

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

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, 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

### 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

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

## 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
-------------------	-------------------

### Standards and Regulations

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

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

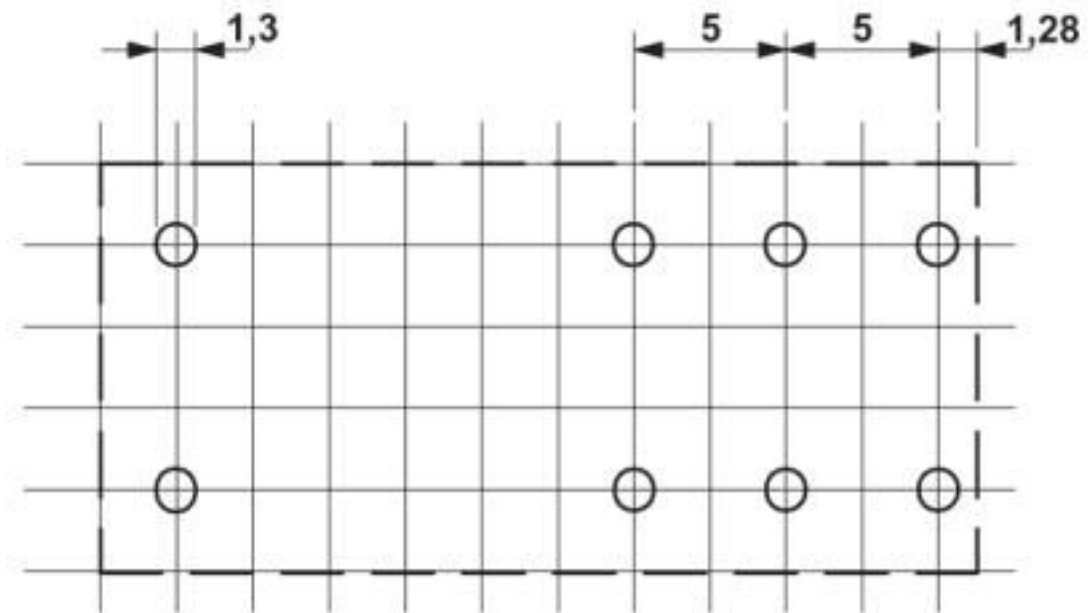
## Technical data

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

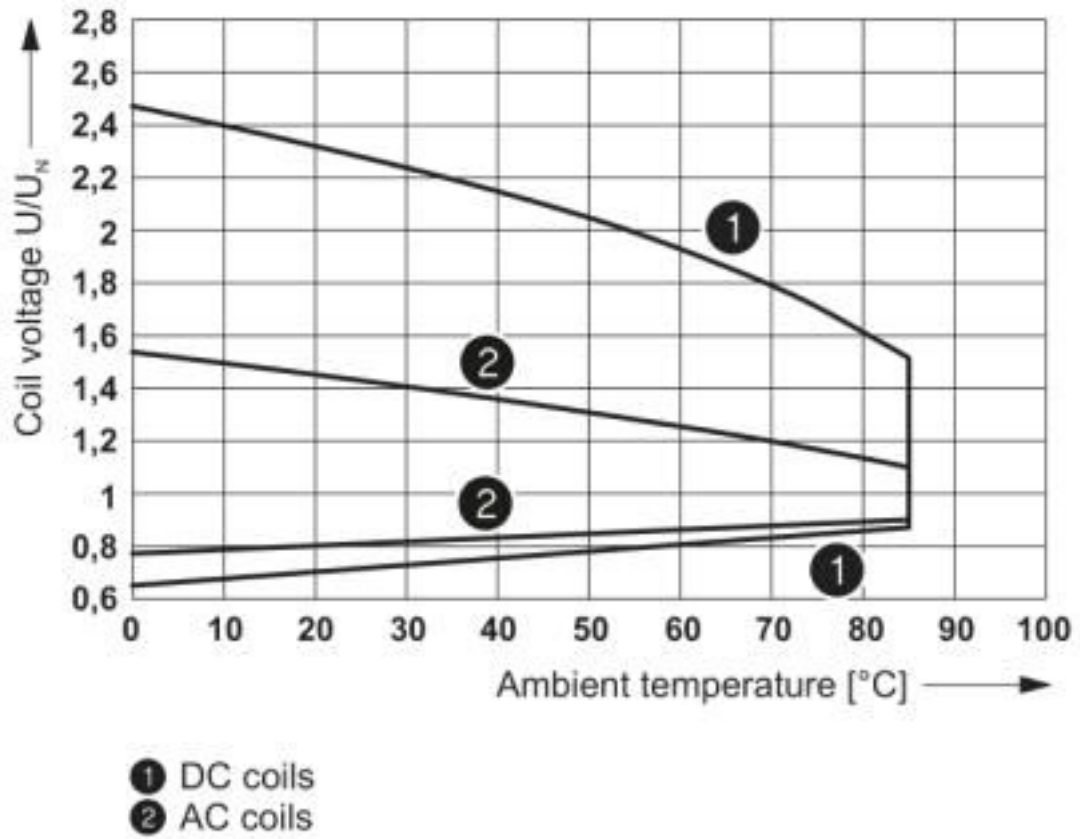
Drilling diagram



a = pitch division 2.5 mm

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

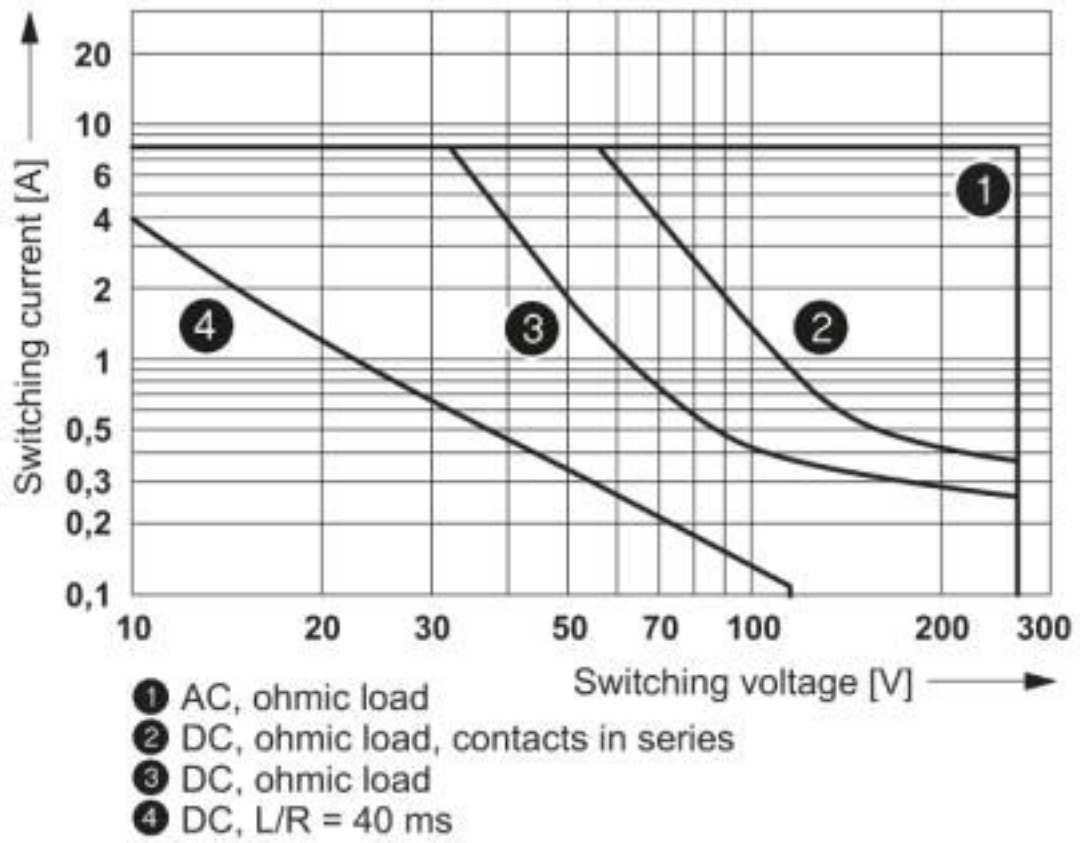
Diagram



Operating voltage range

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

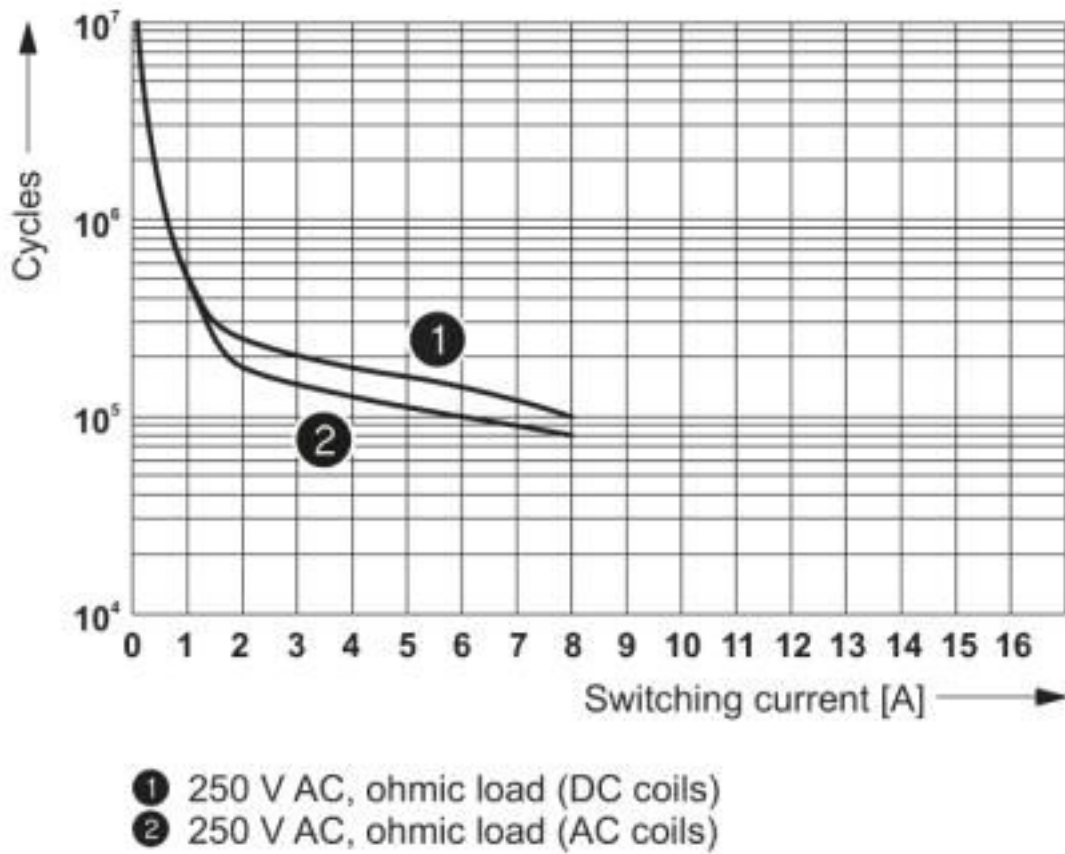
Diagram



Interrupting rating

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

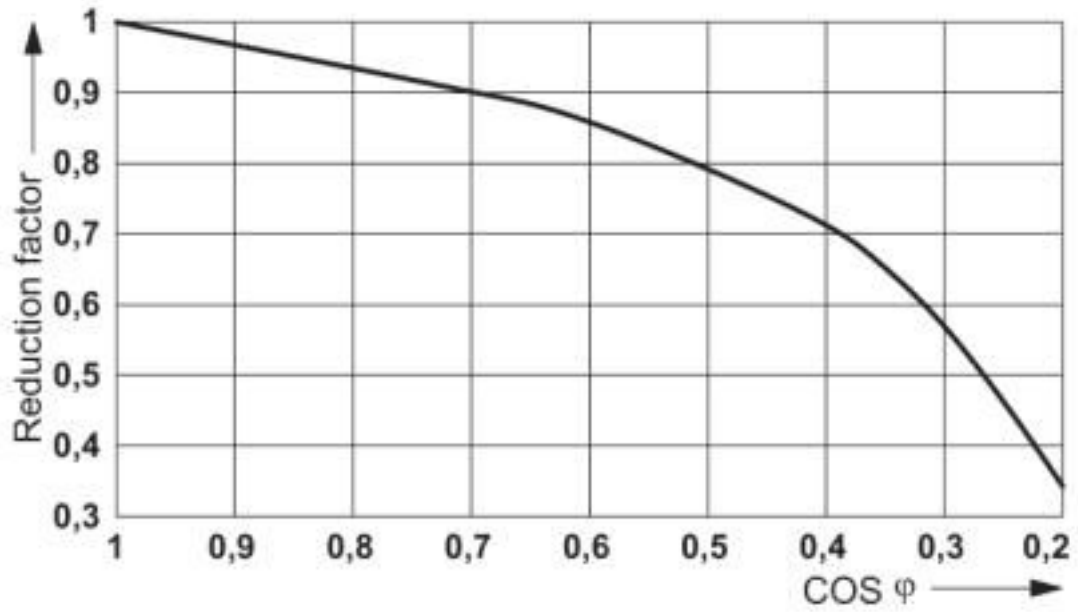
Diagram



Electrical service life

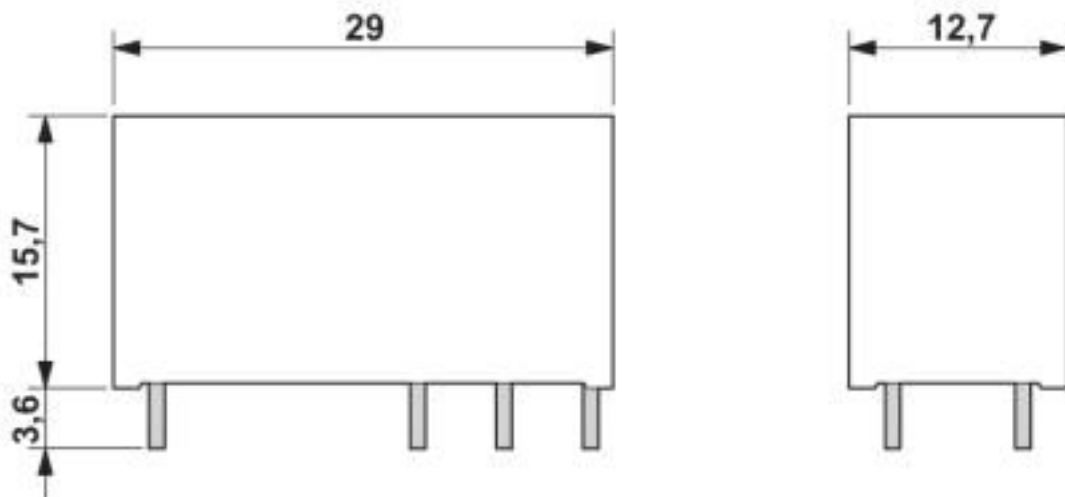
# Single relay - REL-MR-110DC/21-21/EX - 2908824

Diagram



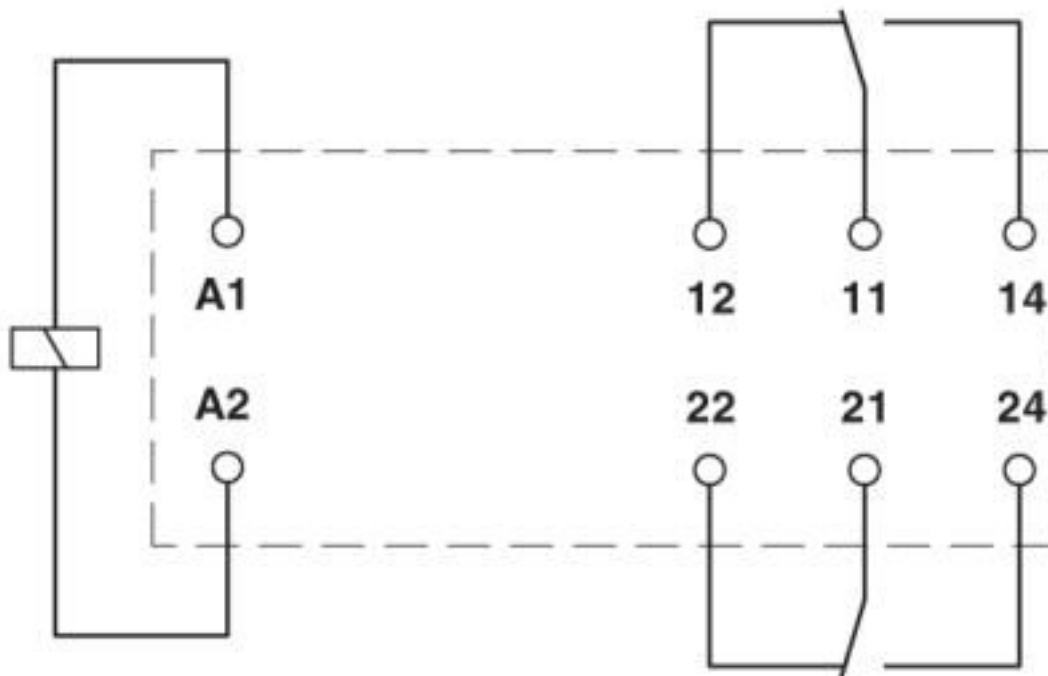
Service life reduction factor with various cos phi

Dimensional drawing



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

Circuit diagram



## Classifications

eCl@ss

eCl@ss 10.0.1	27371601
eCl@ss 5.0	27371600
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 13.2	39122334
UNSPSC 18.0	39122334
UNSPSC 19.0	39122334



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

## Classifications

### UNSPSC

UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

## 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
------------------------	--	---	----------

EAC			RU C- DE.A*30.B.01082
-----	--	--	--------------------------

cULus Recognized			
------------------	--	--	--

Phoenix Contact 2020 © - all rights reserved  
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG  
Flachsmarktstr. 8  
32825 Blomberg  
Germany  
Tel. +49 5235 300  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.com>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [General Purpose Relays](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[PCN-105D3MH,000](#) [59641F200](#) [LY1SAC110120](#) [5X827E](#) [5X837F](#) [5X840F](#) [5X842F](#) [5X848E](#) [LY2N-AC120](#) [LY2S-AC220/240](#) [LY2-US-AC120](#) [LY3-US-AC120](#) [LY4F-UA-DC12](#) [LY4F-UA-DC24](#) [LY4F-US-AC120](#) [LY4F-US-AC240](#) [LY4F-US-DC24](#) [LY4F-VD-AC110](#) [LYQ20DC12](#) [M115C60](#) [M115N010](#) [M115N0150](#) [6031007G](#) [603-12D](#) [61211T0B4](#) [61212T400](#) [61222Q400](#) [61243B600](#) [61243C500](#) [61243Q400](#) [61311BOA2](#) [61311BOA6](#) [61311BOA8](#) [61311C0A2](#) [61311COA1](#) [61311COA6](#) [61311F0A2](#) [61311QOA1](#) [61311QOA4](#) [61311T0D6](#) [61311TOA6](#) [61311TOA7](#) [61311TOB3](#) [61311TOB4](#) [61311U0A6](#) [61312Q600](#) [61312T400](#) [61312T600](#) [61313U200](#) [61313U400](#)