

## Single relay - REL-MR- 48DC/21-21AU - 2834847

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 48 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)	16.0 GRM
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
---------------------------------	------------------

#### Coil side

Nominal input voltage $U_N$	48 V DC
Typical input current at $U_N$	8.7 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	5520 $\Omega$ $\pm$ 10 % (at 20 °C)

# Single relay - REL-MR- 48DC/21-21AU - 2834847

## Technical data

### Contact side

Contact type	2 PDT
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC
	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)
	100 W (at 48 V DC)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
	2000 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	2 A (at 24 V, AC15)
	2 A (at 120 V, AC15)
	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
	EN 50178
	IEC 62103
Rated surge voltage / insulation	Basic insulation

# Single relay - REL-MR- 48DC/21-21AU - 2834847

## Technical data

### General

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
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

### Approvals

#### Approvals

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

#### Ex Approvals

# Single relay - REL-MR- 48DC/21-21AU - 2834847

## Approvals

Approvals submitted

### Approval details

UL Recognized

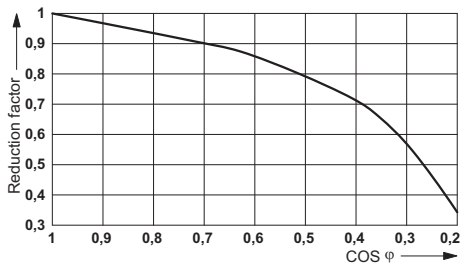
VDE Gutachten mit Fertigungsüberwachung

cUL Recognized

cULus Recognized

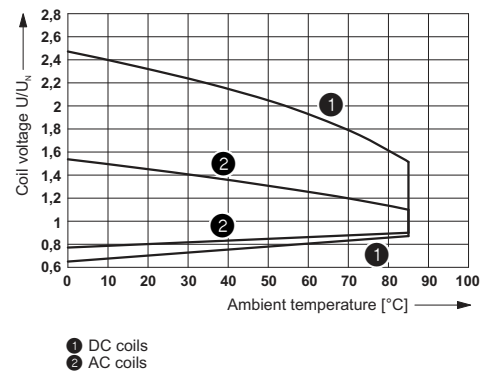
## Drawings

Diagram



Service life reduction factor with various cos phi

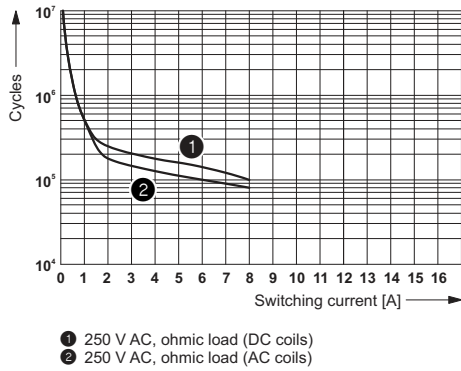
Diagram



Operating voltage range

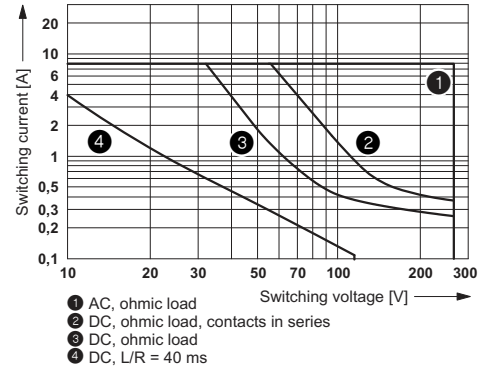
# Single relay - REL-MR- 48DC/21-21AU - 2834847

Diagram



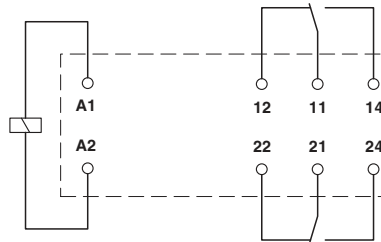
Electrical service life

Diagram



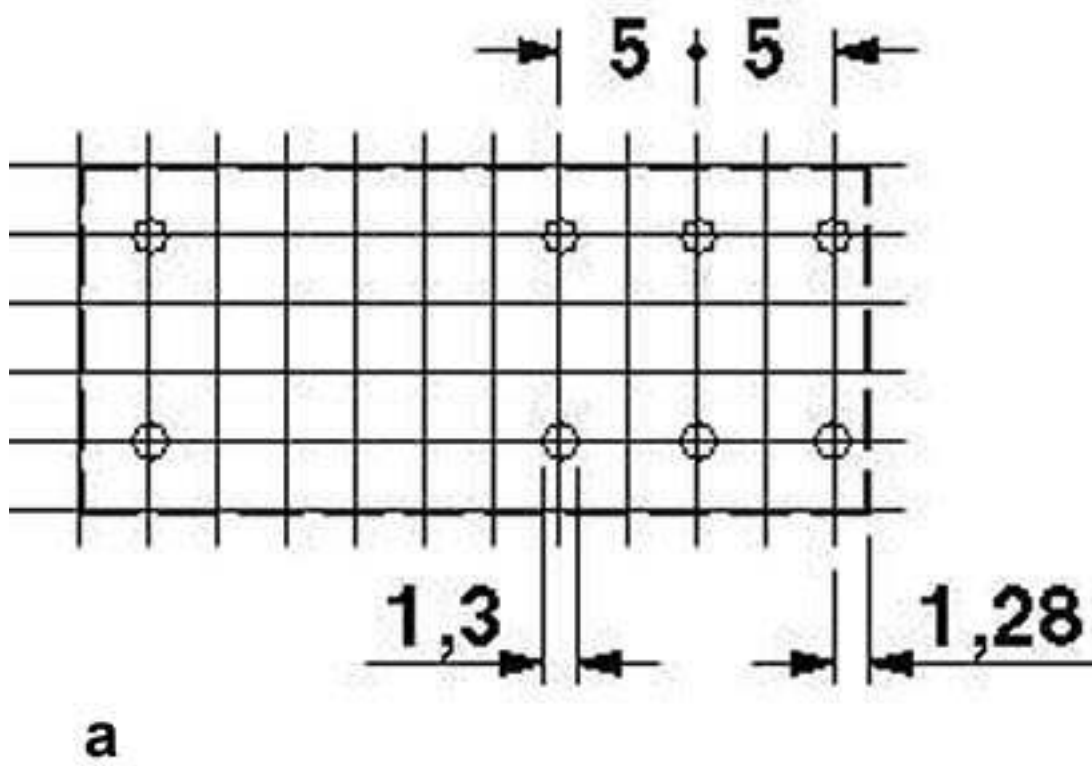
Interrupting rating

Circuit diagram



# Single relay - REL-MR- 48DC/21-21AU - 2834847

Drilling diagram



a = pitch division 2.5 mm

Dimensioned drawing

