

OPT- 5DC/ 24DC/ 2 - Miniature solid-state relay



2967989

<https://www.phoenixcontact.com/gb/products/2967989>

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 miniature solid-state relay, power solid-state relay, 1 N/O contact, input voltage: 5 V DC



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

Commercial data

Item number	2967989
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CK61F2
Product key	CK61F2
Catalog page	Page 396 (C-5-2019)
GTIN	4017918820763
Weight per piece (including packing)	5.24 g
Weight per piece (excluding packing)	3.5 g
Customs tariff number	85364190
Country of origin	HU

OPT- 5DC/ 24DC/ 2 - Miniature solid-state relay



2967989

<https://www.phoenixcontact.com/gb/products/2967989>

Technical data

Product properties

Product type	Single solid-state relay
Operating mode	100% operating factor

Insulation characteristics

Insulation	Basic insulation
------------	------------------

Insulation characteristics: Standards/regulations

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	0.05 W
Test voltage (Input/output)	2.5 kV (50 Hz, 1 min., input/output)

Input data

Nominal input voltage U_N	5 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
Input voltage range	4 V DC ... 6 V DC
Switching threshold "0" signal, voltage	≤ 0.8 V
Switching threshold "1" signal voltage	≥ 2.5 V
Typical input current at U_N	9 mA
Typical response time	20 μ s (at U_N)
Typical turn-off time	300 μ s (at U_N)
Transmission frequency	300 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
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	≤ 150 mV
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection
	Surge protection

Dimensions

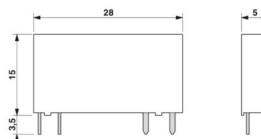
OPT- 5DC/ 24DC/ 2 - Miniature solid-state relay



2967989

<https://www.phoenixcontact.com/gb/products/2967989>

Dimensional drawing



Width	5 mm
Height	28 mm
Depth	15 mm

Material specifications

Color	black (RAL 9005)
-------	------------------

Environmental and real-life conditions

Ambient conditions

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

Approvals

Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Standards and regulations

Standards/regulations

Standards/regulations	IEC 60664
	EN 50178

Mounting

Assembly instructions	in rows with zero spacing
Mounting position	any

OPT- 5DC/ 24DC/ 2 - Miniature solid-state relay

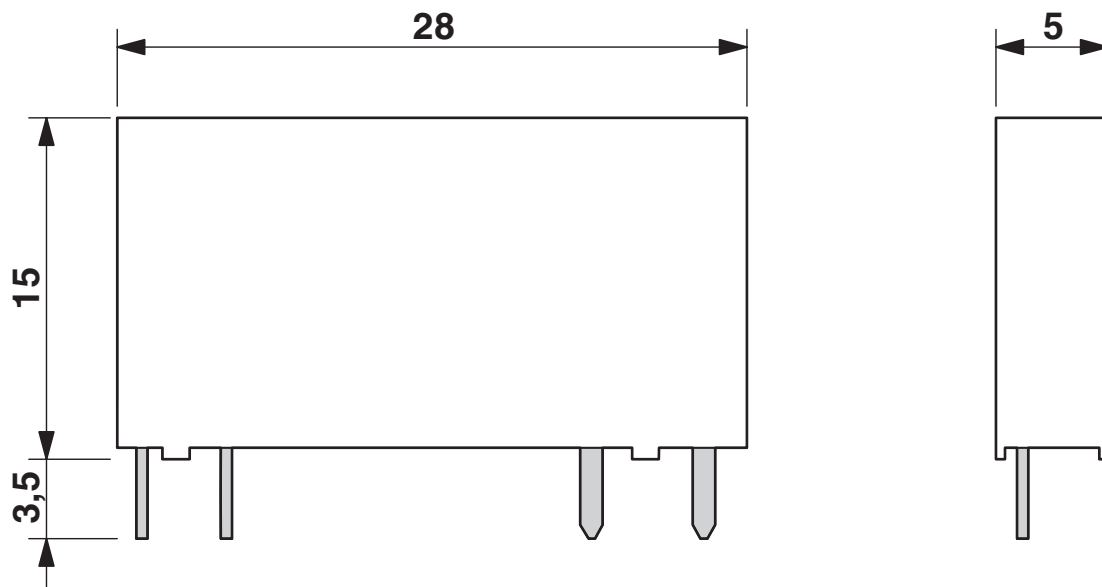
2967989

<https://www.phoenixcontact.com/gb/products/2967989>

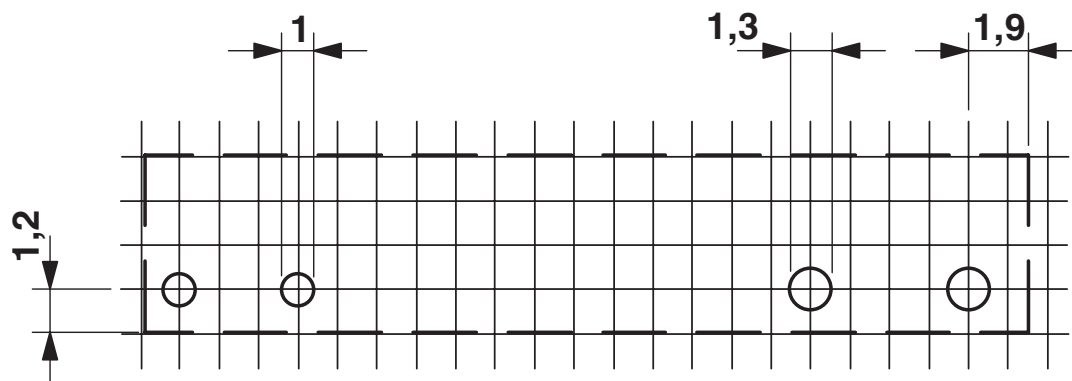


Drawings

Dimensional drawing

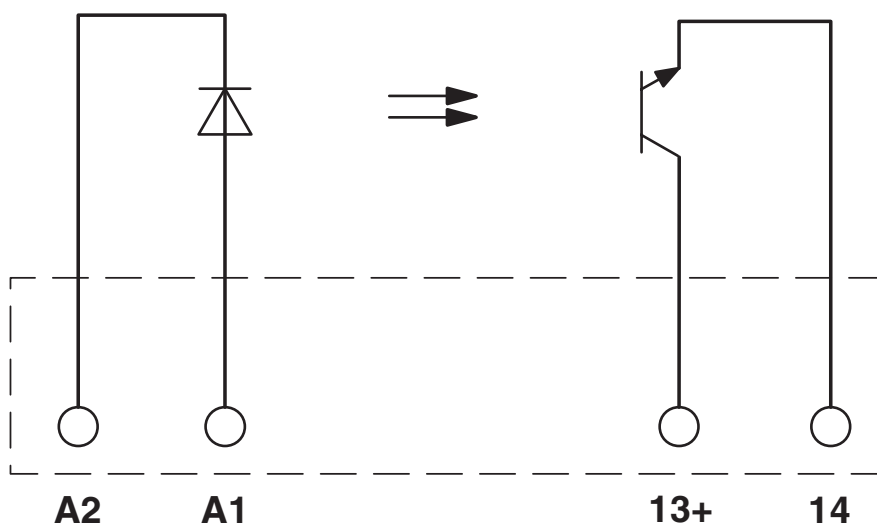


Drilling plan/solder pad geometry

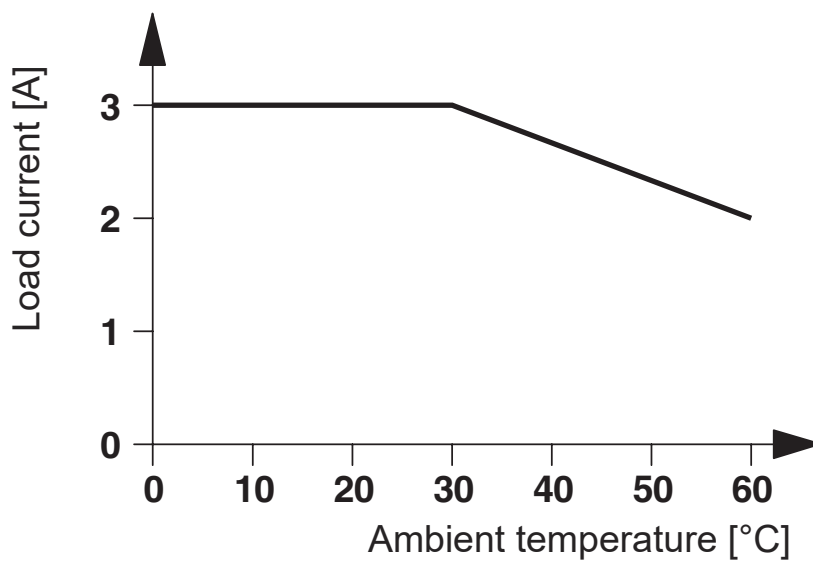


a = pitch division 1.25 mm and 1.27 mm

Circuit diagram



Diagram



OPT- 5DC/ 24DC/ 2 - Miniature solid-state relay



2967989

<https://www.phoenixcontact.com/gb/products/2967989>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2967989>



cUL Recognized
Approval ID: FILE E 195083



UL Recognized
Approval ID: FILE E 195083



EAC
Approval ID: TR_TS_D_00573_c



UL Recognized
Approval ID: FILE E 195083



cUL Recognized
Approval ID: FILE E 195083



GL
Approval ID: 46016-03 HH

OPT- 5DC/ 24DC/ 2 - Miniature solid-state relay



2967989

<https://www.phoenixcontact.com/gb/products/2967989>

Classifications

ECLASS

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

ETIM

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

UNSPSC

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

OPT- 5DC/ 24DC/ 2 - Miniature solid-state relay



2967989

<https://www.phoenixcontact.com/gb/products/2967989>

Environmental product compliance

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

OPT- 5DC/ 24DC/ 2 - Miniature solid-state relay



2967989

<https://www.phoenixcontact.com/gb/products/2967989>

Mandatory accessories

PLC-BPT- 5DC/21 - Relay base

2900443

<https://www.phoenixcontact.com/gb/products/2900443>



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 changeover contact, input voltage 5 V DC

PLC-BSC- 5DC/21 - Relay base

2980225

<https://www.phoenixcontact.com/gb/products/2980225>



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 changeover contact, input voltage 5 V DC

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT Ltd

Halesfield 13, Telford

Shropshire, TF7 4PG

01952 681700

info@phoenixcontact.co.uk