

EMG 10-OV- 5DC/24DC/1 - Solid-state relay module



2944203

<https://www.phoenixcontact.com/us/products/2944203>

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

Commercial data

Item number	2944203
Packing unit	1 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	CK61C2
Catalog page	Page 138 (IF-2011)
GTIN	4017918081508
Weight per piece (including packing)	37.78 g
Weight per piece (excluding packing)	37.78 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	5 V DC
Input voltage range in reference to U_N	0.9 ... 1.1
Input voltage range	4.5 V DC ... 5.5 V DC
Switching threshold "0" signal in reference to U_N	≤ 0.6
Switching threshold "1" signal in reference to U_N	≥ 0.9
Typical input current at U_N	4.2 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

Flammability rating according to UL 94	V0
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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

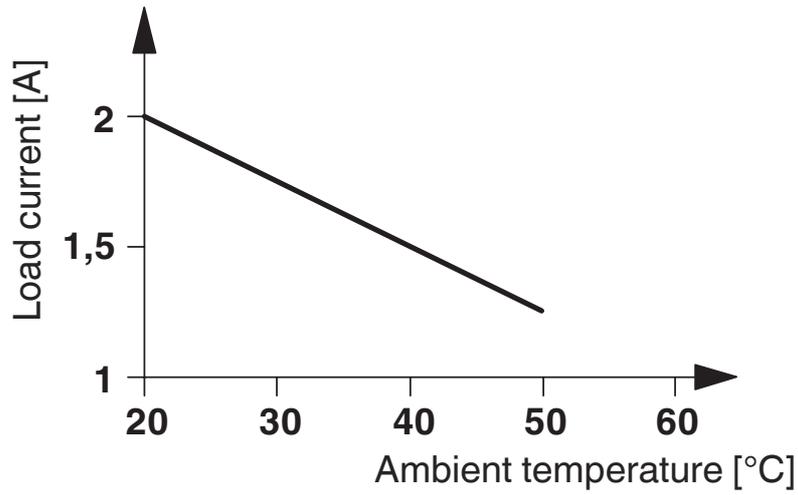
Standards/regulations	IEC 60664
	EN 50178

Mounting

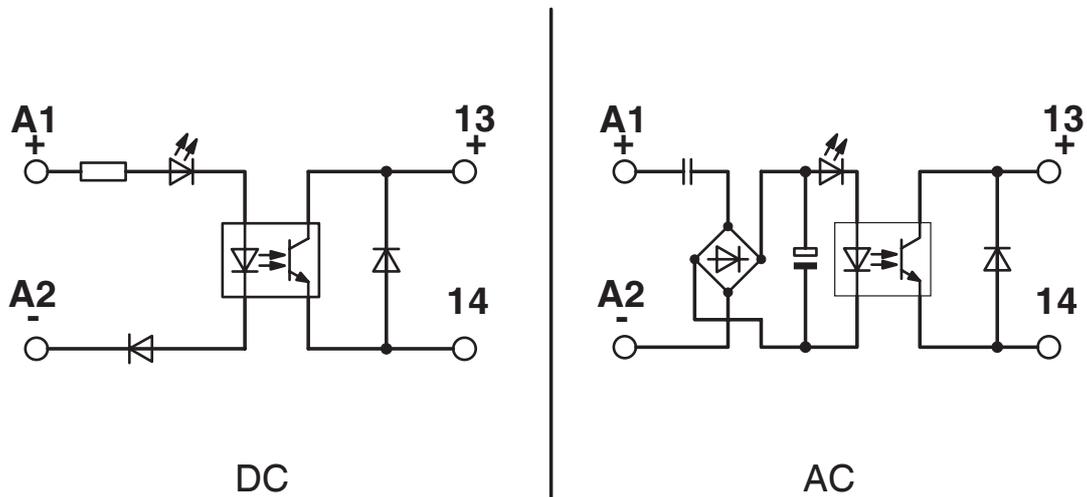
Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	any

Drawings

Diagram



Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2944203>



EAC

Approval ID: TR_TS_D_00573_c



EAC

Approval ID: RU*C-DE.*08.B.00010

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Classifications

ECLASS

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

ETIM

ETIM 8.0	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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Accessories

EMG-SGKS 10 - Marking material

2947585

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Equipment marker, narrow



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