

OPT- 5DC/230AC/ 1 - Miniature solid-state relay



2982139

<https://www.phoenixcontact.com/us/products/2982139>

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Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 5 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
- Can be soldered on PCB

Commercial Data

Item number	2982139
Packing unit	1 pc
Minimum order quantity	10 pc
Note	Made to Order (non-returnable)
Sales Key	C460
Product Key	CK61B3
GTIN	4046356418973
Weight per Piece (including packing)	4.12 g
Weight per Piece (excluding packing)	4.12 g
Customs tariff number	85364190
Country of origin	DE

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Technical Data

Product properties

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

Insulation characteristics: Standards/regulations

Overvoltage category	III
Pollution degree	2

Electrical properties

Standards/regulations

Rated insulation voltage	260 V AC
Rated surge voltage	4 kV (Basic insulation)

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	≤ 1.4 V
Switching threshold "1" signal voltage	≥ 3 V
Typical input current at U_N	7 mA
Typical response time	10 ms
Typical turn-off time	10 ms
Transmission frequency	10 Hz

Output data

Contact 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

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Dimensional drawing	
Width	5 mm
Height	28 mm
Depth	15 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT III
Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 75 °C

Approval data

Corrosive gas test

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

Standards/regulations

Standards/regulations	IEC 60664 EN 50178
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Mounting

Assembly instructions	in rows with zero spacing
Mounting position	any

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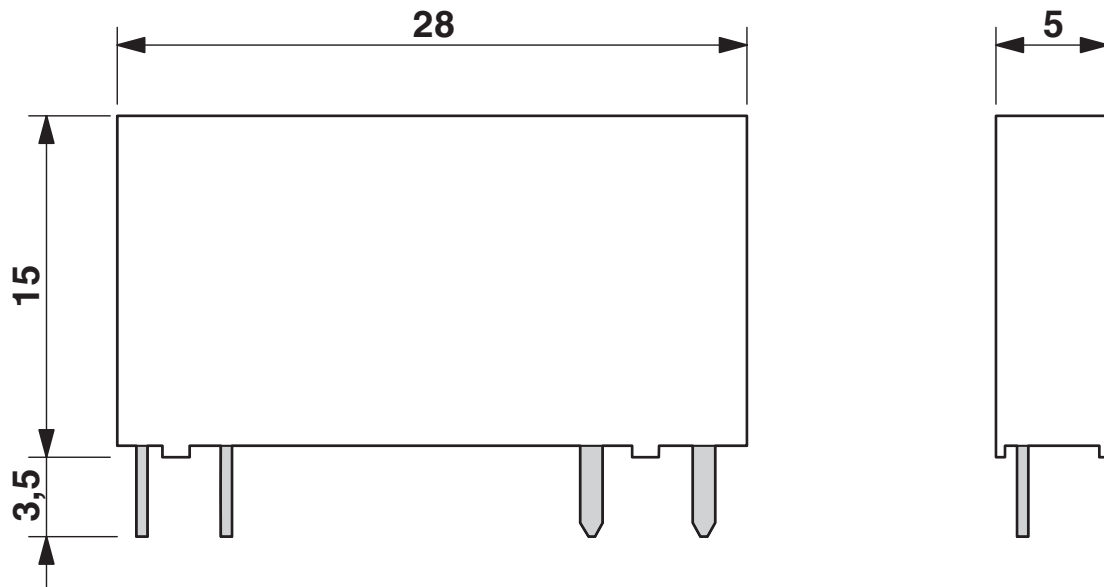


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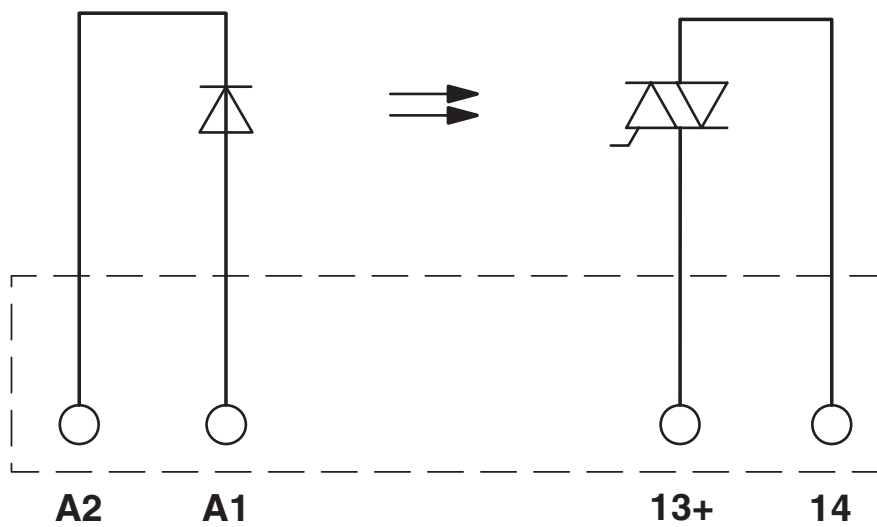
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Drawings

Dimensional drawing



Circuit diagram



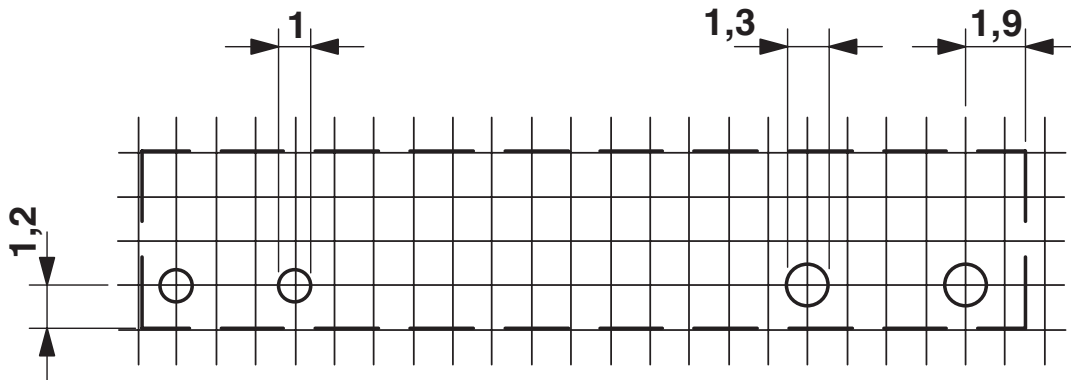
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Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

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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



EAC

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

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Classifications

ECLASS

ECLASS-11.0

27371604

ETIM

ETIM 8.0

EC001504

UNSPSC

UNSPSC 21.0

39122300

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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

PLC-BSC- 5DC/21 - Relay base

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

PLC-BPT- 5DC/21 - Relay base

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

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