

## Single relay - REL-MR- 12DC/21 - 2961150

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 power contact, 1 PDT, input voltage 12 V DC

The illustration shows the version REL-MR- 24DC/21

### Product Features

- ✓ Safe isolation according to DIN EN 50178 between coil and contact
- ✓ High degree of protection up to RT III depending on type (wash-proof)
- ✓ Power contacts up to 6 A



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	
Weight per Piece (excluding packing)	9.55 g
Custom tariff number	85364190
Country of origin	Czech Republic

### Technical data

#### Dimensions

Width	5 mm
Height	28 mm
Depth	15 mm

#### Ambient conditions

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

# Single relay - REL-MR- 12DC/21 - 2961150

## Technical data

### Coil side

Nominal input voltage $U_N$	12 V DC
Input voltage range in reference to $U_N$	see diagram
Typical input current at $U_N$	14 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	848 $\Omega$ $\pm$ 10 % (at 20 °C)
Power dissipation for nominal condition	0.17 W

### Contact side

Contact type	1 PDT
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	on request
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 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)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

### General

Test voltage relay winding/relay contact	4 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT III (wash-proof)
Mechanical service life	2 x 10 <sup>7</sup> cycles
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Pollution degree	3

# Single relay - REL-MR- 12DC/21 - 2961150

## Technical data

### General

Overvoltage category	III
Mounting position	any
Assembly instructions	In rows with zero spacing

### Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Pollution degree	3
Overvoltage category	III

## 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

# Single relay - REL-MR- 12DC/21 - 2961150

## Approvals

### Approvals

---

#### Approvals

UL Recognized / VDE Gutachten mit Fertigungsüberwachung / VDE Zeichengenehmigung / cUL Recognized / GL / cUL Recognized / UL Recognized / EAC / EAC / cULus Recognized

---

#### Ex Approvals


---

#### Approvals submitted

---

### Approval details


UL Recognized 

VDE Gutachten mit Fertigungsüberwachung 

VDE Zeichengenehmigung 

cUL Recognized 

GL

cUL Recognized 

# Single relay - REL-MR- 12DC/21 - 2961150

## Approvals

UL Recognized

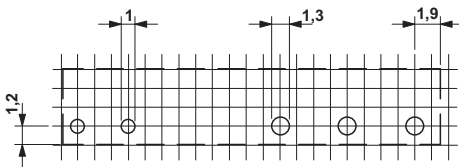
EAC

EAC

cULus Recognized

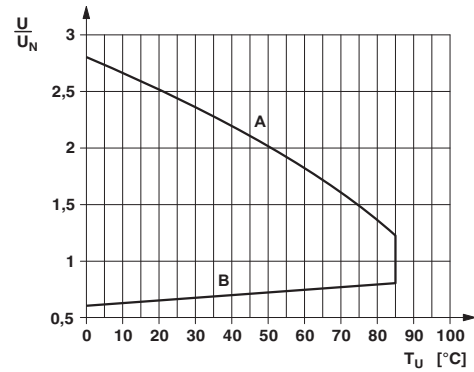
## Drawings

Drilling diagram



a = pitch division 1.25 mm and 1.27 mm

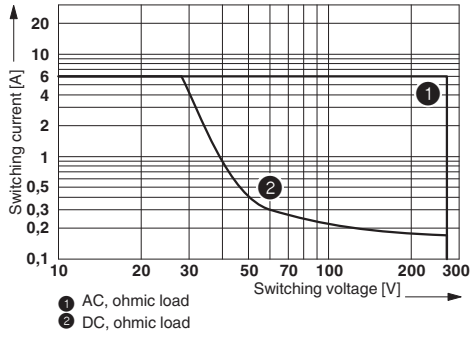
Diagram



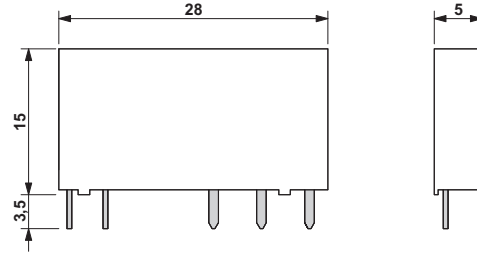
Input voltage range

# Single relay - REL-MR- 12DC/21 - 2961150

Diagram



Dimensional drawing



## Interrupting rating

Circuit diagram

