

# Single relay - REL-MR-120AC/21HC/MS - 2987901

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Plug-in miniature relay, with power contact, 1 PDT, test button, mechanical switch position indicator, status LED, input voltage 120 V AC

The figure shows the 230 V version.

## Product Features

- With detectable manual operation
- Switching current of up to 16 A
- DC types with integrated freewheeling diode
- Integrated status LED
- Mechanical switch position indicator

## Key commercial data

<b>package_quantity</b>	10
<b>GTIN</b>	4046356481038

## Technical data

### Dimensions

<b>Width</b>	12.7 mm
<b>Height</b>	29 mm
<b>Depth</b>	25 mm

### Ambient conditions

<b>Ambient temperature (operation)</b>	-40 °C ... 70 °C
<b>Ambient temperature (storage/transport)</b>	-40 °C ... 85 °C

### Coil side

<b>Nominal input voltage <math>U_N</math></b>	120 V AC
<b>Nominal input current at <math>U_{IN}</math></b>	7 mA
<b>Typical response time</b>	3 ms ... 12 ms (depending on phase relation)
<b>Typical release time range</b>	2 ms ... 8 ms (depending on phase relation)

### Contact side

<b>Contact type</b>	Single contact, 1-PDT
<b>Contact material</b>	AgNi
<b>Maximum switching voltage</b>	250 V AC/DC
<b>Minimum switching voltage</b>	12 V (at 10 mA)

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## Technical data

### Contact side

Maximum inrush current	32 A (20 ms)
Min. switching current	10 mA (at 12 V)
Limiting continuous current	16 A
Interrupting rating (ohmic load) max.	4000 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	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 240 V, AC15)

### General

Test voltage relay winding/relay contact	5 kV AC (50 Hz, 1 min.)
Mechanical service life	5 x 10 <sup>6</sup> cycles
Standards/regulations	DIN EN 61810-1
Standards/regulations	VDE 0435-201
Standards/regulations	EN 50178
Standards/regulations	IEC 62103

## 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

### UNSPSC

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

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## approvals

UL Recognized / VDE Zeichengenehmigung / cUL Recognized / cULus Recognized /

### Approval details

UL Recognized

VDE Zeichengenehmigung

Nominal voltage UN	
Nominal current IN	
mm <sup>2</sup> /AWG/kcmil	

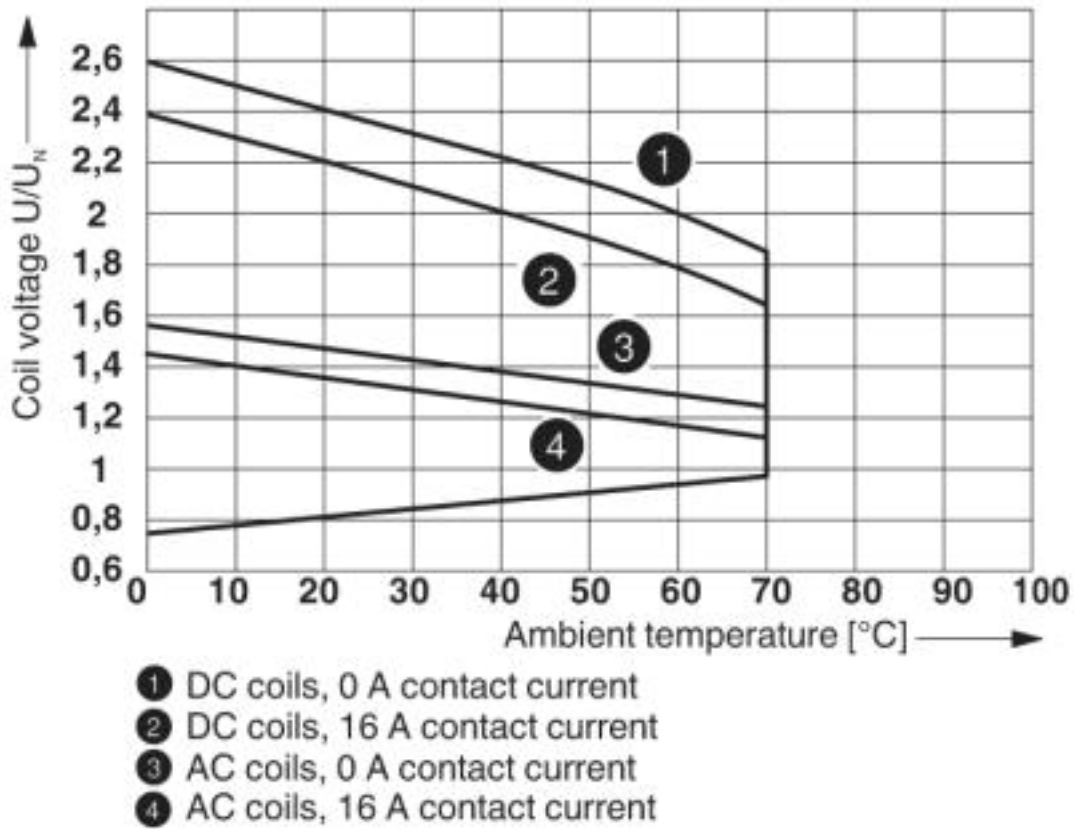
cUL Recognized

cULus Recognized

## Drawings

# Single relay - REL-MR-120AC/21HC/MS - 2987901

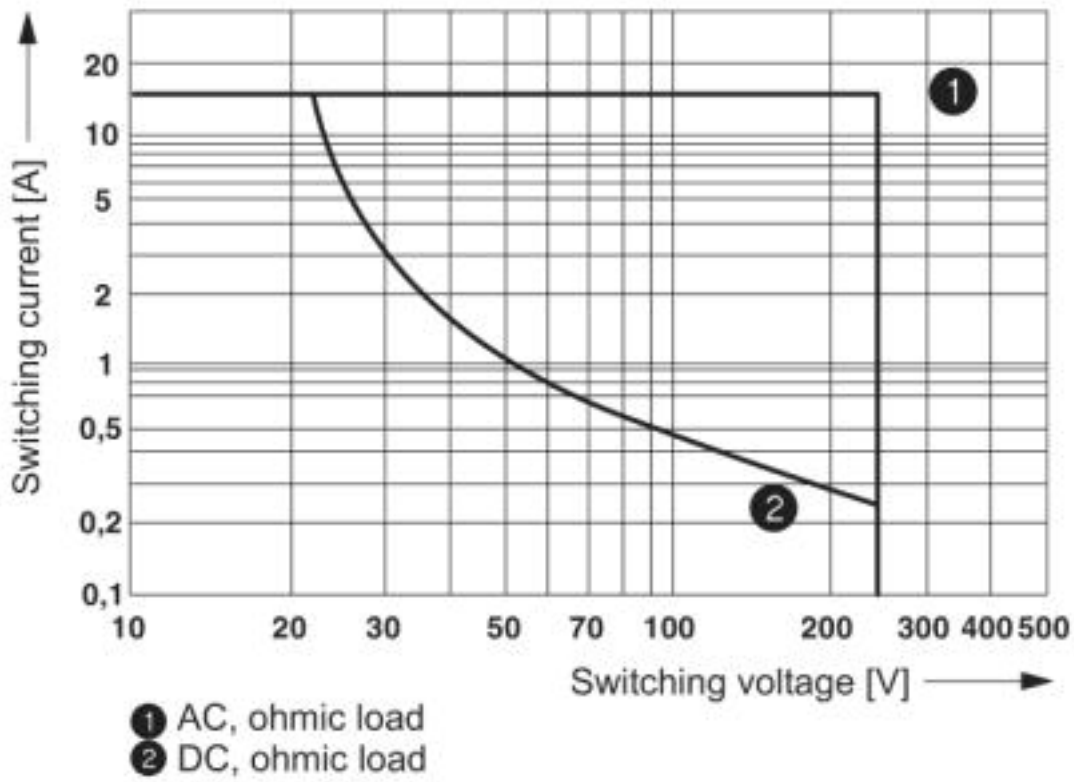
Diagram



Operating voltage range

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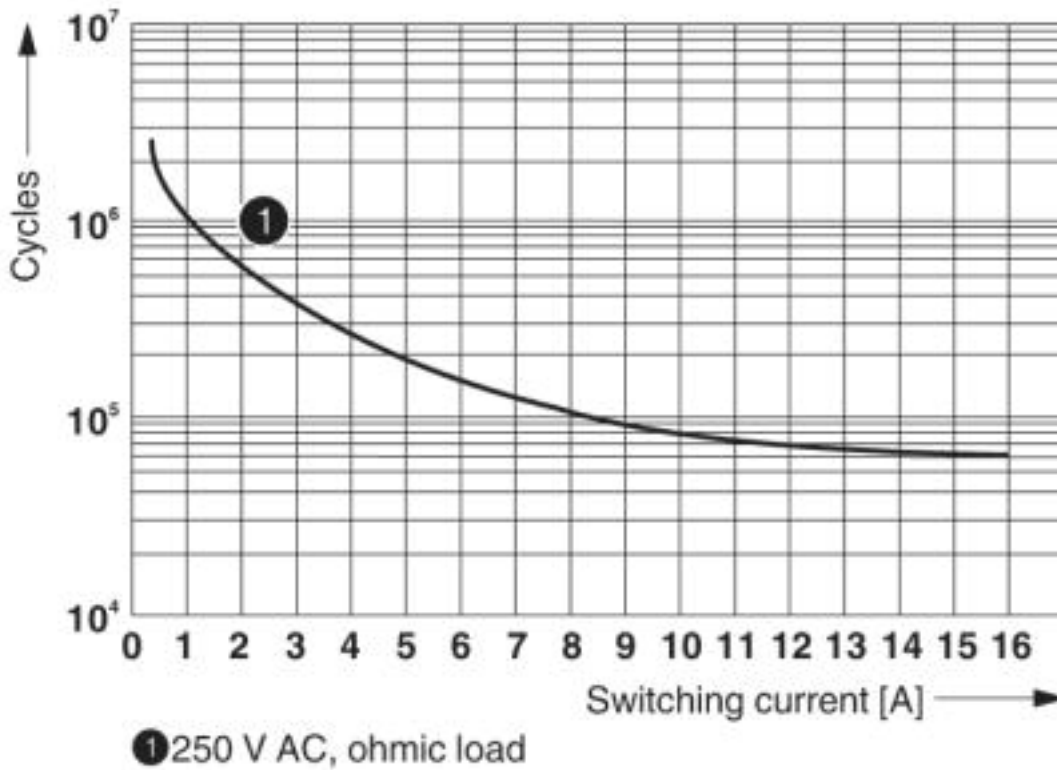
Diagram



Interrupting rating

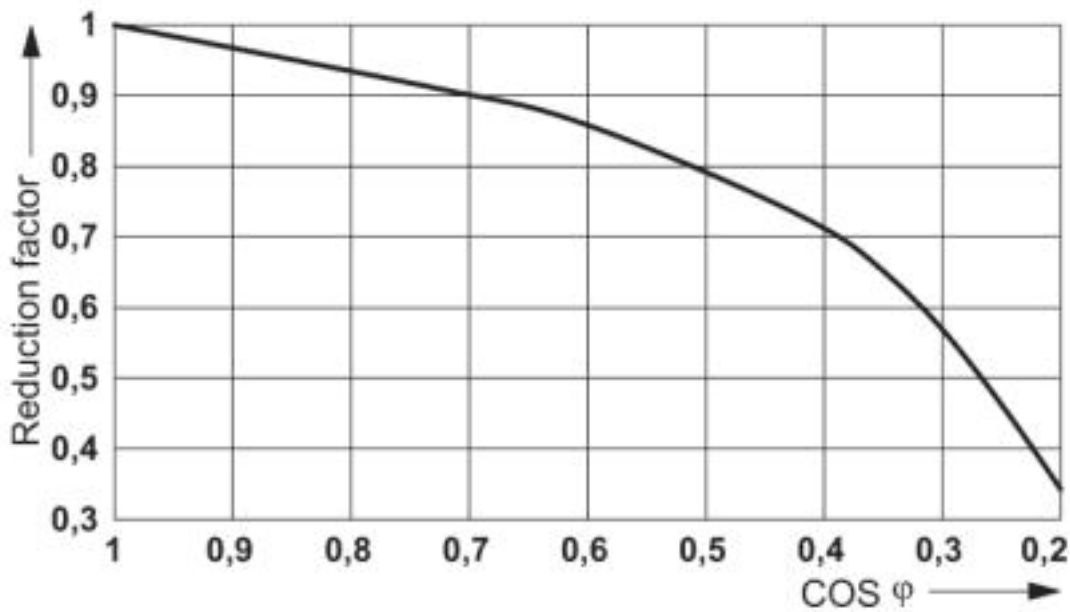
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Diagram



Electrical service life

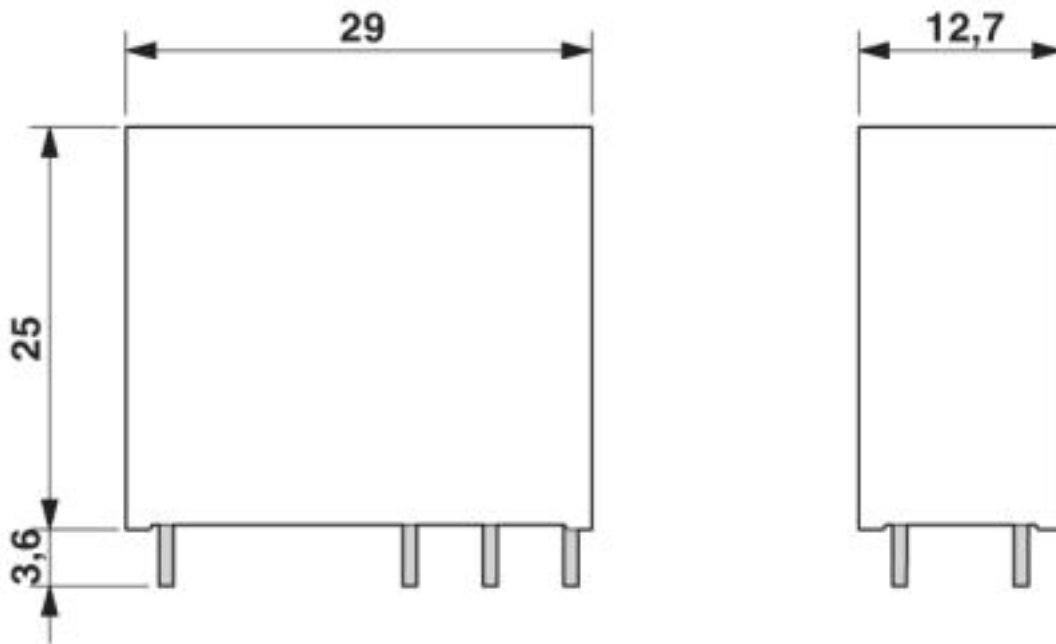
Diagram



Service life reduction factor with various cos phi

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Dimensioned drawing



Circuit diagram

