

# Single relay - REL-MR-110DC/21-21/EX - 2908824

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Plug-in miniature power relay, RT III sealed with power contacts, 2 changeover contacts, input voltage: 110 V DC, in connection with the corresponding PLC base approved in accordance with ATEX/IECEx (zone 2) and Ex zone class I, div. 2.

## Your advantages

- Switching current of up to 8 A
- RT III-proof (wash-proof)



## Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 055626 345185
GTIN	4055626345185

## 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
Degree of protection	RT III (wash-proof)

### Coil side

Nominal input voltage $U_N$	110 V DC
Typical input current at $U_N$	4.1 mA
Typical response time	7 ms
Typical release time	3 ms

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## Technical data

### Coil side

Coil resistance	26600 Ω ±15 % (at 20 °C)
Power dissipation for nominal condition	0.45 W

### 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	5 V (at 10 mA)
Min. switching current	10 mA (At 5 V)
Maximum inrush current	25 A (20 ms)
Limiting continuous current	8 A
Interrupting rating (ohmic load) max.	190 W (at 24 V DC)
	85 W (at 48 V DC)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
	2000 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	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	3x 10 <sup>7</sup> cycles
Service life, electrical	see diagram
Mounting position	any
Assembly instructions	Can be aligned without spacing (> 70 °C ≥ 2.5 mm)

### Connection data

Connection method	Solder connection
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### Standards and Regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1
Insulation	Basic insulation
Pollution degree	3
Overvoltage category	III

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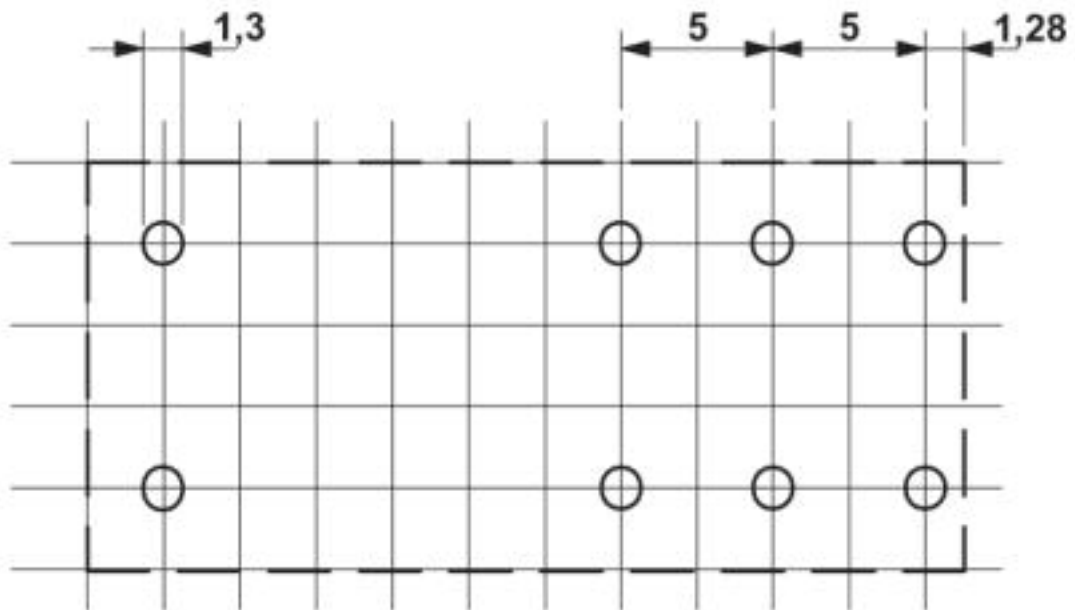
## Technical data

### Environmental Product Compliance

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

## Drawings

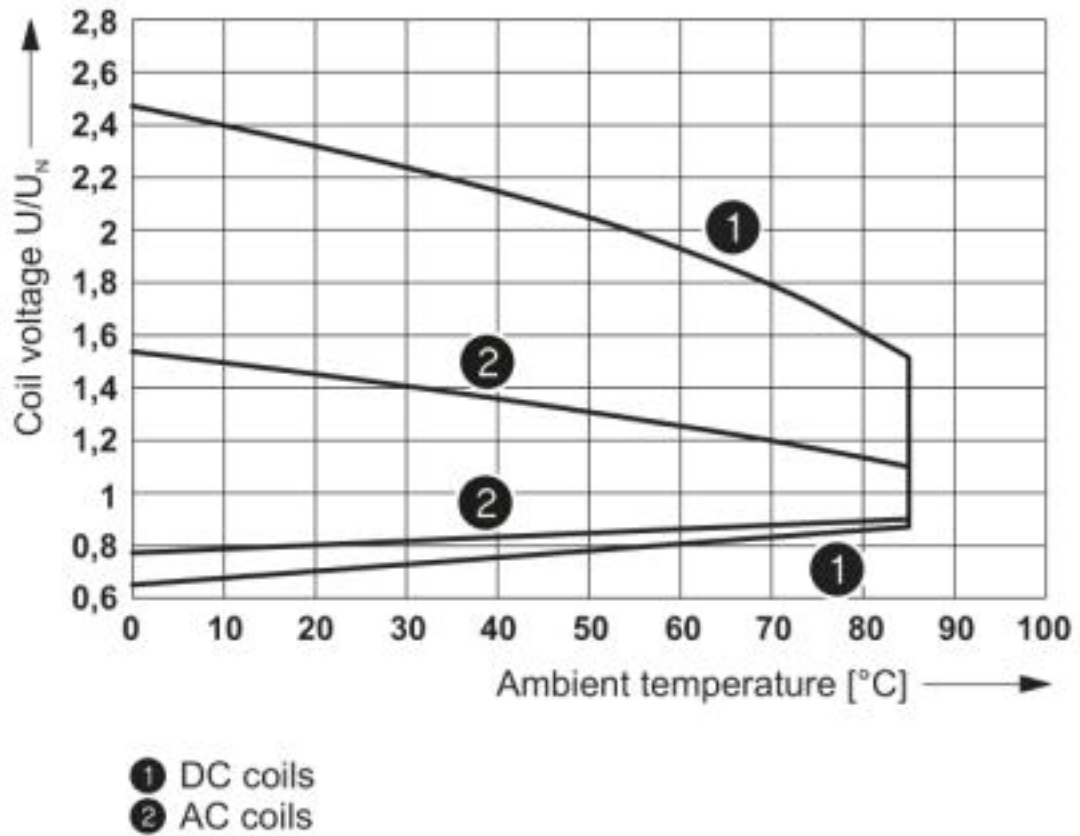
Drilling diagram



a = pitch division 2.5 mm

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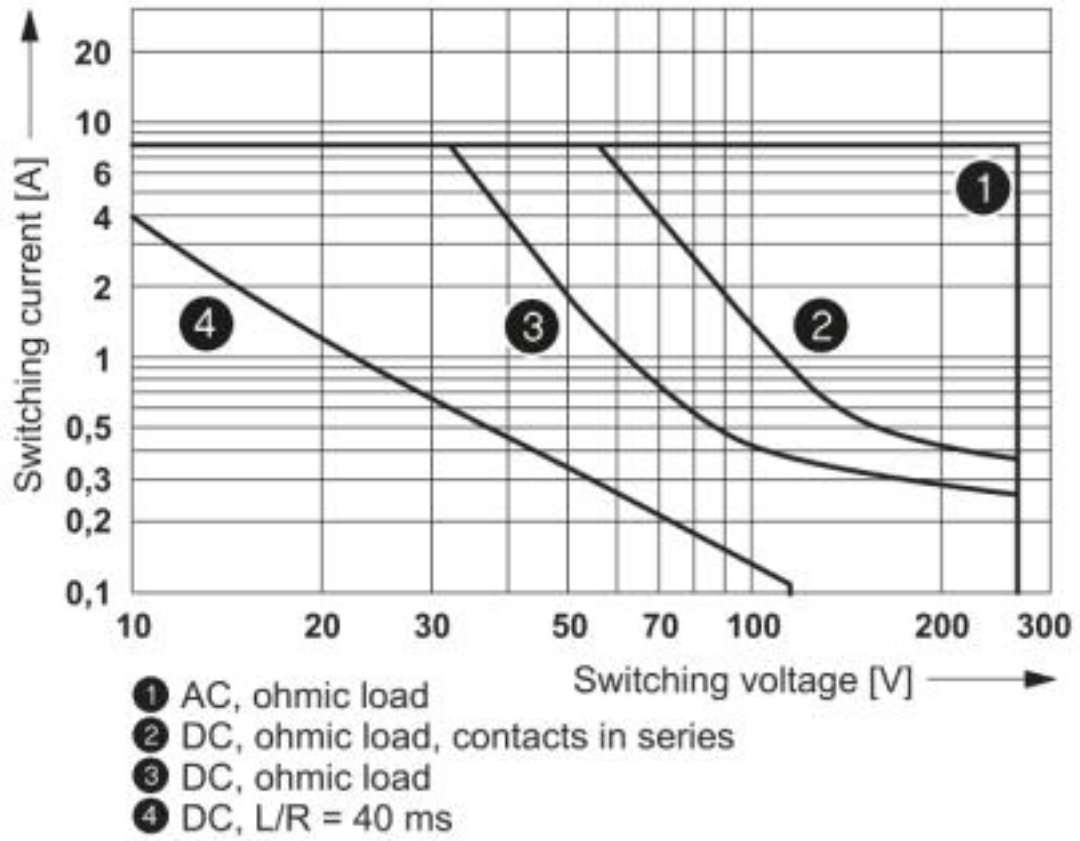
Diagram



Operating voltage range

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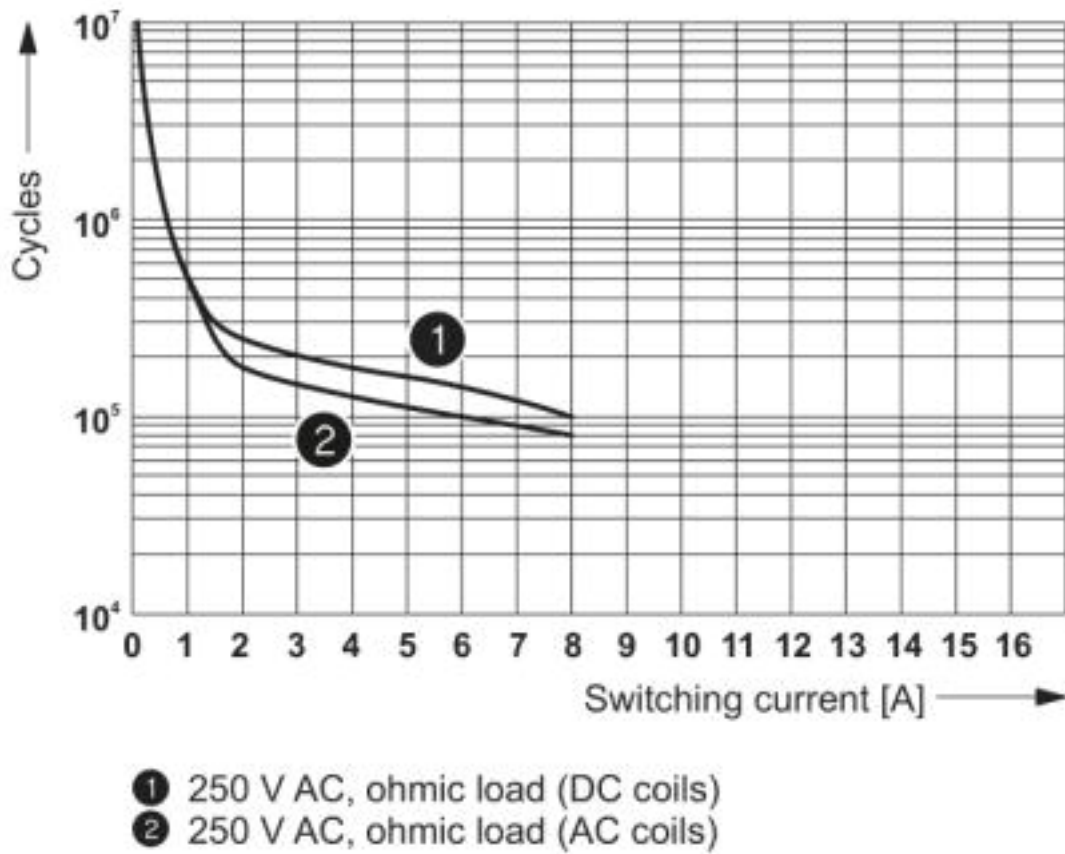
Diagram



Interrupting rating

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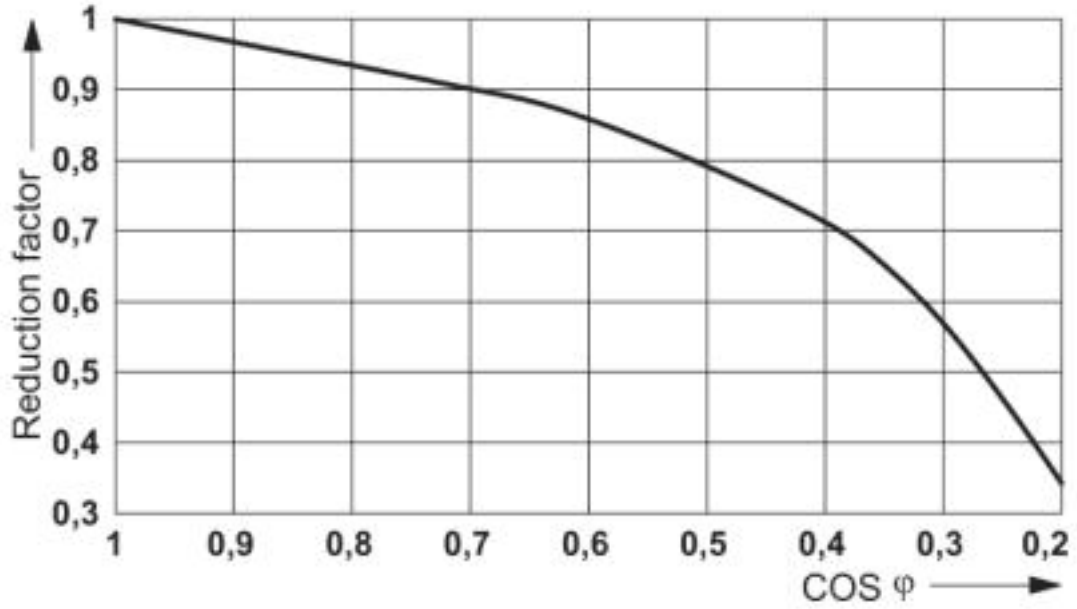
Diagram



Electrical service life

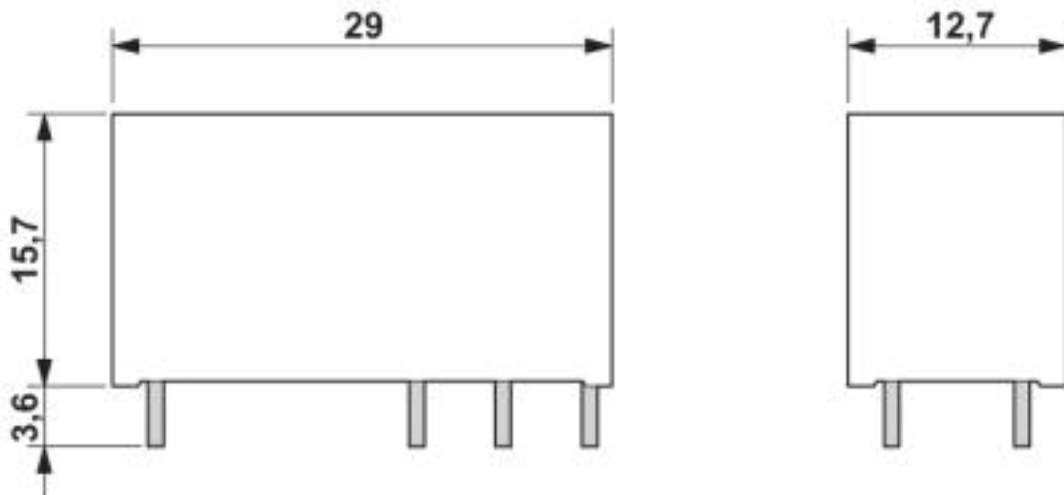
# Single relay - REL-MR-110DC/21-21/EX - 2908824

Diagram



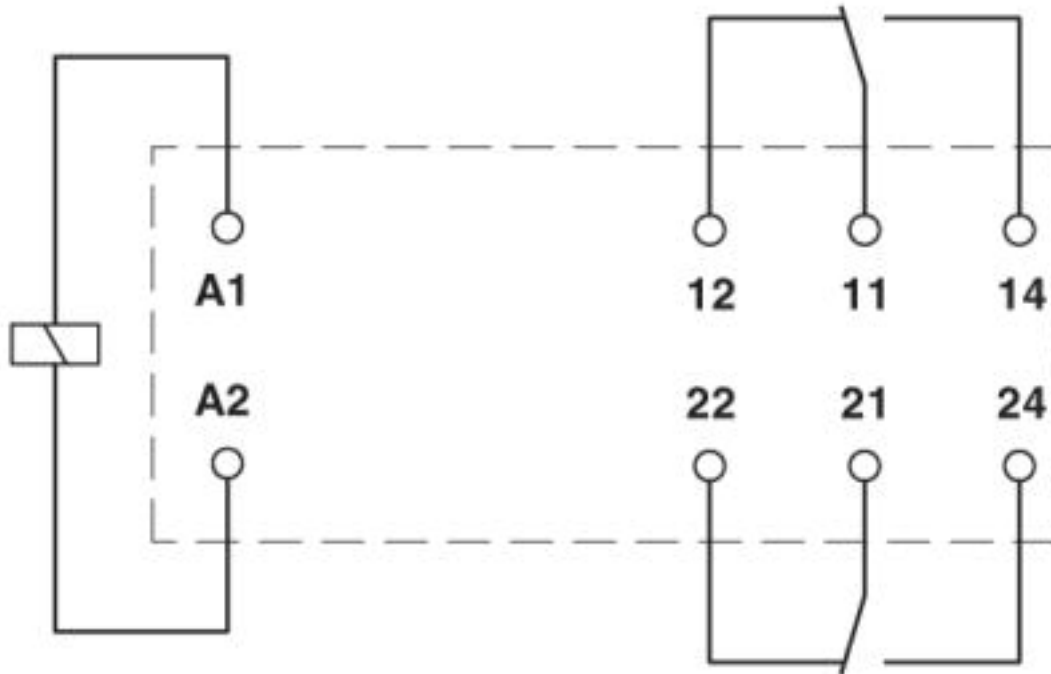
Service life reduction factor with various cos phi

Dimensional drawing



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Circuit diagram



## Approvals

Approvals

Approvals

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

Ex Approvals

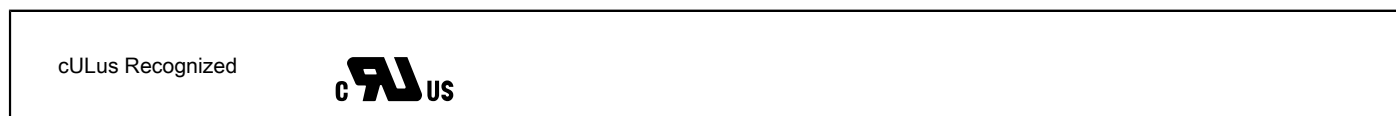
## Approval details

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 228652
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 228652
VDE Zeichengenehmigung		<a href="http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx">http://www2.vde.com/de/Institut/Online-Service/VDE-gepruefteProdukte/Seiten/Online-Suche.aspx</a>	40007758



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### Approvals



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