



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Solid-state relay module - EMG 17-OV-120AC/ 24DC/2 - 2946845

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: 120 V AC, 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

- ✓ RC protective circuit
- ✓ EMG-17-OV, short-circuit-proof with indicator LED
- ✓ 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

Packing unit	1 pc
GTIN	 4 017918 082482
Weight per Piece (excluding packing)	58.94 GRM
Custom tariff number	85364900
Country of origin	Germany

### Technical data

#### Dimensions

Width	17.5 mm
Height	75 mm

# Solid-state relay module - EMG 17-OV-120AC/ 24DC/2 - 2946845

## 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 $U_N$	120 V AC
Input voltage range in reference to $U_N$	0.8 ... 1.16
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 $U_N$	2.1 mA
Typical response time	50 ms
Typical turn-off time	12 ms
Status display	Yellow LED
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
	Varistor
Transmission frequency	10 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-120AC/ 24DC/2 - 2946845

## 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-120AC/ 24DC/2 - 2946845

Classifications

ETIM

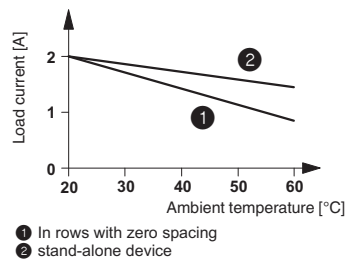
ETIM 4.0	EC001504
ETIM 5.0	EC001504

UNSPSC

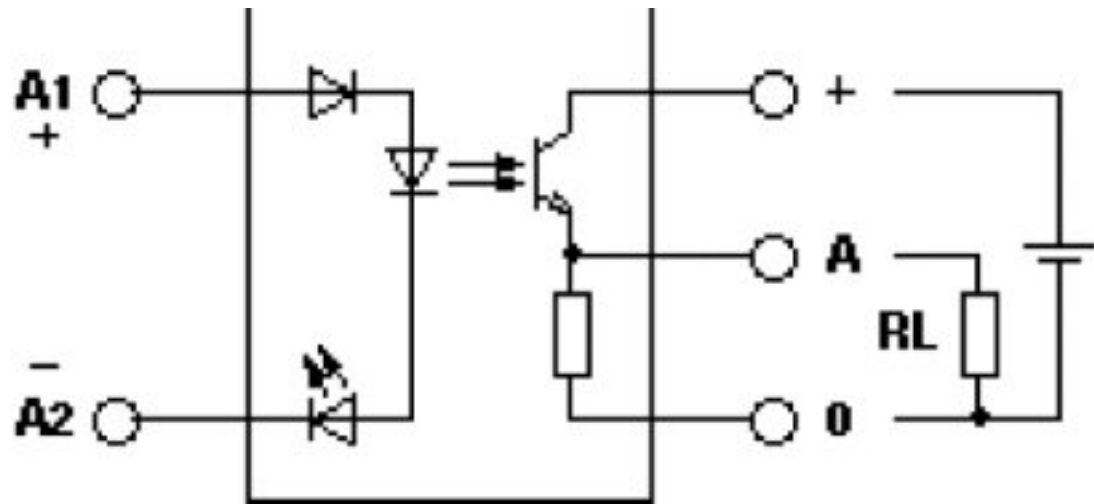
UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

Drawings

Diagram



Circuit diagram



## Solid-state relay module - EMG 17-OV-120AC/ 24DC/2 - 2946845

Circuit diagram

