

Relay Module - PLC-RSC-12DC/21-21/EX - 2909517


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PLC-INTERFACE, consisting of DIN-rail-mountable basic terminal block in 14 mm with screw connection and plug-in relay with power contact, 2 changeover contacts, 12 V DC input voltage. Approved according to ATEX/IECEX (Zone 2) and Ex Zone Class I, Div. 2.



Key Commercial Data

| | |
|------------------------|---|
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| GTIN |  4 055626 363202 |
| GTIN | 4055626363202 |

Technical data

Note

| | |
|-------------------------|---|
| Utilization restriction | EMC: class A product, see manufacturer's declaration in the download area |
|-------------------------|---|

Dimensions

| | |
|--------|-------|
| Width | 14 mm |
| Height | 80 mm |
| Depth | 94 mm |

Ambient conditions

| | |
|---|---------------------------------|
| Ambient temperature (operation) | -20 °C ... 60 °C (UL) |
| | -40 °C ... 60 °C (ATEX / IECEx) |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Degree of protection | RT III (Relay) |
| | IP20 (Relay base) |

Coil side

| | |
|--------------------------------|---------|
| Nominal input voltage U_N | 12 V DC |
| Typical input current at U_N | 33 mA |

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Technical data

Coil side

| | |
|---|---|
| Typical response time | 8 ms |
| Typical release time | 10 ms |
| Protective circuit | Reverse polarity protection Polarity protection diode |
| | Free-wheeling diode Damping diode |
| Operating voltage display | Yellow LED |
| Power dissipation for nominal condition | 0.4 W |

Contact side

| | |
|---------------------------------------|---|
| Contact type | 2 PDT |
| Type of switch contact | Single contact |
| Contact material | AgNi |
| Maximum switching voltage | 250 V AC/DC (The separating plate PLC-ATP should be installed for voltages larger than 250 V (L1, L2, L3) between identical terminal blocks in adjacent modules. Potential bridging is then carried out with FBST 8-PLC... or ...FBST 500...) |
| Minimum switching voltage | 5 V AC/DC (at 10 mA) |
| Min. switching current | 10 mA (At 5 V) |
| Maximum inrush current | 15 A (300 ms) |
| Limiting continuous current | 6 A |
| Interrupting rating (ohmic load) max. | 140 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) |
| | 1500 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) |

General

| | |
|--|---------------------------|
| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.) |
| Test voltage PDT/PDT | 2.5 kV AC (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Mechanical service life | 3x 10 ⁷ cycles |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

Connection data

| | |
|-------------------|------------------|
| Connection name | Coil side |
| Connection method | Screw connection |
| Stripping length | 8 mm |

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Connection data

| | |
|----------------------------------|---|
| Screw thread | M3 |
| Conductor cross section solid | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 2.5 mm ² |
| | 0.2 mm ² ... 2.5 mm ² (Single ferrule) |
| | 2x 0.5 mm ² ... 1.5 mm ² (TWIN ferrule) |
| Conductor cross section AWG | 26 ... 14 |

Connection data 2

| | |
|----------------------------------|---|
| Connection name | Contact side |
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross section solid | 0.14 mm ² ... 2.5 mm ² |
| Conductor cross section flexible | 0.14 mm ² ... 2.5 mm ² |
| | 0.2 mm ² ... 2.5 mm ² (Single ferrule) |
| | 2x 0.5 mm ² ... 1.5 mm ² (TWIN ferrule) |
| Conductor cross section AWG | 26 ... 14 |

Standards and Regulations

| | |
|--------------------------|---------------------------------------|
| Designation | Standards/regulations |
| Standards/regulations | IEC 60664 |
| | EN 50178 |
| | EN 60079-0, -7, -15 |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 6 kV |
| Insulation | Safe isolation, reinforced insulation |
| Pollution degree | 2 |
| Overvoltage category | III |
| Conformance | CE-compliant |
| ATEX | # II 3G Ex ec nC IIC T4 Gc |
| IECEX | Ex ec nC IIC T4 Gc |
| UL, USA | Class I, Zone 2, AEx nA nC IIC T6 |
| UL, USA/Canada | Class I, Div. 2, Groups A, B, C, D |
| UL, Canada | Class I, Zone 2, Ex nA nC IIC Gc T6 X |

Conformance/approvals

| | |
|----------------|----------------------------|
| Designation | CE |
| Identification | CE-compliant |
| Designation | ATEX |
| Identification | # II 3G Ex ec nC IIC T4 Gc |
| Certificate | IBExU16ATEXB015 X |
| Designation | IECEX |

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Technical data

Conformance/approvals

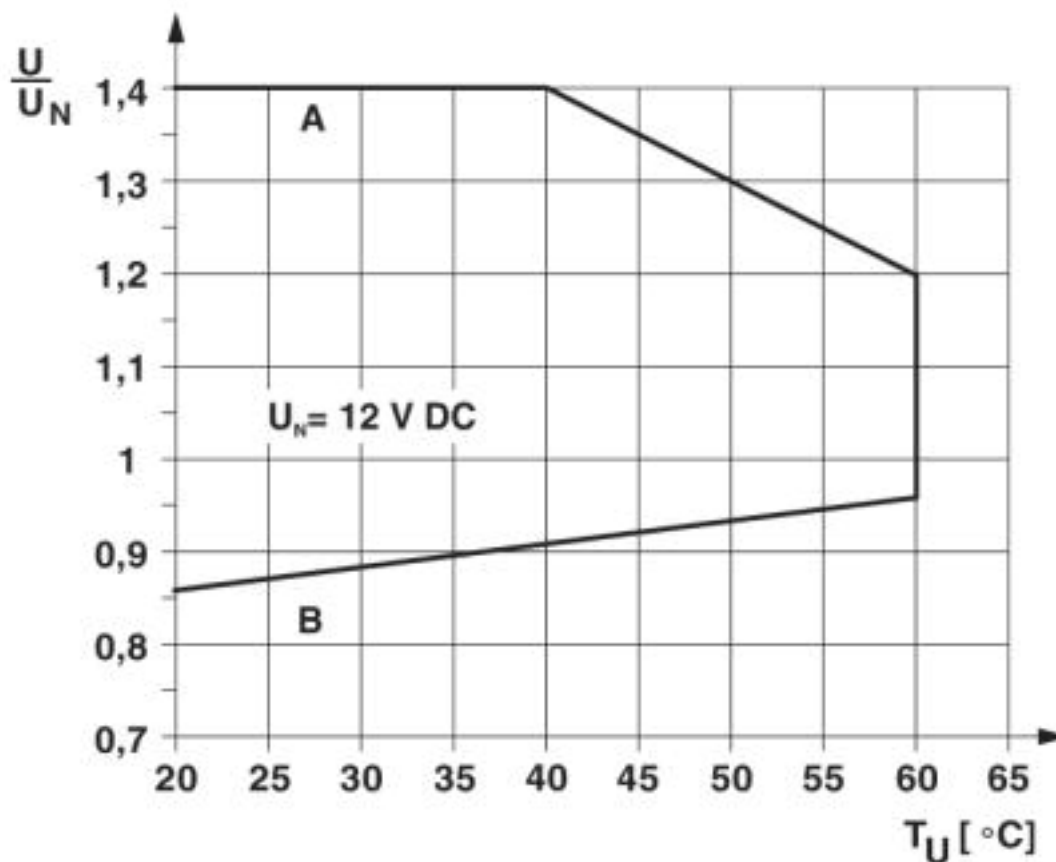
| | |
|----------------|---------------------------------------|
| Identification | Ex ec nC IIC T4 Gc |
| Certificate | IECEX IBE 16.0029X |
| Designation | UL, USA |
| Identification | Class I, Zone 2, AEx nA nC IIC T6 |
| Designation | UL, USA/Canada |
| Identification | Class I, Div. 2, Groups A, B, C, D |
| Designation | UL, Canada |
| Identification | Class I, Zone 2, Ex nA nC IIC Gc T6 X |

Environmental Product Compliance

| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Diagram



Curve A

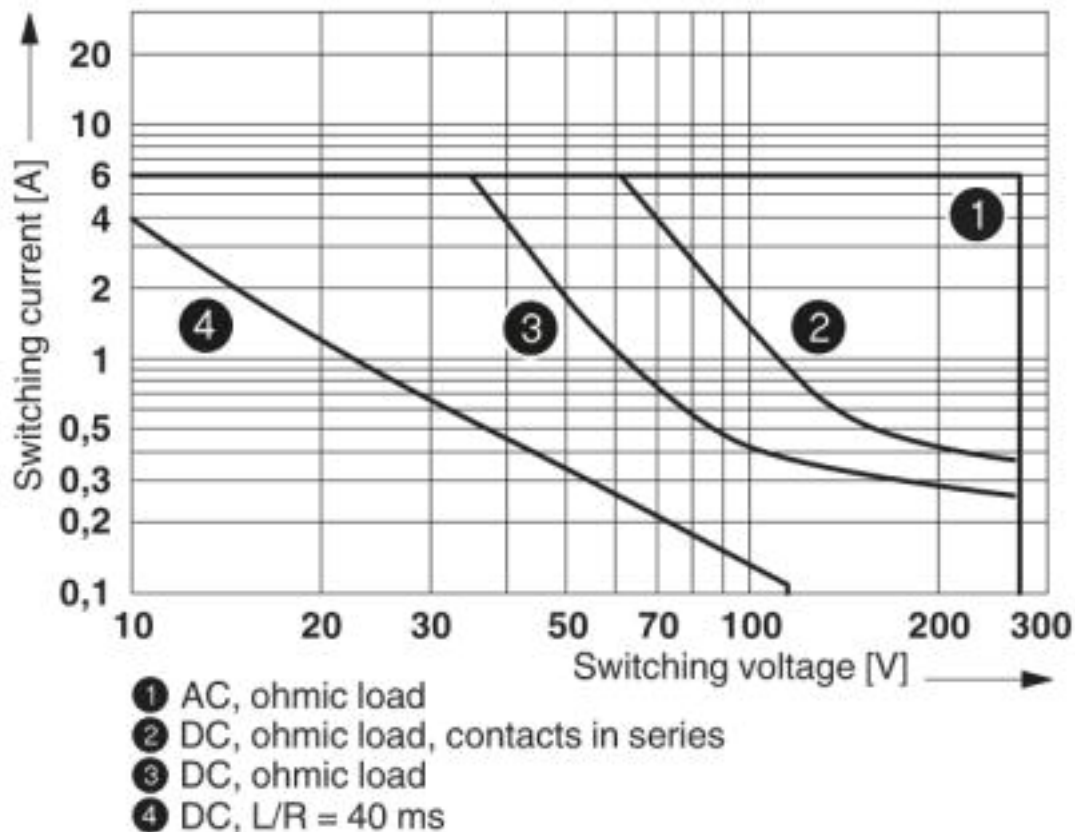
Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data)

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Curve B

Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)

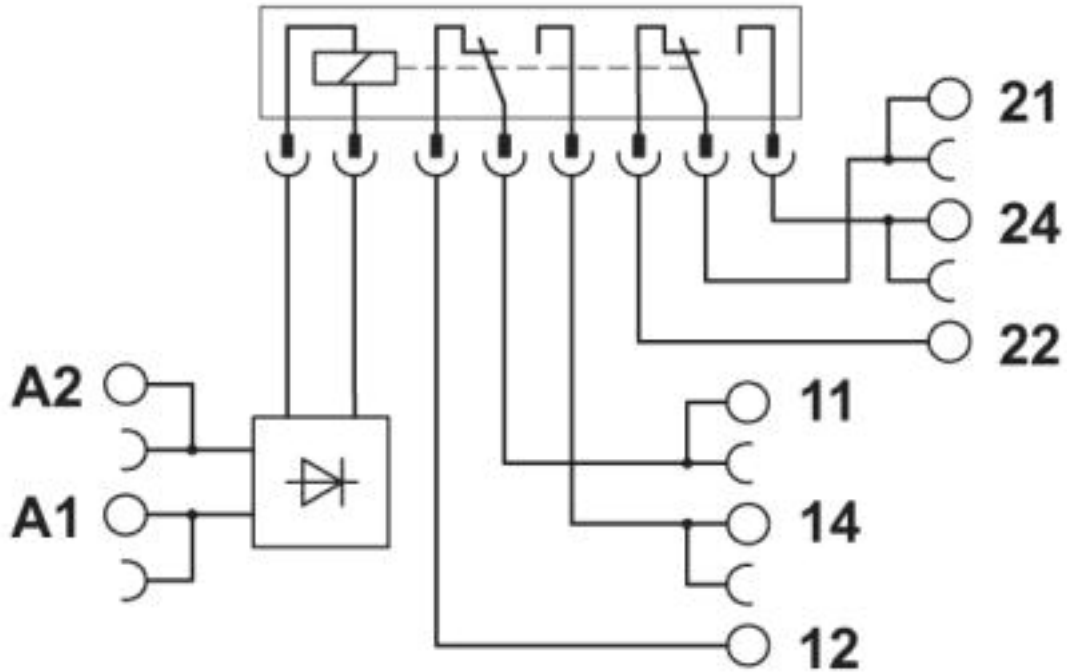
Diagram



Interrupting rating

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Circuit diagram



Approvals

Approvals

Approvals

EAC / DNV GL

Ex Approvals

IECEX / ATEX / UL Listed / cUL Listed / cULus Listed

Approval details

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.A*30.B.01082 |
|-----|--|--------------------------|

| | | | |
|--------|--|---|---------------|
| DNV GL | | https://approvalfinder.dnvgl.com/ | TAE0000196-02 |
|--------|--|---|---------------|

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PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>