

REL-MR- 60DC/21/MS - Single relay

2909643

<https://www.phoenixcontact.com/us/products/2909643>



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Plug-in miniature power relay, with power contact, 1 changeover contact, manual operation, 60 V DC input voltage



Commercial data

| | |
|--------------------------------------|--------------------------------|
| Item number | 2909643 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Note | Made to order (non-returnable) |
| Sales key | C460 |
| Product key | CK6195 |
| Catalog page | Page 394 (C-5-2019) |
| GTIN | 4055626377681 |
| Weight per piece (including packing) | 6.62 g |
| Weight per piece (excluding packing) | 4.7 g |
| Customs tariff number | 85364190 |
| Country of origin | CZ |

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Technical data

Product properties

| | |
|-------------------------|------------------------|
| Product type | Single relay |
| Operating mode | 100% operating factor |
| Mechanical service life | 1×10^7 cycles |

Insulation characteristics

| | |
|----------------------|-----|
| Overvoltage category | III |
| Pollution degree | 3 |

Electrical properties

| | |
|---|--|
| Maximum power dissipation for nominal condition | 0.18 W |
| Test voltage (Winding/contact) | 4 kV AC (50 Hz, 1 min., winding/contact) |

Input data

Coil side

| | |
|--------------------------------|------------------------------------|
| Nominal input voltage U_N | 60 V DC |
| Input voltage range | 36 V DC ... 165 V DC |
| Drive and function | monostable |
| Drive (polarity) | non-polarized |
| Typical input current at U_N | 3 mA |
| Typical response time | 5 ms |
| Typical release time | 2.5 ms |
| Coil resistance | $20500 \Omega \pm 15\%$ (at 20 °C) |

Output data

Switching

| | |
|---------------------------------------|---|
| Contact switching type | 1 changeover contact |
| Type of switch contact | Single contact |
| Contact material | AgSnO |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 5 V (at 100 mA) |
| Limiting continuous current | 6 A |
| Maximum inrush current | 10 A (4 s) |
| Min. switching current | 10 mA (at 12 V) |
| Interrupting rating (ohmic load) max. | 140 W (at 24 V DC) 20 W (at 48 V DC) 18 W (at 60 V DC) 23 W (at 110 V DC) 40 W (at 220 V DC) 1500 VA (for 250 V AC) 2 A (at 24 V, DC13) |

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| | |
|--------------------|------------------------|
| Switching capacity | 0.2 A (at 110 V, DC13) |
| | 0.1 A (at 220 V, DC13) |
| | 3 A (at 24 V, AC15) |
| | 3 A (at 120 V, AC15) |
| | 3 A (at 230 V, AC15) |

Connection data

| | |
|-------------------|--------------------------|
| Connection method | Plug / solder connection |
|-------------------|--------------------------|

Dimensions

| | |
|--------|-------|
| Width | 5 mm |
| Height | 28 mm |
| Depth | 16 mm |

Material specifications

| | |
|-------|------------------|
| Color | white (RAL 9010) |
|-------|------------------|

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 |

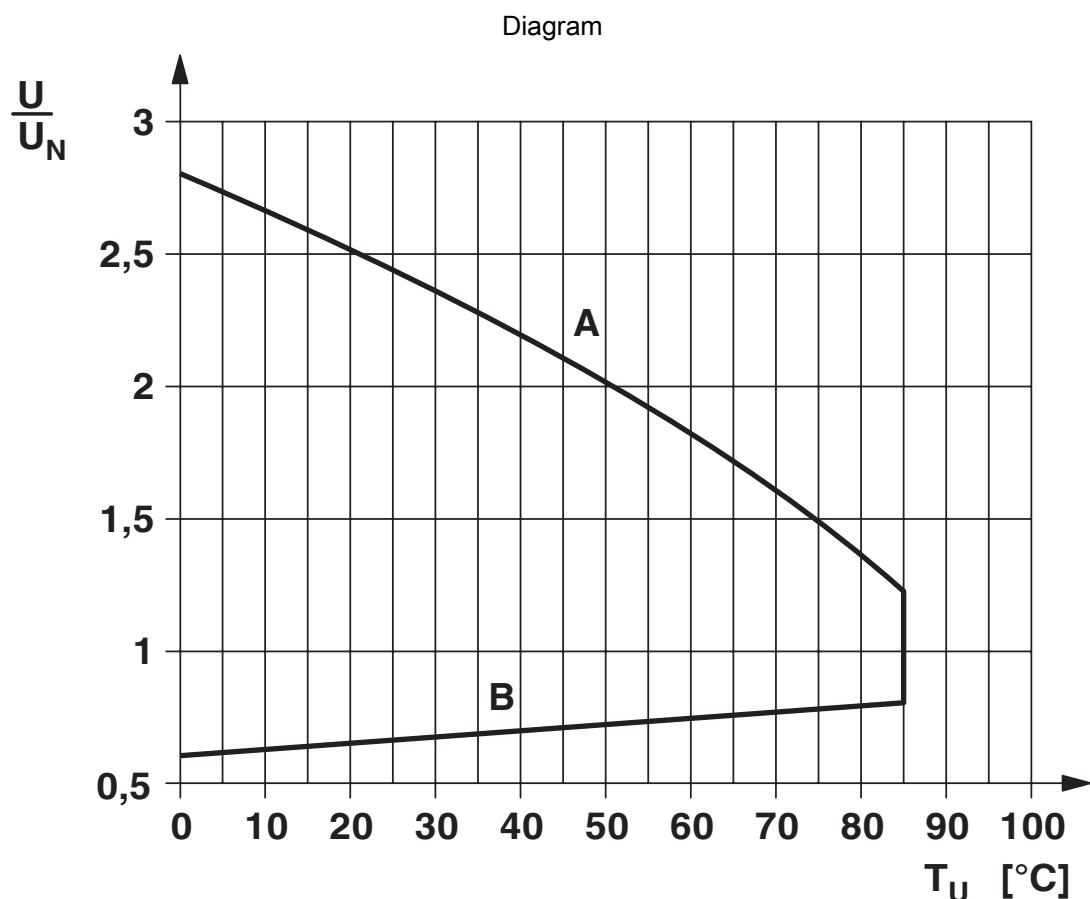
Standards and regulations

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

Mounting

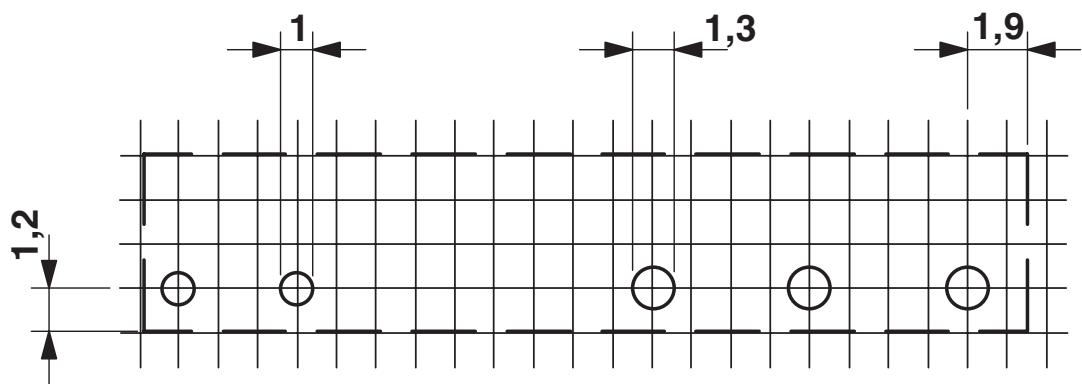
| | |
|-----------------------|---------------------------|
| Assembly instructions | in rows with zero spacing |
| Mounting position | any |

Drawings



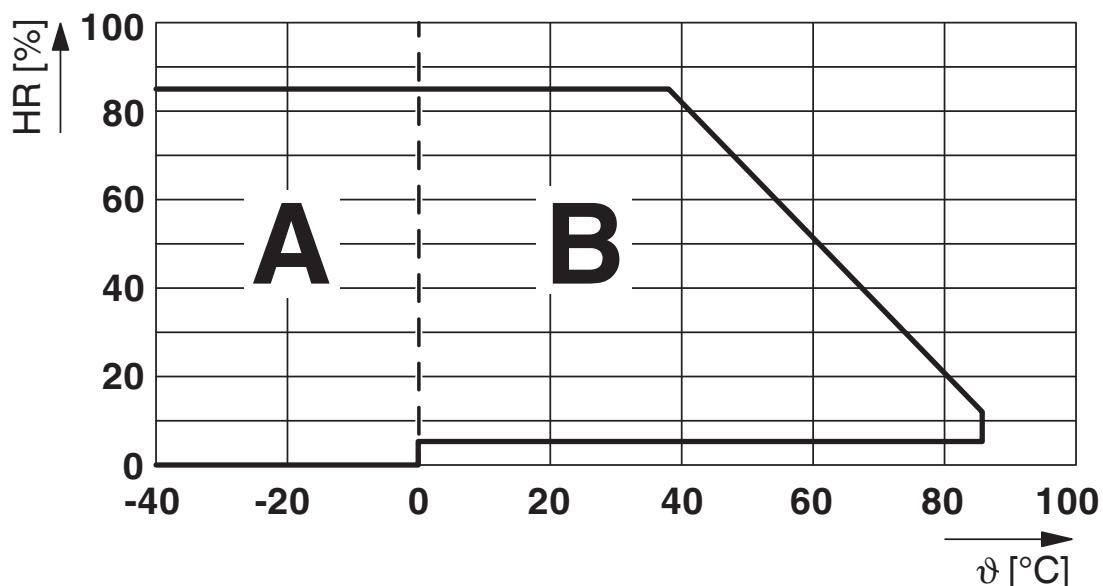
Operating voltage range

Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

Diagram



Permissible humidity for operation and storage.

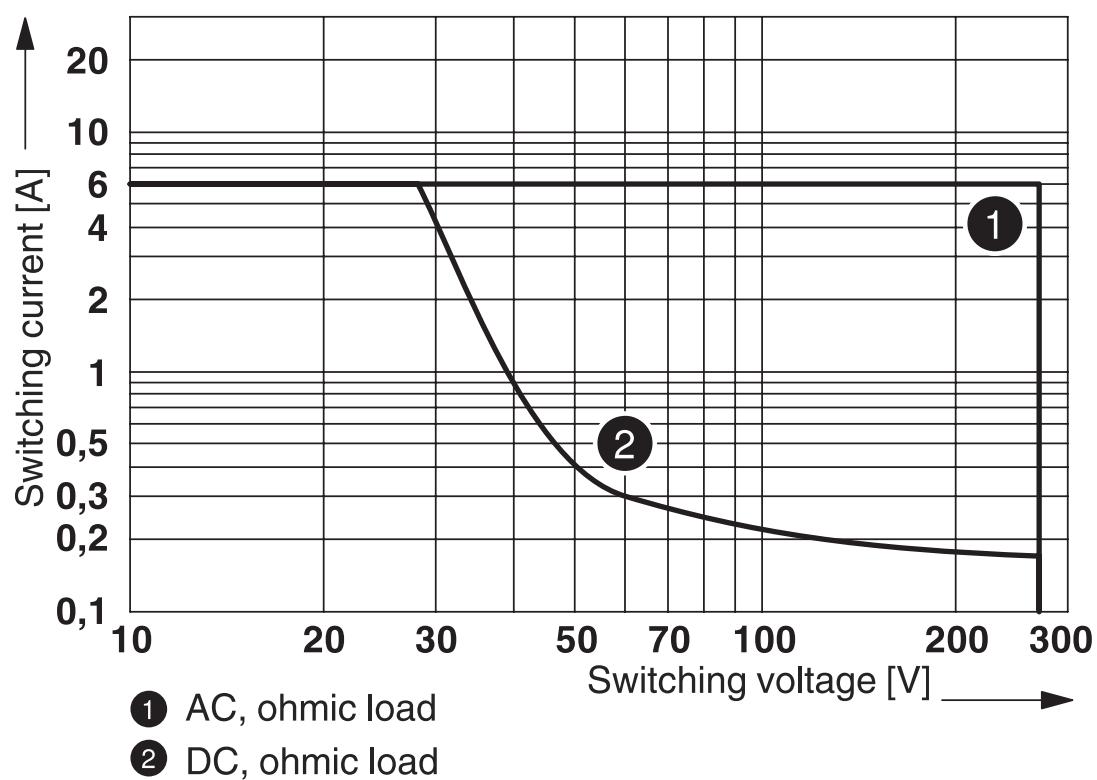
The maximum permissible ambient temperature as specified in the data sheet must be observed.

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



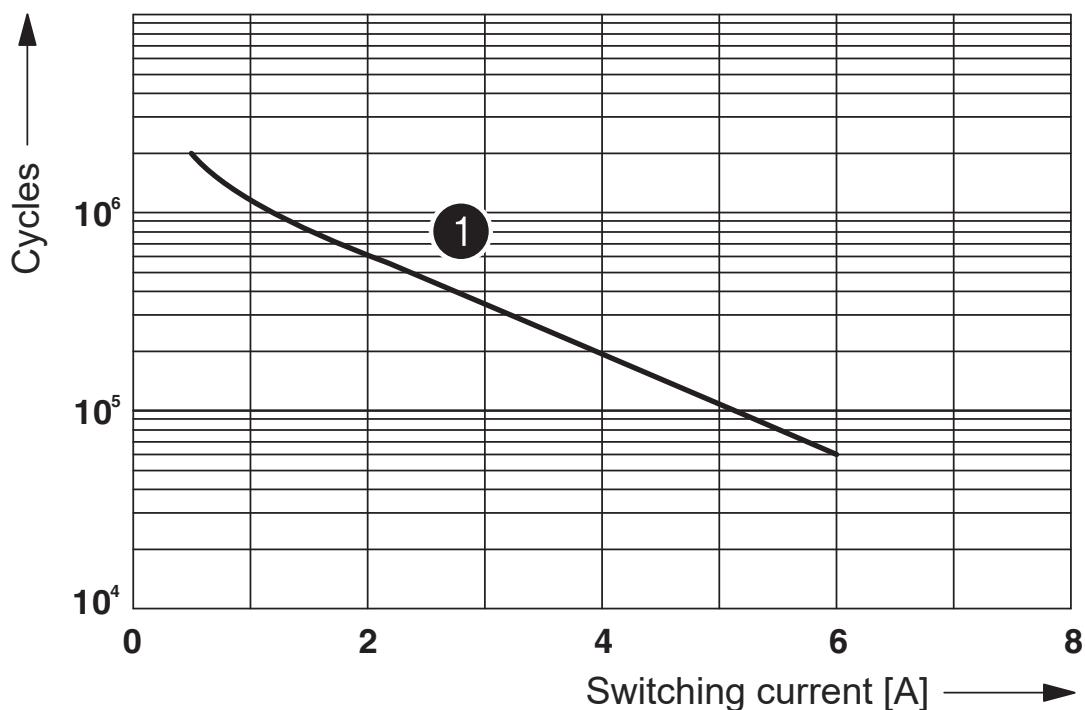
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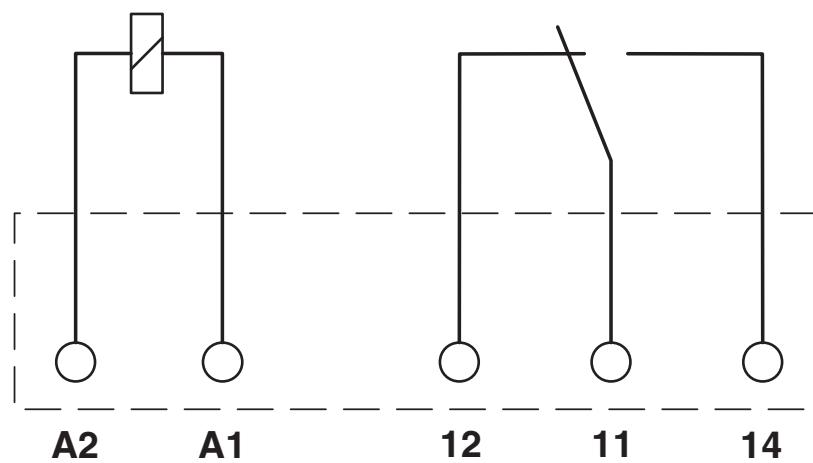
Diagram



① 250 V AC, ohmic load

Electrical service life

Circuit diagram



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Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2909643>



cUL Recognized

Approval ID: FILE E 228652



UL Recognized

Approval ID: FILE E 228652



EAC

Approval ID: TR_TS_D_00573_c



EAC

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



VDE Zeichengenehmigung

Approval ID: 40010212

cULus Recognized

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Classifications

ECLASS

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

ETIM

| | |
|----------|----------|
| ETIM 9.0 | 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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Mandatory accessories

PLC-BPT-120UC/21 - Relay base

2900280

<https://www.phoenixcontact.com/us/products/2900280>



6.2 mm PLC basic terminal block 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/21 - Relay base

2966032

<https://www.phoenixcontact.com/us/products/2966032>



6.2 mm PLC basic terminal block 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

REL-MR- 60DC/21/MS - Single relay



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PLC-BPT-230UC/21 - Relay base

2900281

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6.2 mm PLC basic terminal block 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/21 - Relay base

2966045

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6.2 mm PLC basic terminal block 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-BPT-120UC/ 1/SEN - Relay base

2900451

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6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 120 V AC/DC

PLC-BSC-120UC/ 1/SEN - Relay base

2966074

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6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 120 V AC/DC

REL-MR- 60DC/21/MS - Single relay



2909643

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PLC-BPT-230UC/ 1/SEN - Relay base

2900452

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6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 230 V AC/DC



PLC-BSC-230UC/ 1/SEN - Relay base

2966087

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6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on NS 35/7,5 DIN rail, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage: 230 V AC/DC



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

2900453

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6.2 mm PLC basic terminal block against interference currents/voltages on the control side with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 120 V AC

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

2980319

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6.2 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, with integrated RCZ filter, 1 changeover contact, input voltage 120 V AC

REL-MR- 60DC/21/MS - Single relay



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

2900455

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6.2 mm PLC basic terminal block against interference currents/voltages on the control side with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with integrated RCZ filter, 1 changeover contact, input voltage 230 V AC

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

2980335

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6.2 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, with integrated RCZ filter, 1 changeover contact, input voltage 230 V AC

REL-MR- 60DC/21/MS - Single relay



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PLC-BSC-120UC/ 1/SEN/SO46 - Relay base

2980322

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6.2 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, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 120 V AC



PLC-BPT-230UC/ 1/SEN/SO46 - Relay base

2900457

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6.2 mm PLC basic terminal block with interference current and interference voltage protection on the control side, with push-in connection, without relay or solid-state relay, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 230 V AC



REL-MR- 60DC/21/MS - Single relay

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PLC-BSC-230UC/ 1/SEN/SO46 - Relay base

2980348

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6.2 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, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 230 V AC

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