

Relay Module - PLC-RSC- 24DC/2X21/FG - 2910535

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)




PLC-INTERFACE, consisting of a relay base and pluggable safety relay with force-guided contacts in accordance with DIN EN 50205, Screw connection, 2 changeover contacts, forcibly actuated, Input voltage: 24 V DC

Product Description

The force-guided coupling relay module is approved for industrial control equipment in accordance with UL 508 (cULus listed). The requirements for Type A in accordance with DIN EN 50205 are satisfied if the circuit is designed as 1 N/O contact / 1 N/C contact.



Key Commercial Data

| | |
|--------------|---|
| Packing unit | 10 pc |
| GTIN |  4 055626 486864 |
| GTIN | 4055626486864 |

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 | 104 mm |

Ambient conditions

| | |
|---|-------------------|
| Ambient temperature (operation) | -20 °C ... 60 °C |
| Ambient temperature (storage/transport) | -20 °C ... 85 °C |
| Maximum altitude | 2000 m |
| Degree of protection | IP20 (Relay base) |
| | RT II (Relay) |

Coil side

Relay Module - PLC-RSC- 24DC/2X21/FG - 2910535

Technical data

Coil side

| | |
|---|---------------|
| Nominal input voltage U_N | 24 V DC |
| Input voltage range in reference to U_N | see diagram |
| Typical input current at U_N | 30 mA |
| Typical response time | 10 ms |
| Typical release time | 10 ms |
| Coil voltage | 24 V DC |
| Protective circuit | Damping diode |
| Operating voltage display | Yellow LED |

Contact side

| | |
|---|--|
| Contact type | 2 changeover contacts, forcibly actuated |
| Type of switch contact | Single contact |
| Contact material | AgNi |
| Force-guided contacts in accordance with EN 50205 | Type B |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 5 V (10 mA) |
| Min. switching current | 10 mA (5 V) |
| Maximum inrush current | 6 A |
| Limiting continuous current | 6 A |
| Interrupting rating (ohmic load) max. | 144 W (24 V DC) |
| | 288 W (48 V DC) |
| | 88 W (110 V DC) |
| | 110 W (220 V DC) |
| | 1500 VA (250 V AC) |
| Switching capacity min. | 150 mW |
| Switching capacity | 3 A (24 V, DC13) |
| | 3 A (230 V, AC15) |

General

| | |
|--|---------------------------------------|
| Test voltage relay winding/relay contact | 4 kV _{rms} (50 Hz, 1 min.) |
| Test voltage PDT/PDT | 2.5 kV _{rms} (50 Hz, 1 min.) |
| Operating mode | 100% operating factor |
| Degree of protection | IP20 (Relay base) |
| | RT II (Relay) |
| Mechanical service life | approx. 10 ⁷ cycles |
| UL, USA | UL 508 |
| | UL 508 Recognized |
| UL, USA/Canada | cUL 508 |
| | cUL 508 Recognized |
| Mounting position | any |
| Assembly instructions | In rows with zero spacing |

Relay Module - PLC-RSC- 24DC/2X21/FG - 2910535

Technical data

General

| | |
|------------------|---|
| B _{10d} | 600000 Cycles (AC1; 250 V / 6 A; 1 NO) |
| | 900000 Cycles (AC1; 250 V / 3 A; 1 NO) |
| | 1800000 Cycles (AC1; 250 V / 1,5 A; 1 NO) |
| | 180000 Cycles (AC15; 250 V / 3 A; 1 NO) |
| | 560000 Cycles (AC15; 250 V / 2 A; 1 NO) |
| | 4600000 Cycles (AC15; 250 V / 0,75 A; 1 NO) |
| | 360000 Cycles (DC13; 24 V / 3 A; 1 NO) |
| | 740000 Cycles (DC13; 24 V / 1,5 A; 1 NO) |
| | 4200000 Cycles (DC13; 24 V / 0,75 A; 1 NO) |

Connection data

| | |
|----------------------------------|---|
| Connection name | Coil 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 |

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 | EN 50178 |
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 6 kV |
| Insulation | Safe isolation, reinforced insulation |
| Degree of pollution | 2 |
| Overvoltage category | III |
| UL, USA | UL 508 |
| | UL 508 Recognized |

Relay Module - PLC-RSC- 24DC/2X21/FG - 2910535

Technical data

Standards and Regulations

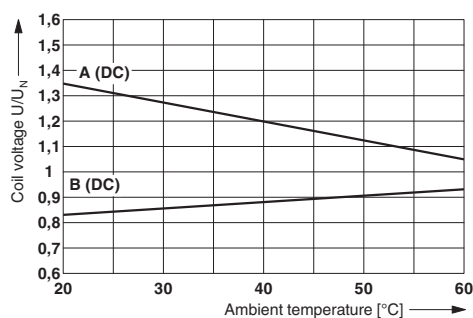
| | |
|----------------|--------------------|
| UL, USA/Canada | cUL 508 |
| | cUL 508 Recognized |

Environmental Product Compliance

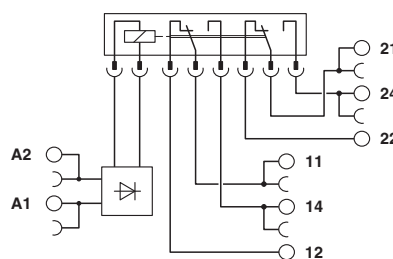
| | |
|------------|---|
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Diagram



Circuit diagram



Curve A: maximum continuous voltage at limiting continuous current
 Curve B: minimum pick-up voltage for pre-excitation with U_N and limiting continuous current

Articles in set

Safety relays - REL-SR- 24DC/2X21/FG - 2908777



Safety relay with forcibly guided contacts in acc. with DIN EN 50205, contact type 2 PDTs. The requirements for type A in accordance with EN 50205 are fulfilled when the wiring topology is 1 NO / 1 NC.

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / DNV GL / cULus Listed

Ex Approvals

Relay Module - PLC-RSC- 24DC/2X21/FG - 2910535

Approvals

Approval details

| | | | |
|--------------|--|---|--------------------------|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 172140 |
| EAC | | | RU C- DE.A*30.B.01082 |
| DNV GL | | https://approvalfinder.dnvgl.com/ | TAE0000196-02 |
| cULus Listed | | | |

Phoenix Contact 2019 © - all rights reserved
<http://www.phoenixcontact.com>

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