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

RoHS

Key Commercial Data

Packing unit	1 STK
Minimum order quantity	10 STK
GTIN	4 017918 187552
GTIN	4017918187552
Weight per Piece (excluding packing)	15.700 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

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

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	33 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	360 Ω ±10 % (at 20 °C)
Power dissipation for nominal condition	0.4 W

Contact side

Contact type	1 PDT
Type of switch contact	Single contact
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 10^7 cycles
Mounting position	any
Assembly instructions	Can be aligned without spacing (> 70 °C ≥ 2.5 mm)

Standards and Regulations

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

Technical data

Standards and Regulations

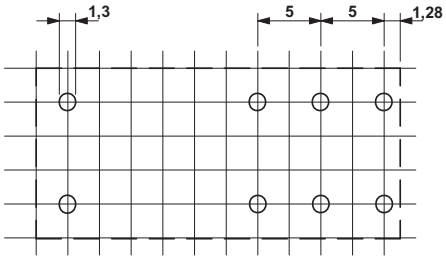
Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1
Degree of pollution	3
Overvoltage category	III

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

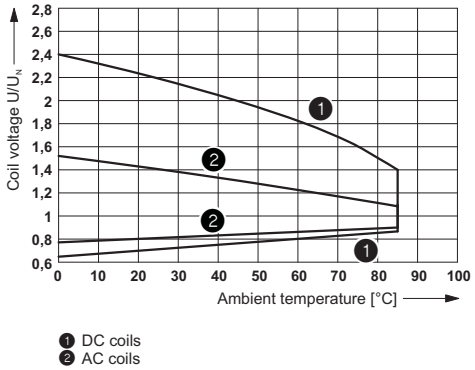
Drawings

Drilling diagram



a = pitch division 2.5 mm

Diagram



Operating voltage range

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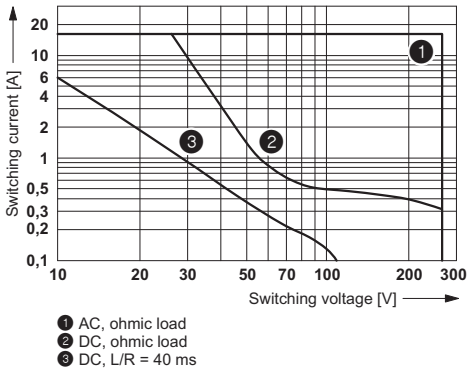
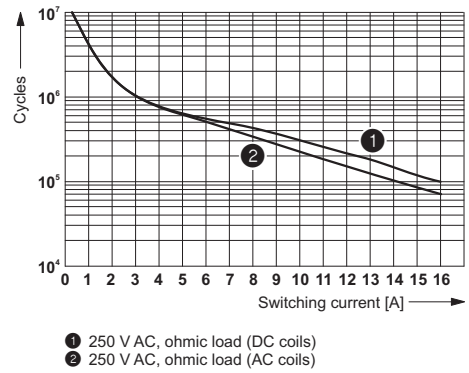
Diagram



1 AC, ohmic load
2 DC, ohmic load
3 DC, L/R = 40 ms

Interrupting rating

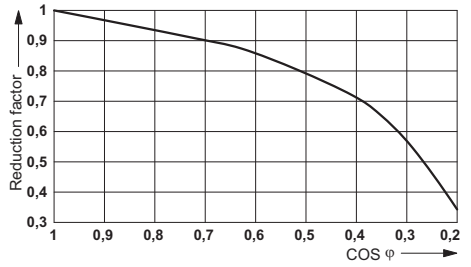
Diagram



1 250 V AC, ohmic load (DC coils)
2 250 V AC, ohmic load (AC coils)

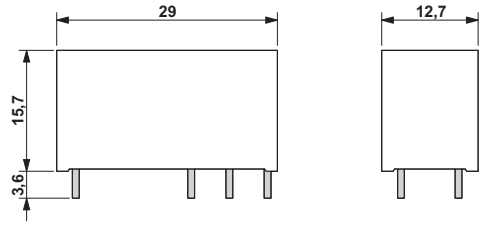
Electrical service life

Diagram

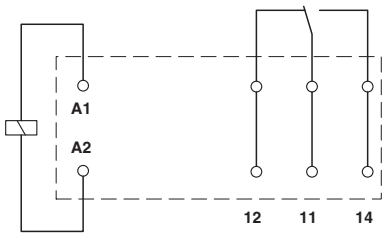


Service life reduction factor with various cos phi

Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 5.0	27371601

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Classifications

eCl@ss

eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334

Approvals

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UL Recognized / cUL Recognized / GL / EAC / EAC / UL Recognized / cUL Recognized / PRS / VDE approval of drawings / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652

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

Approvals

cUL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652
GL	http://exchange.dnv.com/tari/	46016-03 HH
EAC		RU C-DE.A*30.B.01082
EAC		EAC-Zulassung
UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652
cUL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 228652
PRS	http://www.prs.pl/	TE/2109/880590/16
VDE approval of drawings	http://www.vde.com/en/Institute/OnlineService/VDE-approved-products/Pages/Online-Search.aspx	40007758
UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140

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Approvals

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 172140

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

Accessories

Additional products

Relay base - 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 base - 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

Relay base - 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

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

Accessories

Relay base - PR1-BSC2/2X21 - 2833518



Relay base 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 base - PR1-BSC3/2X21 - 2833521



Relay base 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 base - PR1-BSP3/2X21 - 2833534



Relay base 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

Relay base - RIF-1-BPT/2X21 - 2900931



RIF-1... relay base, for miniature power relay with 1 or 2 PDTs or solid-state relays of the same design, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

Relay base - RIF-1-BSC/2X21 - 2900930



RIF-1... relay base, for miniature power relay with 1 or 2 changeover contacts or identical solid-state relays, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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