

EMG 10-OV-120AC/24DC/1 - Solid-state relay module



2944261

<https://www.phoenixcontact.com/us/products/2944261>

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 120 V AC, output: 5 - 36 V DC/max. 1 A

Commercial data

Item number	2944261
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK61C2
GTIN	4017918081560
Weight per piece (including packing)	41.84 g
Weight per piece (excluding packing)	41.84 g
Customs tariff number	85364900
Country of origin	DE

Technical data

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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Data management status

Date of last data management	08.12.2025
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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	120 V AC
Input voltage range in reference to U_N	0.8 ... 1.1
Input voltage range	96 V AC ... 144 V AC
Switching threshold "0" signal in reference to U_N	≤ 0.25
Switching threshold "1" signal in reference to U_N	≥ 0.8
Typical input current at U_N	4 mA
Typical response time	25 ms
Typical turn-off time	25 ms
Status display	LED (yellow)
Protective circuit	Reverse polarity protection; Polarity protection diode
Transmission frequency	10 Hz

Output data

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
Protective circuit	Reverse polarity protection; Polarity protection diode

Connection data

Input side

Connection method	Screw connection
Stripping length	8 mm

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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

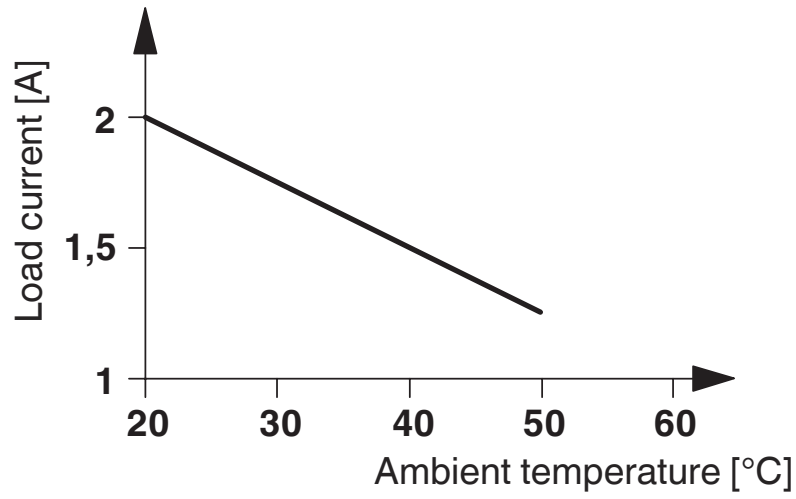
Standards/regulations	IEC 60664
	EN 50178

Mounting

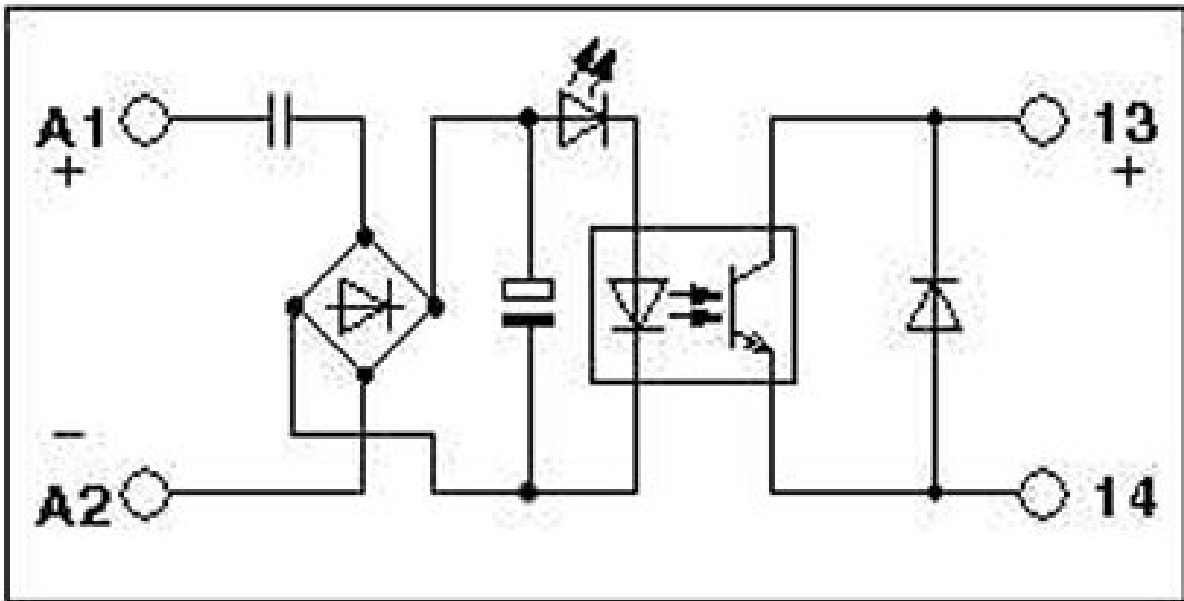
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

Diagram



Circuit diagram



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Classifications

UNSPSC

UNSPSC 21.0	39122326
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)

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