

# Solid-state relay module - EMG 12-OV- 24DC/240AC/1 - 2948827

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 24 V DC, output: 24 - 280 V AC/max. 1 A

The figure shows version EMG 12-OV, with AC voltage output, max. 1 A



## Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 083496
GTIN	4017918083496

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	12.5 mm
Height	75 mm
Depth	102 mm

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Degree of protection	IP20

### Input data

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.2
Input voltage range	19.2 V DC ... 28.8 V DC

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## Technical data

### Input data

Switching threshold "0" signal in reference to $U_N$	$\leq 0.4$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.8$
Typical input current at $U_N$	6.8 mA
Typical response time	max. one half cycle - zero-voltage crossing
Typical turn-off time	max. one half cycle - zero-current crossing
Status display	Yellow LED
Type of protection	Reverse polarity protection
	Surge protection
Protective circuit/component	Polarity protection diode
	Varistor
Transmission frequency	10 Hz

### Output data

Output nominal voltage	240 V AC
Output voltage range	24 V AC ... 280 V AC (50 Hz ... 60 Hz)
Limiting continuous current	1 A (see derating curve)
Min. load current	50 mA
Leakage current	3.5 mA
Surge current	125 A (t = 10 ms)
Max. load value	78 A <sup>2</sup> s ( $I^2 \times t$ where t = 10 ms)
Peak offstate voltage	600 V (Periodic peak reverse voltage)
Voltage drop at max. limiting continuous current	$\leq 1.5$ V
Output circuit	2-wire, floating
Type of protection	RC element
Protective circuit/component	RC element

### General

Test voltage input/output	3.5 kV AC
	3.5 kV AC
Mounting position	any
Assembly instructions	Mounted in rows with zero spacing: Horizontal/not in rows: Any
Operating mode	100% operating factor
Flammability rating according to UL 94	V0

### Connection data

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

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### Technical data

#### Connection data 2

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

#### Standards and Regulations

Standards/regulations	IEC 60664
	EN 50178
Insulation	Basic insulation

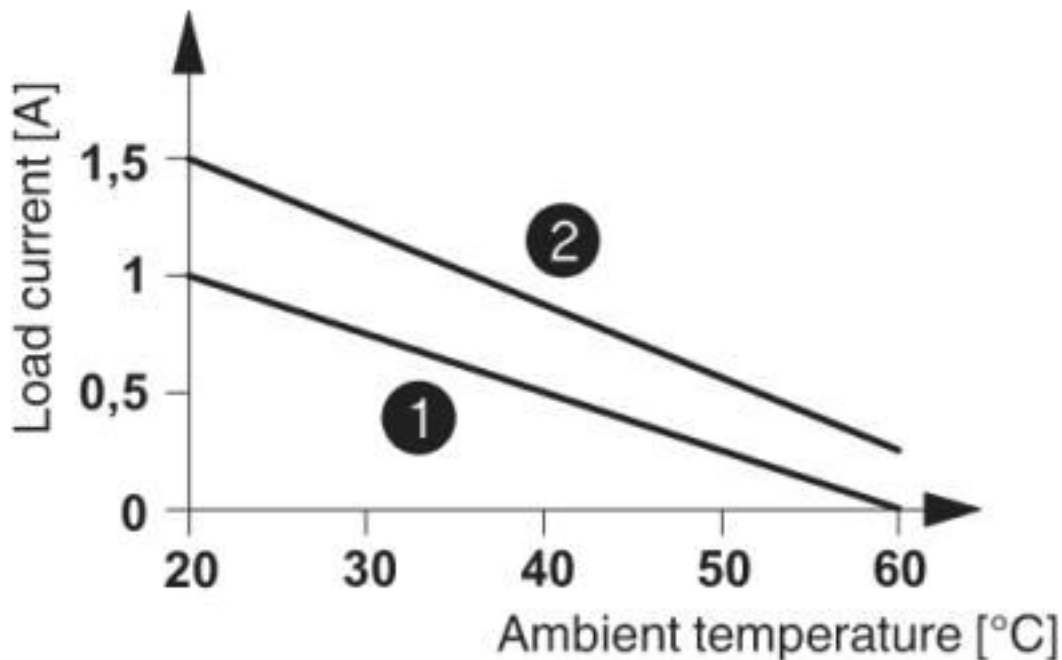
#### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

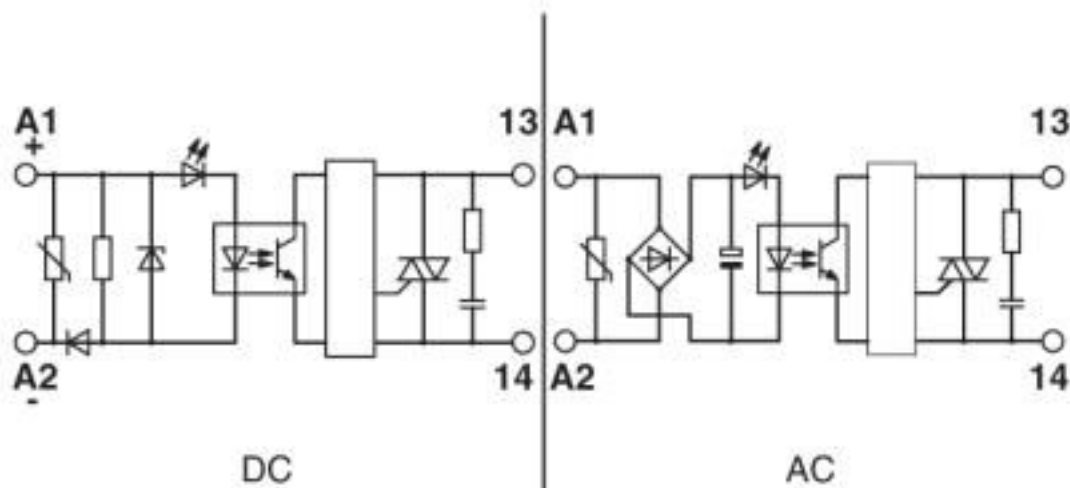
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Diagram



- ① In rows with zero spacing
- ② stand-alone device

Circuit diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27371604
eCl@ss 4.0	27371100

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## Classifications

### eCl@ss

eCl@ss 4.1	27371100
eCl@ss 5.0	27371000
eCl@ss 5.1	27371000
eCl@ss 6.0	27371600
eCl@ss 7.0	27371604
eCl@ss 8.0	27371604
eCl@ss 9.0	27371604

### ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504
ETIM 6.0	EC001504
ETIM 7.0	EC001504

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39122326
UNSPSC 18.0	39122326
UNSPSC 19.0	39122326
UNSPSC 20.0	39122326
UNSPSC 21.0	39122326

## Approvals

### Approvals

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Approvals

EAC / EAC

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Ex Approvals

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### Approval details

## Solid-state relay module - EMG 12-OV- 24DC/240AC/1 - 2948827

### Approvals

EAC		TR_TS_D_00573_c
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EAC		RU*C- DE.*08.B.00010
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### Accessories

#### Accessories

Marking material - EMG-GKS 12 - 2947035



Device marking label, width: 12 mm, area: 12 x 8 mm, e.g. for EML(10x7) R adhesive marking material

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