

Miniature solid-state relay - OPT-60DC/ 24DC/ 2



2966605

<https://www.phoenixcontact.com/de/produkte/2966605>

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Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 60 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

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Commercial Data

Item number	2966605
Packing unit	10 pc
Minimum order quantity	10 pc
Sales Key	G1 - Relais
Product Key	CK61F2
Catalog Page	Page 396 (C-5-2019)
GTIN	4017918130923
Weight per Piece (including packing)	5,42 g
Weight per Piece (excluding packing)	5,42 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	0.18 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	0.8 ... 1.2
Input voltage range	48 V DC ... 72 V DC
Switching threshold "0" signal, voltage	≤ 20 V
Switching threshold "1" signal voltage	≥ 35 V
Typical input current at U_N	3 mA
Typical response time	40 μ s (at U_N)
Typical turn-off time	500 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; Polarity protection diode 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

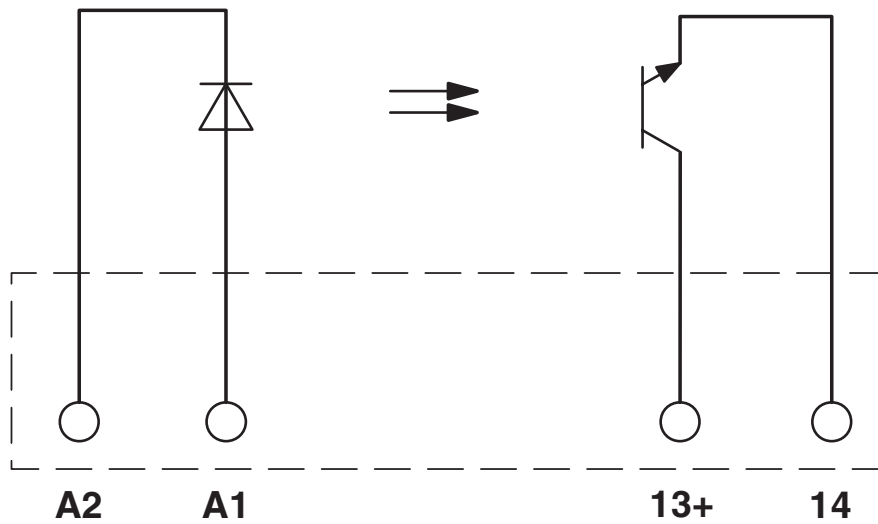
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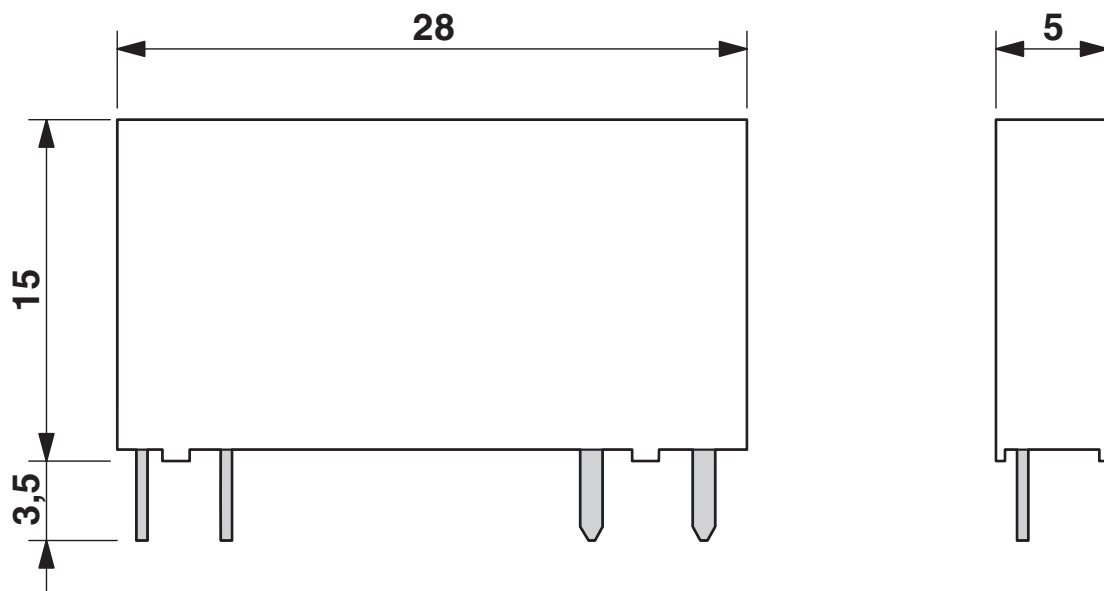
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Drawings

Circuit diagram



Dimensional drawing

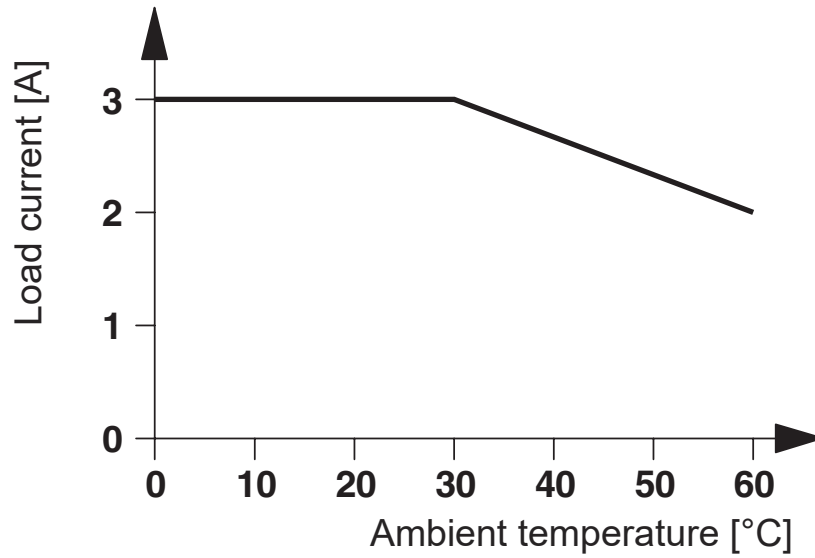


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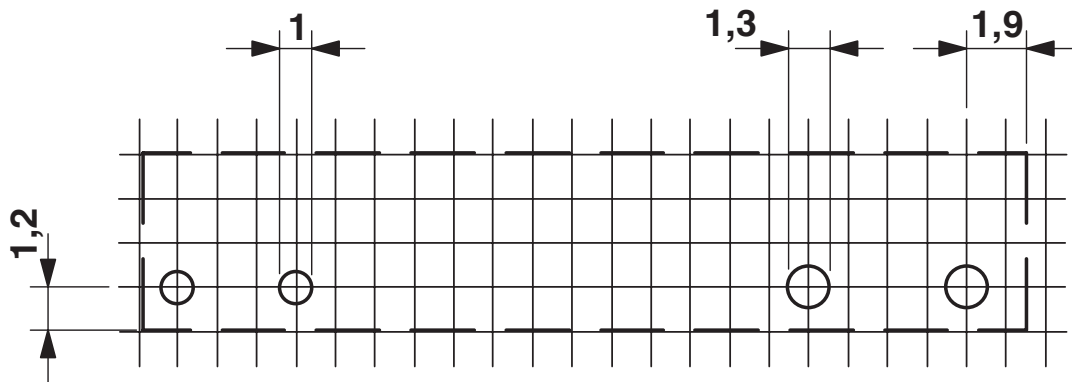
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Diagram



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



UL Recognized
Approval ID: FILE E 195083



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



PRS
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- 60DC/21 - 2900279

<https://www.phoenixcontact.com/de/produkte/2900279>



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 60 V DC

Relay base

Relay base - PLC-BSC- 60DC/21 - 2966100

<https://www.phoenixcontact.com/de/produkte/2966100>



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 60 V DC

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Relay base

Relay base - PLC-BPT-120UC/21 - 2900280

<https://www.phoenixcontact.com/de/produkte/2900280>



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 120 V AC/DC

Relay base

Relay base - PLC-BSC-120UC/21 - 2966032

<https://www.phoenixcontact.com/de/produkte/2966032>



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 120 V AC/DC

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Relay base

Relay base - PLC-BPT-230UC/21 - 2900281

<https://www.phoenixcontact.com/de/produkte/2900281>



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 230 V AC/DC

Relay base

Relay base - PLC-BSC-230UC/21 - 2966045

<https://www.phoenixcontact.com/de/produkte/2966045>



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 230 V AC/DC

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Relay base

Relay base - PLC-BPT-120UC/ 1/SEN - 2900451

<https://www.phoenixcontact.com/de/produkte/2900451>



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 120 V AC/DC

Relay base

Relay base - PLC-BSC-120UC/ 1/SEN - 2966074

<https://www.phoenixcontact.com/de/produkte/2966074>



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 120 V AC/DC

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Relay base

Relay base - PLC-BPT-230UC/ 1/SEN - 2900452

<https://www.phoenixcontact.com/de/produkte/2900452>



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 230 V AC/DC

Relay base

Relay base - PLC-BSC-230UC/ 1/SEN - 2966087

<https://www.phoenixcontact.com/de/produkte/2966087>



6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on NS 35/7,5 DIN rail, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage: 230 V AC/DC

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Relay base

Relay base - PLC-BPT-120UC/21/SO46 - 2900453

<https://www.phoenixcontact.com/de/produkte/2900453>



6.2 mm PLC basic terminal block against interference currents/voltages on the control side with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 120 V AC

Relay base

Relay base - PLC-BSC-120UC/21/SO46 - 2980319

<https://www.phoenixcontact.com/de/produkte/2980319>



6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 120 V AC

Miniature solid-state relay - OPT-60DC/ 24DC/ 2

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Relay base

Relay base - PLC-BPT-230UC/21/SO46 - 2900455

<https://www.phoenixcontact.com/de/produkte/2900455>



6.2 mm PLC basic terminal block against interference currents/voltages on the control side with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 230 V AC

Relay base

Relay base - PLC-BSC-230UC/21/SO46 - 2980335

<https://www.phoenixcontact.com/de/produkte/2980335>



6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 230 V AC

Miniature solid-state relay - OPT-60DC/ 24DC/ 2

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Relay base

Relay base - PLC-BPT-120UC/ 1/SEN/SO46 - 2900456

<https://www.phoenixcontact.com/de/produkte/2900456>



6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with push-in connection, without relay or solid-state relay, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 120 V AC

Relay base

Relay base - PLC-BSC-120UC/ 1/SEN/SO46 - 2980322

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6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with screw connection, without relay or solid-state relay, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 120 V AC

Miniature solid-state relay - OPT-60DC/ 24DC/ 2



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Relay base

Relay base - PLC-BPT-230UC/ 1/SEN/SO46 - 2900457

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6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with push-in connection, without relay or solid-state relay, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 230 V AC

Relay base

Relay base - PLC-BSC-230UC/ 1/SEN/SO46 - 2980348

<https://www.phoenixcontact.com/de/produkte/2980348>



6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with screw connection, without relay or solid-state relay, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 230 V AC

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