

EMG 17-OV- 12DC/240AC/3 - Solid-state relay module



2954222

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 12 V DC, output: 48 - 280 V AC/max. 3 A

Commercial data

Item number	2954222
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	CK61C3
Catalog page	Page 141 (IF-2011)
GTIN	4017918084882
Weight per piece (including packing)	89.43 g
Weight per piece (excluding packing)	89.43 g
Customs tariff number	85364190
Country of origin	DE

Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Product properties

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

Insulation characteristics

Insulation	Basic insulation
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Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

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	0.8 ... 1.2
Input voltage range	9.6 V DC ... 14.4 V DC
Switching threshold "0" signal in reference to U_N	≤ 0.4
Switching threshold "1" signal in reference to U_N	≥ 0.8
Typical input current at U_N	4.1 mA
Typical response time	10 ms
Typical turn-off time	10 ms
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection; Varistor
Transmission frequency	25 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output nominal voltage	240 V AC
Output voltage range	48 V AC ... 280 V AC (50 Hz ... 60 Hz)
Limiting continuous current	3 A (see derating curve)
Min. load current	50 mA

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Leakage current	4 mA (in off state)
Surge current	160 A (t = 10 ms)
Phase angle cos phi min	0.5
Max. load value	128 A ² s (I ² x t where t = 10 ms)
Peak offstate voltage	600 V (Periodic peak reverse voltage)
Voltage drop at max. limiting continuous current	≤ 1 V
Output circuit	2-conductor, floating
Protective circuit	RC element; RC element Surge protection; Varistor

Connection data

Input side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.2 mm ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
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 ² ... 4 mm ²
Conductor cross section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross section AWG	24 ... 12

Dimensions

Width	17.5 mm
Height	75 mm
Depth	102 mm

Material specifications

Flammability rating according to UL 94	V0
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Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

Standards and regulations

Standards/regulations	IEC 60664 EN 50178
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Mounting

Mounting type	DIN rail mounting
Assembly instructions	in rows with zero spacing
Mounting position	horizontal

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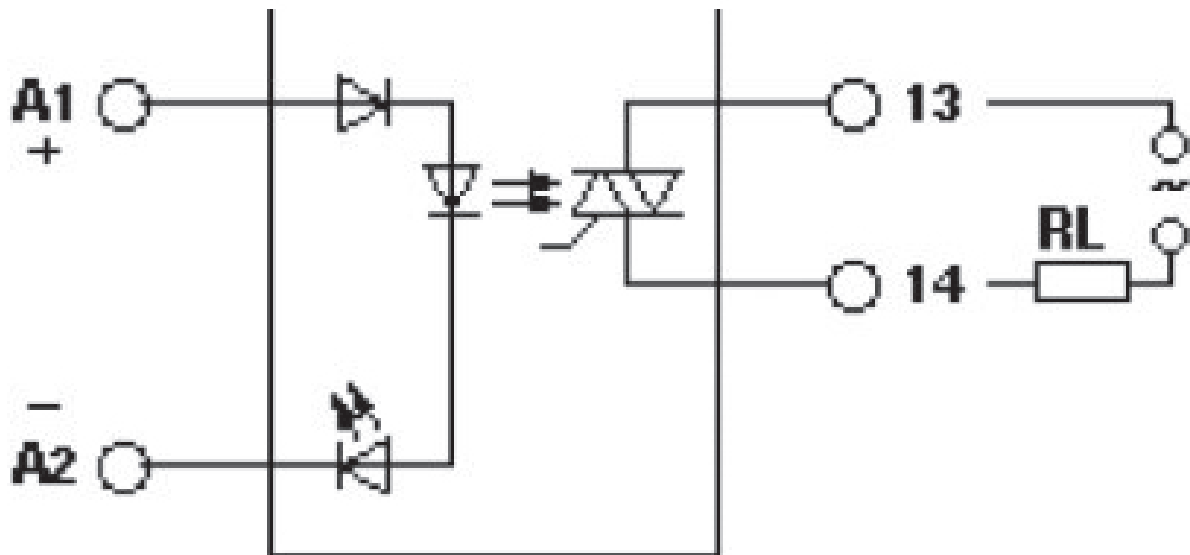


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Drawings

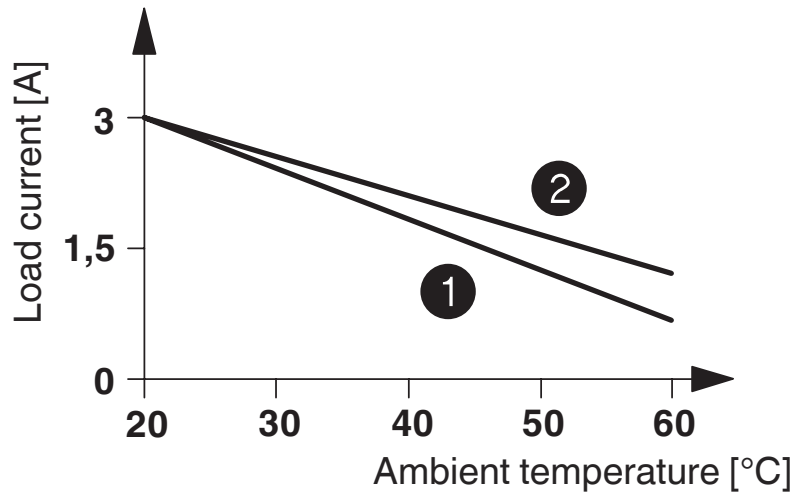
Circuit diagram



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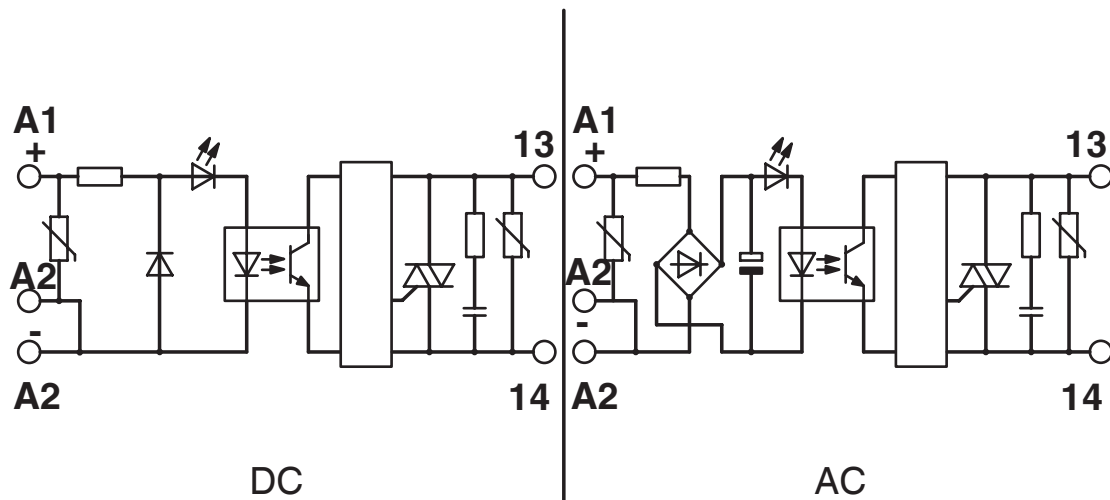
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Diagram



- ① In rows with zero spacing
- ② stand-alone device

Circuit diagram



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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2954222>



EAC

Approval ID: TR_TS_D_00573_c



EAC

Approval ID: RU*C-DE.*08.B.00010

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Classifications

ECLASS

ECLASS-11.0	27371604
ECLASS-12.0	27371604
ECLASS-13.0	27371604

ETIM

ETIM 9.0	EC001504
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UNSPSC

UNSPSC 21.0	39122300
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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