

Single relay - REL-MR-120AC/21HC AU - 2961516

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 multi-layer gold contact for high continuous currents, 1 PDT, input voltage 120 V AC

Product Features

- RT III-proof (wash-proof)
- Switching current of up to 16 A



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
Weight per Piece (excluding packing)	14.95 g
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
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Coil side

Nominal input voltage U_N	120 V AC
Typical input current at U_N	7 mA (at 50 Hz)
	5 mA (At 60 Hz)

Single relay - REL-MR-120AC/21HC AU - 2961516

Technical data

Coil side

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 $\pm$ 15 % (at 20 °C)

Contact side

Contact type	1 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)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, AC15)
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Limiting continuous current	16 A
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA (at 12 V)
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)
	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.)
Operating mode	100% operating factor
Mechanical service life	1 x 10 ⁷ cycles

Single relay - REL-MR-120AC/21HC AU - 2961516

Technical data

General

Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Degree of pollution	3
Overvoltage category	III
Mounting position	any
Assembly instructions	Can be aligned without spacing ($> 70\text{ °C} \geq 2.5\text{ mm}$)

Standards and Regulations

Connection in acc. with standard	CUL
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
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

Single relay - REL-MR-120AC/21HC AU - 2961516

Classifications

UNSPSC

UNSPSC 12.01	39121515
UNSPSC 13.2	39121515

Approvals

Approvals

Approvals

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

Ex Approvals

Approvals submitted

Approval details

UL Recognized 

VDE Gutachten mit Fertigungsüberwachung 

cUL Recognized 

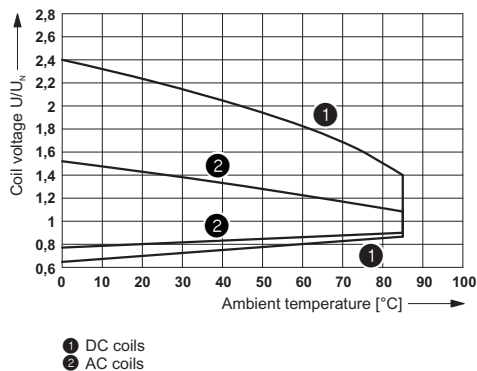
EAC

cULus Recognized 

Drawings

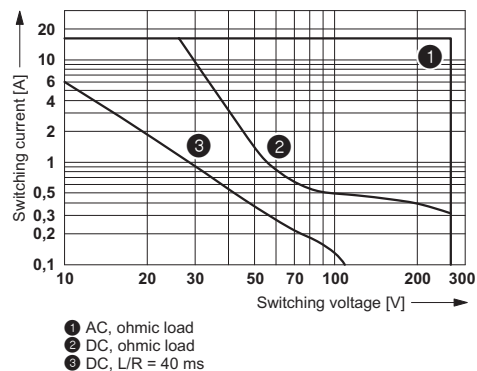
Single relay - REL-MR-120AC/21HC AU - 2961516

Diagram



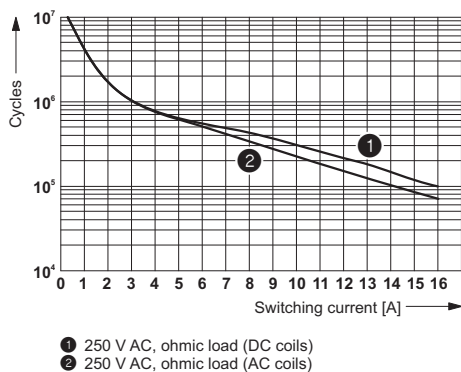
Operating voltage range

Diagram



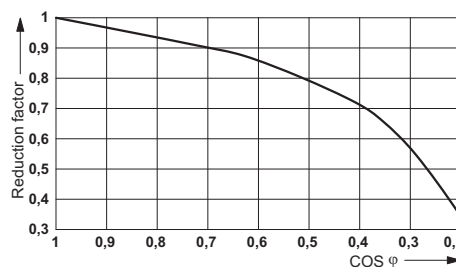
Interrupting rating

Diagram



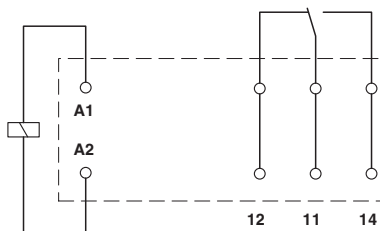
Electrical service life

Diagram



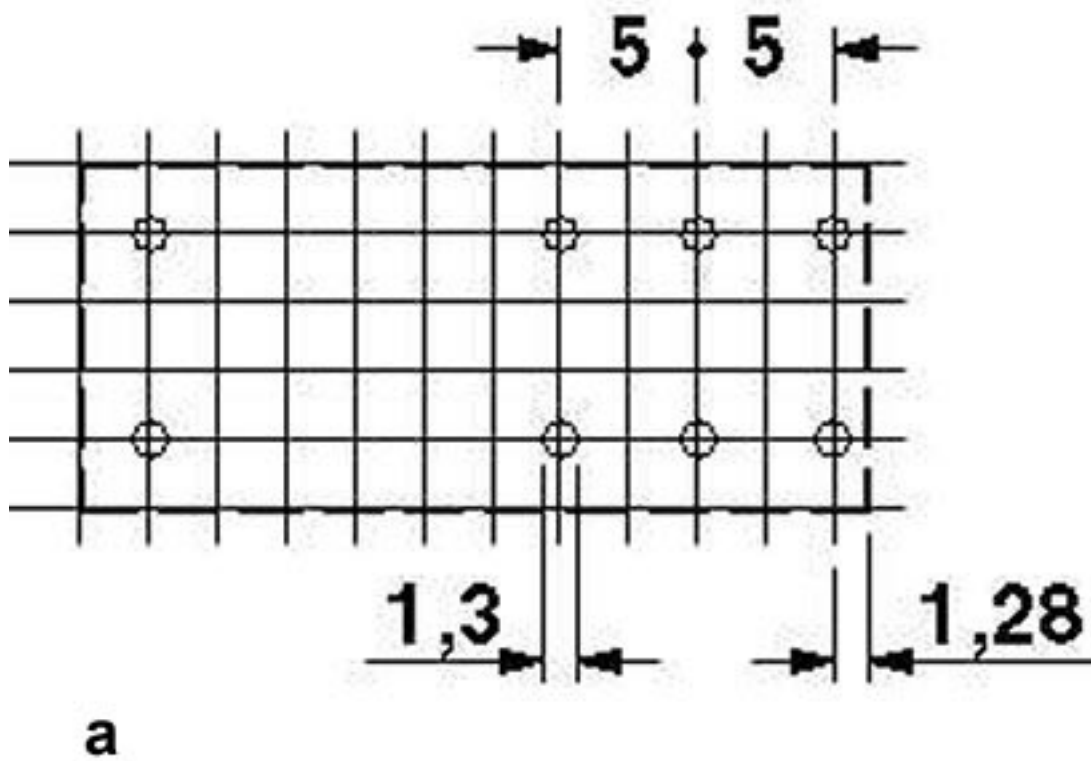
Service life reduction factor with various cos phi

Circuit diagram



Single relay - REL-MR-120AC/21HC AU - 2961516

Drilling diagram



a = pitch division 2.5 mm

Dimensional drawing

