

SIM-EI-110DC/48DC/100 - Miniature solid-state relay



2271099

<https://www.phoenixcontact.com/us/products/2271099>

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Input solid-state relay, with protective circuit in input and output circuits, input: 110 V DC, output: 8 - 48 V DC/100 mA

The figure shows version SIM-EI-5DC/48DC/100

Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2271099 |
| Packing unit | 1 pc |
| Note | Made to order (non-returnable) |
| Sales key | C460 |
| Product key | DK61F1 |
| GTIN | 4017918054137 |
| Weight per piece (including packing) | 20.4 g |
| Weight per piece (excluding packing) | 19.4 g |
| Customs tariff number | 85364900 |
| Country of origin | DE |

Technical data

Product properties

| | |
|----------------|--------------------------|
| Product type | Single solid-state relay |
| Operating mode | 100% operating factor |

Data management status

| | |
|------------------------------|------------|
| Date of last data management | 01.04.2026 |
|------------------------------|------------|

Electrical properties

| | |
|-----------------------------|--------------------------------------|
| Test voltage (Input/output) | 2.5 kV (50 Hz, 1 min., input/output) |
|-----------------------------|--------------------------------------|

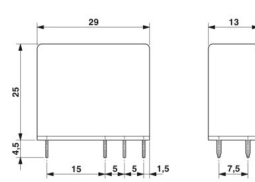
Input data

| | |
|--|--|
| Nominal input voltage U_N | 110 V DC |
| Input voltage range in reference to U_N | 0.9 ... 1.1 |
| Input voltage range | 99 V DC ... 121 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 | 2.4 mA |
| Protective circuit | Reverse polarity protection; Polarity protection diode |
| Transmission frequency | 300 Hz |

Output data

| | |
|--|--|
| Design of digital output | electronic |
| Output voltage range | 8 V DC ... 48 V DC |
| Limiting continuous current | 100 mA |
| Voltage drop at max. limiting continuous current | 1 V |
| Output circuit | 2-conductor, floating |
| Protective circuit | Reverse polarity protection; Polarity protection diode |

Dimensions

| | |
|---------------------|--|
| Dimensional drawing |  |
| Width | 13 mm |
| Height | 29 mm |
| Depth | 25 mm |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|------------------|
| Ambient temperature (operation) | -20 °C ... 50 °C |
|---------------------------------|------------------|

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

Standards and regulations

| | |
|-----------------------|--------------|
| Standards/regulations | DIN VDE 0110 |
|-----------------------|--------------|

Mounting

| | |
|-------------------|---|
| Assembly note | can be aligned with spacing ≥ 2 mm |
| Mounting position | any |

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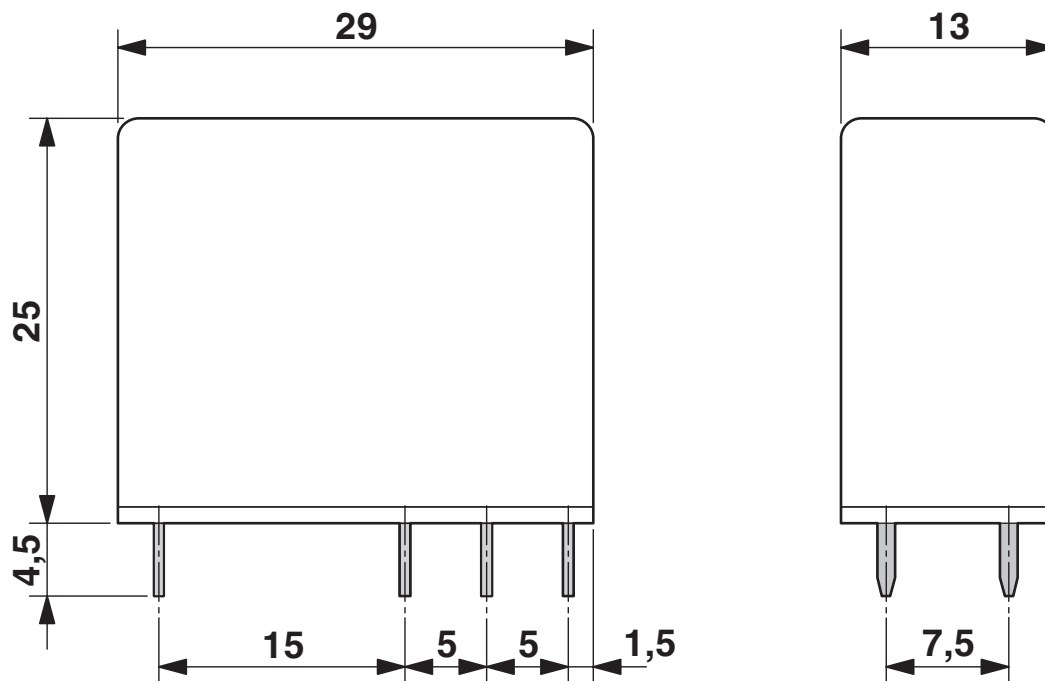


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Drawings

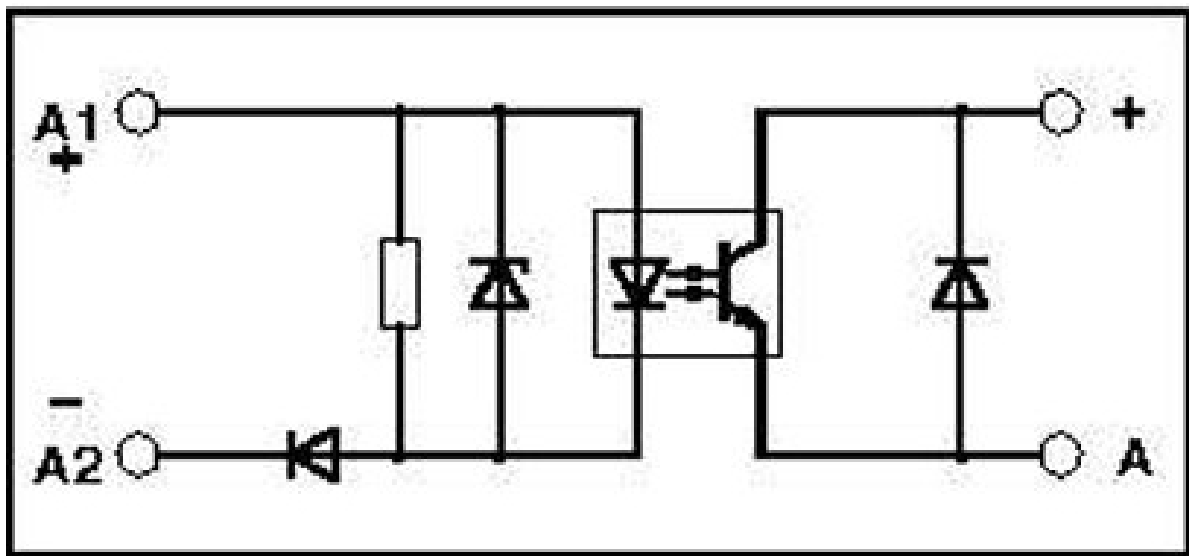
Dimensional drawing



Schematic diagram



Circuit diagram



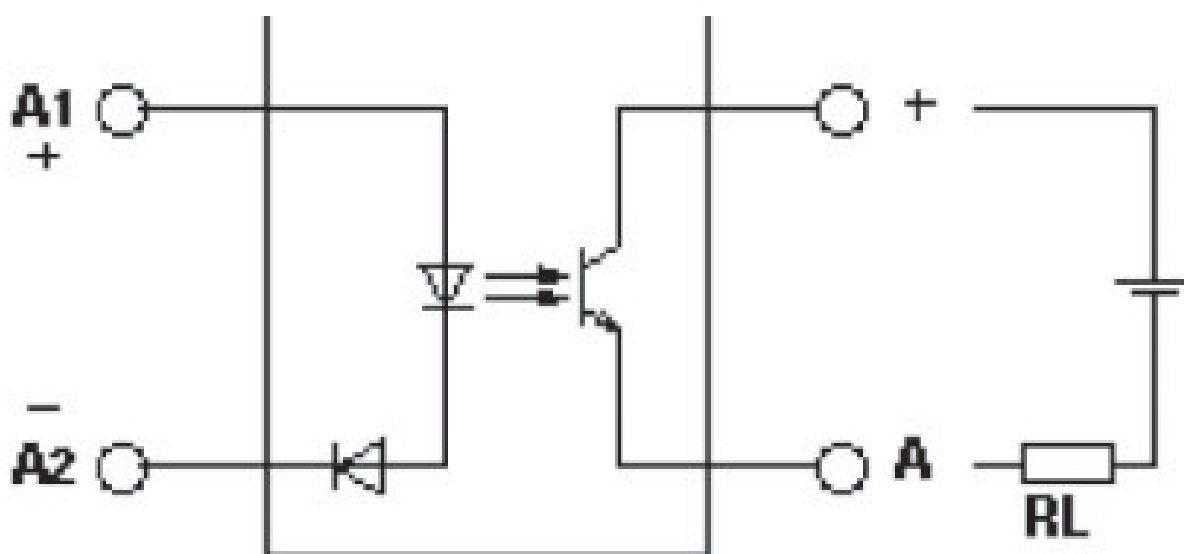
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Circuit diagram



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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

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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