

## Solid-state relay module - EMG 12-OV- 5DC/ 60DC/1 - 2948720

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 5 V DC, output: 12 - 60 V DC/max. 1 A


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

### Product Features

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



### Key commercial data

Packing unit	1 pc
GTIN	 4 017918 083397
Weight per Piece (excluding packing)	49.22 GRM
Custom tariff number	85364190
Country of origin	Germany

### Technical data

#### Note:

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

### 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 $U_N$	5 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.2
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 $U_N$	7 mA
Typical response time	20 $\mu$ s
Typical turn-off time	200 $\mu$ s
Status display	Yellow LED
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
Transmission frequency	500 Hz

### Output data

Output nominal voltage	60 V DC
Output voltage range	12 V DC ... 60 V DC
Limiting continuous current	1 A (see derating curve)
Peak offstate voltage	60 V DC
Voltage drop at max. limiting continuous current	1.2 V
Output circuit	2-wire, floating
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode

### Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid min.	0.2 mm <sup>2</sup>

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## Technical data

### Connection data

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	In rows with zero spacing
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

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542

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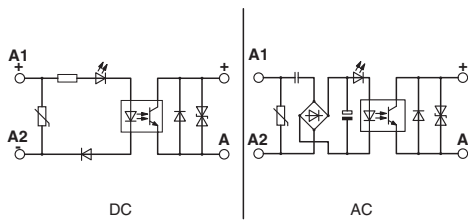
## Classifications

### UNSPSC

UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

## Drawings

Circuit diagram



Diagram

