## **SIEMENS**

Data sheet 3RQ4052-2SM30



output optocoupler, 24 V DC, 1 NO contact, spring-loaded terminal (push-in), width 6.2 mm, thermal current 6 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	
<ul> <li>relay output</li> </ul>	No
semi-conductor output	Yes
power loss [W] maximum	0.15 W
consumed active power	0.2 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	3 kV
maximum permissible voltage for protective separation	
<ul> <li>between control and auxiliary circuit</li> </ul>	300 V
<ul> <li>between control and auxiliary circuit according to IEC 60947-1</li> </ul>	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	6 A
short-time withstand current (lcw) 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 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7
Weight	30 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 output	Suppressor diode
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>	0.02 mA
Switching Function	
design of the switching function positively driven	No
Digital Outputs	
property of the output short-circuit proof	Yes
Mechanical data	
product component plug-in socket	No
Short-circuit protection	140
design of the fuse link for short-circuit protection of the auxiliary switch required	fuse gG: 4 A
Auxiliary circuit	
	NO contest
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	6 A
type of voltage of the output voltage	DC
voltage drop when switched-through maximum	80 mV
switching voltage of the semiconductor output at DC	10 30 V
ampacity of the semiconductor output at DC	1 mA 6 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	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	2 kV
due to conductor-earth surge according to IEC 61000-4-5	2 kV
<ul> <li>due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	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	
	LED green
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	No
display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection  • for auxiliary and control circuit	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  type of connection technology	No
display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection  • for auxiliary and control circuit  type of connection technology  type of connectable conductor cross-sections	No spring-loaded terminals (push-in) 3-wire technology
display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection  • for auxiliary and control circuit  type of connection technology  type of connectable conductor cross-sections  • solid	No spring-loaded terminals (push-in) 3-wire technology  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  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing	No spring-loaded terminals (push-in) 3-wire technology  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  type of connection technology  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) 3-wire technology  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  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid	No  spring-loaded terminals (push-in)  3-wire technology  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (0.25 2.4 mm²)
display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection  • for auxiliary and control circuit  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded	No spring-loaded terminals (push-in) 3-wire technology  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  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section	No spring-loaded terminals (push-in) 3-wire technology  1x (0.25 2.5 mm²) 1x (0.25 1.5 mm²) 1x (0.25 2.5 mm²) 1x (0.25 2.1 mm²) 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  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid	No spring-loaded terminals (push-in) 3-wire technology  1x (0.25 2.5 mm²) 1x (0.25 1.5 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  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing	No  spring-loaded terminals (push-in)  3-wire technology  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
display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection	No spring-loaded terminals (push-in) 3-wire technology  1x (0.25 2.5 mm²) 1x (0.25 1.5 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	No  spring-loaded terminals (push-in)  3-wire technology  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  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded without core end processing	No  spring-loaded terminals (push-in)  3-wire technology  1x (0.25 2.5 mm²)  1x (0.25 1.5 mm²)  1x (0.25 2.5 mm²)  1 x (20 14)  1x (20 14)  0.25 2.5 mm²  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  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded without core end processing  • solid  • solid  • stranded	No  spring-loaded terminals (push-in)  3-wire technology  1x (0.25 2.5 mm²)  1x (0.25 1.5 mm²)  1x (0.25 2.5 mm²)  1 x (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
display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection  • for auxiliary and control circuit  type of connection technology  type of connectable conductor cross-sections  • solid  • finely stranded with core end processing  • finely stranded without core end processing  • for AWG cables solid  • for AWG cables stranded  connectable conductor cross-section  • solid  • finely stranded with core end processing  • finely stranded with core end processing  • finely stranded without core end processing  • finely stranded without core end processing  AWG number as coded connectable conductor cross section  • solid  • stranded  size of the screwdriver tip	No  spring-loaded terminals (push-in)  3-wire technology  1x (0.25 2.5 mm²)  1x (0.25 1.5 mm²)  1x (0.25 2.5 mm²)  1 x (20 14)  1x (20 14)  0.25 2.5 mm²  0.25 1.5 mm²  0.25 2.5 mm²  20 14  PZ1
display version as status display by LED  Connections/ Terminals  product function removable terminal  type of electrical connection	No  spring-loaded terminals (push-in)  3-wire technology  1x (0.25 2.5 mm²)  1x (0.25 1.5 mm²)  1x (0.25 2.5 mm²)  1 x (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

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		rimum	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		



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=3RQ4052-2SM30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4052-2SM30

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

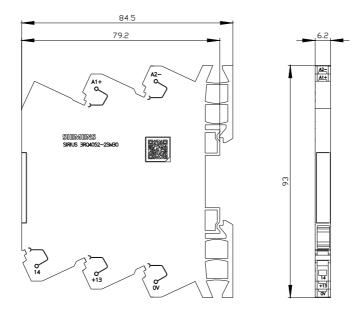
https://support.industry.siemens.com/cs/ww/en/ps/3RQ4052-2SM30

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RQ4052-2SM30&lang=en

**Characteristic: Derating** 

https://support.industry.siemens.com/cs/ww/en/ps/3RQ4052-2SM30/manual



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