

ST-OV3-120AC/220DC/1 - Solid-state relay



2903163

<https://www.phoenixcontact.com/us/products/2903163>

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: 120 V AC, 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	2903163
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK61B2
GTIN	4017918078959
Weight per piece (including packing)	58.58 g
Weight per piece (excluding packing)	58.58 g
Customs tariff number	85364900
Country of origin	DE

ST-OV3-120AC/220DC/1 - Solid-state relay



2903163

<https://www.phoenixcontact.com/us/products/2903163>

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, voltage	≤ 10.5 V
Switching threshold "1" signal voltage	≥ 29 V
Typical input current at U_N	5 mA
Typical response time	4 ms
Typical turn-off time	35 ms
Transmission frequency	10 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-OV3-120AC/220DC/1 - Solid-state relay



2903163

<https://www.phoenixcontact.com/us/products/2903163>

Ambient temperature (storage/transport)

-20 °C ... 70 °C

Standards and regulations

Standards/regulations

DIN VDE 0110

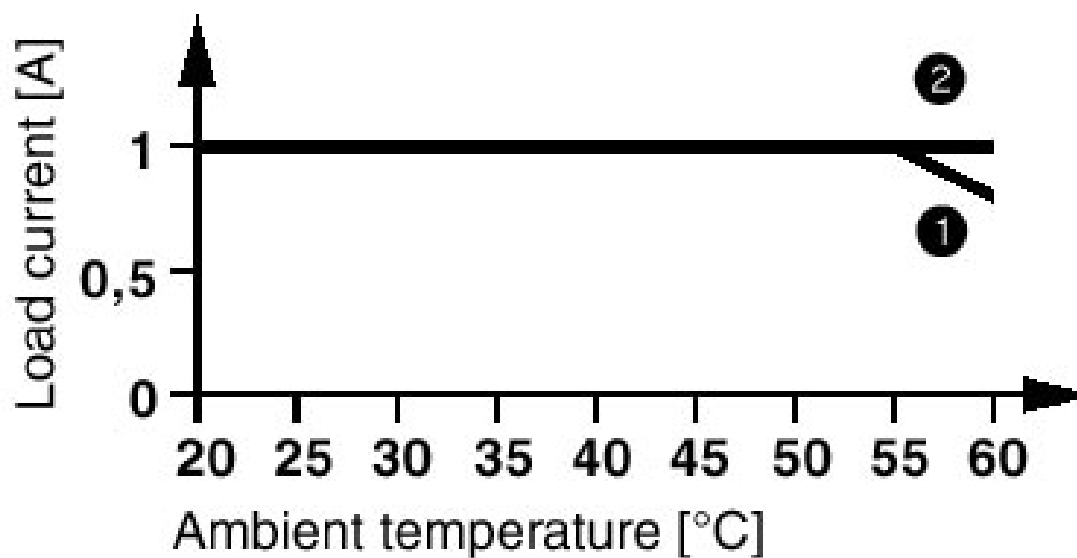
Mounting

Mounting position

any

Drawings

Diagram



- ① mounted in rows with zero spacing.
- ② power optocouplers mounted in rows, ≥ 20 mm.

ST-OV3-120AC/220DC/1 - Solid-state relay

2903163

<https://www.phoenixcontact.com/us/products/2903163>

Circuit diagram



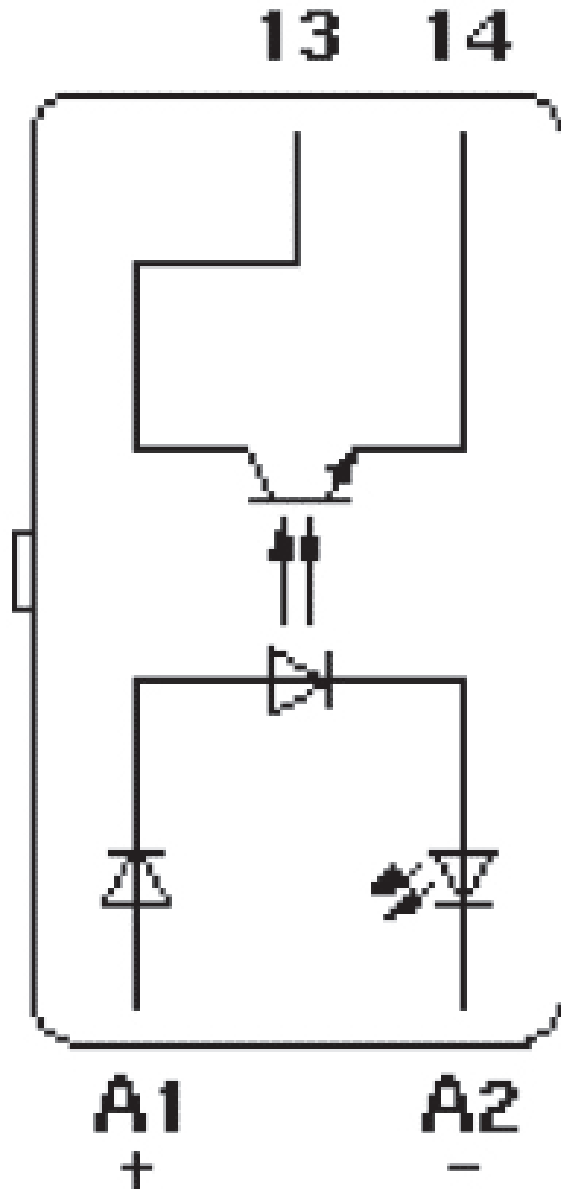
ST-OV3-120AC/220DC/1 - Solid-state relay

2903163

<https://www.phoenixcontact.com/us/products/2903163>



Circuit diagram



ST-OV3-120AC/220DC/1 - Solid-state relay



2903163

<https://www.phoenixcontact.com/us/products/2903163>

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