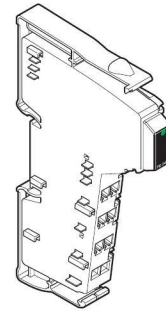


IB IL PD 24V (-PAC) IB IL PD GND (-PAC)

Terminal for 24 V or GND Potential Distribution

Data Sheet 687901

03/2003



6879A001



The IB IL PD ... and IB IL PD ... -PAC only differ in the scope of supply (see "Ordering Data" on page 6). Their function and technical data are identical.



These terminals do not have a protocol chip and are therefore not bus devices.



This data sheet is only valid in association with the IB IL SYS PRO UM E User Manual or the Inline System Manual for your bus system.

Features

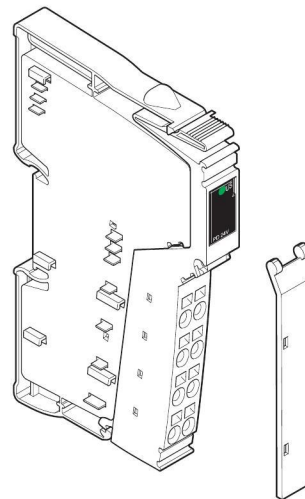
- Supply of the 24 V segment voltage U_S (IB IL PD 24V (-PAC))
- GND connections (IB IL PD GND (-PAC))

Function

The terminal is designed for use within an Inline station.

The **IB IL PD 24V (-PAC)** terminal supplies the 24 V supply voltage from the segment circuit (U_S). In this way, it can also provide the 24 V supply from U_S for sensors, which are connected to the IB IL 24 DI 32/HD terminal using 1-wire technology.

The **IB IL PD GND (-PAC)** terminal has eight GND connections. These can be used to connect actuators, which are connected to the IB IL 24 DO 32/HD terminal using 1-wire technology, to the internal GND.



6879A002

Figure 1 IB IL PD 24V-PAC terminal

687901

**PHENIX
CONTACT**

1

IB IL PD 24V (-PAC)/IB IL PD GND (-PAC)

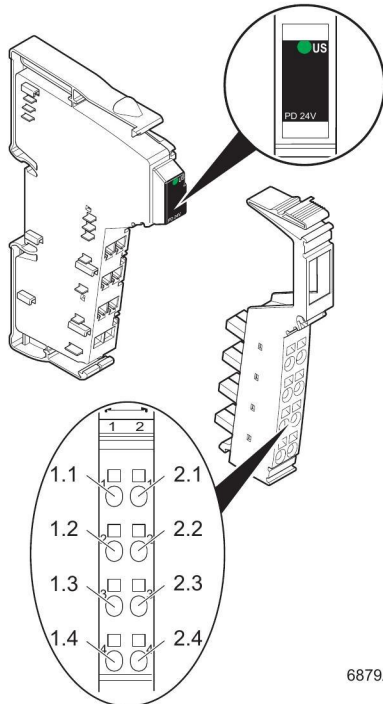


Figure 2 IB IL PD 24V (-PAC)
with appropriate connector

Function Identification

Black

Connector Labeling

IB IL PD 24V (-PAC): Red

IB IL PD GND (-PAC): Blue

Local LED Diagnostic Indicators

IB IL PD 24V (-PAC)

| Des. | Color | Meaning |
|------|-------|---|
| US | Green | 24 V voltage (in the segment circuit U_S) |

IB IL PD GND (-PAC)

No indicators

IB IL PD 24V (-PAC) Terminal Assignment

| Terminal Point | Assignment |
|---|---|
| 1.1, 2.1, 1.2, 2.2, 1.3, 2.3, 1.4, 2.4 | Discharge points from the segment circuit U_S (+24 V) |

IB IL PD GND (-PAC) Terminal Assignment

| Terminal Point | Assignment |
|---|--|
| 1.1, 2.1, 1.2, 2.2, 1.3, 2.3, 1.4, 2.4 | Ground contact (GND) The reference potential is directly connected with the GND potential jumper. |

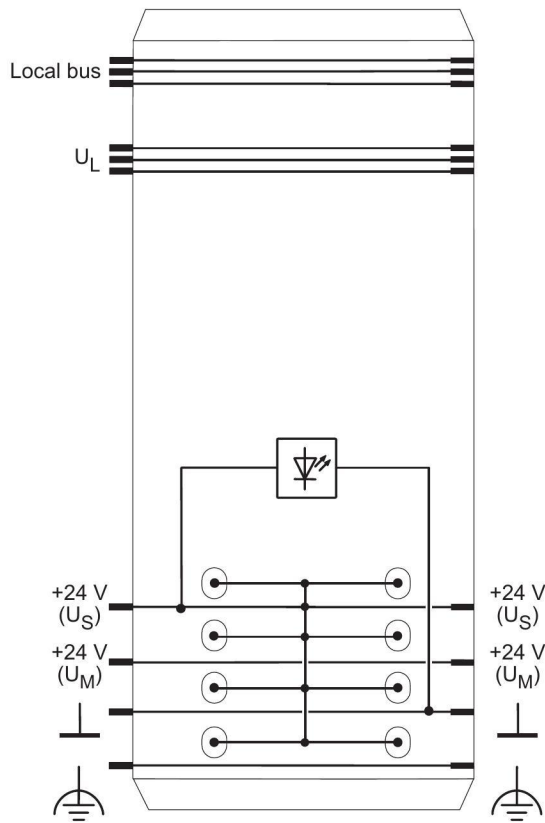


Observe the current carrying capacity

The maximum total current of the potential jumpers (total current $U_M/U_S/GND$) must not exceed 8 A.

Internal Circuit Diagram

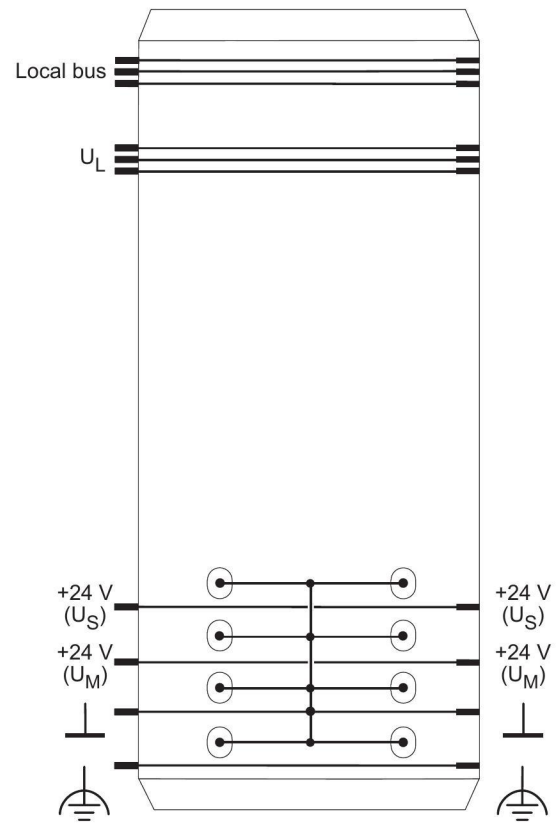
IB IL PD 24V (-PAC)



6879A004

Figure 3 Internal wiring of the terminal points

IB IL PD GND (-PAC)



6879A005

Figure 4 Internal wiring of the terminal points

Key:



Other symbols are explained in the IB IL SYS PRO UM E User Manual or in the Inline System Manual for your bus system.

Connection Example




For connection examples, please refer to the data sheets for the IB IL 24 DI 32-HD and IB IL 24 DO 32-HD terminals.

Technical Data

| General Data | |
|--|--|
| Order Designation (Order No.) | IB IL PD 24V (-PAC) (28 62 99 0) IB IL PD GND (-PAC) (28 62 98 7) |
| Housing dimensions (width x height x depth) | 12.2 mm x 120 mm x 71.5 mm (0.480 x 4.724 x 2.815 in.) |
| Weight | 44 g (without connectors) |
| Permissible temperature (operation) | -25°C to +55°C (-13°F to +131°F) |
| Permissible temperature (storage/transport) | -25°C to +85°C (-13°F to +185°F) |
| In the range from -25°C to +55°C (-13°F to +131°F) appropriate measures against increased humidity (> 85%) must be taken. | |
| Permissible humidity (storage/transport) | 75% on average, 85% occasionally |
| For a short period, slight condensation may appear on the outside of the housing if, for example, the terminal is brought into a closed room from a vehicle. | |
| Permissible air pressure (operation) | 80 kPa to 106 kPa (up to 2000 m [6562 ft.] above sea level) |
| Permissible air pressure (storage/transport) | 70 kPa to 106 kPa (up to 3000 m [9843 ft.] above sea level) |
| Degree of protection | IP 20 according to IEC 60529 |
| Class of protection | Class 3 according to VDE 0106, IEC 60536 |

| Safety Measures | |
|---|----|
| Overload/short circuit in the segment circuit | No |
| Surge voltage | No |
| Polarity reversal | No |

| Electrical Isolation/Isolation of the Voltage Areas | |
|---|---|
|  | To provide electrical isolation between the logic level and the I/O area, it is necessary to supply these areas via the bus terminal or via the bus terminal and a power terminal from separate power supply units. Interconnection of the 24 V power supply units is not permitted. Please pay attention to GND/PE connections on the power supply units (see also user manual). |



| Common Potentials |
|--|
| The 24 V main voltage, 24 V segment voltage, and GND have the same potential. FE is a separate potential area. |

| Separate Potentials in the System Consisting of Bus Terminal/Power Terminal and I/O Terminal | |
|--|-------------------------|
| - Test Distance | - Test Voltage |
| 5 V supply incoming remote bus/7.5 V supply (bus logic) | 500 V AC, 50 Hz, 1 min. |
| 5 V supply outgoing remote bus/7.5 V supply (bus logic) | 500 V AC, 50 Hz, 1 min. |
| 7.5 V supply (bus logic)/24 V supply (I/O) | 500 V AC, 50 Hz, 1 min. |
| 24 V supply (I/O)/functional earth ground | 500 V AC, 50 Hz, 1 min. |

| Error Messages to the Higher-Level Control or Computer System |
|---|
| None |

IB IL PD 24V (-PAC)/IB IL PD GND (-PAC)

Ordering Data

| Description | Order Designation | Order No. |
|---|--------------------|------------|
| Terminal for 24 V potential distribution; including connectors and labeling field | IB IL PD 24V-PAC | 28 62 98 7 |
| Terminal for 24 V potential distribution | IB IL PD 24V | 28 63 05 4 |
|  <div style="background-color: yellow; padding: 5px; border: 1px solid black;"> The listed connector is needed for the complete fitting of the IB IL PD 24V terminal. </div> | | |
| Connector with eight terminals, spring-cage connection (green, with color print); pack of 10 | IB IL SCN-8/ 24V | 28 63 03 8 |
| Terminal for GND potential distribution; including connectors and labeling field | IB IL PD GND-PAC | 28 62 99 0 |
| Terminal for GND potential distribution | IB IL PD GND | 28 63 06 7 |
|  <div style="background-color: yellow; padding: 5px; border: 1px solid black;"> The listed connector is needed for the complete fitting of the IB IL PD GND terminal. </div> | | |
| Connector with eight terminals, spring-cage connection (green, with color print); pack of 10 | IB IL SCN-8/GND | 28 63 04 1 |
| "Configuring and Installing the INTERBUS Inline Product Range" User Manual | IB IL SYS PRO UM E | 27 43 04 8 |



Make sure you always use the latest documentation.
 This is available on the Internet at www.phoenixcontact.com.

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