

Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

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Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 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 | 1 pc |
| Minimum order quantity | 10 pc |
| GTIN |  4 017918 130947 |
| GTIN | 4017918130947 |
| Weight per Piece (excluding packing) | 5.340 g |
| Custom tariff number | 85364190 |
| Country of origin | Hungary |

Technical data

Dimensions

| | |
|--------|-------|
| Width | 5 mm |
| Height | 28 mm |
| Depth | 15 mm |

Ambient conditions

Miniature solid-state relay - OPT-24DC/ 24DC/ 2 - 2966595

Technical data

Ambient conditions

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

Input data

| | |
|---|-------------------------|
| Nominal input voltage U_N | 24 V DC |
| Input voltage range in reference to U_N | 0.8 ... 1.2 |
| Input voltage range | 19.2 V DC ... 28.8 V DC |
| Switching threshold "0" signal, voltage | ≤ 10 V |
| Switching threshold "1" signal voltage | ≥ 16 V |
| Typical input current at U_N | 7 mA |
| Typical response time | 20 μ s (at U_N) |
| Typical turn-off time | 300 μ s (at U_N) |
| Transmission frequency | 300 Hz |
| Power dissipation for nominal condition | 0.17 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 | ≤ 150 mV |
| Output circuit | 2-wire, floating |
| Type of protection | Reverse polarity protection |
| | Surge protection |

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 |

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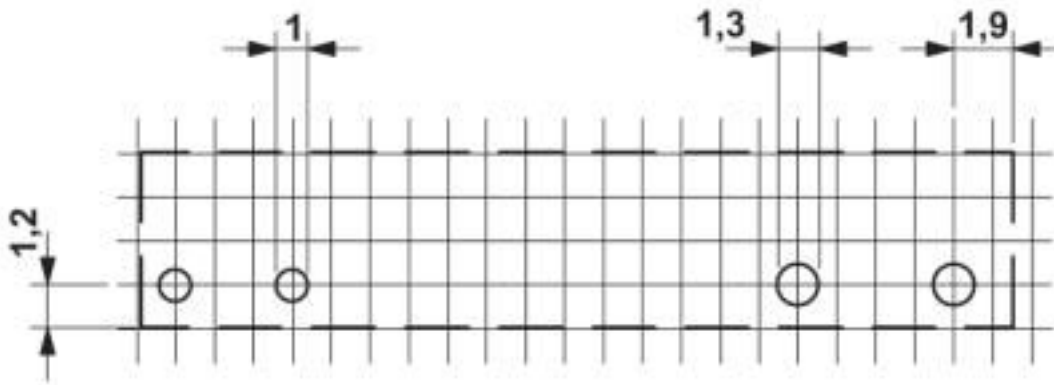
Technical data

Environmental Product Compliance

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

Drawings

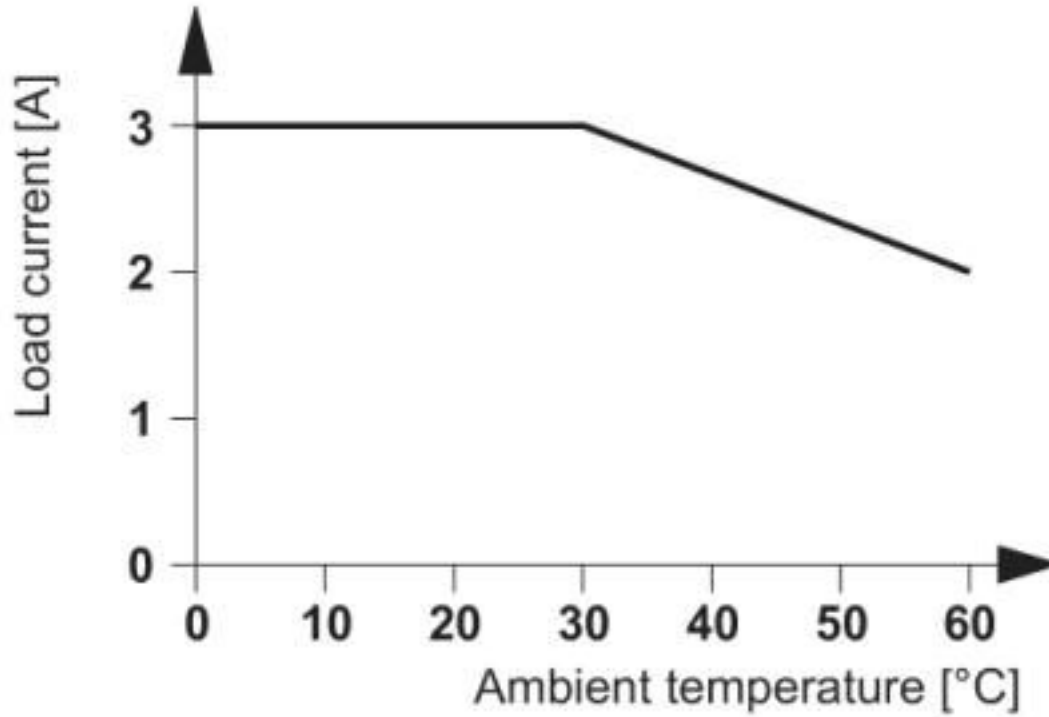
Drilling diagram



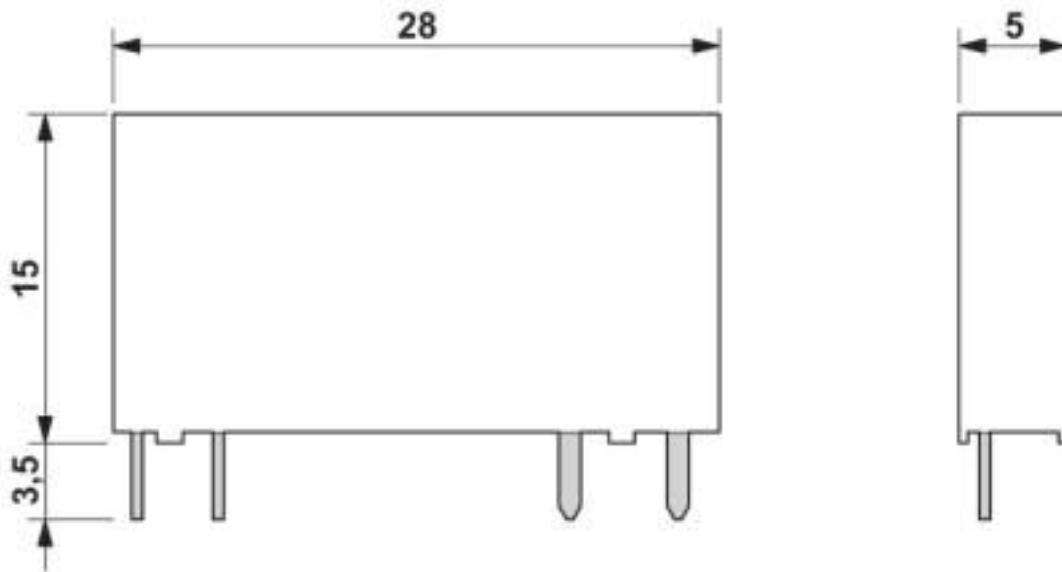
a = pitch division 1.25 mm and 1.27 mm

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Diagram

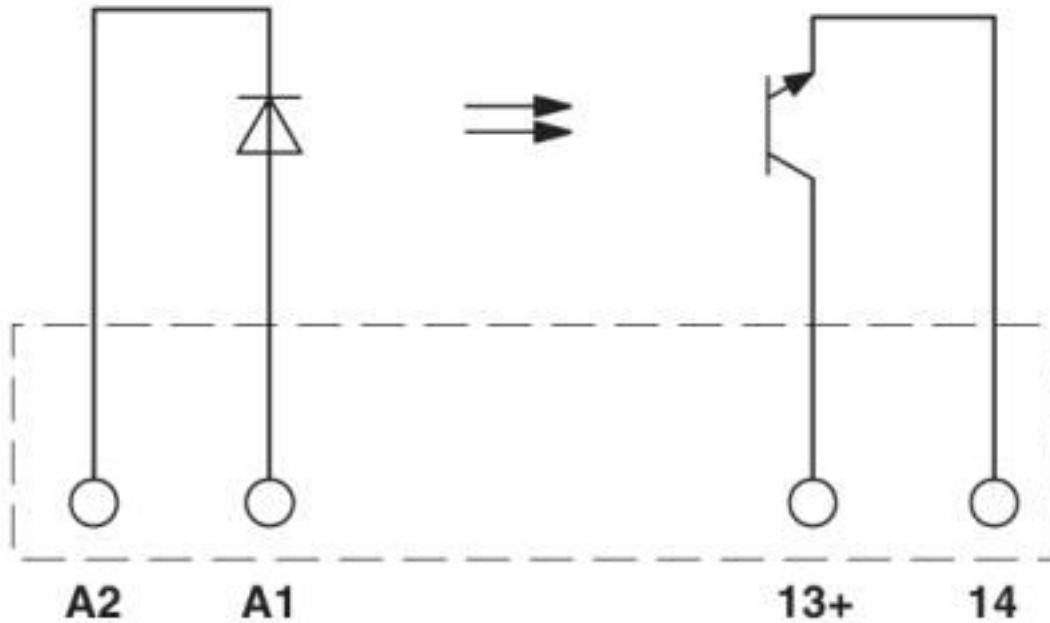


Dimensional drawing



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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 |
| 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 |

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Classifications

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

Ex Approvals

Approval details

| | | | |
|---------------|--|---|---------------|
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 195083 |
|---------------|--|---|---------------|

| | | | |
|----------------|--|---|---------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 195083 |
|----------------|--|---|---------------|

| | | | |
|-----|--|---|-------------------|
| PRS | | http://www.prs.pl/ | TE/2109/880590/16 |
|-----|--|---|-------------------|

| | | | |
|----|--|---|-------------|
| GL | | https://approvalfinder.dnvgl.com/ | 46016-03 HH |
|----|--|---|-------------|

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Approvals

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| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 195083 |
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 195083 |
| EAC | | | TR_TS_D_00573_c |

Accessories

Additional products

Relay base - PLC-BPT- 24DC/21 - 2900445



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 24 V DC

Relay base - PLC-BSC- 24DC/21 - 2966016



6.2 mm PLC basic terminal block with screw connection, without relays or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

Relay base - PLC-BSC- 24DC/21 - 2966016



6.2 mm PLC basic terminal block with screw connection, without relays or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

Basic terminal block - PLC-BSC- 36DC/21 - 2966964

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Accessories

Basic terminal block

Relay base - PLC-BPT- 48DC/21 - 2900447



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 48 V DC

Relay base - PLC-BSP- 48DC/21 - 2967329



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 48 V DC

Relay base - PLC-BSC- 48DC/21 - 2966090



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 48 V DC

Relay base - PLC-BPT- 24DC/ 1/SEN - 2900262



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 24 V DC

Relay base - PLC-BSP- 24DC/ 1/SEN - 2967206



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 24 V DC

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Accessories

Relay base - PLC-BSC- 24DC/ 1/SEN - 2966061



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 24 V DC

Relay base - PLC-BPT- 24DC/ 1/ACT - 2900449



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 24 V DC

Relay base - PLC-BSP- 24DC/ 1/ACT - 2967196



6.2 mm PLC basic terminal block for output functions with spring-cage 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 24 V DC

Relay base - PLC-BSC- 24DC/ 1/ACT - 2966058



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 24 V DC

Relay base - PLC-BPT- 24UC/ 1/ACT - 2900450



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 24 V AC/DC

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Accessories

Relay base - PLC-BSP- 24UC/ 1/ACT - 2982809



6.2 mm PLC basic terminal block for output functions with spring-cage 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 24 V AC/DC

Relay base - PLC-BSC- 24UC/ 1/ACT - 2982799



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 24 V AC/DC

Relay base - PLC-BSC- 24DC/21/SO46 - 2980458



6.2 mm PLC basic terminal block with protection against interference currents and interference voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on NS 35/7,5 DIN rail, with increased input current consumption, 1 PDT, 24 V DC input voltage

Relay base - RIF-0-BPT/1 - 2901873



RIF-0... relay base, for miniature power relay with 1 N/O contact or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

Relay base - RIF-0-BSC/ 1 - 2901872



RIF-0... relay base, for miniature power relay with 1 N/O contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

