

## Single relay - REL-MR-110DC/21-21 - 2961202

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Plug-in miniature power relay, with power contact, 2 PDTs, input voltage 110 V DC

### Why buy this product

- RT III-proof (wash-proof)
- Switching current of up to 8 A

### Key Commercial Data

Packing unit	10 STK
GTIN	 4 017918 158002
Sales Key	08

### 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 $U_N$	110 V DC
Typical input current at $U_N$	4.1 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	26600 $\Omega$ $\pm$ 15 % (at 20 °C)
Power dissipation for nominal condition	0.45 W

#### Contact side

Contact type	2 PDT
Contact material	AgNi

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## Technical data

### Contact side

Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Min. switching current	10 mA (At 5 V)
Maximum inrush current	25 A (20 ms)
Limiting continuous current	8 A
Interrupting rating (ohmic load) max.	190 W (at 24 V DC)
	85 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 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 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
Degree of protection	RT III (wash-proof)
Mechanical service life	3 x 10 <sup>7</sup> cycles
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	Basic insulation
Degree of pollution	3
Overvoltage category	III
Mounting position	any
Assembly instructions	Can be aligned without spacing (> 70 °C ≥ 2.5 mm)

### Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	Basic insulation
Degree of pollution	3
Overvoltage category	III

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## 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

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#### Approvals

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

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#### Ex Approvals

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#### Approvals submitted

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### Approval details

UL Recognized
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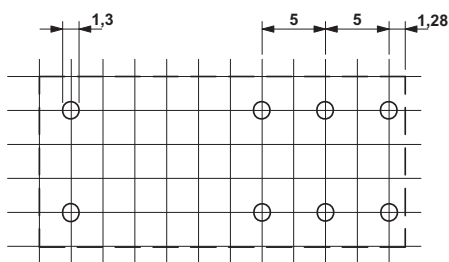
# Single relay - REL-MR-110DC/21-21 - 2961202

## Approvals

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

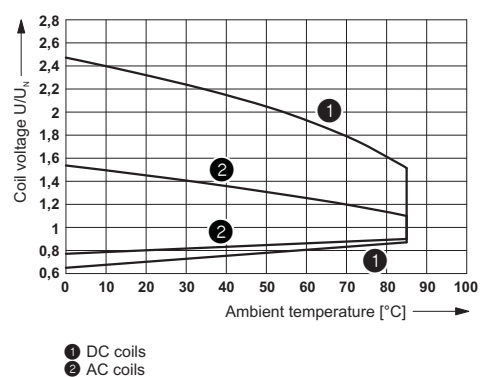
## Drawings

Drilling diagram



a = pitch division 2.5 mm

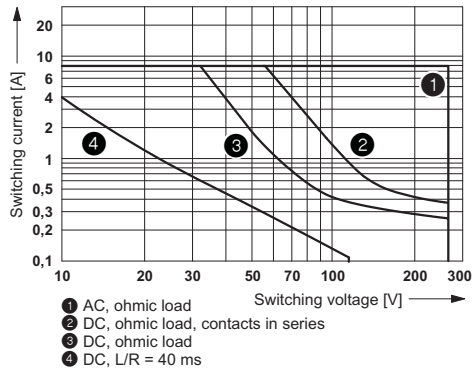
Diagram



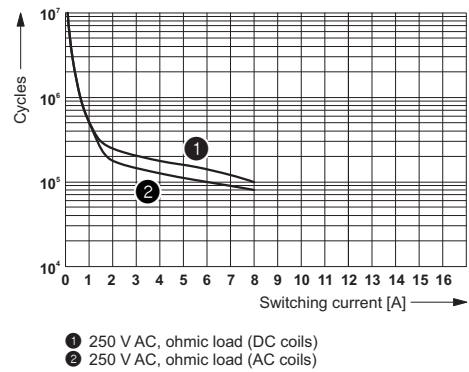
Operating voltage range

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Diagram



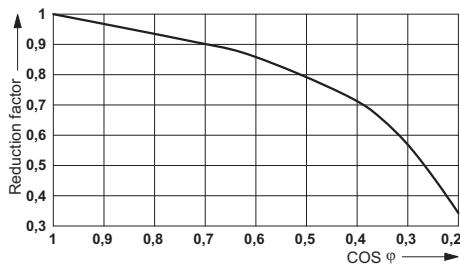
Diagram



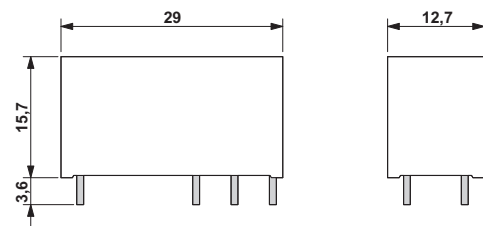
Interrupting rating

Electrical service life

Diagram

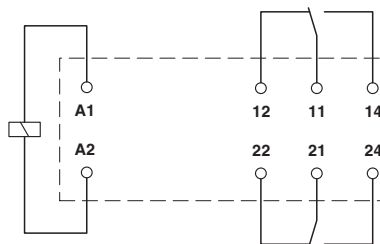


Dimensional drawing



Service life reduction factor with various cos phi

Circuit diagram



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