

# ST-OV2- 12DC/ 60DC/1 - Solid-state relay



2905022

<https://www.phoenixcontact.com/us/products/2905022>

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Plug-in power solid-state relay, with LED and protective circuit in input and output circuits, input: 12 V DC, output: 12 - 60 V DC/max. 1 A, can be plugged into basic terminal blocks

The figure shows version ST-OV  
2- 5 DC/ 60 DC/1

## Commercial data

Item number	2905022
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK61B2
GTIN	4017918079161
Weight per piece (including packing)	25.34 g
Weight per piece (excluding packing)	25.34 g
Customs tariff number	85364190
Country of origin	DE

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## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Product properties

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

Date of last data management	05.09.2025
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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 $U_N$	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 $U_N$	$\leq 0.4$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.8$
Typical input current at $U_N$	7 mA
Typical response time	20 $\mu$ s
Typical turn-off time	200 $\mu$ s
Status display	LED (yellow)
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection
Transmission frequency	500 Hz

### Output data

Design of digital output	electronic
Output voltage range	12 V DC ... 60 V DC
Limiting continuous current	1 A (see derating curve)
Surge current	5 A (t = 1 s)
Peak offstate voltage	60 V DC (Collector-emitter reverse voltage)
Voltage drop at max. limiting continuous current	1.2 V
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection

### Dimensions

Width	14.6 mm
Height	33 mm

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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 0110b, Gr. C for 250 V DC
	DIN VDE 0160 (in relevant parts)

## 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



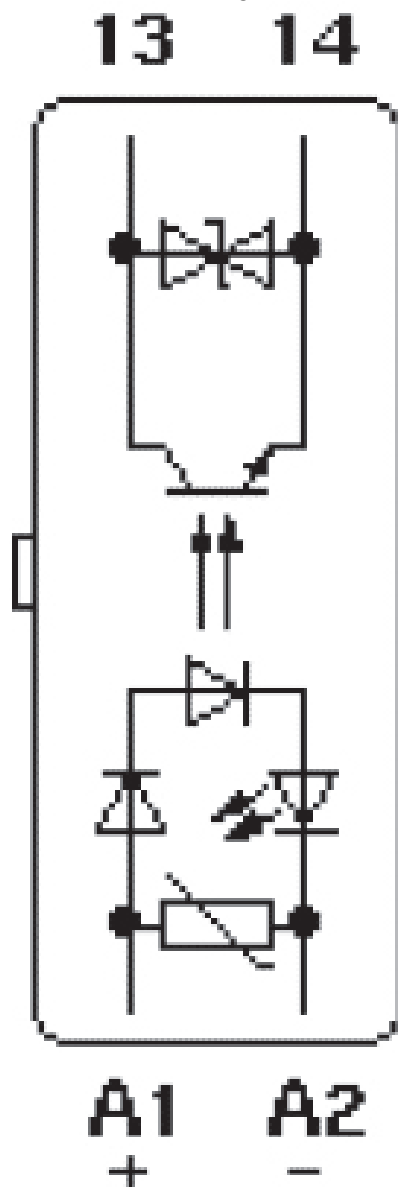
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Circuit diagram



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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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