

# Single relay - REL-MR-110DC/21-21/MS - 1012698

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Plug-in miniature relay, with power contact, 2 changeover contacts, test button, mechanical switch position indicator, status LED, freewheeling diode, polarity A1+, A2, input voltage 110 V DC

## Your advantages

- With detectable manual operation
- DC types with integrated freewheeling diode
- Integrated status LED
- Mechanical switch position indicator



## Key Commercial Data

Packing unit	10 pc
GTIN	 4 055626 490175
GTIN	4055626490175
Weight per Piece (excluding packing)	16.600 g
Custom tariff number	85364900
Country of origin	China
Note	Made to Order (non-returnable)

## Technical data

### Dimensions

Width	12.7 mm
Height	29 mm
Depth	25 mm

### Ambient conditions

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

### Coil side

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## Technical data

### Coil side

Nominal input voltage $U_N$	110 V DC
Input voltage range in reference to $U_N$	see diagram
Typical input current at $U_N$	3.6 mA
Typical response time	9 ms
Typical release time	6 ms

### Contact side

Contact type	2 PDT
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	16 A (20 ms)
Limiting continuous current	8 A
Interrupting rating (ohmic load) max.	2000 VA (for 250 V AC)
Motor load according to UL 508	1/4 HP, 120 V AC (N/O contact)
	1/2 HP, 240 V AC (N/O contact)

### General

Test voltage relay winding/relay contact	5 kV AC (50 Hz, 1 min.)
Test voltage relay contact/relay contact	5 kV AC (50 Hz, 1 min.)
Test voltage PDT/PDT	5 kV AC
Mechanical service life	5x 10 <sup>6</sup> cycles
Service life, electrical	see diagram

### Connection data

Connection method	Solder connection
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### Standards and Regulations

Standards/regulations	EN 61810-1
	VDE 0435-201
	EN 50178

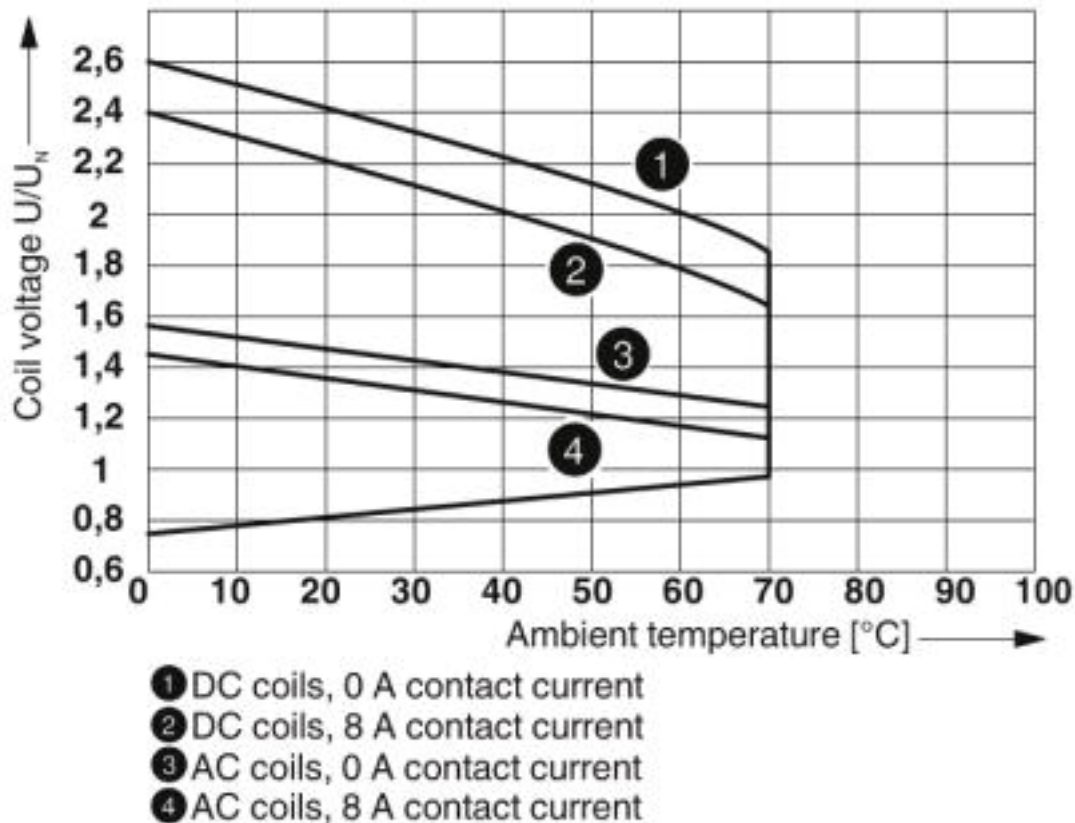
### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

# Single relay - REL-MR-110DC/21-21/MS - 1012698

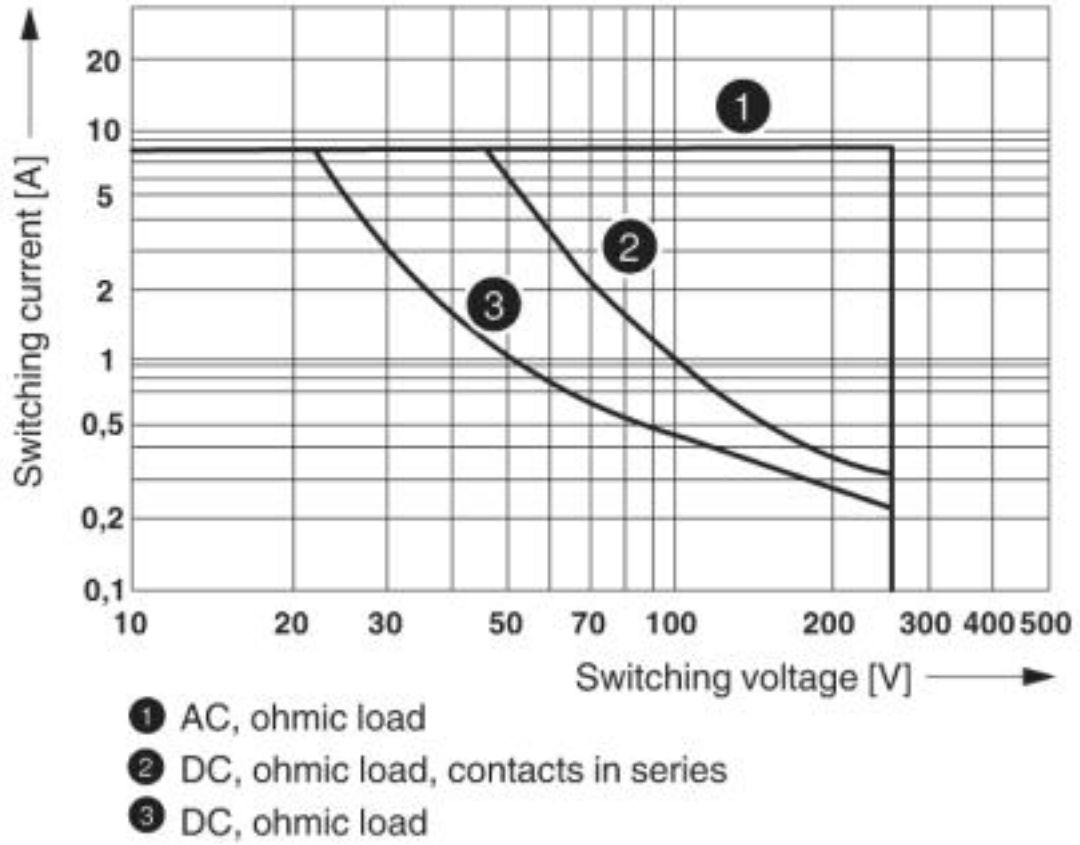
Diagram



Operating voltage range

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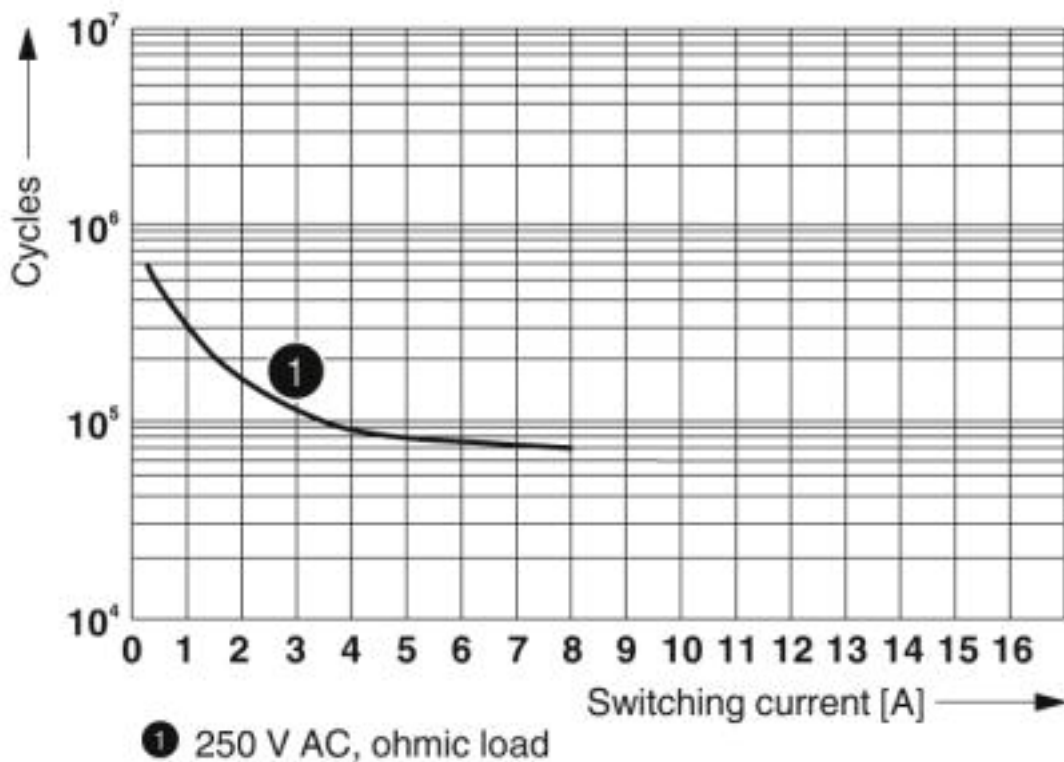
Diagram



Interrupting rating

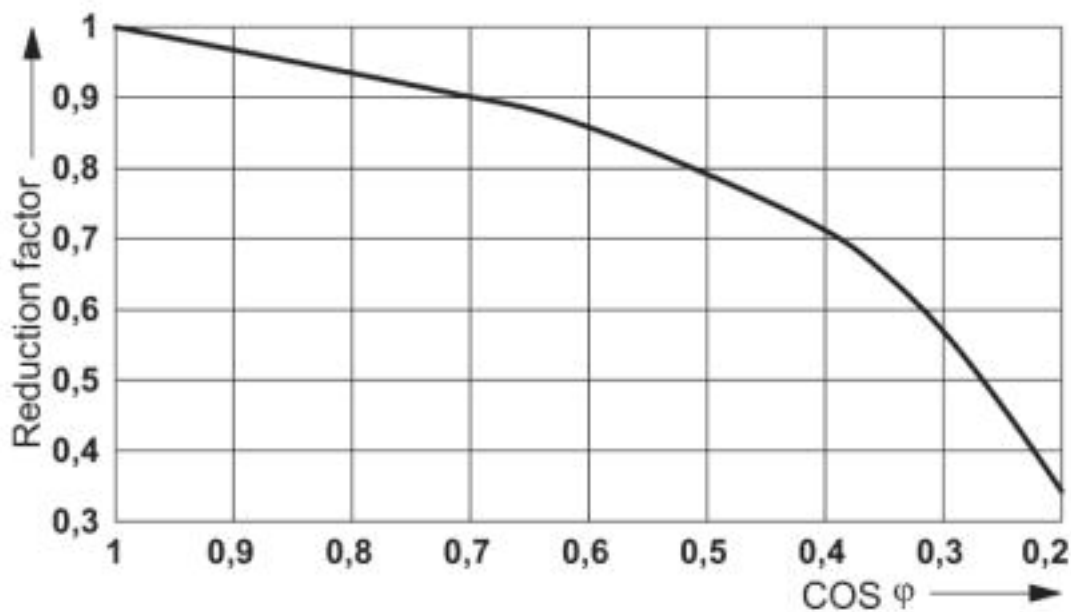
# Single relay - REL-MR-110DC/21-21/MS - 1012698

Diagram



## Electrical service life

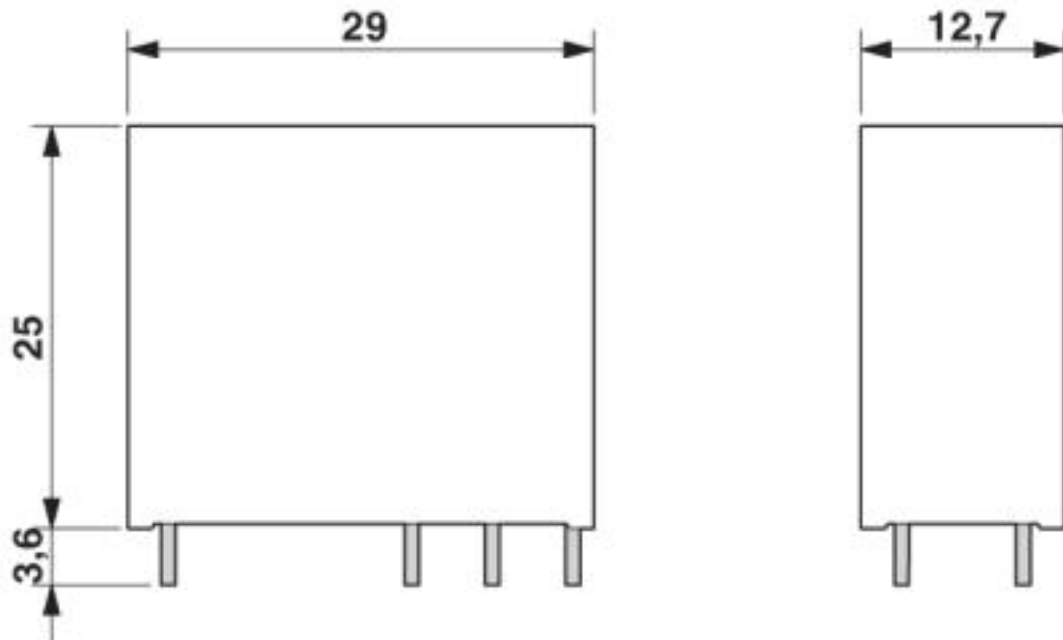
Diagram



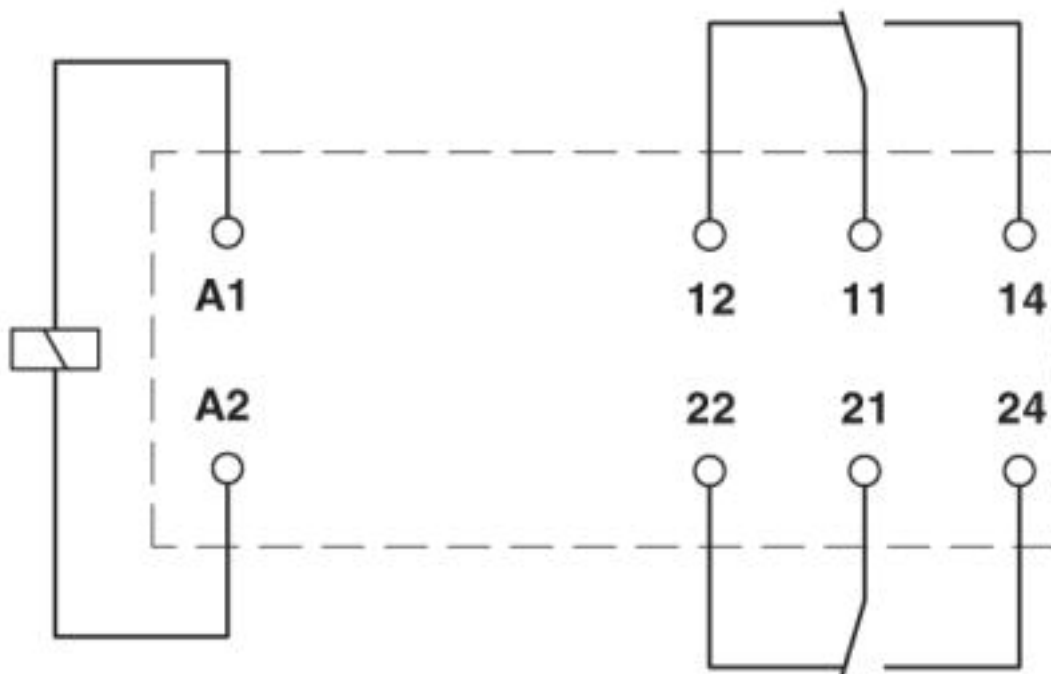
## Service life reduction factor with various cos phi

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Dimensional drawing



Circuit diagram



## Classifications

eCl@ss

eCl@ss 5.0	27371600
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## Classifications

### eCl@ss

eCl@ss 5.1	27371600
eCl@ss 6.0	27371600
eCl@ss 7.0	27371601
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

### ETIM

ETIM 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437
ETIM 7.0	EC001437

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

## Approvals

### Approvals

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#### Approvals

UL Recognized / cUL Recognized / EAC / EAC / cULus Recognized

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#### Ex Approvals

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### Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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## Approvals

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 172140
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EAC			TR_TS_D_00573_c
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EAC			TR_TS_S_00010_c
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cULus Recognized			
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## Accessories

### Additional products

Relay base - PLC-BSC-120UC/21-21/H - 1012014



14 mm PLC basic terminal block without relay, for mounting on DIN rail NS 35/7,5, Screw connection, 2 PDT, Input voltage 120 V AC/DC

Relay base - PLC-BPT-120UC/21-21/H - 1012002



14 mm PLC basic terminal block without relay, for mounting on DIN rail NS 35/7,5, Push-in connection, 2 PDT, Input voltage 120 V AC/DC

Relay base - PLC-BSC-230UC/21-21/H - 1012001



14 mm PLC basic terminal block without relay, for mounting on DIN rail NS 35/7,5, Screw connection, 2 PDT, Input voltage 230 V AC/DC



## Single relay - REL-MR-110DC/21-21/MS - 1012698

### Accessories

Relay base - PLC-BPT-230UC/21-21/H - 1011961



14 mm PLC basic terminal block without relay, for mounting on DIN rail NS 35/7,5, Push-in connection, 2 PDT, Input voltage 230 V AC/DC