

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



2961215

<https://www.phoenixcontact.com/de/produkte/2961215>

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Plug-in miniature power relay, with multi-layer gold contact, 2 changeover contacts, input voltage 24 V DC

Your advantages

- RT III-proof (wash-proof)

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



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Commercial Data

Item number	2961215
Packing unit	10 pc
Minimum order quantity	10 pc
Sales Key	G1 - Relais
Product Key	CK6195
Catalog Page	Page 290 (C-5-2019)
GTIN	4017918157999
Weight per Piece (including packing)	16,08 g
Weight per Piece (excluding packing)	14,95 g
Customs tariff number	85364900
Country of origin	AT

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Technical Data

Product properties

Product type	Single relay
Set comprises	2967125 PLC-RSC- 24DC/21-21AU
	2967112 PLC-RSC- 24UC/21-21AU
	2967280 PLC-RSC- 48DC/21-21AU
	2912578 PLC-RSP- 24DC/21-21AU
	2912581 PLC-RSP- 24UC/21-21AU
	2912594 PLC-RSP- 48DC/21-21AU
	2900338 PLC-RPT- 24DC/21-21AU
	2900339 PLC-RPT- 24UC/21-21AU
	2900340 PLC-RPT- 48DC/21-21AU
	2834520 PR1-RSC3-LDP-24DC/2X21AU
	2834601 PR1-RSP3-LDP-24DC/2X21AU
	2903330 RIF-1-RPT-LDP-24DC/2X21AU
	2903346 RIF-1-RSC-LDP-24DC/2X21AU
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Insulation characteristics

Overvoltage category	III
Pollution degree	3
Insulation	Basic insulation

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.41 W
Test voltage	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	24 V DC
Input voltage range	15.6 V DC ... 59.52 V DC
Typical input current at U _N	17 mA
Typical response time	7 ms
Typical release time	3 ms
Coil resistance	1440 Ω ±10 % (at 20 °C)

Output data

Switching

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

Switching: when the gold layer is destroyed

Note	the following values are applicable if a gold layer is destroyed
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	15 A (300 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 110 V, DC13) 0.2 A (at 250 V, DC13) 2 A (at 24 V, AC15) 2 A (at 120 V, AC15) 2 A (at 250 V, AC15)

Connection data

Connection method	Solder connection
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Dimensions

Dimensional drawing	
Width	12.7 mm
Height	29 mm

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Depth	15.7 mm
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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

Approval data

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 ($> 70\text{ °C} \geq 2.5\text{ mm}$)
Mounting position	any

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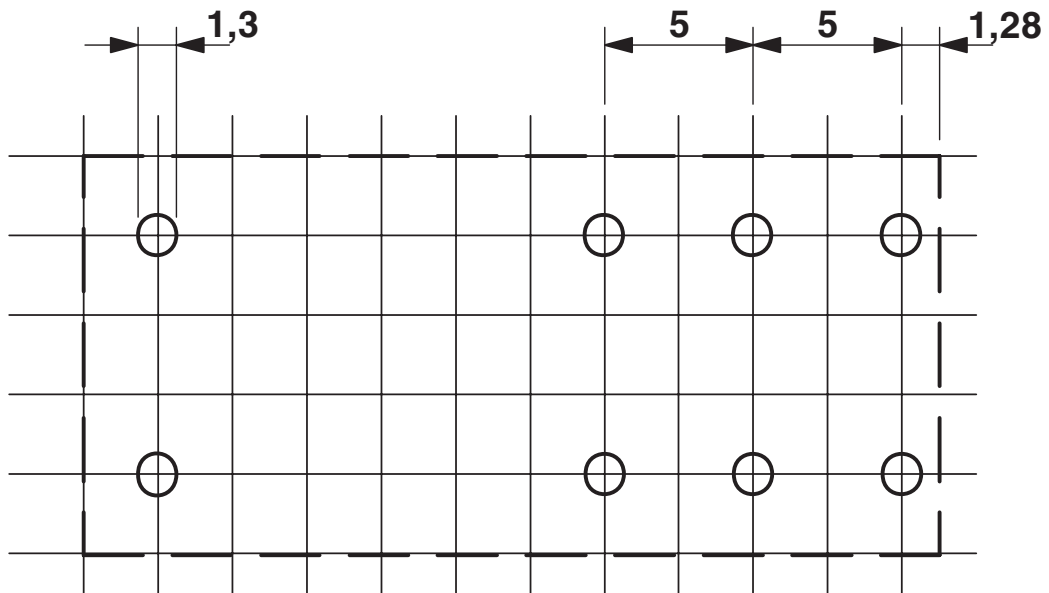


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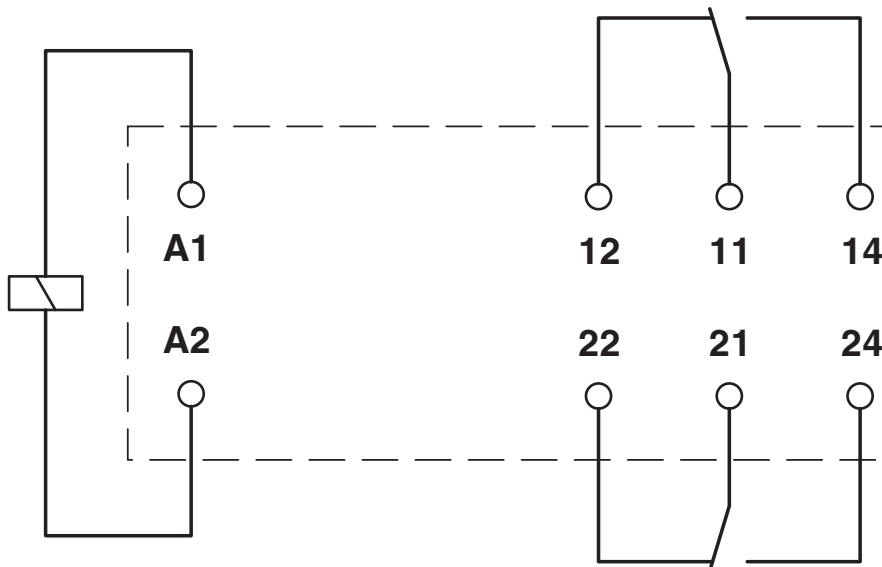
Drawings

Drilling plan/solder pad geometry



a = pitch division 2.5 mm

Circuit diagram

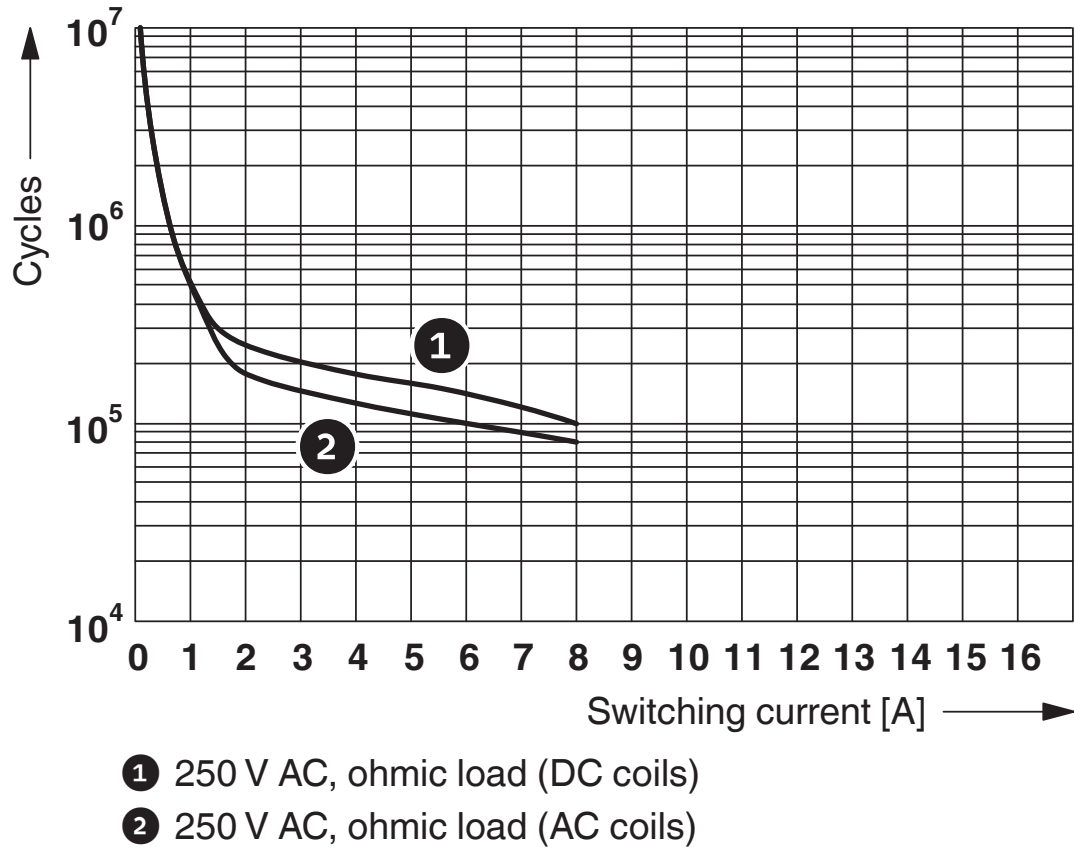


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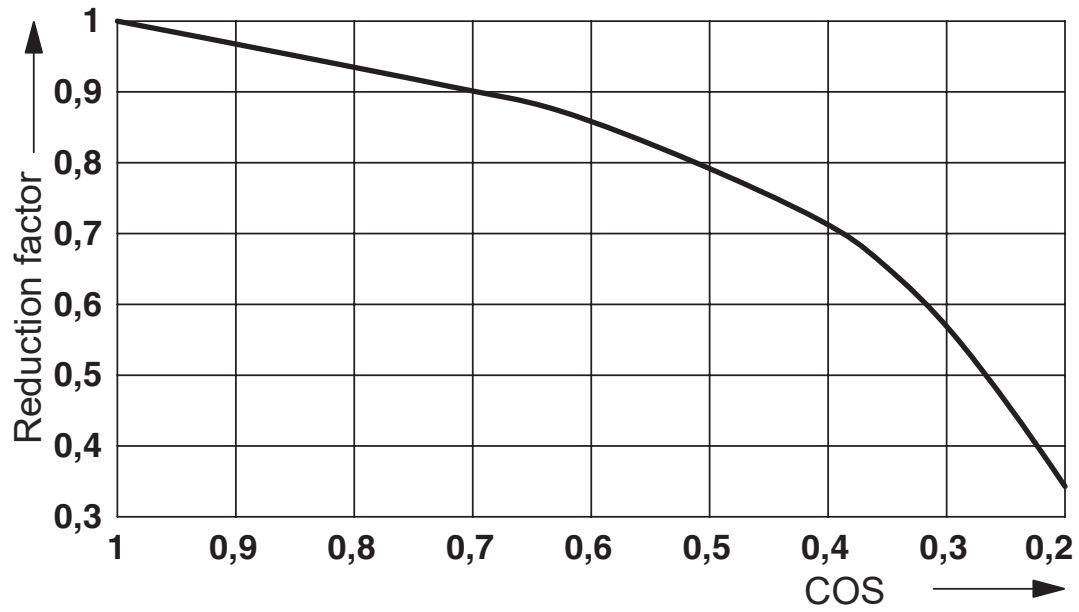
<https://www.phoenixcontact.com/de/produkte/2961215>

Diagram



Electrical service life

Diagram



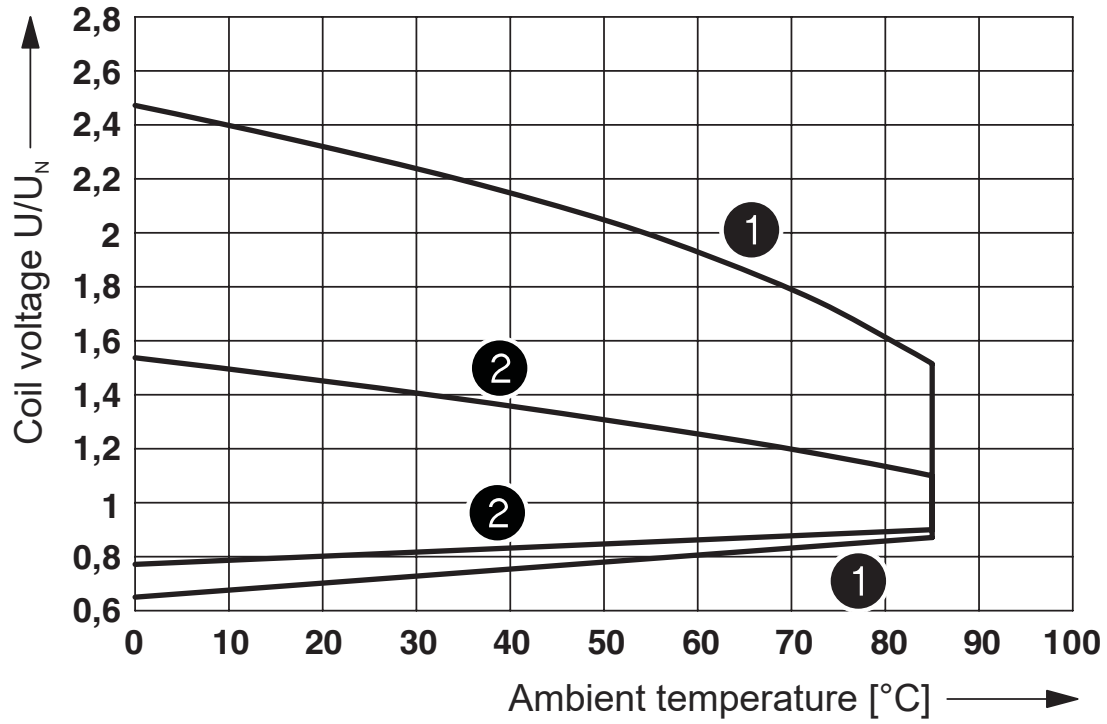
Service life reduction factor with various cos phi

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Diagram



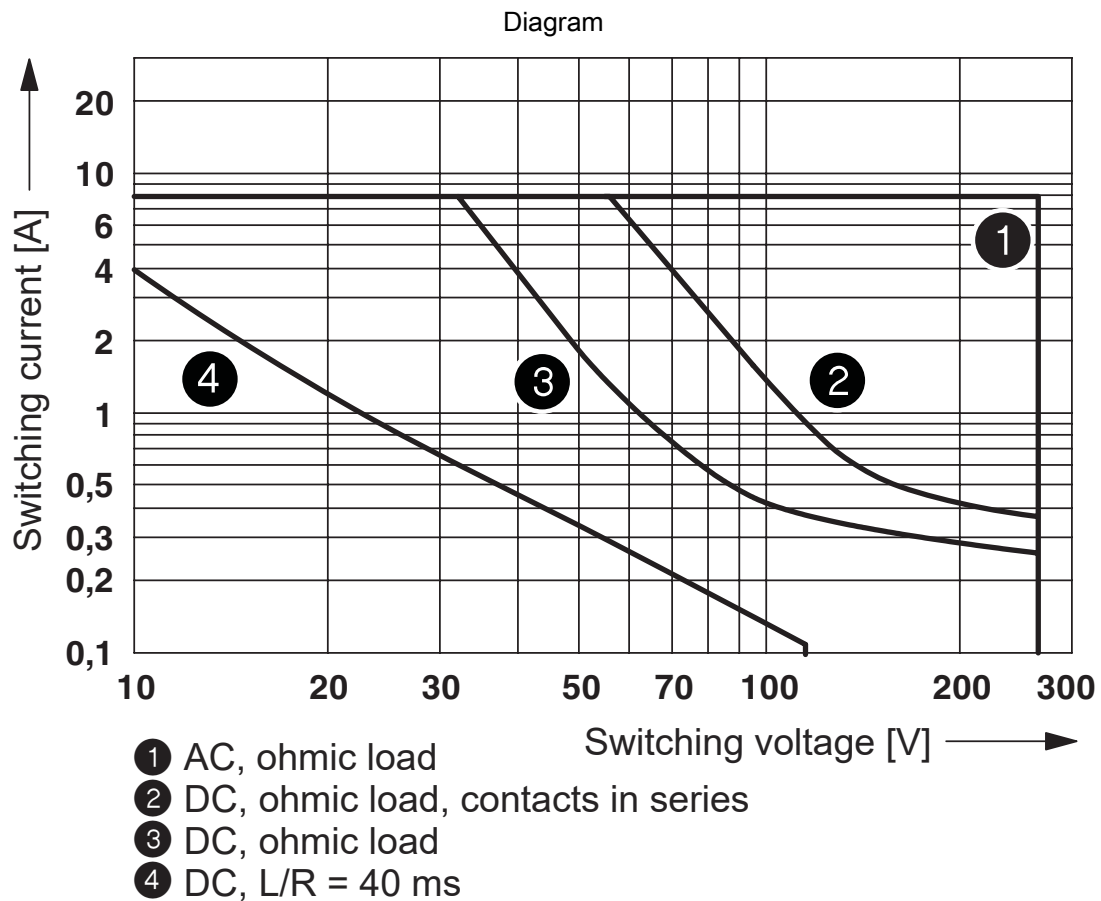
- ① DC coils
- ② AC coils

Operating voltage range

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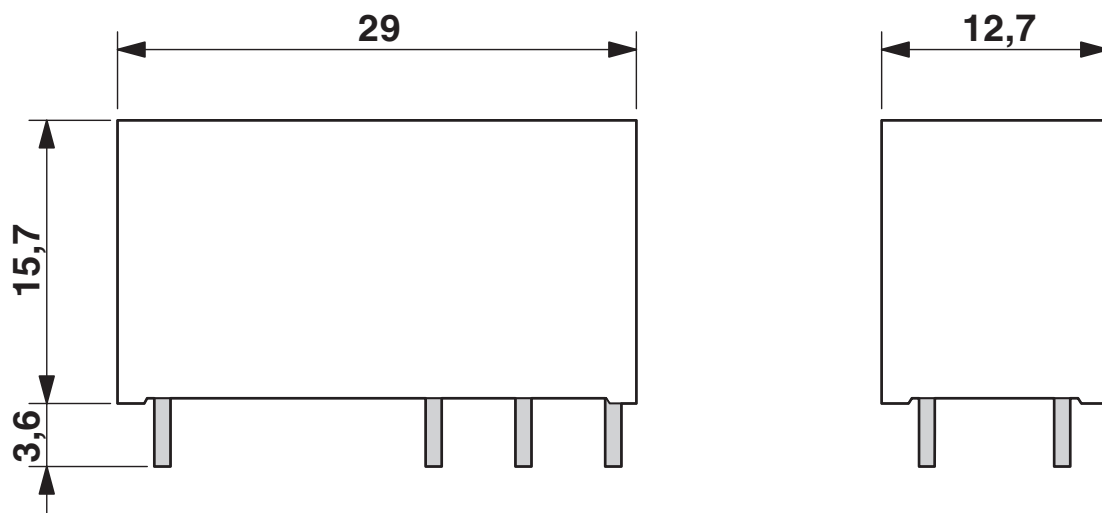
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Interrupting rating

Dimensional drawing



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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

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Reports with production monitoring			-	-



VDE Zeichengenehmigung
Approval ID: 40048281

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
Reports with production monitoring			-	-



PRS
Approval ID: TE/2109/880590/16



cUL Recognized
Approval ID: FILE E 228652



cUL Recognized
Approval ID: FILE E 172140

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UL Recognized

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Classifications

ECLASS

ECLASS-9.0	27371601
ECLASS-10.0.1	27371601
ECLASS-11.0	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

Relay base

Relay base - PLC-BPT- 24DC/21-21 - 2900283

<https://www.phoenixcontact.com/de/produkte/2900283>



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 24 V DC

Relay base

Relay base - PLC-BSC- 24DC/21-21 - 2967015

<https://www.phoenixcontact.com/de/produkte/2967015>



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 24 V DC

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Relay base

Relay base - PLC-BPT- 24UC/21-21 - 2900284

<https://www.phoenixcontact.com/de/produkte/2900284>



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 24 V AC/DC

Relay base

Relay base - PLC-BSC- 24UC/21-21 - 2967028

<https://www.phoenixcontact.com/de/produkte/2967028>



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 24 V AC/DC

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Relay base

Relay base - PLC-BPT- 48DC/21-21 - 2900285

<https://www.phoenixcontact.com/de/produkte/2900285>



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 48 V DC

Relay base

Relay base - PLC-BSC- 48DC/21-21 - 2967264

<https://www.phoenixcontact.com/de/produkte/2967264>



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 48 V DC

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Relay base

Relay base - PLC-BSC- 24DC/ 1- 1/ACT - 2967057

<https://www.phoenixcontact.com/de/produkte/2967057>



14 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), 2 N/O contacts (1-1), input voltage 24 V DC

Relay base

Relay base - RIF-1-BPT/2X21 - 2900931

<https://www.phoenixcontact.com/de/produkte/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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Relay base

Relay base - RIF-1-BSC/2X21 - 2900930

<https://www.phoenixcontact.com/de/produkte/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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