

## Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/3 A

### Your advantages

- Vibration and shock resistant
- RT III-proof (wash-proof)
- Wear-free and durable
- Can be soldered on PCB
- Switching capacity of up to 24 V DC/3 A



### Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 017918 130947
GTIN	4017918130947
Sales Key	08

### Technical data

#### Dimensions

Width	5 mm
Height	28 mm
Depth	15 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Degree of protection	RT III

#### Input data

# Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

## Technical data

### 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, voltage	$\leq 10$ V
Switching threshold "1" signal voltage	$\geq 16$ V
Typical input current at $U_N$	7 mA
Typical response time	20 $\mu$ s (at $U_N$ )
Typical turn-off time	300 $\mu$ s (at $U_N$ )
Transmission frequency	300 Hz
Power dissipation for nominal condition	0.17 W

### Output data

Output voltage range	3 V DC ... 33 V DC
Limiting continuous current	3 A (see derating curve)
Maximum inrush current	15 A (10 ms)
Voltage drop at max. limiting continuous current	$\leq 150$ mV
Output circuit	2-wire, floating
Type of protection	Reverse polarity protection
	Surge protection

### General

Test voltage input/output	2.5 kV (50 Hz, 1 min.)
Mounting position	any
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor

### Standards and Regulations

Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III

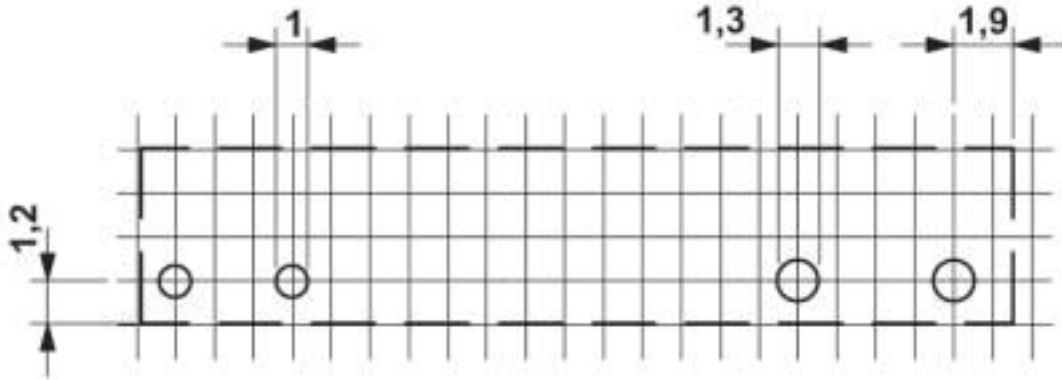
### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

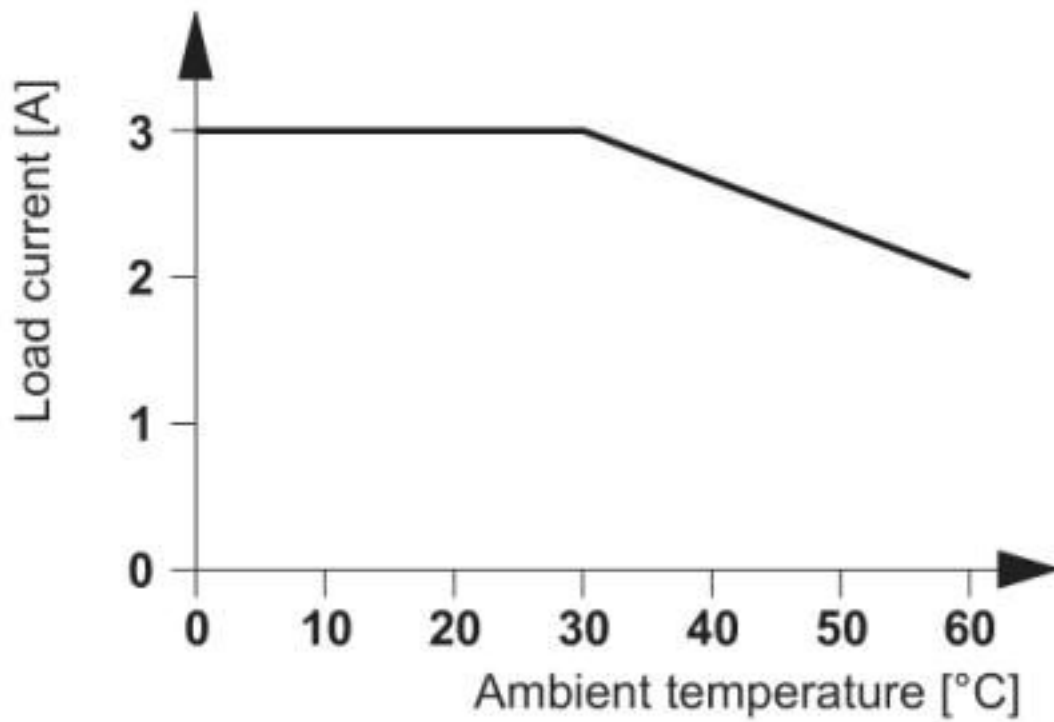
# Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

Drilling diagram



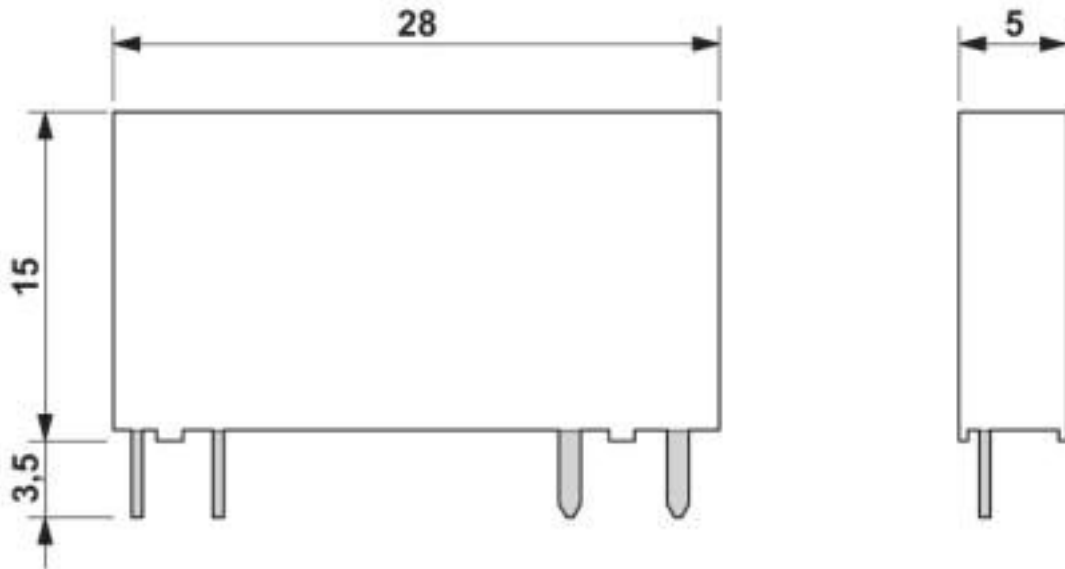
a = pitch division 1.25 mm and 1.27 mm

Diagram

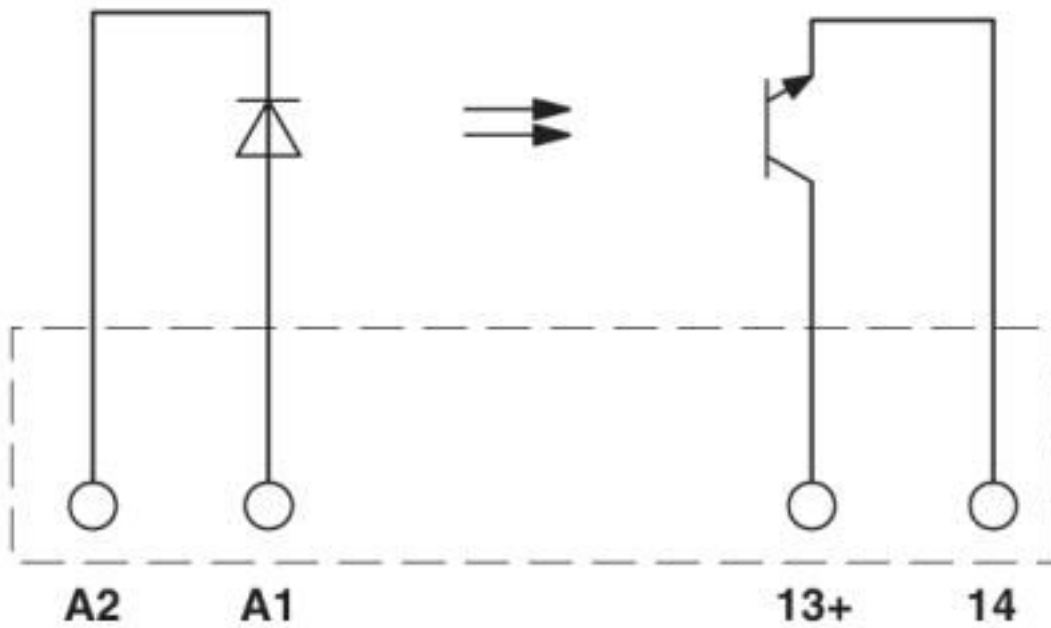


# Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

Dimensional drawing



Circuit diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27371604
eCl@ss 11.0	27371604
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100

# Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

## Classifications

### eCl@ss

eCl@ss 5.0	27371000
eCl@ss 5.1	27371000
eCl@ss 6.0	27371600
eCl@ss 7.0	27371604
eCl@ss 8.0	27371604
eCl@ss 9.0	27371604

### ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504
ETIM 6.0	EC001504
ETIM 7.0	EC001504

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39122326
UNSPSC 18.0	39122326
UNSPSC 19.0	39122326
UNSPSC 20.0	39122326
UNSPSC 21.0	39122326

## Approvals

### Approvals

---

Approvals

UL Recognized / cUL Recognized / PRS / GL / UL Recognized / cUL Recognized / EAC

---

### Ex Approvals

---

### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYVV/template/LISEXT/1FRAME/index.htm</a>	FILE E 195083
---------------	--	---	---------------

# Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

## Approvals

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 195083
PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2109/880590/16
GL		<a href="https://approvalfinder.dnvgi.com/">https://approvalfinder.dnvgi.com/</a>	46016-03 HH
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 195083
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 195083
EAC			TR_TS_D_00573_c

## Accessories

### Additional products

Relay base - PLC-BPT- 24DC/21 - 2900445



6.2 mm PLC basic terminal block with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

Relay base - PLC-BSC- 24DC/21 - 2966016



6.2 mm PLC basic terminal block with screw connection, without relays or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

## Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

### Accessories

Relay base - PLC-BSC- 24DC/21 - 2966016



6.2 mm PLC basic terminal block with screw connection, without relays or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

---

Relay base - PLC-BPT- 48DC/21 - 2900447



6.2 mm PLC basic terminal block with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 48 V DC

---

Relay base - PLC-BSC- 48DC/21 - 2966090



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 48 V DC

---

Relay base - PLC-BPT- 24DC/ 1/SEN - 2900262



6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

---

Relay base - PLC-BSC- 24DC/ 1/SEN - 2966061



6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

---

## Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

### Accessories

#### Relay base - PLC-BPT- 24DC/ 1/ACT - 2900449



6.2 mm PLC basic terminal block for output functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V DC

---

#### Relay base - PLC-BSC- 24DC/ 1/ACT - 2966058



6.2 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V DC

---

#### Relay base - PLC-BPT- 24UC/ 1/ACT - 2900450



6.2 mm PLC basic terminal block for output functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

---

#### Relay base - PLC-BSC- 24UC/ 1/ACT - 2982799



6.2 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

---

#### Relay base - PLC-BSC- 24DC/21/SO46 - 2980458



6.2 mm PLC basic terminal block with protection against interference currents and interference voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on NS 35/7,5 DIN rail, with increased input current consumption, 1 PDT, 24 V DC input voltage

---



## Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

### Accessories

Relay base - RIF-0-BPT/1 - 2901873



RIF-0... relay base, for miniature power relay with 1 N/O contact or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

---

Relay base - RIF-0-BSC/ 1 - 2901872



RIF-0... relay base, for miniature power relay with 1 N/O contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

---

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>