## **SIEMENS**

Data sheet 3RQ1200-2EW00



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

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  product feature protective coating on printed-circuit board consumed active power 2 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 shock resistance rated value 4 kV shock resistance 11g / 15 ms vibration resistance 2 occording to IEC 60068-2-27 11g / 15 ms vibration resistance 3 occording 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 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 6,6'-d-ietr-butyl-2,2'-methylenedi-p-cresol - 119-47-1 Weight	product brand name	SIRIUS
design of the product product type designation 3RQ1  General technical data  product feature protective coating on printed-circuit board consumed active power 2W commed active power 2	·	
product type designation  General technical data  product feature protective coating on printed-circuit board  consumd active power  2 W  insulation voltage for overvoltage category III according to IEC  60664 with degree of pollution 3 rated value  degree of pollution  3 urgs voltage resistance rated value  4 kV  shock resistance  • according to IEC 60068-2-27  11g / 15 ms  vibration resistance  • according to IEC 60068-2-26  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 - 7439-92-1  Lead monoide (lead oxide) - 1317-36-8  2,2,6,6-letraburous-4,4-isopropylidenediphenol - 79-94-7  2,methyl-1,d-methylthophenyl)-2-morpholinopropan-1-one - 71868-10-5  6,6'-di-letr-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight  Product Function  suitability for operation device connector 3ZY12  No  Control circuit/ Control  control supply voltage at AC  at 50 Hz  at 50 Hz  at 60 Hz  initial value  full-scale value  0,7  initial value  full-scale value  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC  operating range factor control supply voltage rated value at DC	. •	
Product Feature protective coating on printed-circuit board 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 5 rated value degree of pollution  surge voltage resistance ated value 4 kV  shock resistance • according to IEC 60068-2-27  11g / 15 ms  vibration 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  Substance Prohibitance (Date)  SYHC substance name  Lead - 7439-92-1 Lead	<u> </u>	·
product feature protective coating on printed-circuit board consumed active power		V. W.
consumed active power insulation voltage for overvoltage category III according to IEC 60684 with degree of pollution 3 rated value  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 60068-2-8 0 roberating 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 K Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 L2.2,6.6.1-eleraburyl-2.2-methyl-1-(4-methythiciphenyl)-2-morpholinopropan-1-one - 71868-10-5 6.6-di-leraburyl-2.2-methylenedi-p-cresol - 119-47-1  Weight Ontrol circuit/ Control  control supply voltage at AC • at 50 Hz 2 4 240 V Operating range factor control supply voltage rated value at DC • initial value • full-scale value  Operating range factor control supply voltage rated value at DC • initial value • full-scale value  Operating range factor control supply voltage rated value at Cat 50 Hz		No
degree of pollution  3 surge voltage resistance rated value  \$\text{According to IEC 60068-2-27} \tag{11g / 15 ms} \tag{15 ms}		2 W
surge voltage resistance rated value  shock resistance		300 V
shock resistance  according to IEC 60068-2-27  11g / 15 ms  vibration resistance  according to IEC 60068-2-6  perating 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 81348-2  Substance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1  Lead monoxide (lead oxide) - 1317-36-8  2,2,6,6'-deter/butyl-2,2-methylenedi-p-cresol - 119-47-1  Weight  Product Function  suitability for operation device connector 3ZY12  No  Control circuit/ Control  control supply voltage at AC  a 150 Hz  a 160 Hz  control supply voltage at DC  operating range factor control supply voltage rated value at AC at 50 Hz  initial value  operating range factor control supply voltage rated value at AC at 50 Hz  visitability for operation device control supply voltage rated value at AC at 50 Hz  a 11g / 15 ms  10	degree of pollution	3
according to IEC 60068-2-27  vibration resistance according to IEC 60068-2-6  10 55 Hz: 0.35 mm  360 1/h  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-tert-butyl-2,2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 6,6-d-tert-butyl-2,2-methylenedi-p-cresol - 119-47-1  Weight  O.148 kg  Product Function  suitability for operation device connector 3ZY12  Control supply voltage at AC at 50 Hz initial value operating range factor control supply voltage rated value at AC at 50 Hz  visitability voltage factor control supply voltage rated value at AC at 50 Hz  visitability range factor control supply voltage rated value at AC at 50 Hz  visitability voltage at AC at 50 Hz	surge voltage resistance rated value	4 kV
vibration resistance	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 2,2',6,6'-detrabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methyltitophenyl)-2-morpholinopropan-1-one - 71868-10-5 6,6'-de-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight  Product Function  suitability for operation device connector 3ZY12  No  Control circuit/ Control  control supply voltage at AC  at 50 Hz  at 60 Hz  operating range factor control supply voltage rated value at DC  initial value  at Cat 50 Hz  perating range factor control supply voltage rated value at AC at 50 Hz  volume to the control supply voltage rated value at AC at 50 Hz  volume to the control supply voltage rated value at AC at 50 Hz  volume to the control supply voltage rated value at AC at 50 Hz  volume to the control supply voltage rated value at AC at 50 Hz  volume to the control supply voltage rated value at AC at 50 Hz	<ul> <li>according to IEC 60068-2-27</li> </ul>	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  Kubstance Prohibitance (Date)  SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-letrabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methythiopyl)-2-morpholinopropan-1-one - 71868-10-5 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight  Product Function  suitability for operation device connector 3ZY12  Control circuit/ Control  control supply voltage at AC	vibration resistance	
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 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'-letrabromo-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 6',6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight 0.148 kg  Product Function  suitability for operation device connector 3ZY12 No  Control circuit/ Control  control supply voltage at AC  • at 50 Hz  • initial value • full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz   ### Control supply voltage factor control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  ### Control supply voltage rated value at AC at 50 Hz  #### Control supply voltage rated value at AC at 50 Hz  #### Control supply voltage rated value at AC at 50 Hz  ##### Control supply voltage rated value at AC at 50 Hz  ######### Control supply voltage rated value at AC at 50 Hz  ###################################	• 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-methyl-1)-2-morpholinopropan-1-one - 71868-10-5 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight  Product Function  suitability for operation device connector 3ZY12  No  Control circuit/ Control  control supply voltage at AC	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-methyliophenyl)-2-morpholinopropan-1-one - 71868-10-5 .6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight 0.148 kg  Product Function  suitability for operation device connector 3ZY12 No  Control circuit/ Control  control supply voltage at AC	switching behavior	monostable
maximum reference code according to IEC 81346-2  Substance Prohibitance (Date)  SYHC 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 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight  Product Function  suitability for operation device connector 3ZY12  No  Control circuit/ Control  control supply voltage at AC  at 50 Hz  at 60 Hz  control supply voltage at DC  operating range factor control supply voltage rated value at DC  initial value  full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz	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 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight  D.148 kg  Product Function  suitability for operation device connector 3ZY12  No  Control circuit/ Control  control supply voltage at AC		5 A
SVHC substance name  Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetralorom-4,4'-isopropylidenediphenol - 79-94-7 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight  0.148 kg  Product Function  suitability for operation device connector 3ZY12  No  Control circuit/ Control  control supply voltage at AC	reference code according to IEC 81346-2	К
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 6,6'-d-tert-butyl-2,2'-methylenedi-p-cresol - 119-47-1  Weight  D.148 kg  Product Function  suitability for operation device connector 3ZY12  No  Control circuit/ Control  control supply voltage at AC  at 50 Hz  at 60 Hz  control supply voltage at DC  operating range factor control supply voltage rated value at DC  initial value  of full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz  Lead monoxide (lead oxide) - 1317-36-8 2,2',6,6'-tetrabromo-4,4'-isopropylyldenediphenol - 79-94-7  B.22'-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5  6,6'-d-tertabrothylhiophenyl-2-morpholinopropan-1-one - 71868-10-5  6,6'-d-tertabrylhiophenyl-2-morpholinopropan-1-one - 71868-10-5  8	Substance Prohibitance (Date)	05/31/2018
suitability for operation device connector 3ZY12 No  Control circuit/ Control  control supply voltage at AC  • at 50 Hz  • at 60 Hz  control supply voltage at DC  control supply voltage at DC  operating range factor control supply voltage rated value at DC  • initial value  • full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz	SVHC substance name	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
suitability for operation device connector 3ZY12  Control circuit/ Control  control supply voltage at AC  at 50 Hz  at 60 Hz  control supply voltage at DC  control supply voltage at DC  operating range factor control supply voltage rated value at DC  initial value  of full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz  No  24 240 V  24 240 V  0.7  1.1	Weight	0.148 kg
Control circuit/ Control  control supply voltage at AC  • at 50 Hz  • at 60 Hz  Control supply voltage at DC  control supply voltage at DC  operating range factor control supply voltage rated value at DC  • initial value  • full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz	Product Function	
control supply voltage at AC  • at 50 Hz • at 60 Hz  control supply voltage at DC  operating range factor control supply voltage rated value at DC  • initial value • full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz  24 240 V  24 240 V  0.7  1.1	suitability for operation device connector 3ZY12	No
at 50 Hz  at 60 Hz  control supply voltage at DC  operating range factor control supply voltage rated value at DC  initial value  of full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz  24 240 V  24 240 V  0.7  1.1	Control circuit/ Control	
at 60 Hz      control supply voltage at DC      operating range factor control supply voltage rated value at DC      initial value     ofull-scale value      operating range factor control supply voltage rated value at AC at 50 Hz      24 240 V      operating range factor control supply voltage rated value at AC at 50 Hz	control supply voltage at AC	
control supply voltage at DC  operating range factor control supply voltage rated value at DC  o initial value of full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz  24 240 V  0.7  1.1	• at 50 Hz	24 240 V
operating range factor control supply voltage rated value at DC  • initial value  • full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz	• at 60 Hz	24 240 V
initial value	control supply voltage at DC	24 240 V
• full-scale value  operating range factor control supply voltage rated value at AC at 50 Hz		
operating range factor control supply voltage rated value at AC at 50 Hz	initial value	0.7
AC at 50 Hz	full-scale value	1.1
• initial value 0.85		
	• 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 maximum	70 ms
Switching Function	70 IIIS
	NC contact and NC contact
design of the switching function	NC contact and NO contact
Mechanical data	
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
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 emitted interference according to IEC 60947-1  EMC immunity according to IEC 60947-1	ambience A (industrial sector) corresponds to degree of severity 3
EMC immunity according to IEC 60947-1 conducted interference	
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4	corresponds to degree of severity 3 2 kV
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5	corresponds to degree of severity 3  2 kV  2 kV (line to ground)  1 kV (line to line)
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)
educ to conductor-earth surge according to IEC 61000-4-5  due to conductor-conductor surge according to IEC 61000-4-5  due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2	corresponds to degree of severity 3  2 kV  2 kV (line to ground)  1 kV (line to line)
educ to burst according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display	corresponds to degree of severity 3  2 kV  2 kV (line to ground)  1 kV (line to line)  10 V/m  4 kV contact discharging, 8 kV air discharging
educ to burst according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data	corresponds to degree of severity 3  2 kV  2 kV (line to ground)  1 kV (line to line)  10 V/m  4 kV contact discharging, 8 kV air discharging
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1	corresponds to degree of severity 3  2 kV  2 kV (line to ground)  1 kV (line to line)  10 V/m  4 kV contact discharging, 8 kV air discharging
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use	corresponds to degree of severity 3  2 kV  2 kV (line to ground)  1 kV (line to line)  10 V/m  4 kV contact discharging, 8 kV air discharging  Yes
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No Yes
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No Yes  safe shutdown Yes
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No Yes  safe shutdown
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No Yes  safe shutdown Yes
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No Yes  safe shutdown Yes
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No Yes  safe shutdown Yes
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061  Safety Integrity Level (SIL)	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  Yes  No Yes safe shutdown Yes 0
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061  Safety Integrity Level (SIL)  • according to IEC 62061	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  Yes  No Yes safe shutdown Yes 0
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061  Safety Integrity Level (SIL)  • according to IEC 62061  ISO 13849	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  Yes  No Yes safe shutdown Yes 0
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061  Safety Integrity Level (SIL)  • according to IEC 62061  ISO 13849  performance level (PL) according to ISO 13849-1	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  Yes  No Yes safe shutdown Yes 0  SIL 3  PL e
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061  Safety Integrity Level (SIL)  • according to IEC 62061  ISO 13849  performance level (PL) according to ISO 13849-1  category according to ISO 13849-1	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  Yes  No Yes safe shutdown Yes 0  SIL 3  PL e 4
EMC immunity according to IEC 60947-1  conducted interference  • due to burst according to IEC 61000-4-4  • due to conductor-earth surge according to IEC 61000-4-5  • due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  • positively driven operation according to IEC 60947-5-1  suitability for use  • safety-related switching on  • safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061  Safety Integrity Level (SIL)  • according to IEC 62061  ISO 13849  performance level (PL) according to ISO 13849-1  category according to ISO 13849-1  device type according to ISO 13849-1	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No Yes  Safe shutdown Yes 0  SIL 3  PL e 4 1
emc immunity according to IEC 60947-1  conducted interference  due to burst according to IEC 61000-4-4  due to conductor-earth surge according to IEC 61000-4-5  due to conductor-conductor surge according to IEC 61000-4-5  field-based interference according to IEC 61000-4-3  electrostatic discharge according to IEC 61000-4-2  Display  product component LED  Safety related data  product function  positively driven operation according to IEC 60947-5-1  suitability for use  safety-related switching on safety-related switching OFF  safe state  test wear-related service life necessary  stop category according to IEC 60204-1  IEC 62061  Safety Integrity Level (SIL) according to IEC 62061  ISO 13849  performance level (PL) according to ISO 13849-1  category according to ISO 13849-1  device type according to ISO 13849-1  overdimensioning according to ISO 13849-2 necessary	corresponds to degree of severity 3  2 kV 2 kV (line to ground) 1 kV (line to line)  10 V/m 4 kV contact discharging, 8 kV air discharging  Yes  No Yes  Safe shutdown Yes 0  SIL 3  PL e 4 1

safety device type according to IEC 61508-2	Type A
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	1x (0.5 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
for AWG cables solid	20 12
connectable conductor cross-section	
• solid	0.5 4 mm²
<ul> <li>finely stranded with core end processing maximum</li> </ul>	2.5 mm²
<ul> <li>finely stranded without core end processing minimum</li> </ul>	0.5 mm²
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	90 mm
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
<ul> <li>during storage</li> </ul>	-40 +80 °C
during transport	-40 +80 °C
relative humidity during operation	10 95 %
Approvals Certificates	

## **General Product Approval**











**TUEV** 

EMV Maritime application 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

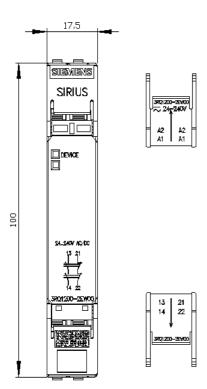
Industry Mall (Online ordering system)

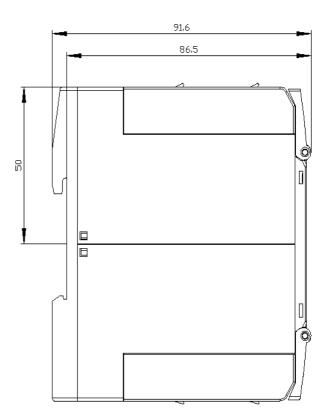
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RQ1200-2EW00

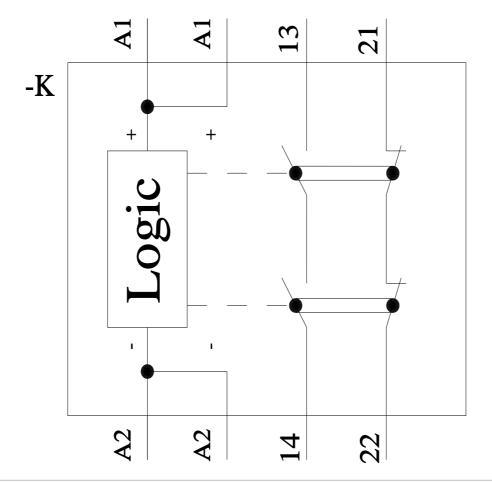
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ1200-2EW00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ1200-2EW00&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ1200-2EW00&lang=en</a>







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