

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



2903231

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

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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

The figure shows version ST-OV
3- 5 DC/240 AC/3

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	DK61B1
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

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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	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

Item dimensions	
Width	20.8 mm
Height	33 mm
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

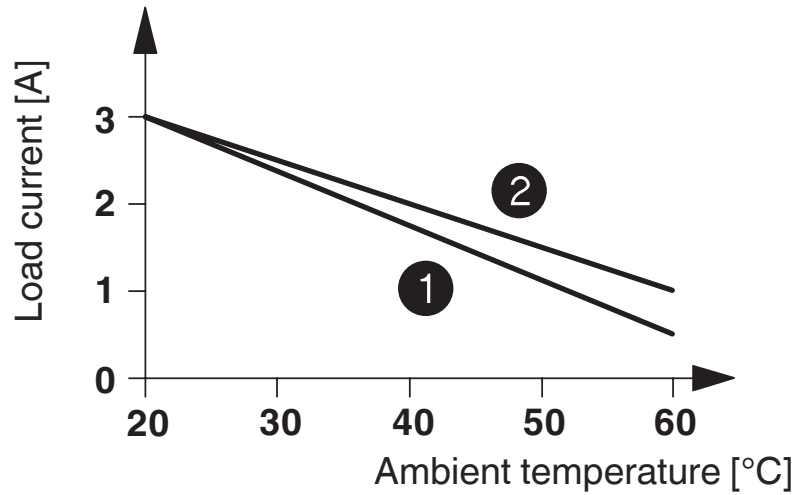
Standards/regulations	DIN VDE 0110
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Mounting

Mounting position	any
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Drawings

Diagram



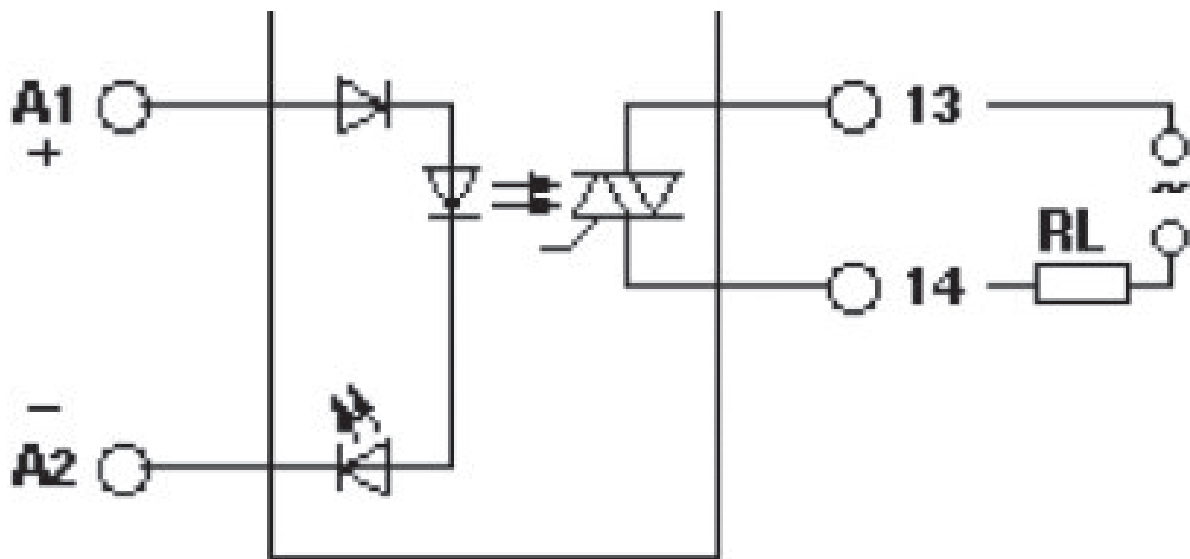
- ① In rows with zero spacing
- ② stand-alone device

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Circuit diagram

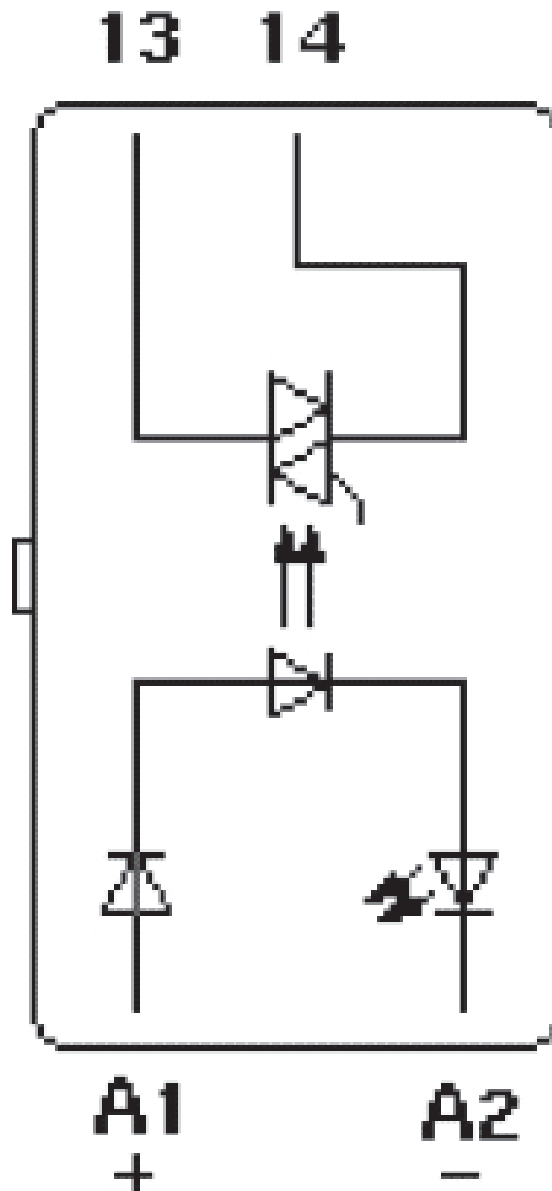


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Circuit diagram



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Classifications

ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

ETIM

ETIM 10.0	EC001504
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UNSPSC

UNSPSC 21.0	39122300
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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

EF3.1 Climate Change

CO2e kg	1.056 kg CO2e
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