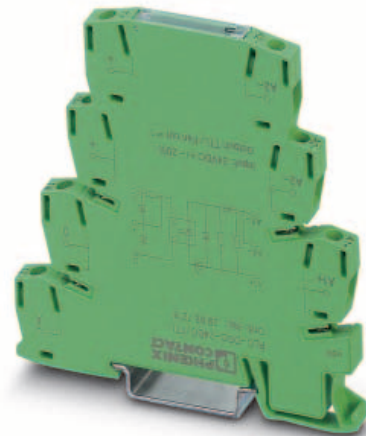


PLC-OS...-24DC/TTL

PLC INTERFACE With Integrated Solid-State Relay and TTL Output (5 V)



INTERFACE

Data Sheet
103248_en_01

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Description

The 6.2 mm **PLC-OS...-24DC/TTL** PLC INTERFACE module with screw or spring-cage connection has an integrated solid-state relay.

The module operates with an input voltage of 24 V DC. A further advantage is the ready-integrated input circuit. It comprises a status indicator, polarity protection function and surge protection function, and ensures that the operating state is displayed clearly, also preventing destruction of the optical electronics should the polarity be accidentally reversed.

Plug-In Bridges Save Wiring

The PLC INTERFACE module achieves maximum efficiency with the user-friendly FBST plug-in bridge system. PLC-OS...-24DC/TTL makes effective use of the bridging options for the A1/A2 connection on the control side and for the supply at connections 0 and + on the load side. 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.

Additional Advantages

- Switching capacity TTL (5 V), fan out = 1
- Integrated input circuit
- Wear-resistant switching
- Resistant to vibrations and shocks
- Inflammability class V0 in accordance with UL94





Make sure you always use the 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:

Ordering Data

PLC INTERFACE

Description	Type	Order No.	Pcs./Pck.
PLC INTERFACE with integrated solid-state relay, input voltage 24 V DC, output: TTL (5 V), for mounting on  , with screw connection	PLC-OSC-24DC/TTL	2982728	10
PLC INTERFACE with integrated solid-state relay, input voltage 24 V DC, output: TTL (5 V), for mounting on  , with spring-cage connection	PLC-OSP-24DC/TTL	2982731	10

Accessories

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



The PLC-ATP BK partition 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.

Technical Data

Input Data	
Nominal input voltage U_N	24 V DC
Permissible range (with reference to U_N)	0.8 ... 1.2 x U_N
Switching level	
1 signal ("H")	> 0.8 x U_N
0 signal ("L")	< 0.4 x U_N
Typical input current at U_N	3.4 mA
Typical response time at U_N	35 μ s
Typical release time at U_N	35 μ s
Transmission frequency f_{limit}	1 kHz
Input circuit	Yellow LED, polarity protection, surge protection
Surge protection	> 33 V
Output Data	
Nominal output supply voltage U_{VN}	5 V DC
Permissible range (with reference to U_{VN})	0.9 ... 1.2 x U_{VN}
Limiting continuous current	TTL load (fan out = 1)
Output configuration	3-conductor, ground referenced
Output circuit	Polarity protection ¹ , surge protection
Voltage drop at maximum limiting continuous current	≤ 80 mV
Surge protection	> 8 V

¹ Use a fuse to prevent short circuit in the event of polarity reversal.

General Data

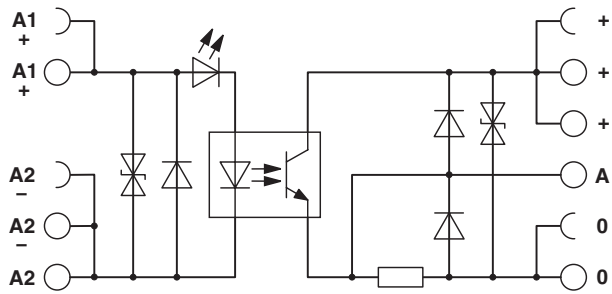
Rated insulation voltage	250 V
Impulse voltage withstand level	4 kV
Ambient temperature range	-20°C - 60°C
Nominal operating mode	100% operating factor
Inflammability class in accordance with UL 94 (housing)	V0
Air and creepage distances between the circuits	
Basic insulation ¹	DIN EN 50178
Degree of pollution	2
Surge voltage category	III
Mounting position	Any
Mounting	Can be aligned without spacing
Conductor cross-section (solid and stranded)	
Screw connection	0.14 mm ² ... 2.5 mm ²
Spring-cage connection	0.2 mm ² ... 2.5 mm ²
Stripping length	8 mm
Dimensions (W x H x D)	6.2 mm x 86 mm x 80 mm
Housing material	Polyamide PA, color green

¹ The PLC-ATP BK partition plate must be installed for safe isolation between adjacent modules (see "Accessories"). Potential bridging is then carried out with FBST 8-PLC... or FBST 500....

Tests/Approvals

CE	CE
UL	Applied for

Block Diagram



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