

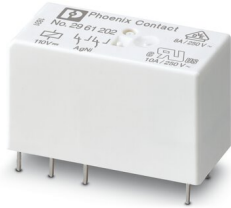
# REL-MR-110DC/21-21 - Single relay



2961202

<https://www.phoenixcontact.com/in/products/2961202>

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Plug-in miniature power relay, with power contact, 2 changeover contacts, input voltage 110 V DC

## Your advantages

- RT III-proof (wash-proof)
- Switching current of up to 8 A

## Commercial Data

Item number	2961202
Packing unit	10 pc
Minimum order quantity	10 pc
Sales Key	CK6
Product Key	CK6195
Catalog Page	Page 290 (C-5-2019)
GTIN	4017918158002
Weight per Piece (including packing)	17 g
Weight per Piece (excluding packing)	16.125 g
Customs tariff number	85364900
Country of origin	AT

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## Technical Data

### Product properties

Product type	Single relay
Set comprises	2967086 PLC-RSC-120UC/21-21
	2967099 PLC-RSC-230UC/21-21
	2912549 PLC-RSP-120UC/21-21
	2912552 PLC-RSP-230UC/21-21
	2900335 PLC-RPT-120UC/21-21
	2900336 PLC-RPT-230UC/21-21
Operating mode	100% operating factor
Mechanical service life	3x 10 <sup>7</sup> cycles

### Insulation characteristics

Insulation	Basic insulation
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### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	3

### Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.45 W
Test voltage (Winding/contact)	5 kV AC (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	2.5 kV AC (50 Hz, 1 min., contact/contact)

### Input data

#### Coil side

Nominal input voltage $U_N$	110 V DC
Input voltage range	71.5 V DC ... 272.8 V DC
Typical input current at $U_N$	4.1 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	26600 $\Omega$ $\pm$ 15 % (at 20 °C)

### Output data

#### Switching

Contact type	2 changeover contacts
Type of switch contact	Single contact
Drive and function	monostable
Drive (polarity)	bipolar
Contact material	AgNi

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Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Limiting continuous current	8 A
Maximum inrush current	25 A (20 ms)
Min. switching current	10 mA (At 5 V)
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)
Motor load according to UL 508	1/4 HP, 120 V AC
	1/2 HP, 240 V AC

## Connection data

Connection method	Plug / solder connection
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## Dimensions

Dimensional drawing	
Width	12.7 mm
Height	29 mm
Depth	15.7 mm

## 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

### Corrosive gas test

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

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## Standards and regulations

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

## Mounting

Assembly instructions	Can be aligned without spacing ( $> 70\text{ °C} \geq 2.5\text{ mm}$ )
Mounting position	any

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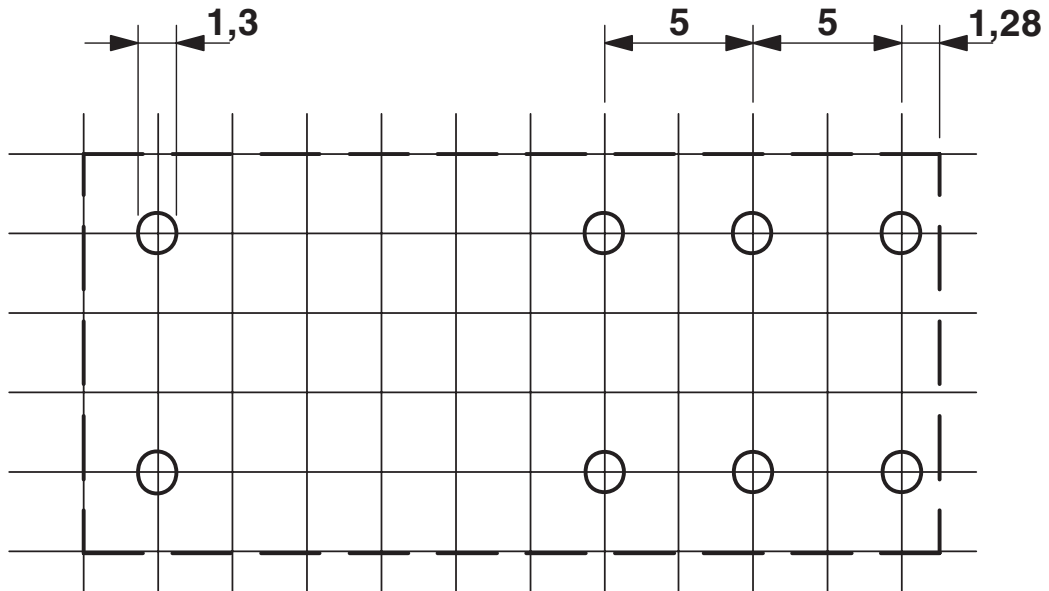


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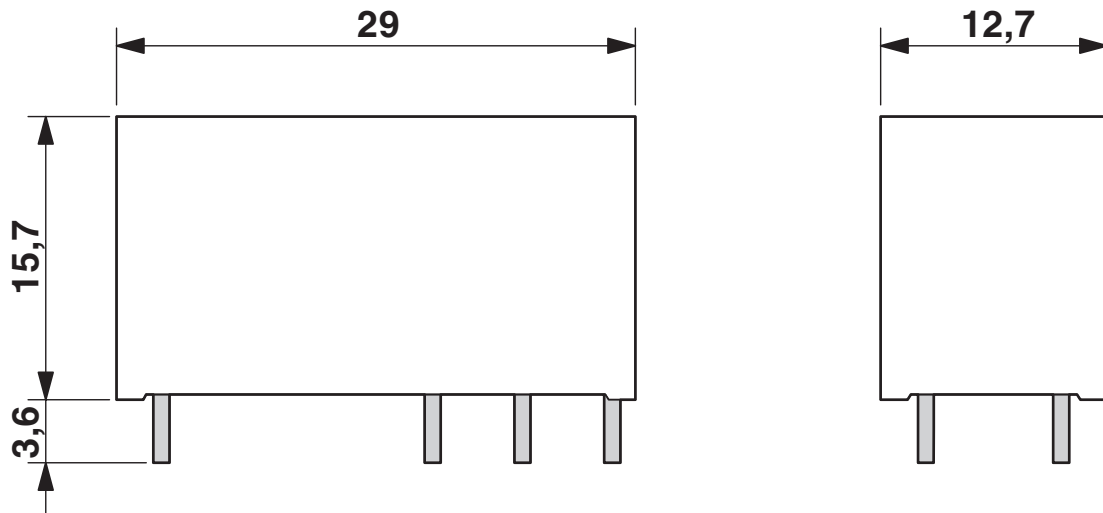
## Drawings

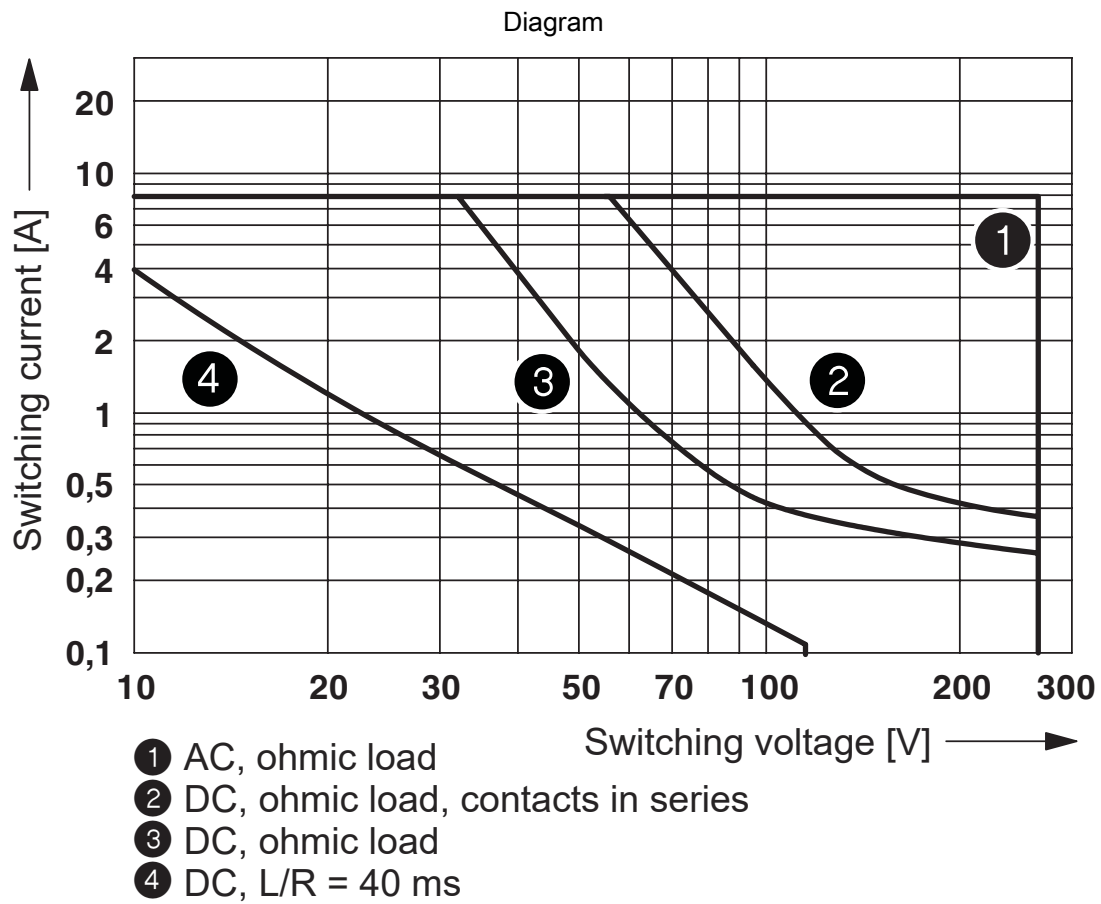
Drilling plan/solder pad geometry



a = pitch division 2.5 mm

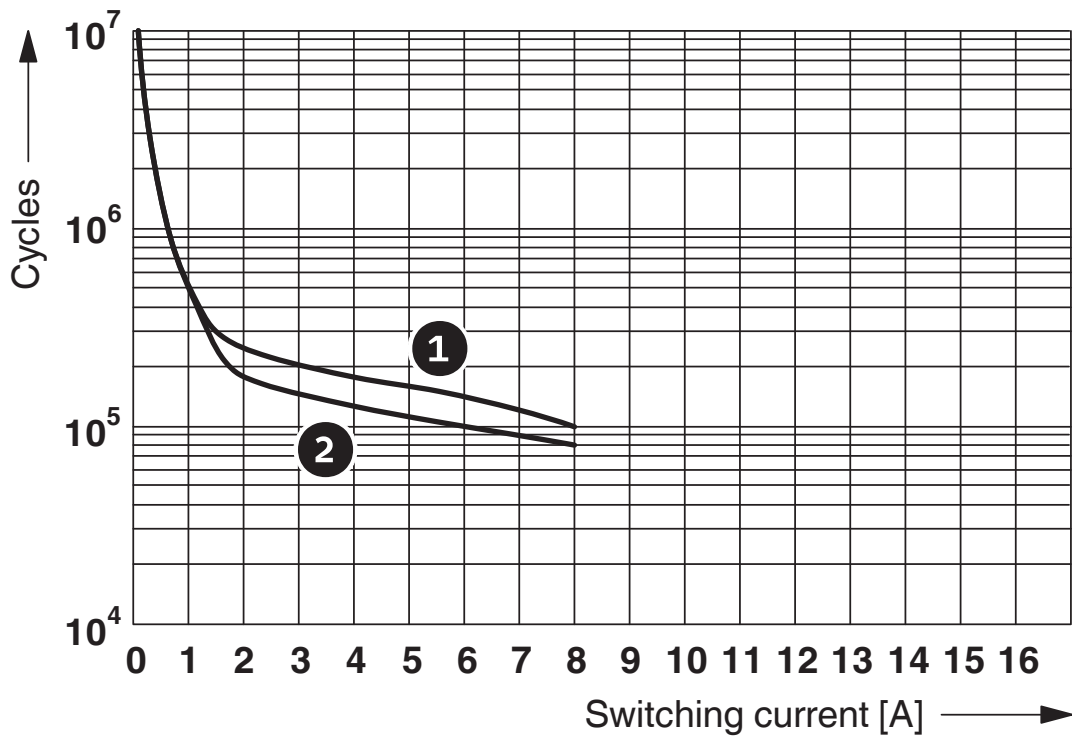
Dimensional drawing





Interrupting rating

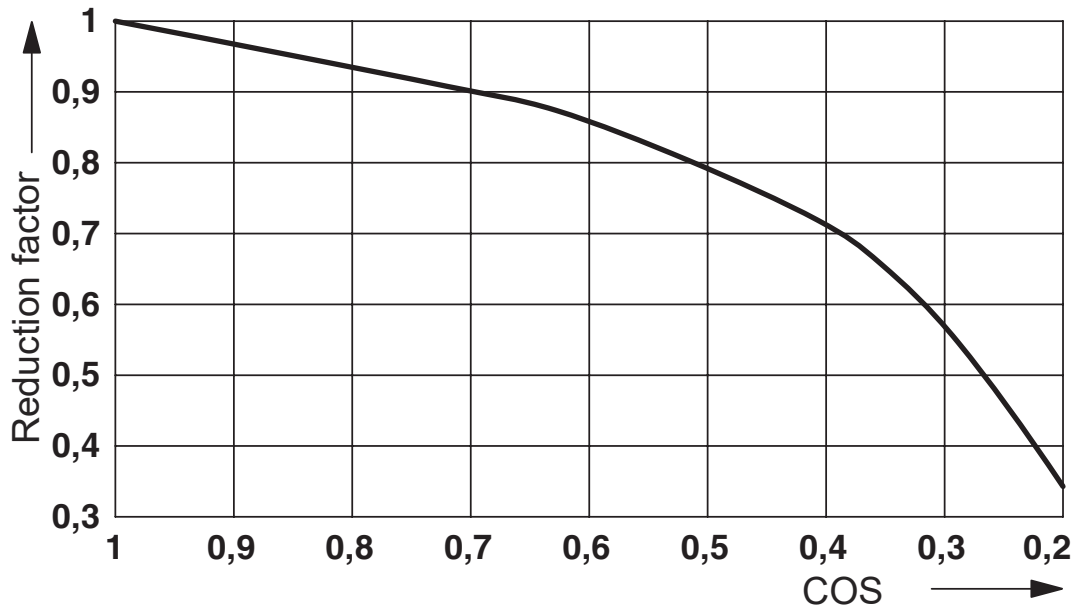
Diagram



- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

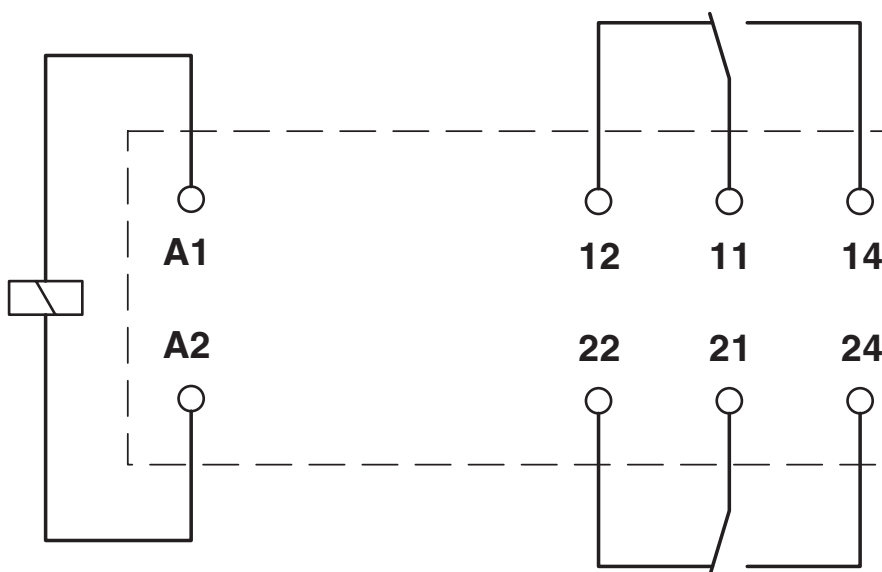
Electrical service life

Diagram



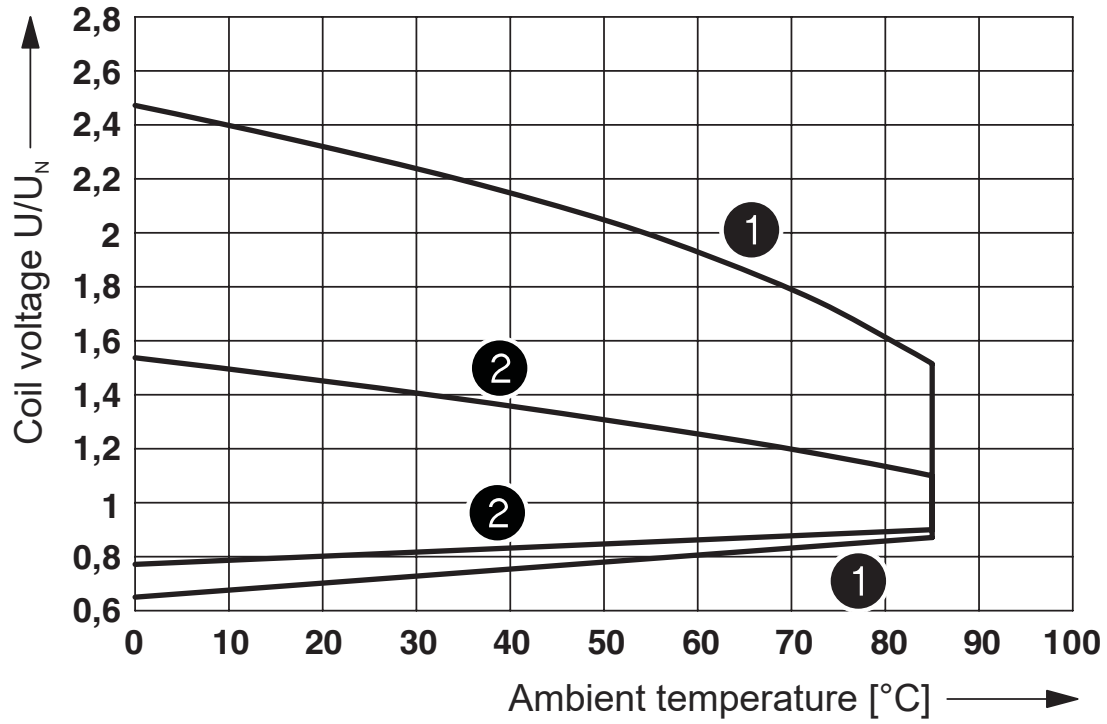
Service life reduction factor with various cos phi

Circuit diagram





Diagram



- ① DC coils
- ② AC coils

Operating voltage range

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## Approvals



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



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



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



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



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



**VDE Zeichengenehmigung**  
Approval ID: 40007758



**PRS**  
Approval ID: TE/2109/880590/16



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

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## Classifications

### ECLASS

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

### ETIM

ETIM 8.0	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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## Accessories

### PLC-BPT-120UC/21-21 - Relay base

2900287

<https://www.phoenixcontact.com/in/products/2900287>



14 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 changeover contacts, input voltage 120 V AC/DC

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### PLC-BSC-120UC/21-21 - Relay base

2967031

<https://www.phoenixcontact.com/in/products/2967031>



14 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 changeover contacts, input voltage 120 V AC/DC

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## PLC-BPT-230UC/21-21 - Relay base

2900288

<https://www.phoenixcontact.com/in/products/2900288>



14 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 changeover contacts, input voltage 230 V AC/DC

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## PLC-BSC-230UC/21-21 - Relay base

2967044

<https://www.phoenixcontact.com/in/products/2967044>



14 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 2 changeover contacts, input voltage 230 V AC/DC

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## PLC-BSC-120UC/21-21/SO46 - Relay base

2980416

<https://www.phoenixcontact.com/in/products/2980416>



14 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 2 changeover contacts, input voltage 120 V AC

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## PLC-BSC-230UC/21-21/SO46 - Relay base

2980429

<https://www.phoenixcontact.com/in/products/2980429>



14 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 2 changeover contacts, input voltage 230 V AC

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## RIF-1-BPT/2X21 - Relay base

2900931

<https://www.phoenixcontact.com/in/products/2900931>



Relay base RIF-1..., for miniature power relay with 1 or 2 changeover contacts or solid-state relays of the same design, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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## RIF-1-BSC/2X21 - Relay base

2900930

<https://www.phoenixcontact.com/in/products/2900930>



RIF-1... relay base, for miniature power relay with 1 or 2 changeover contacts or identical solid-state relays, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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