

Single relay - REL-MR-120AC/21-21 - 2961448

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Pluggable miniature relay, with power contact, 2 PDT, coil voltage 120 V AC

Product Features

- RT III wash tight (comparable with IP67)
- Switching current of up to 16 A

Key commercial data

package_quantity	10
GTIN	4017918937850

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	120 V AC
Nominal input current at U_{IN}	7 mA (at 50 Hz)
Nominal input current at U_{IN}	5 mA (At 60 Hz)
Typical response time	3 ms ... 12 ms (depending on phase relation)
Typical release time range	2 ms ... 9 ms (depending on phase relation)
Coil resistance	8100 Ω +/-15% (at 20 °C)

Contact side

Contact type	Single contact, 2-PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Maximum inrush current	12 A (20 ms)
Min. switching current	10 mA (At 5 V)

Single relay - REL-MR-120AC/21-21 - 2961448

Technical data

Contact side

Limiting continuous current	8 A
Interrupting rating (ohmic load) max.	190 W (at 24 V DC)
Interrupting rating (ohmic load) max.	85 W (at 48 V DC)
Interrupting rating (ohmic load) max.	60 W (at 60 V DC)
Interrupting rating (ohmic load) max.	44 W (at 110 V DC)
Interrupting rating (ohmic load) max.	60 W (at 220 V DC)
Interrupting rating (ohmic load) max.	2000 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	0.2 A (at 250 V, DC13)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	3 A (at 24 V, AC15)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	3 A (at 120 V, AC15)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	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
Mechanical service life	1 x 10 ⁷ cycles
Standards/regulations	IEC 60664
Standards/regulations	EN 50178
Standards/regulations	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
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

Single relay - REL-MR-120AC/21-21 - 2961448

classifications

UNSPSC

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

approvals

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

Approval details

UL Recognized

VDE Gutachten mit Fertigungsüberwachung

Nominal voltage UN	
Nominal current IN	
mm ² /AWG/kcmil	

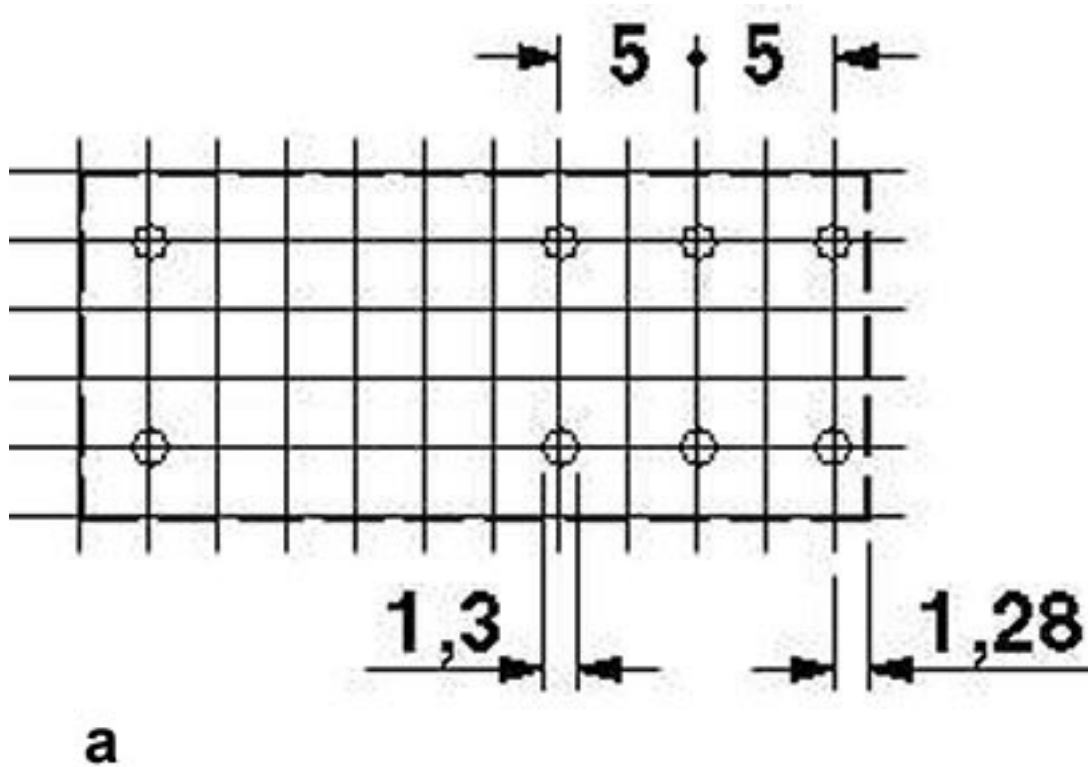
cUL Recognized

cULus Recognized

Drawings

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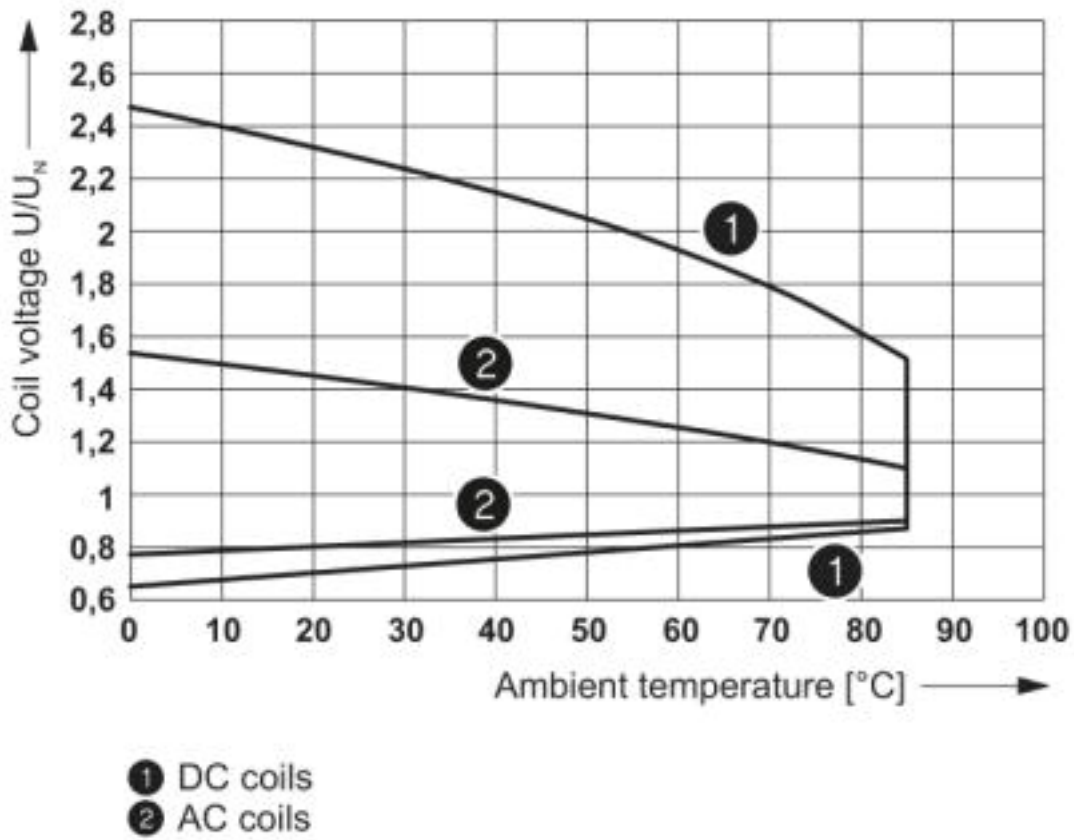
Drilling diagram



a = pitch division 2.5 mm

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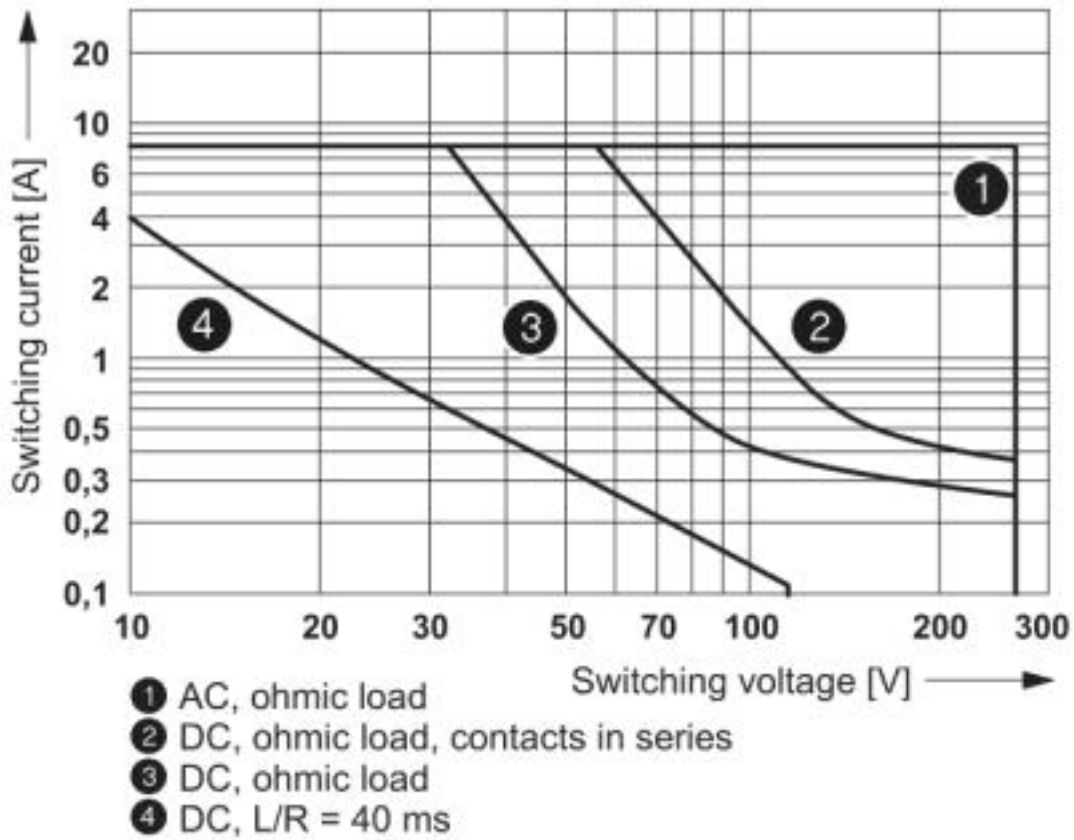
Diagram



Operating voltage range

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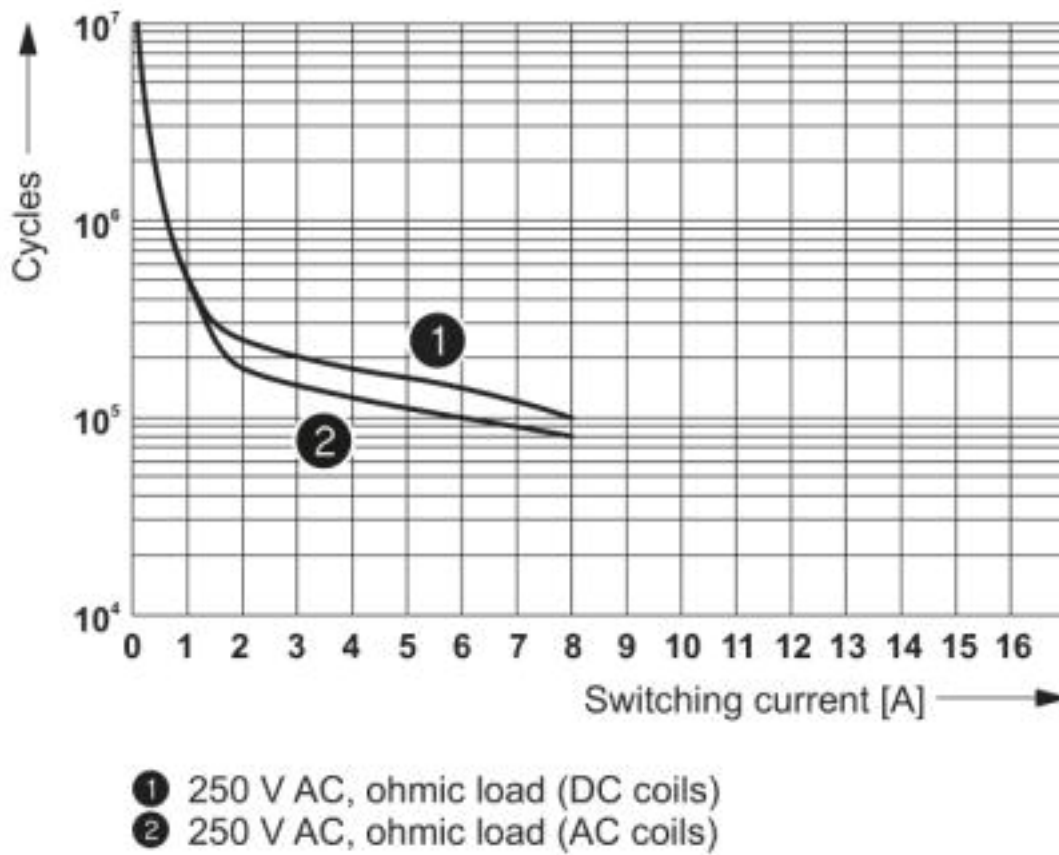
Diagram



Interrupting rating

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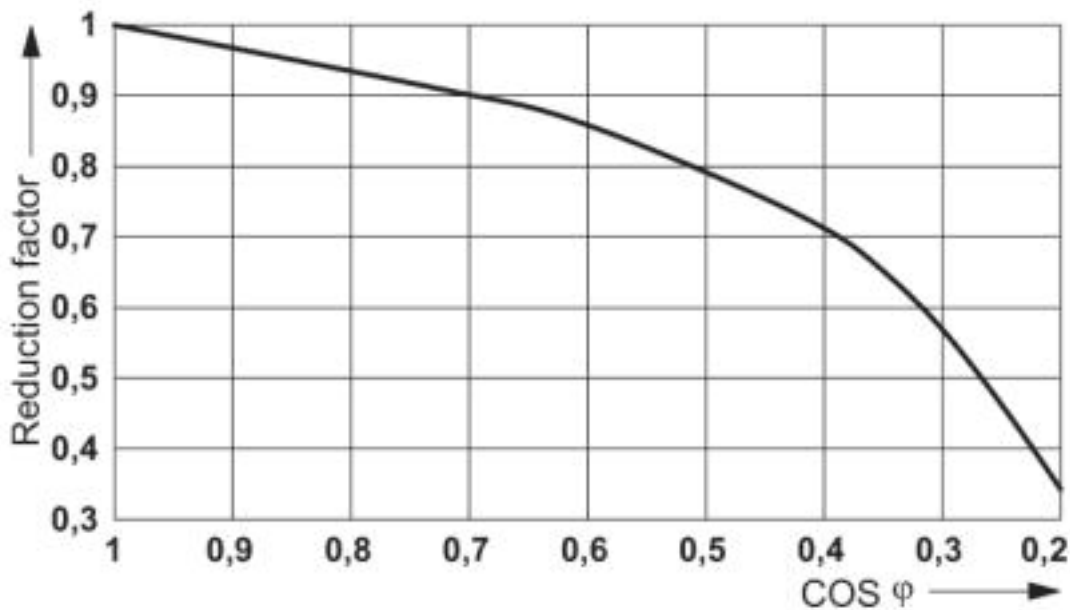
Diagram



Electrical service life

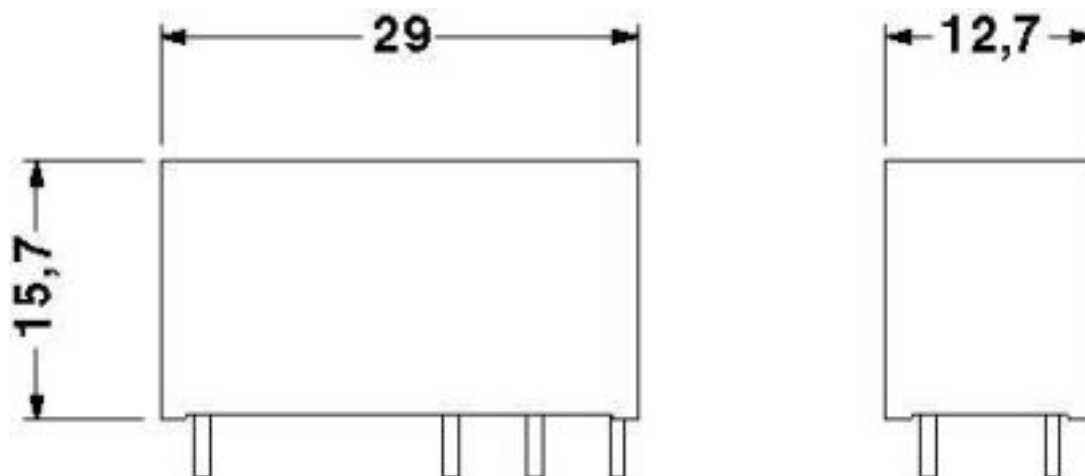
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Diagram



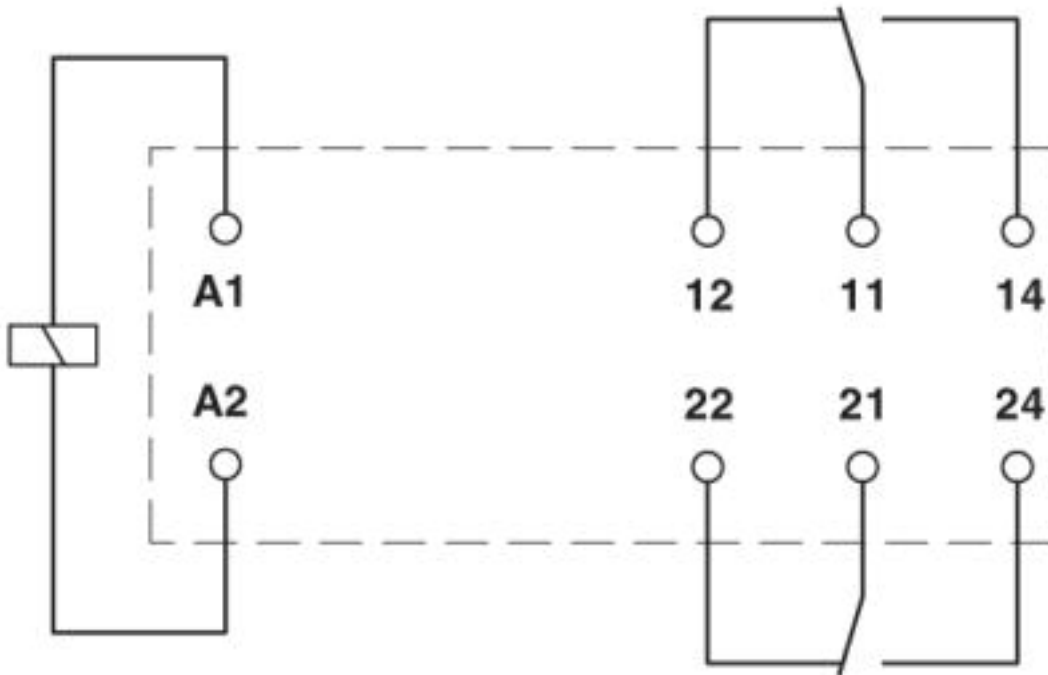
Service life reduction factor with various cos phi

Dimensioned drawing



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Circuit diagram



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