

## Single relay - REL-MR- 60DC/21-21AU - 2961286

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 power relay, with multi-layer gold contact, 2 PDTs, input voltage 60 V DC

### Product Features

- RT III wash tight (comparable with IP67)



### Key Commercial Data

|                                      |          |
|--------------------------------------|----------|
| Packing unit                         | 1 pc     |
| Minimum order quantity               | 10 pc    |
| Weight per Piece (excluding packing) | 14.52 g  |
| Custom tariff number                 | 85364900 |
| Country of origin                    | Austria  |

### 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 $U_N$    | 60 V DC |
| Typical input current at $U_N$ | 8.2 mA  |
| Typical response time          | 7 ms    |
| Typical release time           | 3 ms    |

# Single relay - REL-MR- 60DC/21-21AU - 2961286

## Technical data

### Coil side

|   |                                     |
|---|-------------------------------------|
| Coil resistance                         | 7340 $\Omega$ $\pm$ 15 % (at 20 °C) |
| Power dissipation for nominal condition | 0.49 W                              |

### Contact side

|  |  |
|--|--|
| Contact type   | 2 PDT  |
| Contact material                                       | AgNi, hard gold-plated   |
| Maximum switching voltage                              | 30 V AC<br>36 V DC   |
| Minimum switching voltage                              | 100 mV (at 10 mA)  |
| Maximum inrush current                                 | 50 mA  |
| 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)   |
| Note   | the following values are applicable if a gold layer is destroyed   |
| Maximum switching voltage                              | 250 V  |
| Minimum switching voltage                              | 5 V (at 10 mA)   |
| Limiting continuous current                            | 8 A  |
| Maximum inrush current                                 | 15 A (300 ms)  |
| Min. switching current                                 | 10 mA (At 5 V)   |
| Interrupting rating (ohmic load) max.                  | 190 W (at 24 V DC)<br>85 W (at 48 V DC)<br>60 W (at 60 V DC)<br>44 W (at 110 V DC)<br>60 W (at 220 V DC)   |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2000 VA (for 250 V AC)<br>2 A (at 24 V, DC13)<br>0.2 A (at 110 V, DC13)<br>0.2 A (at 250 V, DC13)<br>2 A (at 24 V, AC15)<br>2 A (at 120 V, AC15)<br>2 A (at 250 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.)  |
| Operating mode                           | 100% operating factor      |
| Mechanical service life                  | 3 x 10 <sup>7</sup> cycles |
| Standards/regulations                    | IEC 60664                  |

# Single relay - REL-MR- 60DC/21-21AU - 2961286

## Technical data

### General

|                                |   |
|--------------------------------|---|
|                                | EN 50178  |
|                                | IEC 62103   |
| Rated surge voltage/insulation | Basic insulation                                  |
| Pollution degree               | 3   |
| Overvoltage 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 |
| eCl@ss 6.0 | 27371001 |
| eCl@ss 7.0 | 27371001 |
| eCl@ss 8.0 | 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 Gutachten mit Fertigungsüberwachung / cUL Recognized / GL / cUL Recognized / UL Recognized / EAC / cULus Recognized

# Single relay - REL-MR- 60DC/21-21AU - 2961286

## Approvals

---

Ex Approvals

---

Approvals submitted

---


### Approval details

UL Recognized 

VDE Gutachten mit Fertigungsüberwachung 



cUL Recognized 

GL

cUL Recognized 

UL Recognized 

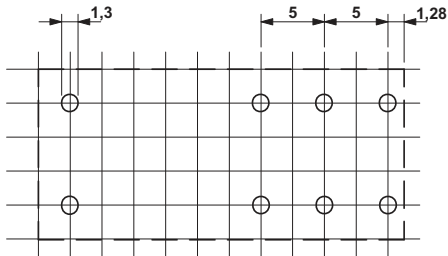
EAC

cULus Recognized  

## Drawings

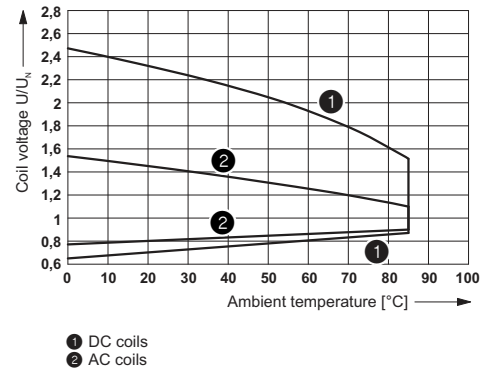
# Single relay - REL-MR- 60DC/21-21AU - 2961286

Drilling diagram



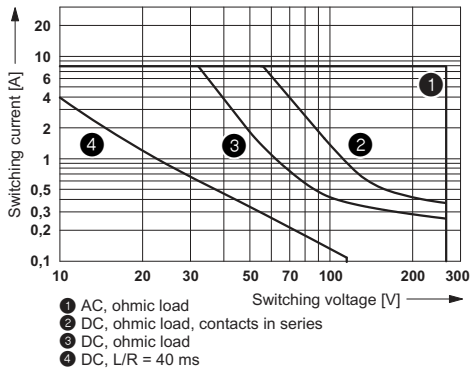
a = pitch division 2.5 mm

Diagram



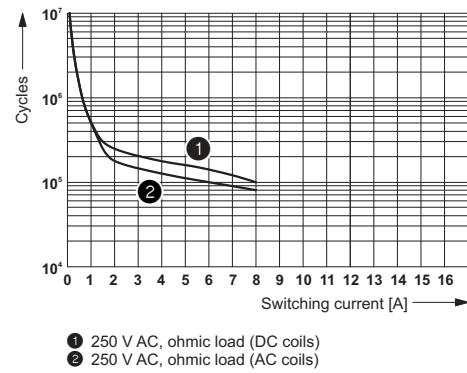
Operating voltage range

Diagram



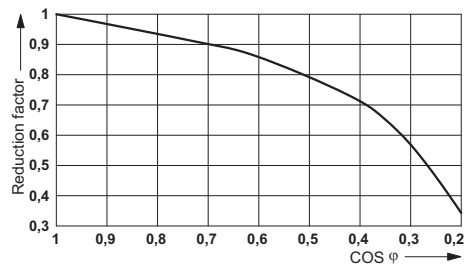
Interrupting rating

Diagram



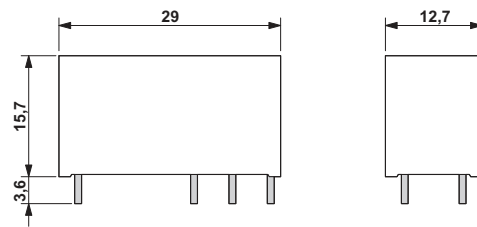
Electrical service life

Diagram



Service life reduction factor with various cos phi

Dimensional drawing



## Single relay - REL-MR- 60DC/21-21AU - 2961286

Circuit diagram

