SIEMENS

Data sheet 3RQ3053-2SG30



Output coupler Optocoupler 1 NO transistor, 110-230 V AC/DC Output max. 30 V DC, 3 A short circuit-proof Enclosure width 6.2 mm Spring-type terminal (push-in) Thermal current 3A

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	Output 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	0.3 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	
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	10 Hz	
thermal current	3 A	
reference code acc. to IEC 81346-2	K	
Control circuit/ Control		
control supply voltage at AC		
 at 50 Hz rated value 	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	
• initial value	0.7
• full-scale value	1.1
switch ON delay time	
• at AC maximum	3 ms
• at DC maximum	2 ms
OFF delay time	10 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	Yes
Outputs	
ampacity of the semiconductor output at DC	1 mA 3 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	
due to burst acc. to IEC 61000-4-4	2 kV
 due to conductor-earth surge acc. to IEC 61000-4-5 	2 kV
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 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	
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)
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 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 • 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)
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	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)
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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) 1 x (20 14) 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	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 4.5 mm²)
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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	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) 1 x (20 14) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 mm² 2 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	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) 1 x (20 14) 1 x (20 14) 0.25 2.5 mm² 0.25 1.5 mm² 0.25 2.5 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 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 2.5 mm² 20 14 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 • 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 (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 1.4 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 • 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 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 14 any snap-on mounting
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 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 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 2 0.25 1.5 mm² 2 0.27 14 20 14 any snap-on mounting 93 mm

required spacing		
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	
 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

Marine / Shipping

other



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=3RQ3053-2SG30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3053-2SG30

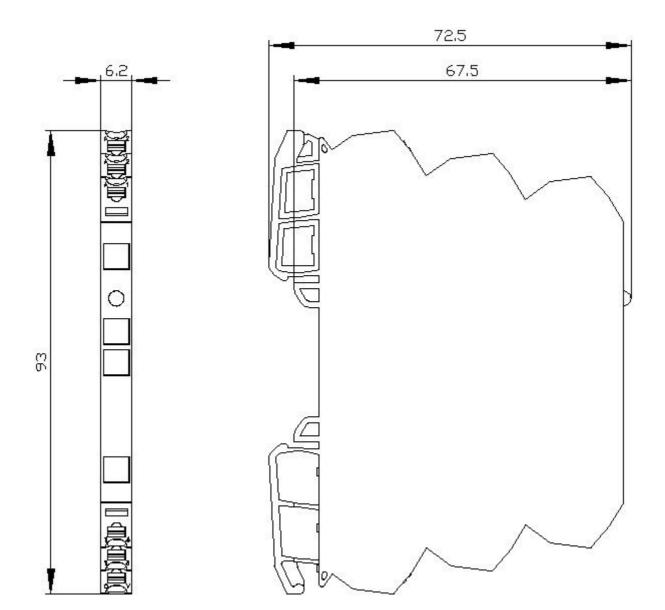
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

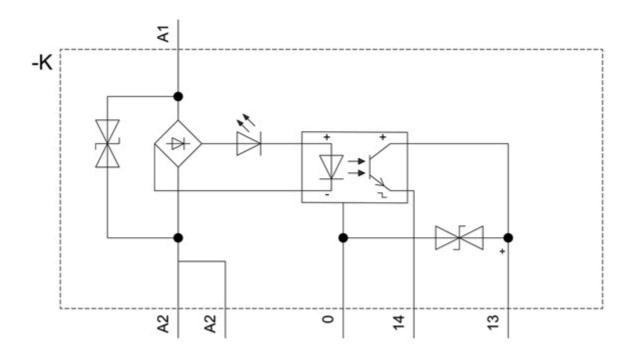
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3053-2SG30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RQ3053-2SG30&lang=en

Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3053-2SG30/manual





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