

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

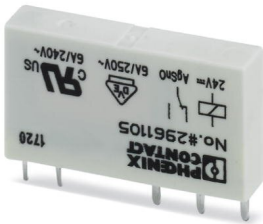


2961105

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

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



## Your advantages

- Safe isolation according to DIN EN 50178 between coil and contact
- High degree of protection up to RT III depending on type (wash-proof)
- Power contacts up to 6 A

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## Commercial Data

Order Key	2961105
Packing unit	10 pc
Minimum order quantity	10 pc
Note	Made to Order (non-returnable)
Sales Key	0608*
Product Key	CK6195
Catalog Page	Page 284 (C-5-2019)
GTIN	4017918130893
Weight per Piece (including packing)	6.73 g
Weight per Piece (excluding packing)	5 g
Customs tariff number	85364900
Country of origin	CZ

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## Technical Data

### Product properties

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

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

### Electrical properties

Maximum power dissipation for nominal condition	0.17 W
Test voltage	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
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 type	1 changeover contact
Type of switch contact	Single contact
Drive and function	monostable
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)
	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)

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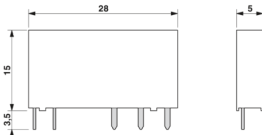


	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)
Motor load according to UL 508	1/4 HP, 240 - 277 V AC (N/O contact)
	1/6 HP, 240 - 277 V AC (N/C contact)

## Connection data

Connection method	Solder connection
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## Dimensions

Dimensional drawing	
Width	5 mm
Height	28 mm
Depth	15 mm

## Material specifications

Color	white
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## 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

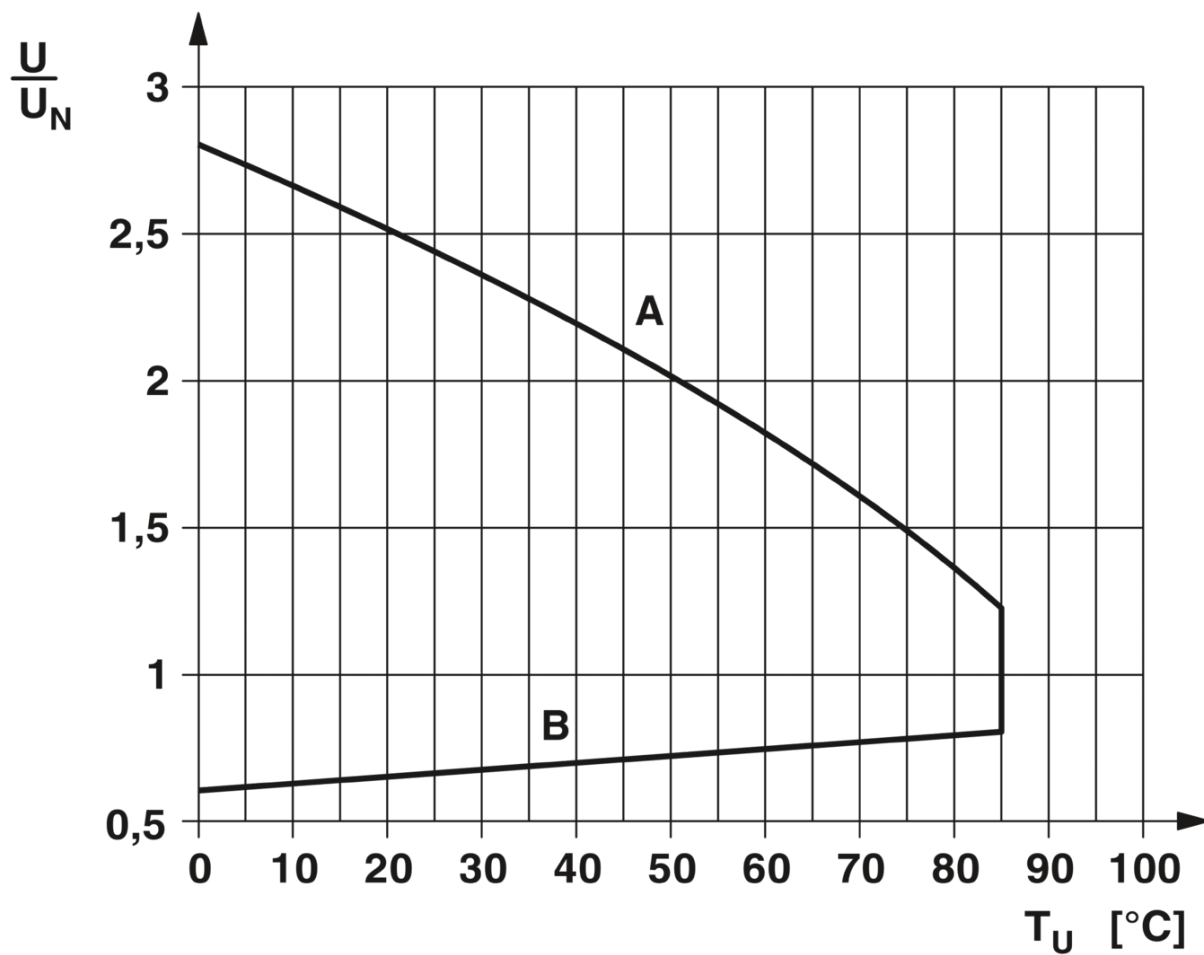
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

## Mounting

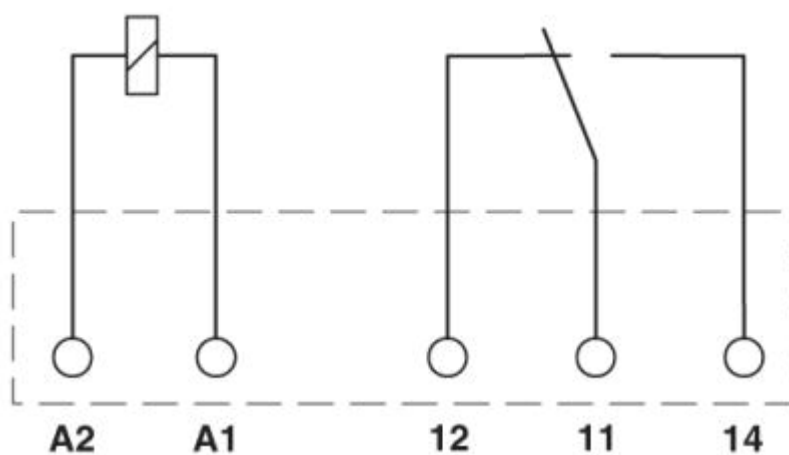
Assembly instructions	in rows with zero spacing
Mounting position	any

## Drawings

Diagram



Circuit diagram



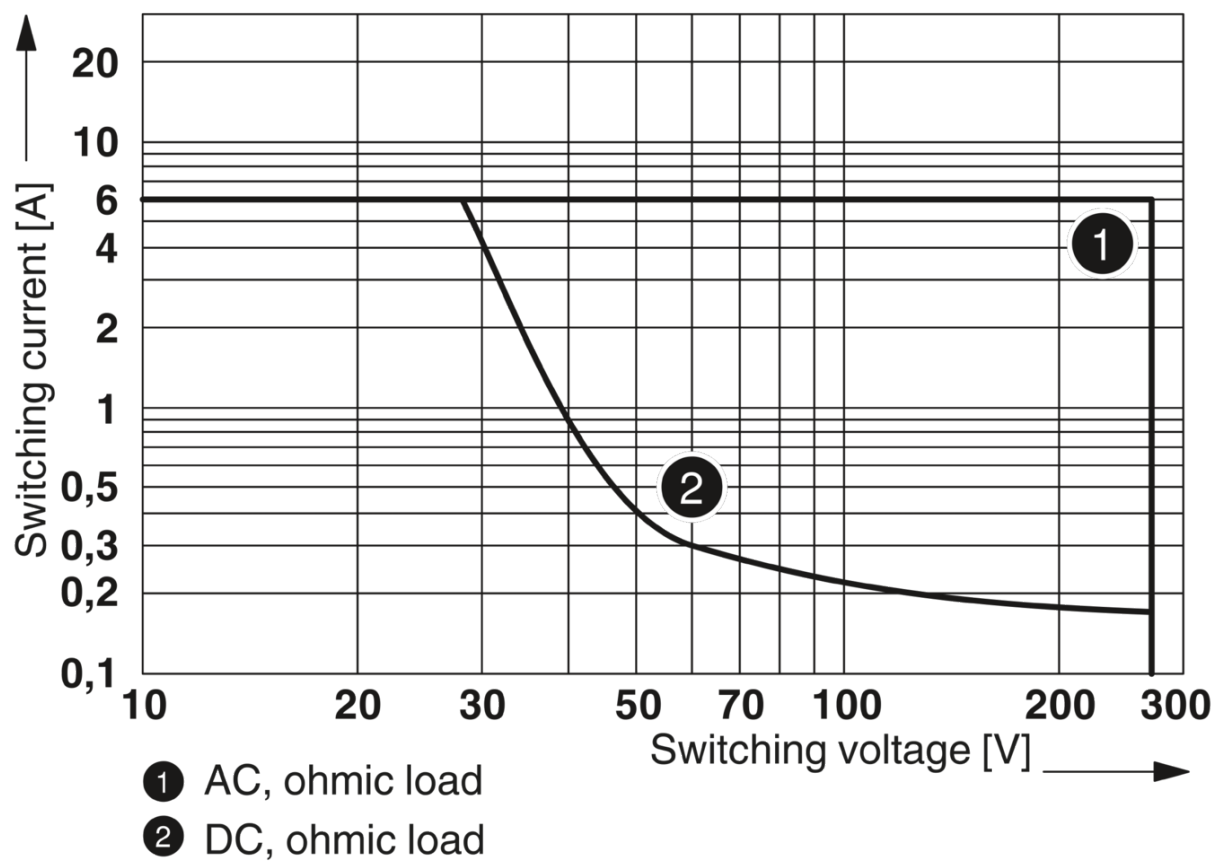
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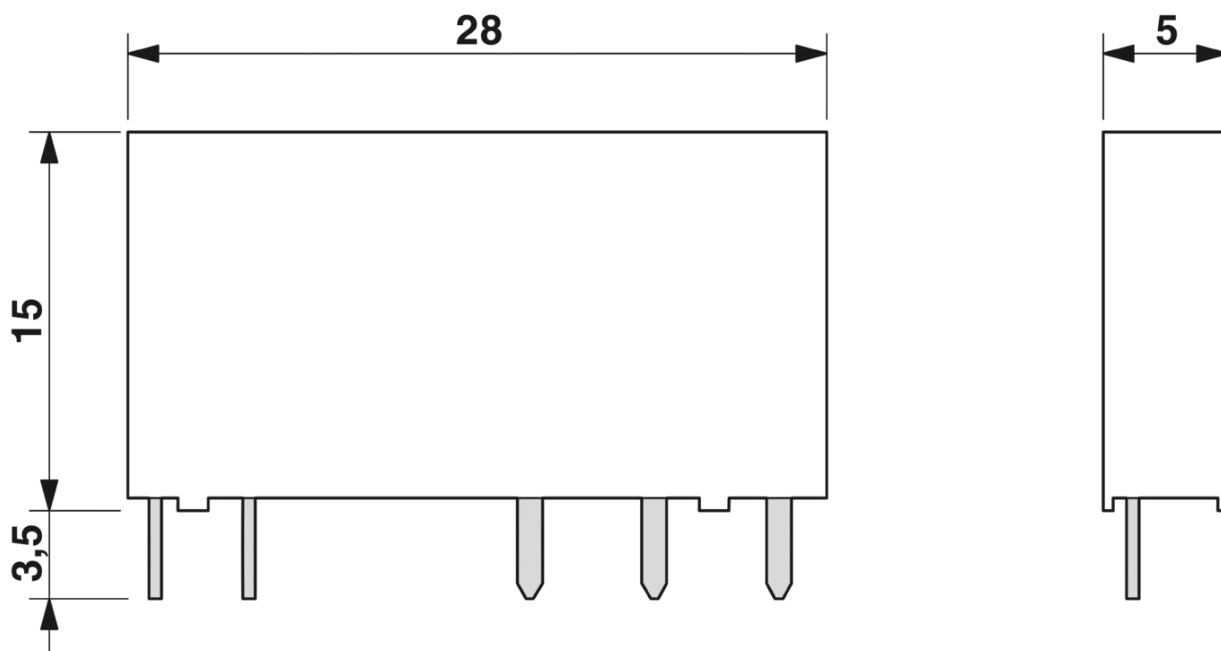


Diagram



Interrupting rating

Dimensional drawing



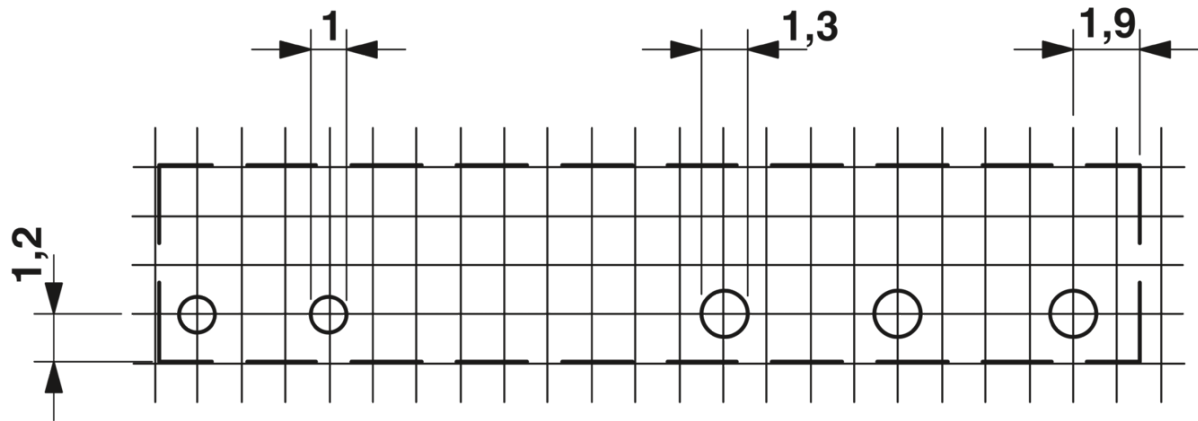
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Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

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## Approvals

cUL Recognized 

UL Recognized 

EAC 

UL Recognized 

EAC 

VDE  
Zeichengenehmigung  


Nominal Voltage  $U_N$

Nominal Current  $I_N$

Cross Section AWG

Cross Section  $\text{mm}^2$

Reports with production  
monitoring

-

-

VDE  
Zeichengenehmigung  


Nominal Voltage  $U_N$

Nominal Current  $I_N$

Cross Section AWG

Cross Section  $\text{mm}^2$

Mark approval  
certificate

-

-

PRS 

cUL Recognized 

VDE  
Zeichengenehmigung  




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## Classifications

### ECLASS

ECLASS-9.0	27371601
ECLASS-10.0.1	27371601
ECLASS-11.0	27371601

### ETIM

ETIM 6.0	EC001437
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### UNSPSC

UNSPSC 19.0	39122334
UNSPSC 20.0	39122334
UNSPSC 21.0	39122334

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## Environmental Product Compliance

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

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## Accessories

### Relay base

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

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### Relay base

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

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## Relay base

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

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## Relay base

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

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## Relay base

Relay base - PLC-BPT- 48DC/21 - 2900447



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 48 V DC

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## Relay base

Relay base - PLC-BSC- 48DC/21 - 2966090



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 48 V DC

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## Relay base

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

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## Relay base

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

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## Relay base

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

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## Relay base

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

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## Relay base

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

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## Relay base

Relay base - RIF-0-BPT/21 - 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



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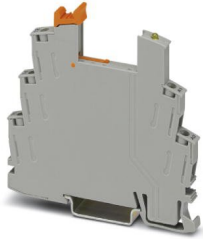
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## Relay base

Relay base - RIF-0-BSC/21 - 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

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