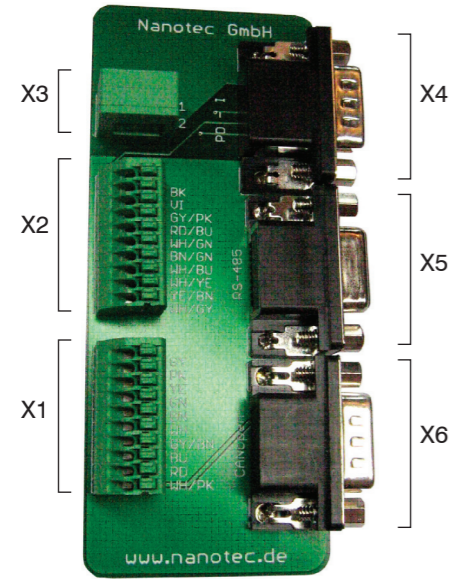


■ Additional board ZIB-PDx-N for PDx-N Plug & Drive motors



**PDx-N Data 1 (X1)**

Pin	Function
GY	RS485 TX+
PK	RS485 TX-
YE	RS485 RX-
GN	RS485 RX+
BN	CAN+
WH	CAN-
GY/BN	Signal GND
BU	GND
RD	GND
WH/PK	+UB external

**PDx-N Data 2 (X2)**

Pin	Function
BK	Input 1
VT	Input 2
GY/PK	Input 3
RD/BU	Input 4
WH/GN	Input 5
BN/GN	Input 6
WH/BU	Analog Input
WH/YE	Output 1
YE/BN	Output 2
WH/GY	Output 3

**PDx-N supply (X3)**

Pin	Function
1	+UB
2	Power GND

■ Caution: Only suitable for support during commissioning and test operation.

**Technical data**

**Operating voltage:** DC 24 to 48 V  
**Interface:** RS485 or CANopen  
**Temperature range:** 0 to + 40 °C

**Information on the application**

**Connection of voltage supply (X4)**  
 The voltage supply must be ensured via 2 connectors each:  
 Pin 6, 11: 24-48V  
 Pin 10, 15: Power GND

**Communication**  
 Optionally communication can be made via a CAN bus (connector X6) or an RS485 bus (connector X5). The connection is only possible via the converter cable ZK-RS485-USB.

**Inputs/Outputs**  
 All inputs and outputs are made available via the X4 connector.

**PD-I (X4)**

Pin	Function
1	Input 5
2	Input 4
3	Input 3
4	Input 2
5	Input 1
6	+UB24-48V
7	Input 6
8	Output 3
9	Signal GND
10	Power GND
11	+UB24-48V
12	Analog Input
13	Output 2
14	Output 1
15	Power GND

**RS-485 (X5)**

Pin	Function
1	NC
2	RX+
3	NC
4	TX+
5	NC
6	NC
7	RX-
8	GND
9	TX-

**CANopen (X6)**

Pin	Function
1	NC
2	CAN-
3	GND
4	NC
5	NC
6	GND
7	CAN+
8	NC
9	+UB_Ext

■ Quick Start Guide

NANOTEC produces component parts that are deployed in a variety of industrial applications. The selection and application of NANOTEC products is the responsibility of the system constructor or end user. NANOTEC accepts no responsibility for the integration of the products in the end system.

Under no circumstances may a NANOTEC product be integrated as the sole safety control in a product or construction. All positioning controls without exception must be designed so that errors are detected dynamically and fail-safe under all circumstances. All products which contain a component part manufactured by NANOTEC must show appropriate warning notices and instructions for a safe application and safe operation on delivery to the end user. All warning notices provided by NANOTEC must be immediately passed on to the end user.

NANOTEC only accepts an express warranty for the quality of its own products in agreement with the standards and specifications as they appear in the NANOTEC manual. ALL OTHER IMPLICIT and EXPLICIT WARRANTIES ARE EXCLUDED. NANOTEC assumes no liability for injuries, product damage, loss or claims that arise through incorrect application of the products.

**Safety instructions**

The symbols used in this manual are defined in the following in order to grade the safety instructions and to identify the degree of danger associated with it. Non compliance with the precautionary measures specified in this manual can lead to grave or even fatal injury, and/or personal damage, damage to products, facilities and systems.

**CAUTION**

Indicates a potentially dangerous situation that can lead to mortal or severe injury if they are not avoided.

**ATTENTION**

Indicates a potentially dangerous situation that can lead to minor or fairly serious injury if it is not avoided. The product is checked on delivery, installation, wiring, maintenance, inspection and during operation on the basis of following safety instructions.

**Installation**

**ATTENTION**

Do not use the products in environments where they are exposed to water, corrosive gases, inflammable gases or fuels. Otherwise there is a danger of electric shock or fire. Only use the ZIB printed circuit board for tests during the commissioning. It is not designed for permanent operation.

**Wiring**

**ATTENTION**

Make sure that the polarity of the power supply is correct. Otherwise the drive used can be damaged. Make sure that the wires mounted on the connector are correctly seated. Otherwise there is a danger of short-circuit or fire.

**Operation**

**ATTENTION**

Never touch rotating parts of the motor while the motor is running. Otherwise there is a danger of injury. Never touch the ZIB printed circuit board when the voltage supply is applied. Otherwise there is a danger of injury. Do not touch any of the motors during operation. Otherwise the high temperatures can cause panic reactions.

**Maintenance and inspection**

**ATTENTION**

Do not attempt to disconnect the plug connectors or cable while the voltage is switched on. There is a danger of electric shock. After switching off the voltage supply wait until the back-up capacitors have discharged. There is a danger of electric shock from the residual voltage. The ZIB printed circuit board is maintenance-free.

**General safety instructions**

**PAY ATTENTION TO THE FOLLOWING INSTRUCTIONS TO ENSURE SAFE APPLICATION:**

Some figures in this manual show the product with the protective covers or shielding removed. Always replace the protective cover or shielding as stated before putting the product into operation according to the specifications in the manual.

The figures in this manual are used as typical examples and can vary from your actual product.

The manual is subject to change as a result of product improvements, changes to the specifications and revision of the manual. If revisions are made to the manual, the version number is updated and the new manual is issued as a new edition.

If you would like to reorder a manual because of loss or damage, you can download it free of charge from the homepage at [www.nanotec.de](http://www.nanotec.de). If it is not available, please contact NANOTEC directly.

NANOTEC accepts no responsibility for results that arise from unauthorized changes to the product. NANOTEC assumes no liability for damage or failures that are caused by unauthorized changes.