

## Single relay - REL-MR- 24DC/21HC - 2961312

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Plug-in miniature power relay, with power contact for high continuous currents, 1 PDT, input voltage 24 V DC

### Product Features

- Switching current of up to 16 A



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
Weight per Piece (excluding packing)	16.14 g
Custom tariff number	85364190
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 $U_N$	24 V DC
Typical input current at $U_N$	17 mA
Typical response time	7 ms
Typical release time	3 ms

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## Technical data

### Coil side

Coil resistance	1440 Ω ±10 % (at 20 °C)
Power dissipation for nominal condition	0.41 W

### Contact side

Contact type	1 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	50 A (20 ms)
Limiting continuous current	16 A
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	4000 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)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 V, AC15)

### General

Test voltage relay winding/relay contact	5 kV AC (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	RT II (flux-proof)
Mechanical service life	3 x 10 <sup>7</sup> cycles
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
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
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## Technical data

### Standards and Regulations

Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Degree of pollution	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

## 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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## Approvals

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Ex Approvals

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Approvals submitted

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### Approval details

UL Recognized 

VDE Gutachten mit Fertigungsüberwachung 

cUL Recognized 


GL

EAC

EAC

UL Recognized

cUL Recognized

cULus Recognized 

## Accessories

Additional products

## Single relay - REL-MR- 24DC/21HC - 2961312

### Accessories

#### Relay socket - PLC-BSP- 24DC/21HC - 2912345



14 mm PLC basic terminal block for high continuous currents with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

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#### Relay socket - PLC-BSP- 24UC/21HC - 2912358



14 mm PLC basic terminal block for high continuous currents with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V AC/DC

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#### Relay socket - PLC-BSP- 48DC/21HC - 2912361



14 mm PLC basic terminal block for high continuous currents with spring-cage connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 48 V DC

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#### Relay socket - PLC-BSC- 24DC/21HC - 2967772



14 mm PLC basic terminal block for high continuous currents with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

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#### Relay socket - PLC-BSC- 24UC/21HC - 2967785



14 mm PLC basic terminal block for high continuous currents with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V AC/DC

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## Single relay - REL-MR- 24DC/21HC - 2961312

### Accessories

#### Relay socket - PLC-BSC- 48DC/21HC - 2967798



14 mm PLC basic terminal block for high continuous currents with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 48 V DC

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#### Relay socket - PLC-BPT- 24DC/21HC - 2900254



14 mm PLC basic terminal block for high continuous currents with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V DC

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#### Relay socket - PLC-BPT- 24UC/21HC - 2900255



14 mm PLC basic terminal block for high continuous currents with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 24 V AC/DC

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#### Relay socket - PLC-BPT- 48DC/21HC - 2900256



14 mm PLC basic terminal block for high continuous currents with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 PDT, input voltage 48 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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# Single relay - REL-MR- 24DC/21HC - 2961312

## Accessories

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

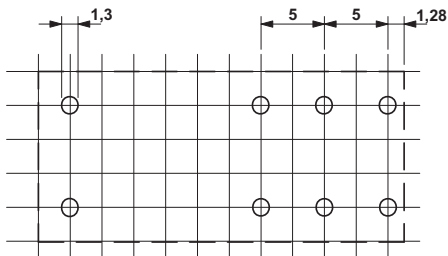
Relay socket - PR1-BSP3/2X21 - 2833534



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

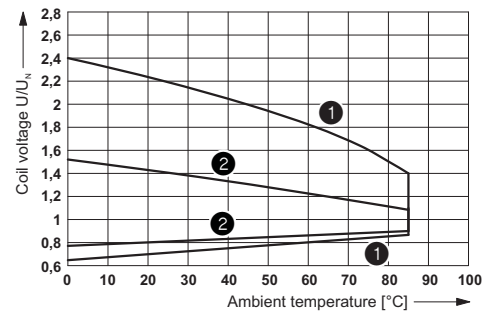
## Drawings

Drilling diagram



Basic pitch 2.5 mm

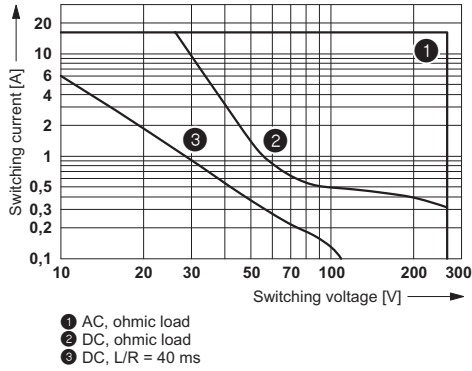
Diagram



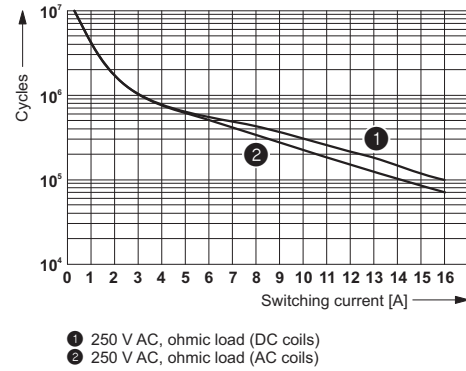
Operating voltage range

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Diagram



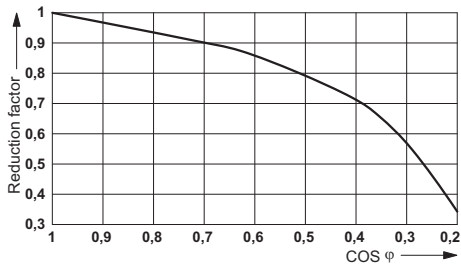
Diagram



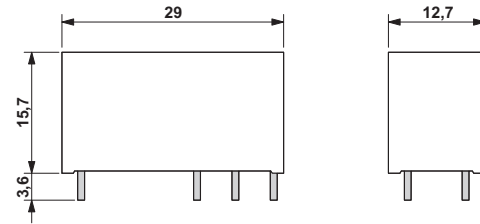
Interrupting rating

Electrical service life

Diagram

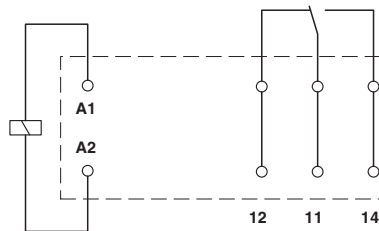


Dimensional drawing



Service life reduction factor with various cos phi

Circuit diagram





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