

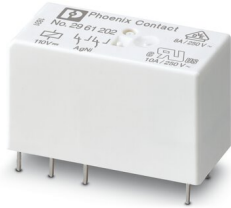
REL-MR-110DC/21-21 - Single relay



2961202

<https://www.phoenixcontact.com/mx/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	05
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	85364999
Country of origin	AT

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



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Technical data

Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ 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
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at U _N	4.1 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	26600 Ω ±15 % (at 20 °C)

Output data

Switching

Contact switching type	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi
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)
	190 W (at 24 V DC)

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Interrupting rating (ohmic load) max.	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
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Mounting

Assembly instructions	Can be aligned without spacing (> 70 °C ≥ 2.5 mm)
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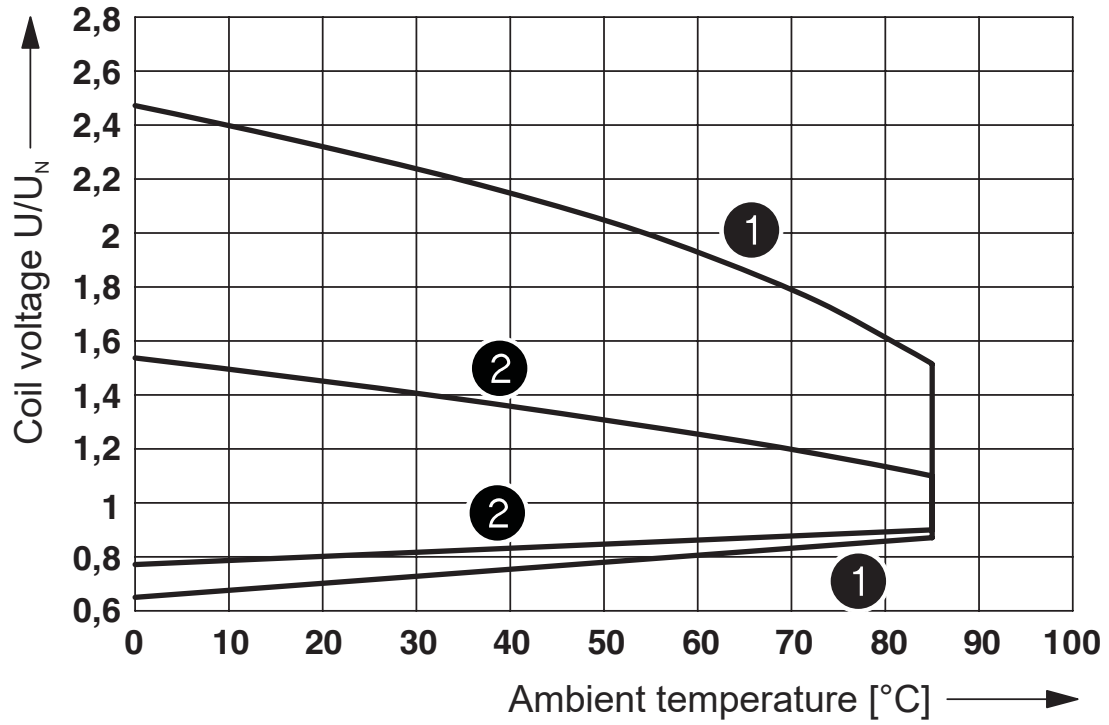
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Mounting position	any
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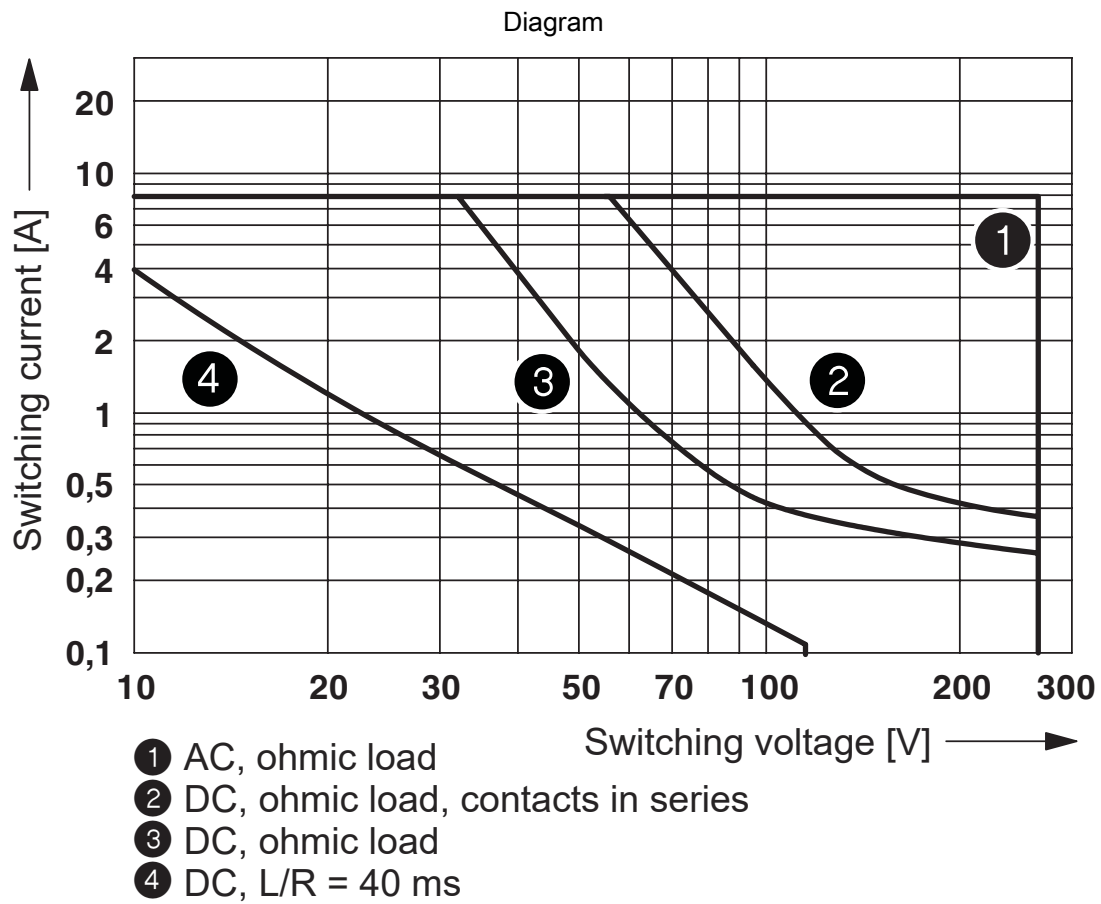
Drawings

Diagram



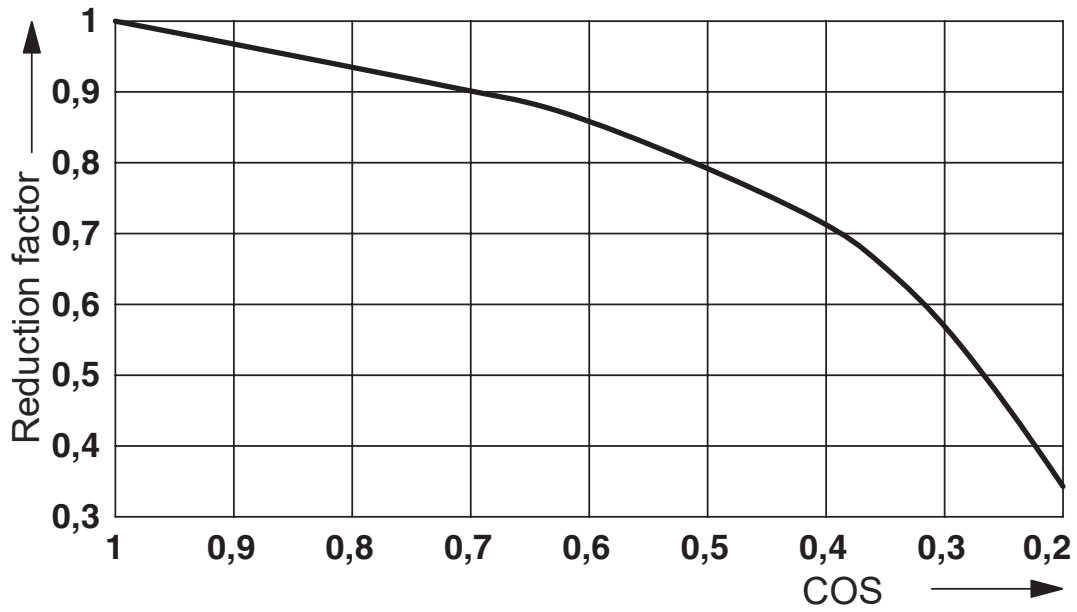
- ① DC coils
- ② AC coils

Operating voltage range



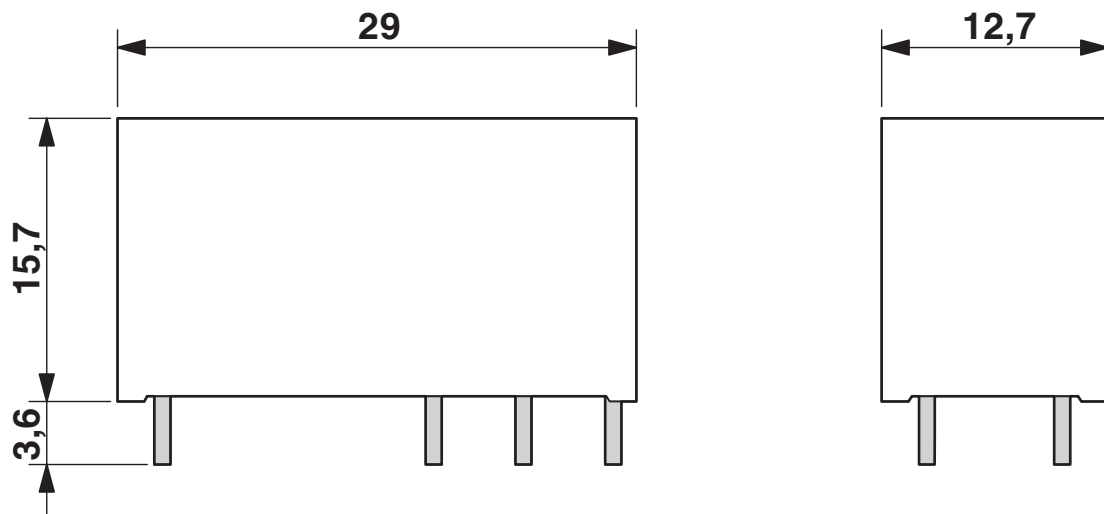
Interrupting rating

Diagram



Service life reduction factor with various cos phi

Dimensional drawing

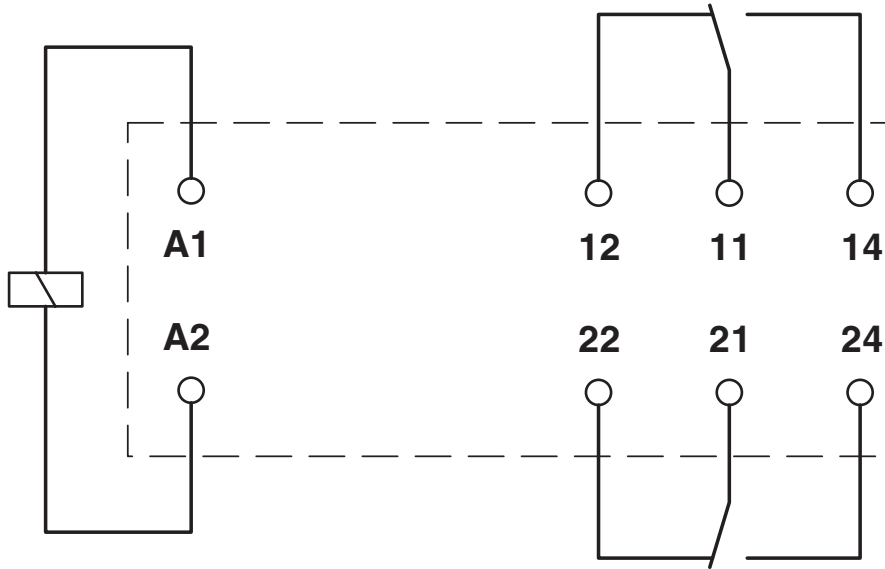


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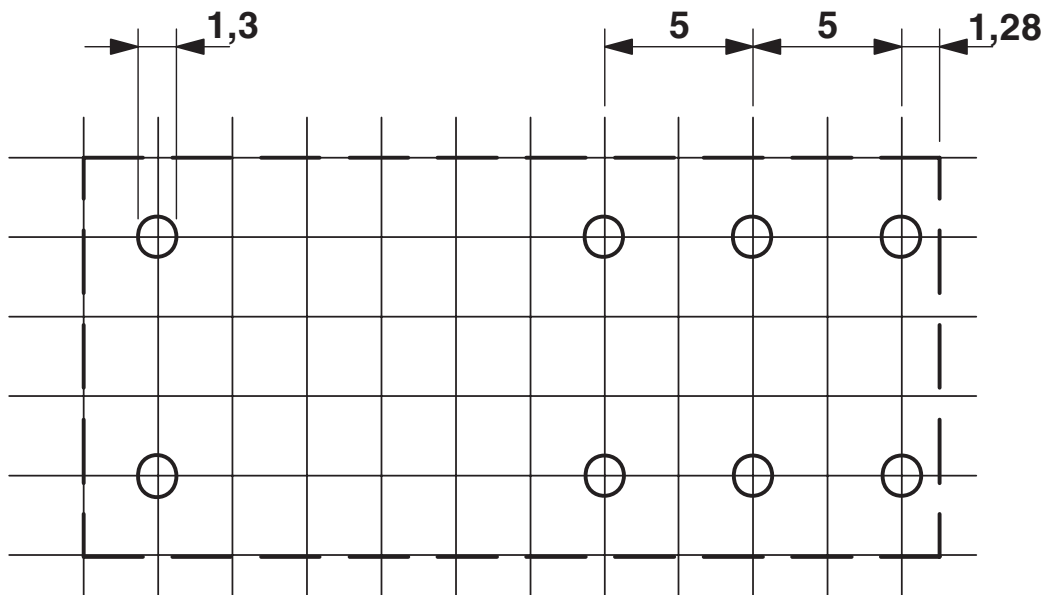
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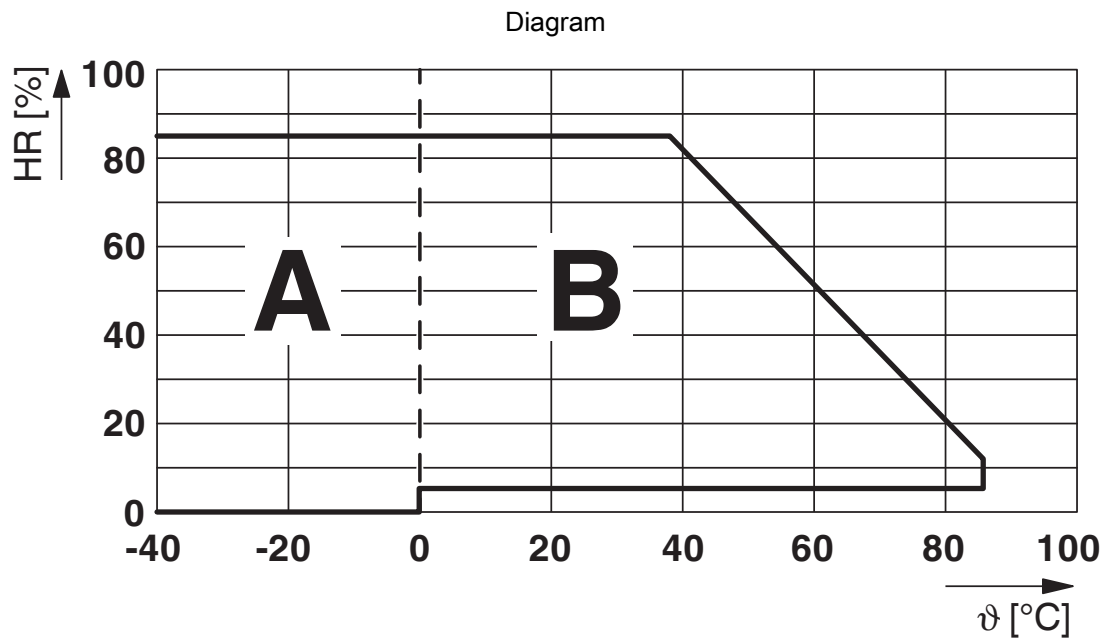
Circuit diagram



Drilling plan/solder pad geometry



a = pitch division 2.5 mm



Permissible humidity for operation and storage.

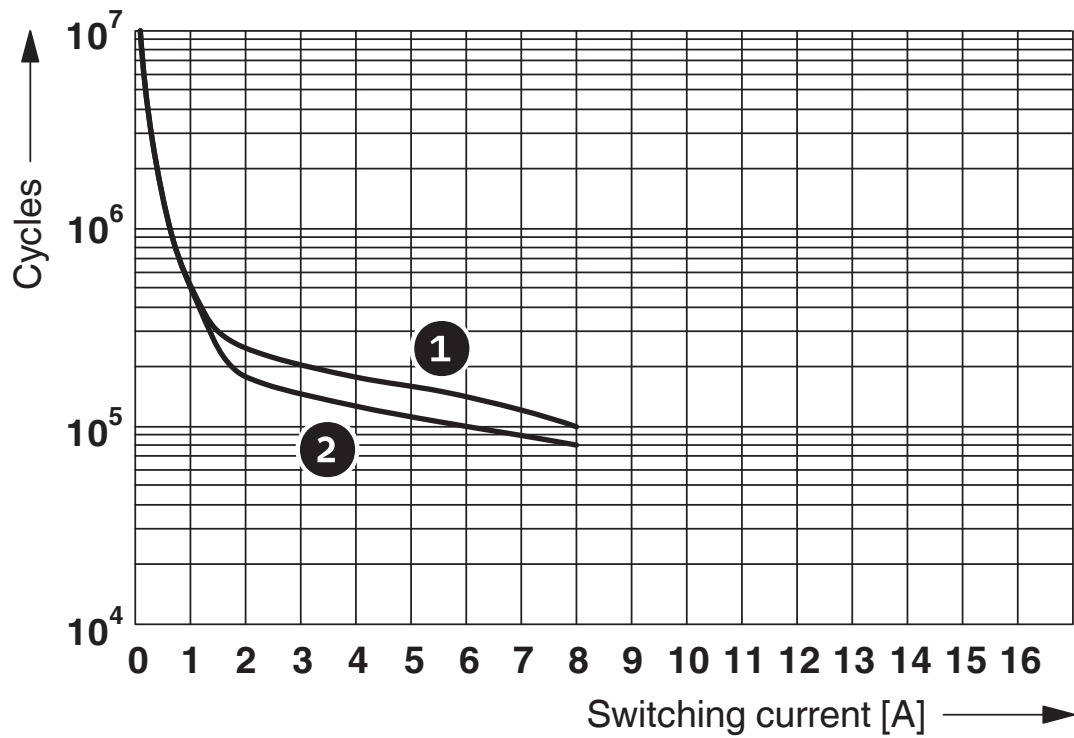
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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 $\leq 25^\circ\text{C}$.

Diagram



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

Electrical service life

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/mx/products/2961202>



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



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

RIF-1-BPT/2X21 - Relay base

2900931

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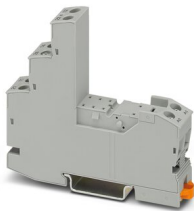


Relay base RIF-1..., for miniature power relay with 1 or 2 changeover contacts or solid-state relays of the same design, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

RIF-1-BSC/2X21 - Relay base

2900930

<https://www.phoenixcontact.com/mx/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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PLC-BPT-120UC/21-21 - Relay base

2900287

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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

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

2967031

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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

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

2961202

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

2900288

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

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

2967044

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

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

2961202

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

2980416

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

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

2980429

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