SIEMENS

Data sheet 3RQ3070-1SB30



Input coupler Optocoupler 1 NO contact, Transistor Input 24 V AC/DC Output max. 30 V DC, 0.5 A Overall width 6.2 mm screw terminal Thermal current 0.5 A

product brand name	SIRIUS		
product category	SIRIUS 3RQ3 coupling relays in slim design		
product designation	Coupling relays with semiconductor 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 	No		
semi-conductor output	Yes		
consumed active power	0.5 W		
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	50 V		
surge voltage resistance rated value	2.5 kV		
protection class IP	IP20		
flammability class of enclosure material	UL94 V-0		
shock resistance			
• according to IEC 60068-2-27	sinusoidal half-wave 15g / 11 ms		
vibration resistance			
according to IEC 60068-2-6	6 150 Hz: 2 g		
switching frequency	0.1 Hz		
thermal current	0.5 A		
reference code according to IEC 81346-2	К		
Substance Prohibitance (Date)	03/25/2015		
Control circuit/ Control			
control supply voltage at AC			
 at 50 Hz rated value 	11 30 V		
at 60 Hz rated value	11 30 V		
control supply voltage frequency			
• 1 rated value	50 Hz		
2 rated value	60 Hz		
control supply voltage at DC			
rated value	11 30 V		
operating range factor control supply voltage rated value at DC			
• initial value	1		
full-scale value	1		
operating range factor control supply voltage rated value at AC at 50 Hz			
• initial value	1		
• full-scale value	1		

operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	1
• full-scale value	1
minimum switching voltage when switching on	11 V
maximum switching voltage when switching off	5 V
ON-delay time	
• at AC maximum	2 ms
at DC maximum	1 ms
OFF-delay time	4 ms
product component plug-in socket	No
Auxiliary circuit	
type of switching contact	NO contact
number of NO contacts for auxiliary contacts	1
Main circuit	
type of voltage	AC/DC
Inputs/ Outputs	
property of the output short-circuit proof	No
switching voltage of the semiconductor output at DC	10 30 V
ampacity of the semiconductor output at DC	10 mA 0.5 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
due to conductor-conductor surge according to IEC	1 kV
61000-4-5	
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
District.	
Display	
display version as status display by LED	LED green
	LED green
display version as status display by LED	LED green
display version as status display by LED Connections/ Terminals	
display version as status display by LED Connections/ Terminals product function removable terminal	No
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit	No
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length	No screw-type terminals
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum	No screw-type terminals 500 m
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum	No screw-type terminals 500 m 1 000 m
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²)
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²)
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²)
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²)
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm²
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14)
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm²
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm²
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross-section	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm²
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm²
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm²
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting — forwards	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting — forwards — backwards	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm
display version as status display by LED Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid connectable conductor cross-section • solid • finely stranded with core end processing AWG number as coded connectable conductor cross section • solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • with side-by-side mounting — forwards	No screw-type terminals 500 m 1 000 m 1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 20 14 0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm

General Product Approval		EMC	Declaration of Con- formity
Certificates/ approvals			
relative humidity during operation	10 95 %		
during transport	-40 +85 °C		
during storage	-40 +85 °C		
 during operation 	-25 +60 °C		
ambient temperature			
installation altitude at height above sea level maximum	2 000 m		
Ambient conditions			
— at the side	0 mm		
— downwards	0 mm		
— upwards	0 mm		
— backwards	0 mm		
— forwards	0 mm		
• for live parts			
— downwards	0 mm		
— at the side	0 mm		
— upwards	0 mm		
— backwards	0 mm		
— forwards	0 mm		
 for grounded parts 			
— at the side	0 mm		



Confirmation









Declaration of Conformity

Test Certificates

Marine / Shipping

other



Type Test Certificates/Test Report



Confirmation

Further information

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RQ3070-1SB30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3070-1SB30

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

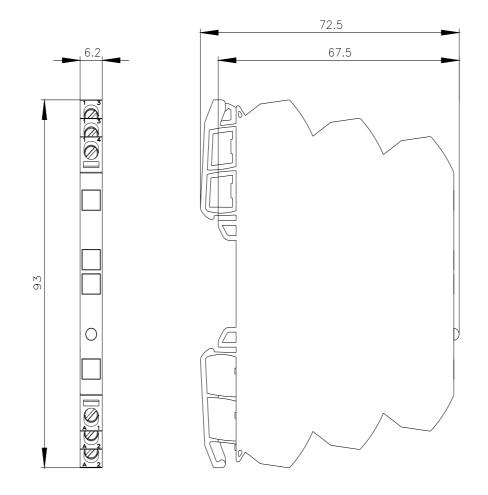
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3070-1SB30

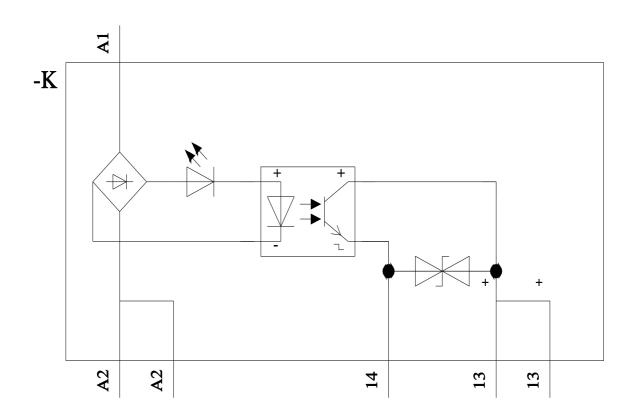
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3070-1SB30&lang=er

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3070-1SB30/manual





last modified: 5/6/2021 🖸

