



output optocoupler, 24 V DC, 1 NO contact, screw terminal, width 6.2 mm, thermal current 3 A

product brand name	SIRIUS
product category	SIRIUS 3RQ4 coupling relay, narrow design
product designation	Coupling relay with integrated semiconductor output
design of the product	output coupling link
product type designation	3RQ4
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
power loss [W] maximum	0.2 W
consumed active power	0.3 W
insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	100 V
surge voltage resistance rated value	3 kV
maximum permissible voltage for protective separation	
• between control and auxiliary circuit	100 V
• between control and auxiliary circuit according to IEC 60947-1	50 V
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	25 Hz
thermal current	3 A
short-time withstand current (I _{cw}) limited to 10 ms	8 A
reference code according to IEC 81346-2	K
Substance Prohibitance (Date)	09/26/2024
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	33 g
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	0.7
• full-scale value	1
design of the surge suppressor at input	Varistor
design of the surge suppressor at output	Varistor

minimum switching voltage when switching on	11 V
maximum switching voltage when switching off	5 V
ON-delay time	
• at DC maximum	2 ms
OFF-delay time maximum	2 ms
leakage current of the electronics for control with signal <0>	0.01 mA
Switching Function	
design of the switching function positively driven	No
Digital Outputs	
property of the output short-circuit proof	No
Mechanical data	
product component plug-in socket	No
Short-circuit protection	
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gG: 4 A
Auxiliary circuit	
type of switching contact	NO contact
number of NO contacts for auxiliary contacts	1
Main circuit	
type of voltage	DC
Inputs/ Outputs	
switching current of semiconductor outputs	3 A
type of voltage of the output voltage	DC
voltage drop when switched-through maximum	90 mV
switching voltage of the semiconductor output at DC	10 ... 60 V
ampacity of the semiconductor output at DC	1 mA ... 3 A
Electromagnetic compatibility	
electromagnetic compatibility	acc. to EN 60947-5-1
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
type of connection technology	2-wire technology
type of connectable conductor cross-sections	
• solid	1x (0.25 ... 2.5 mm ²)
• finely stranded with core end processing	1x (0.25 ... 2.5 mm ²), 2x (0.25 ... 1.5 mm ²)
• for AWG cables solid	1x (20 ... 14), 2x (20 ... 16)
connectable conductor cross-section	
• solid	0.25 ... 2.5 mm ²
• finely stranded with core end processing	0.25 ... 2.5 mm ²
AWG number as coded connectable conductor cross section	
• solid	20 ... 14
tightening torque with screw-type terminals	0.5 ... 0.6 N·m
size of the screwdriver tip	3,0 x 0,5 mm
stripped length	10 mm
Installation/ mounting/ dimensions	
mounting position	any
fastening method	snap-on mounting

height	93 mm
width	6.2 mm
depth	84.5 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
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
relative humidity during operation	10 ... 95 %

Approvals Certificates

General Product Approval	other	Environment
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[Confirmation](#)



Further information

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=3RQ4050-1SM50>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4050-1SM50>

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

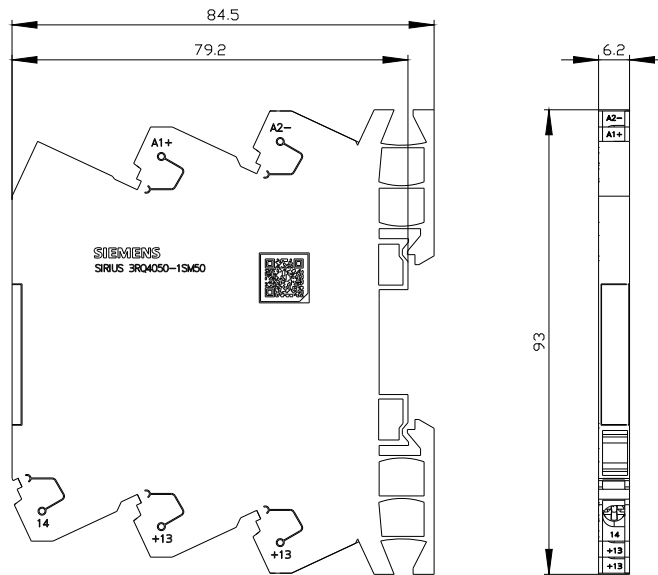
<https://support.industry.siemens.com/cs/ww/en/ps/3RQ4050-1SM50>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ4050-1SM50&lang=en

Characteristic: Derating

<https://support.industry.siemens.com/cs/ww/en/ps/3RQ4050-1SM50/manual>



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