

Miniature solid-state relay - OPT-24DC/230AC/ 1 - 2967950

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Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 24 - 253 V AC/0.75 A

Product Features

- Vibration and shock resistant
- RT III-proof (wash-proof)
- Wear-free and durable
- Switching power of up to 24 V DC/5 A
- Can be soldered on PCB
- Zero voltage switch at AC output



Key Commercial Data

| | |
|--------------------------------------|--------|
| Packing unit | 1 pc |
| Minimum order quantity | 10 pc |
| Weight per Piece (excluding packing) | 5.52 g |
| Country of origin | Japan |

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 |

Input data

| | |
|-----------------------------|---------|
| Nominal input voltage U_N | 24 V DC |
|-----------------------------|---------|

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Technical data

Input data

| | |
|---|-------------------------|
| Input voltage range in reference to U_N | 0.8 ... 1.2 |
| Switching threshold "0" signal, voltage | ≤ 5 V |
| Switching threshold "1" signal voltage | ≥ 10 V |
| Typical input current at U_N | 3 mA |
| Typical response time | 6 ms (at U_N) |
| Typical turn-off time | 500 μ s (at U_N) |
| Transmission frequency | 10 Hz |
| Power dissipation for nominal condition | 0.8 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 |
| 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 |
| 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) |
| Designation | Standards/regulations |
| Standards/regulations | IEC 60664 |
| | EN 50178 |
| | IEC 62103 |
| Rated surge voltage/insulation | Basic insulation |
| Degree of pollution | 2 |
| Overvoltage category | III |

Standards and Regulations

| | |
|----------------------------------|-----------------------|
| Connection in acc. with standard | CUL |
| Designation | Standards/regulations |
| Standards/regulations | IEC 60664 |

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Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27371102 |
| eCl@ss 4.1 | 27371102 |
| eCl@ss 5.0 | 27371001 |
| eCl@ss 5.1 | 27371001 |
| eCl@ss 6.0 | 27371604 |
| 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 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211916 |
| UNSPSC 7.0901 | 39121542 |
| UNSPSC 11 | 39121542 |
| UNSPSC 12.01 | 39121542 |
| UNSPSC 13.2 | 39121542 |

Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / GL / EAC / UL Recognized / cUL Recognized / cULus Recognized

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Approvals

Ex Approvals

Approvals submitted

Approval details

UL Recognized

cUL Recognized

GL

EAC

UL Recognized

cUL Recognized

cULus Recognized

Accessories

Additional products

Relay socket - 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

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Accessories

Relay socket - PLC-BSP- 24DC/21 - 2967219



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 24 V DC

Relay socket - 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 socket - 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 socket - 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 socket - 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

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Accessories

Relay socket - 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 socket - 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

Relay socket - 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 socket - 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 socket - 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

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Accessories

Relay socket - 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 socket - 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

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

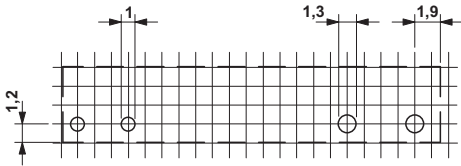


6.2 mm PLC basic terminal block with protection against interference currents and interference voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on NS 35/7,5 DIN rail, with increased input current consumption, 1 PDT, 24 V DC input voltage

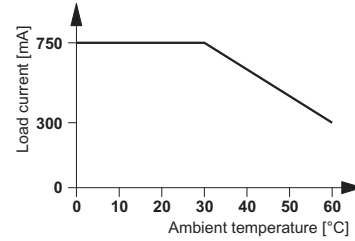
Drawings

Miniature solid-state relay - OPT-24DC/230AC/ 1 - 2967950

Drilling diagram

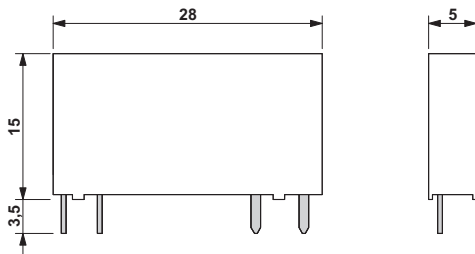


Diagram



a = pitch division 1.25 mm and 1.27 mm

Dimensional drawing



Circuit diagram

