

## Solid-state relay module - EMG 17-OV- 60DC/ 24DC/2 - 2946816

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: 48 - 60 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

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



### Key commercial data

Packing unit	1 pc
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	17.5 mm
Height	75 mm

# Solid-state relay module - EMG 17-OV- 60DC/ 24DC/2 - 2946816

## Technical data

### Dimensions

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 $U_N$	60 V DC
Input voltage range in reference to $U_N$	0.64 ... 1.2
Switching threshold "0" signal in reference to $U_N$	$\leq 0.32$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.64$
Typical input current at $U_N$	2.1 mA
Typical response time	130 $\mu$ s
Typical turn-off time	180 $\mu$ s
Status display	Yellow LED
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
	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
	Free running
	Surge protection
Protective circuit/component	Polarity protection diode
	Damping diode
	Suppressor diode

## Solid-state relay module - EMG 17-OV- 60DC/ 24DC/2 - 2946816

### Technical data

#### 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

Test voltage input/output	2.5 kV AC
	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
	EN 50178
	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

# Solid-state relay module - EMG 17-OV- 60DC/ 24DC/2 - 2946816

## Classifications

### ETIM

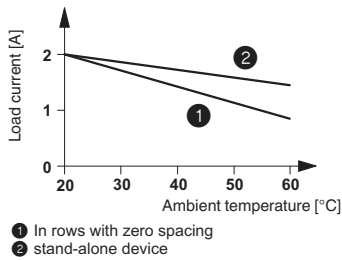
ETIM 4.0	EC001504
ETIM 5.0	EC001504

### UNSPSC

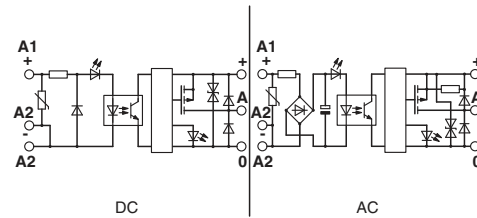
UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

## Drawings

Diagram



Circuit diagram



Circuit diagram

