

## Solid-state relay module - EMG 10-OV- 12DC/24DC/1 - 2944216

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Power solid-state relay, with LED and protective circuit in input and output circuits, input: 12 V DC, output: 5 - 36 V DC/max. 1 A


The illustration shows version EMG 10-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
- Status indicator
- Direct control with switching levels from 5 V to 230 V and up to 2 A
- Electrical isolation
- Zero voltage switch



### Key commercial data

Packing unit	1 pc
GTIN	 4 017918 081515
Weight per Piece (excluding packing)	40.47 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
-------------------------	---

# Solid-state relay module - EMG 10-OV- 12DC/24DC/1 - 2944216

## 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

### Input data

Nominal input voltage $U_N$	12 V DC
Input voltage range in reference to $U_N$	0.9 ... 1.1
Switching threshold "0" signal in reference to $U_N$	$\leq 0.33$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.9$
Typical input current at $U_N$	4 mA
Typical response time	0.1 ms
Typical turn-off time	0.2 ms
Status display	Yellow LED
Type of protection	Protection against polarity reversal
Protective circuit/component	Polarity protection diode
Transmission frequency	500 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

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>

## Solid-state relay module - EMG 10-OV- 12DC/24DC/1 - 2944216

### Technical data

#### Connection data

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
UNSPSC 11	39121542

# Solid-state relay module - EMG 10-OV- 12DC/24DC/1 - 2944216

## Classifications

### UNSPSC

UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

## Approvals

### Approvals

---

### Approvals

GOST

---

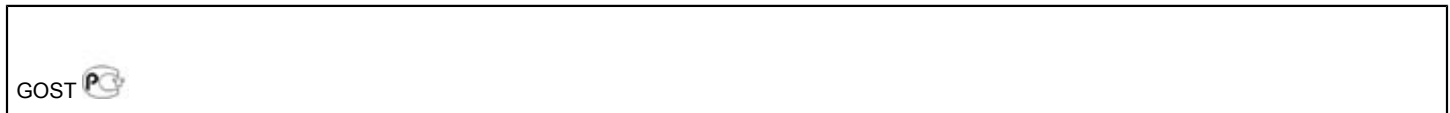
### Ex Approvals

---

### Approvals submitted

---

## Approval details



## Accessories

### Accessories

Marking material - EMG-SGKS 10 - 2947585

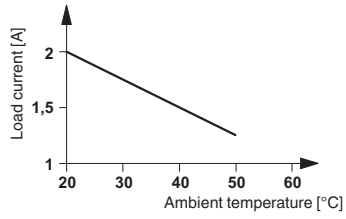


Equipment marker, narrow

## Drawings

# Solid-state relay module - EMG 10-OV- 12DC/24DC/1 - 2944216

Diagram



Circuit diagram

