

# EMG 17-OE- 12DC/ 24DC/500 - Solid-state relay module



2954387

<https://www.phoenixcontact.com/us/products/2954387>

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Input optocoupler, with light indicator and protection circuits in the input and output circuits, input: 12 V DC, output: short-circuit resistant, 12-35 V DC/max. 500 mA

The figure shows version EMG 17-OE, with short-circuit proof DC voltage output, max. 500 mA

## Commercial data

Item number	2954387
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DK61C1
GTIN	4017918085049
Weight per piece (including packing)	56.43 g
Weight per piece (excluding packing)	56.43 g
Customs tariff number	85364190
Country of origin	DE

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## Technical data

### Product properties

Product type	Solid-state relay module
Application	Input function
Operating mode	100% operating factor

### Insulation characteristics

Overvoltage category	III
Pollution degree	2

### Data management status

Date of last data management	01.04.2026
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### Electrical properties

Test voltage (Input/output)	3.5 kV AC (Input/output)
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### Input data

Nominal input voltage $U_N$	12 V DC
Input voltage range in reference to $U_N$	0.9 ... 1.1
Input voltage range	10.8 V DC ... 13.2 V DC
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 $U_N$	5 mA
Typical response time	50 $\mu$ s
Typical turn-off time	200 $\mu$ s
Status display	LED (yellow)
Protective circuit	Reverse polarity protection; Polarity protection diode RC element
Transmission frequency	300 Hz

### Output data

Design of digital output	electronic
Output nominal voltage	24 V DC
Output voltage range	22 V DC ... 35 V DC
Limiting continuous current	500 mA
Current limitation at short-circuits	620 mA (continued short-circuit resistant)
Voltage drop at max. limiting continuous current	2 V
Output circuit	3-conductor, ground-referenced
Error indication	Red LED, (flashes in the event of short-circuits or overload)
Protective circuit	Reverse polarity protection; Polarity protection diode Free running; Freewheeling diode

### Connection data

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## Input side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	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

## Output side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	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

## Dimensions

Width	17.5 mm
Height	75 mm
Depth	102 mm

## Material specifications

Color	green (RAL 6021)
Flammability rating according to UL 94	V0

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 50 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

## Standards and regulations

Standards/regulations	DIN VDE 0110b, Gr. C for 250 V DC VDE 0110
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## Mounting

Assembly note	in rows with zero spacing
Mounting position	any

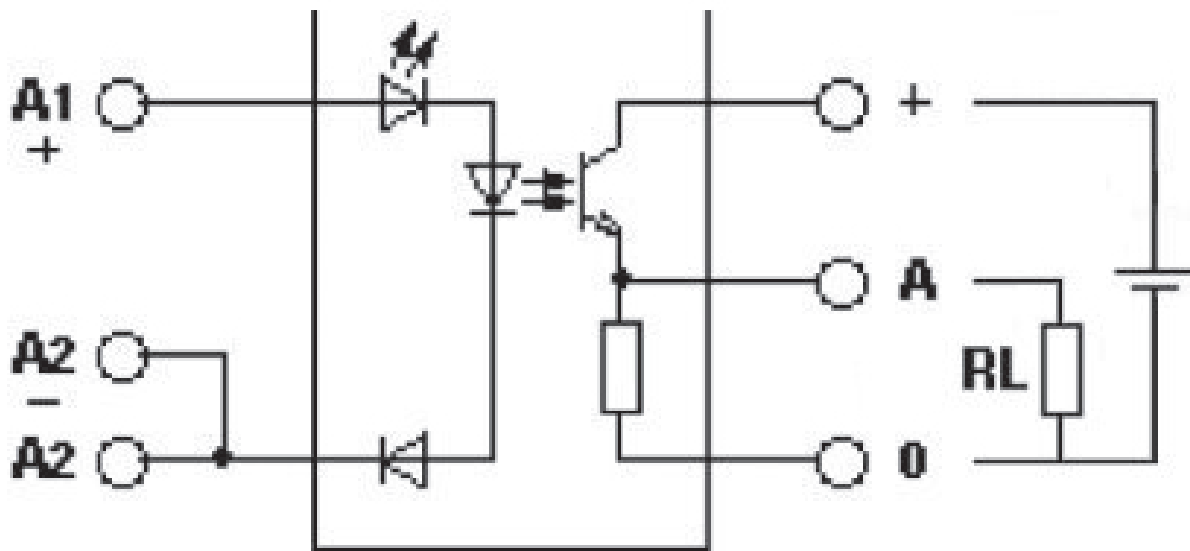
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## Drawings

Circuit diagram



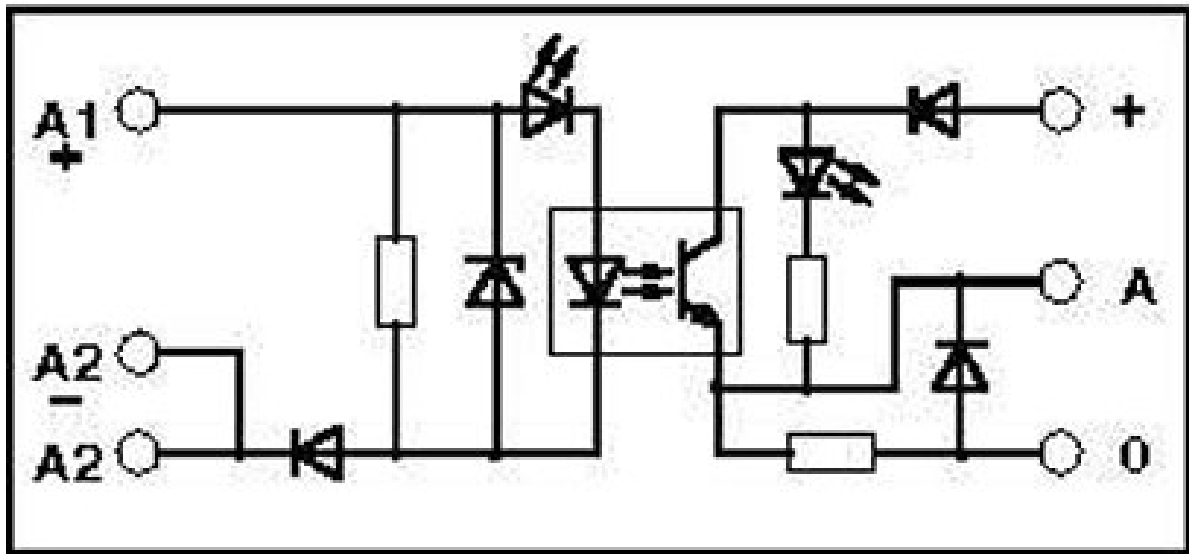
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Circuit diagram



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## Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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