

## Miniature solid-state relay - OPT-60DC/230AC/ 1 - 2967963

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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



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 017918 190521
GTIN	4017918190521
Weight per Piece (excluding packing)	5.560 g
Custom tariff number	85364190
Country of origin	Germany

### Technical data

#### Dimensions

Width	5 mm
Height	28 mm
Depth	15 mm

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## Technical data

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C

### 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	$\leq 15$ V
Switching threshold "1" signal voltage	$\geq 50$ V
Typical input current at $U_N$	3 mA
Typical response time	9 ms (at $U_N$ )
Typical turn-off time	700 $\mu$ s (at $U_N$ )
Transmission frequency	10 Hz
Power dissipation for nominal condition	0.18 W

### Output data

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)
Max. load value	4.5 A <sup>2</sup> s
Voltage drop at max. limiting continuous current	< 1 V
Output circuit	2-conductor floating, zero voltage switch
Type of protection	RCV circuit
Protective circuit/component	RCV circuit

### General

Test voltage input/output	2.5 kV (50 Hz, 1 min.)
Mounting position	any
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor
Degree of protection	RT III (wash-proof)

### Standards and Regulations

Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178

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Technical data

Standards and Regulations

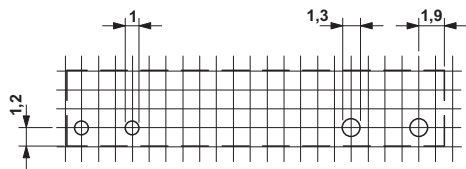
Insulation	Basic insulation
Degree of pollution	2
Overvoltage category	III

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

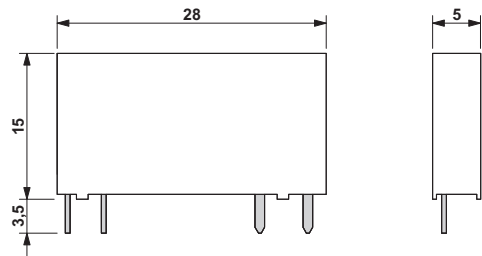
Drilling diagram



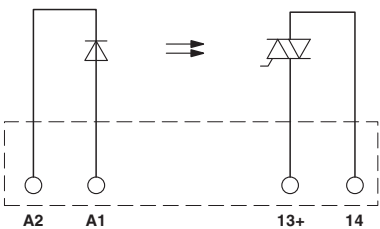
Diagram

a = pitch division 1.25 mm and 1.27 mm

Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 5.0	27371001
eCl@ss 5.1	27371000
eCl@ss 6.0	27371600
eCl@ss 7.0	27371604
eCl@ss 8.0	27371604

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### Classifications

eCl@ss

eCl@ss 9.0	27371604
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ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504
ETIM 6.0	EC001504
ETIM 7.0	EC001504

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39122326

### Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / PRS / GL / UL Recognized / cUL Recognized / EAC

Ex Approvals






### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 195083
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cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 195083
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## Approvals

PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2109/880590/16
GL		<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	46016-03 HH
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 195083
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 195083
EAC			RU C- DE.A*30.B.01082

## Accessories

### Additional products

Relay base - PLC-BPT- 60DC/21 - 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 PDT, input voltage 60 V DC

Relay base - PLC-BSP- 60DC/21 - 2967332



6.2 mm PLC basic terminal block with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 60 V DC

## Miniature solid-state relay - OPT-60DC/230AC/ 1 - 2967963

### Accessories

Relay base - PLC-BSC- 60DC/21 - 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 PDT, input voltage 60 V DC

Relay base - PLC-BPT-120UC/21 - 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 PDT, input voltage 120 V AC/DC

Relay base - PLC-BSP-120UC/21 - 2967167



6.2 mm PLC basic terminal block with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 120 V AC/DC

Relay base - PLC-BSC-120UC/21 - 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 PDT, input voltage 120 V AC/DC

Relay base - PLC-BPT-230UC/21 - 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 PDT, input voltage 230 V AC/DC

## Miniature solid-state relay - OPT-60DC/230AC/ 1 - 2967963

### Accessories

Relay base - PLC-BSP-230UC/21 - 2967183



6.2 mm PLC basic terminal block with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 230 V AC/DC

Relay base - PLC-BSC-230UC/21 - 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 PDT, input voltage 230 V AC/DC

Relay base - PLC-BPT-120UC/ 1/SEN - 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 - PLC-BSP-120UC/ 1/SEN - 2967154



6.2 mm PLC basic terminal block for input functions with spring-cage 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 - PLC-BSC-120UC/ 1/SEN - 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

## Miniature solid-state relay - OPT-60DC/230AC/ 1 - 2967963

### Accessories

Relay base - PLC-BPT-230UC/ 1/SEN - 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 - PLC-BSP-230UC/ 1/SEN - 2967170



6.2 mm PLC basic terminal block for input functions with spring-cage 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 - PLC-BSC-230UC/ 1/SEN - 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

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



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, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 PDT, input voltage 120 V AC

Relay base - PLC-BSP-120UC/21/SO46 - 2980351



6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 PDT, input voltage 120 V AC



## Miniature solid-state relay - OPT-60DC/230AC/ 1 - 2967963

### Accessories

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



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, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 PDT, input voltage 120 V AC

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



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, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 PDT, input voltage 230 V AC

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#### Relay base - PLC-BSP-230UC/21/SO46 - 2980377



6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 PDT, input voltage 230 V AC

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



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, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 PDT, input voltage 230 V AC

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

## Miniature solid-state relay - OPT-60DC/230AC/ 1 - 2967963

### Accessories

Relay base - PLC-BSP-120UC/ 1/SEN/SO46 - 2980364



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

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



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

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



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 - PLC-BSP-230UC/ 1/SEN/SO46 - 2980380



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

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

