

EMG 17-OV- 12DC/ 24DC/2 - Solid-state relay module



2946793

<https://www.phoenixcontact.com/us/products/2946793>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Power solid-state relay, with LED and protective circuit in input and output circuits, input: 12 V DC, output: short-circuit-proof, 10 - 30 V DC/max. 2 A

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2946793 |
| Packing unit | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | C460 |
| Product key | DK61C2 |
| GTIN | 4017918082437 |
| Weight per piece (including packing) | 56.14 g |
| Weight per piece (excluding packing) | 56.14 g |
| Customs tariff number | 85364110 |
| 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 | 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 | 4.6 mA |
| Typical response time | 210 μ s |
| Typical turn-off time | 410 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 |

EMG 17-OV- 12DC/ 24DC/2 - Solid-state relay module



2946793

<https://www.phoenixcontact.com/us/products/2946793>

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

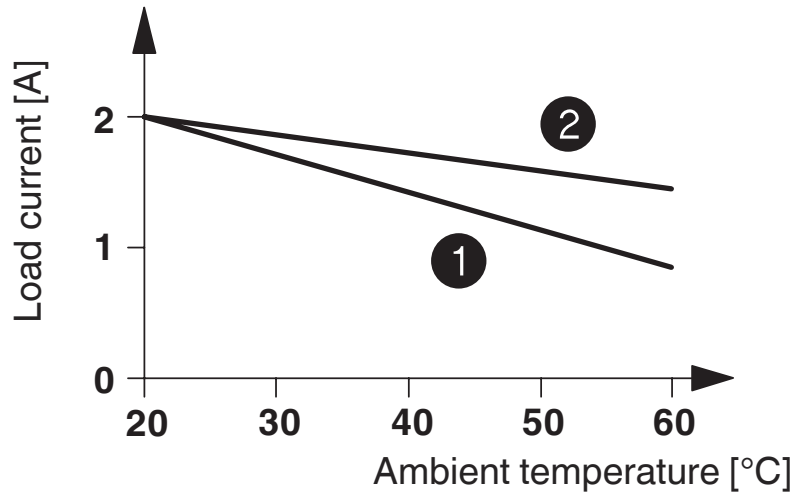
| | |
|-----------------------|-----------|
| Standards/regulations | IEC 60664 |
| | EN 50178 |

Mounting

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

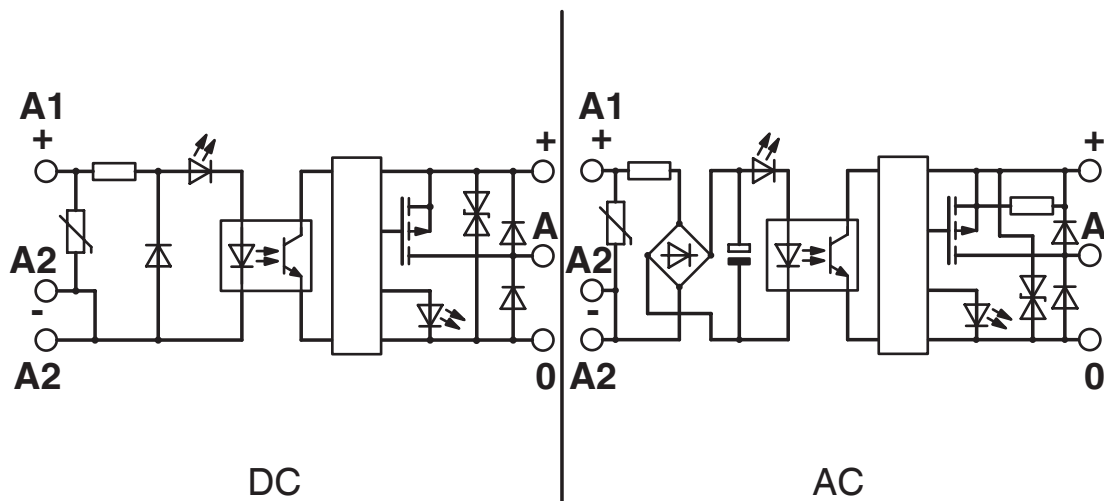
Drawings

Diagram



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

Circuit diagram



EMG 17-OV- 12DC/ 24DC/2 - Solid-state relay module



2946793

<https://www.phoenixcontact.com/us/products/2946793>

Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39122326 |
|-------------|----------|

2946793

<https://www.phoenixcontact.com/us/products/2946793>

Environmental product compliance

EU RoHS

| | |
|---|--------------|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 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) |
|-------------------------------------|----------------------|

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

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