

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

2961338

<https://www.phoenixcontact.com/gb/products/2961338>



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Plug-in miniature power relay, with power contact for high continuous currents, 1 changeover contact, input voltage 110 V DC

Your advantages

- Switching current of up to 16 A

Commercial data

Item number	2961338
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	CK6195
Product key	CK6195
Catalog page	Page 290 (C-5-2019)
GTIN	4017918187590
Weight per piece (including packing)	16.25 g
Weight per piece (excluding packing)	16.2 g
Customs tariff number	85364900
Country of origin	AT

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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

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)

Input data

Coil side

Nominal input voltage U _N	110 V DC
Input voltage range	71.5 V DC ... 264 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	1 changeover contact
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Limiting continuous current	16 A
Maximum inrush current	50 A (20 ms)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	4000 VA (for 250 V AC)

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Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 V, AC15)
Motor load according to UL 508	1/2 HP, 120 V AC (N/O contact)
	1 HP, 240 V AC (N/O contact)
	1/3 HP, 120 V AC (N/C contact)
	3/4 HP, 240 V AC (N/C contact)
	1/4 HP, 200 ... 250 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

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

Standards/regulations	IEC 60664
	EN 50178
	EN 61810-1

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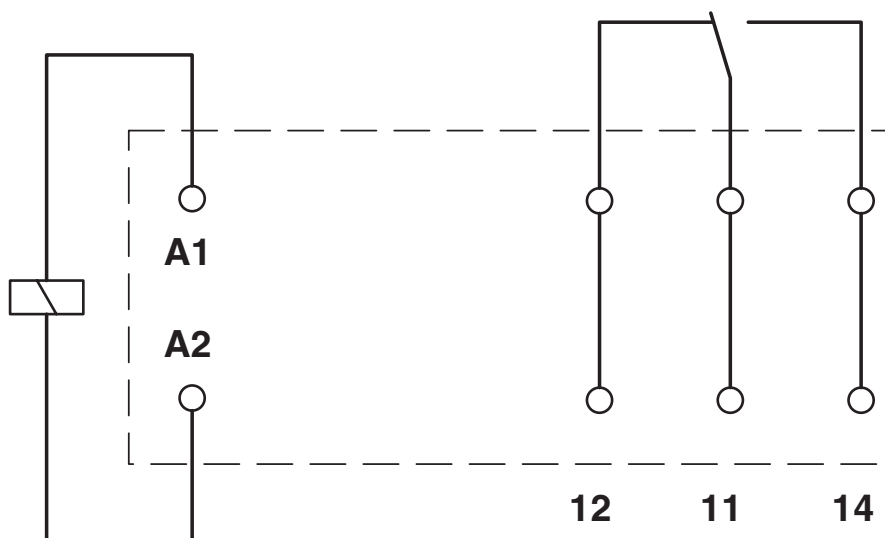
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Mounting

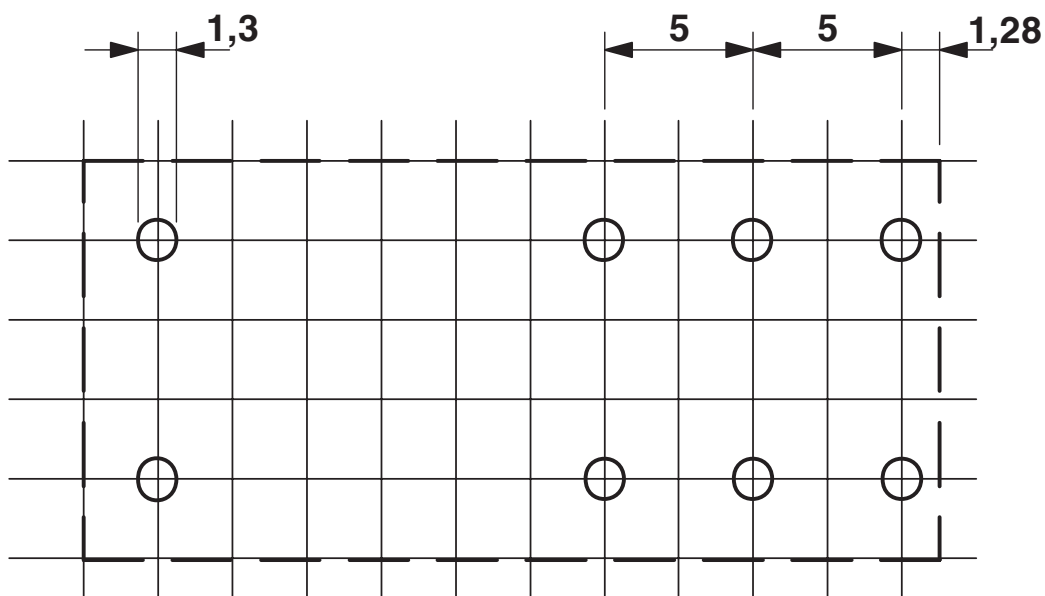
Assembly instructions	Can be aligned without spacing (> 70 °C ≥ 2.5 mm)
Mounting position	any

Drawings

Circuit diagram

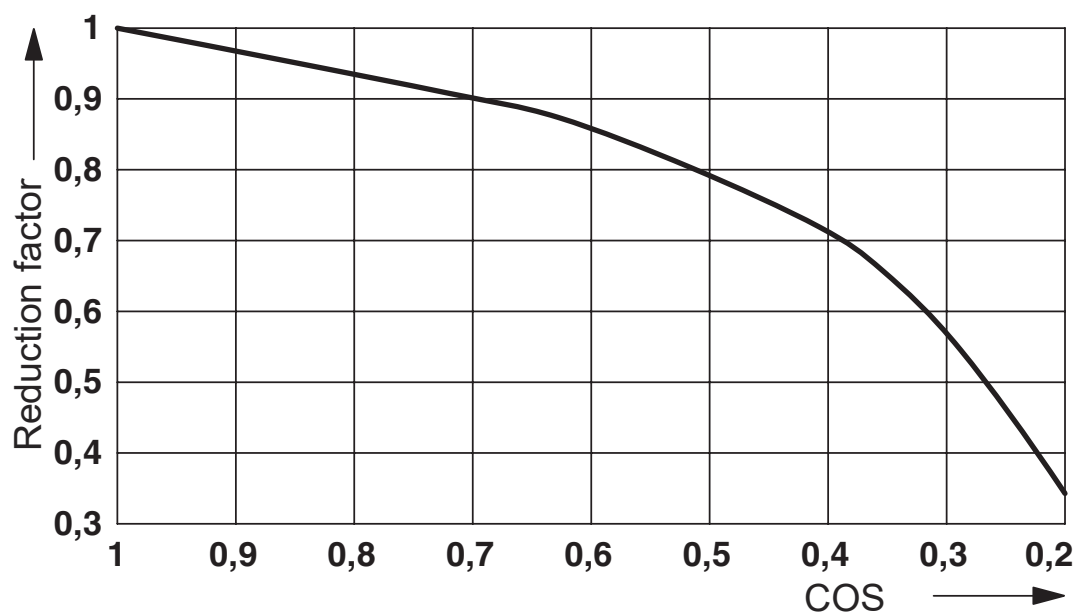


Drilling plan/solder pad geometry



a = pitch division 2.5 mm

Diagram



Service life reduction factor with various cos phi



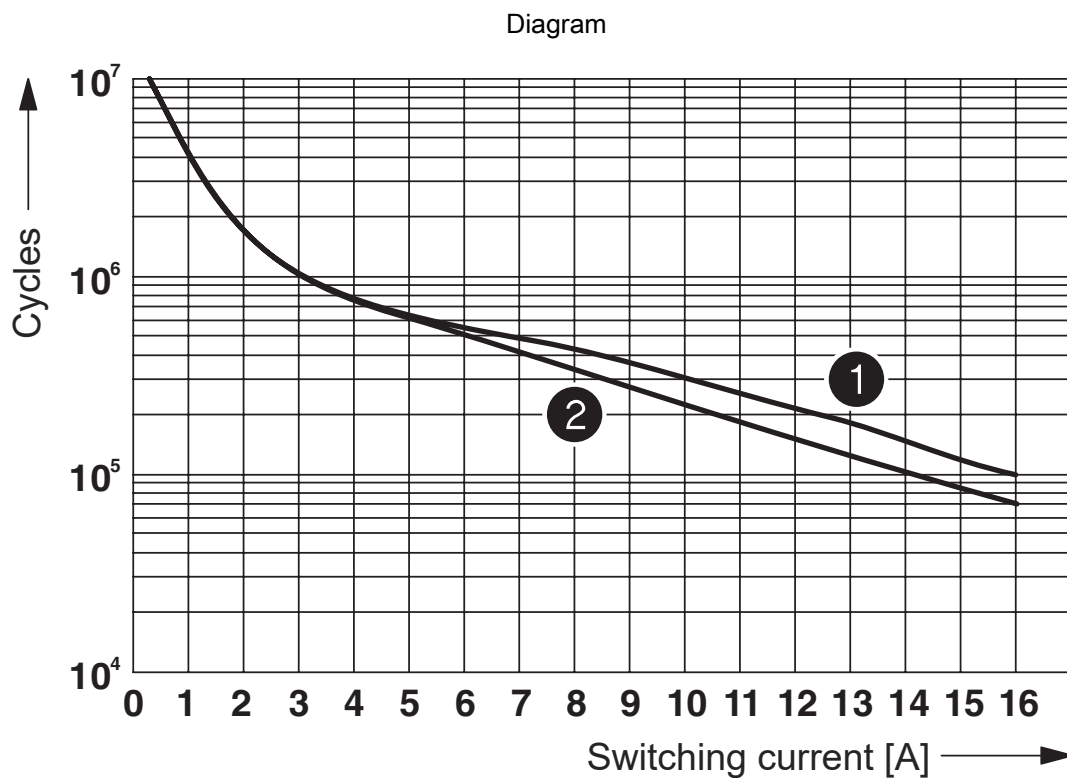
Permissible humidity for operation and storage.

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

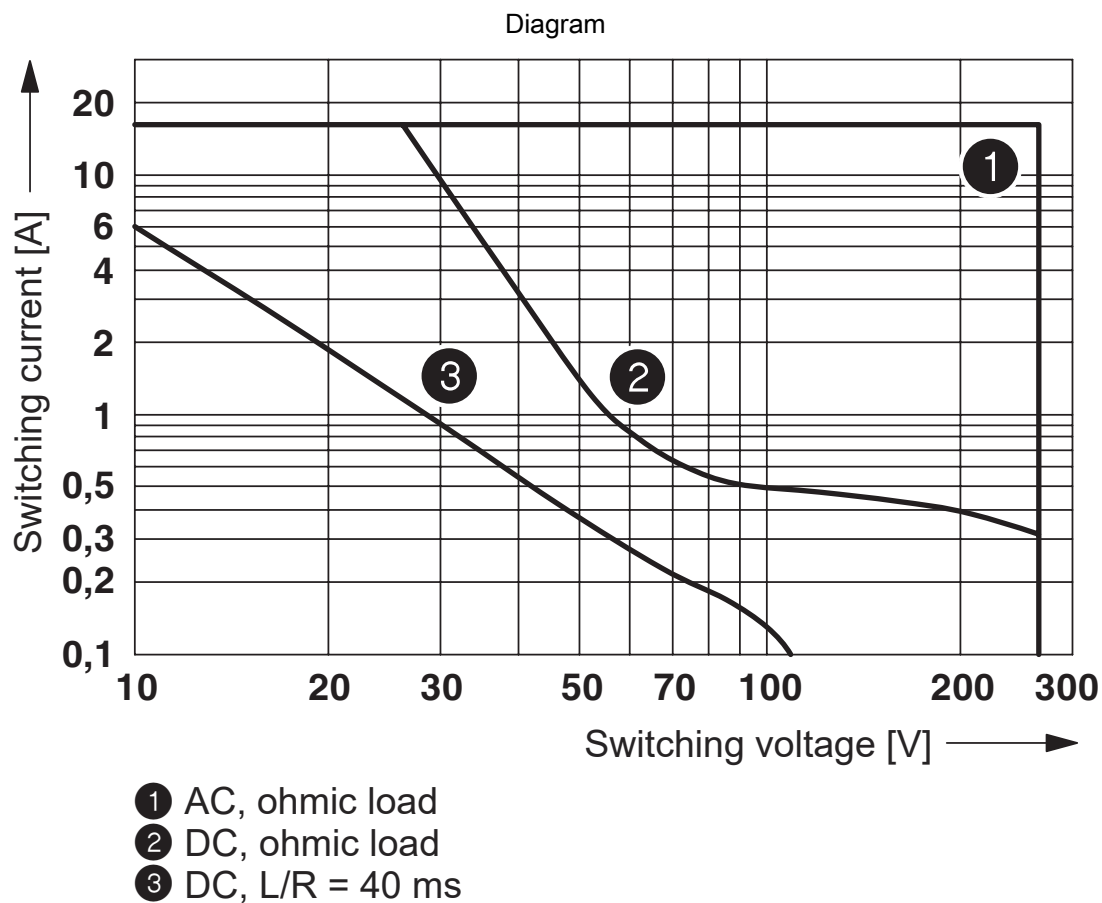
Area B: Condensation at ambient temperatures $> 0^{\circ}\text{C}$ must be prevented

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



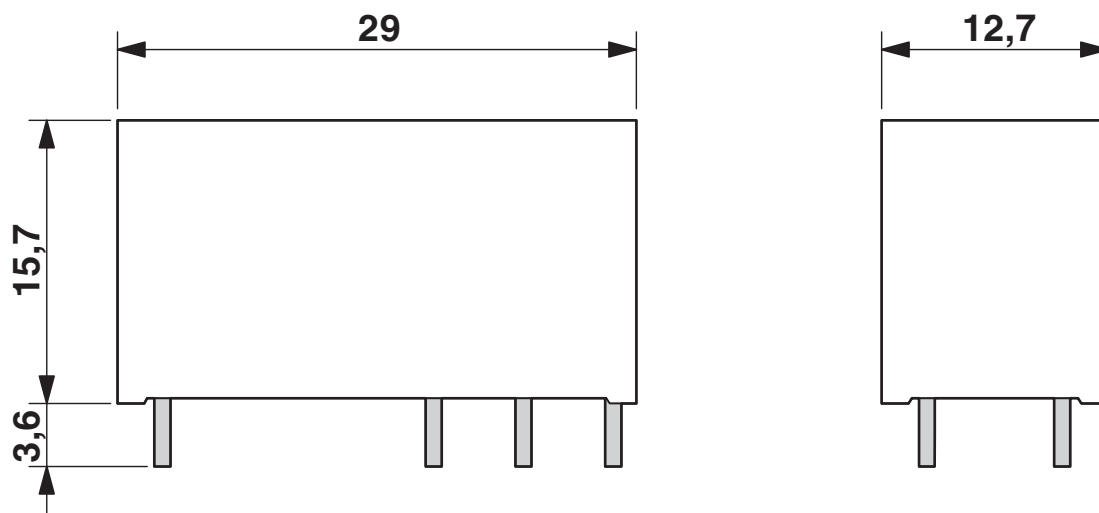
- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

Electrical service life

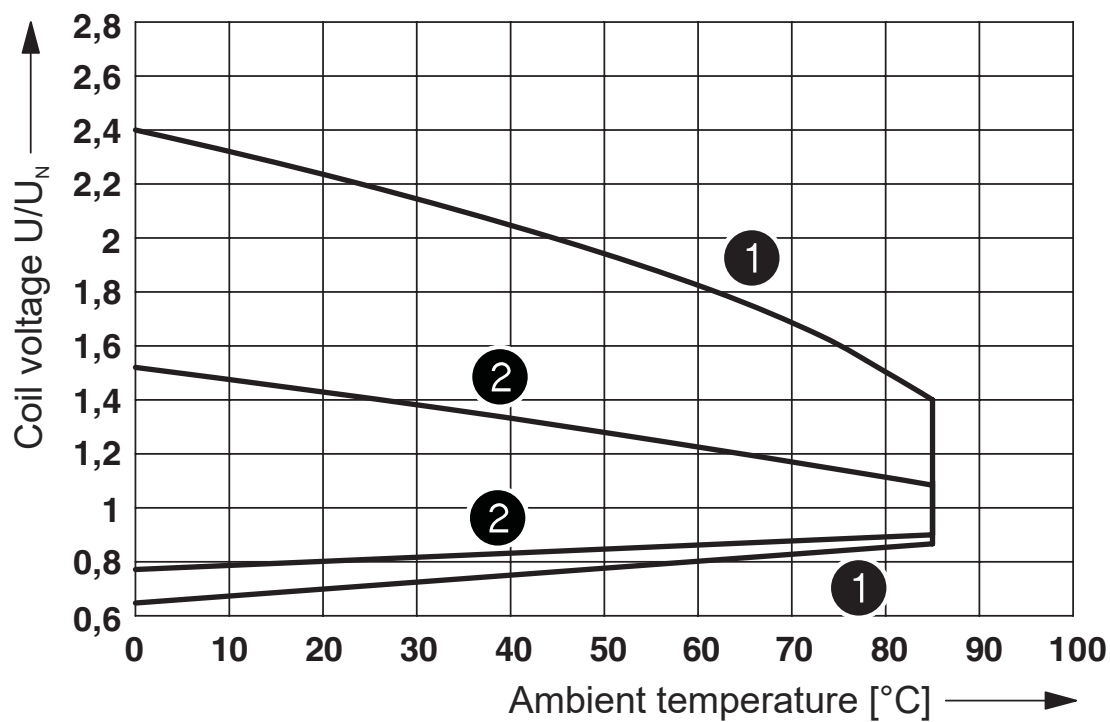


Interrupting rating

Dimensional drawing



Diagram



- ① DC coils
- ② AC coils

Operating voltage range

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/gb/products/2961338>



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 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-120UC/21HC - Relay base

2900258

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14 mm PLC basic terminal block for high continuous currents with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

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

2967811

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14 mm PLC basic terminal block for high continuous currents with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 120 V AC/DC

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

2900259

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14 mm PLC basic terminal block for high continuous currents with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 230 V AC/DC

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

2967824

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14 mm PLC basic terminal block for high continuous currents with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 230 V AC/DC

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

2980432

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14 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, for high continuous currents, 1 changeover contact, input voltage 120 V AC

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

2980445

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14 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, for high continuous currents, 1 changeover contact, input voltage 230 V AC

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RIF-1-BPT/2X21 - Relay base

2900931

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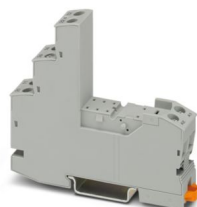


Relay base RIF-1..., for miniature power relay with 1 or 2 changeover contacts or solid-state relays of the same design, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

RIF-1-BSC/2X21 - Relay base

2900930

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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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