## **SIEMENS**

Data sheet 3RQ3070-2SG30



Input coupler Optocoupler 1 NO contact, Transistor Input 110-230 V AC/DC Output max. 30 V DC, 0.5 A short circuit-proof Overall width 6.2 mm Spring-type terminal (push-in) 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	
<ul><li>relay output</li></ul>	No
<ul> <li>semi-conductor output</li> </ul>	Yes
consumed active power	0.5 W
surge voltage resistance rated value	4 kV
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
switching frequency	0.2 Hz
thermal current	0.5 A
reference code acc. to IEC 81346-2	K
Control circuit/ Control	
control supply voltage at AC	
<ul> <li>at 50 Hz rated value</li> </ul>	110 230 V
at 60 Hz rated value	110 230 V
control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage at DC	
rated value	110 230 V
operating range factor control supply voltage rated value at DC	
• initial value	0.7
full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.7
full-scale value	1.1
operating range factor control supply voltage rated	

value at AC at 60 Hz	
<ul> <li>initial value</li> </ul>	0.7
<ul> <li>full-scale value</li> </ul>	1.1
switch ON delay time	
<ul> <li>at AC maximum</li> </ul>	5 ms
at DC maximum	3 ms
OFF delay time	7 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
Outputs	
ampacity of the semiconductor output at DC	10 mA 0.5 A
Electromagnetic compatibility	
EMC emitted interference acc. to IEC 60947-1	ambience A (industrial sector)
EMC immunity acc. to IEC 60947-1	corresponds to degree of severity 3
conducted interference	Corresponds to degree or seventy 5
due to burst acc. to IEC 61000-4-4	2 kV
due to build add. to IES 61000-4-4      due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
due to conductor-conductor surge acc. to IEC     61000-4-5	1 kV
field-based interference acc. to IEC 61000-4-3	10 V/m
electrostatic discharge acc. to IEC 61000-4-3	6 kV contact discharge / 8 kV air discharge
	OKV Contact discharge / OKV all discharge
Display	LED areas
display version as status display by LED	LED green
Connections/ Terminals	No
Connections/ Terminals product function removable terminal	No
Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit	No spring-loaded terminals (push-in)
Connections/ Terminals  product function removable terminal  type of electrical connection for auxiliary and control circuit  wire length	spring-loaded terminals (push-in)
Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum	spring-loaded terminals (push-in) 500 m
Connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length • at AC maximum • at DC maximum	spring-loaded terminals (push-in)
connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m
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	spring-loaded terminals (push-in)  500 m  1 000 m  1x (0.25 2.5 mm²)
product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²)
connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²)
connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (0.25 2.15 mm²)
connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (0.25 2.1 mm²) 1x (20 14) 1x (20 14)
connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14) 0.25 2.5 mm²
product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m  1 000 m  1x (0.25 2.5 mm²)  1x (0.25 1.5 mm²)  1x (0.25 2.5 mm²)  1x (20 14)  1x (20 14)  0.25 2.5 mm²  0.25 1.5 mm²
product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14) 0.25 2.5 mm²
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product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1 x (20 14) 1x (20 14) 0.25 2.5 mm² 0.25 2.5 mm² 0.25 2.5 mm² 20 1.5 mm²
connections/ Terminals product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1 x (20 14) 1x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 mm² 2 0.25 1.5 mm²
product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 20 14  20 14
product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1 x (20 14) 1x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 mm² 2 0.25 1.5 mm²
product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 20 14  20 14
product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m 1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1 x (20 14) 1x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 20 14 20 14  any snap-on mounting 93 mm
product function removable terminal type of electrical connection for auxiliary and control circuit wire length	spring-loaded terminals (push-in)  500 m  1 000 m  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (20 14) 1x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 0.25 2.5 mm² 20 14

General Product Approval		EMC
Certificates/ approvals		
relative humidity during operation	10 95 %	
ambient temperature during transport	-40 +85 °C	
<ul> <li>ambient temperature during storage</li> </ul>	-40 +85 °C	
<ul> <li>ambient temperature during operation</li> </ul>	-25 +60 °C	
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	
— downwards	0 mm	
— upwards	0 mm	
— backwards	0 mm	
— forwards	0 mm	













**Declaration of Conformity** 

Marine / Shipping

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**Miscellaneous** 



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=3RQ3070-2SG30

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RQ3070-2SG30}$ 

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

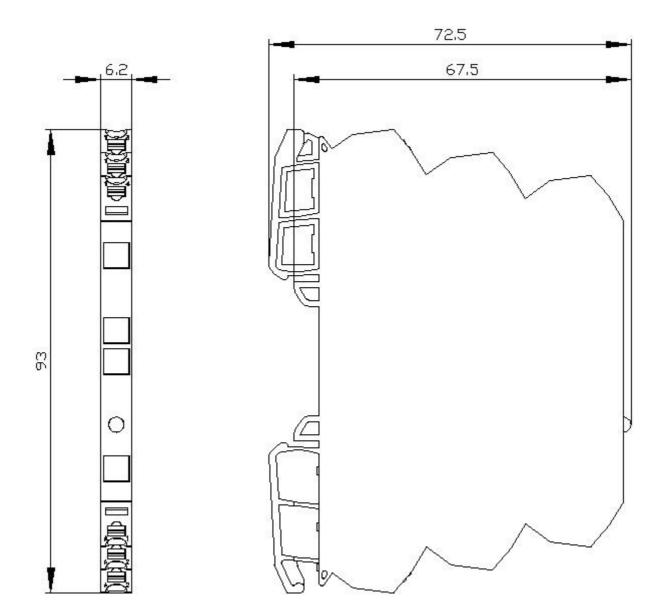
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3070-2SG30

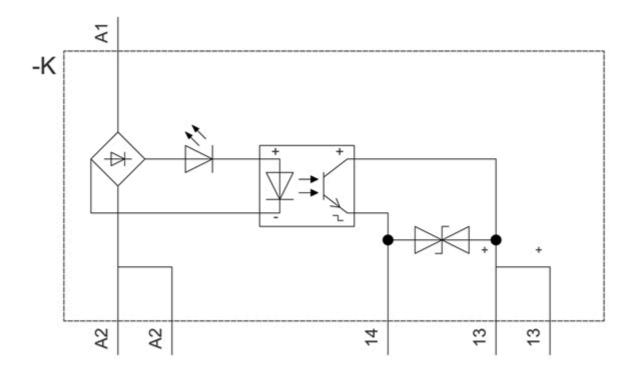
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3070-2SG30&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3070-2SG30/manual





last modified: 8/11/2020 🖸