

Miniature solid-state relay - OPT- 5DC/ 48DC/100 - 2967992

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Plug-in miniature solid-state relay, input solid-state relay, 1 N/O contact, input voltage: 5 V DC

Your advantages

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



Key Commercial Data

| | |
|--------------------------------------|---|
| Packing unit | 1 pc |
| Minimum order quantity | 10 pc |
| GTIN |  4 017918 820749 |
| GTIN | 4017918820749 |
| Weight per Piece (excluding packing) | 4.920 g |
| Custom tariff number | 85364190 |
| Country of origin | Hungary |

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 |
| Degree of protection | RT III |

Input data

| | |
|---|-------------------------|
| Nominal input voltage U_N | 5 V DC |
| Input voltage range in reference to U_N | 0.8 ... 1.2 |
| Input voltage range | 4 V DC ... 6 V DC |
| Switching threshold "0" signal, voltage | ≤ 0.8 V |
| Switching threshold "1" signal voltage | ≥ 2.5 V |
| Typical input current at U_N | 4 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 | 0.02 W |

Output data

| | |
|--|-----------------------------|
| Output voltage range | 3 V DC ... 48 V DC |
| Limiting continuous current | 100 mA |
| Voltage drop at max. limiting continuous current | ≤ 1 V |
| Output circuit | 2-conductor, floating |
| Type of protection | Reverse polarity protection |
| | Surge protection |

General

| | |
|-----------------------|--------------------------------------|
| Test voltage | 2.5 kV (50 Hz, 1 min., input/output) |
| 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 |

Conformance/approvals

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Technical data

Conformance/approvals

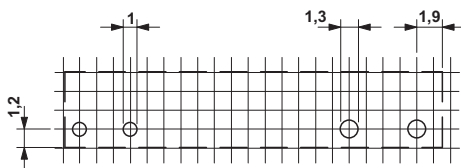
| | |
|----------------|----------------------------|
| Designation | Corrosive gas test |
| Identification | ISA-S71.04. G3 Harsh Group |
| | EN 60068-2-60 |

Environmental Product Compliance

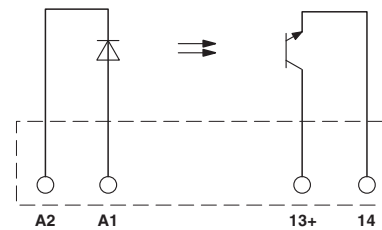
| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

Drawings

Drilling diagram



Circuit diagram



a = pitch division 1.25 mm and 1.27 mm

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27371604 |
| eCl@ss 11.0 | 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 9.0 | 27371604 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001504 |
| ETIM 3.0 | EC001504 |
| ETIM 4.0 | EC001504 |
| ETIM 6.0 | EC001504 |

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Classifications

ETIM

| | |
|----------|----------|
| 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 |  | 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 |
|-----|---|---|-------------------|

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Approvals

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

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

| | | | |
|-----|--|--|-----------------|
| EAC | | | TR_TS_D_00573_c |
|-----|--|--|-----------------|

| | | | |
|-----|--|--|-------------------------|
| EAC | | | RU*C- DE.*08.B.00010 |
|-----|--|--|-------------------------|

Accessories

Additional products

Relay base - PLC-BPT- 5DC/21 - 2900443



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 5 V DC

Relay base - PLC-BSP- 5DC/21 - 2980238



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 changeover contact, input voltage 5 V DC

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Accessories

Relay base - PLC-BSC- 5DC/21 - 2980225



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 5 V DC

Relay base - PLC-BSC- 5DC/ 1/SEN - 2980267



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 5 V DC

Relay base - PLC-BPT- 5DC/ 1/ACT - 2900448



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 5 V DC

Relay base - PLC-BSP- 5DC/ 1/ACT - 2980254



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 5 V DC

Relay base - PLC-BSC- 5DC/ 1/ACT - 2980241



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 5 V DC

