

## Single relay - REL-MR- 12DC/21-21AU - 2961299

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Plug-in miniature power relay, with multi-layer gold contact, 2 PDTs, input voltage 12 V DC

### Why buy this product

- RT III wash tight (comparable with IP67)
- 



### Key commercial data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 017918 164041
Weight per Piece (excluding packing)	14.98 g
Custom tariff number	85364900
Country of origin	Austria
Note	Made to Order (non-returnable)

### 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 $U_N$	12 V DC
Typical input current at $U_N$	33 mA
Power dissipation for nominal condition	0.4 W

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## Technical data

### Coil side

Typical response time	7 ms
Typical release time	3 ms
Coil resistance	360 Ω ±10 % (at 20 °C)

### 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)
Switching capacity min.	0.12 W
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)
	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 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

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## Technical data

### General

Rated surge voltage/insulation	Basic insulation
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	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 / EAC / cULus Recognized


#### Ex Approvals

# Single relay - REL-MR- 12DC/21-21AU - 2961299


## Approvals

Approvals submitted


### Approval details


UL Recognized 

VDE Gutachten mit Fertigungsüberwachung 

cUL Recognized 


GL

cUL Recognized 

UL Recognized 

EAC

EAC

cULus Recognized 

## Accessories

Additional products

## Single relay - REL-MR- 12DC/21-21AU - 2961299

### Accessories

#### Relay socket - PLC-BPT- 12DC/21-21 - 2900282



14 mm PLC basic terminal block with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 12 V DC

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#### Relay socket - PLC-BSP- 12DC/21-21 - 2912426



14 mm PLC basic terminal block with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 12 V DC

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#### Relay socket - PLC-BSC- 12DC/21-21 - 2967251



14 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 PDTs, input voltage 12 V DC

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#### Relay socket - PR1-BSC2/2X21 - 2833518



Relay socket PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 2/2 level design, screw connections, connection facility for input/interference suppression modules

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#### Relay socket - PR1-BSC3/2X21 - 2833521



Relay socket PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 1/3 level design, screw connections, connection facility for input/interference suppression modules

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## Accessories

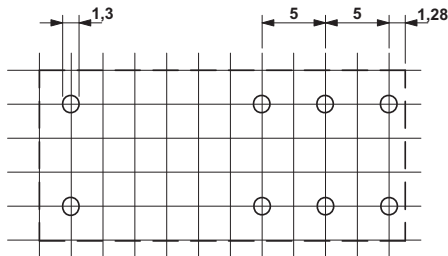
Relay socket - PR1-BSP3/2X21 - 2833534

Relay socket PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 1/3 level design, spring-cage connections, connection facility for input/interference suppression modules



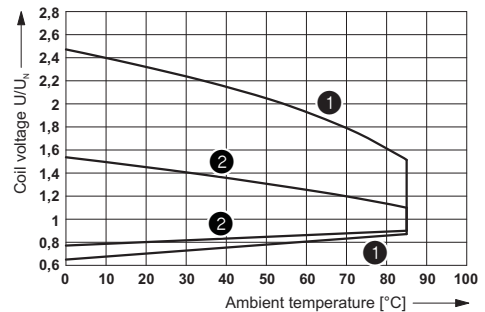
## Drawings

Drilling diagram



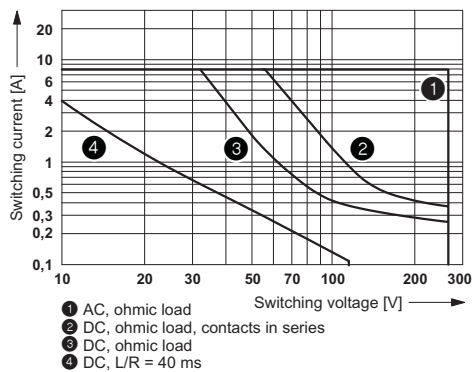
a = pitch division 2.5 mm

Diagram



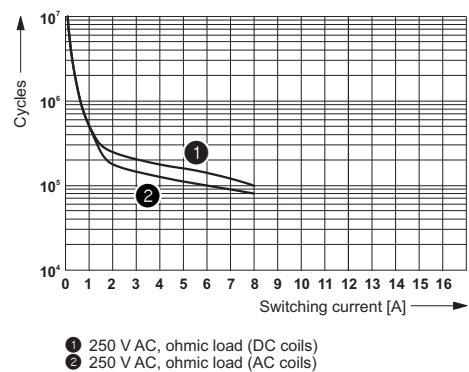
Operating voltage range

Diagram



Interrupting rating

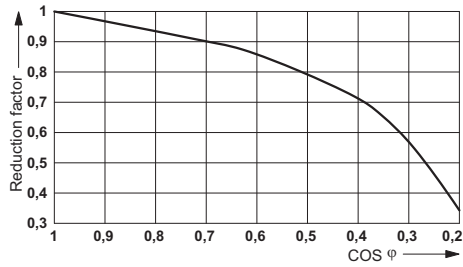
Diagram



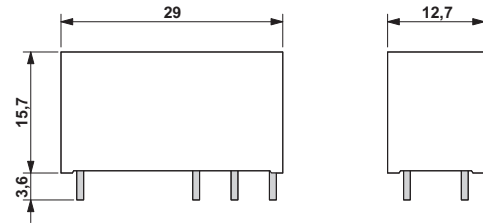
Electrical service life

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Diagram



Dimensional drawing



Service life reduction factor with various cos phi

Circuit diagram

