SIEMENS

Data sheet 3RQ3050-1SM50



Output coupler Optocoupler 1 NO, Transistor, 24 V DC Output max. 60 V DC, 0.5 A screw terminal Overall width 6.2 mm 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	Output coupling link
product type designation	3RQ3
General technical data	
display version LED	Yes
product feature protective coating on printed-circuit board	No
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	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	50 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 DC	
rated value	11 30 V
operating range factor control supply voltage rated value at DC	
• 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 DC maximum	0.3 ms
OFF-delay time	2 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	DC
Inputs/ Outputs	
property of the output short-circuit proof	No
switching voltage of the semiconductor output at DC	10 60 V
ampacity of the semiconductor output at DC	1 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 61000-4-5 	1 kV
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
Display	
display version as status display by LED	LED green
Connections/ Terminals	
product function removable terminal	No
type of electrical connection for auxiliary and control circuit	screw-type terminals
wire length	
at DC maximum	1 000 m
type of connectable conductor cross-sections	
• solid	1x (0.25 2.5 mm²)
 finely stranded with core end processing 	1x (0.25 1.5 mm²)
for AWG cables solid	1 x (20 14)
connectable conductor cross-section	
• solid	0.25 2.5 mm²
 finely stranded with core end processing 	0.25 1.5 mm²
AWG number as coded connectable conductor cross	
section	
• solid	20 14
	20 14 0.5 0.6 N·m
• solid	
solid tightening torque with screw-type terminals	
solid tightening torque with screw-type terminals Installation/ mounting/ dimensions	0.5 0.6 N·m
solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height	0.5 0.6 N·m any snap-on mounting 93 mm
solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm
solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth	0.5 0.6 N·m any snap-on mounting 93 mm
solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm
solid tightening torque with screw-type terminals Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting	any snap-on mounting 93 mm 6.2 mm 72.5 mm
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	any snap-on mounting 93 mm 6.2 mm 72.5 mm
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	any snap-on mounting 93 mm 6.2 mm 72.5 mm
● 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 — upwards	any snap-on mounting 93 mm 6.2 mm 72.5 mm
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 — upwards — downwards	any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm
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 — upwards — downwards — at the side	any snap-on mounting 93 mm 6.2 mm 72.5 mm
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 — upwards — downwards — at the side for grounded parts	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
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 — upwards — downwards — at the side for grounded parts — forwards	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
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 — upwards — downwards — at the side for grounded parts — forwards — backwards — backwards — a the side for grounded parts — backwards — backwards	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
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 — upwards — downwards — at the side for grounded parts — forwards — backwards — upwards — at the side for grounded parts — forwards — backwards — upwards — upwards	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
● 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 — upwards — downwards — at the side ● for grounded parts — backwards — backwards — upwards — at the side ● for grounded parts — backwards — backwards — backwards — upwards — backwards — at the side	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
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 — upwards — downwards — at the side for grounded parts — backwards — upwards — at the side backwards — upwards — at the side — downwards — at the side — downwards — at the side — downwards	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
● 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 — upwards — downwards — at the side ● for grounded parts — forwards — backwards — upwards — at the side • for wards — at the side — downwards	any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
● 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 — upwards — downwards — at the side ● for grounded parts — forwards — backwards — upwards — at the side ● for grounded parts — forwards — backwards — upwards — backwards — upwards — at the side — downwards — at the side — downwards • for live parts — forwards	0.5 0.6 N·m any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
● 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 — upwards — downwards — at the side ● for grounded parts — forwards — backwards — upwards — at the side ● for downwards — at the side — downwards — at the side — downwards — at the side — downwards ● for live parts — forwards — backwards — backwards	any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
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 — upwards — downwards — at the side for grounded parts — backwards — upwards — at the side o for grounded parts — at the side o at the side o at the side o backwards — upwards — at the side — downwards o for live parts — forwards o for live parts — backwards — upwards o backwards o parkwards o parkwards	any snap-on mounting 93 mm 6.2 mm 72.5 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm 0 mm
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ambient temperature

- during operation
- during storage
- during transport

relative humidity during operation

-25 ... +60 °C

-40 ... +85 °C

-40 ... +85 °C 10 ... 95 %

Certificates/ approvals

General Product Approval

EMC













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).

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=3RQ3050-1SM50

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ3050-1SM50

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

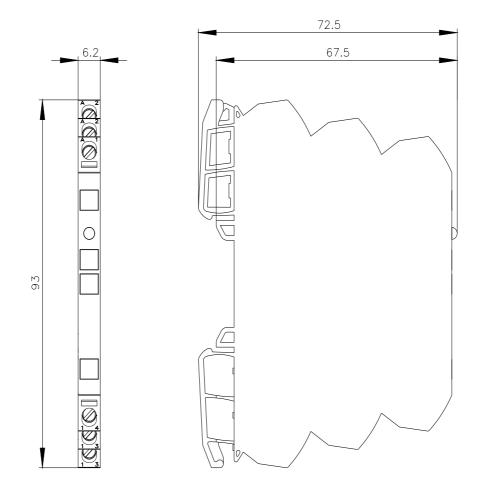
https://support.industry.siemens.com/cs/ww/en/ps/3RQ3050-1SM50

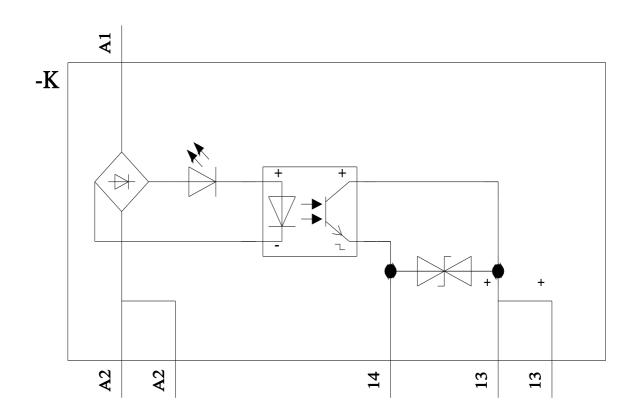
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ3050-1SM50&lang=en

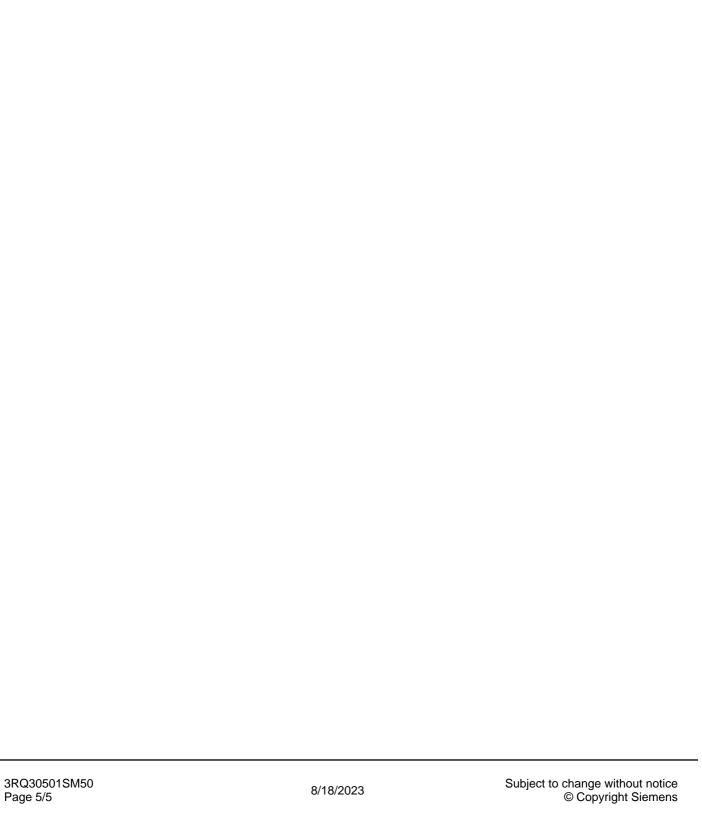
Characteristic: Derating

https://support.industry.siemens.com/cs/ww/en/ps/3RQ3050-1SM50/manual





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