

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



2903189

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

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

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



2903189

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

## 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 $U_N$	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)
-------	------------------

### Environmental and real-life conditions

#### Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
---------------------------------	------------------

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



2903189

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

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

## Standards and regulations

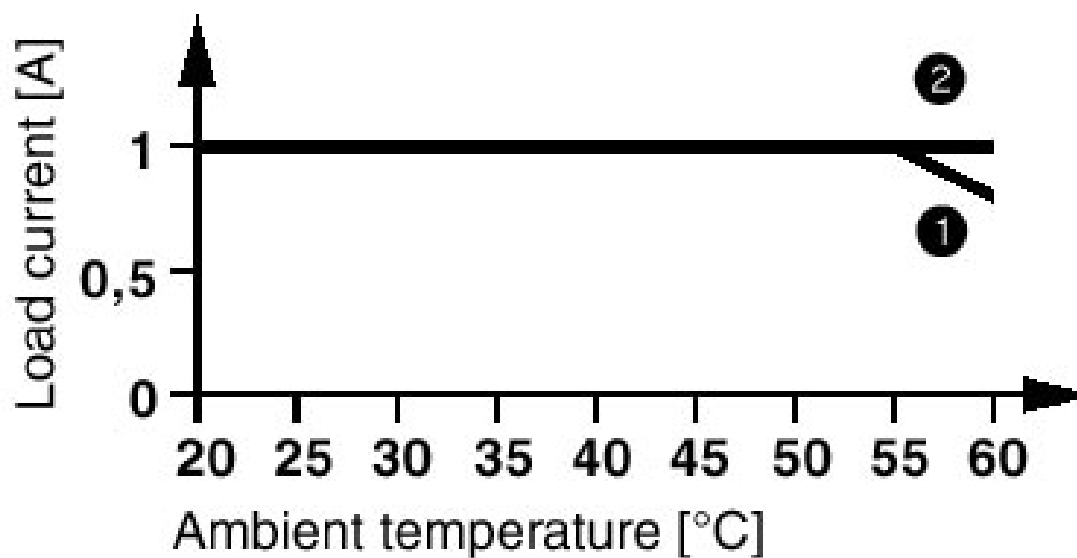
Standards/regulations	DIN VDE 0110
-----------------------	--------------

## Mounting

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

Drawings

Diagram



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

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



2903189

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

Circuit diagram

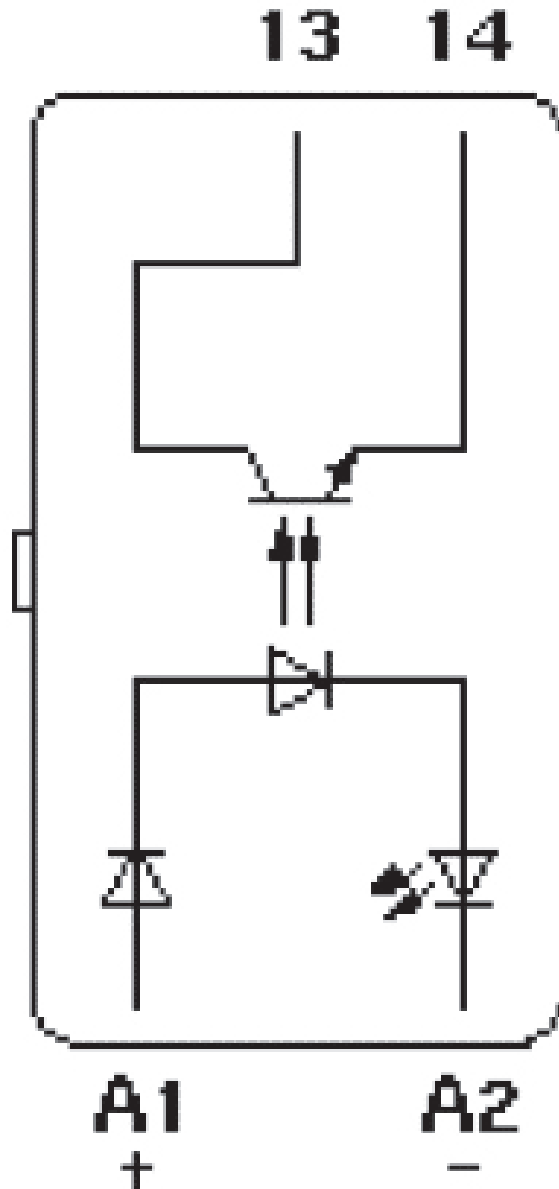


# ST-OV3-110DC/220DC/1 - Solid-state relay

2903189

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

Circuit diagram



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



2903189

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

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)