

OPT-60DC/230AC/ 1 - Miniature solid-state relay



2967963

<https://www.phoenixcontact.com/sk/products/2967963>

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: 60 V DC, output: 24 - 253 V AC/0.75 A

Your advantages

- Vibration and shock resistant
- RT III-proof (wash-proof)
- Wear-free and durable
- Switching power of up to 24 V DC/5 A
- Zero voltage switch at AC output
- Can be soldered on PCB

Commercial data

Item number	2967963
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to order (non-returnable)
Sales key	CK6
Product key	CK61F3
Catalog page	Page 397 (C-5-2019)
GTIN	4017918190521
Weight per piece (including packing)	4.11 g
Weight per piece (excluding packing)	4 g
Customs tariff number	85364190
Country of origin	DE

OPT-60DC/230AC/ 1 - Miniature solid-state relay



2967963

<https://www.phoenixcontact.com/sk/products/2967963>

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	0.18 W
Test voltage (Input/output)	2.5 kV (50 Hz, 1 min., input/output)

Input data

Nominal input voltage U_N	60 V DC
Input voltage range in reference to U_N	0.9 ... 1.1
Input voltage range	54 V DC ... 66 V DC
Switching threshold "0" signal, voltage	≤ 15 V
Switching threshold "1" signal voltage	≥ 50 V
Typical input current at U_N	3 mA
Typical response time	9 ms (at U_N)
Typical turn-off time	700 μ s (at U_N)
Transmission frequency	10 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output voltage range	24 V AC ... 253 V AC
Limiting continuous current	0.75 A (see derating curve)
Maximum inrush current	30 A (10 ms)
Min. load current	10 mA
Leakage current	< 1 mA (in off state)
Phase angle $\cos \phi$ min	0.5
Max. load value	4.5 A ² s
Voltage drop at max. limiting continuous current	< 1 V
Output circuit	2-conductor floating, zero voltage switch
Protective circuit	RCV circuit; RCV circuit

Dimensions

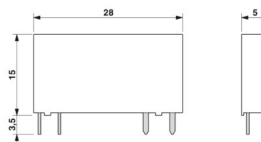
OPT-60DC/230AC/ 1 - Miniature solid-state relay



2967963

<https://www.phoenixcontact.com/sk/products/2967963>

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-60DC/230AC/ 1 - Miniature solid-state relay

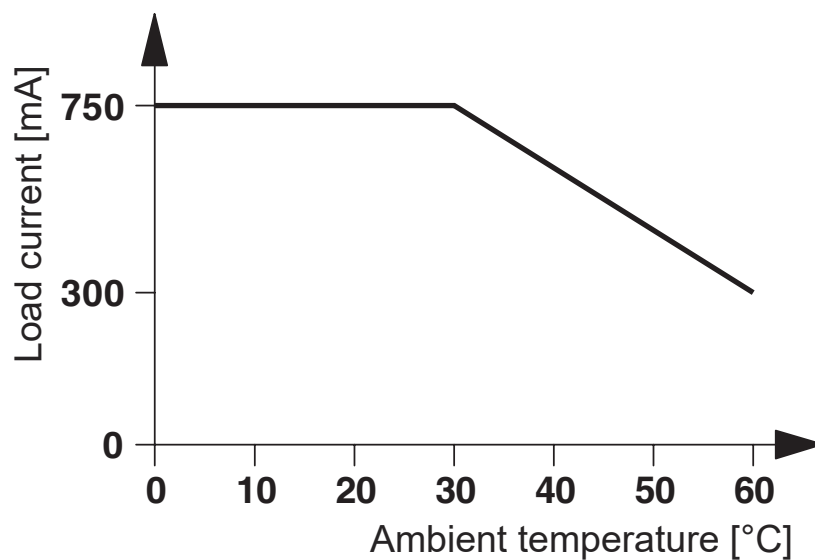
2967963

<https://www.phoenixcontact.com/sk/products/2967963>

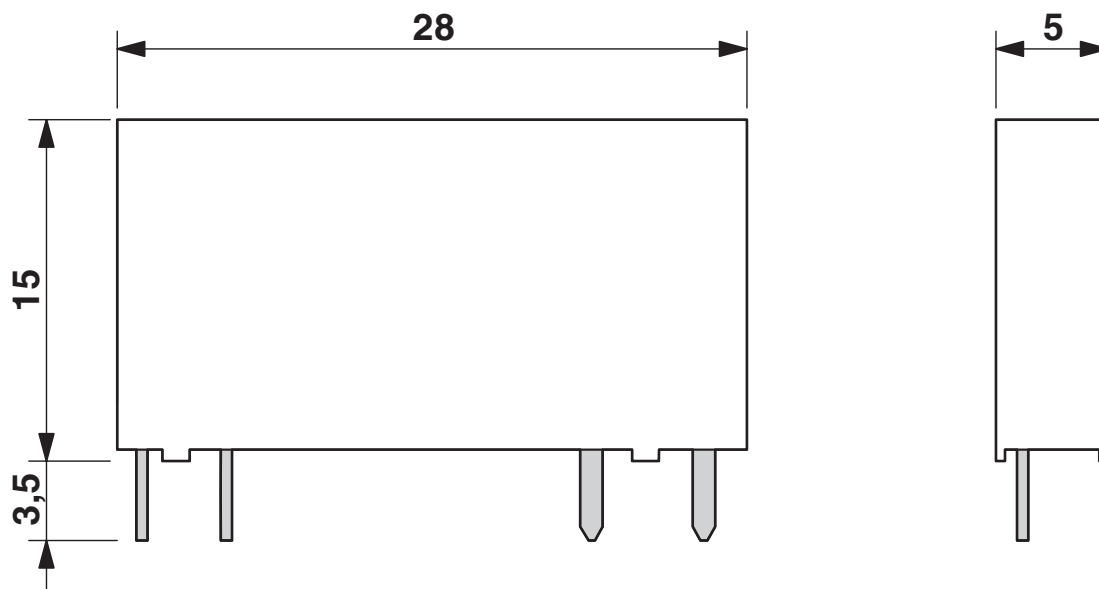


Drawings

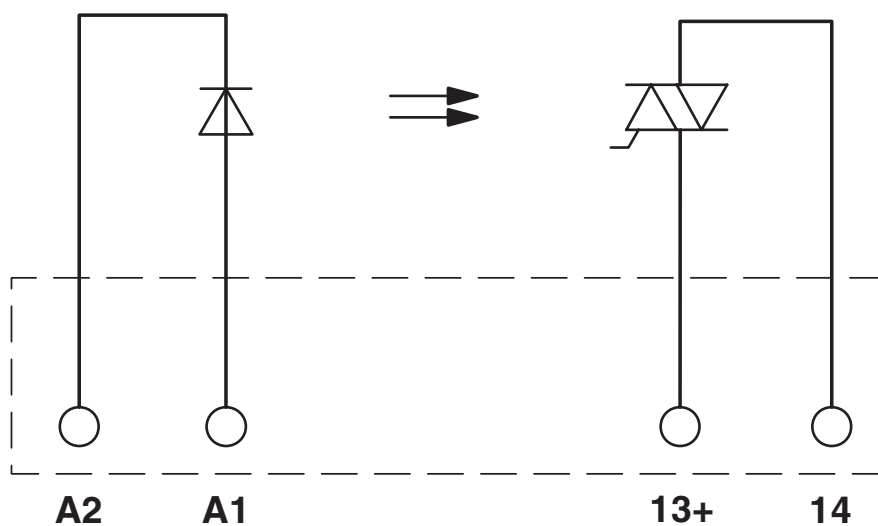
Diagram



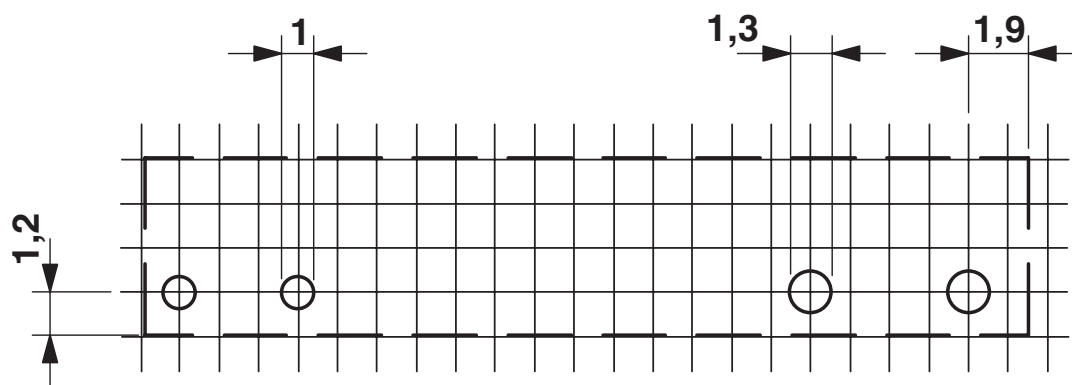
Dimensional drawing



Circuit diagram



Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

OPT-60DC/230AC/ 1 - Miniature solid-state relay



2967963

<https://www.phoenixcontact.com/sk/products/2967963>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/sk/products/2967963>



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



EAC
Approval ID: RU*C-DE.*08.B.00010



cUL Recognized
Approval ID: FILE E 195083



GL
Approval ID: 46016-03 HH

OPT-60DC/230AC/ 1 - Miniature solid-state relay



2967963

<https://www.phoenixcontact.com/sk/products/2967963>

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-60DC/230AC/ 1 - Miniature solid-state relay



2967963

<https://www.phoenixcontact.com/sk/products/2967963>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a)

China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	7b1088cc-3309-4620-a913-7476772a8ca6

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

PHOENIX CONTACT s.r.o.
Námestie Mateja Korvína 1
811 07 Bratislava
+421 2 3210 1470
obchod.sk@phoenixcontact.com