

EMG 17-OV-220DC/ 24DC/2 - Solid-state relay module



2946832

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Power solid-state relay, with LED and protective circuit in input and output circuits, input: 220 V DC, output: short-circuit-proof, 10 - 30 V DC/max. 2 A

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2946832 |
| Packing unit | 10 pc |
| Minimum order quantity | 1 pc |
| Note | Made to order (non-returnable) |
| Product key | DK61C2 |
| GTIN | 4017918082475 |
| Weight per piece (including packing) | 57.61 g |
| Weight per piece (excluding packing) | 57.61 g |
| Country of origin | DE |

Technical data

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 | 15.09.2025 |
|------------------------------|------------|

Electrical properties

| | |
|-----------------------------|--------------------------|
| Test voltage (Input/output) | 2.5 kV AC (Input/output) |
|-----------------------------|--------------------------|

Input data

| | |
|--|--|
| Nominal input voltage U_N | 220 V DC |
| Input voltage range in reference to U_N | 0.8 ... 1.2 |
| Input voltage range | 176 V DC ... 264 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 | 1.7 mA |
| Typical response time | 130 μ s |
| Typical turn-off time | 180 μ s |
| Status display | LED (yellow) |
| Protective circuit | Reverse polarity protection; Polarity protection diode Surge protection; Varistor |
| Transmission frequency | 1000 Hz |

Output data

| | |
|--|---|
| Design of digital output | electronic |
| 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 μ A |
| Peak offstate voltage | 33 V DC (Collector-emitter reverse voltage) |
| Current limitation at short-circuits | > 2 A (short-circuit-proof) |
| Voltage drop at max. limiting continuous current | ≤ 0.3 V |
| Output circuit | 3-conductor, ground-referenced |
| Error indication | Red LED Reverse polarity protection; Polarity protection diode |

| | |
|--------------------|------------------------------------|
| Protective circuit | Free running; Freewheeling diode |
| | Surge protection; Suppressor diode |

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

| | |
|--|------------------|
| 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

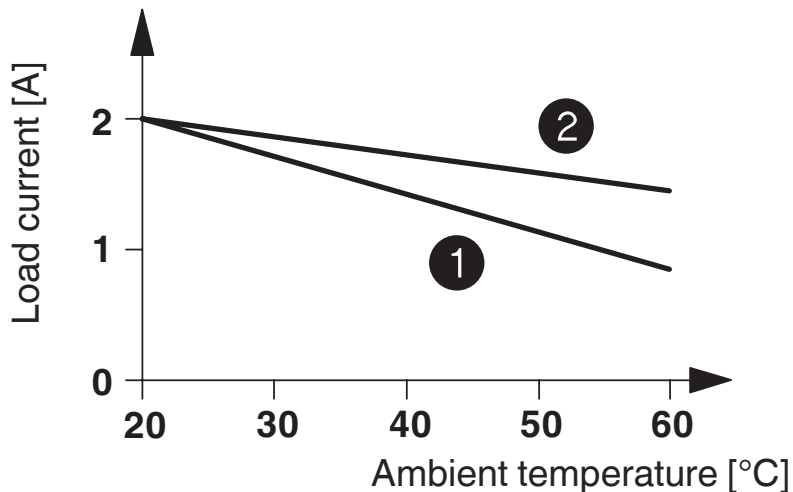
| | |
|-----------------------|-----------|
| Standards/regulations | IEC 60664 |
| | EN 50178 |

Mounting

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

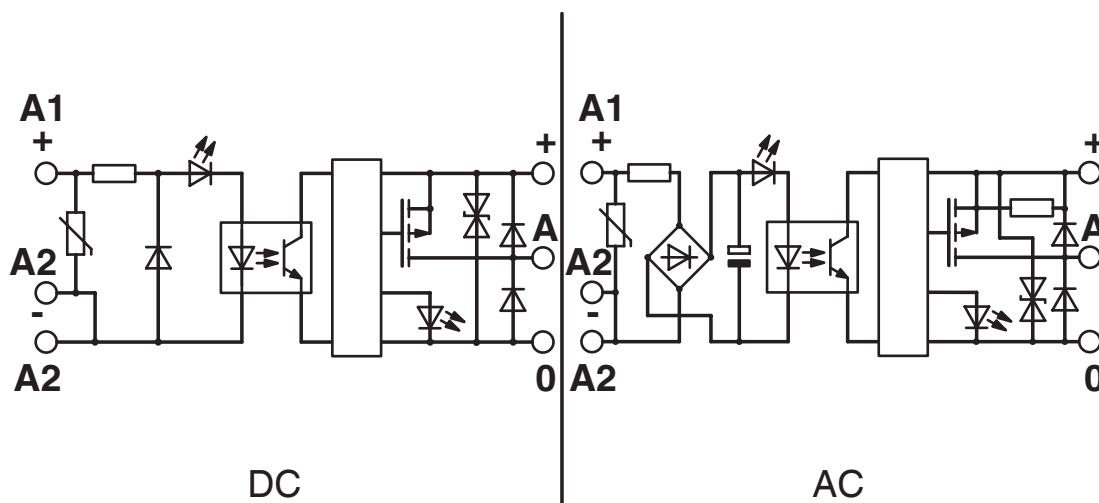
Drawings

Diagram



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

Circuit diagram



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Environmental product compliance

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.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com