

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

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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

| | |
|--------------------------------------|----------|
| Packing unit | 1 pc |
| Minimum order quantity | 10 pc |
| Weight per Piece (excluding packing) | 24.0 g |
| Custom tariff number | 85364190 |
| Country of origin | China |

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

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

Technical data

Coil side

| | |
|---|--------|
| Typical input current at U_N | 18 mA |
| Typical response time | 9 ms |
| Typical release time | 6 ms |
| Power dissipation for nominal condition | 0.43 W |

Contact side

| | |
|--|--|
| Contact type | 2 PDT |
| Contact material | AgNi, hard gold-plated |
| Maximum switching voltage | 30 V AC 36 V DC |
| Minimum switching voltage | 12 V (At 1 mA) |
| Min. switching current | 1 mA (at 12 V) |
| Maximum inrush current | 50 mA |
| 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 | 12 V (at 10 mA) |
| Limiting continuous current | 8 A |
| Maximum inrush current | 16 A (20 ms) |
| Min. switching current | 10 mA (at 12 V) |
| 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) 1.5 A (at 24 V, AC15) 1.5 A (at 120 V, AC15) 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 | 5×10^6 cycles |
| Standards/regulations | DIN EN 61810-1 VDE 0435-201 EN 50178 IEC 62103 |

Standards and Regulations

| | |
|----------------------------------|----------------|
| Connection in acc. with standard | CUL |
| Standards/regulations | DIN EN 61810-1 |

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

Technical data

Standards and Regulations

| | |
|--|--------------|
| | VDE 0435-201 |
| | EN 50178 |
| | 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 | 27371601 |
| eCl@ss 9.0 | 27371601 |

ETIM

| | |
|----------|----------|
| ETIM 2.0 | EC000196 |
| ETIM 3.0 | EC000196 |
| ETIM 4.0 | EC000196 |
| ETIM 5.0 | EC001437 |

UNSPSC

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

Approvals

Approvals

Approvals

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

Ex Approvals

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

Approvals

Approvals submitted

Approval details

UL Recognized

VDE Zeichengenehmigung

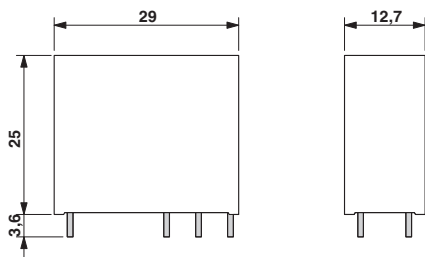
cUL Recognized

EAC

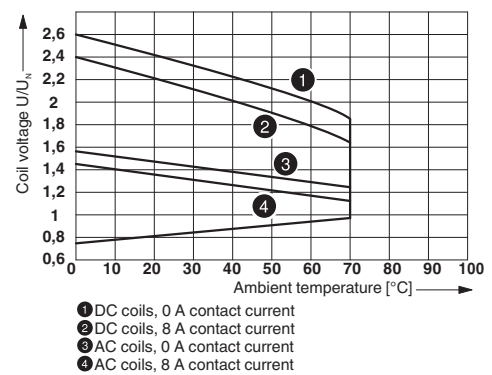
cULus Recognized

Drawings

Dimensional drawing



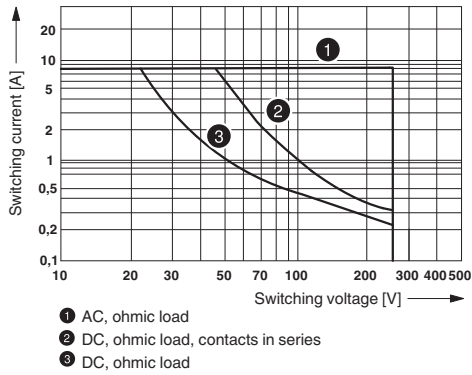
Diagram



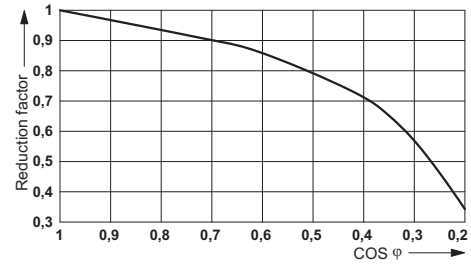
Operating voltage range

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

Diagram



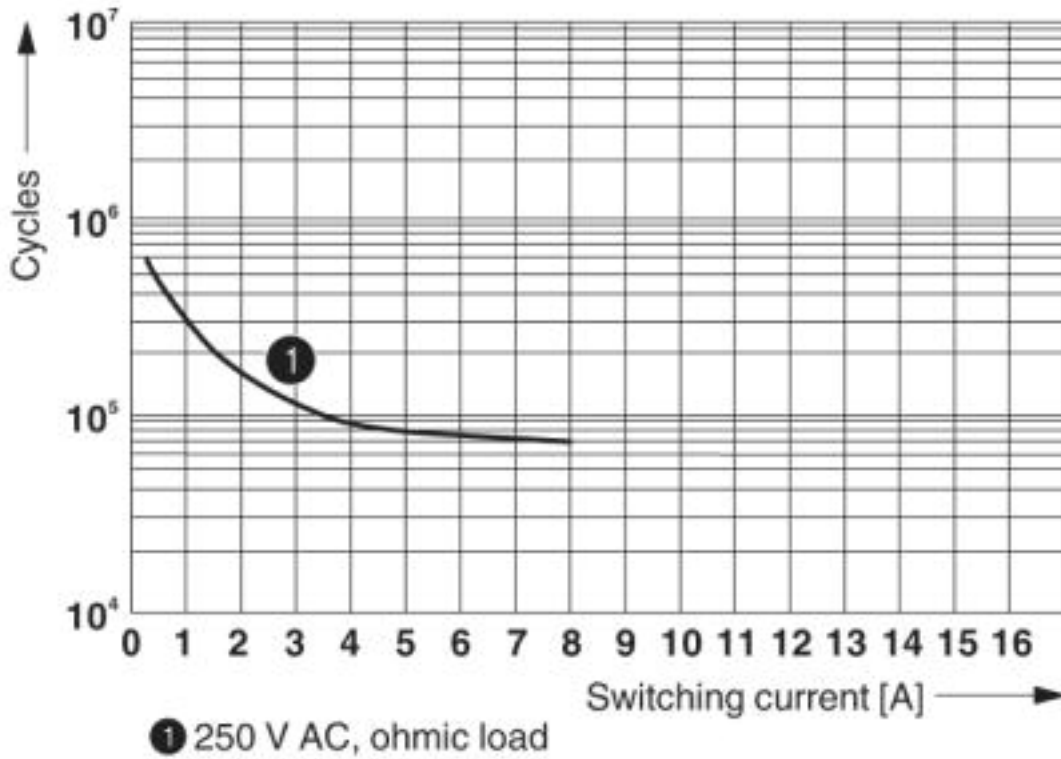
Diagram



Interrupting rating

Service life reduction factor with various cos phi

Diagram



Electrical service life