

Single relay - REL-MR- 24DC/21-21AU/MS - 2987985

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Plug-in miniature relay, with multi-layer contact with hard gold coating, 2 PDTs, test button, mechanical switch position indicator, status LED, freewheeling diode, polarity A1+, A2-, input voltage 24 V DC

Product Features

- With detectable manual operation
- DC types with integrated freewheeling diode
- Integrated status LED
- Mechanical switch position indicator
- Switching current of up to 16 A

Key commercial data

| | |
|-------------------------|---------------|
| package_quantity | 10 |
| GTIN | 4046356480994 |

Technical data

Dimensions

| | |
|---------------|---------|
| Width | 12.7 mm |
| Height | 29 mm |
| Depth | 25 mm |

Ambient conditions

| | |
|--|------------------|
| Ambient temperature (operation) | -40 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Coil side

| | |
|---|---------|
| Nominal input voltage U_N | 24 V DC |
| Nominal input current at U_{IN} | 18 mA |
| Typical response time | 9 ms |
| Typical release time | 6 ms |

Contact side

| | |
|----------------------------------|------------------------|
| Contact type | Single contact, 2-PDT |
| Contact material | AgNi, hard gold-plated |
| Maximum switching voltage | 30 V AC |
| Maximum switching voltage | 36 V DC |
| Minimum switching voltage | 12 V (At 1 mA) |

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Technical data

Contact side

| | |
|--|--|
| Maximum inrush current | 50 mA |
| Min. switching current | 1 mA (at 12 V) |
| Limiting continuous current | 50 mA |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1.5 A (at 240 V, AC15) |
| Note | the following values are applicable if a gold layer is destroyed |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 6 V |
| Limiting continuous current | 16 A |
| Maximum inrush current | 30 A (300 ms) |
| Min. switching current | 100 mA |
| Interrupting rating (ohmic load) max. | 2000 VA (for 250 V AC) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1 A (at 24 V, DC13) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1.5 A (at 24 V, AC15) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1.5 A (at 120 V, AC15) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 1.5 A (at 240 V, AC15) |

General

| | |
|--|----------------------------|
| Test voltage relay winding/relay contact | 5 kV AC (50 Hz, 1 min.) |
| Test voltage relay contact/relay contact | 2.5 kV AC (50 Hz, 1 min.) |
| Mechanical service life | 5 x 10 ⁶ cycles |
| Standards/regulations | DIN EN 61810-1 |
| Standards/regulations | VDE 0435-201 |
| Standards/regulations | EN 50178 |
| Standards/regulations | IEC 62103 |

classifications

eCl@ss

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

Single relay - REL-MR- 24DC/21-21AU/MS - 2987985

classifications

UNSPSC

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

approvals

UL Recognized / VDE Zeichengenehmigung / cUL Recognized / cULus Recognized /

Approval details

UL Recognized

VDE Zeichengenehmigung

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

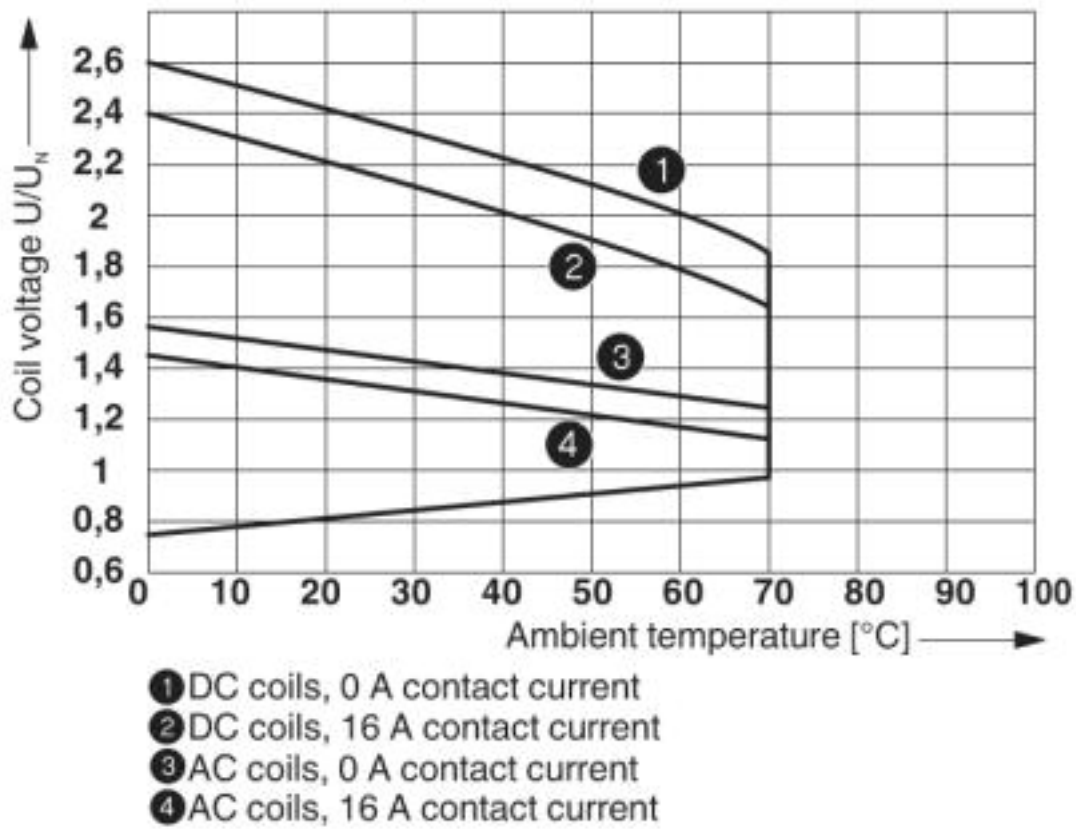
cUL Recognized

cULus Recognized

Drawings

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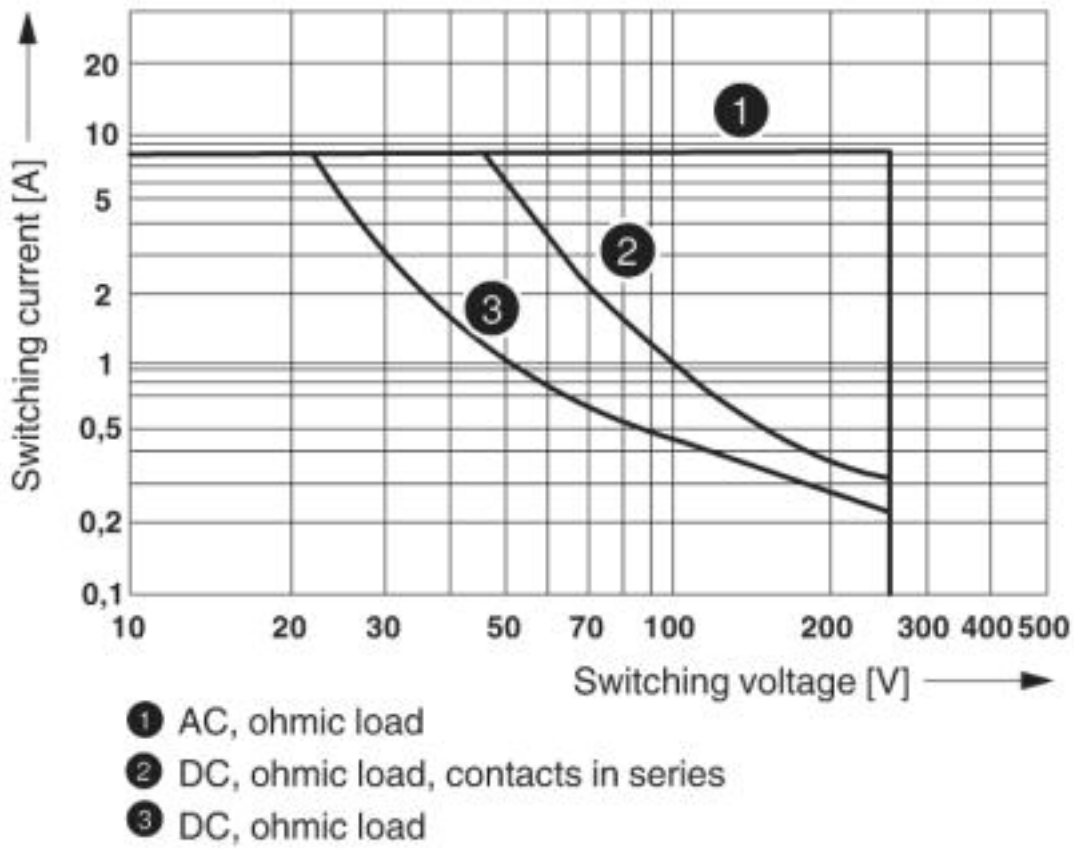
Diagram



Operating voltage range

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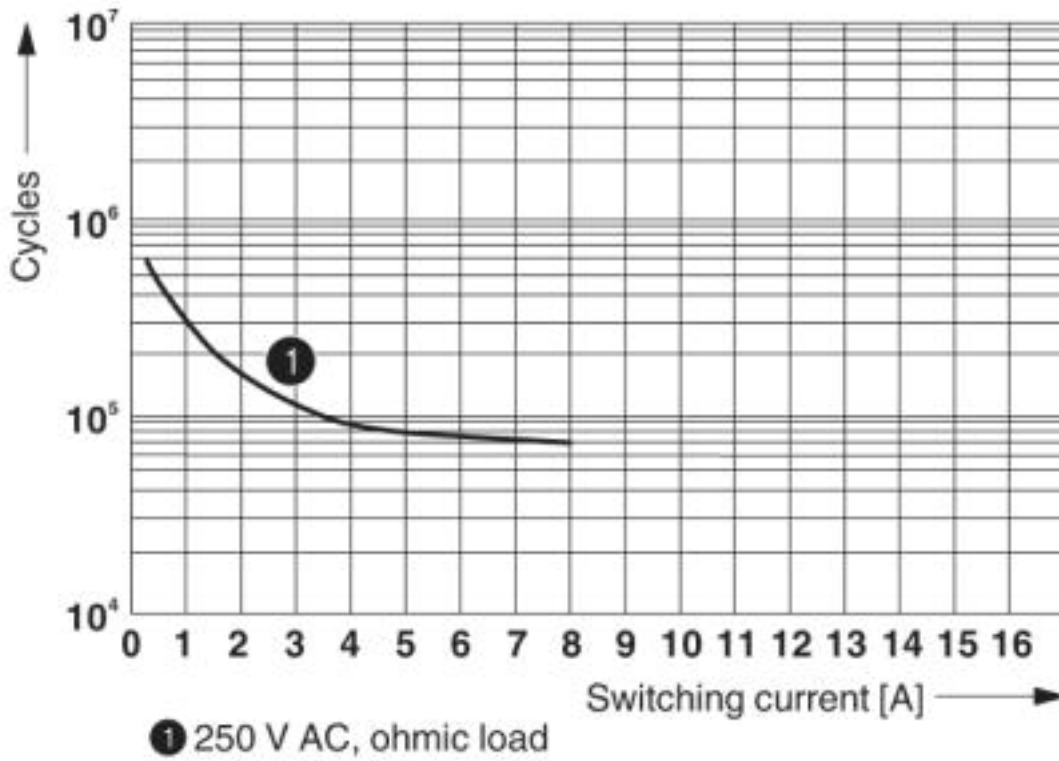
Diagram



Interrupting rating

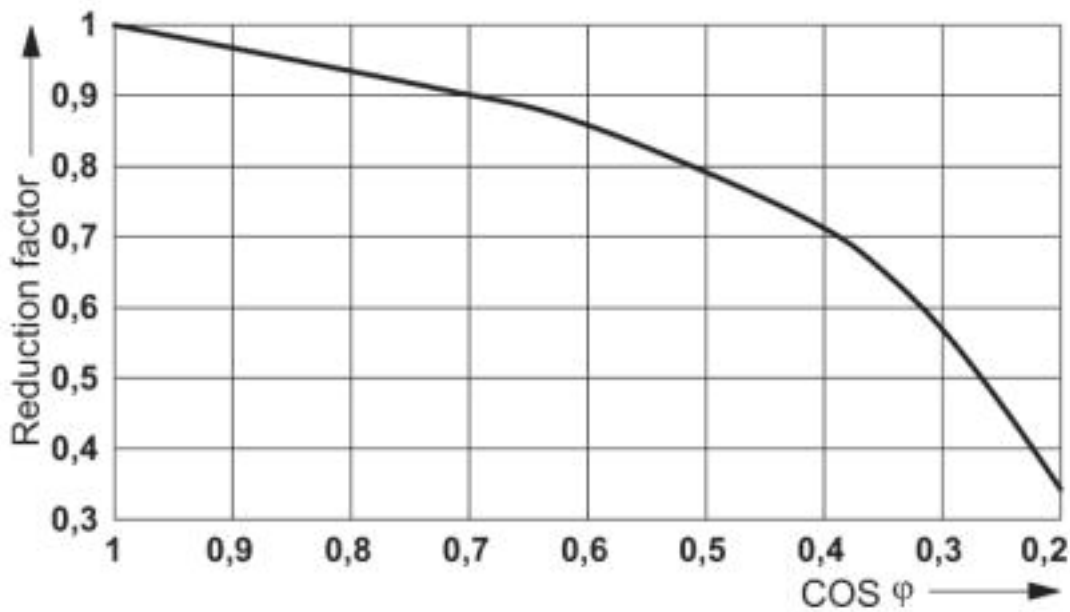
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Diagram



Electrical service life

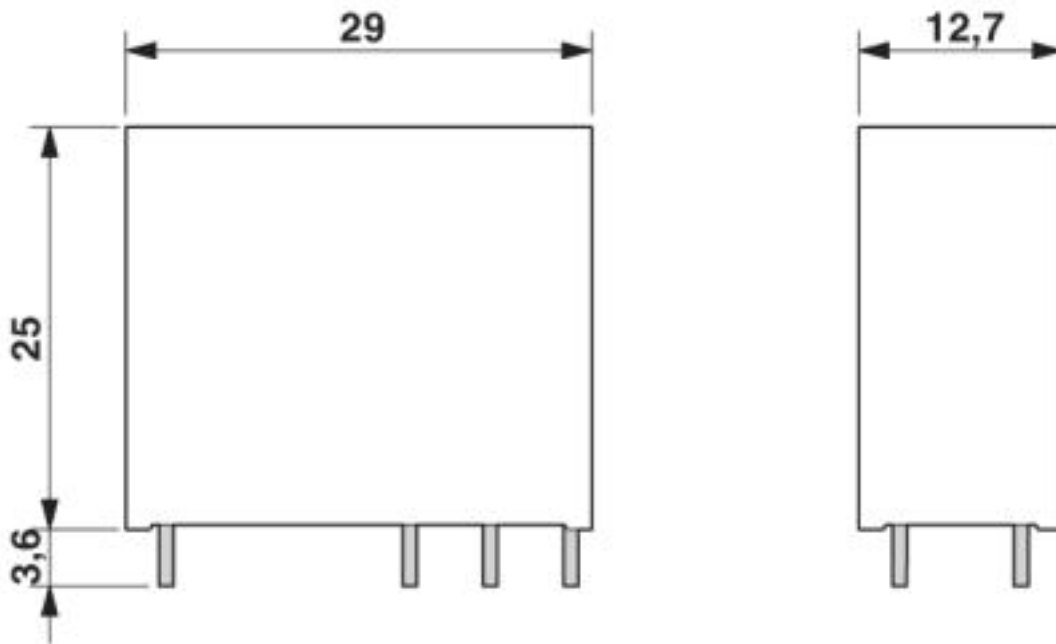
Diagram



Service life reduction factor with various cos phi

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Dimensioned drawing



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