

PLC-...24UC/1/S/H

PLC-...24UC/1/S/L

PLC INTERFACE With Switch and Integrated Power Contact Relay

INTERFACE

Data Sheet
101460_en_04

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1 Description

The 6.2 mm PLC-...24UC/1/S... PLC INTERFACE module supports "Manual", "Zero", and "Automatic" functions. The load can be switched directly using the module.

1.1 Switching Function

Depending on the version, the switch can be operated either by hand or using a screwdriver.

A floating contact provides confirmation for the "Automatic" switching state.

1.2 Optimum Use of Plug-In Bridges

The PLC INTERFACE module achieves maximum efficiency with the user-friendly FBST plug-in bridge system. The PLC-...24UC/1/S... makes effective use of the bridging options for the A1/A2 connection on the coil side, for the supply at connection 13 on the contact side, and for the manual input at connection M. Especially effective here are the 500 mm long color-insulated continuous plug-in bridges that can easily be cut to the required length and quickly

inserted in the bridge shafts. They eliminate the need for complicated and time-consuming loop bridges.

1.3 Additional Advantages

- Environmentally friendly, cadmium-free power contact material for loads up to 250 V AC/6 A
- Integrated input/protective circuit
- Safe isolation according to DIN EN 50178
- Spring-cage and screw connection types available
- 6 kV_{rms} electrical isolation between coil and contact
- Floating confirmation contact for "Automatic" switching state





Make sure you always use the latest documentation.
It can be downloaded at www.download.phoenixcontact.com.
A conversion table is available on the Internet at
www.download.phoenixcontact.com/general/7000_en_00.pdf.





This data sheet is valid for all products listed on the following page:

2 Ordering Data

PLC INTERFACE With Switch (Operation by Hand)

| Description | Type | Order No. | Pcs./Pck. |
|--|---------------------|-----------|-----------|
| PLC INTERFACE with switch (operation by hand) and integrated power contact relay for "Manual", "Zero", and "Automatic" functions, with screw connection, for mounting on  | PLC-RSC- 24UC/1/S/H | 2982236 | 10 |
| PLC INTERFACE with switch (operation by hand) and integrated power contact relay for "Manual", "Zero", and "Automatic" functions, with spring-cage connection, for mounting on  | PLC-RSP- 24UC/1/S/H | 2982249 | 10 |

PLC INTERFACE With Switch (Operation Using a Screwdriver)

| Description | Type | Order No. | Pcs./Pck. |
|--|---------------------|-----------|-----------|
| PLC INTERFACE with switch (operation using a screwdriver) and integrated power contact relay for "Manual", "Zero", and "Automatic" functions, with screw connection, for mounting on  | PLC-RSC- 24UC/1/S/L | 2834876 | 10 |
| PLC INTERFACE with switch (operation using a screwdriver) and integrated power contact relay for "Manual", "Zero", and "Automatic" functions, with spring-cage connection, for mounting on  | PLC-RSP- 24UC/1/S/L | 2834889 | 10 |



For the protection of input and output, inductive loads must be dampened with an effective protective circuit.

Accessories

| Description | Type | Order No. | Pcs./Pck. |
|------------------|------------|-----------|-----------|
| Insulating plate | PLC-ATP BK | 2966841 | 25 |



The PLC-ATP BK insulating plate should be used in the following cases: always fit at the start and end of a PLC terminal strip for voltages greater than 250 V (L1, L2, L3) between the same terminal points on adjacent modules (FBST 8-PLC... or FBST 500... can be used for potential bridging) and for safe isolation between adjacent modules.

For additional accessories such as power terminal blocks and plug-in bridges, please refer to the INTERFACE catalog or www.phoenixcontact.com.

3 Technical Data

| Input Data | |
|--|---|
| Input voltage U_N | 24 V AC/DC, 50 Hz ... 60 Hz |
| Permissible range (with reference to U_N) | See "Operating Voltage Range" on page 4 |
| Typical input current at U_N | 11 mA |
| Input circuit | Yellow LED, bridge rectifier |

| Output Data | |
|-----------------------------|-------------------------------|
| Contact type | Single contact, 1 N/O contact |
| Contact material | Silver tin oxide AgSnO |
| Maximum switching voltage | 250 V AC/DC ¹ |
| Minimum switching voltage | 12 V AC/DC |
| Limiting continuous current | 6 A |
| Maximum inrush current | On request |
| Minimum switching current | 10 mA |
| Maximum shutdown power | Ohmic load $\tau = 0$ ms |
| | 24 V DC 140 W |
| | 48 V DC 20 W |
| | 60 V DC 18 W |
| | 110 V DC 23 W |
| | 220 V DC 40 W |
| | 250 V AC 1500 VA |
| Minimum switching power | 120 mW |

¹ The PLC-ATP BK insulating plate must be installed for voltages greater than 250 V (L1, L2, L3) between the same terminal points on adjacent modules (see "Accessories"). FBST 8-PLC... or FBST 500... is then used for potential bridging.

| General Data | |
|---|---|
| Rated insulation voltage | 250 V AC |
| Impulse voltage withstand level | 6 kV |
| Ambient temperature range | |
| Operation | -25°C ... 60°C |
| Storage/transport | -20°C ... 85°C |
| Nominal operating mode | 100% operating factor |
| Inflammability class according to UL 94 (housing) | V0 |
| Air and creepage distances between the circuits | DIN EN 50178/VDE 0160 (safe isolation, reinforced insulation I/O) |
| Standards/specifications | IEC 60664, IEC 60664 A, DIN VDE 0110, DIN EN 50155/VDE 0115-200 (in relevant parts), IEC 60255/DIN VDE 0435 (in relevant parts) |
| Pollution degree | 2 |
| Surge voltage category | III |
| Mounting position | Any |
| Mounting | Can be aligned without spacing |
| Conductor cross-section | |
| Solid, with screw connection | 0.14 mm ² ... 2.5 mm ² (26 - 14 AWG) |
| Stranded, with screw connection | 0.14 mm ² ... 1.5 mm ² (26 - 14 AWG) |
| Solid, with spring-cage connection | 0.2 mm ² ... 2.5 mm ² (24 - 14 AWG) |
| Stranded, with spring-cage connection | 0.2 mm ² ... 1.5 mm ² (24 - 14 AWG) |
| Stripping length | |
| Screw connection | 10 mm |
| Spring-cage connection | 8 mm |
| Dimensions (W x H x D) | 6.2 mm x 94 mm x 80 mm |
| Housing material | Polybutylene terephthalate PBT, non-reinforced, green |

Confirmation

"Automatic" mode, floating

30 V AC/DC / 50 mA, maximum
2 V AC/DC / 1 mA, minimum

Approvals

CE

CE

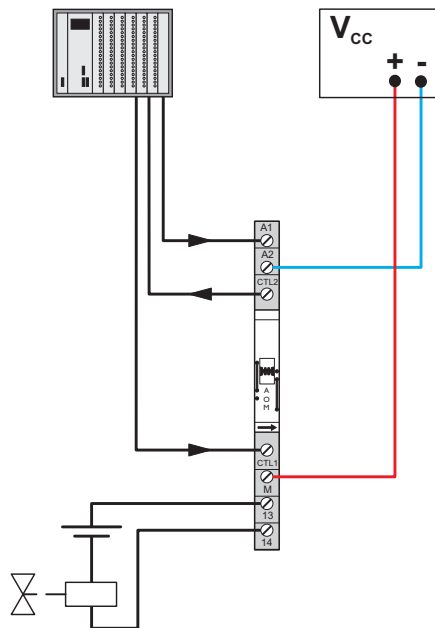
UL/CUL

Applied for

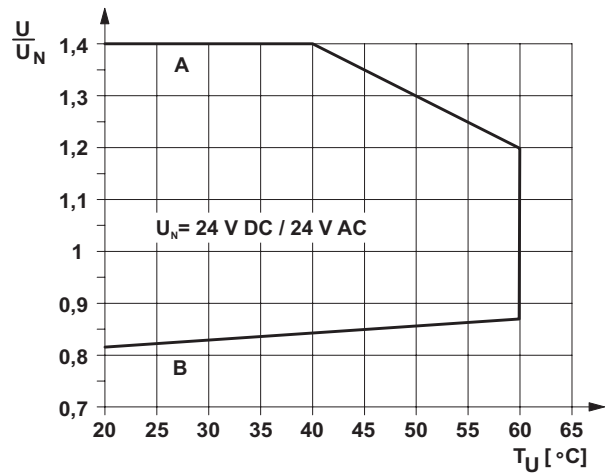
GL

Planned

4 Application Example



6 Operating Voltage Range



General Conditions

Direct alignment in the block, all devices 100% operating factor, horizontal or vertical mounting.

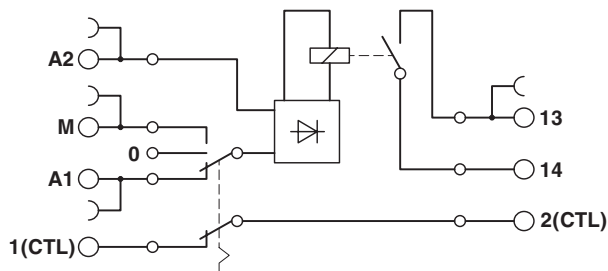
Curve A

Maximum permissible continuous voltage U_{max} with limiting continuous current on the contact side

Curve B

Minimum permissible relay operate voltage U_{op} following pre-excitation

5 Block Diagram



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