

## Data sheet

3RQ3070-1SB30



!!! phased-out product !!! the preferred successor is 3RQ4070-1SB30 input coupler optocoupler 1 NO contact, transistor input 24 V AC/DC output max. 30 V DC, 0.5 A 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
<b>General technical data</b>	
display version LED	Yes
product feature protective coating on printed-circuit board	No
product component	<ul style="list-style-type: none"> <li>• relay output</li> <li>• semi-conductor output</li> </ul>
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
flammability class of enclosure material	UL94 V-0
shock resistance	<ul style="list-style-type: none"> <li>• according to IEC 60068-2-27</li> </ul>
vibration resistance	sinusoidal half-wave 15g / 11 ms
<ul style="list-style-type: none"> <li>• according to IEC 60068-2-6</li> </ul>	6 ... 150 Hz: 2 g
switching frequency	0.1 Hz
thermal current	0.5 A
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	03/25/2015
Net Weight	0.031 kg
<b>Control circuit/ Control</b>	
control supply voltage at AC	
<ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>	11 ... 30 V 11 ... 30 V
control supply voltage frequency	
<ul style="list-style-type: none"> <li>• 1 rated value</li> <li>• 2 rated value</li> </ul>	50 Hz 60 Hz
control supply voltage at DC rated value	11 ... 30 V
operating range factor control supply voltage rated value at DC	
<ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	1 1
operating range factor control supply voltage rated value at AC at 50 Hz	
<ul style="list-style-type: none"> <li>• initial value</li> </ul>	1

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

• with side-by-side mounting	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm
• for grounded parts	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— at the side	0 mm
— downwards	0 mm
• for live parts	
— forwards	0 mm
— backwards	0 mm
— upwards	0 mm
— downwards	0 mm
— at the side	0 mm

#### Ambient conditions

installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
• during operation	-25 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
relative humidity during operation	10 ... 95 %

#### Approvals Certificates

General Product Approval	EMV
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KC

Test Certificates	Maritime application	other	Environment
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[Type Test Certificates/Test Report](#)



[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=3RQ3070-1SB30>

Cax online generator

<https://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, ...)

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RQ3070-1SB30&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3070-1SB30&lang=en)



