# PLC-RSC-230UC/21HC/SO46 - Relay module

1125943

https://www.phoenixcontact.com/us/products/1125943

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 documentation. Our general terms of use for downloads are valid.



PLC-INTERFACE for protection against interference currents/voltages on the control side. Consisting of PLC-BSC-230UC/21HC/SO46 basic terminal block with screw connection and plug-in miniature relay with power contact up to 10 A, 1 changeover contact, 230 V AC input voltage

## Commercial data

| | |
|---|---|
| Item number | 1125943 |
| Packing unit | 10 pc |
| Minimum order quantity | 10 pc |
| Sales key | C461 |
| Product key | DK623M |
| GTIN | 4063151052973 |
| Weight per piece (including packing) | 78.61 g |
| Weight per piece (excluding packing) | 56.43 g |
| Customs tariff number | 85364900 |
| Country of origin | DE |

# Technical data

## Notes

| | |
|---|---|
| Notes on operation | The PLC-ATP divider plate must be installed for voltages greater than 250 V (L1, L2, L3) between identical terminal blocks on adjacent modules. |
| Notes on operation | The PLC-ATP divider plate should be installed for safe isolation between adjacent modules |
| Notes on operation | The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact. |
| Assembly note | The PLC-ATP divider plate is required at the start and end of every PLC terminal strip. |

## Product properties

| | |
|---|---|
| Product type | Relay Module |
| Product family | PLC-INTERFACE |
| Application | Filter to prevent interference |
| Operating mode | 100% operating factor |
| Mechanical service life | approx. 3x $10^7$ cycles |

Insulation characteristics: Air clearances and creepage distances between the power circuits

| | |
|---|---|
| Insulation | Basic insulation |
| Overvoltage category | III |
| Pollution degree | 3 |

Data management status

| | |
|---|---|
| Date of last data management | 01.04.2026 |

## Electrical properties

| | |
|---|---|
| Maximum power dissipation for nominal condition | 2.3 W |
| Test voltage (Winding/contact) | 4 $kV_{rms}$ (50 Hz, 1 min., winding/contact) |

Air clearances and creepage distances between the power circuits

| | |
|---|---|
| Rated insulation voltage | 250 V AC |
| Rated surge voltage | 4 kV (Safe isolation, reinforced insulation, and 6 kV between input circuit and output contact current paths) |

## Input data

Coil side

| | |
|---|---|
| Nominal input voltage $U_N$ | 230 V AC |
| | 220 V DC |
| Input voltage range | 179.4 V AC ... 264.5 V AC (20 °C) |
| | 171.6 V DC ... 253 V DC (20 °C) |
| Nominal voltage (plugged-in electromechanical relay) | 110 V DC |
| Mains frequency | 50/60 Hz |

| | |
|---|---|
| Drive and function | monostable |
| Drive (polarity) | polarized |
| Typical input current at $U_N$ | 8.5 mA (50 Hz) |
| | 10 mA (60 Hz) |
| Typical response time | 7 ms |
| Typical release time | 10 ms |
| Typical release voltage | 60 V AC |
| Protective circuit | RC element |
| | Bridge rectifier |
| Status display | LED (yellow) |

## Output data

Switching

| | |
|---|---|
| Contact switching type | 1 changeover contact |
| Type of switch contact | Single contact |
| Contact material | AgNi |
| Maximum switching voltage | 250 V AC/DC |
| Minimum switching voltage | 12 V (10 mA) |
| Limiting continuous current | 6 A |
| | 10 A (value applies to connections 12. If connections 12 are bridged, the normal value applies.) |
| Maximum inrush current | 30 A (300 ms, N/O contact) |
| Min. switching current | 10 mA (12 V) |
| Interrupting rating (ohmic load) max. | 144 W (24 V DC) |
| | 240 W (24 V DC, value is valid for connections 12. If connections 12 are bridged, the normal value applies.) |
| | 58 W (48 V DC) |
| | 48 W (60 V DC) |
| | 50 W (110 V DC) |
| | 80 W (220 V DC) |
| | 1500 VA (250 V AC) |
| | 2500 W (250 V AC, value is valid for connections 12. If connections 12 are bridged, the normal value applies.) |
| Switching capacity | 2 A (DC13, 24 V) |
| | 0.2 A (DC13, 250 V) |
| | 6 A (AC15, 24 V) |
| | 6 A (AC15, 250 V) |

## Connection data

| | |
|---|---|
| Connection method | Screw connection |
| Stripping length | 8 mm |
| Screw thread | M3 |
| Conductor cross-section rigid | 0.14 mm² ... 2.5 mm² |
| | 0.14 mm² ... 2.5 mm² |

| | |
|---|---|
| Conductor cross-section flexible | 0.2 mm² ... 2.5 mm² (Single ferrule) |
| | 2x 0.5 mm² ... 1.5 mm² (TWIN ferrule) |
| Conductor cross-section AWG | 26 ... 14 |
| Tightening torque | 0.6 Nm ... 0.8 Nm |

## Dimensions

Item dimensions

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

## Material specifications

| | |
|---|---|
| Color | gray (RAL 7042) |

## Environmental and real-life conditions

Ambient conditions

| | |
|---|---|
| Degree of protection (Relay base) | IP20 (Relay base) |
| Degree of protection (Relay) | RT II (Relay) |
| Degree of protection (Installation location) | IP54 (Installation location) |
| Ambient temperature (operation) | -40 °C ... 55 °C |
| Ambient temperature (storage/transport) | -40 °C ... 85 °C |
| Altitude | ≤ 2000 m |

## Approvals

CE

| | |
|---|---|
| Certificate | CE-compliant |

UKCA

| | |
|---|---|
| Certificate | UKCA-compliant |

Shipbuilding approval

| | |
|---|---|
| Certificate | TAE0000196 |

Corrosive gas test

| | |
|---|---|
| Identification | ISA-S71.04. G3 Harsh Group |
| | EN 60068-2-60 |

Shipbuilding data

| | |
|---|---|
| Temperature | D |
| Humidity | A |
| Vibration | B/C |
| EMC | B |
| Enclosure | Required protection according to the Rules shall be provided upon installation on board |

## EMC data

| | |
|---|---|
| Electromagnetic compatibility | Conformance with EMC directive |
| Low Voltage Directive | Conformance with Low Voltage Directive |

## Standards and regulations

Air clearances and creepage distances between the power circuits

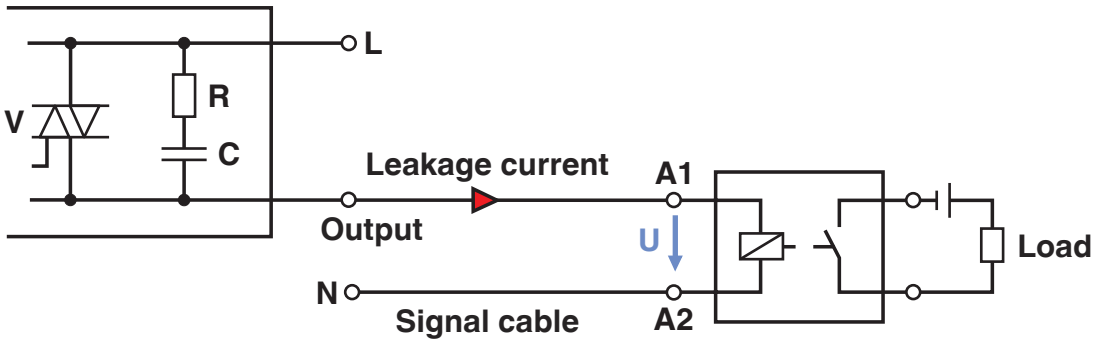
| | |
|---|---|
| Standards/regulations | IEC 60947-5-1 |

## Mounting

| | |
|---|---|
| Mounting type | DIN rail mounting |
| Assembly note | in rows with zero spacing |
| Mounting position | any |

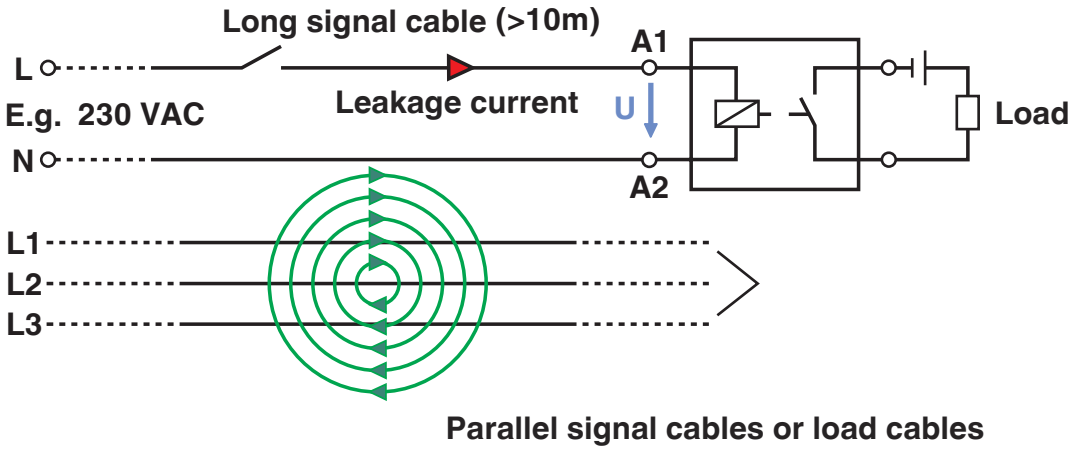
## Drawings

Application drawing



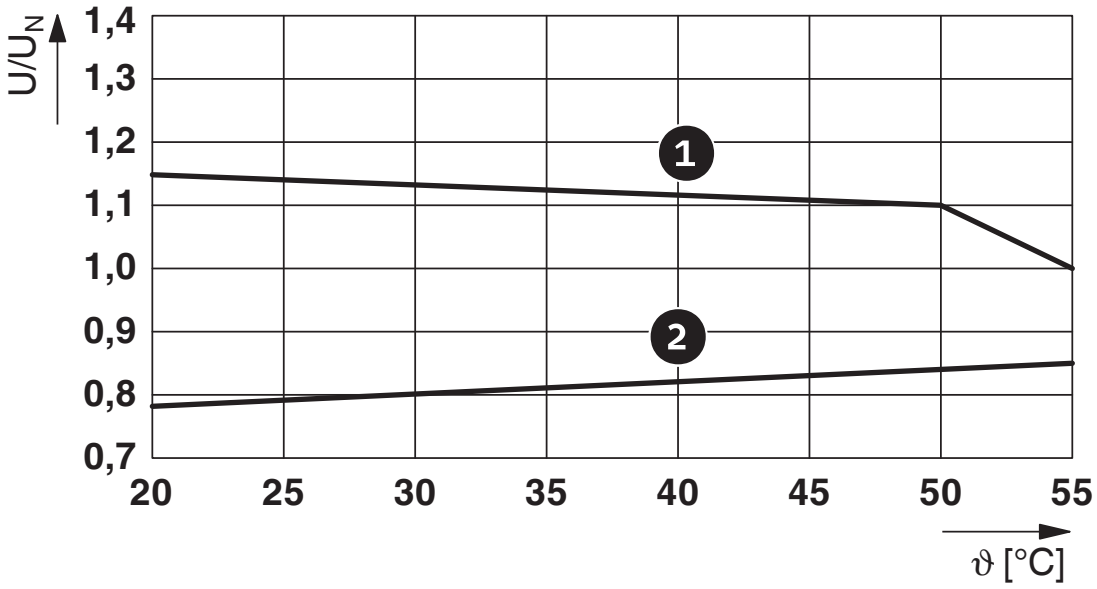

Occurrence of interference signals
Scenario 1: controller - AC output card

Application drawing



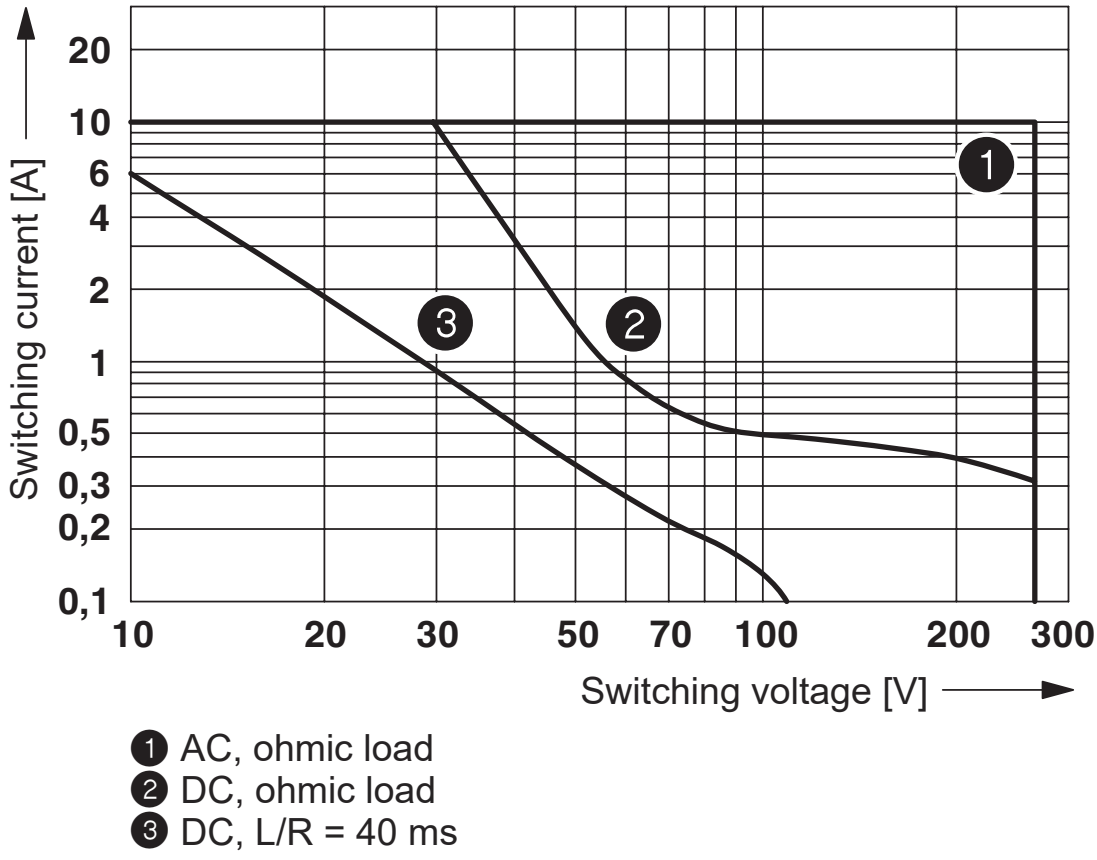

Occurrence of interference signals
Scenario 2: long signal cables

Diagram




❶ maximum continuous voltage $U_{max}$ at $I_K$=10 A
❷ minimum pick-up voltage $U_{an}$ with pre-energization with $U_N$ at limiting continuous current $I_K$=10 A

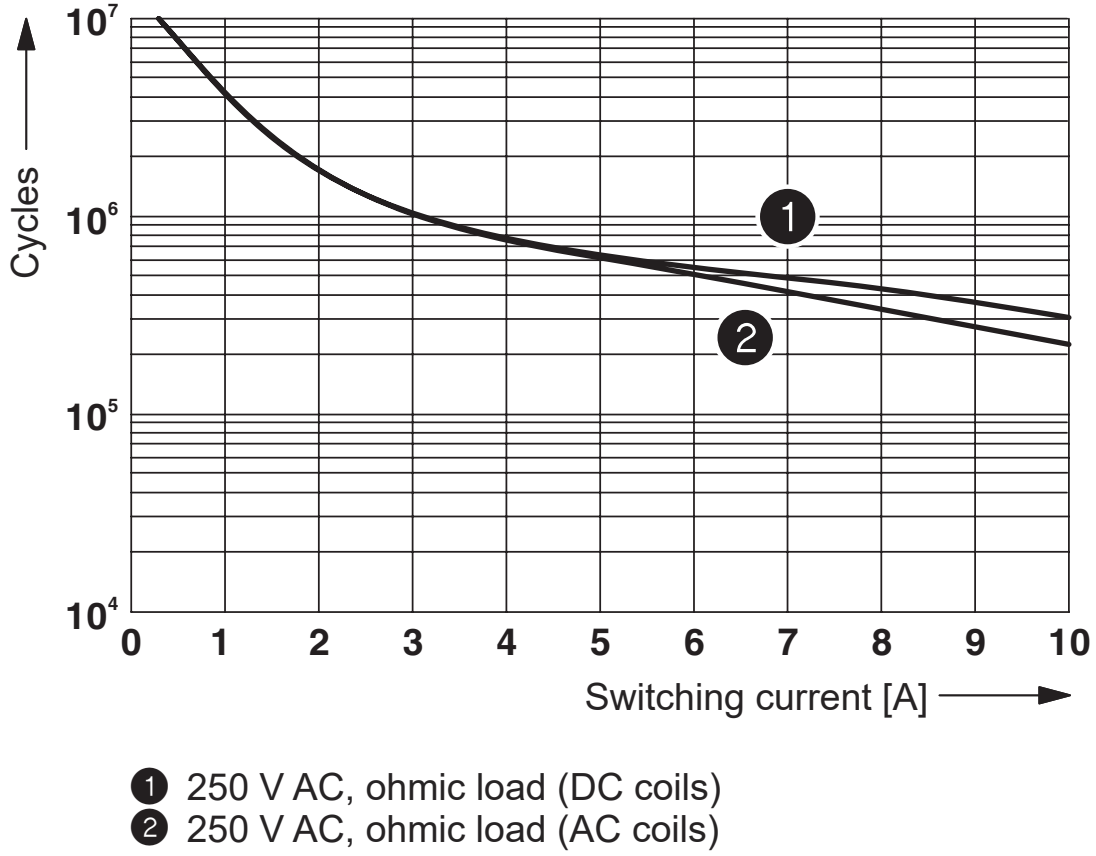
Diagram




❶ AC, ohmic load
❷ DC, ohmic load
❸ DC, L/R = 40 ms

Interrupting rating

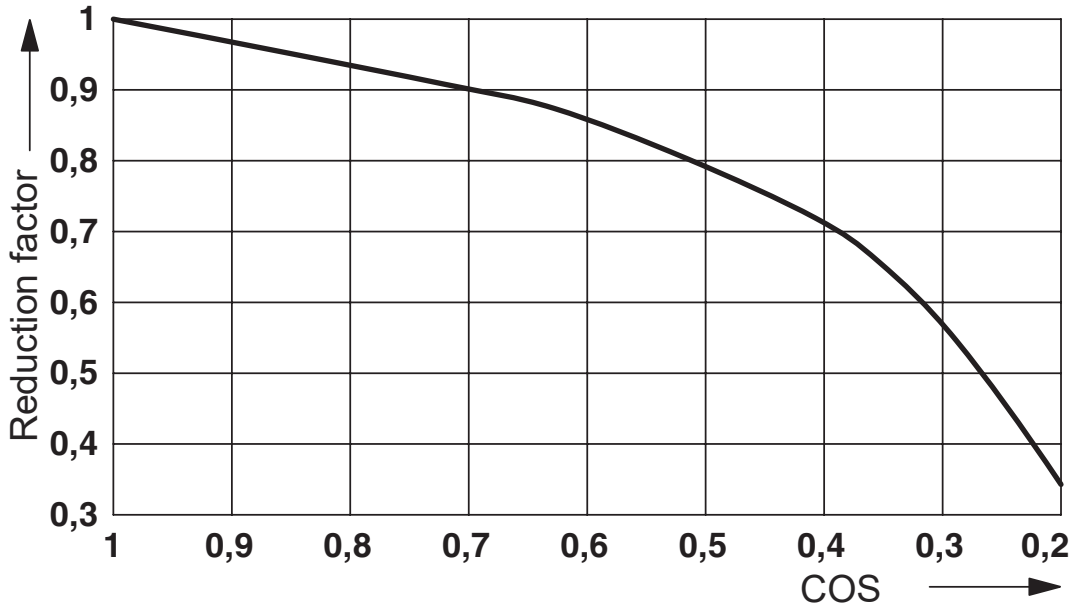
Diagram




1 250 V AC, ohmic load (DC coils)
2 250 V AC, ohmic load (AC coils)

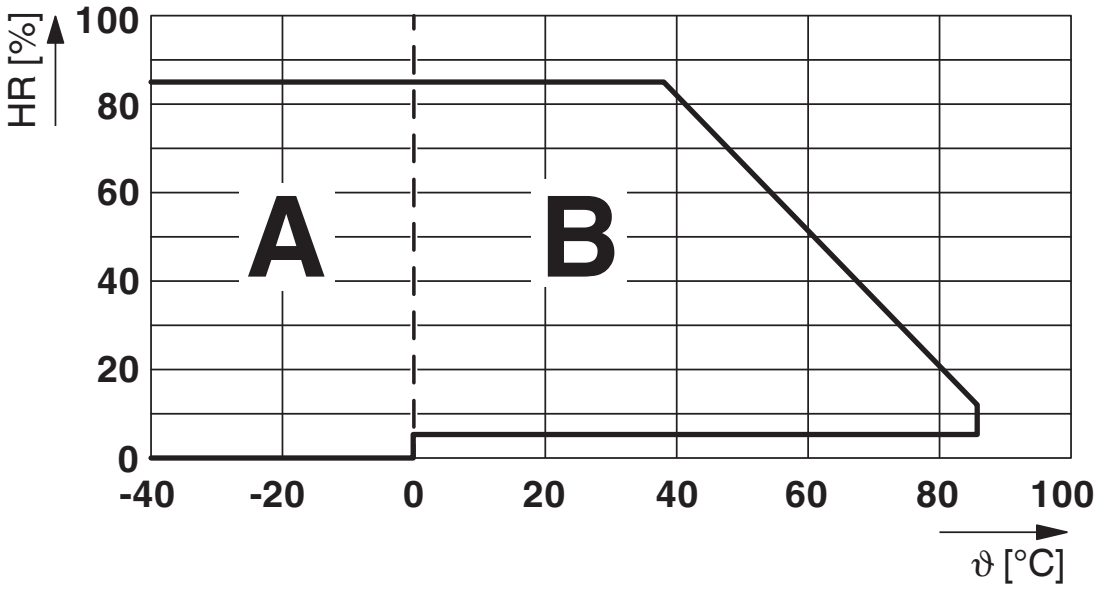
Electrical service life

Diagram




Service life reduction factor

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 ≤ 0°C must be prevented
Area B: Condensation at ambient temperatures > 0°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 ≤ 25°C.

## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1125943

**EAC**
Approval ID: RU D-DE.B*00573/18

**cULus Listed**
Approval ID: E140324

**cULus Listed**
Approval ID: E140324

**cULus Listed**
Approval ID: E140324

**DNV**
Approval ID: TAE0000196

## Classifications

### ECLASS

| | |
|---|---|
| ECLASS-13.0 | 27371601 |
| ECLASS-15.0 | 27371601 |

### ETIM

| | |
|---|---|
| ETIM 10.0 | EC001437 |

### UNSPSC

| | |
|---|---|
| UNSPSC 21.0 | 39122300 |

## Environmental product compliance

EU RoHS

| | |
|---|---|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 7(a), 7(c)-I |

China RoHS

| | |
|---|---|
| Environment friendly use period (EFUP) | EFUP-50 |
| | An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required. |

EU REACH SVHC

| | |
|---|---|
| REACH candidate substance (CAS No.) | Hexahydromethylphthalic anhydride(CAS: n/a) |
| | Lead(CAS: 7439-92-1) |
| SCIP | 7c0b2dee-6d86-40cd-9177-4e3af25e9daf |

EF3.1 Climate Change

| | |
|---|---|
| CO2e kg | 1.283 kg CO2e |

Phoenix Contact 2026 © - all rights reserved
https://www.phoenixcontact.com

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com