

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

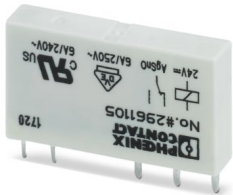


2961105

<https://www.phoenixcontact.com/pc/products/2961105>

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 power 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	2961105
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	08
Product key	CK6921
Catalog page	Page 284 (C-5-2019)
GTIN	4017918130893
Weight per piece (including packing)	6.71 g
Weight per piece (excluding packing)	5 g
Customs tariff number	85364190
Country of origin	CZ

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



2961105

<https://www.phoenixcontact.com/pc/products/2961105>

## Technical data

### Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	2x 10 <sup>7</sup> cycles

### Data management status

Date of last data management	12.09.2024
Article revision	02

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

### 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 <sub>N</sub>	24 V DC
Input voltage range	14.4 V DC ... 66 V DC
Input voltage range in reference to U <sub>N</sub>	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U <sub>N</sub>	7 mA
Typical response time	5 ms
Typical release time	2.5 ms
Coil resistance	3390 Ω ±10 % (at 20 °C)

### Output data

#### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Maximum inrush current	10 A (4 s)
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)

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

2961105

<https://www.phoenixcontact.com/pc/products/2961105>

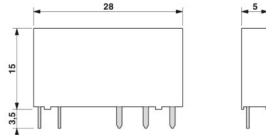


Switching capacity	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
	2 A (at 24 V, DC13)
Motor load according to UL 508	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)
Motor load according to UL 508	1/4 HP, 240 - 277 V AC (N/O contact)
	1/6 HP, 240 - 277 V AC (N/C contact)

## 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

## Standards and regulations

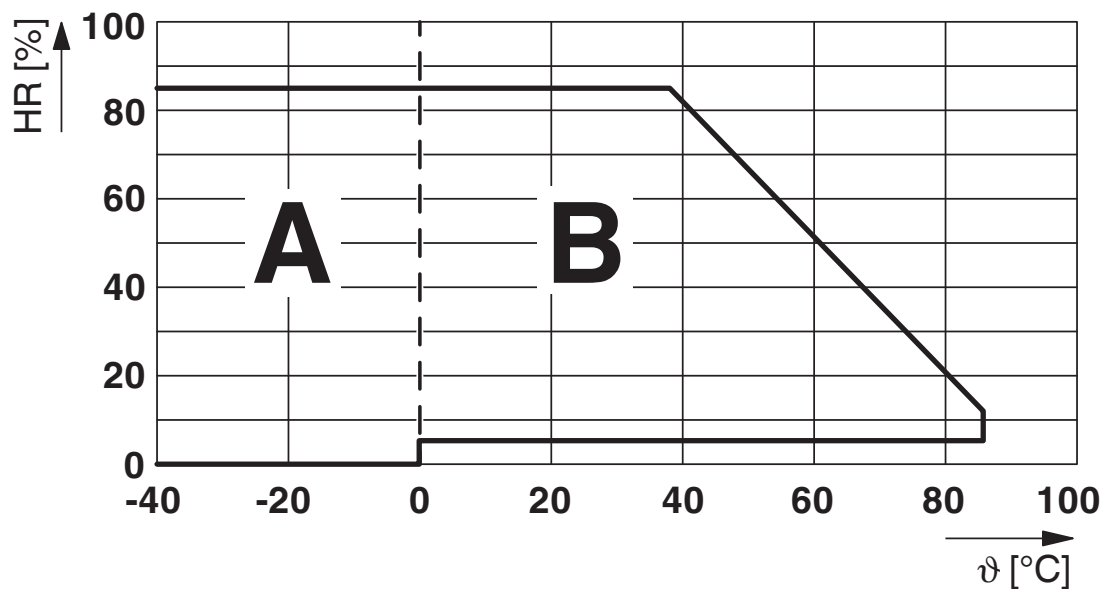
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

## Mounting

Assembly note	in rows with zero spacing
Mounting position	any

## Drawings

Diagram



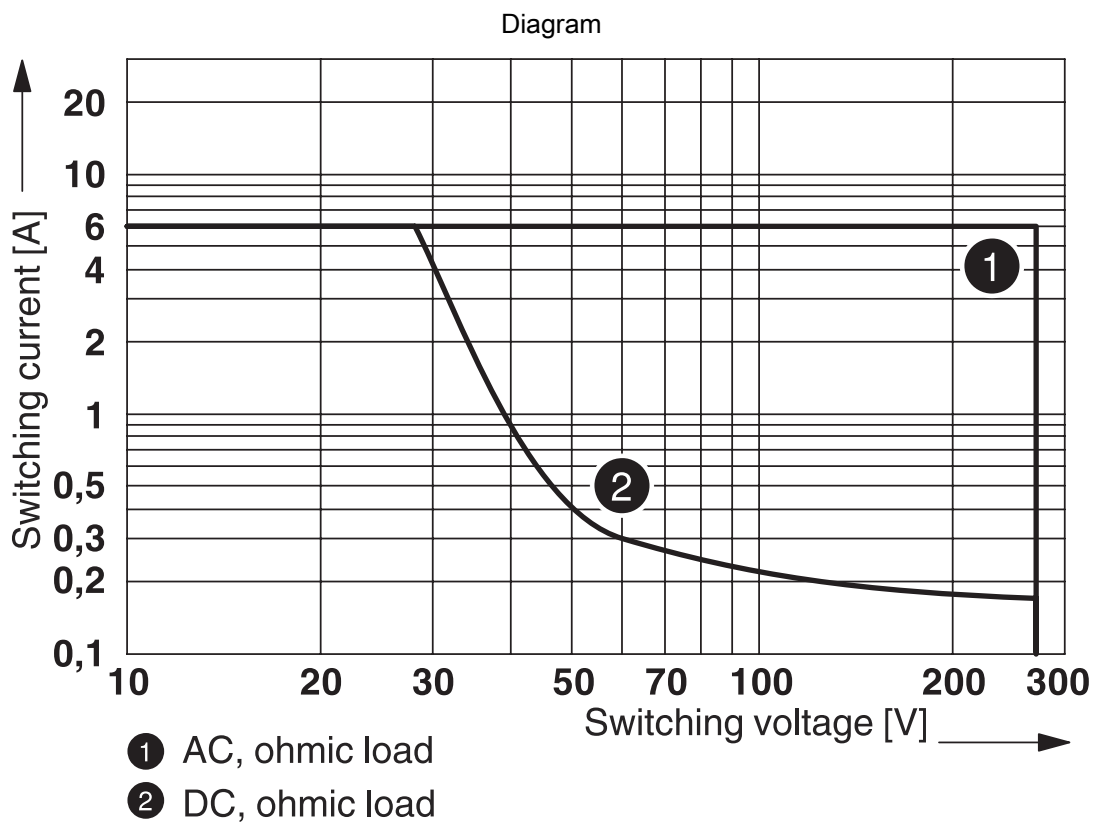
Permissible humidity for operation and storage.

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

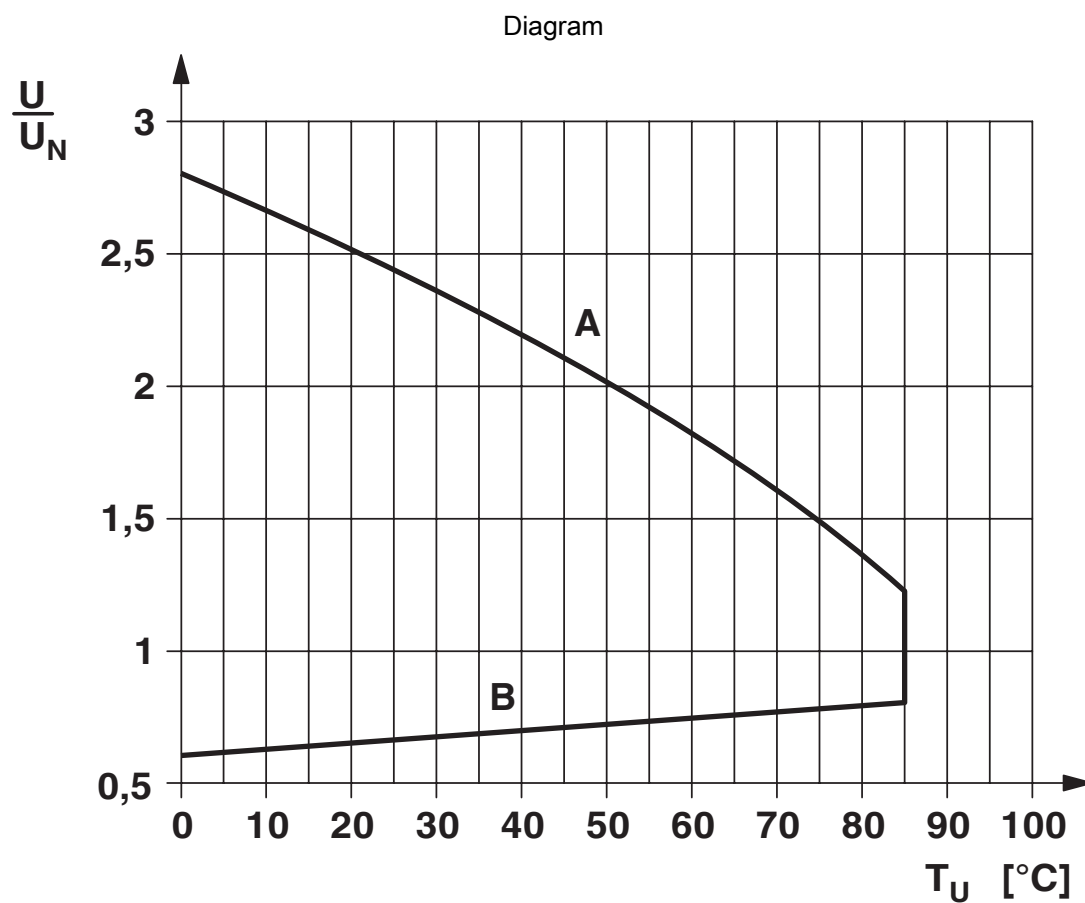
Area A: Ice buildup at ambient temperatures  $\leq 0^{\circ}\text{C}$  must be prevented

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

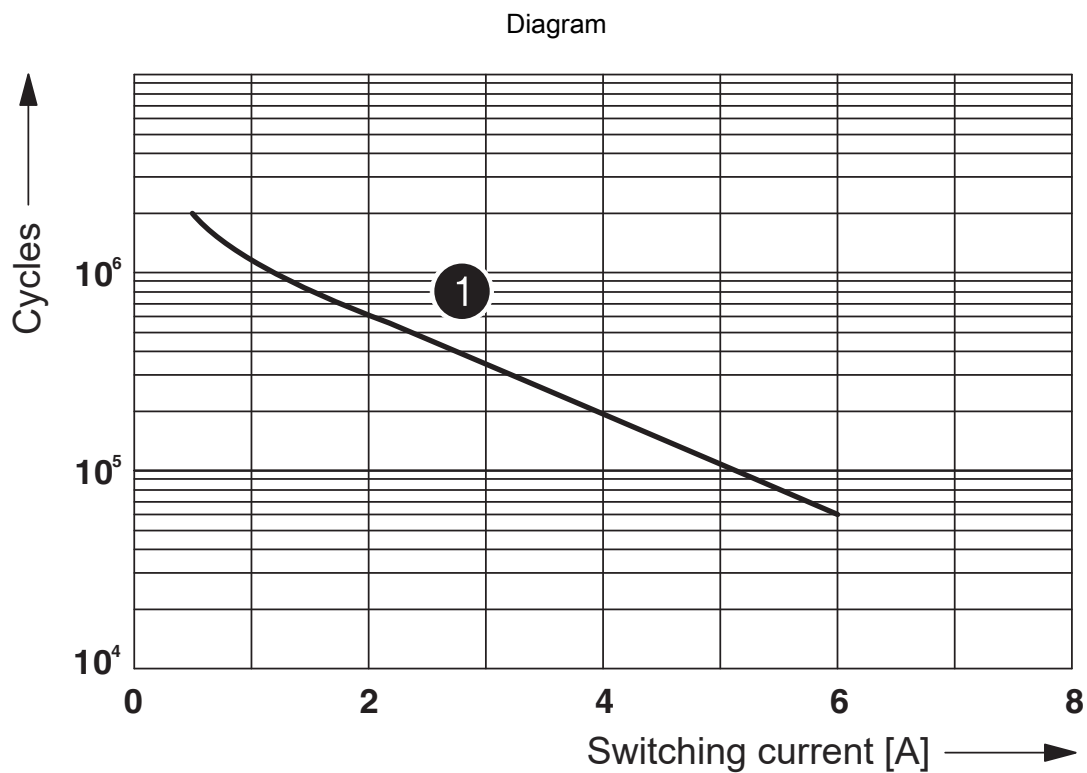
On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature  $\leq 25^{\circ}\text{C}$ .



Interrupting rating



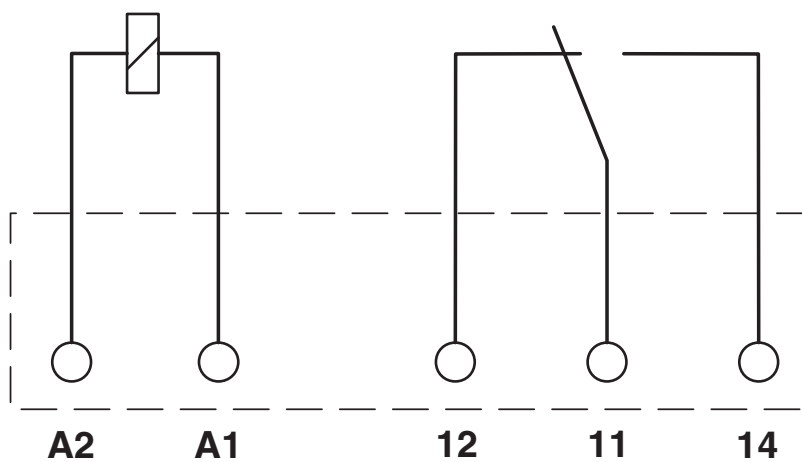
Operating voltage range



① 250 V AC, ohmic load

Electrical service life

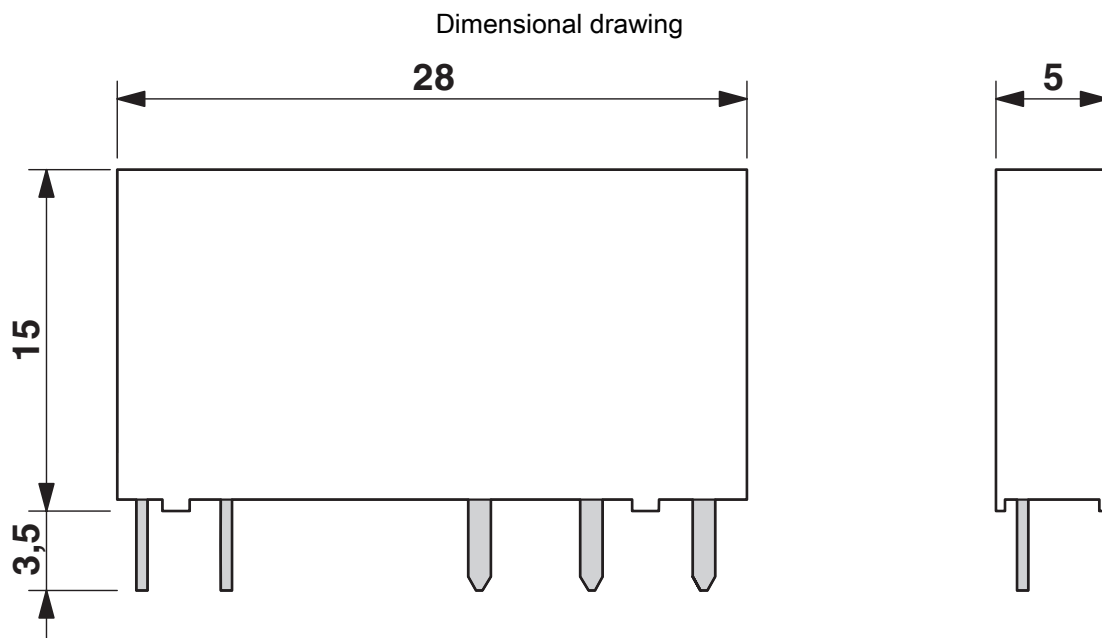
Circuit diagram



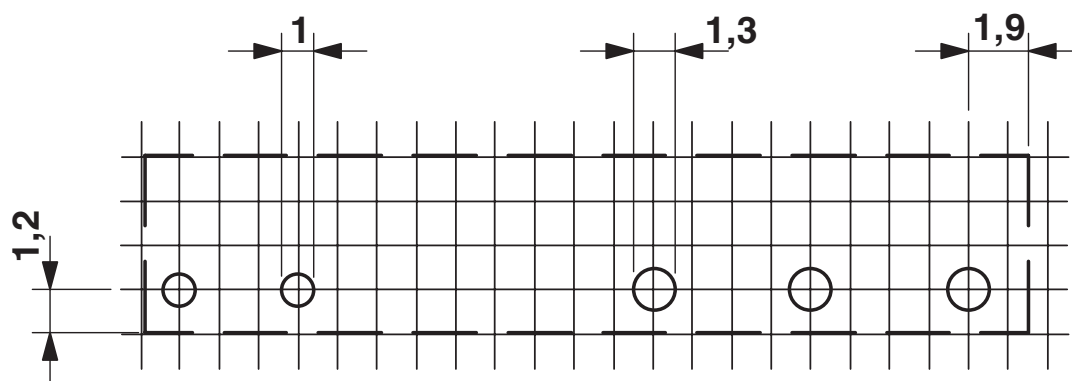
# REL-MR- 24DC/21 - Single relay

2961105

<https://www.phoenixcontact.com/pc/products/2961105>



Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

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













2961105

<https://www.phoenixcontact.com/pc/products/2961105>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/2961105>

	<b>cUL Recognized</b> Approval ID: FILE E 172140
	<b>UL Recognized</b> Approval ID: FILE E 172140
	<b>EAC</b> Approval ID: RU*C-DE.*08.B.00010
	<b>UL Recognized</b> Approval ID: FILE E 172140
	<b>VDE approval of drawings</b> Approval ID: 40032864
	<b>VDE approval of drawings</b> Approval ID: 40054426
	<b>cUL Recognized</b> Approval ID: FILE E 172140
	<b>VDE approval of drawings</b> Approval ID: 40010212
	<b>cUL Recognized</b> Approval ID: FILE E 172140
	<b>UL Recognized</b> Approval ID: FILE E 172140

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



2961105

<https://www.phoenixcontact.com/pc/products/2961105>

## Classifications

### ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

### ETIM

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

### UNSPSC

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

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



2961105

<https://www.phoenixcontact.com/pc/products/2961105>

## 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%

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

2961105

<https://www.phoenixcontact.com/pc/products/2961105>



## Mandatory accessories

### PLC-BPT- 24DC/21 - Relay base

2900445

<https://www.phoenixcontact.com/pc/products/2900445>



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V DC

---

### PLC-BSC- 24DC/21 - Relay base

2966016

<https://www.phoenixcontact.com/pc/products/2966016>



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V DC

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

2961105

<https://www.phoenixcontact.com/pc/products/2961105>



## PLC-BPT- 24UC/21 - Relay base

2900446

<https://www.phoenixcontact.com/pc/products/2900446>



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V AC/DC

---

## PLC-BSC- 24UC/21 - Relay base

2966029

<https://www.phoenixcontact.com/pc/products/2966029>



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V AC/DC

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

2961105

<https://www.phoenixcontact.com/pc/products/2961105>



## PLC-BPT- 24DC/ 1/SEN - Relay base

2900262

<https://www.phoenixcontact.com/pc/products/2900262>



6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

---

## PLC-BSC- 24DC/ 1/SEN - Relay base

2966061

<https://www.phoenixcontact.com/pc/products/2966061>



6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

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

2961105

<https://www.phoenixcontact.com/pc/products/2961105>



## PLC-BPT- 24UC/ 1/ACT - Relay base

2900450

<https://www.phoenixcontact.com/pc/products/2900450>



6.2 mm PLC basic terminal block for output functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

---

## PLC-BSC- 24UC/ 1/ACT - Relay base

2982799

<https://www.phoenixcontact.com/pc/products/2982799>



6.2 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

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

2961105

<https://www.phoenixcontact.com/pc/products/2961105>



## PLC-BSC- 24DC/21/SO46 - Relay base

2980458

<https://www.phoenixcontact.com/pc/products/2980458>



6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with increased input current consumption, 1 changeover contact, input voltage 24 V DC

---

## RIF-0-BPT/21 - Relay base

2900958

<https://www.phoenixcontact.com/pc/products/2900958>



Relay base RIF-0..., for miniature power relay with 1 changeover contact or solid-state relays of the same design, Push-in connection, for mounting on NS 35/7,5

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

2961105

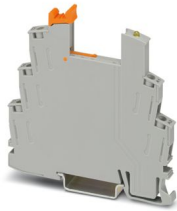
<https://www.phoenixcontact.com/pc/products/2961105>



## RIF-0-BSC/21 - Relay base

2900957

<https://www.phoenixcontact.com/pc/products/2900957>



RIF-0... relay base, for miniature power relay with 1 changeover contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

---

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

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