial value 0.8 • full-scale value 1.2 ON-delay time • at AC maximum 15 ms • at DC maximum 15 ms OFF-delay time maximum 35 ms Switching Function NO contact	Product Function			
control supply voltage 1 at DC rated value 24 V control supply voltage 1 at DC 24 24 V operating range factor control supply voltage rated value at DC • initial value 0.8 • full-scale value 1.2 ON-delay time • at AC maximum 15 ms • at DC maximum 15 ms OFF-delay time maximum 35 ms Switching Function design of the switching function NO contact	suitability for operation device connector 3ZY12	Yes		
control supply voltage 1 at DC operating range factor control supply voltage rated value at DC o initial value of ull-scale value ON-delay time of at AC maximum of at DC maximum of at DC maximum of the switching function NO contact	Control circuit/ Control			
operating range factor control supply voltage rated value at DC initial value ofull-scale value 1.2 ON-delay time of at AC maximum of at DC maximum 15 ms of at DC maximum 15 ms of the switching Function MO contact	control supply voltage 1 at DC rated value	24 V		
initial value initial	control supply voltage 1 at DC	24 24 V		
full-scale value ON-delay time at AC maximum at DC maximum 15 ms at DC maximum 35 ms OFF-delay time maximum Switching Function design of the switching function NO contact				
ON-delay time • at AC maximum • at DC maximum 15 ms OFF-delay time maximum 35 ms Switching Function design of the switching function NO contact	• initial value	0.8		
at AC maximum at DC maximum 15 ms of the switching function 15 ms 35 ms Switching Function NO contact	full-scale value	1.2		
• at DC maximum OFF-delay time maximum 35 ms Switching Function design of the switching function NO contact	ON-delay time			
OFF-delay time maximum 35 ms Switching Function design of the switching function NO contact	• at AC maximum	15 ms		
Switching Function design of the switching function NO contact	at DC maximum	15 ms		
design of the switching function NO contact	OFF-delay time maximum	35 ms		
•	Switching Function			
Mochanical data	design of the switching function	NO contact		
mechanical data	Mechanical data			

product component plus in cocket	No
product component plug-in socket	
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	AgNi + Au flash
number of NC contacts for auxiliary contacts	Agini + Au liasri 0
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts number of CO contacts for auxiliary contacts	0
type of voltage	DC
Inputs/ Outputs	
output current minimum	1 mA
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 burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 	2 kV (line to ground)
 due to conductor-earth surge according to IEC 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
Display	
product component LED	Yes
Safety related data	
product function	
• positively driven operation according to IEC 60947-5-1	Yes
suitability for use	
safety-related switching on	No
safety-related switching OFF	Yes
safe state	safe shutdown
test wear-related service life necessary	Yes
stop category according to IEC 60204-1	0
IEC 62061	
Safety Integrity Level (SIL)	
according to IEC 62061	SIL 3
ISO 13849	
performance level (PL) according to ISO 13849-1	PL e
category according to ISO 13849-1	4
device type according to ISO 13849-1	1
overdimensioning according to ISO 13849-2 necessary	No
IEC 61508	
Safety Integrity Level (SIL) according to IEC 61508	3
safety device type according to IEC 61508-2	Туре А
PFHD with high demand rate according to IEC 61508	5E-10 1/h
PFDavg with low demand rate according to IEC 61508	8E-7
Safe failure fraction (SFF)	99 %
hardware fault tolerance according to IEC 61508	1
T1 value of service life according to IEC 61508	20 a
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	spring-loaded terminal (push-in)
wire length at DC maximum	2 000 m

type of connectable conductor cross-sections		
• solid	0.5 4 mm²	
 finely stranded with core end processing 	0.5 2.5 mm ²	
for AWG cables solid	20 12	
connectable conductor cross-section		
• solid	0.5 4 mm²	
 finely stranded with core end processing maximum 	2.5 mm ²	
 finely stranded without core end processing minimum 	0.5 mm ²	
AWG number as coded connectable conductor cross section		
• solid	12 20	
• stranded	12 20	
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		
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 %	
Approvals Certificates		

General Product Approval













EMV Marine / Shipping other





Confirmation

Environmental Confirmations

Environment

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=3RQ1200-2EB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ1200-2EB00

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

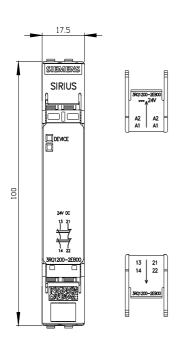
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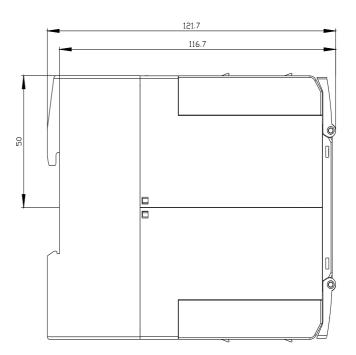
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

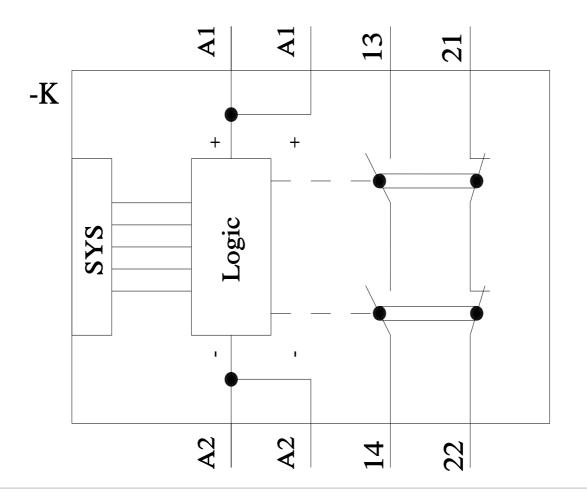
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