

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

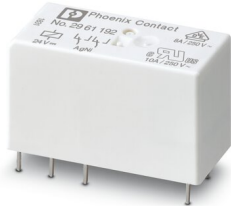


2961192

<https://www.phoenixcontact.com/de/produkte/2961192>

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



Your advantages

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

Commercial Data

| | |
|--------------------------------------|---------------------|
| Item number | 2961192 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Sales Key | G1 - Relais |
| Product Key | CK6195 |
| Catalog Page | Page 290 (C-5-2019) |
| GTIN | 4017918158019 |
| Weight per Piece (including packing) | 15,98 g |
| Weight per Piece (excluding packing) | 15,94 g |
| Customs tariff number | 85364900 |
| Country of origin | AT |

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Technical Data

Product properties

| | |
|---------------------------------|---------------------------------|
| Product type | Single relay |
| Set comprises | 2967060 PLC-RSC- 24DC/21-21 |
| | 2967073 PLC-RSC- 24UC/21-21 |
| | 2967248 PLC-RSC- 48DC/21-21 |
| | 2912507 PLC-RSP- 24DC/21-21 |
| | 2912510 PLC-RSP- 24UC/21-21 |
| | 2912523 PLC-RSP- 48DC/21-21 |
| | 2900330 PLC-RPT- 24DC/21-21 |
| | 2900332 PLC-RPT- 24UC/21-21 |
| | 2900333 PLC-RPT- 48DC/21-21 |
| | 2967109 PLC-RSC- 24DC/ 1- 1/ACT |
| | 2834481 PR1-RSC3-LDP-24DC/2X21 |
| | 2834562 PR1-RSP3-LDP-24DC/2X21 |
| | 2903334 RIF-1-RPT-LDP-24DC/2X21 |
| 2903350 RIF-1-RSC-LDP-24DC/2X21 | |
| 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 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 | 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

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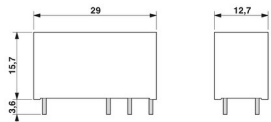
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| | |
|---------------------------------------|--|
| Contact type | 2 changeover contacts |
| Type of switch contact | Single contact |
| Drive and function | monostable |
| Contact material | AgNi |
| Maximum switching voltage | 250 V AC/DC |
| Minimum 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) |
| Interrupting rating (ohmic load) max. | 192 W (at 24 V DC) 96 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 |
|-------------------|--------------------------|

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 |

Approval data

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Corrosive gas test

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

Standards and regulations

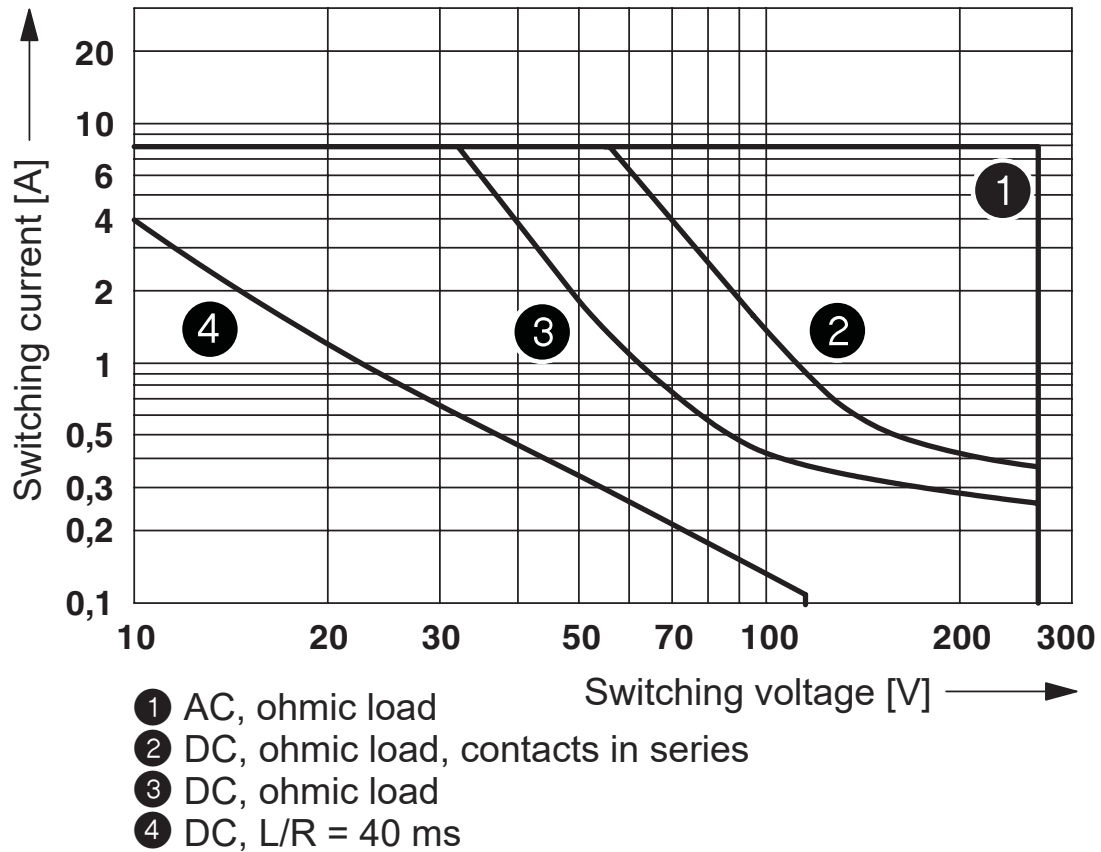
| | |
|-----------------------|------------|
| Standards/regulations | IEC 60664 |
| | EN 50178 |
| | EN 61810-1 |

Mounting

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

Drawings

Diagram



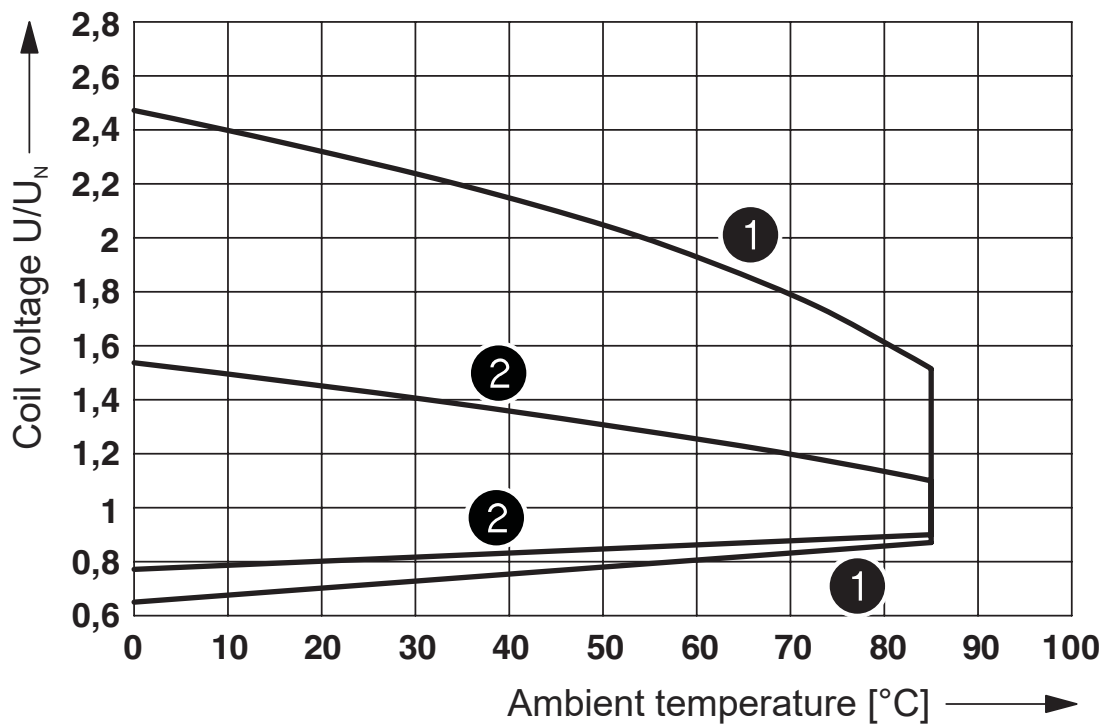
Interrupting rating

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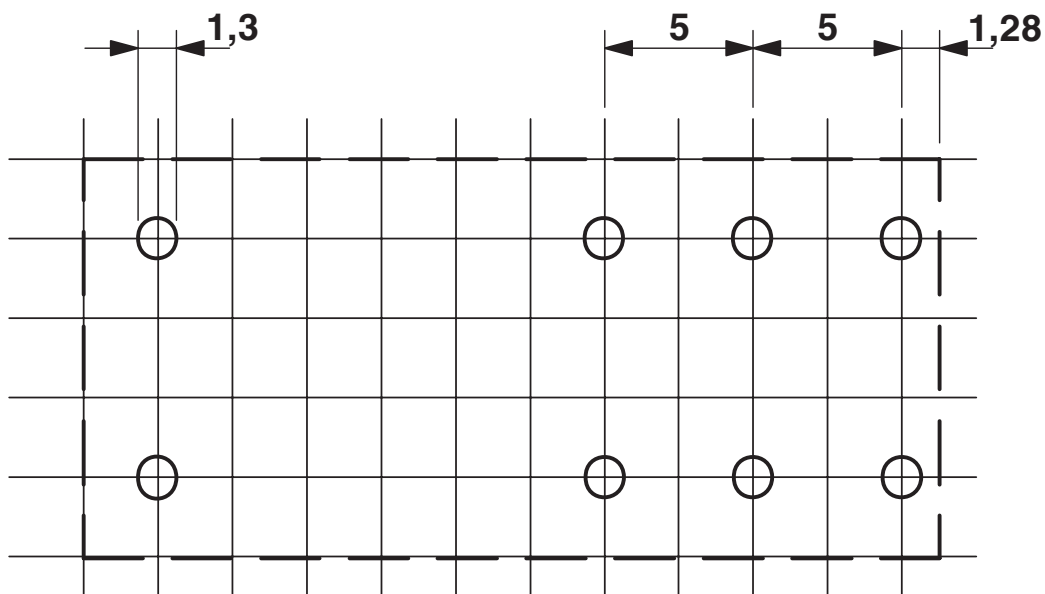
Diagram



- ① DC coils
- ② AC coils

Operating voltage range

Drilling plan/solder pad geometry



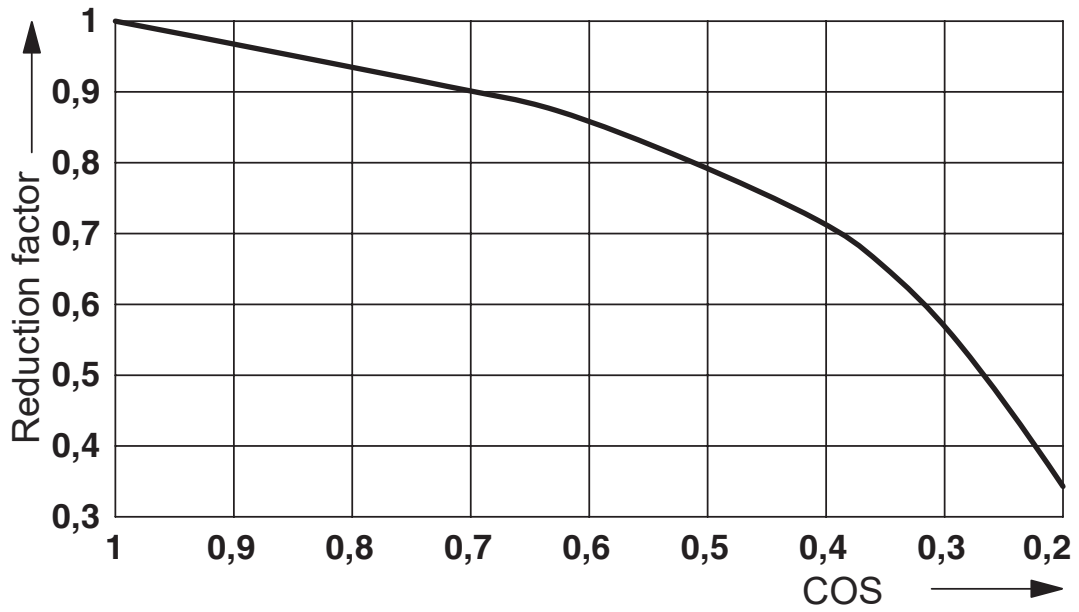
Basic pitch 2.5 mm

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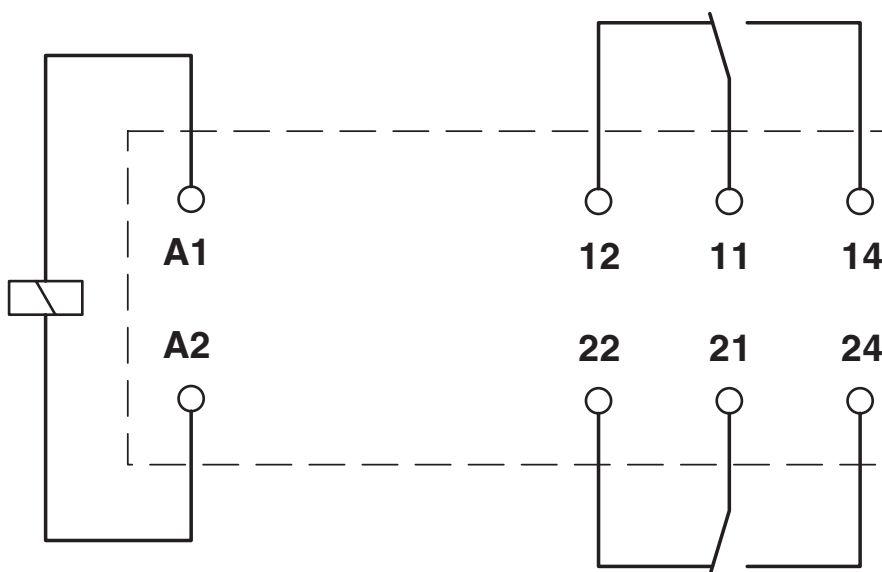
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Diagram



Service life reduction factor with various cos phi

Circuit diagram

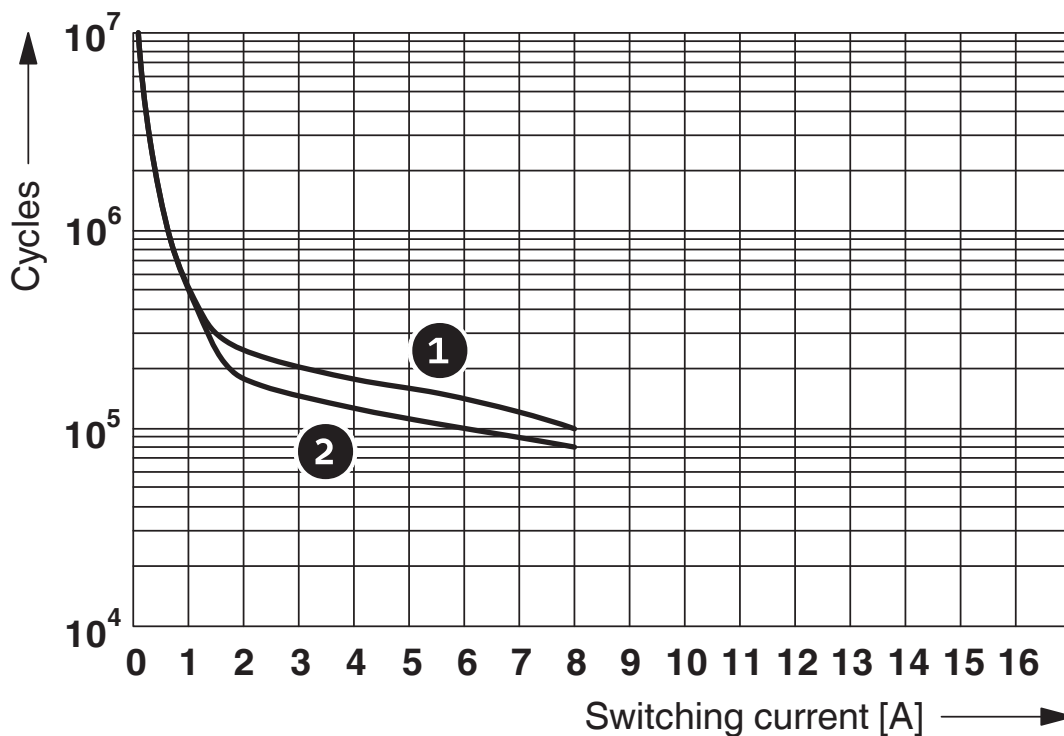


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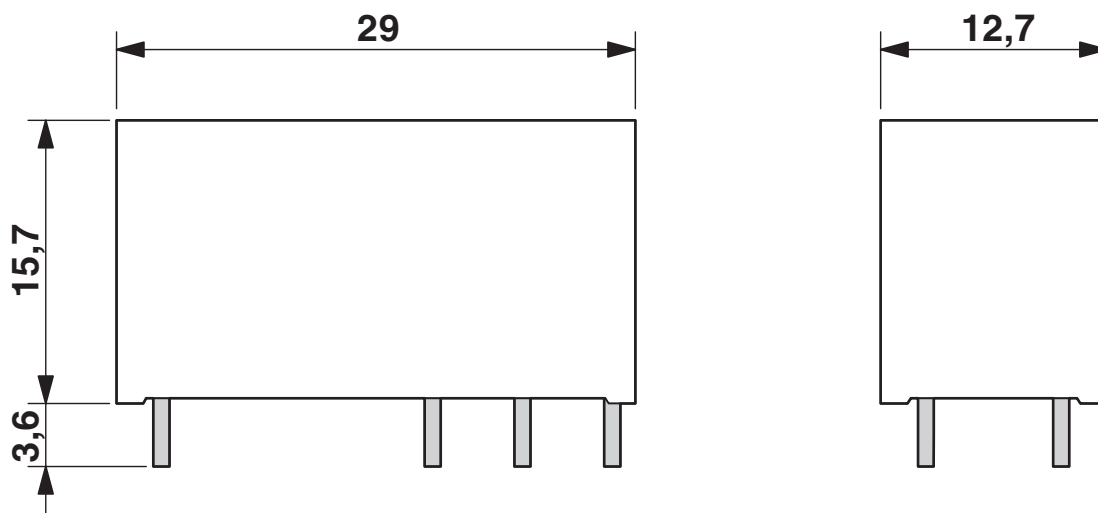
Diagram



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

Electrical service life

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

Approval ID: FILE E 172140

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Classifications

ECLASS

| | |
|---------------|----------|
| ECLASS-9.0 | 27371601 |
| ECLASS-10.0.1 | 27371601 |
| ECLASS-11.0 | 27371601 |

ETIM

| | |
|----------|----------|
| ETIM 8.0 | EC001437 |
|----------|----------|

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

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

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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

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

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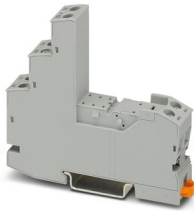
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Relay base

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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