

# ST-OV3-120AC/240AC/3 - Solid-state relay



2903697

<https://www.phoenixcontact.com/us/products/2903697>

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Plug-in power solid-state relay, with LED and protective circuit in input and output circuits, input: 120 V AC, output: 24 - 280 V AC/max. 3 A, can be plugged into basic terminal blocks

The figure shows version ST-OV  
3- 5 DC/240 AC/3

## Commercial data

|                                      |                                |
|--------------------------------------|--------------------------------|
| Item number                          | 2903697                        |
| Packing unit                         | 1 pc                           |
| Note                                 | Made to order (non-returnable) |
| Sales key                            | C460                           |
| Product key                          | DK61B3                         |
| GTIN                                 | 4017918079086                  |
| Weight per piece (including packing) | 60.05 g                        |
| Weight per piece (excluding packing) | 59.9 g                         |
| Customs tariff number                | 85364900                       |
| Country of origin                    | DE                             |

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## Technical data

### Product properties

|                              |                          |
|------------------------------|--------------------------|
| Product type                 | Single solid-state relay |
| Data management status       |                          |
| Date of last data management | 01.04.2026               |

### Electrical properties

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

### Input data

|  |  |
|--|--|
| Nominal input voltage $U_N$                          | 120 V AC   |
| Input voltage range in reference to $U_N$            | 0.8 ... 1.2  |
| Input voltage range                                  | 96 V AC ... 144 V AC                                   |
| Switching threshold "0" signal in reference to $U_N$ | $\leq 0.4$   |
| Switching threshold "1" signal in reference to $U_N$ | $\geq 0.8$   |
| Typical input current at $U_N$                       | 5 mA   |
| Typical response time                                | 24 ms  |
| Typical turn-off time                                | 24 ms  |
| Operating voltage display                            | Yellow LED   |
| Protective circuit                                   | Reverse polarity protection; Polarity protection diode |
| Transmission frequency                               | 10 Hz  |

### Output data

|  |   |
|--|---|
| Design of digital output                         | electronic  |
| Output voltage range                             | 24 V AC ... 280 V AC  |
| Limiting continuous current                      | 3 A (see derating curve)  |
| Min. load current                                | 50 mA   |
| Leakage current                                  | 5 mA (in off state - components with low minimum load and leakage currents on request.) |
| Surge current                                    | 35 A (t = 10 ms)  |
| Phase angle $\cos \phi$ min                      | 0.5   |
| Max. load value                                  | $6 \text{ A}^2\text{s}$ ( $I^2 \times t$ at t = 8.3 ms)                                 |
| Peak offstate voltage                            | 600 V   |
| Voltage drop at max. limiting continuous current | 1.5 V   |
| Output circuit                                   | 2-conductor, floating   |
| Protective circuit                               | RC element  |

### Dimensions

|        |         |
|--------|---------|
| Width  | 20.8 mm |
| Height | 33 mm   |
| Depth  | 66.5 mm |

### Material specifications

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|       |                  |
|-------|------------------|
| Color | green (RAL 6021) |
|-------|------------------|

## Environmental and real-life conditions

### Ambient conditions

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

## Standards and regulations

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

## Mounting

|                   |     |
|-------------------|-----|
| Mounting position | any |
|-------------------|-----|

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## Drawings

Diagram



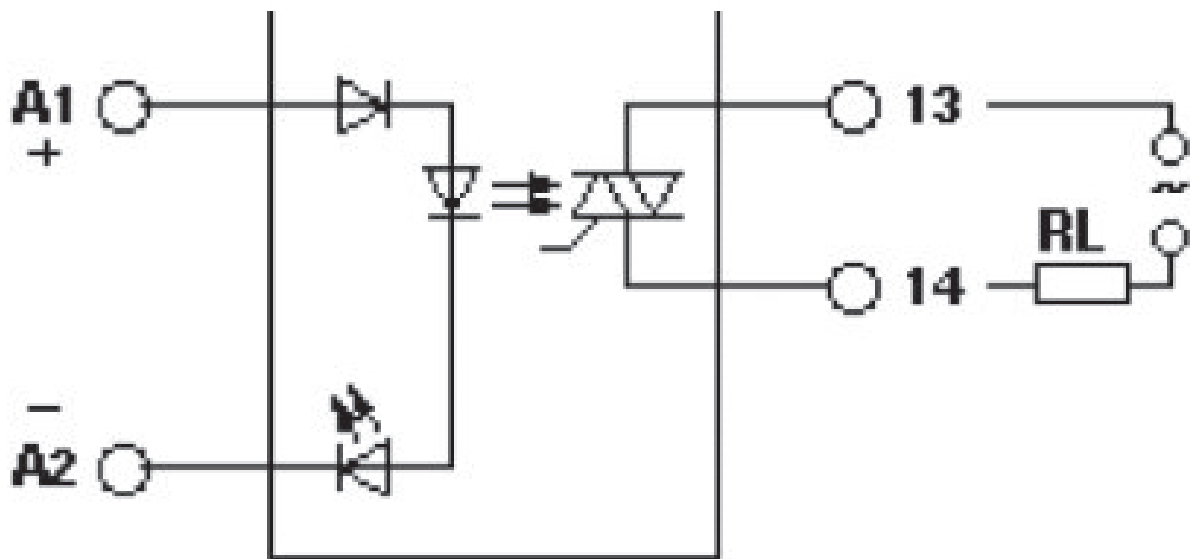
- ① In rows with zero spacing
- ② stand-alone device

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Circuit diagram



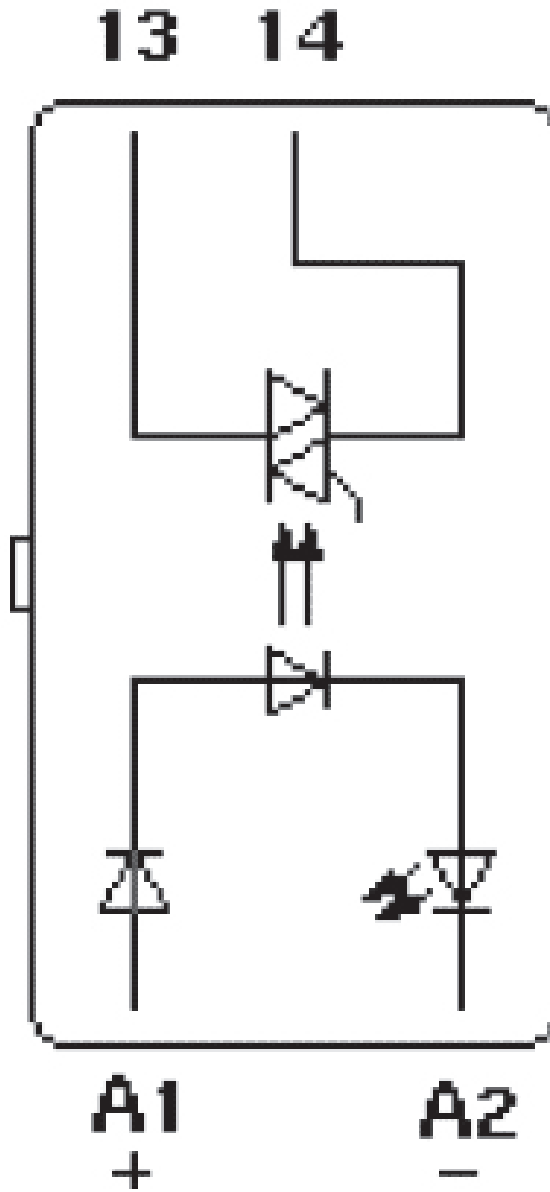
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Circuit diagram



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## 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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