

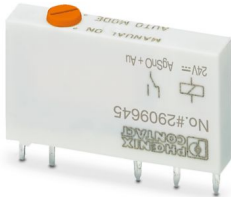
# REL-MR- 24DC/21AU/MS - Single relay



2909645

<https://www.phoenixcontact.com/gb/products/2909645>

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

## Commercial data

Item number	2909645
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CK6195
Product key	CK6195
Catalog page	Page 284 (C-5-2019)
GTIN	4055626377803
Weight per piece (including packing)	6.8 g
Weight per piece (excluding packing)	6.8 g
Customs tariff number	85364190
Country of origin	CZ

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



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## Technical data

### Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	1x 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 (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 % (at 20 °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)
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)

Switching: when the gold layer is destroyed

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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
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## Dimensions

Width	5 mm
Height	28 mm
Depth	16 mm

## Material specifications

Color	white (RAL 9010)
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## Environmental and real-life conditions

### Ambient conditions

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

## Approvals

### Corrosive gas test

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

## Standards and regulations

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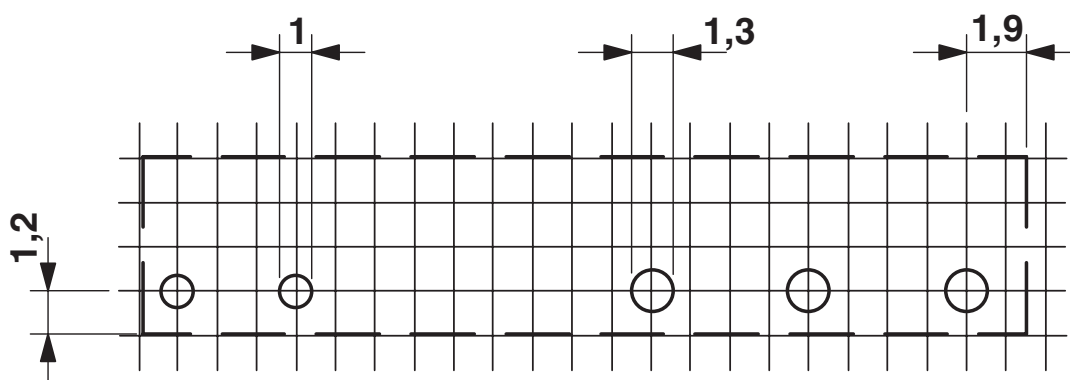
Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

## Mounting

Assembly instructions	in rows with zero spacing
Mounting position	any

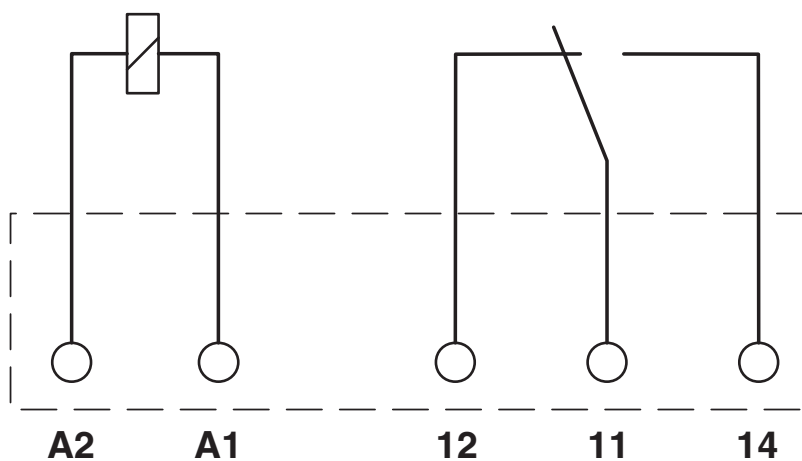
## Drawings

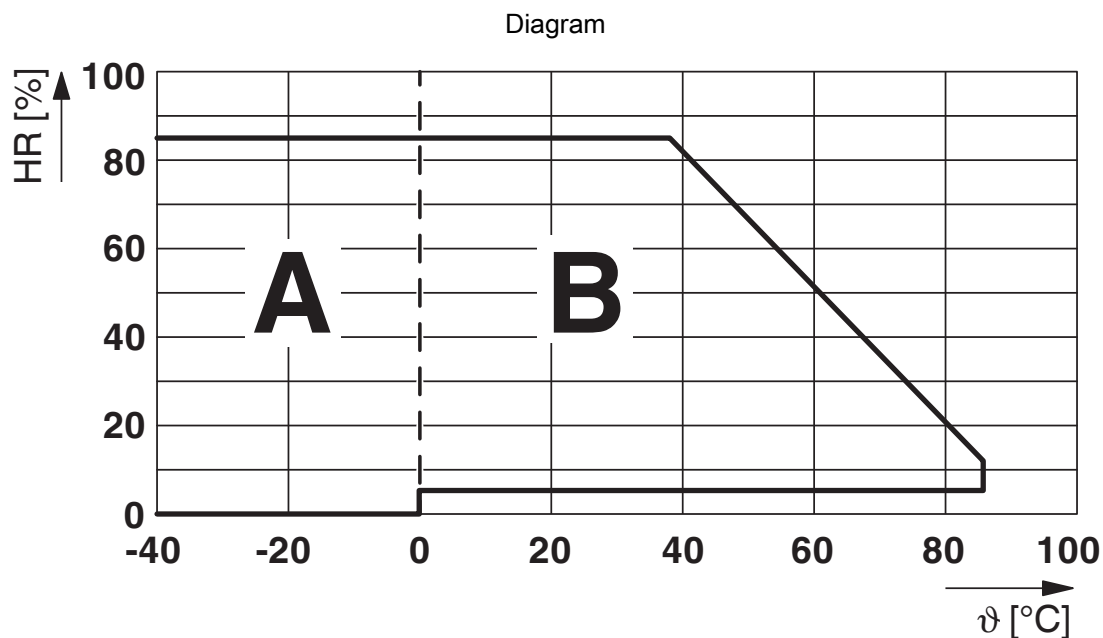
Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

Circuit 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

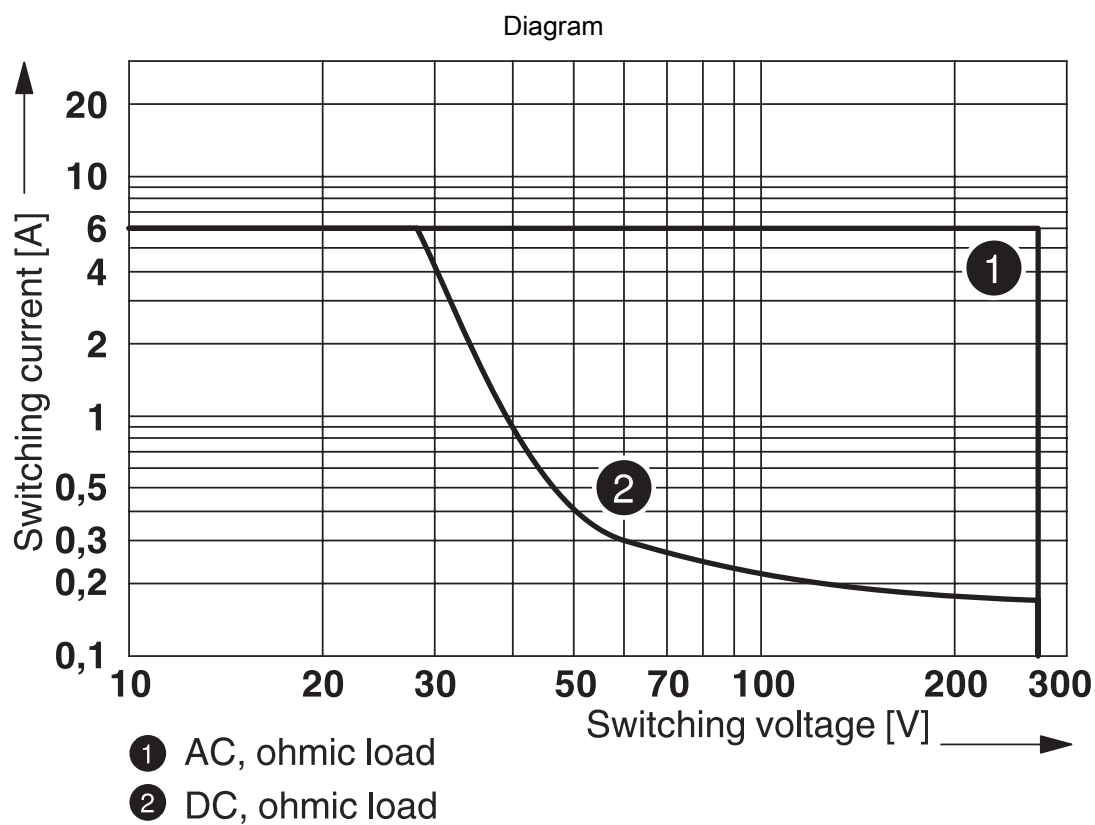
Area B: Condensation at ambient temperatures  $> 0^{\circ}\text{C}$  must be prevented

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



① 250 V AC, ohmic load

Electrical service life



Interrupting rating



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## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2909645>




**cUL Recognized**  
Approval ID: FILE E 228652




**UL Recognized**  
Approval ID: FILE E 228652



**EAC**  
Approval ID: TR\_TS\_D\_00573\_c



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



**VDE Zeichengenehmigung**  
Approval ID: 40010212

**cULus Recognized**

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## Classifications

### ECLASS

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

### ETIM

ETIM 9.0	EC001437
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### UNSPSC

UNSPSC 21.0	39122300
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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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## Mandatory accessories

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

2900445

<https://www.phoenixcontact.com/gb/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

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

2966016

<https://www.phoenixcontact.com/gb/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/21AU/MS - Single relay

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

2900446

<https://www.phoenixcontact.com/gb/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

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

2966029

<https://www.phoenixcontact.com/gb/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/21AU/MS - Single relay



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

2900262

<https://www.phoenixcontact.com/gb/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

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

2966061

<https://www.phoenixcontact.com/gb/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/21AU/MS - Single relay

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

2900449

<https://www.phoenixcontact.com/gb/products/2900449>



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 DC

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

2966058

<https://www.phoenixcontact.com/gb/products/2966058>



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 DC

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

2900450

<https://www.phoenixcontact.com/gb/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

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

2982799

<https://www.phoenixcontact.com/gb/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/21AU/MS - Single relay



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

2980458

<https://www.phoenixcontact.com/gb/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

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

2900958

<https://www.phoenixcontact.com/gb/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

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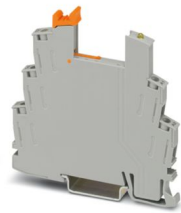
<https://www.phoenixcontact.com/gb/products/2909645>



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

2900957

<https://www.phoenixcontact.com/gb/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

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