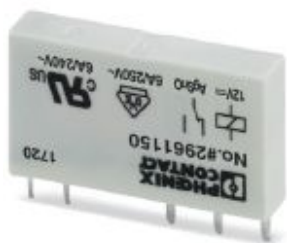


Single relay - REL-MR- 12DC/21 - 2961150

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Plug-in miniature power relay, with power contact, 1 PDT, input voltage 12 V DC

Your advantages

- Safe isolation according to DIN EN 50178 between coil and contact
- High degree of protection up to RT III depending on type (wash-proof)
- Power contacts up to 6 A



Key Commercial Data

| | |
|------------------------|---|
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| GTIN |  4 017918 159566 |
| GTIN | 4017918159566 |
| Sales Key | 08 |

Technical data

Dimensions

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

Ambient conditions

| | |
|---|------------------|
| Ambient temperature (operation) | -40 °C ... 85 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Degree of protection | RT III |

Coil side

| | |
|---|-------------|
| Nominal input voltage U_N | 12 V DC |
| Input voltage range in reference to U_N | see diagram |

Single relay - REL-MR- 12DC/21 - 2961150

Technical data

Coil side

| | |
|---|------------------------------------|
| Typical input current at U_N | 14 mA |
| Typical response time | 5 ms |
| Typical release time | 2.5 ms |
| Coil resistance | 848 Ω \pm 10 % (at 20 °C) |
| Power dissipation for nominal condition | 0.17 W |

Contact side

| | |
|---------------------------------------|--------------------------------------|
| Contact type | 1 PDT |
| Type of switch contact | Single contact |
| Contact material | AgSnO |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 5 V (at 100 mA) |
| Min. switching current | 10 mA (at 12 V) |
| Maximum inrush current | 10 A (4 s) |
| Limiting continuous current | 6 A |
| Interrupting rating (ohmic load) max. | 140 W (at 24 V DC) |
| | 20 W (at 48 V DC) |
| | 18 W (at 60 V DC) |
| | 23 W (at 110 V DC) |
| | 40 W (at 220 V DC) |
| | 1500 VA (for 250 V AC) |
| Switching capacity | 2 A (at 24 V, DC13) |
| | 0.2 A (at 110 V, DC13) |
| | 0.1 A (at 220 V, DC13) |
| | 3 A (at 24 V, AC15) |
| | 3 A (at 120 V, AC15) |
| | 3 A (at 230 V, AC15) |
| Motor load according to UL 508 | 1/4 HP, 240 - 277 V AC (N/O contact) |
| | 1/6 HP, 240 - 277 V AC (N/C contact) |

General

| | |
|--|---------------------------|
| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Mechanical service life | 2x 10 ⁷ cycles |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

Connection data

| | |
|-------------------|-------------------|
| Connection method | Solder connection |
|-------------------|-------------------|

Standards and Regulations

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

Single relay - REL-MR- 12DC/21 - 2961150

Technical data

Standards and Regulations

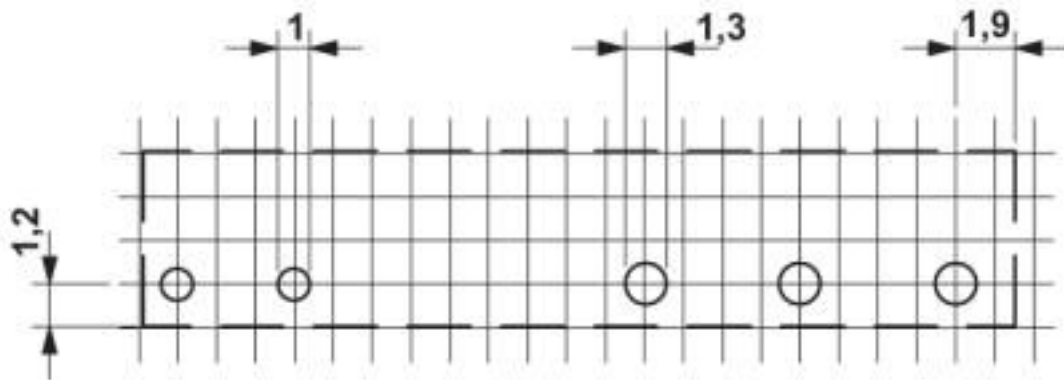
| | |
|----------------------|------------|
| | EN 50178 |
| | EN 61810-1 |
| Pollution degree | 3 |
| Overvoltage category | III |

Environmental Product Compliance

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

Drawings

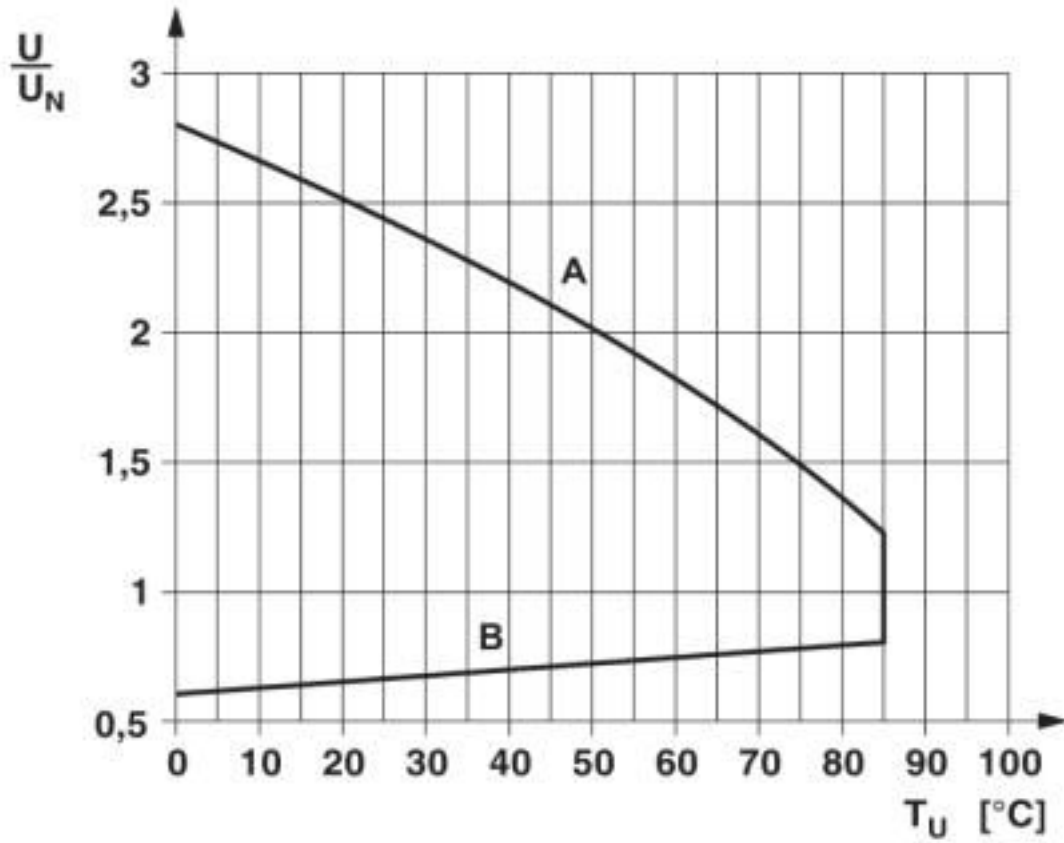
Drilling diagram



a = pitch division 1.25 mm and 1.27 mm

Single relay - REL-MR- 12DC/21 - 2961150

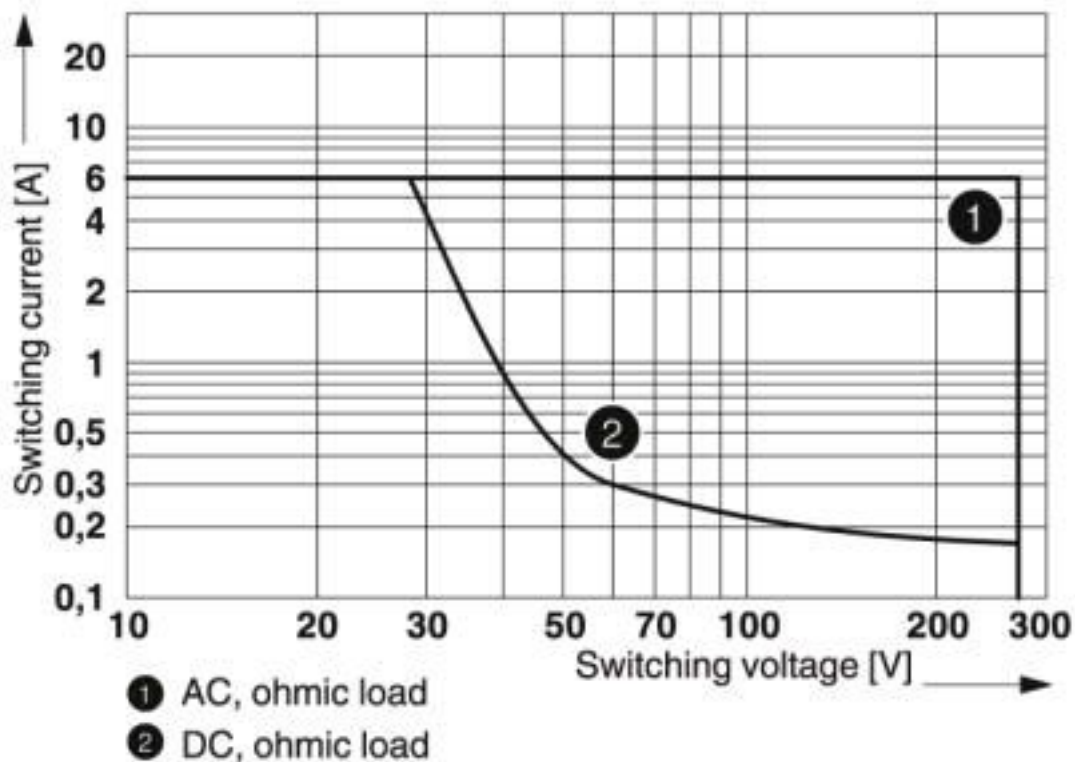
Diagram



Input voltage range

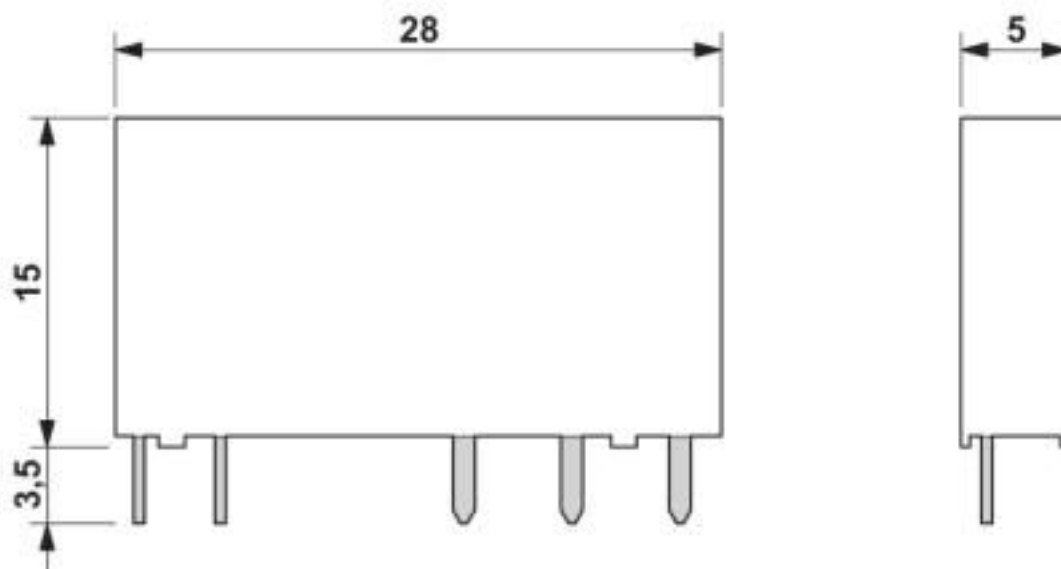
Single relay - REL-MR- 12DC/21 - 2961150

Diagram



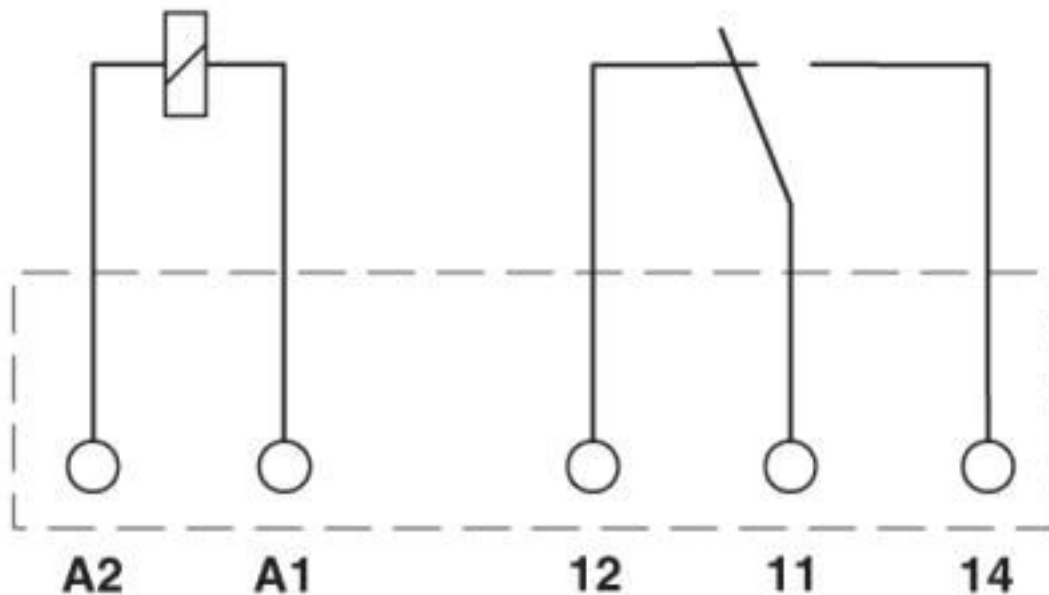
Interrupting rating

Dimensional drawing



Single relay - REL-MR- 12DC/21 - 2961150

Circuit diagram



Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27371601 |
| eCl@ss 4.0 | 27371100 |
| eCl@ss 4.1 | 27371100 |
| eCl@ss 5.0 | 27371600 |
| eCl@ss 5.1 | 27371600 |
| eCl@ss 6.0 | 27371600 |
| eCl@ss 7.0 | 27371601 |
| eCl@ss 8.0 | 27371601 |
| eCl@ss 9.0 | 27371601 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC001437 |
| ETIM 3.0 | EC001437 |
| ETIM 4.0 | EC001437 |
| ETIM 5.0 | EC001437 |
| ETIM 6.0 | EC001437 |
| ETIM 7.0 | EC001437 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211916 |
| UNSPSC 7.0901 | 39121515 |
| UNSPSC 11 | 39121515 |
| UNSPSC 12.01 | 39121515 |

Single relay - REL-MR- 12DC/21 - 2961150

Classifications

UNSPSC

| | |
|-------------|----------|
| UNSPSC 13.2 | 39122334 |
| UNSPSC 18.0 | 39122334 |
| UNSPSC 19.0 | 39122334 |
| UNSPSC 20.0 | 39122334 |
| UNSPSC 21.0 | 39122334 |

Approvals

Approvals


Approvals

PRS / EAC / EAC / UL Recognized / UL Recognized / cUL Recognized / cUL Recognized / VDE Zeichengenehmigung / VDE Zeichengenehmigung


Ex Approvals


Approval details


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

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

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

| | | | |
|---------------|---|---|---------------|
| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
|---------------|---|---|---------------|

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| UL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
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| cUL Recognized |  | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
|----------------|---|---|---------------|

Single relay - REL-MR- 12DC/21 - 2961150

Approvals

| | | | |
|----------------|--|---|---------------|
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
|----------------|--|---|---------------|

| | | | |
|------------------------|--|---|----------|
| VDE Zeichengenehmigung | | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40010212 |
|------------------------|--|---|----------|

| | | | |
|------------------------|--|---|----------|
| VDE Zeichengenehmigung | | http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx | 40032864 |
|------------------------|--|---|----------|

Accessories

Additional products

Relay base - PLC-BPT- 12DC/21 - 2900444



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 12 V DC

Relay base - PLC-BSP- 12DC/21 - 2967426



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 12 V DC

Relay base - PLC-BSC- 12DC/21 - 2966896



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 12 V DC

Single relay - REL-MR- 12DC/21 - 2961150

Accessories

Relay base - RIF-0-BPT/21 - 2900958



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

Relay base - RIF-0-BSC/21 - 2900957



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

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