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Data sheet 3RQ4055-2SM30

Siemens EcoTech

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	
● relay output	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	
● between control and auxiliary circuit	300 V
● between control and auxiliary circuit according to IEC 60947-1	50 V
protection class IP	IP20
flammability class of enclosure material	UL94 V-0
shock resistance	
● according to IEC 60068-2-27	sinusoidal half-wave 15 g / 11 ms
vibration resistance	
● according to IEC 60068-2-6	6 ... 150 Hz: 2 g
switching behavior	monostable
switching frequency	100 Hz
thermal current	6 A
short-time withstand current (Icw) limited to 10 ms	8 A
reference code according to IEC 81346-2	K
Substance Prohibitance (day/month/year)	09/26/2024
SVHC substance name	Lead CAS-No. 7439-92-1
Net Weight	0.031 kg
Control circuit/ Control	
control supply voltage at DC rated value	11 ... 30 V
operating range factor control supply voltage rated value at	

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DC	
● initial value	0.7
● full-scale value	1
design of the surge suppressor at output	Suppressor diode
inrush current maximum	1 A
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
design of the relay operating mechanism	Non-polarized
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	double contact
material of contact coating	other
material of switching contacts	AgSnO2
material of the contact insert	Thermoplastic
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
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	
● 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	spring-loaded terminals
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)

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● for AWG cables solid	1x (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

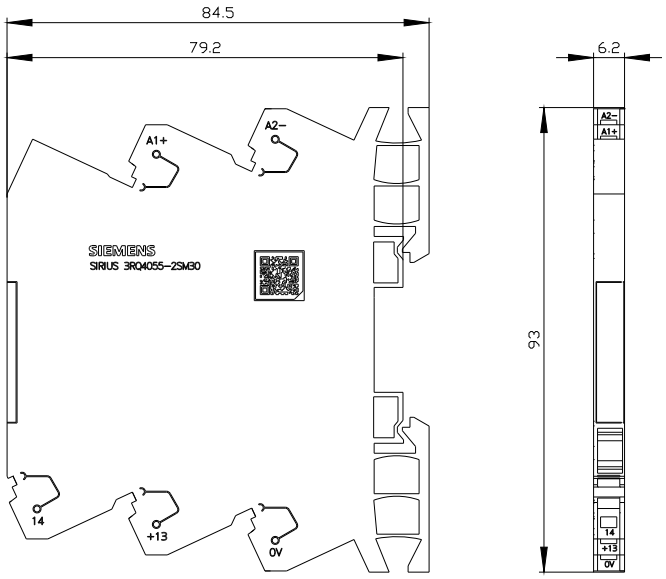
Environment	General Product Approval

General Product Approval	EMV	other
		Confirmation

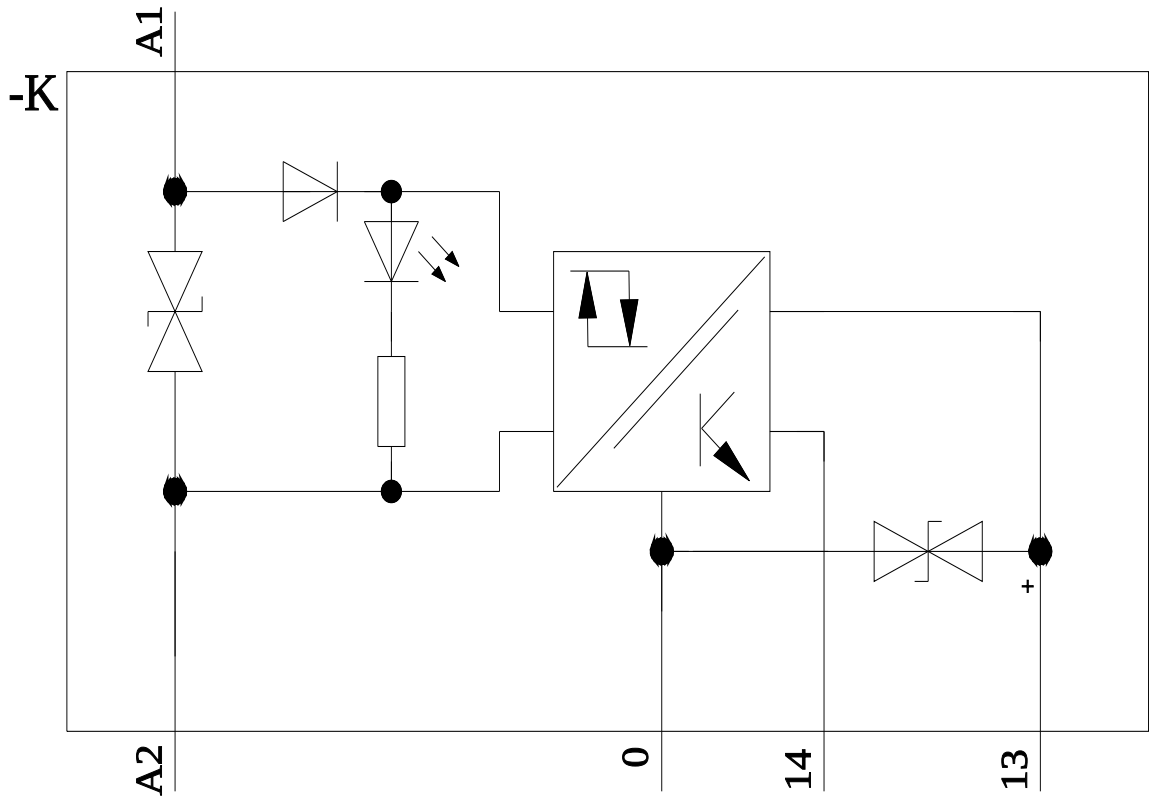
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Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
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=3RQ4055-2SM30
Cax online generator
https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RQ4055-2SM30
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RQ4055-2SM30
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RQ4055-2SM30&lang=en



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