

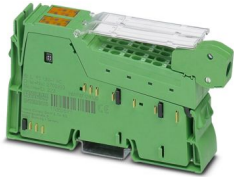
# IB IL RS UNI-2MBD-PAC - Communication module



2701025

<https://www.phoenixcontact.com/us/products/2701025>

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Inline, Communication module, Serial data transmission; interface: RS-232, RS-485, RS-422: 1 (be operated simultaneously); Transmission speed: 110 bps ... 250000 bps; transmission speed in the local bus: 2 Mbps; degree of protection: IP20; Scope of supply: including Inline connectors and marking fields

## 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. The terminal is designed for use within an Inline station. It is used to operate standard I/O devices with serial interfaces on a bus system.

## Your advantages

- A serial input and output channel in RS-232, RS-422, and RS-485 format
- Various protocols supported
- Transmission speed can be set up to 250000 bps
- Number of data bits, stop bits and parity can be set
- Parameterization via process data or PCP
- Process data width can be set via DIP switches: 7, 15 or 31 words

## Commercial data

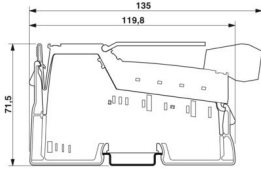
Item number	2701025
Packing unit	1 pc
Sales key	DR01
Product key	DRI151
GTIN	4046356681773
Weight per piece (including packing)	174.3 g
Weight per piece (excluding packing)	135 g
Customs tariff number	85389091
Country of origin	DE

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## Technical data

### Dimensions

Dimensional drawing		
Width		24.3 mm
Height		135.4 mm
Depth		71.5 mm

### Notes

#### Note on application

Note on application	Only for industrial use
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### Interfaces

#### Inline local bus

Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	2 Mbps

#### RS-232, RS-485, RS-422

Number of interfaces	1 (be operated simultaneously)
Connection method	Spring-cage connection
Note on the connection method	Use shielded cables.
Transmission speed	110 bps ... 250000 bps (can be parameterized)
Transmission physics	Copper
Protocols supported	Transparent, end-to-end, XON/XOFF
Termination resistor	typ. 120 Ω (active, integrated)
Data bits	5 ... 8
Stop bits	1 or 2
Input buffer	4 kByte
Output buffer	1 kByte

### System properties

#### Module

ID code (dec.)	223
ID code (hex)	DF
Length code (hex)	1F
Length code (dec)	31

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Process data channel	496 bit
Input address area	max. 62 Byte
Output address area	max. 62 Byte
Register length	64 Byte
Required parameter data	23 Byte
Required configuration data	5 Byte

## Product properties

Product type	I/O component
Product family	Inline
Type	modular
Scope of supply	including Inline connectors and marking fields

## Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

## Electrical properties

Maximum power dissipation for nominal condition	max. 1.3 W
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## Potentials

Power consumption	max. 1.3 W (at $U_L$ and $U_M$ , within the permissible operating temperature)
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## Potentials: Communications power ( $U_L$ )

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 90 mA (all connections of the serial interface are short-circuited) typ. 78 mA
Power consumption	typ. 585 mW

## Potentials: Main circuit supply ( $U_M$ )

Supply voltage	24 V DC (via voltage jumper)
Current draw	max. 25 mA typ. 15 mA

## Electrical isolation/isolation of the voltage ranges

Test voltage: Serial interface/7.5 V supply (bus logic)	500 V AC, 50 Hz, 1 min
Test voltage: Serial interface/24 V supply $U_M$	500 V AC, 50 Hz, 1 min
Test voltage: Serial interface/functional ground	500 V AC, 50 Hz, 1 min
Test voltage: 7.5 V supply (bus logic)/functional ground	500 V AC, 50 Hz, 1 min
Test voltage: 24 V supply ( $U_M$ )/functional ground	500 V AC, 50 Hz, 1 min

## 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
Stripping length	8 mm

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Degree of protection	IP20
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

## Standards and regulations

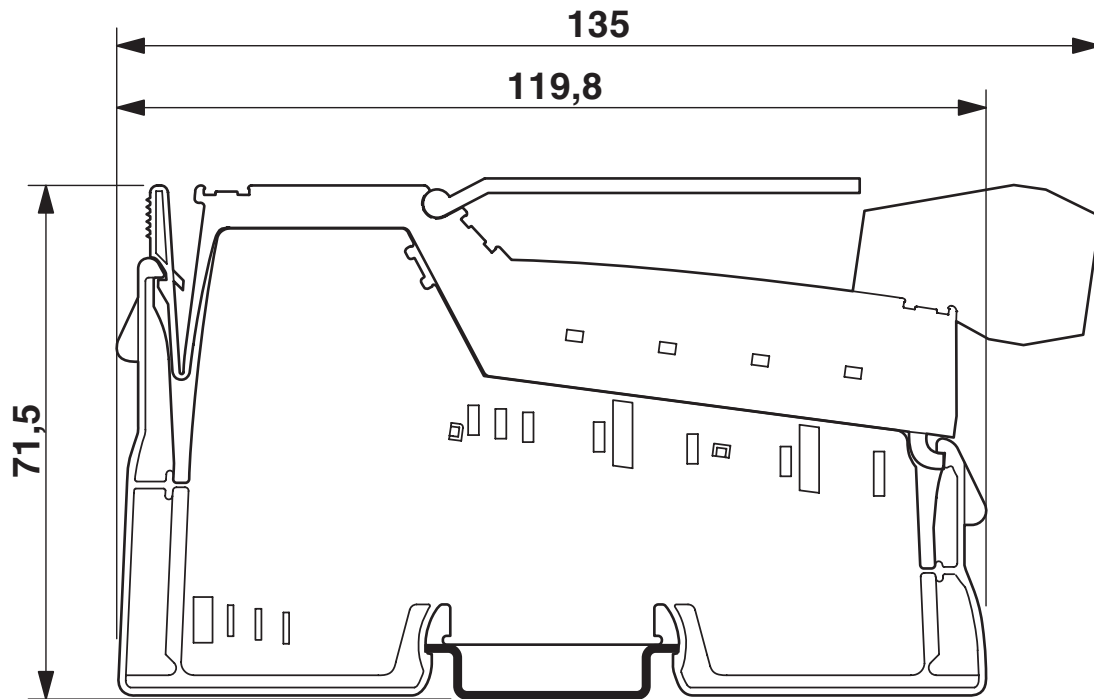
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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## Mounting

Mounting type	DIN rail mounting
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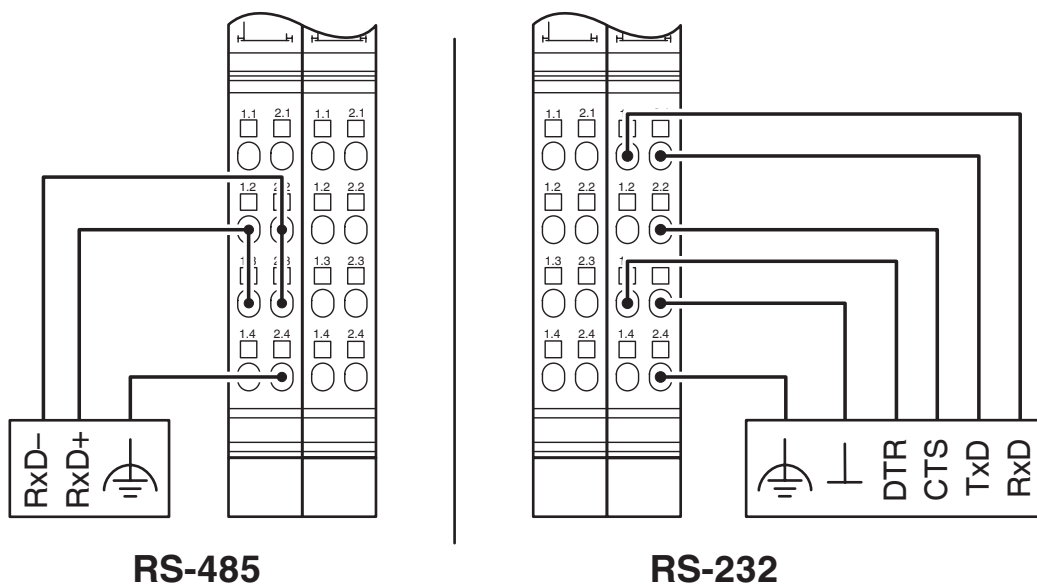
## Drawings

Dimensional drawing

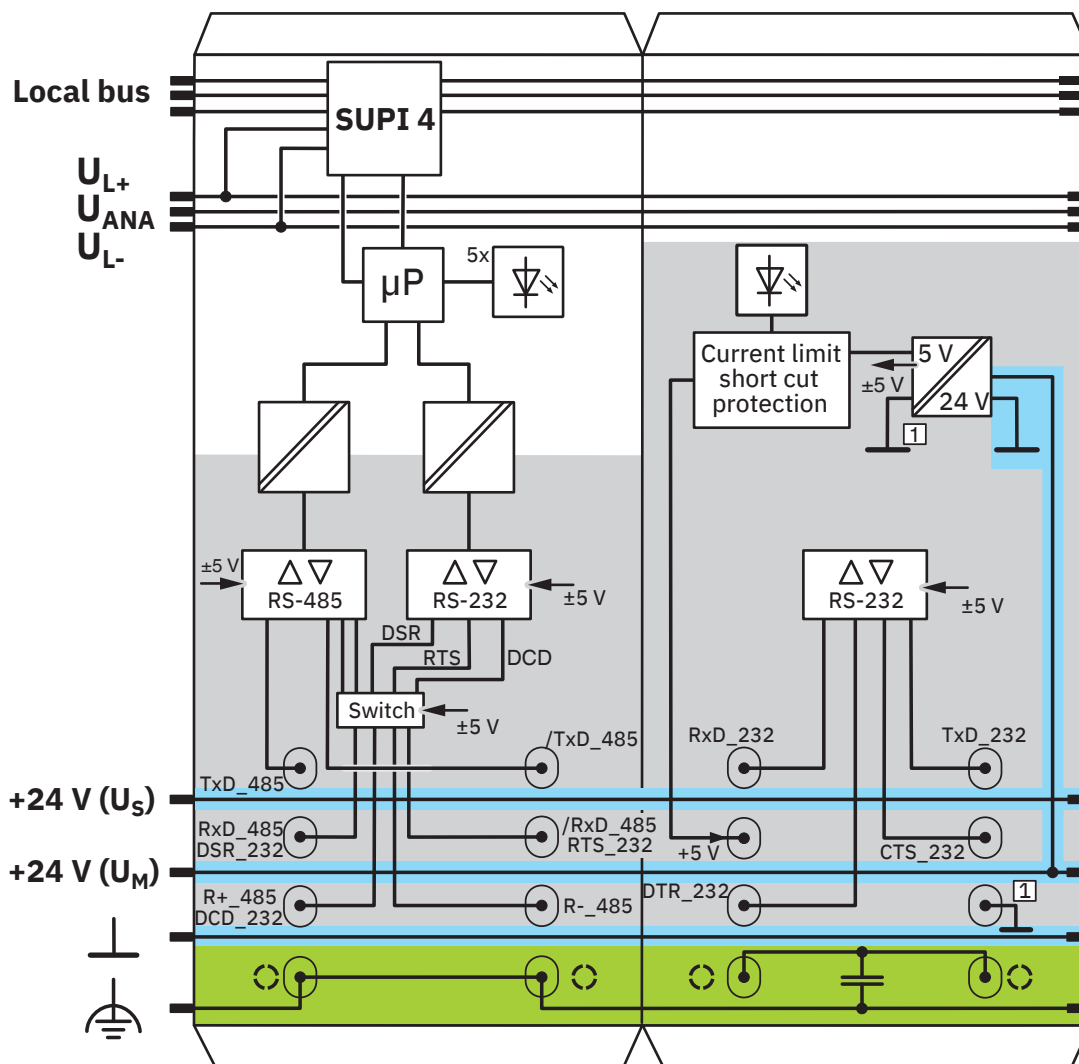


## Dimensions

Connection diagram



Block diagram



Internal wiring of the terminal points

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## Classifications

### ECLASS

ECLASS-13.0

27242608

### ETIM

ETIM 9.0

EC001604

### UNSPSC

UNSPSC 21.0

32151600

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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
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