

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



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	01.04.2026
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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 $U_N$	$\leq 0.25$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.8$
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	$\leq 1$ 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 <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
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 <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section flexible	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
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

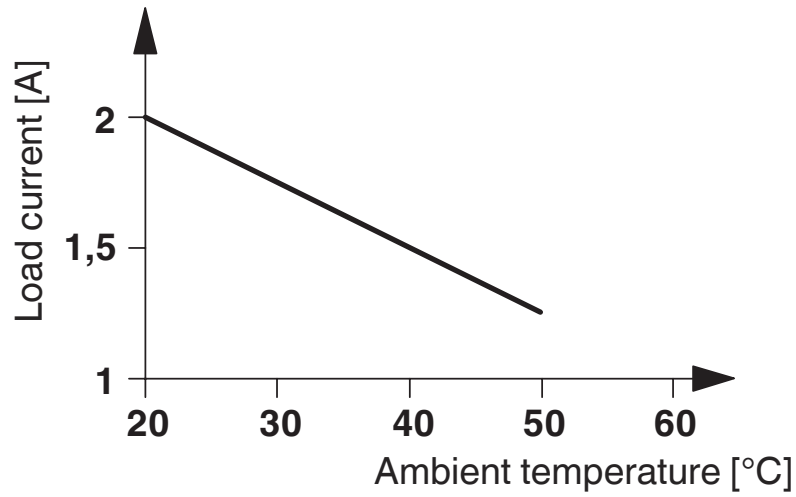
Standards/regulations	IEC 60664
	EN 50178

## Mounting

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

## Drawings

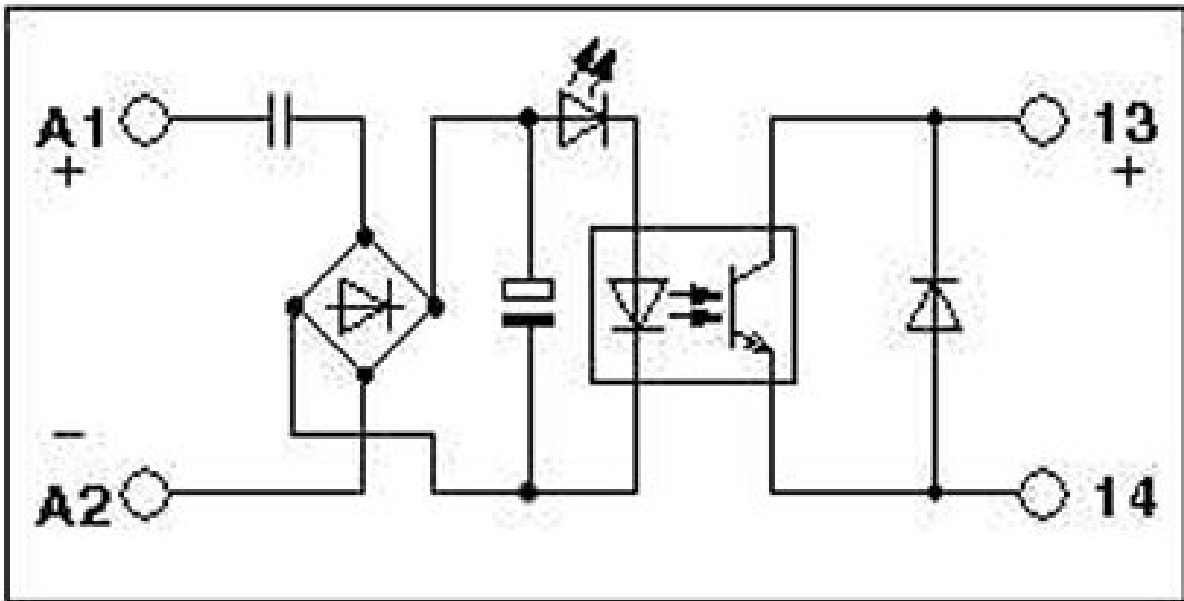
Diagram



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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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