

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



2903231

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

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: 24 V DC, output: 24 - 280 V AC/max. 3 A, can be plugged into basic terminal blocks

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	CK61B1
Catalog page	Page 92 (IF-2005)
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

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



2903231

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

Technical data

Product properties

Product type	Single solid-state relay
Data management status	
Date of last data management	03.05.2024
Article revision	05

Electrical properties

Test voltage (Input/output)	2.5 kV AC (Input/output)
-----------------------------	--------------------------

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	≤ 0.4
Switching threshold "1" signal in reference to U_N	≥ 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

Width	20.8 mm
Height	33 mm
Depth	66.5 mm

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



2903231

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

Material specifications

Color	green (RAL 6021)
-------	------------------

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
-----------------------	--------------

Mounting

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

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

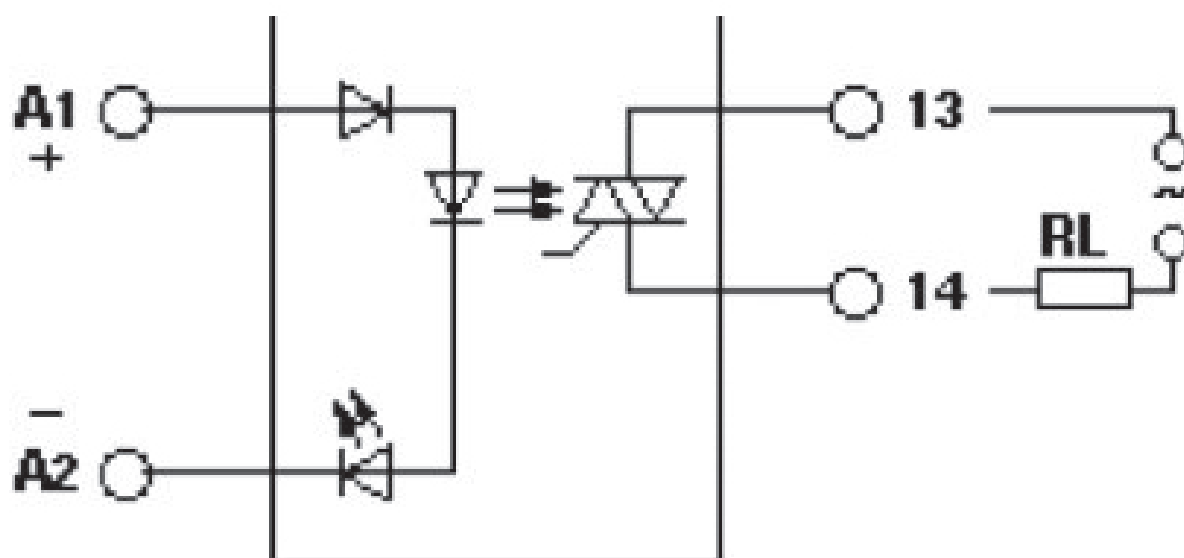


2903231

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

Drawings

Circuit diagram



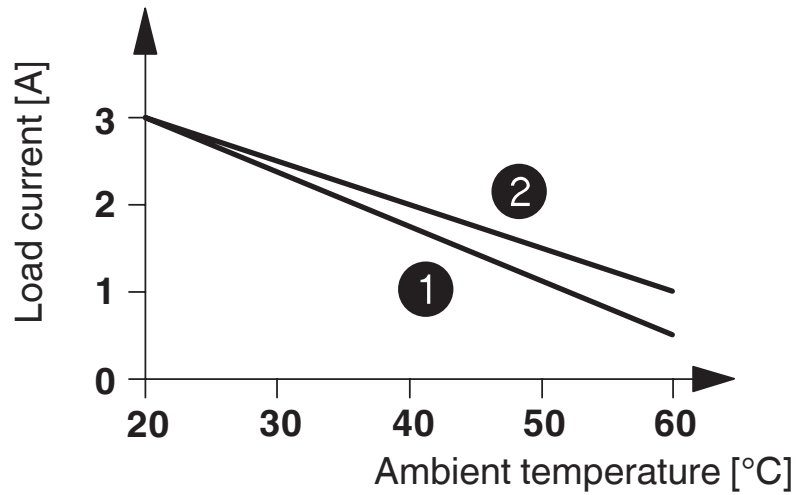
ST-OV3- 24DC/240AC/3 - Solid-state relay

2903231

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



Diagram



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

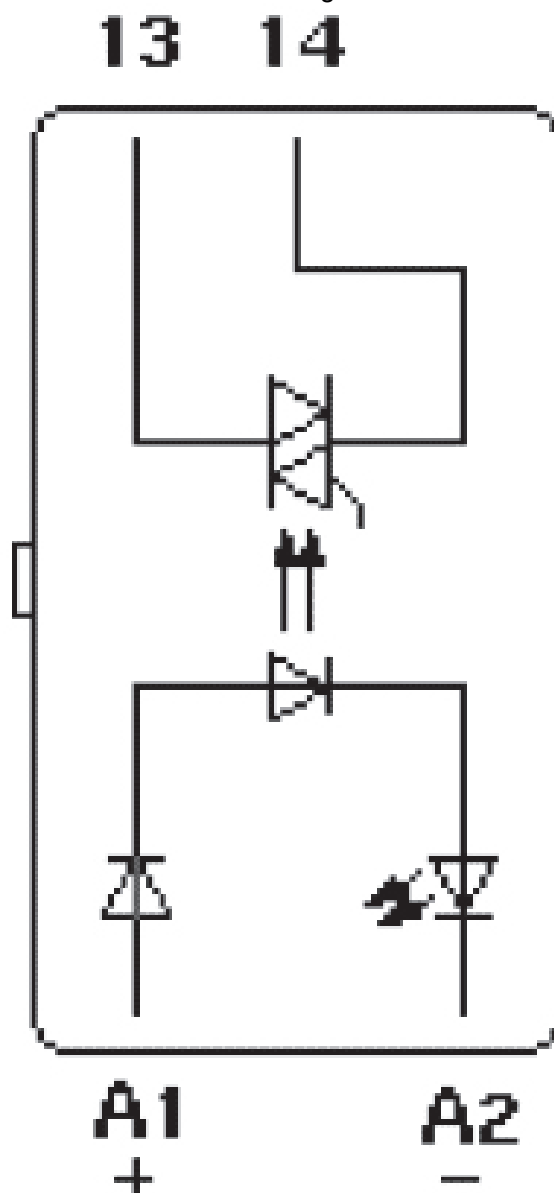
ST-OV3- 24DC/240AC/3 - Solid-state relay

2903231

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



Circuit diagram



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



2903231

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

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

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



2903231

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

Classifications

ECLASS

ECLASS-11.0	27371604
ECLASS-12.0	27371604
ECLASS-13.0	27371604

ETIM

ETIM 9.0	EC001504
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

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



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

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

Phoenix Contact 2024 © - 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