

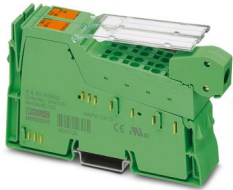
IB IL RS 485/422-PAC - Communication module



2861933

<https://www.phoenixcontact.com/us/products/2861933>

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Inline, Communication terminal, interface RS-485, RS-422: 1 (be operated simultaneously), Communication via PCP, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields

Product description

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

Your advantages

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

Commercial data

Item number	2861933
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI151
GTIN	4017918894627
Weight per piece (including packing)	150.06 g
Weight per piece (excluding packing)	135 g
Customs tariff number	85389091
Country of origin	DE

Technical data

Dimensions

Dimensional drawing	
Width	24.4 mm
Height	135 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	500 kbps

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 ... 38400 bps (can be parameterized)
Transmission physics	Copper
Protocols supported	Transparent, end-to-end, XON/XOFF, dual buffer, 3964R, Modbus/RTU, Modbus/ASCII
Termination resistor	typ. 120 Ω (active, integrated)
Data bits	7 or 8
Stop bits	1 or 2
Input buffer	4 kByte
Output buffer	1 kByte

System properties

Module

ID code (dec.)	220
ID code (hex)	DC
Length code (hex)	01

Length code (dec)	01
Process data channel	16 bit
Input address area	2 Byte
Output address area	2 Byte
Register length	6 Byte
Required parameter data	27 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
Operating mode	Process data operation with 1 word, PCP with 2 words
Special properties	Communication via PCP

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	2 W
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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. 170 mA

Electrical isolation/isolation of the voltage ranges

Test voltage: RS-485/422 interface / 7.5 V supply (bus logics)	500 V AC, 50 Hz, 1 min
Test voltage: RS-485/422 interface / 24 V supply (I/O)	500 V AC, 50 Hz, 1 min
Test voltage: RS-485/422 interface/functional ground	500 V AC, 50 Hz, 1 min
Test voltage: 7.5 V supply (bus logics)/24 V supply (I/O)	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 (I/O) / functional ground	500 V AC, 50 Hz, 1 min

Connection data

Connection technology

Connection name	Inline connector
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Conductor connection

Connection method	Spring-cage connection
Conductor cross-section rigid	0.08 mm² ... 1.5 mm²
Conductor cross-section flexible	0.08 mm² ... 1.5 mm²
Conductor cross-section AWG	28 ... 16

Stripping length	8 mm
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Inline connector

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.08 mm² ... 1.5 mm²
Conductor cross-section, flexible	0.08 mm² ... 1.5 mm²
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

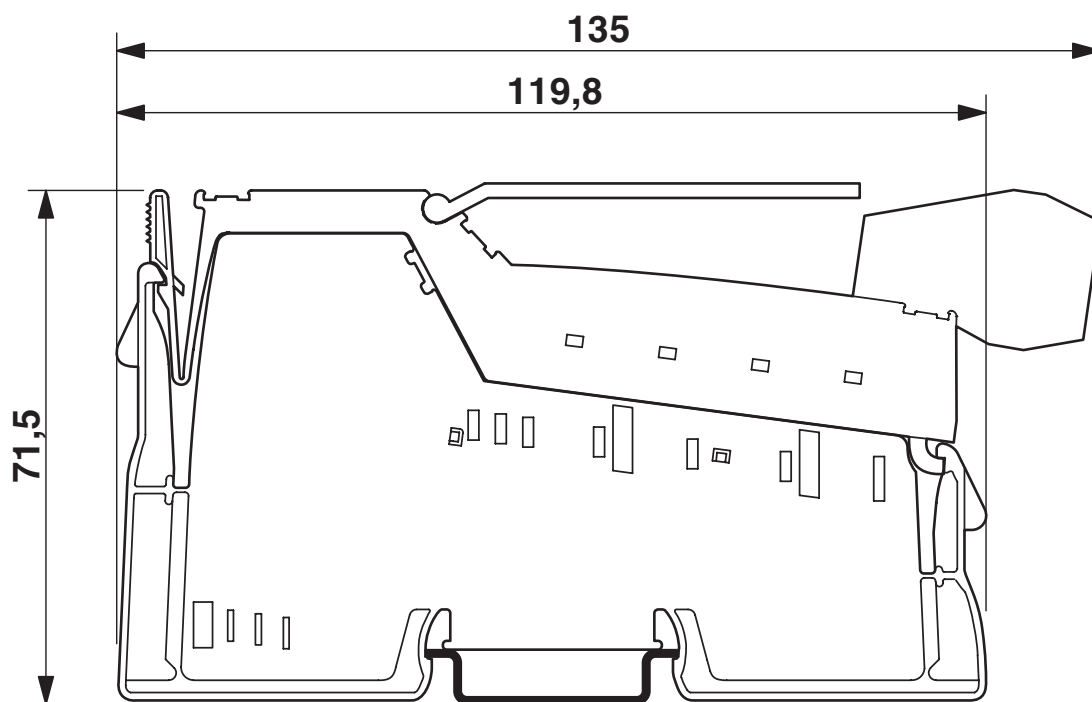
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

Mounting type	DIN rail mounting
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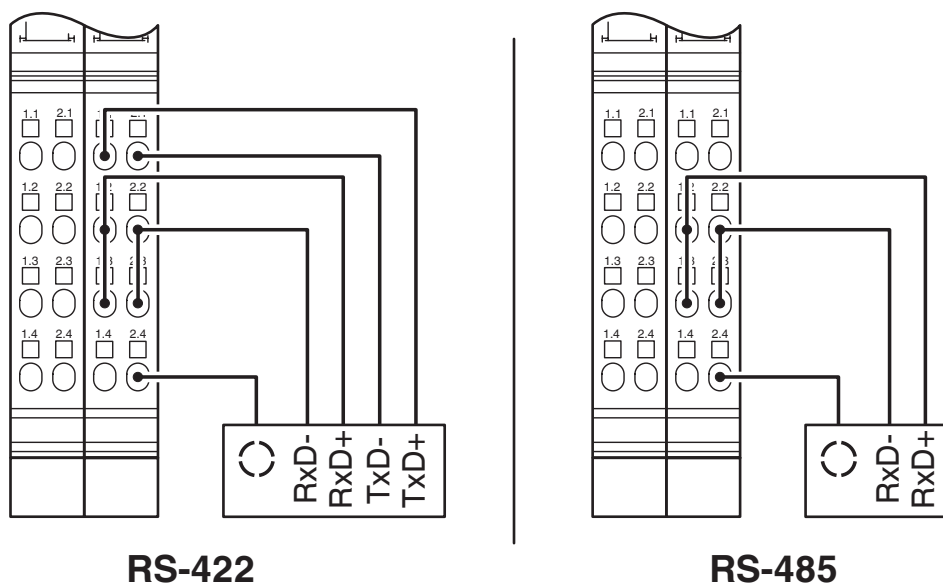
Drawings

Dimensional drawing

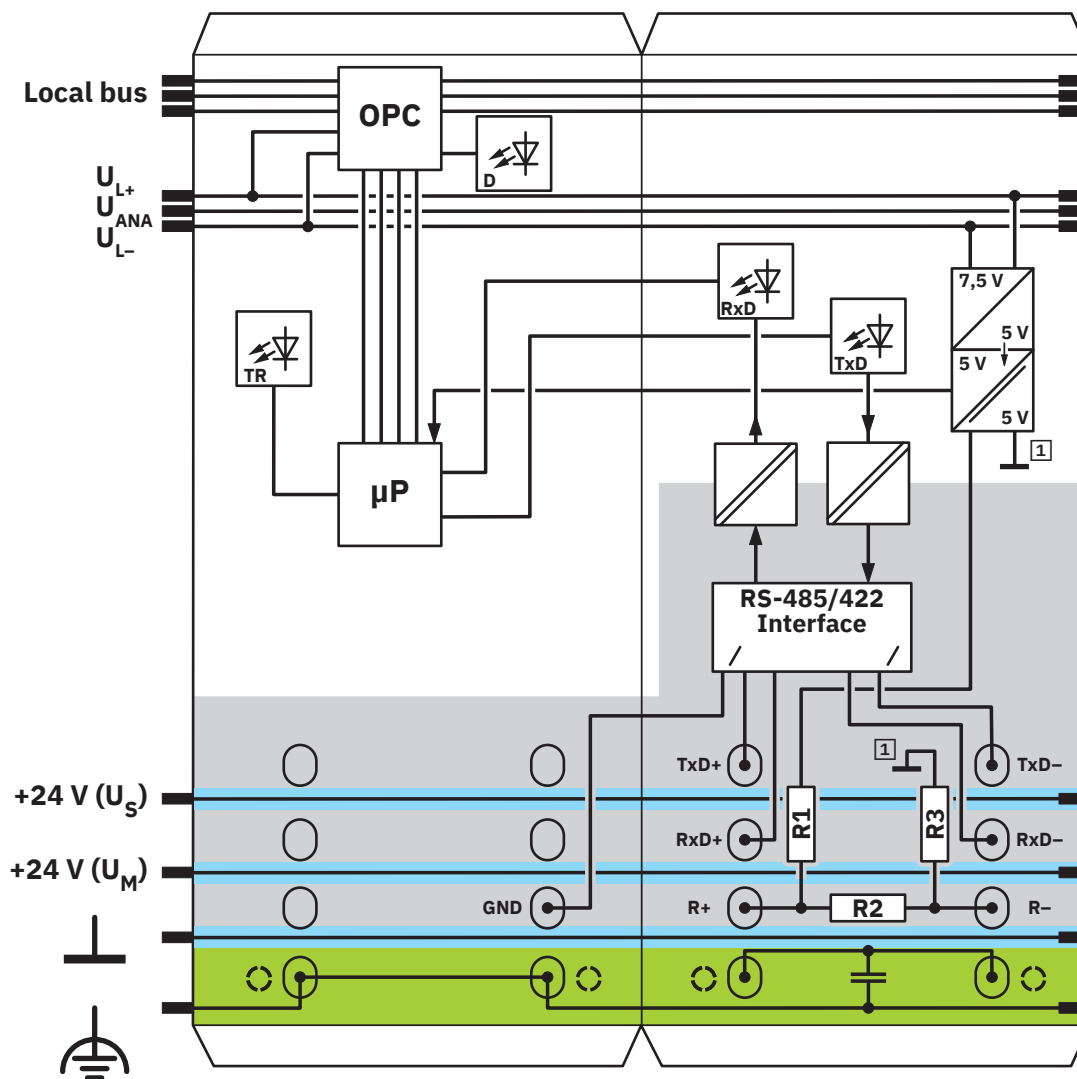


Dimensions

Connection diagram



Block diagram



Internal wiring of the terminal points

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2861933>



DNV GL

Approval ID: TAA00000BN



LR

Approval ID: LR23398855TA



BV

Approval ID: 21595/C1 BV



RINA

Approval ID: ELE121121XG

ABS

Approval ID: 22-2226444-PDA



cULus Recognized

Approval ID: E140324

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Classifications

ECLASS

ECLASS-13.0	27242608
ECLASS-15.0	27242608

ETIM

ETIM 9.0	EC001604
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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)
SCIP	7614eddc-f37b-4d56-9887-efb072384324