

Single relay - REL-MR-230AC/21HC AU - 2961529

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Pluggable miniature relays, with power contact for high continuous current and additional hard gold plating, 1 PDT, input voltage 230 V AC

Product Features

- RT III wash tight (comparable with IP67)
- Switching current of up to 16 A

Key commercial data

| | |
|-------------------------|---------------|
| package_quantity | 10 |
| GTIN | 4017918937928 |

Technical data

Dimensions

| | |
|---------------|---------|
| Width | 12.7 mm |
| Height | 29 mm |
| Depth | 15.7 mm |

Ambient conditions

| | |
|--|------------------|
| Ambient temperature (operation) | -40 °C ... 85 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Coil side

| | |
|---|--|
| Nominal input voltage U_N | 230 V AC |
| Nominal input current at U_{IN} | 3 mA (at 50 Hz) |
| Nominal input current at U_{IN} | 2.5 mA (At 60 Hz) |
| Typical response time | 3 ms ... 12 ms (depending on phase relation) |
| Typical release time range | 2 ms ... 9 ms (depending on phase relation) |
| Coil resistance | 32500 Ω \pm 15% (at 20 °C) |

Contact side

| | |
|----------------------------------|------------------------|
| Contact type | Single contact, 1-PDT |
| Contact material | AgNi, hard gold-plated |
| Maximum switching voltage | 30 V AC |
| Maximum switching voltage | 36 V DC |
| Minimum switching voltage | 100 mV (at 10 mA) |
| Maximum inrush current | 50 mA |

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Technical data

Contact side

| | |
|--|--|
| Min. switching current | 1 mA (at 24 V) |
| Limiting continuous current | 50 mA |
| Interrupting rating (ohmic load) max. | 1.2 W (at 24 V DC) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, AC15) |
| Note | the following values are applicable if a gold layer is destroyed |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 12 V (at 10 mA) |
| Limiting continuous current | 16 A |
| Maximum inrush current | 15 A (300 ms) |
| Min. switching current | 10 mA (at 12 V) |
| Interrupting rating (ohmic load) max. | 384 W (at 24 V DC) |
| Interrupting rating (ohmic load) max. | 58 W (at 48 V DC) |
| Interrupting rating (ohmic load) max. | 48 W (at 60 V DC) |
| Interrupting rating (ohmic load) max. | 50 W (at 110 V DC) |
| Interrupting rating (ohmic load) max. | 80 W (at 220 V DC) |
| Interrupting rating (ohmic load) max. | 4000 VA (for 250 V AC) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, DC13) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 0.2 A (at 110 V, DC13) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 0.2 A (at 250 V, DC13) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, AC15) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 120 V, AC15) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 250 V, AC15) |

General

| | |
|--|---|
| Test voltage relay winding/relay contact | 5 kV AC (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Mechanical service life | 1 x 10 ⁷ cycles |
| Standards/regulations | IEC 60664 |
| Standards/regulations | EN 50178 |
| Standards/regulations | IEC 62103 |
| Pollution degree | 3 |
| Surge voltage category | III |
| Mounting position | Any |
| Assembly instructions | Can be aligned without spacing (> 70 °C ≥ 2.5 mm) |

classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27371104 |
| eCl@ss 4.1 | 27371104 |
| eCl@ss 5.0 | 27371001 |
| eCl@ss 5.1 | 27371001 |

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classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 6.0 | 27371001 |
| eCl@ss 7.0 | 27371001 |
| eCl@ss 8.0 | 27371001 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000196 |
| ETIM 3.0 | EC000196 |
| ETIM 4.0 | EC000196 |
| ETIM 5.0 | EC000196 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 30211916 |
| UNSPSC 7.0901 | 39121515 |
| UNSPSC 11 | 39121515 |
| UNSPSC 12.01 | 39121515 |
| UNSPSC 13.2 | 39121515 |

approvals

UL Recognized / VDE Gutachten mit Fertigungsüberwachung / cUL Recognized / cULus Recognized /

Approval details

UL Recognized

VDE Gutachten mit Fertigungsüberwachung

| | |
|----------------------------|--|
| Nominal voltage UN | |
| Nominal current IN | |
| mm ² /AWG/kcmil | |

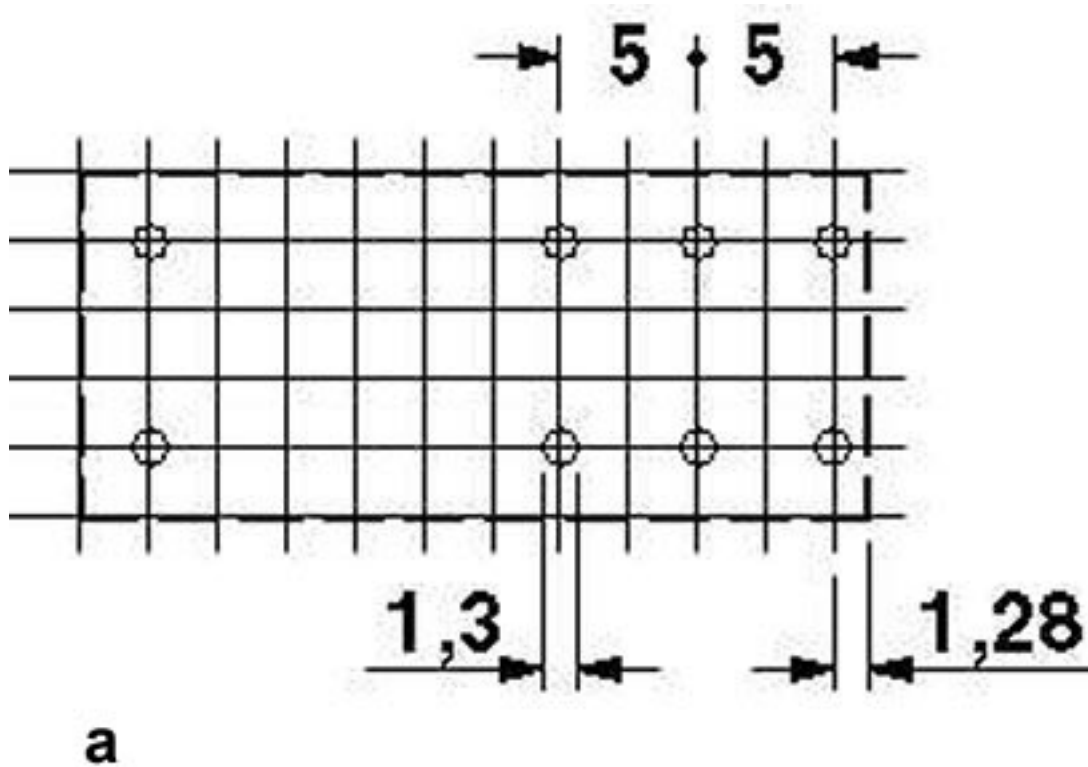
cUL Recognized

cULus Recognized

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Drawings

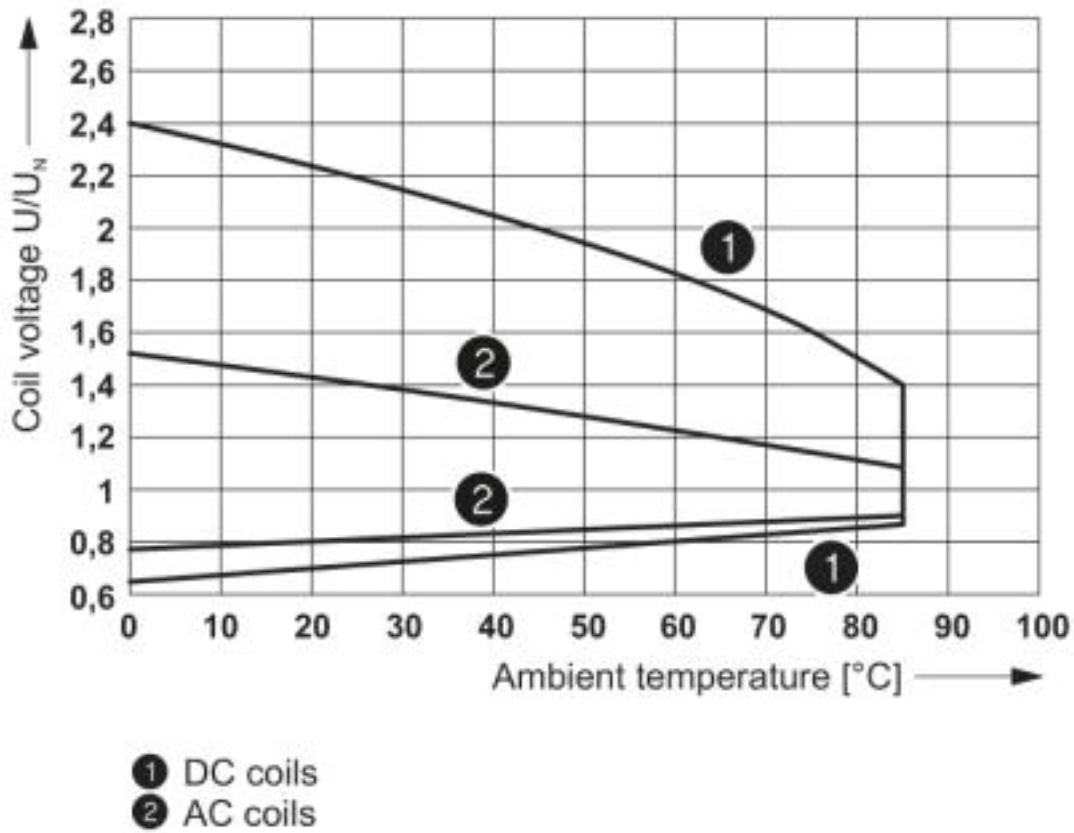
Drilling diagram



a = pitch division 2.5 mm

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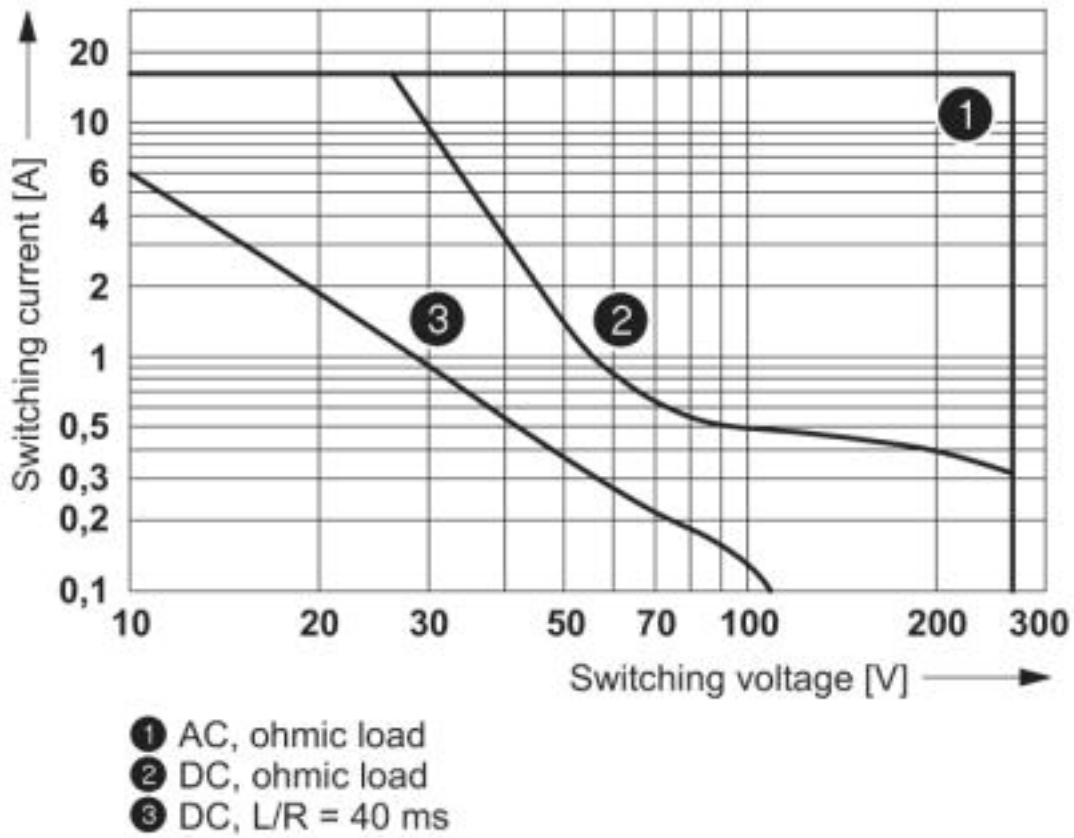
Diagram



Operating voltage range

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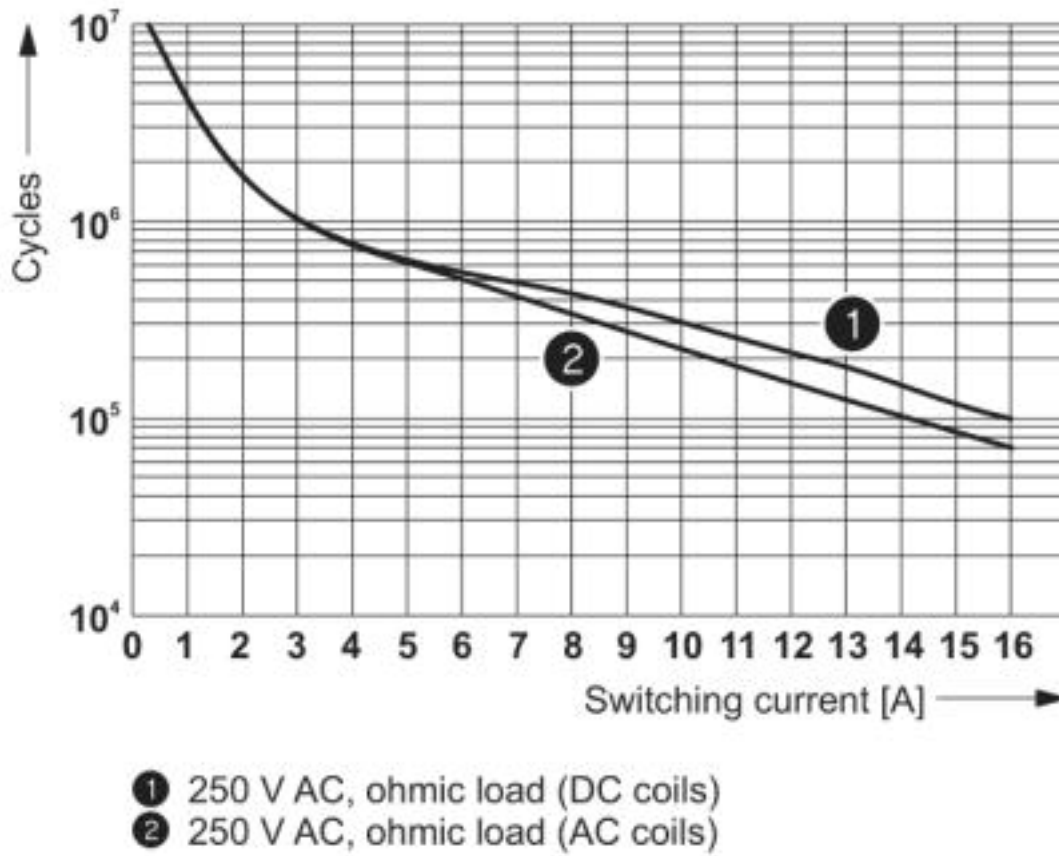
Diagram



Interrupting rating

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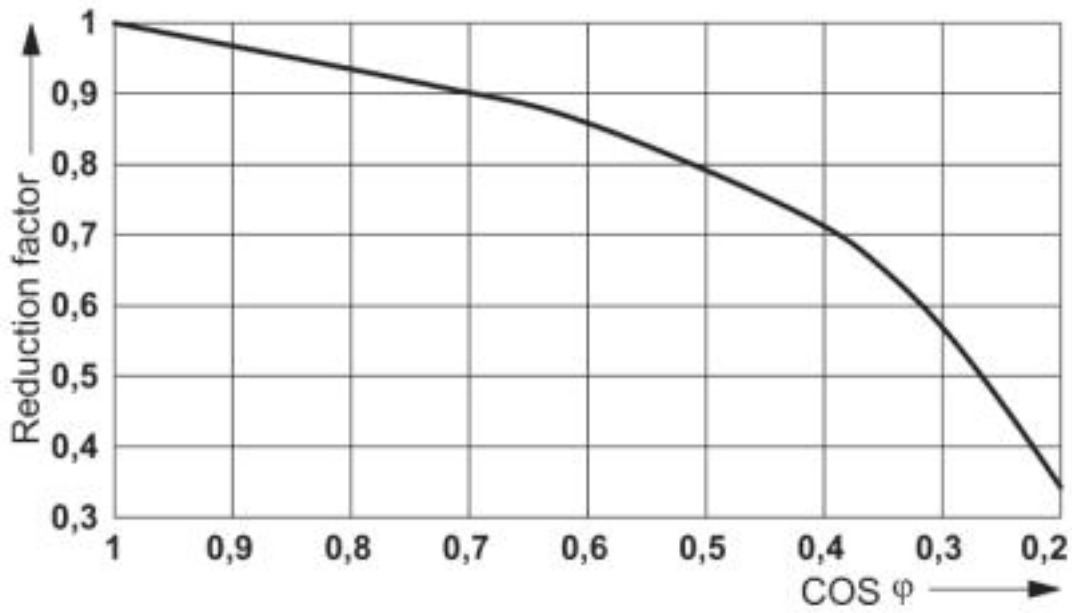
Diagram



Electrical service life

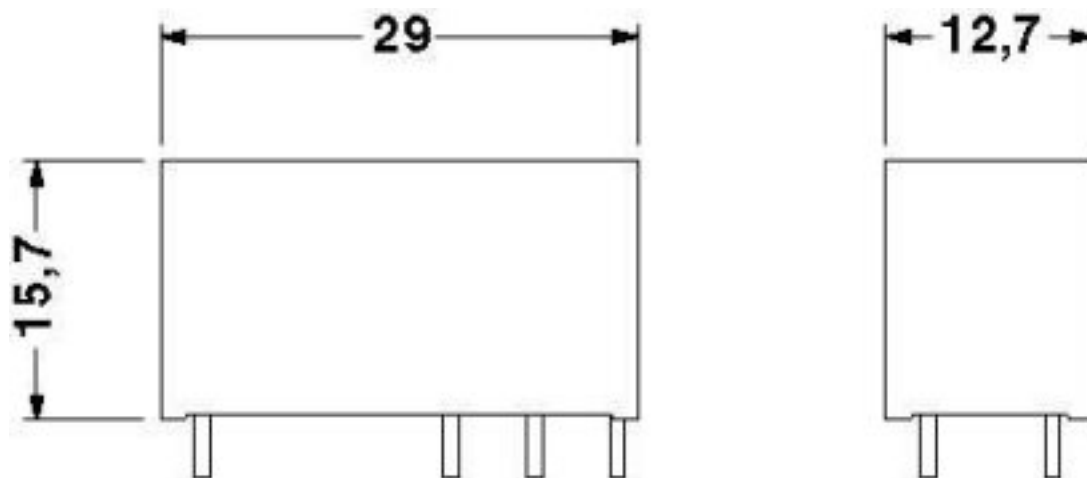
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Diagram



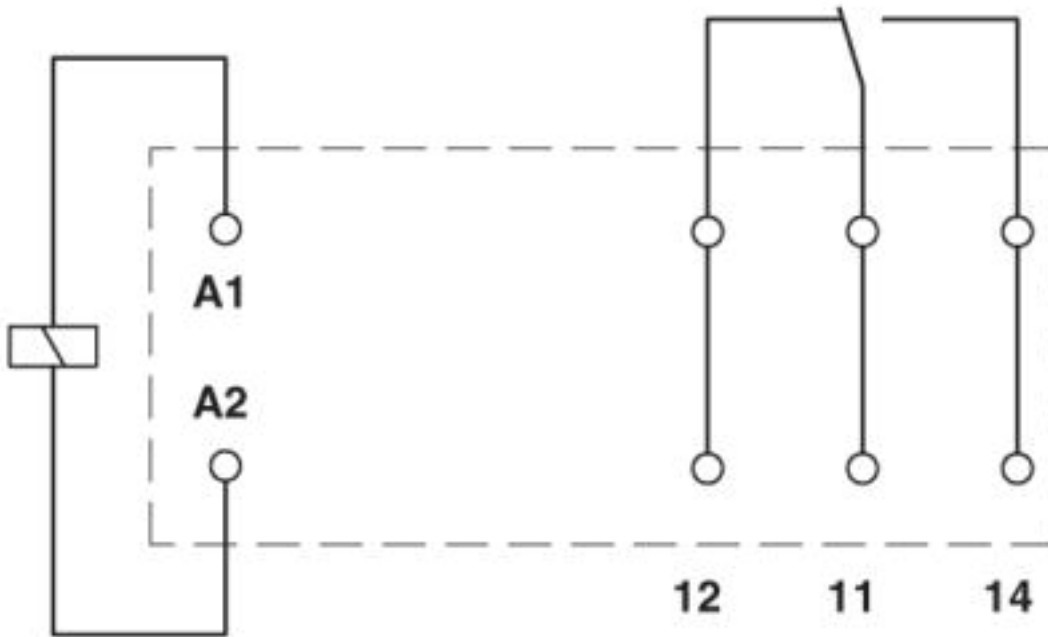
Service life reduction factor with various cos phi

Dimensioned drawing



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Circuit diagram



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