

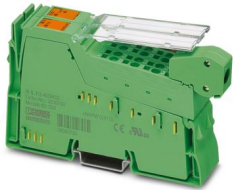
# IB IL RS 485/422-PRO-2MBD-PAC - Inline function terminal



2878887

<https://www.phoenixcontact.com/us/products/2878887>

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Inline RS-485/422 function terminal, for serial data transmission, 1 serial input and output channel in RS-485/422 design, pure process data communication, transmission speed 2 Mbaud

The figure shows the PAC version of the product

## Product description

Inline terminals with "2 MBD" added to their item designation work with a transmission speed of 2 Mbps. These terminal blocks are discontinued or no longer in the range. If you require this transmission speed, please ask your local Phoenix Contact representative. If you can work with a transmission speed of 500 kbps, select as a replacement the corresponding variant that does not have "2MBD" added to its item designation. Please note that a uniform transmission speed must always be used within one inline station.

## Your advantages

- 4 kbyte receive buffer and 1 kbyte transmit buffer
- Transmission speed can be set up to 38400 bps
- Various protocols supported
- 1 serial input and output channel as RS-485 or RS-422 version
- Number of data bits, stop bits and parity can be set

## Commercial data

Item number	2878887
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DRI151
GTIN	4046356084000
Weight per piece (including packing)	166.1 g
Weight per piece (excluding packing)	147.07 g
Customs tariff number	85389091
Country of origin	DE

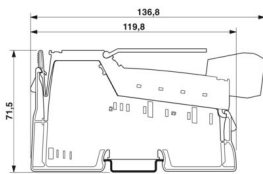
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## Technical data

### Dimensions

Dimensional drawing	
Width	24.4 mm
Height	136.8 mm
Depth	71.5 mm

### Material specifications

Color	green
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### Interfaces

#### Inline local bus

Connection method	Inline data jumper
Transmission speed	2 Mbps

#### RS-485 half duplex or RS-422 full duplex (as alternative only)

Connection method	Spring-cage connection
Transmission speed	110 bps ... 38400 bps (configurable)
Transmission physics	Copper
Data bits	7 or 8
Stop bits	1 or 2
Input buffer	4 kByte
Output buffer	1 kByte

### System properties

#### Programming data

Length code (hex)	06
ID code (dec.)	191
Length code (dec)	06
Process data channel	96 bit
Input address area	12 Byte
Output address area	12 Byte
Parameter channel (PCP)	0 Byte
Register length (bus)	96 bit

#### Fieldbus data telegram

Required parameter data	1 Byte
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Required configuration data	5 Byte
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## Product properties

Product type	I/O component
Product family	Inline
Type	modular
Number of plugs	2
Operating mode	Process data mode with 6 words

## Insulation characteristics

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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## Electrical properties

Test section	5 V supply, incoming remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	5 V supply, outgoing remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	RS-485/422 interface / 7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	RS-485/422 interface / 24 V supply (I/O) 500 V AC 50 Hz 1 min
	RS-485/422 interface/functional ground 500 V AC 50 Hz 1 min
	7.5 V supply (bus logics)/24 V supply (I/O) 500 V AC 50 Hz 1 min
	7.5 V supply (bus logic)/functional ground 500 V AC 50 Hz 1 min
	24 V supply (I/O) / functional ground 500 V AC 50 Hz

## Supply

I/O voltage	24 V DC
I/O voltage range	19.2 V DC ... 30 V DC (including ripple)
Residual ripple	± 1.2 V
Max. current consumption	260 mA
Typical current consumption	170 mA

## Potentials: Communications power ( $U_L$ )

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 260 mA (all connections of the serial interface are short-circuited)
	typ. 185 mA

## Connection data

### Connection technology

Connection name	Inline connector
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### Inline connector

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section AWG	28 ... 16

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Stripping length	8 mm
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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	75 % ... 85 % (in the range of -25°C ... +55°C, appropriate measures against increased humidity (> 85%) must be taken.)
Permissible humidity (storage/transport)	75 % ... 85 % (Slight temporary condensation may sometimes appear on the housing, e.g. when the terminal block is brought out of a vehicle into an enclosed room.)

## Mounting

Mounting type	DIN rail mounting
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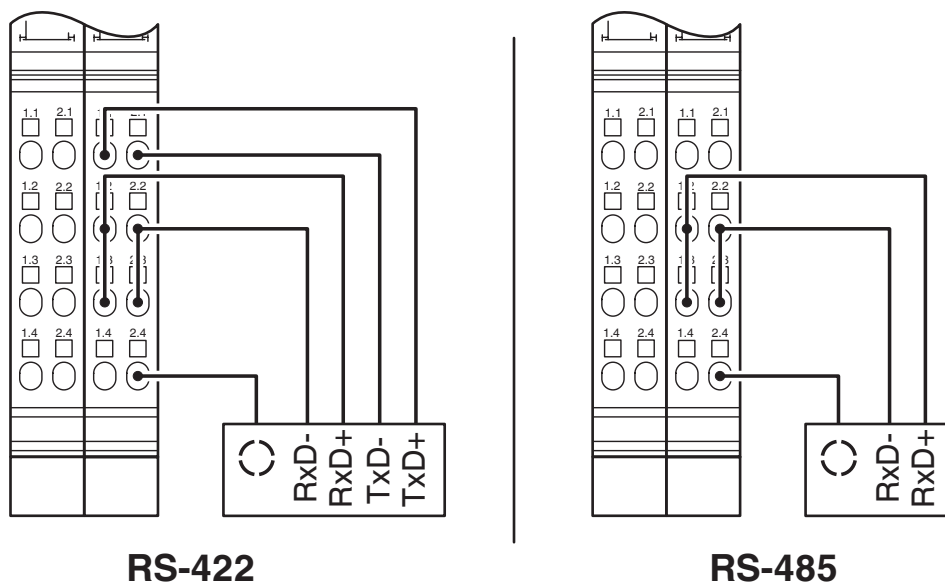
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## Drawings

Dimensional drawing



Connection diagram



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## Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	
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	No substance above 0.1 wt%
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