

Single relay - REL-MR- 12DC/21-21 - 2961257

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



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

Product Features

- RT III-proof (wash-proof)
- Switching current of up to 8 A



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
Weight per Piece (excluding packing)	16.24 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	12 V DC
Input voltage range in reference to U_N	see diagram
Typical input current at U_N	33 mA

Single relay - REL-MR- 12DC/21-21 - 2961257

Technical data

Coil side

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	2 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Min. switching current	10 mA (At 5 V)
Maximum inrush current	25 A (20 ms)
Limiting continuous current	8 A
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 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 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
Pollution degree	3
Overvoltage category	III
Mounting position	any

Single relay - REL-MR- 12DC/21-21 - 2961257

Technical data

General

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
Pollution degree	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

Single relay - REL-MR- 12DC/21-21 - 2961257

Approvals

Approvals


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 

VDE Gutachten mit Fertigungsüberwachung 

cUL Recognized 

GL

cUL Recognized 

UL Recognized 

EAC

EAC

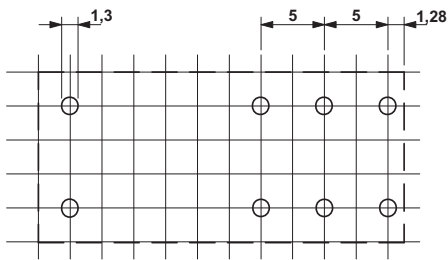
Single relay - REL-MR- 12DC/21-21 - 2961257

Approvals



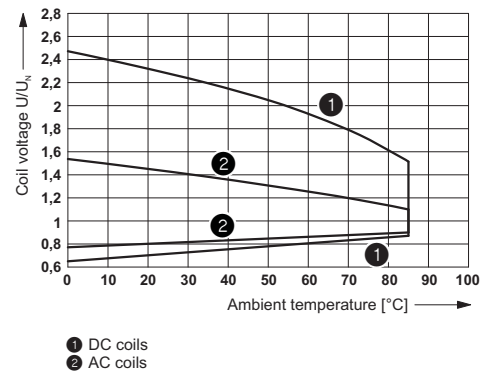
Drawings

Drilling diagram



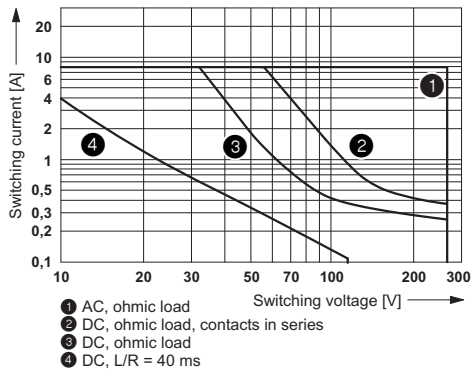
a = pitch division 2.5 mm

Diagram



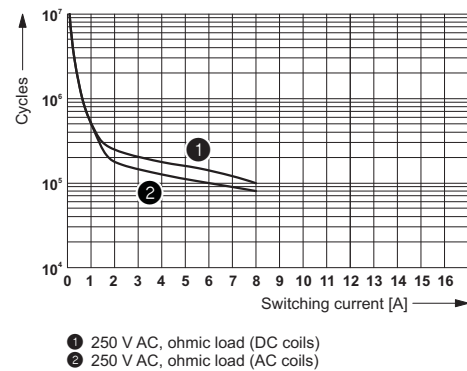
Operating voltage range

Diagram



Interrupting rating

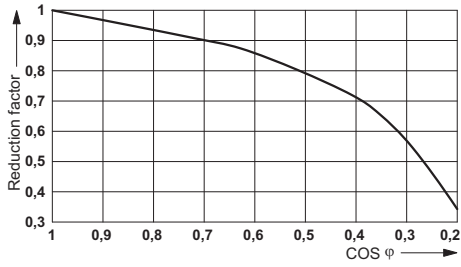
Diagram



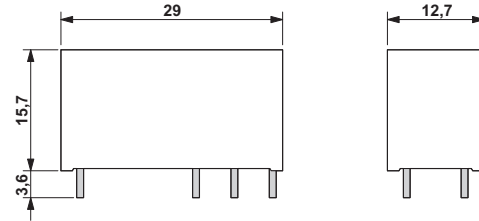
Electrical service life

Single relay - REL-MR- 12DC/21-21 - 2961257

Diagram



Dimensional drawing



Service life reduction factor with various cos phi

Circuit diagram

