

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



### Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 017918 130923
GTIN	4017918130923
Sales Key	08

### Technical data

#### Dimensions

Width	5 mm
Height	28 mm
Depth	15 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Degree of protection	RT III

#### Input data

# Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

## Technical data

### 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	$\leq 20$ V
Switching threshold "1" signal voltage	$\geq 35$ V
Typical input current at $U_N$	3 mA
Typical response time	40 $\mu$ s (at $U_N$ )
Typical turn-off time	500 $\mu$ s (at $U_N$ )
Transmission frequency	300 Hz
Power dissipation for nominal condition	0.18 W

### Output data

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	$\leq 150$ mV
Output circuit	2-wire, floating
Type of protection	Reverse polarity protection
	Surge protection
Protective circuit/component	Polarity protection diode

### 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

### Standards and Regulations

Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III

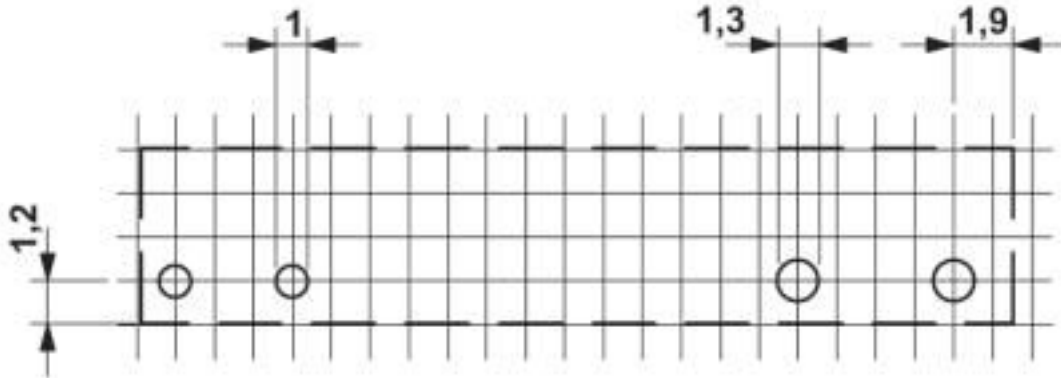
### Environmental Product Compliance

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

## Drawings

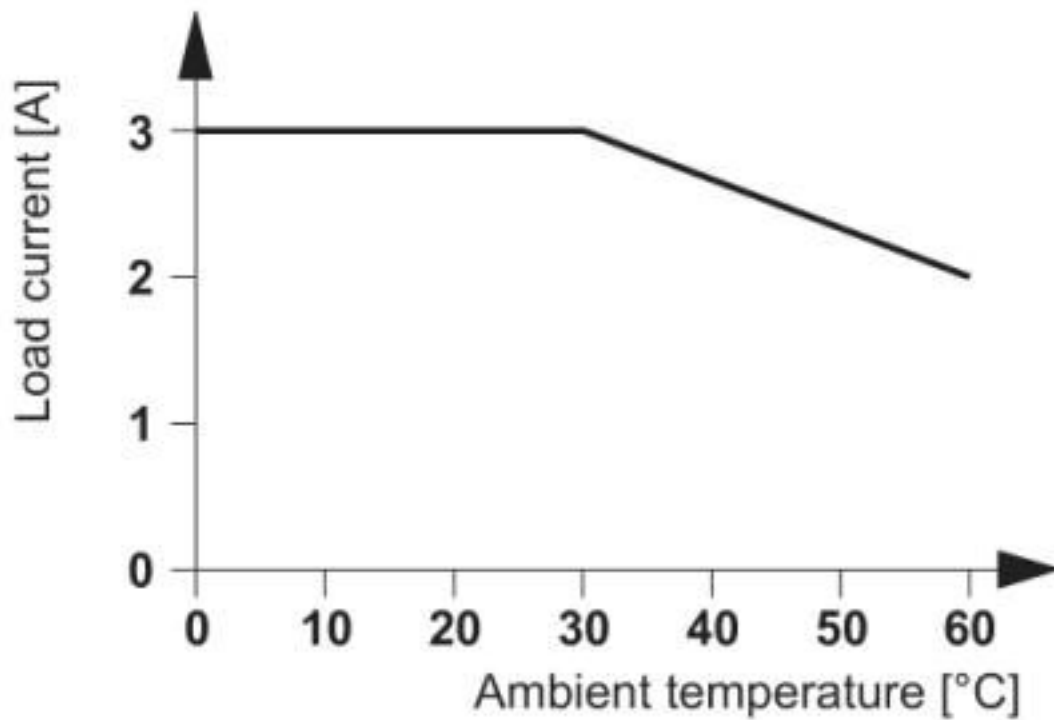
# Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

Drilling diagram



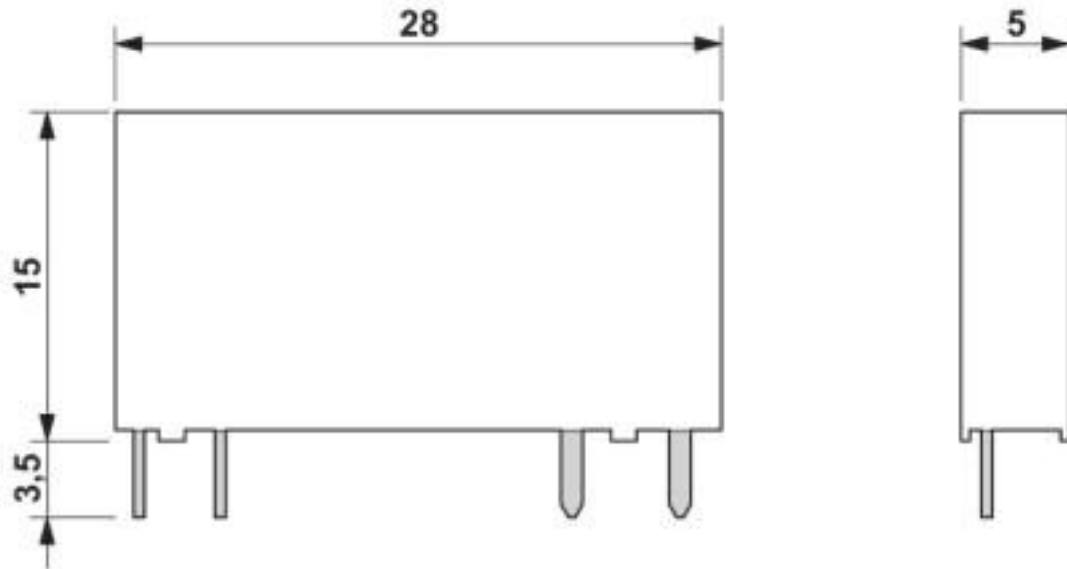
a = pitch division 1.25 mm and 1.27 mm

Diagram

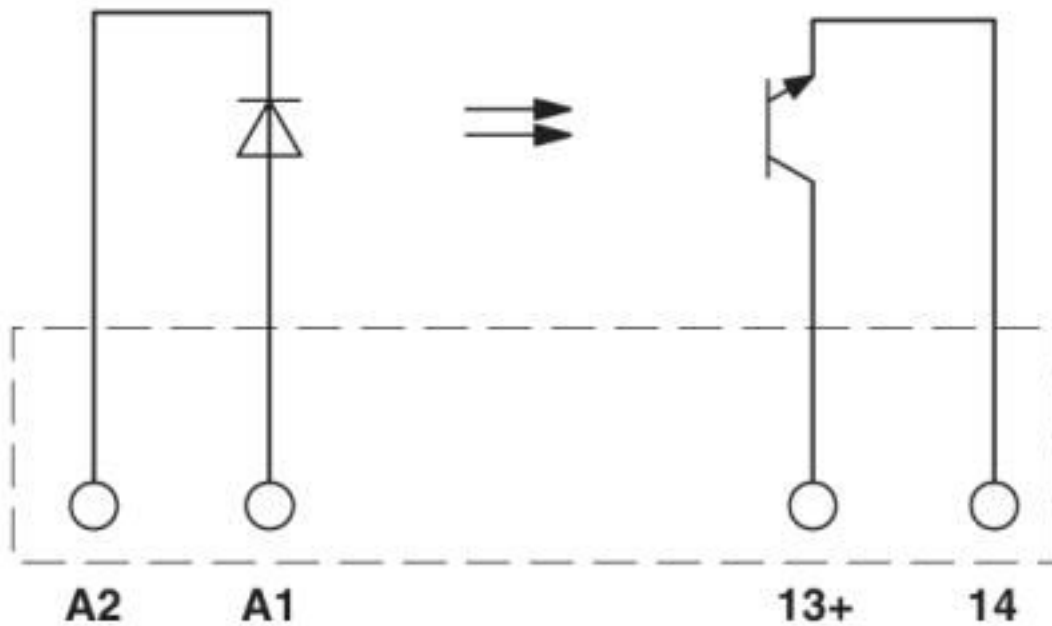


# Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

Dimensional drawing



Circuit diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27371604
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371000

# Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

## Classifications

### eCl@ss

eCl@ss 5.1	27371000
eCl@ss 6.0	27371600
eCl@ss 7.0	27371604
eCl@ss 8.0	27371604
eCl@ss 9.0	27371604

### 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
UNSPSC 18.0	39122326
UNSPSC 19.0	39122326
UNSPSC 20.0	39122326
UNSPSC 21.0	39122326

## Approvals


### Approvals

#### Approvals

UL Recognized / cUL Recognized / PRS / GL / UL Recognized / cUL Recognized / EAC / 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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## Approvals

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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PRS		<a href="http://www.prs.pl/">http://www.prs.pl/</a>	TE/2109/880590/16
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GL		<a href="https://approvalfinder.dnvgi.com/">https://approvalfinder.dnvgi.com/</a>	46016-03 HH
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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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EAC			TR_TS_D_00573_c
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EAC			RU*C- DE.*08.B.00010
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## 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

## Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

### Accessories

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

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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

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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

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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

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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

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## Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

### Accessories

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

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



## Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

### Accessories

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

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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

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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

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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

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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

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## Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

### Accessories

#### 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

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#### 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

## Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

### Accessories

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

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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

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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

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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

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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

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## Miniature solid-state relay - OPT-60DC/ 24DC/ 2 - 2966605

### Accessories

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

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