

Single relay - REL-MR-230AC/21-21AU - 2961480

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Pluggable miniature relay with power contact and additional hard gold plating, 2 PDT, coil voltage 230 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	4017918937898

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	230 V AC
Nominal input current at U_{IN}	3 mA (at 50 Hz)
Nominal input current at U_{IN}	2.5 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	32500 Ω +/-15% (at 20 °C)

Contact side

Contact type	Single contact, 2-PDT
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC
Maximum switching voltage	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Maximum inrush current	50 mA

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Contact side

Min. switching current	1 mA (at 24 V)
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)
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 110 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	2 A (at 24 V, AC15)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 120 V, AC15)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	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
Mechanical service life	1 x 10 ⁷ cycles
Standards/regulations	IEC 60664
Standards/regulations	EN 50178
Standards/regulations	IEC 62103
Rated surge voltage / insulation	Basic insulation
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

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classifications

eCl@ss

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

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	

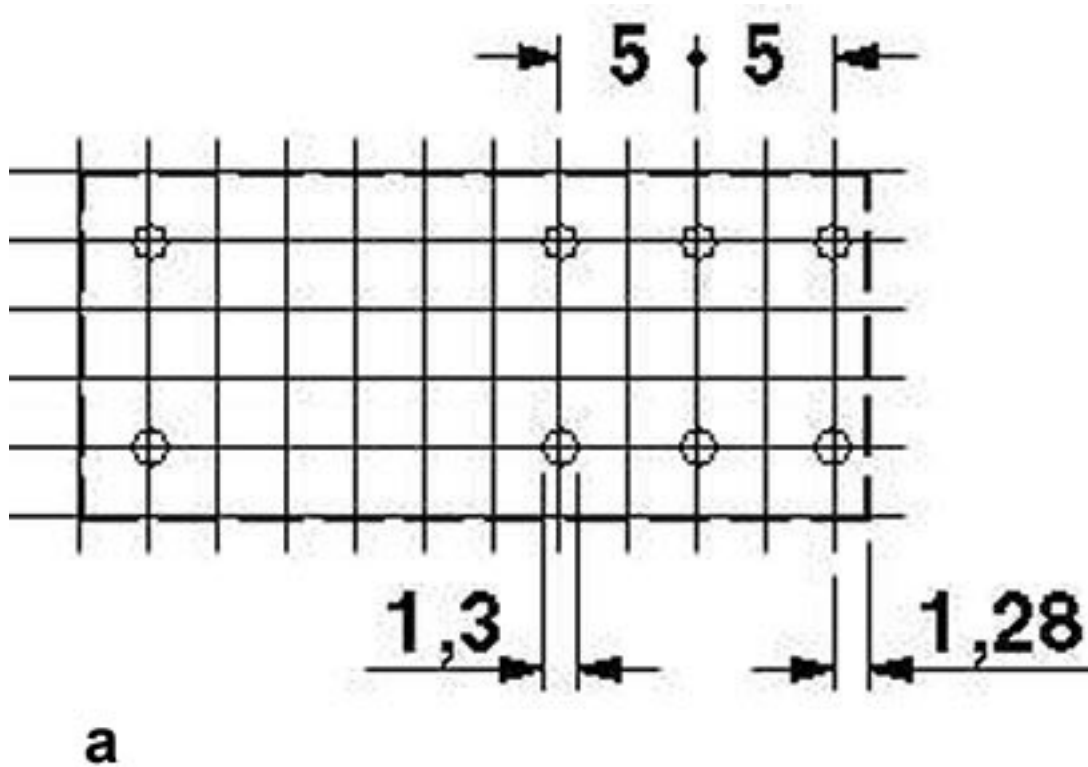
cUL Recognized

cULus Recognized

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Drawings

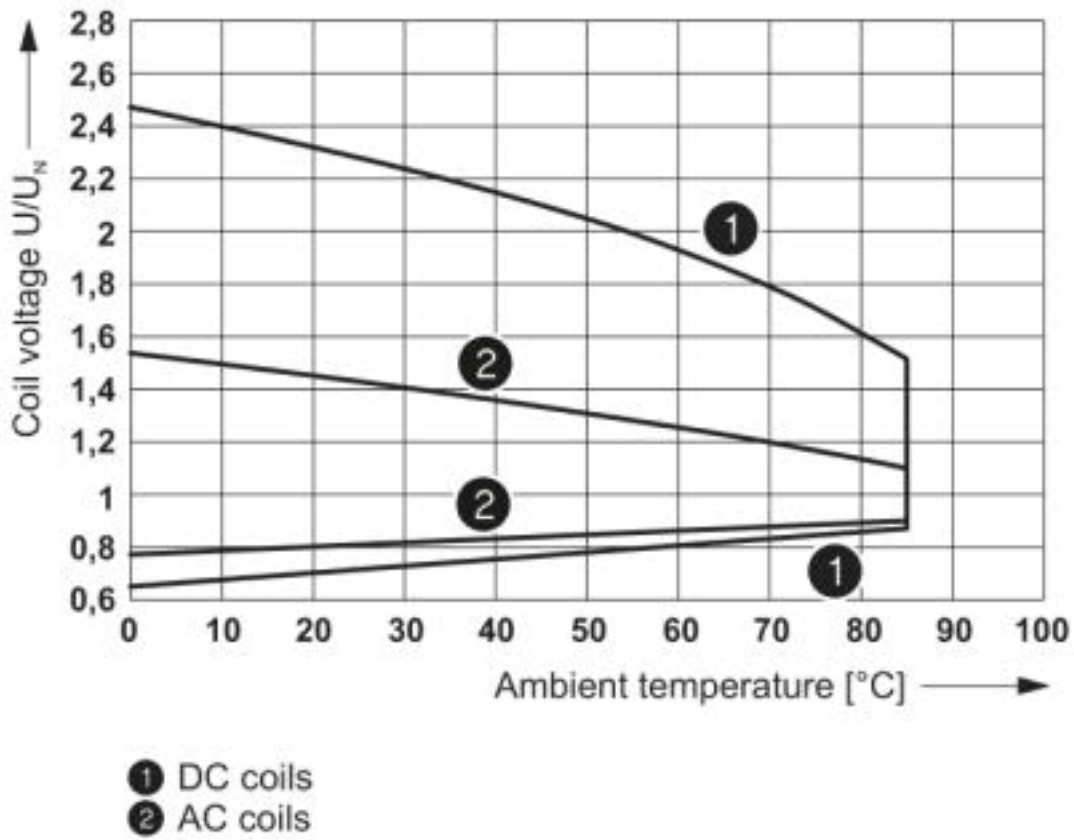
Drilling diagram



a = pitch division 2.5 mm

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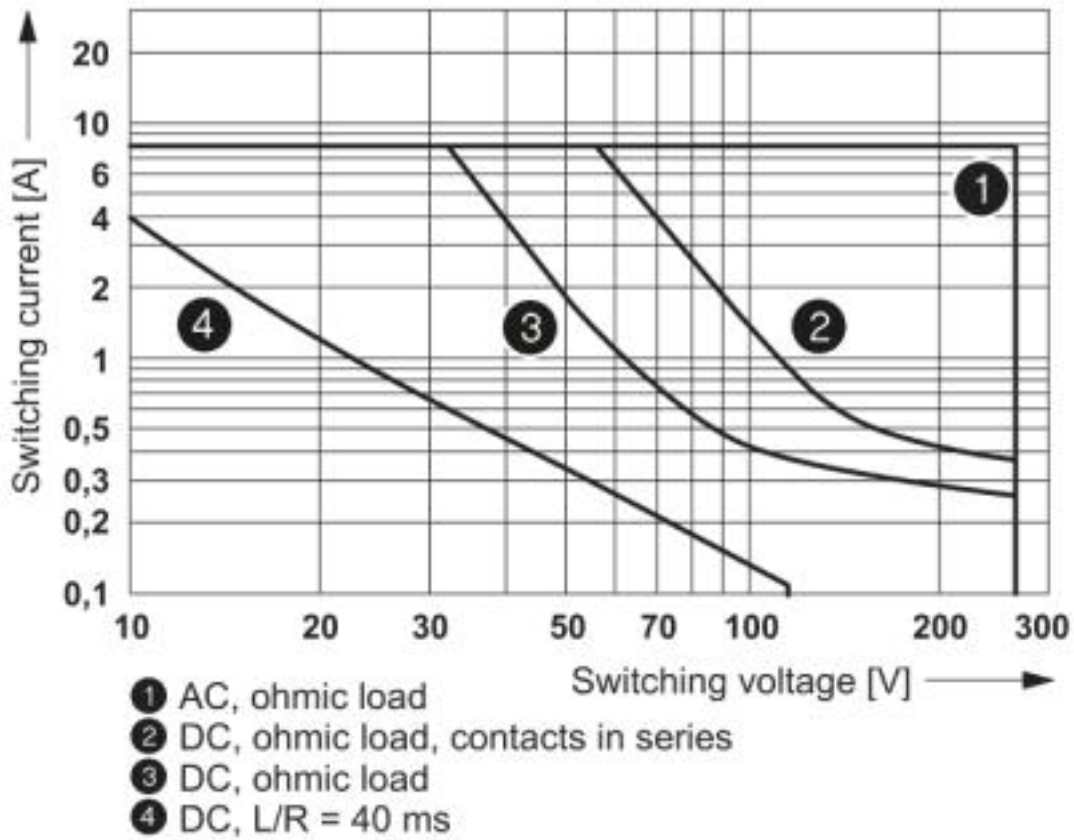
Diagram



Operating voltage range

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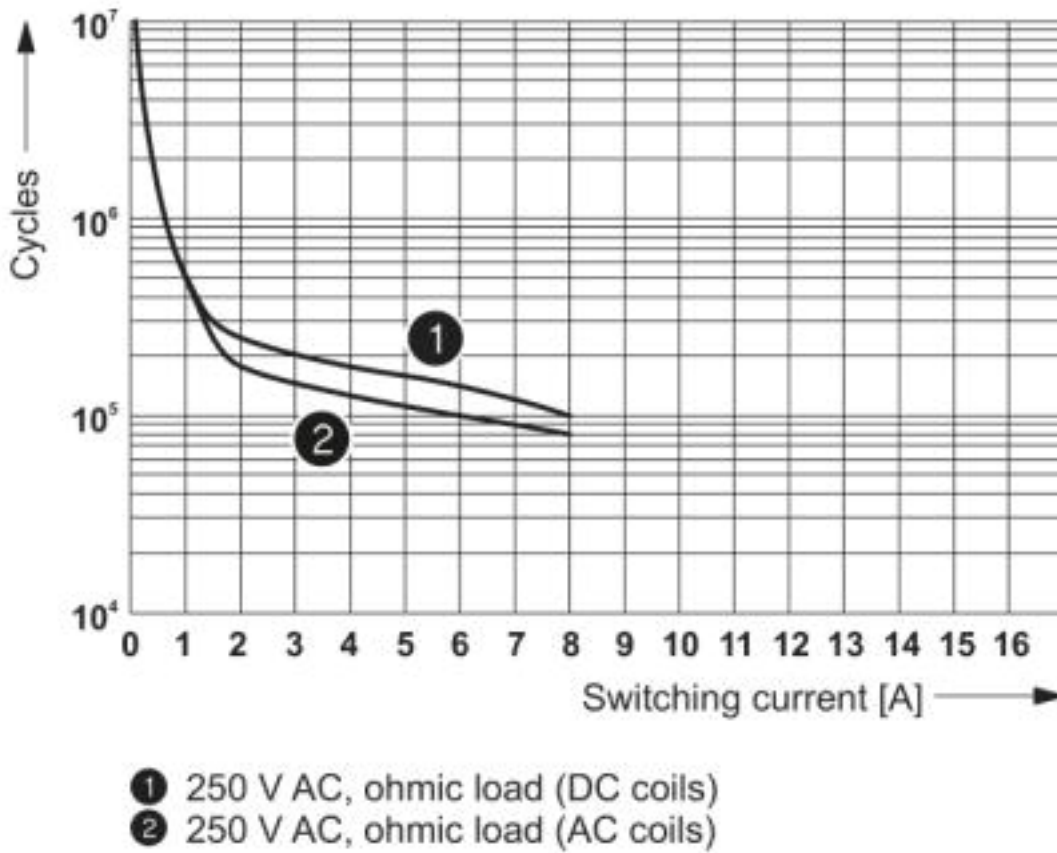
Diagram



Interrupting rating

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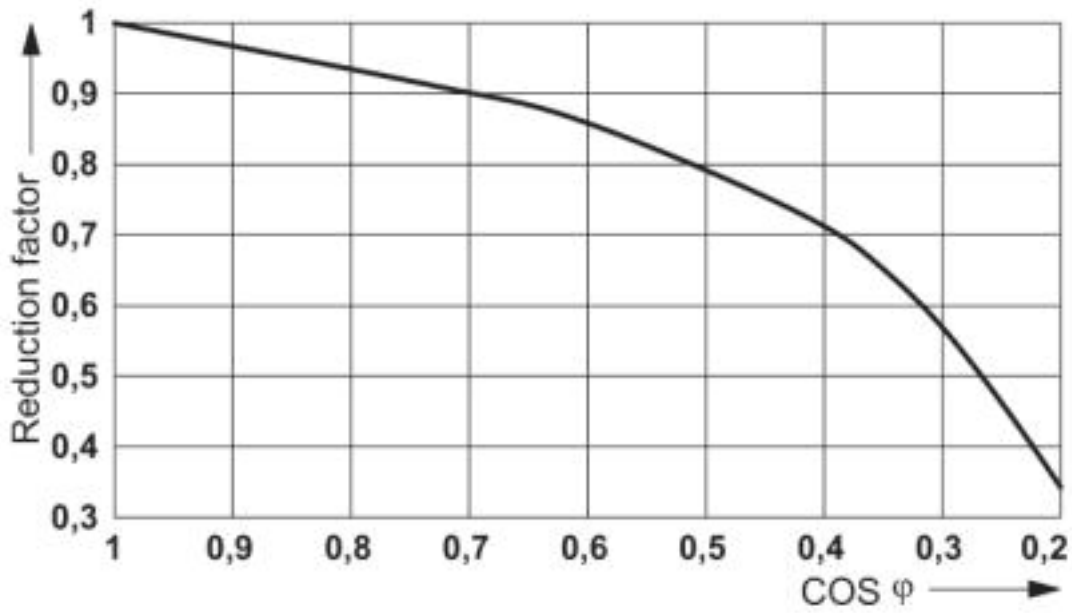
Diagram



Electrical service life

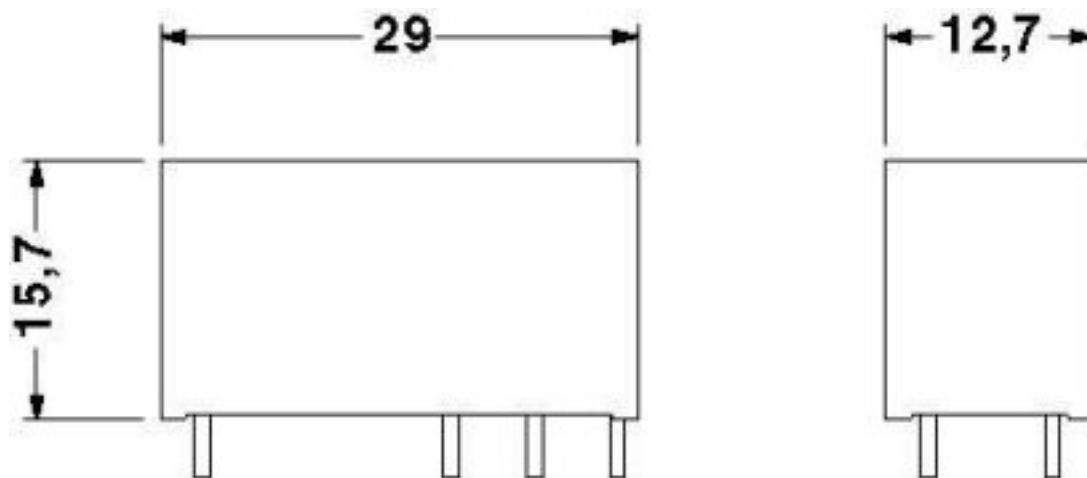
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Diagram



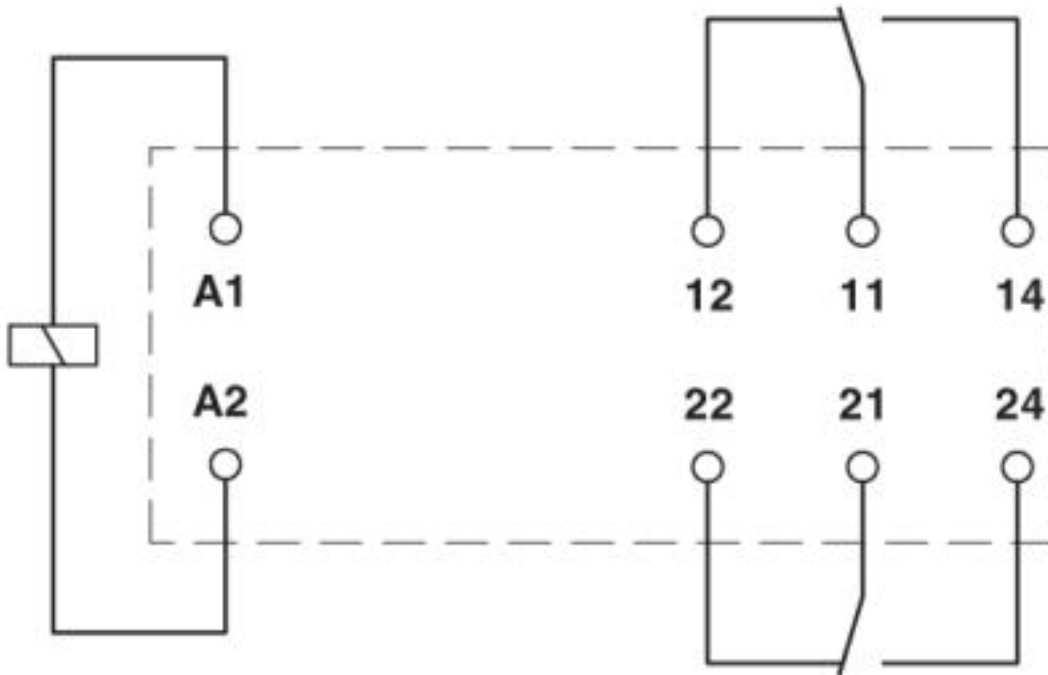
Service life reduction factor with various cos phi

Dimensioned drawing



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Circuit diagram



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