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Relay Module - PLC-RPT-12DC/21HC/EX - 2909531


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PLC-INTERFACE, consisting of DIN-rail-mountable basic terminal block in 14 mm with Push-in connection and plug-in relay with 10 A power contact, 1 changeover contact, 12 V DC input voltage. Approved according to ATEX/IECEx (Zone 2) and Ex Zone Class I, Div. 2.

RoHS

Key Commercial Data

| | |
|------------------------|---|
| Packing unit | 10 STK |
| Minimum order quantity | 10 STK |
| GTIN |  4 055626 363684 |
| GTIN | 4055626363684 |

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 |

Coil side

| | |
|--------------------------------|---------|
| Nominal input voltage U_N | 12 V DC |
| Typical input current at U_N | 33 mA |
| Typical response time | 8 ms |
| Typical release time | 10 ms |

Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

Technical data

Coil side

| | |
|---|---|
| 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 | 1 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 | 12 V AC/DC |
| Min. switching current | 100 mA |
| Maximum inrush current | 30 A (300 ms) |
| Limiting continuous current | 10 A |
| | 6 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.) |
| Interrupting rating (ohmic load) max. | 240 W (at 24 V DC) |
| | 58 W (at 48 V DC) |
| | 48 W (at 60 V DC) |
| | 50 W (at 110 V DC) |
| | 80 W (at 220 V DC) |
| | 2500 VA (for 250 V AC) |
| Interrupting rating (ohmic load) max. bridged | 144 W (for 24 V DC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.) |
| | 1500 VA (for 250 V AC. Value applies to connections 12. If connections 12 are bridged, the normal value applies.) |
| Switching capacity in acc. with DIN VDE 0660/IEC 60947 | 2 A (at 24 V, DC13) |
| | 0.2 A (at 110 V, DC13) |
| | 0.2 A (at 250 V, DC13) |
| | 6 A (at 24 V, AC15) |
| | 6 A (at 120 V, AC15) |
| | 6 A (at 250 V, AC15) |

General

| | |
|--|----------------------------|
| Test voltage relay winding/relay contact | 4 kV AC (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Degree of protection | RT II (Relay) |
| | IP20 (Relay base) |
| Mechanical service life | 3x 10 ⁷ cycles |
| ATEX | # II 3G Ex ec nC IIC T4 Gc |
| EU-type examination certificate | IBExU16ATEXB015 X |

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Technical data

General

| | |
|-----------------------|---------------------------------------|
| IECEX | Ex ec nC IIC T4 Gc |
| IECEX certificate | IECEX IBE 16.0029X |
| 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 |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

Connection data input side

| | |
|----------------------------------|---|
| Connection name | Coil side |
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| 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 () |
| | 2x 0.5 mm ² ... 1 mm ² () |
| Conductor cross section AWG | 26 ... 14 |

Connection data output side

| | |
|----------------------------------|---|
| Connection name | Contact side |
| Connection method | Push-in connection |
| Stripping length | 8 mm |
| 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 () |
| | 2x 0.5 mm ² ... 1 mm ² () |
| 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 |
| Degree of pollution | 2 |
| Overvoltage category | III |
| Flammability rating according to UL 94 | V0 |
| Conformance | CE-compliant |
| ATEX | # II 3G Ex ec nC IIC T4 Gc |
| IECEX | Ex ec nC IIC T4 Gc |

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Technical data

Standards and Regulations

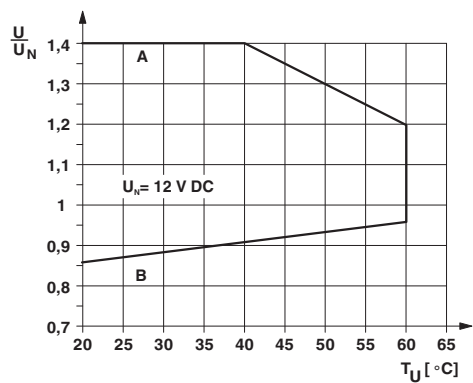
| | |
|----------------|---------------------------------------|
| UL, USA | Class I, Zone 2, AEx nA nC IIC T6 |
| UL, USA/Canada | Class I, Div. 2, Groups A, B, C, D |
| UL, Canada | Class I, Zone 2, Ex nA nC IIC Gc T6 X |

Environmental Product Compliance

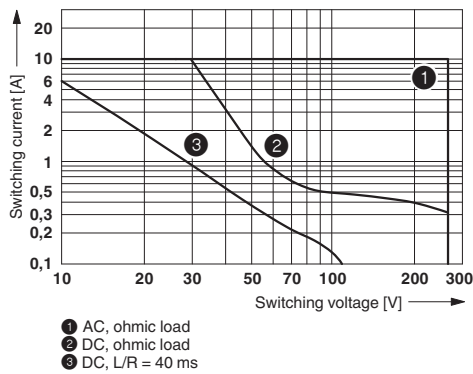
| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Diagram



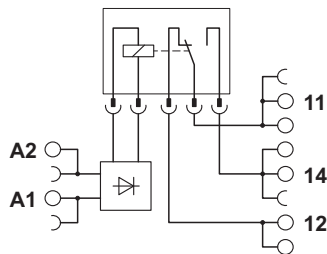
Diagram



Interrupting rating

Curve A
Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side (see relevant technical data)
Curve B
Minimum permissible operate voltage U_{op} after pre-excitation (see relevant technical data)

Circuit diagram



Approvals

Approvals

Relay Module - PLC-RPT-12DC/21HC/EX - 2909531

Approvals


Approvals

EAC

Ex Approvals

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

Approval details

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

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