

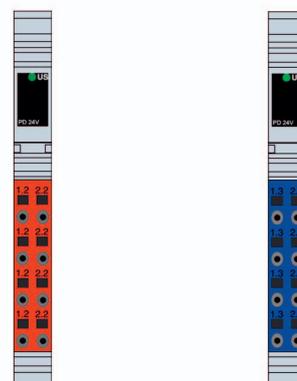
Terminal for Potential Distribution 24 V or GND

R911334603
 Edition 02

Data Sheet R-IB IL PD 24V-PAC / R-IB IL PD GND-PAC

Potential terminal for 24 V or GND

05/2014



1 Function Description

The terminal is designed for use within an Inline station.

The **R-IB IL PD 24V-PAC** terminal enables the 24 V supply voltage to be supplied from the segment circuit (U_S). It thus enables the 24 V supply for sensors from U_S , which are connected to an Inline terminal (e.g., R-IB IL 24 DI 32/HD-PAC) using 1-wire technology.

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

Features

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



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



This data sheet is only valid in association with the “Automation Terminals of the Rexroth Inline Product Range” application description (DOK-CONTROL-ILSYSINS***-AW..-EN-P, MNR R911317021).



Make sure you always use the latest documentation.

It can be downloaded at
www.boschrexroth.com/electrics.

2 Ordering Data

Products

Description	Type	MNR	Pcs. / Pkt.
Rexroth Inline terminal for potential distribution 24 V; complete with accessories (connectors and labeling fields)	R-IB IL PD 24V-PAC	R911297189	1
Terminal for potential distribution GND; complete with accessories (connectors and labeling fields)	R-IB IL PD GND-PAC	R911297193	1

Documentation

Description	Type	MNR	Pcs. / Pkt.
"Automation Terminals of the Rexroth Inline Product Range" application description	DOK-CONTRL-ILSYSINS***-AW..-EN-P	R911317021	1



For additional ordering data (accessories), please refer to the product catalog at www.boschrexroth.com/electrics.

3 Technical Data

General data

Housing dimensions (width x height x depth)	12.2 x 119.8 x 71.5 mm
Weight	44 g (without connectors)
Permissible temperature (operation)	-25°C ... +55°C
Permissible temperature (storage/transport)	-25°C ... +85°C
Permissible humidity (operation/storage/transport)	10% ... 95% (according to DIN EN 61131-2)
Permissible air pressure (operation)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Permissible air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Degree of protection	IP20
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Connection data for Inline connectors	
Connection method	Spring-cage terminal blocks
Conductor cross section	0.2 mm ² ... 1.5 mm ² (solid or stranded), 24 - 16 AWG

Safety equipment

Overload/short circuit in the segment circuit	None
Surge voltage	None
Polarity reversal	None

Electrical isolation/isolation of the voltage areas

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

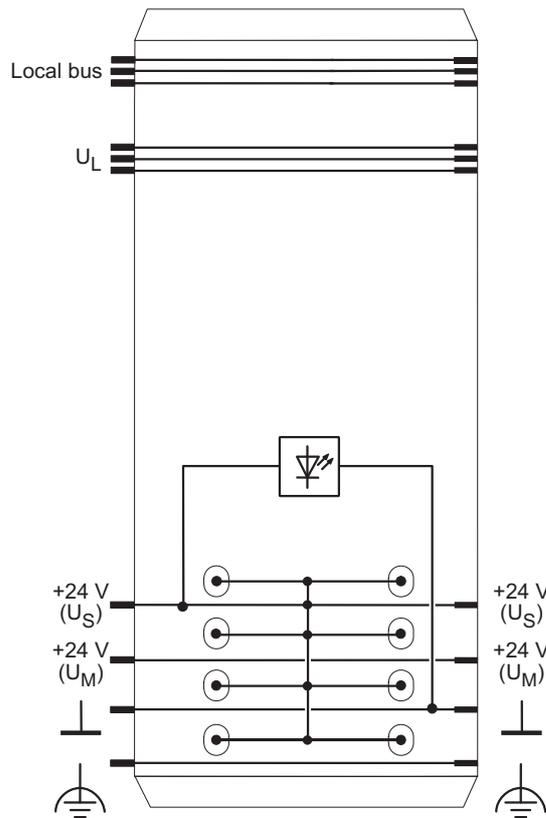
None

Approvals

For the latest approvals, please visit www.boschrexroth.com.

4 Internal Basic Circuit Diagram

4.1 R-IB IL PD 24V-PAC



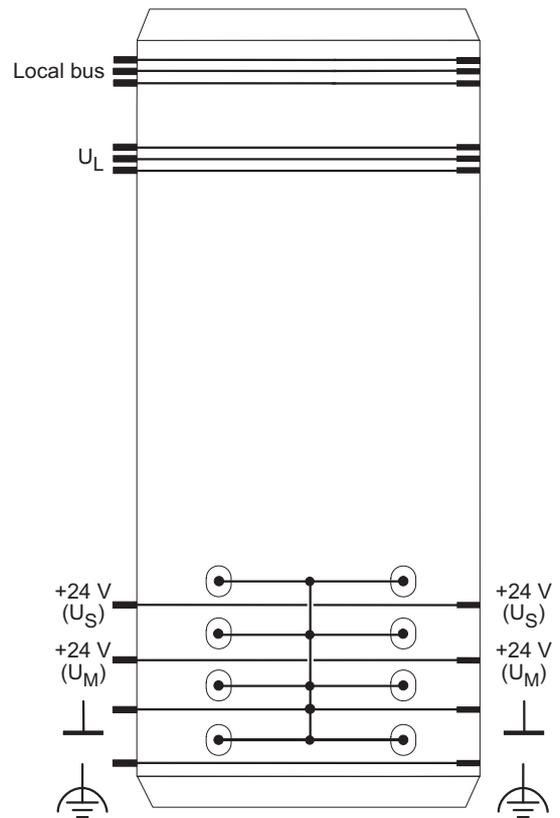
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Fig. 1 Internal wiring of the terminal points

Key:



4.2 R-IB IL PD GND-PAC



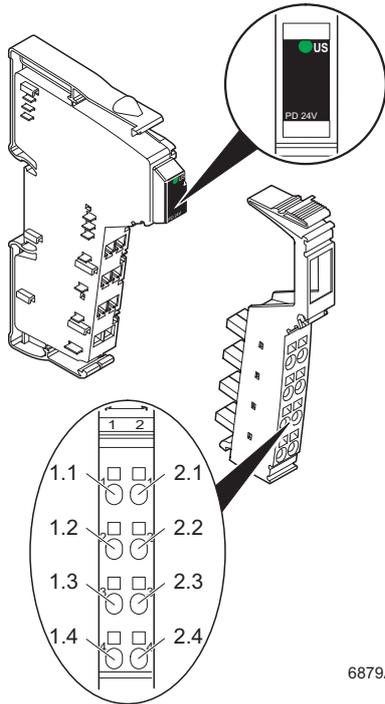
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Fig. 2 Internal wiring of the terminal points



Other symbols used are explained in the application descriptions for the Rexroth Inline system (see ["Documentation" on page 2](#)).

5 Local Diagnostics Indicators and Terminal Point Assignment



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Fig. 3 R-IB IL PD 24V-PAC

5.1 Local Diagnostics Indicators

R-IB IL PD 24V-PAC

Des.	Color	Meaning
US	Green	24 V supply (in the segment circuit U_S)

R-IB IL PD GND-PAC

No display

5.2 Function Identification

Black

5.3 Connector Labeling

R-IB IL PD 24V-PAC: Red

R-IB IL PD GND-PAC: Blue

5.4 R-IB IL PD 24V-PAC Terminal Point 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)

5.5 R-IB IL PD GND-PAC Terminal Point 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 to the GND potential jumper.

NOTICE

Observe the current carrying capacity

Make sure that the maximum total current through the potential jumpers $U_M/U_S/GND$ does not exceed 8 A.

6 Connection Example



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