

# ST-OV3- 24DC/240AC/3 - Solid-state relay



2903231

<https://www.phoenixcontact.com/us/products/2903231>

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Plug-in power solid-state relay, with LED and protective circuit in input and output circuits, input: 24 V DC, 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	2903231
Packing unit	10 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK61B1
GTIN	4017918079017
Weight per piece (including packing)	55.5 g
Weight per piece (excluding packing)	55.5 g
Customs tariff number	85364190
Country of origin	DE

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## Technical data

### Product properties

Product type	Single solid-state relay
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### Data management status

Date of last data management	01.04.2026
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### Electrical properties

Test voltage (Input/output)	2.5 kV AC (Input/output)
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### Input data

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.2
Input voltage range	19.2 V DC ... 28.8 V DC
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 $U_N$	7 mA
Typical response time	switch-on time: Max. one half cycle - zero-voltage crossing
Typical turn-off time	switch-off time Max. one half cycle - zero-current crossing
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection; Polarity protection diode
Transmission frequency	25 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

#### Item dimensions

Width	20.8 mm
Height	33 mm
Depth	66.5 mm

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## Material specifications

Color	green (RAL 6021)
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## 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
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## Mounting

Mounting position	any
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## Drawings

Diagram



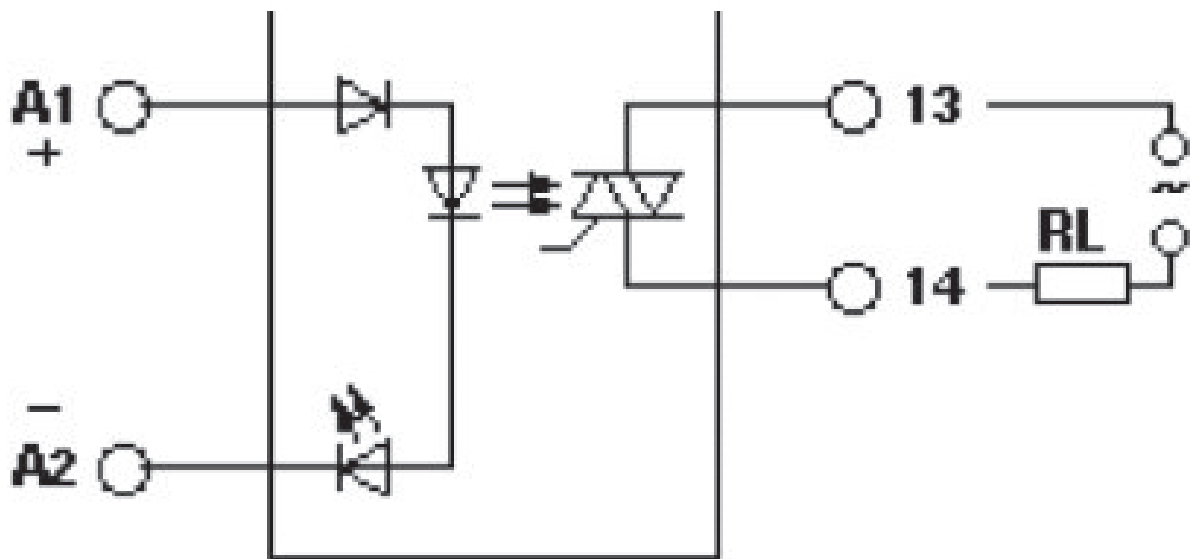
- ① In rows with zero spacing
- ② stand-alone device

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Circuit diagram



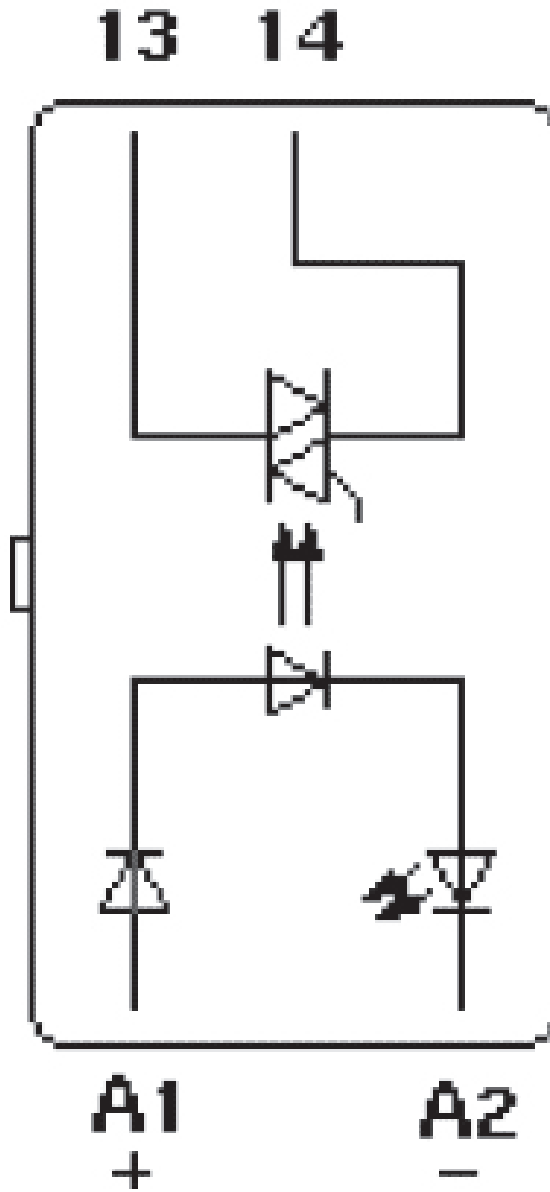
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Circuit diagram



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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2903231>



**EAC**

Approval ID: RU\*C-DE.\*08.B.00010

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## Classifications

### ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

### ETIM

ETIM 10.0	EC001504
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### UNSPSC

UNSPSC 21.0	39122300
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## 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.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
SCIP	0a051117-802b-47c8-bfc3-8f375e982785

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