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


The illustration shows version EMG 10-OV, with DC voltage output, max. 1 A

### Why buy this product

- RC protective circuit
- Protective circuit in input and output
- EMG-17-OV, short-circuit-proof with indicator LED
- Electrical isolation
- Zero voltage switch
- Status indicator
- Direct control with switching levels from 5 V to 230 V and up to 2 A



### Key Commercial Data

Packing unit	10 STK
GTIN	 4 017918 081560

### Technical data

#### Dimensions

Width	10 mm
Height	75 mm
Depth	102 mm

#### Ambient conditions

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

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## Technical data

### Input data

Nominal input voltage $U_N$	120 V AC
Input voltage range in reference to $U_N$	0.8 ... 1.1
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	Yellow LED
Type of protection	Protection against polarity reversal
Protective circuit/component	Polarity protection diode
Transmission frequency	10 Hz

### Output data

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-wire, floating
Type of protection	Protection against polarity reversal
Protective circuit/component	Polarity protection diode

### Connection data, input side

Connection name	Input side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	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

### Connection data, output side

Connection name	Output side
Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	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

### General

Test voltage input/output	3.5 kV AC
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## Technical data

### General

	3.5 kV AC
Mounting position	any
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor
Flammability rating according to UL 94	V0
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	Basic insulation

### Standards and Regulations

Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	Basic insulation
Flammability rating according to UL 94	V0

## Classifications

### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371604

### ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

# Solid-state relay module - EMG 10-OV-120AC/24DC/1 - 2944261

## Approvals

Approvals

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Approvals

EAC

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Ex Approvals

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Approvals submitted

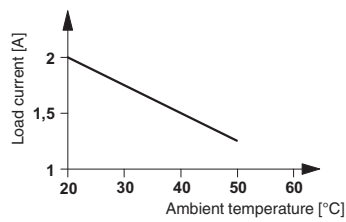
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Approval details

EAC
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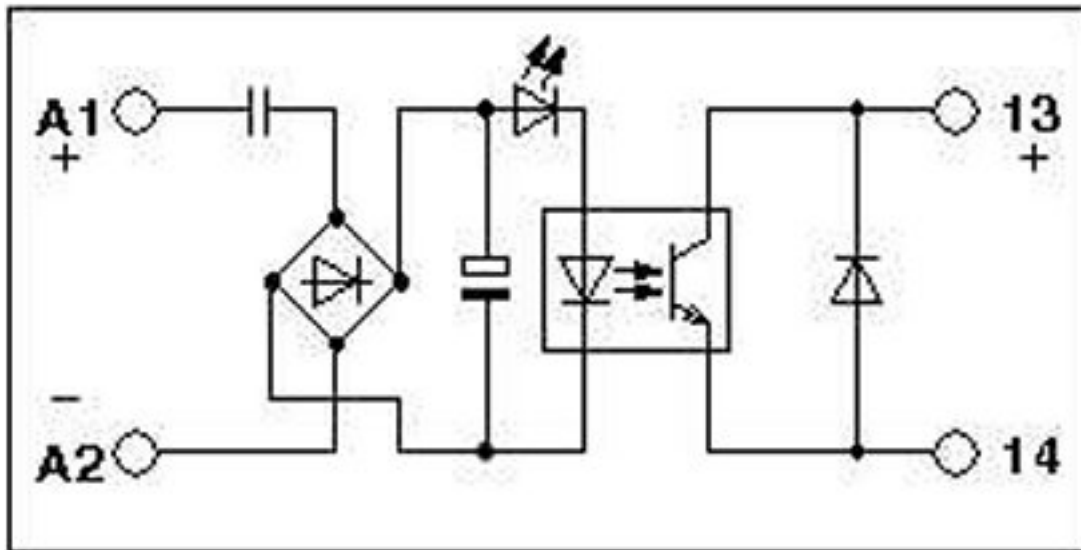
## Drawings

Diagram



## Solid-state relay module - EMG 10-OV-120AC/24DC/1 - 2944261

Circuit diagram



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PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>



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