

Input coupler Relay coupler, 1 change-over contact hard gold-plated contacts 115 V AC/DC screw terminal Overall width 6.2 mm Thermal current 6A

Product brand name	SIRIUS
Product category	SIRIUS 3RQ3 coupling relays in slim design
Product designation	Coupling relays with relay output (not plug-in)
Design of the product	Input coupling link
Product type designation	3RQ3

General technical data

Display version LED	Yes
Product component	
• Relay output	Yes
• semi-conductor output	No
Consumed active power	0.5 W
Insulation voltage	
• for overvoltage category III according to IEC 60664	
— with degree of pollution 3 rated value	300 V
Surge voltage resistance rated value	4 kV
maximum permissible voltage for safe isolation	
• between control and auxiliary circuit	300 V
Percental drop-out voltage related to the input voltage	9.6 %
Protection class IP	IP20
Shock resistance	
• acc. to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms
Vibration resistance	
• acc. to IEC 60068-2-6	6 ... 150 Hz: 2 g
Operating frequency maximum	72 000 1/h
Switching behavior	monostable
Mechanical service life (switching cycles)	
• typical	10 000 000
Electrical endurance (switching cycles)	
• at AC-15 at 230 V typical	100 000
Thermal current	6 A
Reference code acc. to DIN EN 81346-2	K

Control circuit/ Control

Control supply voltage at AC	
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<ul style="list-style-type: none"> • at 50 Hz rated value • at 60 Hz rated value 	<p>115 V</p> <p>115 V</p>
Control supply voltage frequency <ul style="list-style-type: none"> • 1 rated value • 2 rated value 	<p>50 Hz</p> <p>60 Hz</p>
Control supply voltage at DC <ul style="list-style-type: none"> • rated value 	<p>115 V</p>
Operating range factor control supply voltage rated value at DC <ul style="list-style-type: none"> • initial value • Full-scale value 	<p>0.8</p> <p>1.1</p>
Operating range factor control supply voltage rated value at AC at 50 Hz <ul style="list-style-type: none"> • initial value • Full-scale value 	<p>0.8</p> <p>1.1</p>
Operating range factor control supply voltage rated value at AC at 60 Hz <ul style="list-style-type: none"> • initial value • Full-scale value 	<p>0.8</p> <p>1.1</p>
Switch-on delay time <ul style="list-style-type: none"> • at AC maximum • at DC maximum 	<p>8 ms</p> <p>6 ms</p>
Off-delay time	<p>17 ms</p>
Closing delay <ul style="list-style-type: none"> • at AC • at DC 	<p>12 ms</p> <p>5 ms</p>
Opening delay <ul style="list-style-type: none"> • at AC • at DC 	<p>12 ms</p> <p>10 ms</p>
Design of the relay operating mechanism	<p>poled</p>
Product component Plug-in socket	<p>No</p>

Short-circuit protection

Design of the fuse link <ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch required 	<p>fuse gG: 4 A</p>
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Auxiliary circuit

Type of switching contact	<p>Changeover contact</p>
Material of switching contacts	<p>AgSnO₂-HTV</p>
Number of CO contacts <ul style="list-style-type: none"> • for auxiliary contacts 	<p>1</p>
Operating current of auxiliary contacts at AC-15 <ul style="list-style-type: none"> • at 24 V 	<p>3 A</p>

<ul style="list-style-type: none"> • at 250 V 	3 A
Operating current of auxiliary contacts at DC-13	
<ul style="list-style-type: none"> • at 24 V • at 125 V • at 250 V 	1 A 0.2 A 0.1 A
Contact reliability of auxiliary contacts	one incorrect switching operation of 100 million switching operations (5 V, 1 mA)

Main circuit	
Type of voltage	AC/DC

Inputs/ Outputs	
Property of the output Short-circuit proof	No

Outputs	
Ampacity of the output relay at AC-15	
<ul style="list-style-type: none"> • at 250 V at 50/60 Hz 	3 A
Ampacity of the output relay at DC-13	
<ul style="list-style-type: none"> • at 24 V • at 125 V • at 250 V 	1 A 0.2 A 0.1 A

Electromagnetic compatibility	
EMC emitted interference	
<ul style="list-style-type: none"> • acc. to IEC 60947-1 	ambience A (industrial sector)
EMI immunity	
<ul style="list-style-type: none"> • acc. to IEC 60947-1 	corresponds to degree of severity 3
Conducted interference	
<ul style="list-style-type: none"> • due to burst acc. to IEC 61000-4-4 • due to conductor-earth surge acc. to IEC 61000-4-5 • due to conductor-conductor surge acc. to IEC 61000-4-5 	2 kV 2 kV 1 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge

Display	
Display version	
<ul style="list-style-type: none"> • as status display by LED 	LED green

Connections/ Terminals	
Product function	
<ul style="list-style-type: none"> • removable terminal 	No
Type of electrical connection	
<ul style="list-style-type: none"> • for auxiliary and control current circuit 	screw-type terminals
Wire length	

<ul style="list-style-type: none"> • at AC maximum • at DC maximum 	<p>500 m</p> <p>1 000 m</p>
Type of connectable conductor cross-sections <ul style="list-style-type: none"> • solid • finely stranded with core end processing • at AWG conductors solid 	<p>1x (0.25 ... 2.5 mm²)</p> <p>1x (0.25 ... 1.5 mm²)</p> <p>1 x (20 ... 14)</p>
Connectable conductor cross-section <ul style="list-style-type: none"> • solid • finely stranded with core end processing 	<p>0.25 ... 2.5 mm²</p> <p>0.25 ... 1.5 mm²</p>
AWG number as coded connectable conductor cross section <ul style="list-style-type: none"> • solid 	<p>20 ... 14</p>
Tightening torque <ul style="list-style-type: none"> • with screw-type terminals 	<p>0.5 ... 0.6 N·m</p>

Installation/ mounting/ dimensions

Mounting position	any
Mounting type	snap-on mounting
Height	93 mm
Width	6.2 mm
Depth	72.5 mm
Required spacing <ul style="list-style-type: none"> • with side-by-side mounting <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side 	<p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p> <p>0 mm</p>


Ambient conditions

Installation altitude at height above sea level	
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• maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
Relative humidity	
• during operation	10 ... 95 %

Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
 CCC	 EAC	 EG-Konf.
 CSA	 UL	 RCM

Declaration of Conformity	Marine / Shipping	other
Miscellaneous	 DNV-GL DNVGL.COM/AF	Confirmation

Further information

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=3RQ3038-1AE01>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3038-1AE01>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ3038-1AE01>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3038-1AE01&lang=en

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