

## Solid-state relay module - EMG 12-OV-220DC/240AC/1 - 2948856

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 220 V DC, output: 24 - 280 V AC/max. 1 A


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

### Product Features

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



### Key commercial data

Packing unit	1 pc
GTIN	 4 017918 083526
Weight per Piece (excluding packing)	41.48 GRM
Custom tariff number	85364900
Country of origin	Germany

### Technical data

#### Dimensions

Width	12.5 mm
Height	75 mm

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## Technical data

### Dimensions

Depth	102 mm
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### 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 $U_N$	220 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.1
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 $U_N$	3 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	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
	Varistor
Transmission frequency	25 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	2.5 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

### Connection data

Connection method	Screw connection
Stripping length	8 mm

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### Technical data

#### Connection data

Screw thread	M3
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	4 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	12

#### 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
Inflammability class according to UL 94	V0
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage / insulation	Basic insulation

### 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	27371001

#### ETIM

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

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## Classifications

### UNSPSC

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

## Drawings

