

# ST-OV3-110DC/220DC/1 - Solid-state relay



2903189

<https://www.phoenixcontact.com/us/products/2903189>

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Plug-in power solid-state relay, with LED and protective circuit in input and output circuits, input: 110 V DC, output: 15 - 220 V DC/max. 1 A, can be plugged into basic terminal blocks

The figure shows version ST-OV  
3- 5 DC/220 DC/1

## Commercial data

Item number	2903189
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK61B2
GTIN	4017918078973
Weight per piece (including packing)	50.95 g
Weight per piece (excluding packing)	50.95 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)
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### 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, voltage	$\leq 7$ V
Switching threshold "1" signal voltage	$\geq 19$ V
Typical input current at $U_N$	6 mA
Typical response time	25 $\mu$ s
Typical turn-off time	1 ms
Transmission frequency	100 Hz

### Output data

Design of digital output	electronic
Output voltage range	15 V DC ... 220 V DC
Limiting continuous current	1 A (see derating curve)
Surge current	2 A (t = 1 s)
Peak offstate voltage	220 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	20.8 mm
Height	33 mm
Depth	66.5 mm

### Material specifications

Color	green (RAL 6021)
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### Environmental and real-life conditions

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
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Ambient temperature (storage/transport)
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-20 °C ... 70 °C
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## Standards and regulations

Standards/regulations
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DIN VDE 0110
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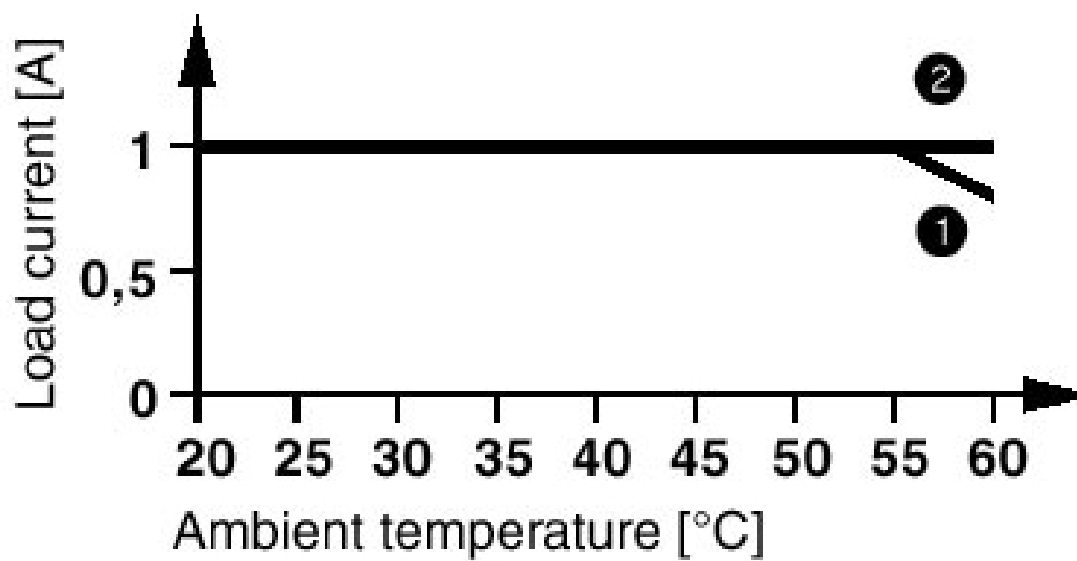
## Mounting

Mounting position
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any
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Drawings

Diagram



- ① mounted in rows with zero spacing.
- ② power optocouplers mounted in rows,  $\geq 20$  mm.

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Circuit diagram

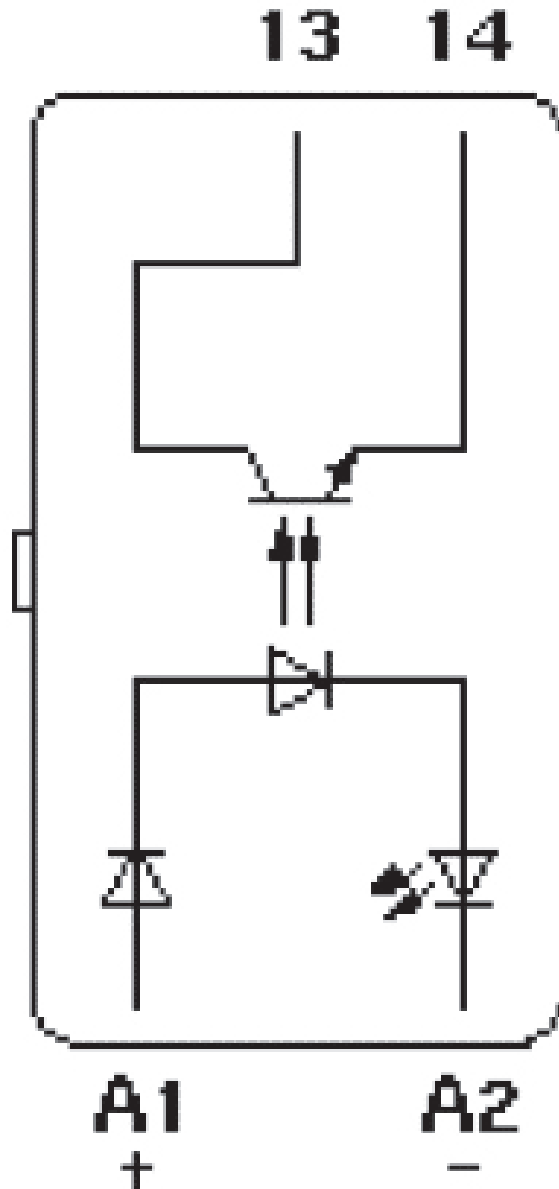


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Circuit diagram



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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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