Single relay - REL-MR- 24DC/21-21AU - 2961215

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Plug-in miniature power relay, with multi-layer gold contact, 2 PDTs, input voltage 24 V DC

Why buy this product

- RT III-proof (wash-proof)

Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	4 017918 157999
Weight per Piece (excluding packing)	14.95 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
Coil resistance	1440 Ω ±10 % (at 20 °C)

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Technical data

Coil side

Power dissipation for nominal condition	0.41 W

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)
Min. switching current	1 mA (at 24 V)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
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
Degree of protection	RT III (wash-proof)
Mechanical service life	3 x 10^7 cycles
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage/insulation	Basic insulation
Degree of pollution	3

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Technical data

General

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

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

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Approvals

Approvals

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

Ex Approvals

Approvals submitted

Approval details

UL Recognized

VDE Gutachten mit Fertigungsüberwachung

cUL Recognized

GL

EAC

EAC

UL Recognized

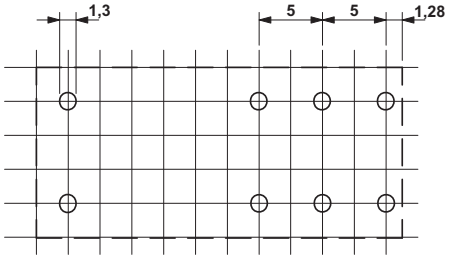
cUL Recognized

cULus Recognized

Drawings

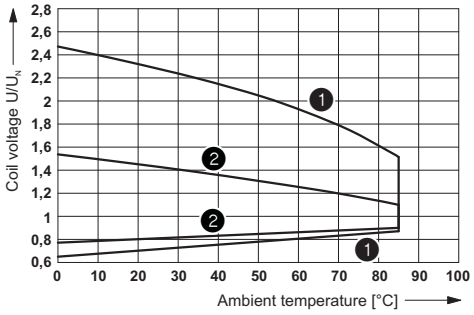
Single relay - REL-MR- 24DC/21-21AU - 2961215

Drilling diagram



a = pitch division 2.5 mm

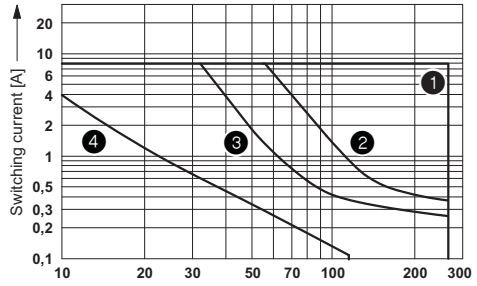
Diagram



1 DC coils
2 AC coils

Operating voltage range

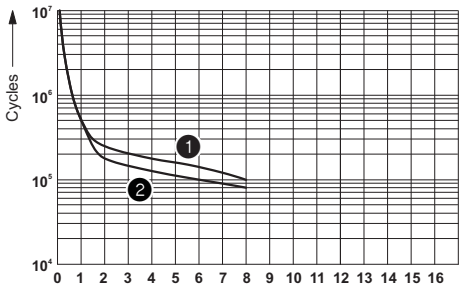
Diagram



1 AC, ohmic load
2 DC, ohmic load, contacts in series
3 DC, ohmic load
4 DC, L/R = 40 ms

Interrupting rating

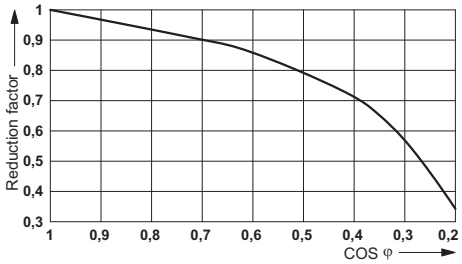
Diagram



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

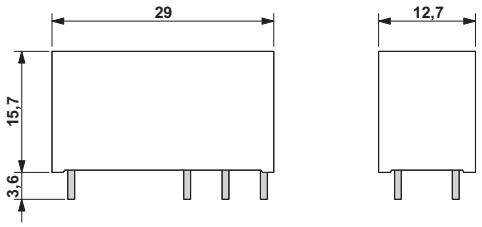
Electrical service life

Diagram



Service life reduction factor with various cos phi

Dimensional drawing



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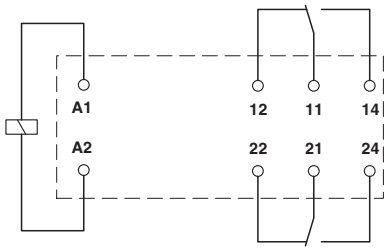
Circuit diagram



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