## **SIEMENS**

Data sheet 3RQ3070-2SB30



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 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		
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		
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	0.1 Hz		
thermal current	0.5 A		
reference code acc. to IEC 81346-2	K		
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
switch 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
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	ourseponds to degree or severity o
• due to burst acc. to IEC 61000-4-4	2 kV
due to burst acc. to IEC 01000-4-4      due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
due to conductor-cartificative acc. to IEC 01000-4-3      due to conductor-conductor surge acc. to IEC	1 kV
61000-4-5	
field-based interference 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 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  product function removable terminal	No
display version as status display by LED  Connections/ Terminals	
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 spring-loaded terminals (push-in)
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 spring-loaded terminals (push-in) 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 spring-loaded terminals (push-in) 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 spring-loaded terminals (push-in)  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	No spring-loaded terminals (push-in)  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	No 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)
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  • finely stranded without core end processing	No 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 (0.20 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  finely stranded without core end processing  at AWG cables solid  at AWG cables stranded	No 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 4.5 mm²) 1x (0.25 4.4) 1x (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  • finely stranded without core end processing  • at AWG cables solid  • at AWG cables stranded  • connectable conductor cross-section solid	No 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 2.5 mm²) 1x (20 14) 1x (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  finely stranded without core end processing  at AWG cables solid  at AWG cables stranded	No 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 4.5 mm²) 1x (0.25 4.4) 1x (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  • finely stranded without core end processing  • at AWG cables solid  • at AWG cables stranded  • connectable conductor cross-section solid  • connectable conductor cross-section finely stranded with core end processing  • connectable conductor cross-section finely stranded with core end processing	No 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 2.5 mm²) 1x (20 14) 1x (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	No 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
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 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 2.5 mm² 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  • finely stranded without core end processing  • at AWG cables solid  • at AWG cables stranded  • connectable conductor cross-section solid  • connectable conductor cross-section finely stranded with core end processing  • connectable conductor cross-section finely stranded with core end processing  • connectable conductor cross-section finely stranded without core end processing	No 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
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 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 2.5 mm² 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	No 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 2.5 mm² 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  • finely stranded without core end processing  • at AWG cables solid  • at AWG cables stranded  • connectable conductor cross-section solid  • connectable conductor cross-section finely stranded with core end processing  • connectable conductor cross-section finely stranded with core end processing  • connectable conductor cross-section finely stranded without core end processing  • AWG number as coded connectable conductor cross section solid  • AWG number as coded connectable conductor cross section stranded  Installation/ mounting/ dimensions	No 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 2.5 mm² 0.25 1.5 mm² 0.25 1.5 mm² 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  • finely stranded without core end processing  • at AWG cables solid  • at AWG cables stranded  • connectable conductor cross-section solid  • connectable conductor cross-section finely stranded with core end processing  • connectable conductor cross-section finely stranded without core end processing  • AWG number as coded connectable conductor cross section solid  • AWG number as coded connectable conductor cross section solid  • AWG number as coded connectable conductor cross section stranded  Installation/ mounting/ dimensions  mounting position	No 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 2.5 mm² 0.25 1.5 mm² 2 0.25 1.5 mm² 2 0.20 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  • finely stranded without core end processing  • at AWG cables solid  • at AWG cables stranded  • connectable conductor cross-section solid  • connectable conductor cross-section finely stranded with core end processing  • connectable conductor cross-section finely stranded with core end processing  • connectable conductor cross-section finely stranded without core end processing  • AWG number as coded connectable conductor cross section solid  • AWG number as coded connectable conductor cross section stranded  Installation/ mounting/ dimensions  mounting position  fastening method	No 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 2.5 mm² 0.25 1.5 mm² 2 0.25 1.5 mm² 2 0.27 1.5 mm² 2 0.28 1.5 mm² 2 0.29 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  inely stranded without core end processing  at AWG cables solid  at AWG cables stranded  connectable conductor cross-section solid  connectable conductor cross-section finely stranded with core end processing  connectable conductor cross-section finely stranded with core end processing  AWG number as coded connectable conductor cross section solid  AWG number as coded connectable conductor cross section stranded  Installation/ mounting/ dimensions  mounting position  fastening method  height	No 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 20 14

required spacing			
<ul><li>with side-by-side mounting</li></ul>			
— forwards	0 mm		
— backwards	0 mm		
— upwards	0 mm		
— downwards	0 mm		
— at the side	0 mm		
<ul> <li>for grounded parts</li> </ul>			
— 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		
ambient temperature during operation	-25 +60 °C		
ambient temperature during storage	-40 +85 °C		
ambient temperature during transport	-40 +85 °C		
relative humidity during operation	10 95 %		
Certificates/ approvals			
General Product Approval		EMC	Declaration of Conformity











**Miscellaneous** 

**Declaration of** Conformity

Marine / Shipping

other





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=3RQ3070-2SB30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3070-2SB30

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

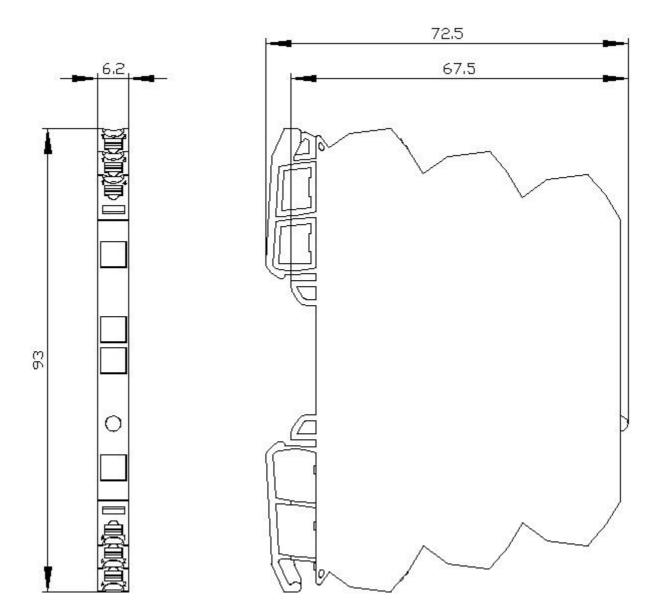
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3070-2SB30

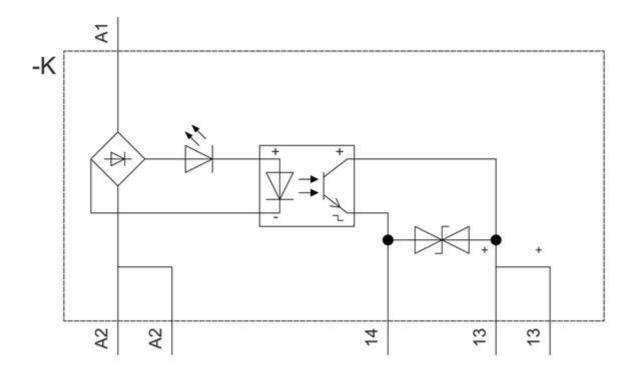
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$ 

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ3070-2SB30&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3070-2SB30/manual





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