

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

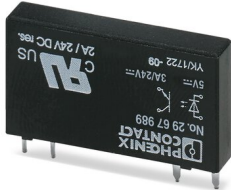


2967989

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

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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	1 pc
Minimum order quantity	10 pc
Sales Key	C05
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

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Technical Data

Product properties

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

Insulation characteristics

Overvoltage category	III
Pollution degree	2
Insulation	Basic insulation

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 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

Dimensional drawing	
Width	5 mm

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Height	28 mm
Depth	15 mm

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

Approval data

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

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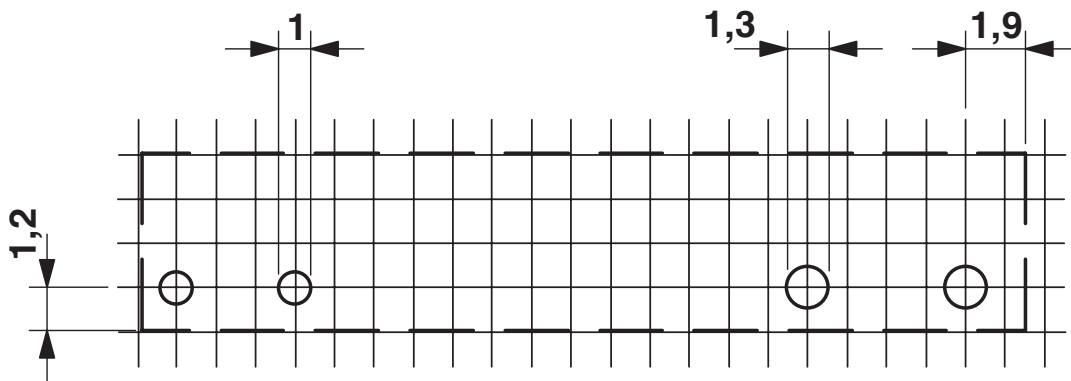


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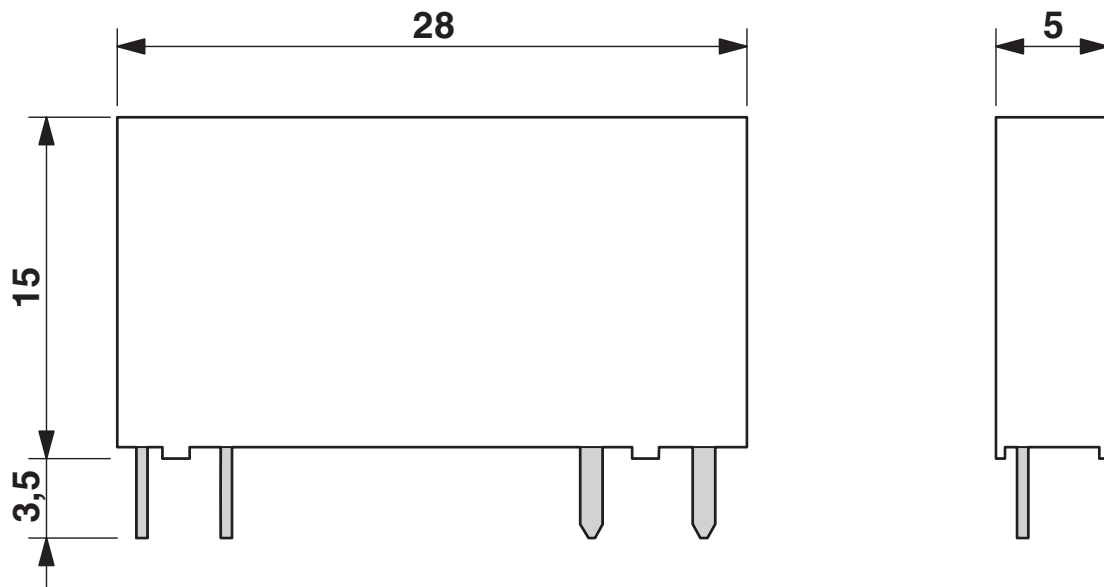
Drawings

Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

Dimensional drawing



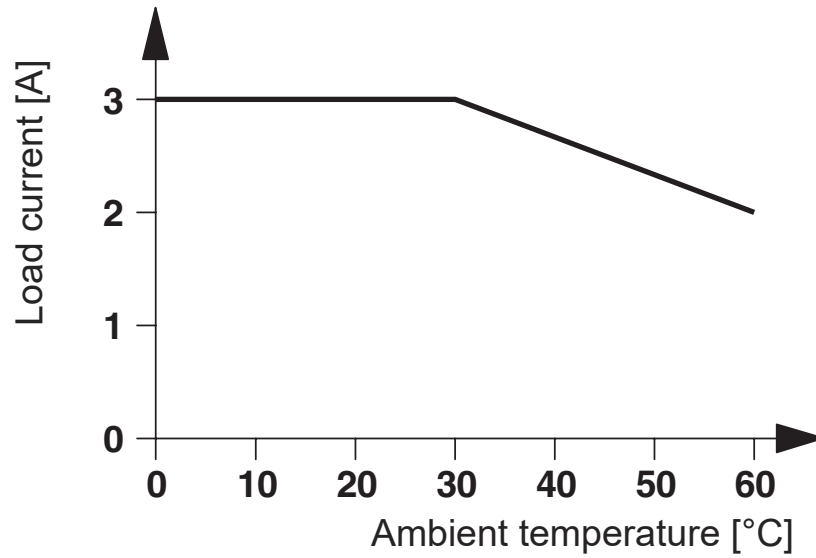
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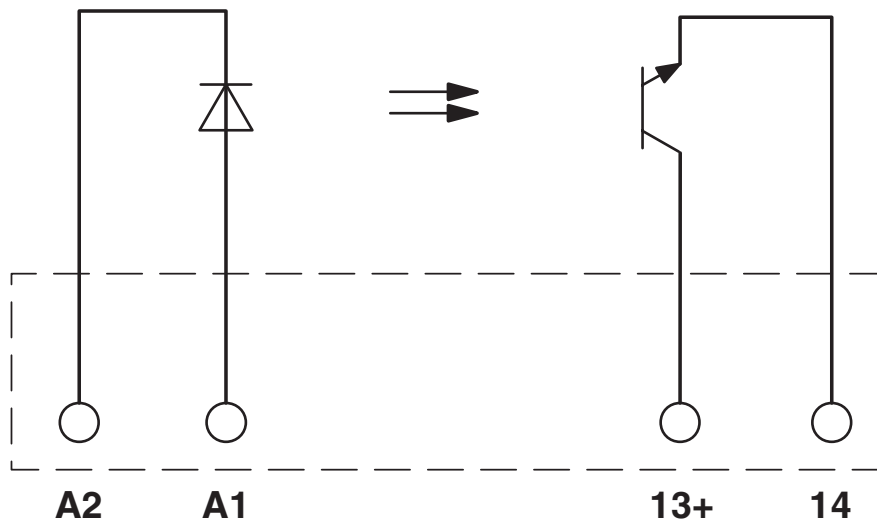
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Diagram



Circuit diagram



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Approvals



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



PRC
Approval ID: TE/2109/880590/16



cUL Recognized
Approval ID: FILE E 195083



GL
Approval ID: 46016-03 HH

Nominal Voltage U_N

Nominal Current I_N

Cross Section AWG

Cross Section mm^2

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Classifications

ECLASS

ECLASS-9.0	27371604
ECLASS-10.0.1	27371604
ECLASS-11.0	27371604

ETIM

ETIM 8.0	EC001504
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UNSPSC

UNSPSC 21.0	39122300
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Environmental Product Compliance

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

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Accessories

Relay base

Relay base - PLC-BPT- 5DC/21 - 2900443

<https://www.phoenixcontact.com/us/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

Relay base

Relay base - PLC-BSC- 5DC/21 - 2980225

<https://www.phoenixcontact.com/us/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

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Relay base

Relay base - PLC-BSC- 5DC/ 1/SEN - 2980267

<https://www.phoenixcontact.com/us/products/2980267>



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 5 V DC

Relay base

Relay base - PLC-BPT- 5DC/ 1/ACT - 2900448

<https://www.phoenixcontact.com/us/products/2900448>



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 5 V DC

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Relay base

Relay base - PLC-BSC- 5DC/ 1/ACT - 2980241

<https://www.phoenixcontact.com/us/products/2980241>



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 5 V DC

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