

# Solid-state relay module - EMG 17-OV- 24DC/ 24DC/2 - 2946803

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 24 V DC, output: short-circuit-proof, 10 - 30 V DC/max. 2 A

The illustration shows version EMG 17-OV, with short-circuit proof DC voltage output, max. 2 A

## Product Features

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



## Key commercial data

<b>package_quantity</b>	10
<b>GTIN</b>	4017918082444

## Technical data

Note:

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

<b>Width</b>	17.5 mm
<b>Height</b>	75 mm
<b>Depth</b>	102 mm

## Ambient conditions

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

## Input data

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## Technical data

### Input data

Nominal input voltage $U_N$	24 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 $U_N$	3.5 mA
Typical response time	120 $\mu$ s
Typical turn-off time	400 $\mu$ s
Status display	Yellow LED
Type of protection	Protection against polarity reversal
Type of protection	Surge protection
Protective circuit/component	Polarity protection diode
Protective circuit/component	Varistor
Transmission frequency	1000 Hz

### Output data

Output nominal voltage	24 V DC
Output voltage range	10 V DC ... 30 V DC
Limiting continuous current	2 A (see derating curve)
Leakage current	150 $\mu$ A
Peak offstate voltage	33 V DC (Collector-emitter reverse voltage)
Current limitation at short-circuits	> 2 A (short-circuit resistant)
Voltage drop at max. limiting continuous current	$\leq 0.3$ V
Output circuit	3-conductor, ground-referenced
Indication	Red LED
Type of protection	Protection against polarity reversal
Type of protection	Free running
Type of protection	Surge protection
Protective circuit/component	Polarity protection diode
Protective circuit/component	Damping diode
Protective circuit/component	Suppressor 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>
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

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## Technical data

### General

Test voltage input/output	2.5 kV AC
Test voltage input/output	2.5 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
Standards/regulations	EN 50178
Standards/regulations	IEC 62103
Rated surge voltage / insulation	Basic insulation
Pollution degree	2
Surge voltage category	III

## 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
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

## approvals

GOST /

### Approval details

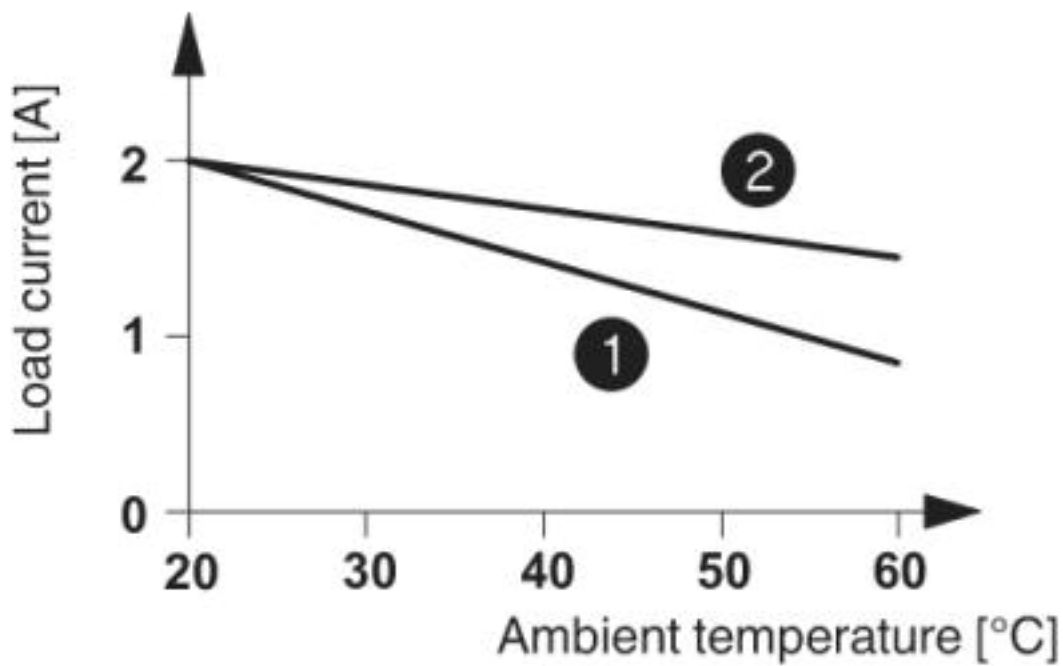
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approvals



Drawings

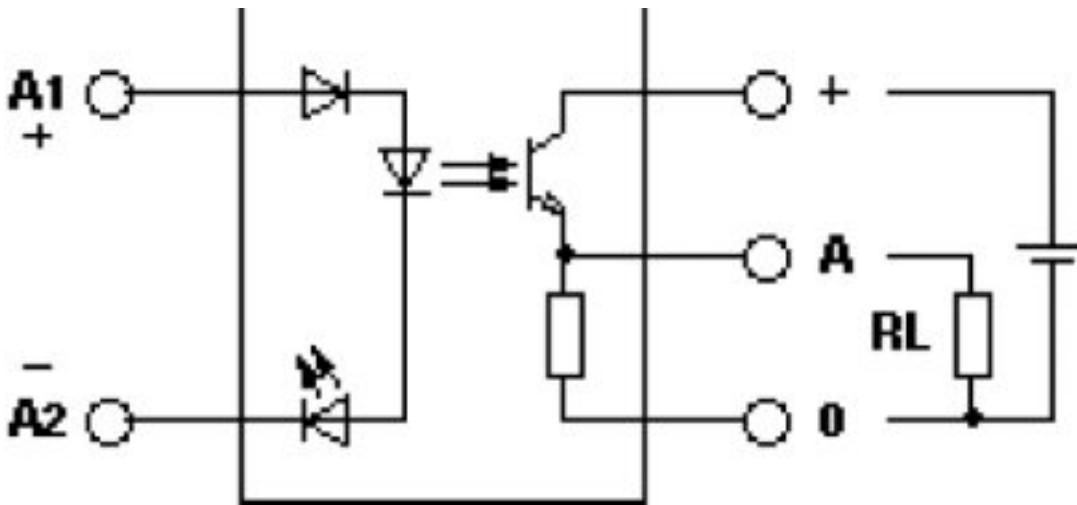
Diagram



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

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Circuit diagram



Circuit diagram

