

ST-OV2- 24DC/ 24DC/5 - Solid-state relay



2905491

<https://www.phoenixcontact.com/pc/products/2905491>

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: 3 - 30 V DC/max. 5 A, can be plugged into basic terminal blocks

Commercial data

Item number	2905491
Packing unit	10 pc
Minimum order quantity	1 pc
Product key	DK61B1
GTIN	4017918079444
Weight per piece (including packing)	42.17 g
Weight per piece (excluding packing)	34.39 g
Customs tariff number	85364190
Country of origin	DE

ST-OV2- 24DC/ 24DC/5 - Solid-state relay



2905491

<https://www.phoenixcontact.com/pc/products/2905491>

Technical data

Product properties

Product type	Single solid-state relay
Data management status	
Date of last data management	19.03.2025

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	50 μ s
Typical turn-off time	200 μ s
Status display	LED (yellow)
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection
Transmission frequency	300 Hz

Output data

Design of digital output	electronic
Output voltage range	3 V DC ... 30 V DC
Limiting continuous current	5 A (see derating curve)
Peak offstate voltage	30 V DC (Collector-emitter reverse voltage)
Voltage drop at max. limiting continuous current	0.3 V
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection

Dimensions

Width	14.6 mm
Height	33 mm
Depth	66.5 mm

Material specifications

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

Environmental and real-life conditions

ST-OV2- 24DC/ 24DC/5 - Solid-state relay



2905491

<https://www.phoenixcontact.com/pc/products/2905491>

Ambient conditions

Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

Standards and regulations

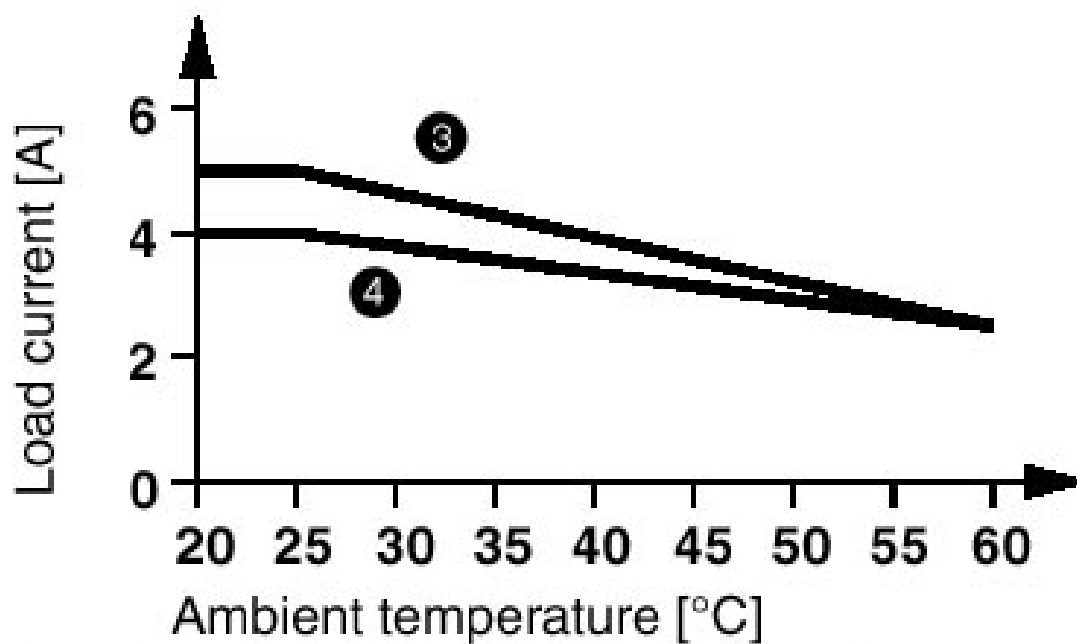
Standards/regulations	IEC 60664
	IEC 60664A
	DIN VDE 0110

Mounting

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

Drawings

Diagram



- ③ power optocouplers mounted in rows with zero spacing, horizontally, or with spacing of > 10 mm, vertically.
- ④ power optocouplers mounted in rows with zero spacing, vertically.

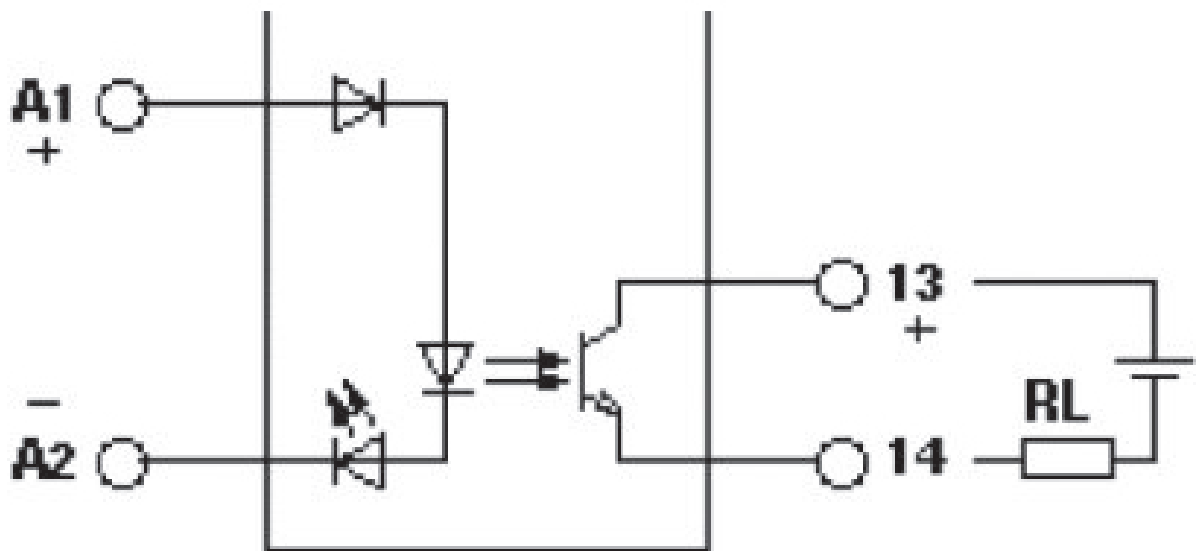
ST-OV2- 24DC/ 24DC/5 - Solid-state relay

2905491

<https://www.phoenixcontact.com/pc/products/2905491>



Circuit diagram



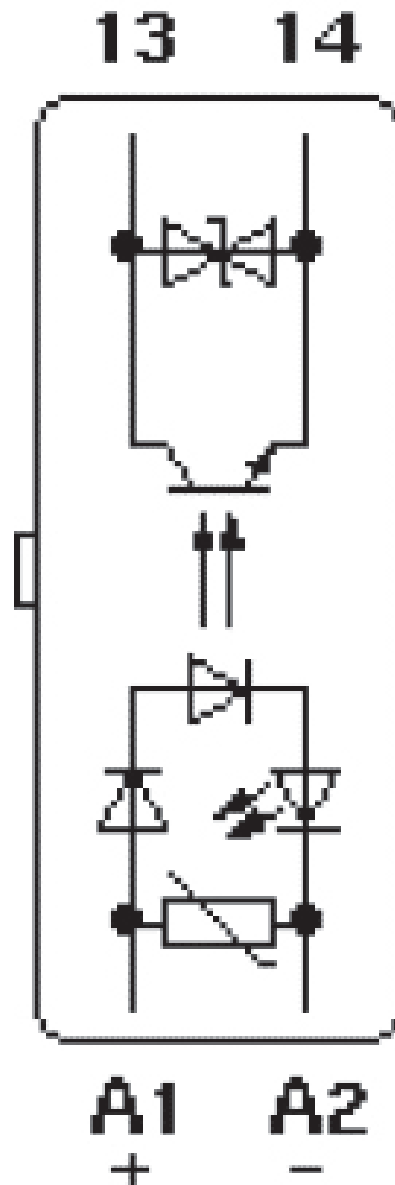
ST-OV2- 24DC/ 24DC/5 - Solid-state relay

2905491

<https://www.phoenixcontact.com/pc/products/2905491>



Circuit diagram



ST-OV2- 24DC/ 24DC/5 - Solid-state relay



2905491

<https://www.phoenixcontact.com/pc/products/2905491>

Classifications

ECLASS

ECLASS-13.0	27371604
-------------	----------

ETIM

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

UNSPSC

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

ST-OV2- 24DC/ 24DC/5 - Solid-state relay



2905491

<https://www.phoenixcontact.com/pc/products/2905491>

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	d48d3039-9ad1-4af5-9cc2-18b5f9c2cf9f

ST-OV2- 24DC/ 24DC/5 - Solid-state relay

2905491

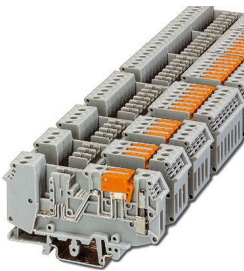
<https://www.phoenixcontact.com/pc/products/2905491>

Mandatory accessories

URELG 2-PMTK - Basic terminal block

2820835

<https://www.phoenixcontact.com/pc/products/2820835>



Basic terminal blocks with test pick-off on both sides and knife disconnection for NS 32 and NS 35/7,5 DIN rail, with end cover, for ST-REL..., ST-OV..., and ST-OE... plugs, 2-pos.

UDK-RELG 2 - Basic terminal block

2777030

<https://www.phoenixcontact.com/pc/products/2777030>



Basic terminal blocks with test pick-off on both sides and double connections with the same potential for NS 32 and NS 35/7,5 DIN rail, with end cover, for ST-REL..., ST-OV..., and ST-OE... plugs, 2-pos.

ST-OV2- 24DC/ 24DC/5 - Solid-state relay



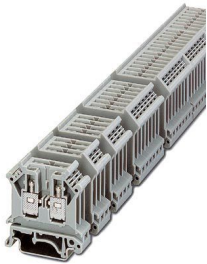
2905491

<https://www.phoenixcontact.com/pc/products/2905491>

URELG 2 - Basic terminal block

2820262

<https://www.phoenixcontact.com/pc/products/2820262>



Basic termination blocks with screw connection for NS 32 and NS 35/7.5 DIN rail, with end cover, for ST-REL..., ST-OV... and ST-OE... plugs, 2-pos.

ZFK-RELG 2 - Basic terminal block

2829904

<https://www.phoenixcontact.com/pc/products/2829904>



Basic termination blocks with spring-cage connection for NS 35/7.5 DIN rail, with end cover, for ST-REL..., ST-OV... and ST-OE... plugs, 2-pos.

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstraße 8
D-32825 Blomberg
+49 (0) 5235-3 00
info@phoenixcontact.com