

REL-MR-BL-100AC/21-21/MS - Single relay



2908183

<https://www.phoenixcontact.com/pc/products/2908183>

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Plug-in miniature relay, with power contact, 2 changeover contacts, test button, mechanical switch position indicator, polarity: bipolar, input voltage: 100 V AC

Commercial data

| | |
|--------------------------------------|---------------------|
| Item number | 2908183 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Product key | CK6195 |
| Catalog page | Page 294 (C-5-2019) |
| GTIN | 4055626279428 |
| Weight per piece (including packing) | 17.5 g |
| Weight per piece (excluding packing) | 17.5 g |
| Customs tariff number | 85364190 |
| Country of origin | CN |

Technical data

Product properties

| | |
|-------------------------|---------------------------|
| Product type | Single relay |
| Operating mode | 100% operating factor |
| Mechanical service life | 5x 10 ⁶ cycles |

Data management status

| | |
|------------------------------|------------|
| Date of last data management | 20.04.2023 |
| Article revision | 02 |

Insulation characteristics

| | |
|----------------------|-----|
| Overvoltage category | III |
| Pollution degree | 2 |

Electrical properties

| | |
|--|--|
| Service life electrical | see diagram |
| Maximum power dissipation for nominal condition | 0.8 W |
| Test voltage (Winding/contact) | 5 kV AC (50 Hz, 1 min., winding/contact) |
| Test voltage (Changeover contact/changeover contact) | 2.5 kV AC (50 Hz, 1 min., changeover contact/changeover contact) |
| Rated insulation voltage | 250 V AC |

Input data

Coil side

| | |
|---|--|
| Nominal input voltage U_N | 100 V AC |
| Input voltage range | 80 V AC ... 135 V AC |
| Input voltage range in reference to U_N | 0.8 ... 1.35 (see diagram) |
| Mains frequency | 50/60 Hz |
| Drive and function | monostable |
| Typical input current at U_N | 8 mA |
| Typical response time | 3 ms ... 12 ms (depending on phase relation) |
| Typical release time range | 2 ms ... 8 ms (depending on phase relation) |
| Status display | LED (yellow) |

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 | 12 V (at 10 mA) |
| Limiting continuous current | 8 A |
| Maximum inrush current | 16 A (20 ms) |

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| | |
|---------------------------------------|--------------------|
| Min. switching current | 10 mA (at 12 V) |
| Interrupting rating (ohmic load) max. | 192 W (at 24 V DC) |
| | 62 W (at 48 V DC) |
| | 42 W (at 60 V DC) |
| | 55 W (at 110 V DC) |
| | 66 W (at 220 V DC) |

Connection data

| | |
|-------------------|-------------------|
| Connection method | Solder connection |
|-------------------|-------------------|

Dimensions

| | |
|--------|---------|
| Width | 13 mm |
| Height | 29 mm |
| Depth | 25.5 mm |

Environmental and real-life conditions

Ambient conditions

| | |
|---|------------------|
| Degree of protection | RT II |
| Ambient temperature (operation) | -40 °C ... 70 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |

Standards and regulations

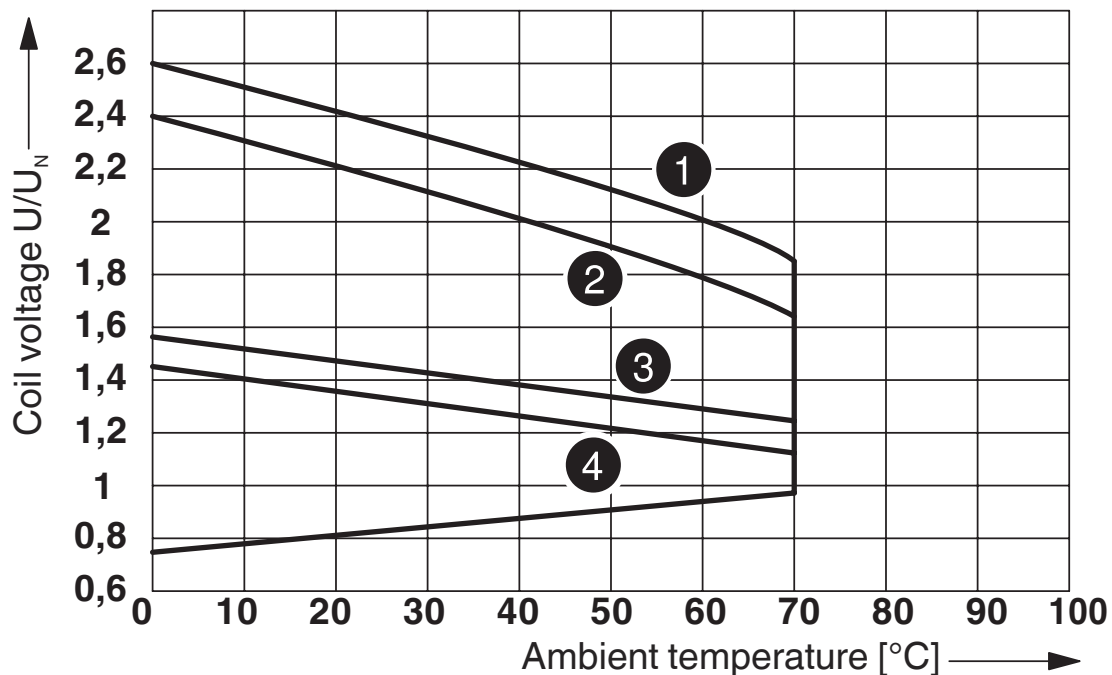
| | |
|-----------------------|-----------|
| Standards/regulations | IEC 61810 |
| | IEC 60664 |

Mounting

| | |
|-------------------|-----|
| Mounting position | any |
|-------------------|-----|

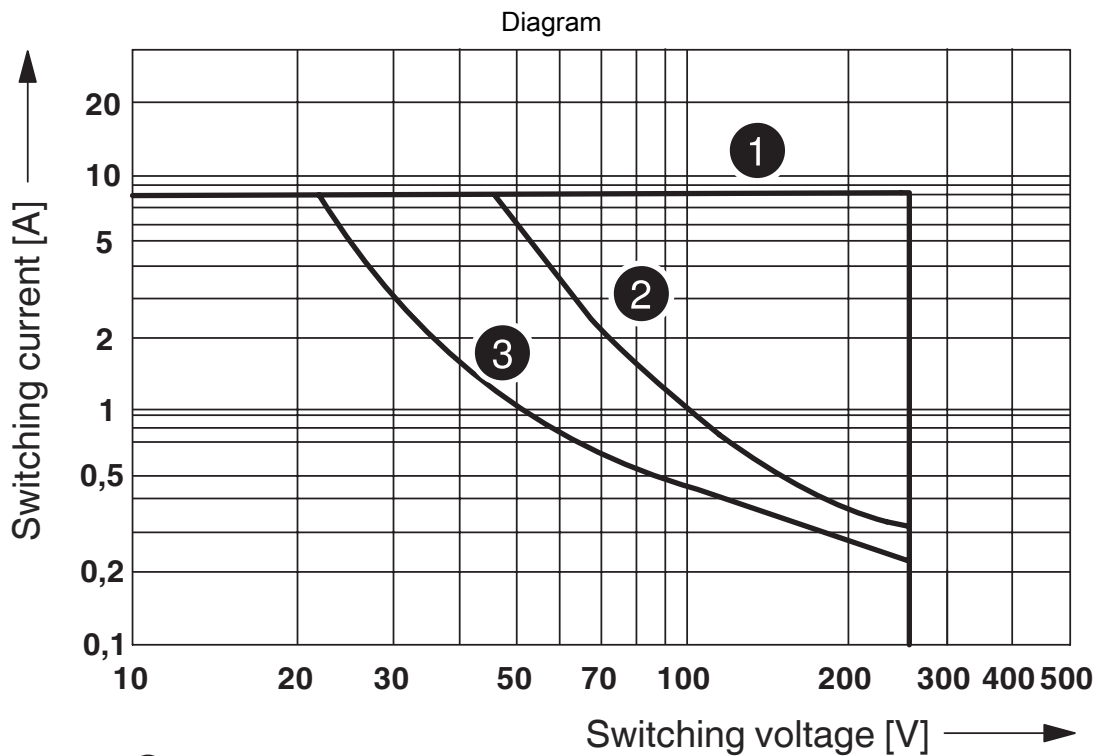
Drawings

Diagram



- ① DC coils, 0 A contact current
- ② DC coils, 8 A contact current
- ③ AC coils, 0 A contact current
- ④ AC coils, 8 A contact current

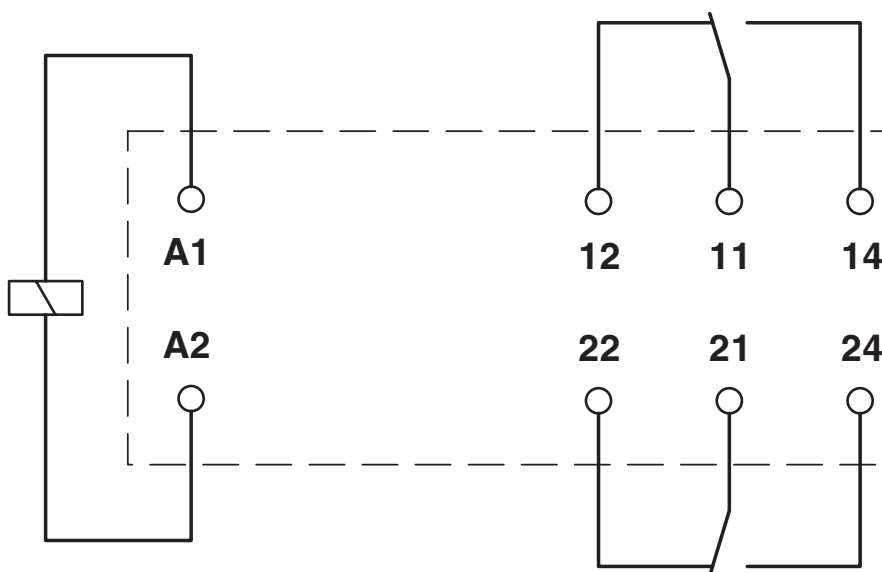
Operating voltage range



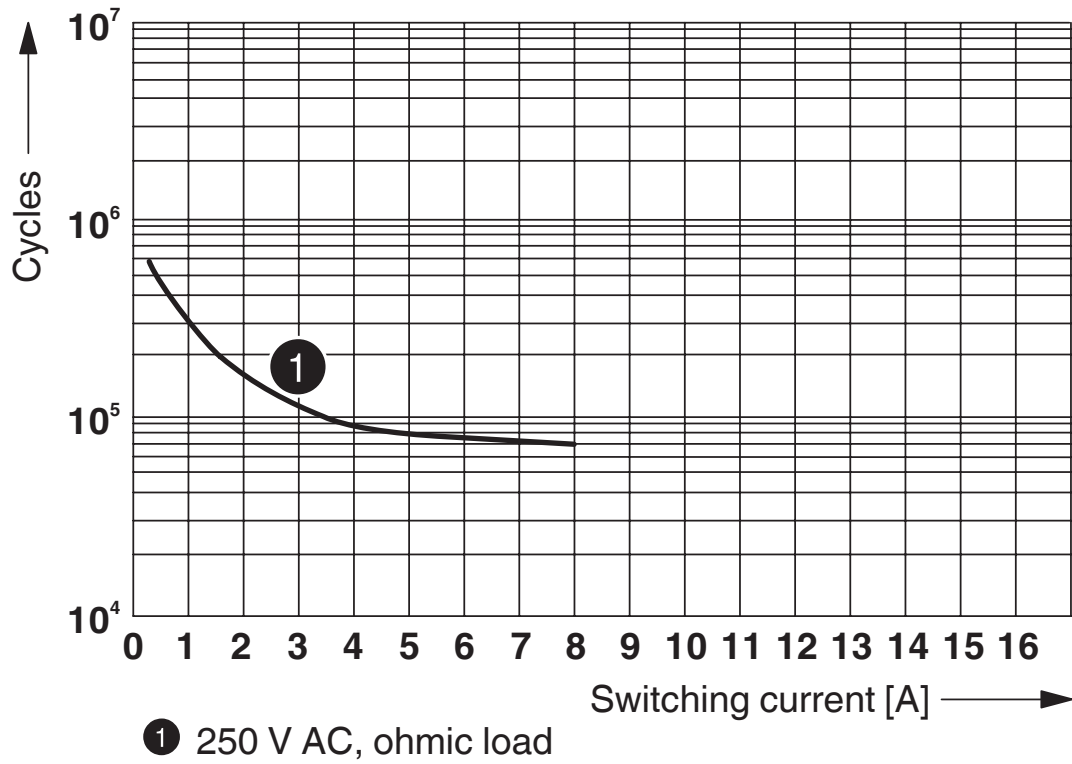
- ① AC, ohmic load
- ② DC, ohmic load, contacts in series
- ③ DC, ohmic load

Interrupting rating

Circuit diagram

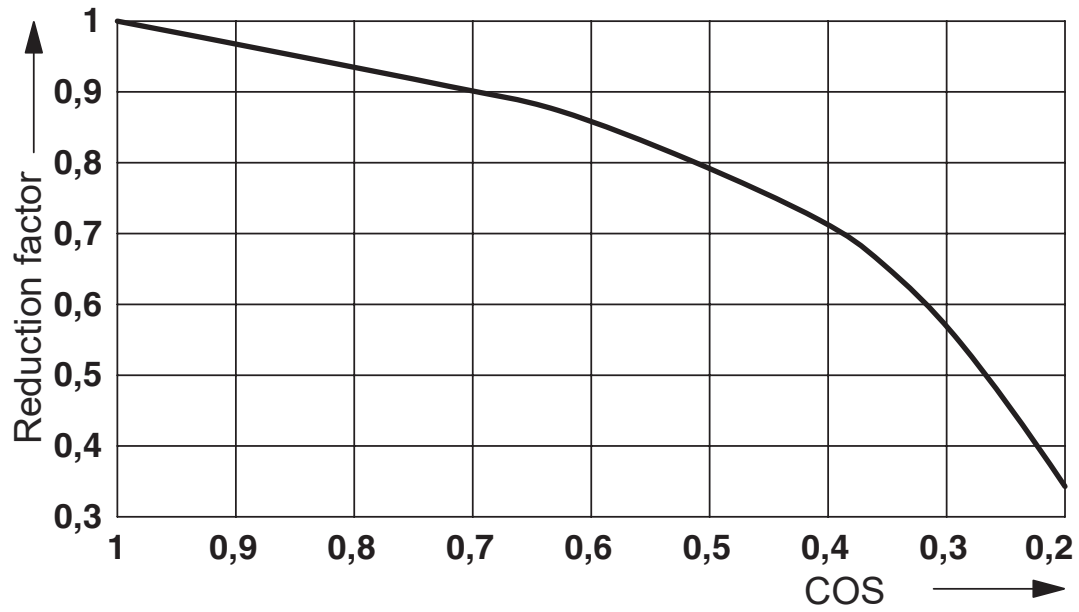


Diagram



Electrical service life

Diagram



Service life reduction factor with various cos phi

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Classifications

ECLASS

ECLASS-11.0

27371601

ETIM

ETIM 8.0

EC001437

UNSPSC

UNSPSC 21.0

39122300

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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