

EMG 10-OV- 12DC/24DC/1 - Solid-state relay module



2944216

<https://www.phoenixcontact.com/us/products/2944216>

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 12 V DC, output: 5 - 36 V DC/max. 1 A

Commercial data

Item number	2944216
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CK61C2
Catalog page	Page 138 (IF-2011)
GTIN	4017918081515
Weight per piece (including packing)	38.35 g
Weight per piece (excluding packing)	38.35 g
Customs tariff number	85364190
Country of origin	DE

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Product properties

Product type	Solid-state relay module
Application	Output function
Operating mode	100% operating factor

Insulation characteristics

Insulation	Basic insulation
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Insulation characteristics

Insulation	Basic insulation
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Electrical properties

Test voltage (Input/output)	3.5 kV AC (Input/output)
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Input data

Nominal input voltage U_N	12 V DC
Input voltage range in reference to U_N	0.9 ... 1.1
Input voltage range	10.8 V DC ... 13.2 V DC
Switching threshold "0" signal in reference to U_N	≤ 0.33
Switching threshold "1" signal in reference to U_N	≥ 0.9
Typical input current at U_N	4 mA
Typical response time	0.1 ms
Typical turn-off time	0.2 ms
Status display	Yellow LED
Protective circuit	Reverse polarity protection; Polarity protection diode
Transmission frequency	500 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output nominal voltage	24 V DC
Output voltage range	5 V DC ... 36 V DC
Limiting continuous current	1 A (see derating curve)
Surge current	2 A ($t = 1$ s)
Peak offstate voltage	45 V DC (Collector-emitter reverse voltage)
Voltage drop at max. limiting continuous current	≤ 1 V
Output circuit	2-conductor, floating

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Protective circuit	Reverse polarity protection; Polarity protection diode
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Connection data

Input side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12

Output side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12

Dimensions

Width	10 mm
Height	75 mm
Depth	102 mm

Material specifications

Color	green (RAL 6021)
Flammability rating according to UL 94	V0

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

Standards and regulations

Standards/regulations	IEC 60664
	EN 50178

Mounting

Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	any

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Classifications

ECLASS

ECLASS-11.0	27371604
ECLASS-12.0	27371604
ECLASS-13.0	27371604

ETIM

ETIM 9.0	EC001504
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UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
	Hexahydromethylphthalic anhydride
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com