

# REL-MR- 24DC/21AU - Single relay

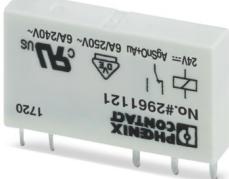
2961121

<https://www.phoenixcontact.com/us/products/2961121>



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 documentation. Our general terms of use for downloads are valid.

Plug-in miniature power relay, with multi-layer gold contact, 1 changeover contact, input voltage 24 V DC



## Your advantages

- Safe isolation between coil and contact side
- High degree of protection up to RT III depending on type (wash-proof)
- Power contacts up to 6 A

## Commercial data

Item number	2961121
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	C460
Product key	DK6922
GTIN	4017918130879
Weight per piece (including packing)	6.92 g
Weight per piece (excluding packing)	6.525 g
Customs tariff number	85364900
Country of origin	CZ

# REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>



## Technical data

### Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	$2 \times 10^7$ cycles

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

### Data management status

Date of last data management	05.09.2025
------------------------------	------------

### Electrical properties

Maximum power dissipation for nominal condition	0.17 W
Test voltage (Winding/contact)	4 kV AC (50 Hz, 1 min., winding/contact)

### Input data

#### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range	14.4 V DC ... 66 V DC
Input voltage range in reference to $U_N$	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at $U_N$	7 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	$3390 \Omega \pm 10\% \text{ (at } 20^\circ\text{C)}$

### Output data

#### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	1 mA (at 24 V)
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)

Switching: when the gold layer is destroyed

# REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>

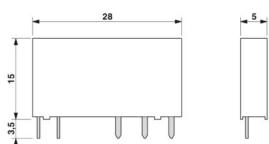


Note	the following values are applicable if a gold layer is destroyed
Contact material	AgSnO
Maximum switching voltage	250 V AC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	140 W (at 24 V DC) 20 W (at 48 V DC) 18 W (at 60 V DC) 23 W (at 110 V DC) 40 W (at 220 V DC) 1500 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13) 0.2 A (at 110 V, DC13) 0.1 A (at 220 V, DC13) 3 A (at 24 V, AC15) 3 A (at 120 V, AC15) 3 A (at 230 V, AC15)

## Connection data

Connection method	Plug / solder connection
-------------------	--------------------------

## Dimensions

Dimensional drawing	
Width	5 mm
Height	28 mm
Depth	15 mm

## Material specifications

Color	white (RAL 9010)
-------	------------------

## Environmental and real-life conditions

Ambient conditions	
Degree of protection	RT III
Ambient temperature (operation)	-40 °C ... 85 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

# REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>



## Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

## Standards and regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

## Mounting

Assembly note	in rows with zero spacing
Mounting position	any

# REL-MR- 24DC/21AU - Single relay

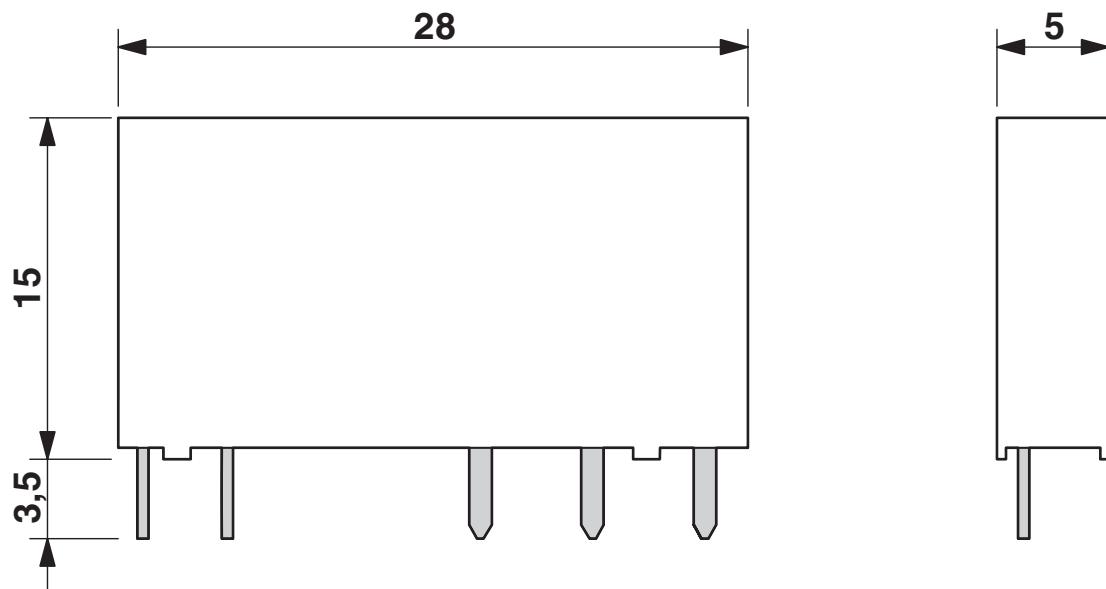
2961121

<https://www.phoenixcontact.com/us/products/2961121>

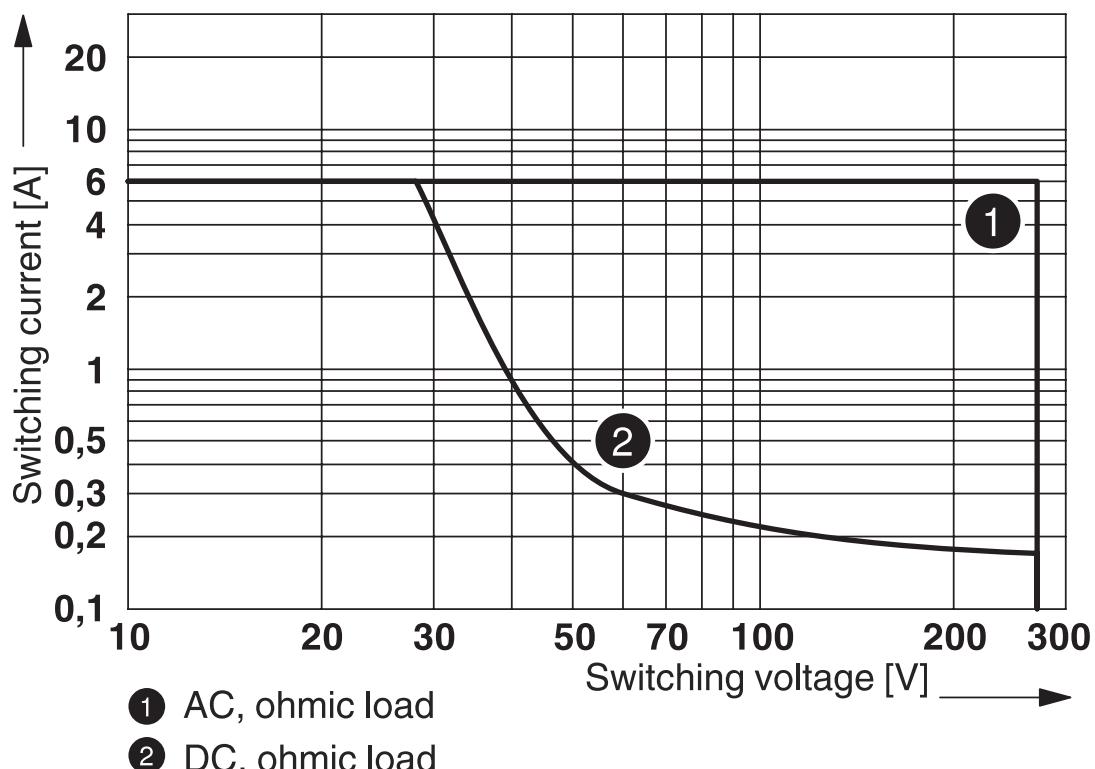


## Drawings

Dimensional drawing



Diagram



Interrupting rating

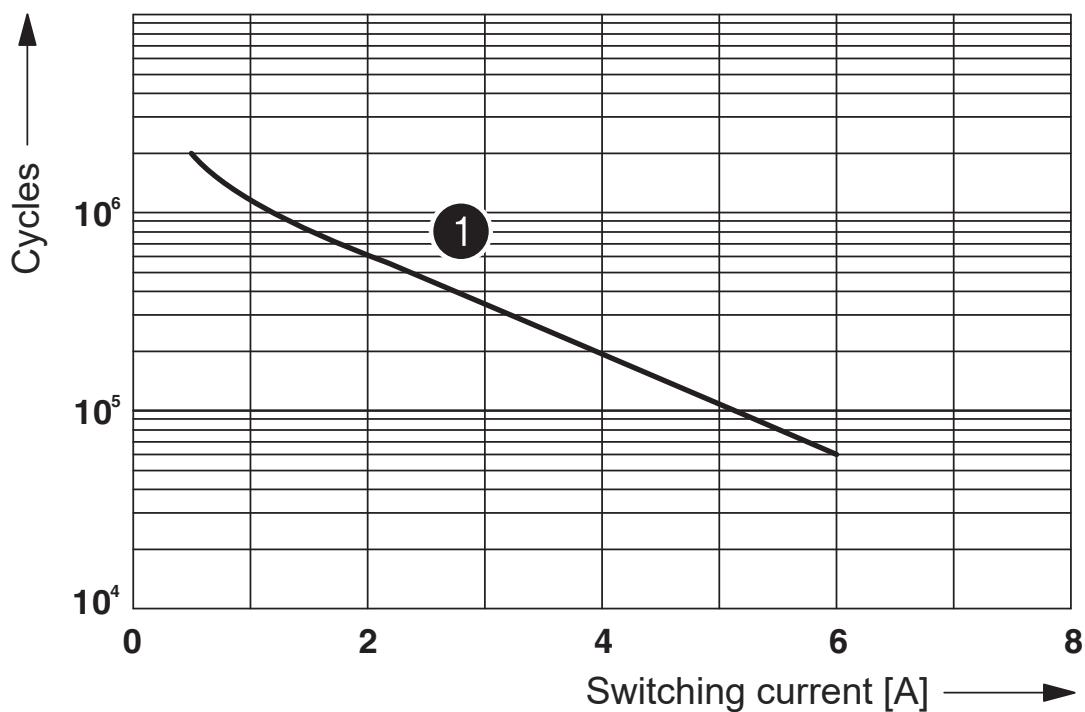
# REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>



Diagram



① 250 V AC, ohmic load

Electrical service life

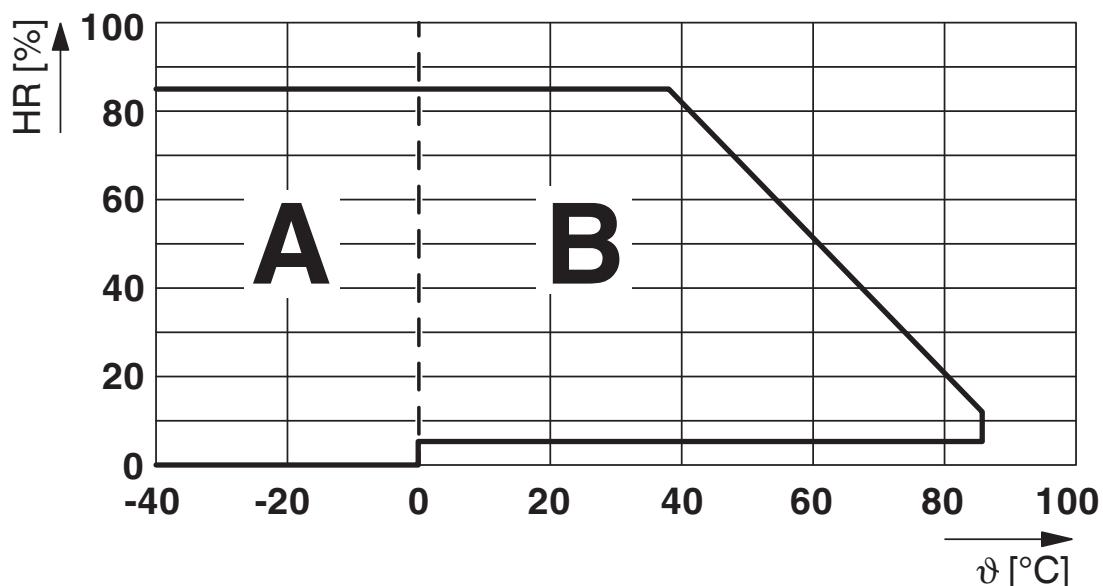
REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>

**PHÖNIX CONTACT**

## Diagram



Permissible humidity for operation and storage.

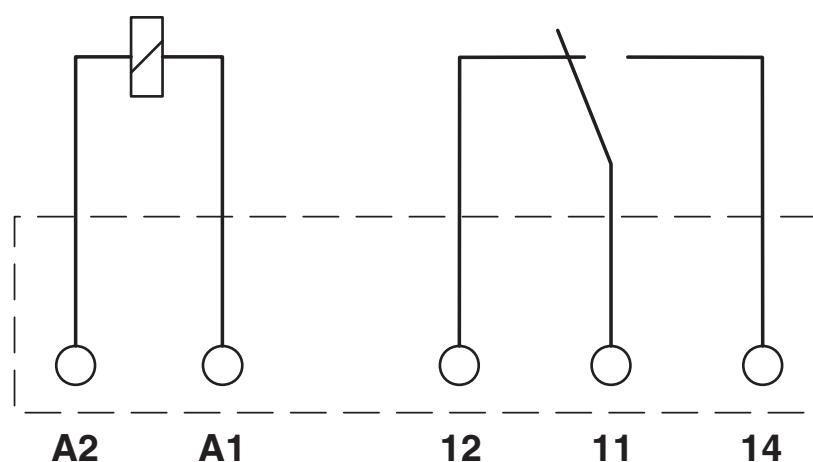
The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures  $\leq 0^{\circ}\text{C}$  must be prevented

Area B: Condensation at ambient temperatures  $> 0^\circ\text{C}$  must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature  $\leq 25^{\circ}\text{C}$ .

### Circuit diagram



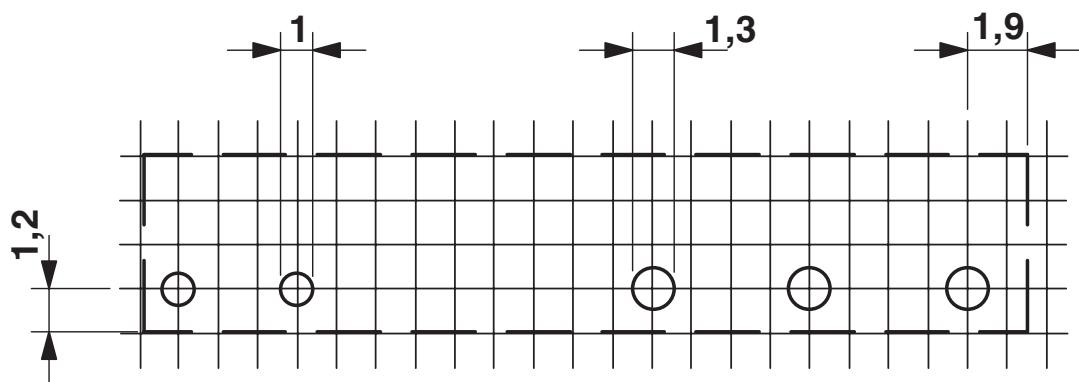
# REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>



Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

# REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>



## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2961121>



**cUL Recognized**

Approval ID: FILE E 172140



**UL Recognized**

Approval ID: FILE E 172140



**EAC**

Approval ID: RU\*C-DE.\*08.B.00010



**UL Recognized**

Approval ID: FILE E 172140



**VDE approval of drawings**

Approval ID: 40032864



**VDE approval of drawings**

Approval ID: 40054426



**cUL Recognized**

Approval ID: FILE E 172140



**VDE approval of drawings**

Approval ID: 40010212



**cUL Recognized**

Approval ID: FILE E 172140



**UL Recognized**

Approval ID: FILE E 172140

# REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>



## Classifications

### ECLASS

ECLASS-13.0	27371601
ECLASS-15.0	27371601

### ETIM

ETIM 9.0	EC001437
----------	----------

### UNSPSC

UNSPSC 21.0	39122300
-------------	----------

# REL-MR- 24DC/21AU - Single relay

2961121

<https://www.phoenixcontact.com/us/products/2961121>



## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

### EF3.0 Climate Change

CO2e kg	0.261 kg CO2e
---------	---------------

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA

586 Fulling Mill Road

Middletown, PA 17057, United States

(+717) 944-1300

[info@phoenixcon.com](mailto:info@phoenixcon.com)