Single relay - REL-MR- 48DC/21HC - 2834821

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 for high continuous currents, 1 PDT, input voltage 48 V DC

Product Features

- Switching current of up to 16 A

Key commercial data

Packing unit	1 pc
Minimum order quantity	10 pc
Custom tariff number	85364900
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

Coil side

Nominal input voltage U_N	48 V DC
Typical input current at U_N	8.7 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	5520 Ω ±10 % (at 20 °C)

Contact side

Single relay - REL-MR- 48DC/21HC - 2834821

Technical data

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
eCl@ss 4.1	27371104

Single relay - REL-MR- 48DC/21HC - 2834821

Classifications

eCl@ss

eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371001
eCl@ss 7.0	27371001
eCl@ss 8.0	27371001

ETIM

ETIM 2.0	EC000196
ETIM 3.0	EC000196
ETIM 4.0	EC000196
ETIM 5.0	EC000196

UNSPSC

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

Approvals

Approvals

Approvals

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

Ex Approvals

Approvals submitted

Approval details

UL Recognized

Single relay - REL-MR- 48DC/21HC - 2834821

Approvals

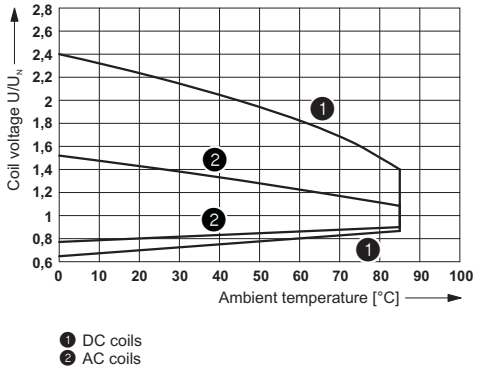
VDE Gutachten mit Fertigungsüberwachung

cUL Recognized

cULus Recognized

Drawings

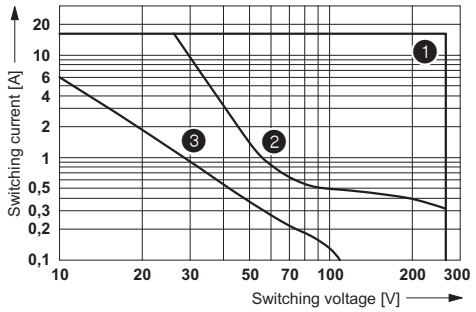
Diagram



❶ DC coils
❷ AC coils

Operating voltage range

Diagram

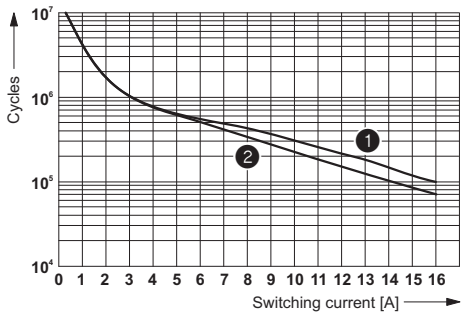


❶ AC, ohmic load
❷ DC, ohmic load
❸ DC, L/R = 40 ms

Interrupting rating

Single relay - REL-MR- 48DC/21HC - 2834821

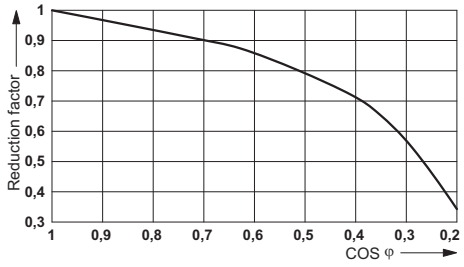
Diagram



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

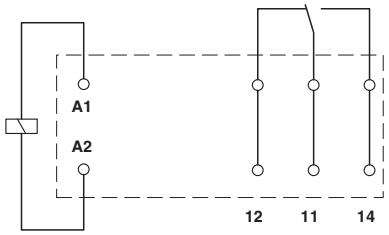
Electrical service life

Diagram



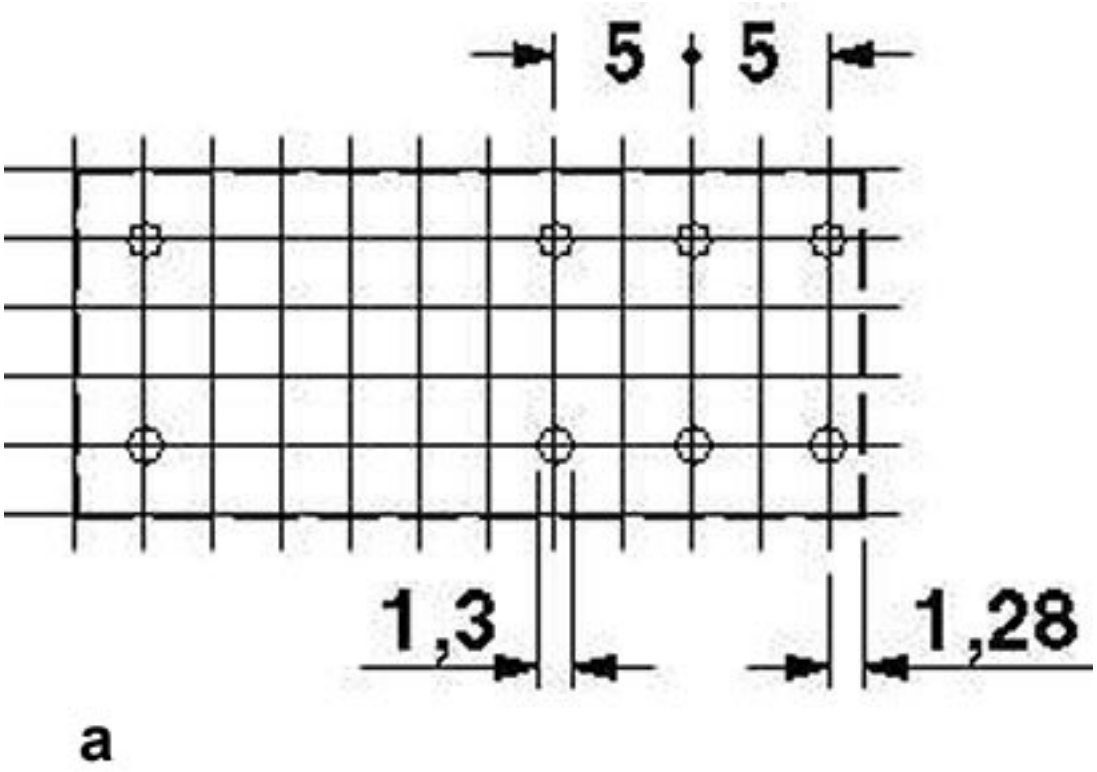
Service life reduction factor with various cos phi

Circuit diagram



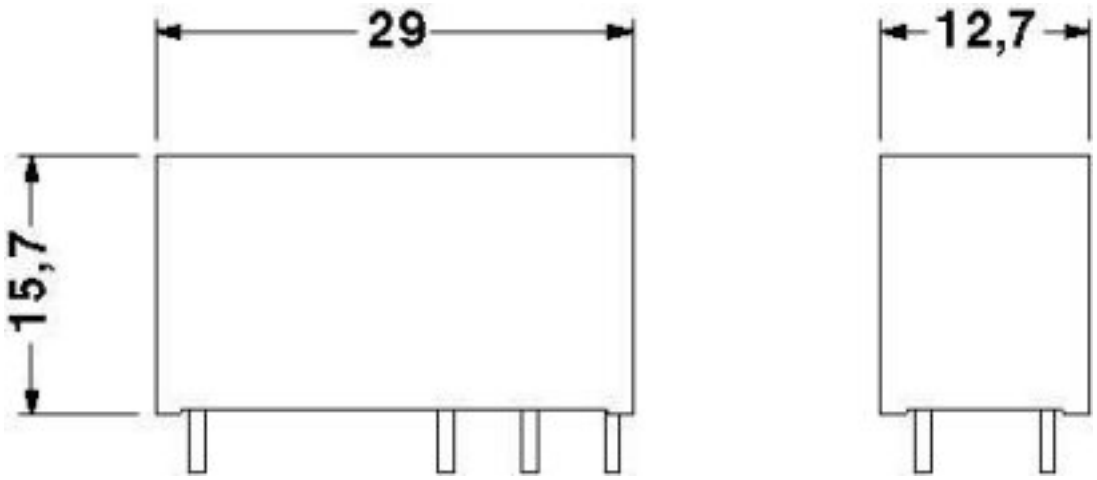
Single relay - REL-MR- 48DC/21HC - 2834821

Drilling diagram



a = pitch division 2.5 mm

Dimensioned drawing



Phoenix Contact 2014 © - all rights reserved
http://www.phoenixcontact.com