

## 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



### Key Commercial Data

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

#### 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

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

## Technical data

### Ambient conditions

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	Reverse polarity protection
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	Reverse polarity protection
Protective circuit/component	Polarity protection diode

### Connection data, input side

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

### Connection data, output side

Connection name	Output side
Connection method	Screw connection
Stripping length	8 mm

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

## Technical data

### Connection data, output side

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

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

### Standards and Regulations

Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	Basic insulation
Flammability rating according to UL 94	V0

## 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	27371604

### ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504

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

## Classifications

### ETIM

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

### Approvals

---

Approvals

EAC / EAC

---

Ex Approvals

---

Approvals submitted

---

### Approval details

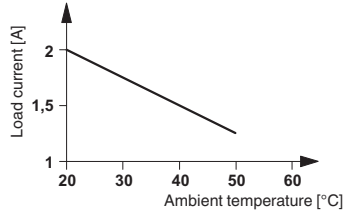
EAC
-----

EAC
-----

## Drawings

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

Diagram



Circuit diagram

