

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 | 10 pc |
| Minimum order quantity | 1 pc |
| Sales key | C460 |
| Product key | DK61C1 |
| 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 |
|----------|---|

Product properties

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

Insulation characteristics

| | |
|----------------------|------------------|
| Insulation | Basic insulation |
| Overvoltage category | III |
| Pollution degree | 2 |

Data management status

| | |
|------------------------------|------------|
| Date of last data management | 15.04.2026 |
|------------------------------|------------|

Electrical properties

| | |
|-----------------------------|--------------------------|
| Test voltage (Input/output) | 3.5 kV AC (Input/output) |
|-----------------------------|--------------------------|

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

Item 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 ... 60 °C |
| Ambient temperature (storage/transport) | -20 °C ... 70 °C |

Standards and regulations

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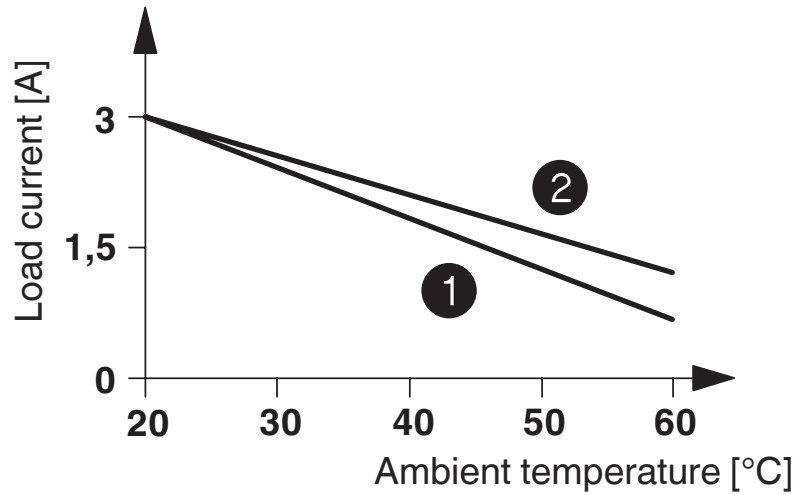
| | |
|-----------------------|-----------|
| Standards/regulations | IEC 60664 |
| | EN 50178 |

Mounting

| | |
|-------------------|---------------------------|
| Mounting type | DIN rail mounting |
| Assembly note | in rows with zero spacing |
| Mounting position | horizontal |

Drawings

Diagram

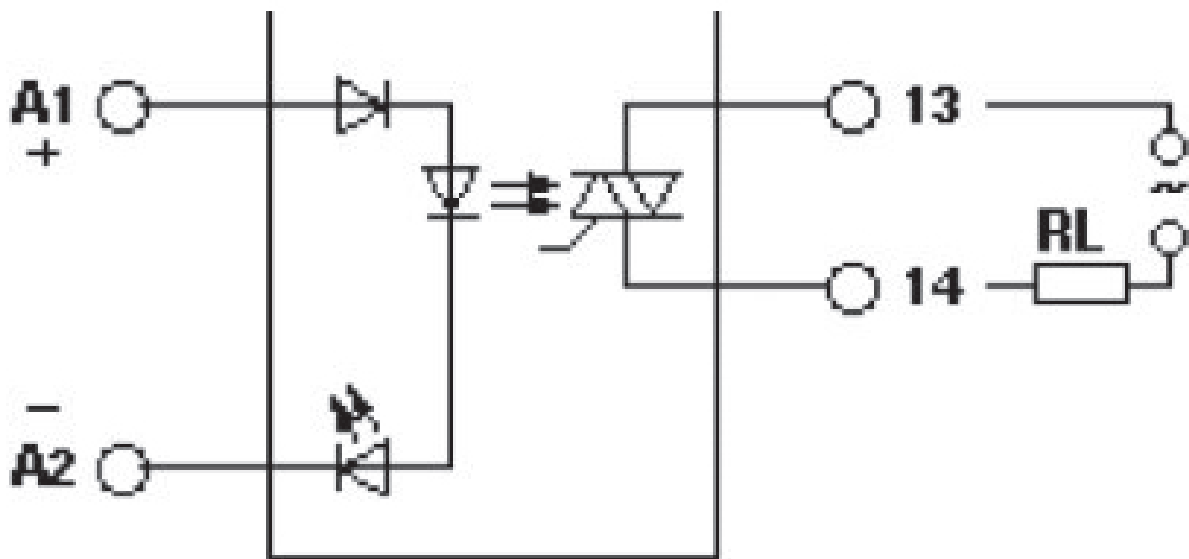


- ① In rows with zero spacing
- ② stand-alone device

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Circuit diagram



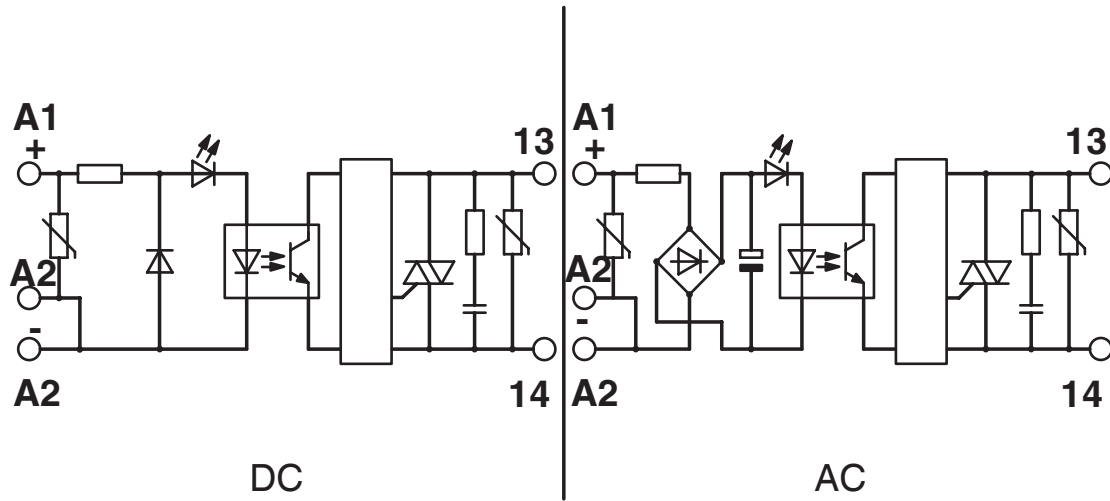
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Circuit diagram



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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27371604 |
| ECLASS-15.0 | 27371604 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC001504 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39122300 |
|-------------|----------|

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 6(c), 7(a), 7(c)-I |

China RoHS

| | |
|--|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|-------------------------------------|--------------------------------------|
| REACH candidate substance (CAS No.) | Lead(CAS: 7439-92-1) |
| SCIP | f1650e38-1017-4ee6-b572-00dba60068fe |

EF3.1 Climate Change

| | |
|---------|---------------|
| CO2e kg | 1.914 kg CO2e |
|---------|---------------|

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