

## Solid-state relay module - EMG 10-OE-220DC/ 48DC/100 - 2948937

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Input solid-state relay, with LED and protective circuit in input and output circuits, input: 220 V DC, output: 4 - 48 V DC/max. 100 mA

The illustration shows version EMG 10-OE, with DC voltage output, max.100 mA

### Product Features

- EMG-17-OV, short-circuit-proof with indicator LED
- Protective circuit in input and output
- RC protective circuit
- Electrical isolation
- Zero voltage switch
- Status indicator



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	39.61 GRM
Custom tariff number	85364900
Country of origin	Germany

### Technical data

#### Dimensions

Width	10 mm
Height	75 mm
Depth	102 mm

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
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## Technical data

### Ambient conditions

Ambient temperature (storage/transport)	-20 °C ... 70 °C
Degree of protection	IP20

### Input data

Nominal input voltage $U_N$	220 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 $U_N$	4 mA
Typical response time	20 $\mu$ s
Typical turn-off time	100 $\mu$ s
Status display	Yellow LED
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode
Transmission frequency	500 Hz

### Output data

Output nominal voltage	48 V DC
Output voltage range	4 V DC ... 48 V DC
Limiting continuous current	100 mA
Voltage drop at max. limiting continuous current	0.9 V
Output circuit	2-wire, floating
Type of protection	Protection against polarity reversal
	Surge protection
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>
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	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
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

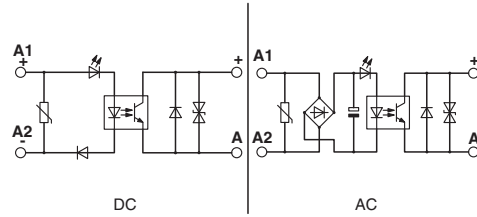
### UNSPSC

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

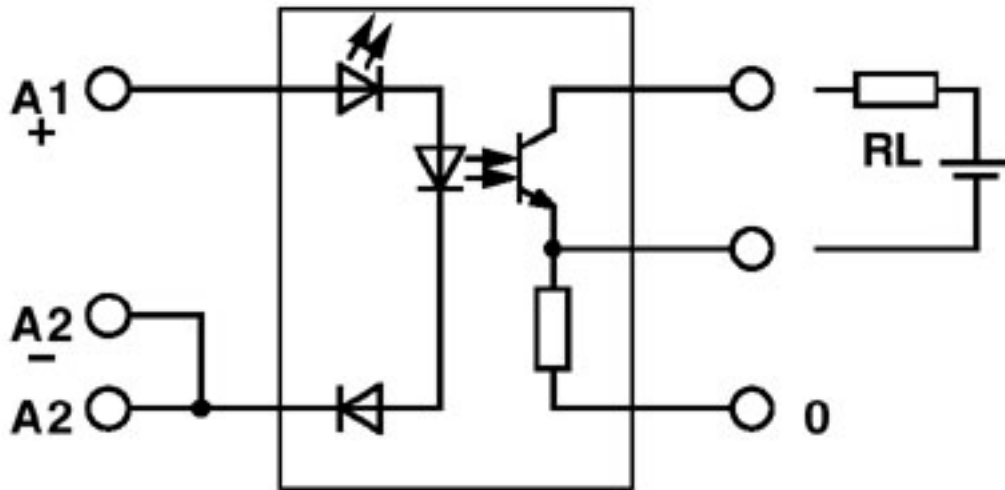
## Drawings

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Circuit diagram



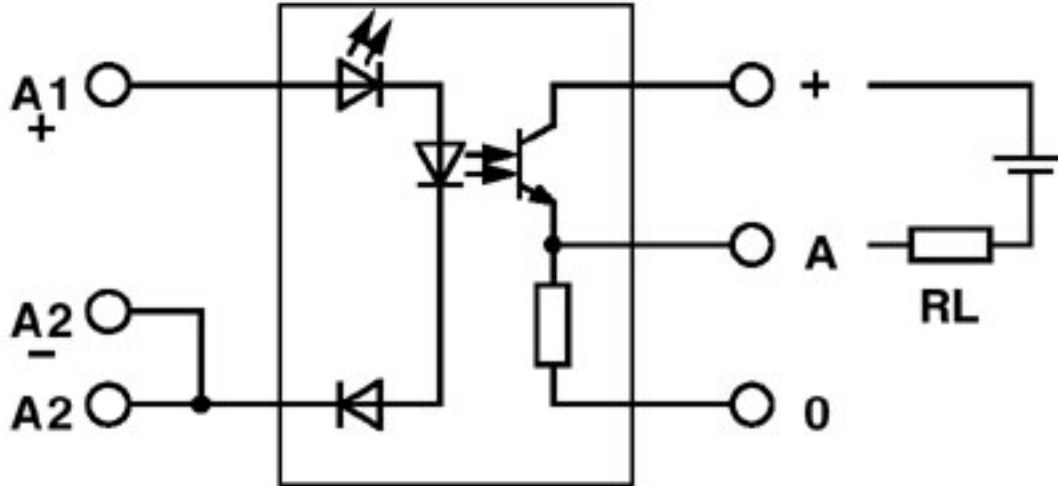
Circuit diagram



Output: 2-wire, floating, minus switching

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Circuit diagram



Output: 2-wire, floating, plus switching