



Coupling relay in industrial enclosure 3 hard gold-plated changeover contacts Wide voltage range 24 V to 240 V AC/DC Screw terminals

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Coupling relay in industrial enclosure
<b>product type designation</b>	3RQ2
<b>General technical data</b>	
<b>product feature protective coating on printed-circuit board</b>	No
<b>consumed active power</b>	2.5 W
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	300 V
<b>degree of pollution</b>	3
<b>surge voltage resistance rated value</b>	4 kV
<b>maximum permissible voltage for protective separation</b>	
• between auxiliary and auxiliary circuit	300 V
• between control and auxiliary circuit according to IEC 60947-1	300 V
<b>shock resistance</b>	
• according to IEC 60068-2-27	11 g / 15 ms
• for railway applications according to EN 61373	Category 1, Class B
<b>vibration resistance</b>	
• according to IEC 60068-2-6	10 ... 55 Hz: 0.35 mm
• for railway applications according to EN 61373	Category 1, Class B
<b>switching behavior</b>	monostable
<b>mechanical service life (operating cycles) typical</b>	10 000 000
electrical endurance (operating cycles) at AC-15 at 230 V typical	100 000
<b>thermal current of the switching element with contacts maximum</b>	5 A
<b>reference code according to IEC 81346-2</b>	K
<b>Substance Prohibitance (day/month/year)</b>	05/31/2018
<b>SVHC substance name</b>	Lead CAS-No. 7439-92-1 Lead monoxide (lead oxide) CAS-No. 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one CAS-No. 71868-10-5 Melamine CAS-No. 108-78-1 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol CAS-No. 119-47-1
<b>Net Weight</b>	0.184 kg
<b>Control circuit/ Control</b>	
<b>control supply voltage at AC</b>	
• at 50 Hz rated value	24 ... 240 V
• at 50 Hz	24 ... 240 V
• at 60 Hz rated value	24 ... 240 V
• at 60 Hz	24 ... 240 V
<b>control supply voltage at DC rated value</b>	24 ... 240 V

<b>control supply voltage at DC</b>	24 ... 240 V
<b>operating range factor control supply voltage rated value at DC</b>	
• initial value	0.7
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b>	
• initial value	0.7
• full-scale value	1.1
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b>	
• initial value	0.7
• full-scale value	1.1
<b>ON-delay time</b>	
• at AC maximum	10 ms
• at DC maximum	10 ms
<b>OFF-delay time maximum</b>	100 ms
<b>Switching Function</b>	
<b>design of the switching function</b>	CO contact
<b>Mechanical data</b>	
<b>product component plug-in socket</b>	No
<b>design of the relay operating mechanism</b>	poled
<b>Short-circuit protection</b>	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gL/gG: 6 A
<b>Auxiliary circuit</b>	
<b>material of switching contacts</b>	AgNi + Au
<b>number of NC contacts for auxiliary contacts</b>	0
<b>number of NO contacts for auxiliary contacts</b>	0
number of CO contacts for auxiliary contacts	3
<b>contact reliability of auxiliary contacts</b>	one incorrect switching per 100 million (11 V, 2 mA)
<b>type of voltage</b>	AC/DC
<b>ampacity of the output relay at AC-15</b>	
• 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
<b>ampacity of the output relay at DC-13</b>	
• at 24 V	1 A
• at 125 V	0.2 A
• at 250 V	0.1 A
<b>Electromagnetic compatibility</b>	
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
<b>conducted interference</b>	
• 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)
<b>field-based interference according to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge according to IEC 61000-4-2</b>	4 kV contact discharging, 8 kV air discharging
<b>Display</b>	
<b>product component LED</b>	Yes
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	screw terminal
<b>type of connectable conductor cross-sections</b>	
• solid	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
• finely stranded with core end processing	1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
• for AWG cables solid	1x (20 ... 12), 2x (20 ... 14)

<b>connectable conductor cross-section</b>	
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded with core end processing maximum</li> <li>• finely stranded without core end processing minimum</li> </ul>	0.5 ... 4 mm <sup>2</sup> 4 mm <sup>2</sup> 0.5 mm <sup>2</sup>
<b>AWG number as coded connectable conductor cross section</b>	
<ul style="list-style-type: none"> <li>• solid</li> <li>• stranded</li> </ul>	12 ... 20 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

<b>mounting position</b>	any
<b>fastening method</b>	screw and snap-on mounting onto 35 mm DIN rail
<b>height</b>	100 mm
<b>width</b>	22.5 mm
<b>depth</b>	90 mm

#### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-40 ... +60 °C -40 ... +80 °C -40 ... +80 °C
relative humidity during operation	10 ... 95 %

#### Approvals Certificates

<b>Environment</b>	<b>General Product Approval</b>
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[Environmental Conformations](#)



<b>EMV</b>	<b>Test Certificates</b>	<b>Maritime application</b>
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[Type Test Certificates/Test Report](#)



<b>other</b>	<b>Railway</b>
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[Confirmation](#)



[Confirmation](#)

#### 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=3RQ2000-1CW01>

**Cax online generator**

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ2000-1CW01>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ2000-1CW01>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RQ2000-1CW01&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ2000-1CW01&lang=en)



