SIEMENS

Data sheet 3RQ4070-2SG30

input optocoupler, 110-230 V AC/DC, 1 NO contact, spring-loaded terminal (push-in), width 6.2 mm, thermal current 5 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	input 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	1.9 W
consumed active power	0.5 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
maximum permissible voltage for protective separation	
● between control and auxiliary circuit	300 V
● between control and auxiliary circuit according to IEC 60947-1	300 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	5 A
short-time withstand current (Icw) 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	0.03 kg
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
design of the surge suppressor at input	Varistor
design of the surge suppressor at output	Suppressor diode
minimum switching voltage when switching on	74 V
maximum switching voltage when switching off	10 V
ON-delay time	
● at AC maximum	5 ms
● at DC maximum	2 ms
OFF-delay time maximum	5 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	
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	AC/DC
Inputs/ Outputs	
switching current of semiconductor outputs	6 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 ... 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	
● 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	spring-loaded terminals (push-in)
type of connection technology	3-wire technology
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)
● finely stranded without core end processing	1x (0.25 ... 2.5 mm²)
● for AWG cables solid	1 x (20 ... 14)
● for AWG cables stranded	1x (20 ... 14)
connectable conductor cross-section	
● solid	0.25 ... 2.5 mm²
● finely stranded with core end processing	0.25 ... 1.5 mm²
● finely stranded without core end processing	0.25 ... 2.5 mm²
AWG number as coded connectable conductor cross section	
● solid	20 ... 14
● stranded	20 ... 14
size of the screwdriver tip	PZ1
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

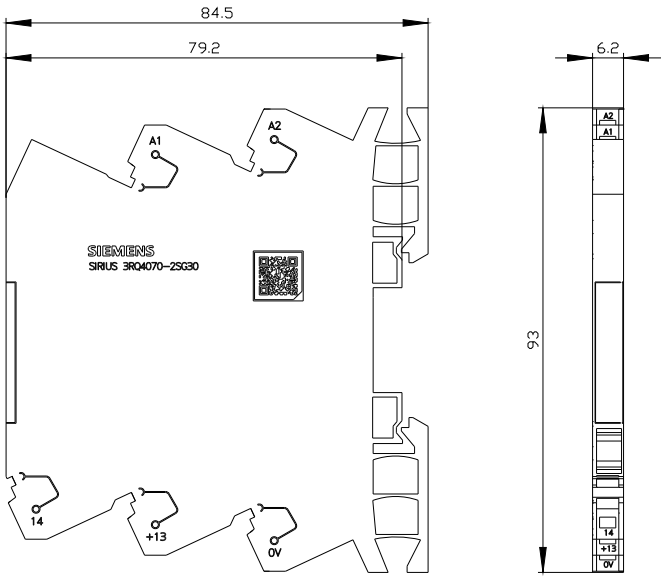
General Product Approval	other	Environment

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=3RQ4070-2SG30

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4070-2SG30
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RQ4070-2SG30
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ4070-2SG30&lang=en
Characteristic: Derating
https://support.industry.siemens.com/cs/ww/en/ps/3RQ4070-2SG30/manual



last modified: 5/16/2025