

Single relay - REL-MR- 12DC/21HC - 2961309

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Plug-in miniature power relay, with power contact for high continuous currents, 1 PDT, input voltage 12 V DC

Why buy this product

- Switching current of up to 16 A
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Key commercial data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 017918 187552
Weight per Piece (excluding packing)	15.7 g
Custom tariff number	85364190
Country of origin	Czech Republic

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
Input voltage range in reference to U_N	see diagram
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	1 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Maximum inrush current	50 A (20 ms)
Min. switching current	10 mA (at 12 V)
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
Mechanical service life	3 x 10 ⁷ cycles
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
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
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Classifications

eCl@ss

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

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

Ex Approvals

Approvals submitted

Approval details

UL Recognized

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Approvals

VDE Gutachten mit Fertigungsüberwachung

cUL Recognized

GL

cUL Recognized

UL Recognized

EAC

EAC

cULus Recognized

Accessories

Additional products

Relay socket - PLC-BPT- 12DC/21HC - 2900253



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 12 V DC

Relay socket - PLC-BSP- 12DC/21HC - 2912332



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 12 V DC

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Accessories

Relay socket - PLC-BSC- 12DC/21HC - 2967769



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 12 V DC

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

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

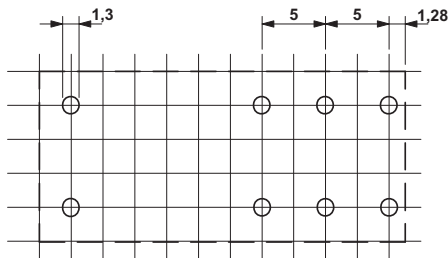


Relay socket PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 1/3 level design, spring-cage connections, connection facility for input/interference suppression modules

Drawings

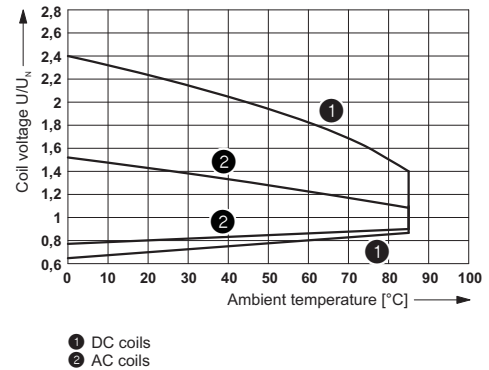
Single relay - REL-MR- 12DC/21HC - 2961309

Drilling diagram



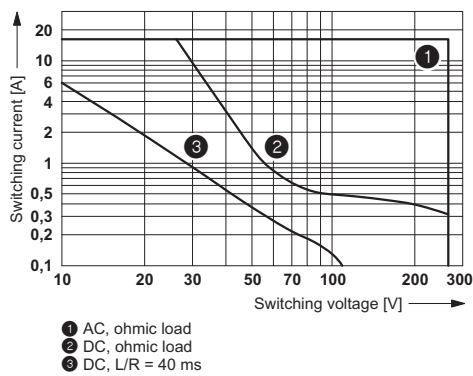
a = pitch division 2.5 mm

Diagram



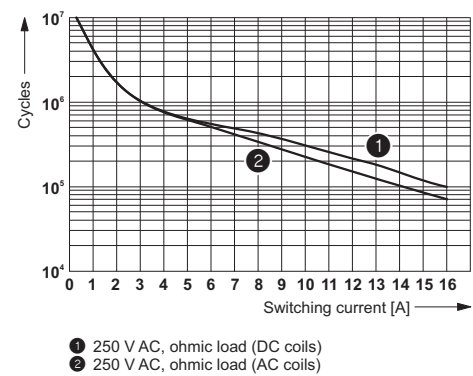
Operating voltage range

Diagram



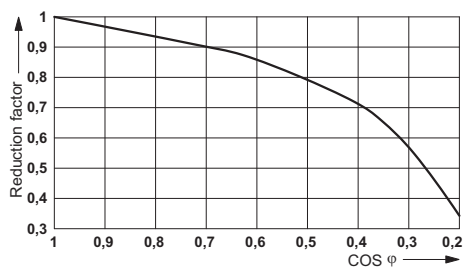
Interrupting rating

Diagram



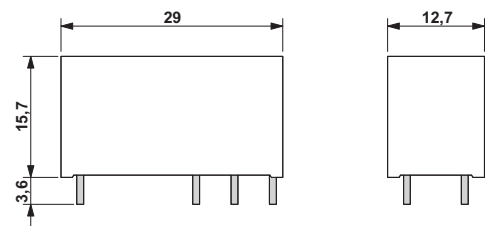
Electrical service life

Diagram



Service life reduction factor with various cos phi

Dimensional drawing



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Circuit diagram

