

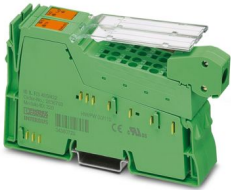
IB IL RS 485/422-PAC - Communication module



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

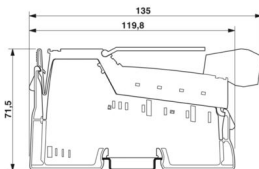
- 1 serial input and output channel as RS-485 or RS-422 version
- Various protocols supported
- Transmission speed can be set up to 38400 bps
- Number of data bits, stop bits and parity can be set
- 4 kbyte receive buffer and 1 kbyte transmit buffer
- Parameterization and data exchange via PCP

Commercial data

Item number	2861933
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI151
Catalog page	Page 229 (C-8-2013)
GTIN	4017918894627
Weight per piece (including packing)	160.06 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

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

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Required parameter data	27 Byte
Required configuration data	5 Byte

Product properties

Type	modular
Product type	I/O component
Product family	Inline
Scope of delivery	including Inline connectors and marking fields
Operating mode	Process data operation with 1 word, PCP with 2 words

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. 2 W
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Potentials

Power consumption	max. 2 W (at U_L , 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. 260 mA (all connections of the serial interface are short-circuited)
	typ. 170 mA
Power consumption	typ. 1.275 W

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 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.08 mm ² ... 1.5 mm ²
Conductor cross section AWG	28 ... 16
Stripping length	8 mm

Inline connector

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Connection method	Spring-cage connection
Conductor cross section, rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross section, flexible	0.08 mm ² ... 1.5 mm ²
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

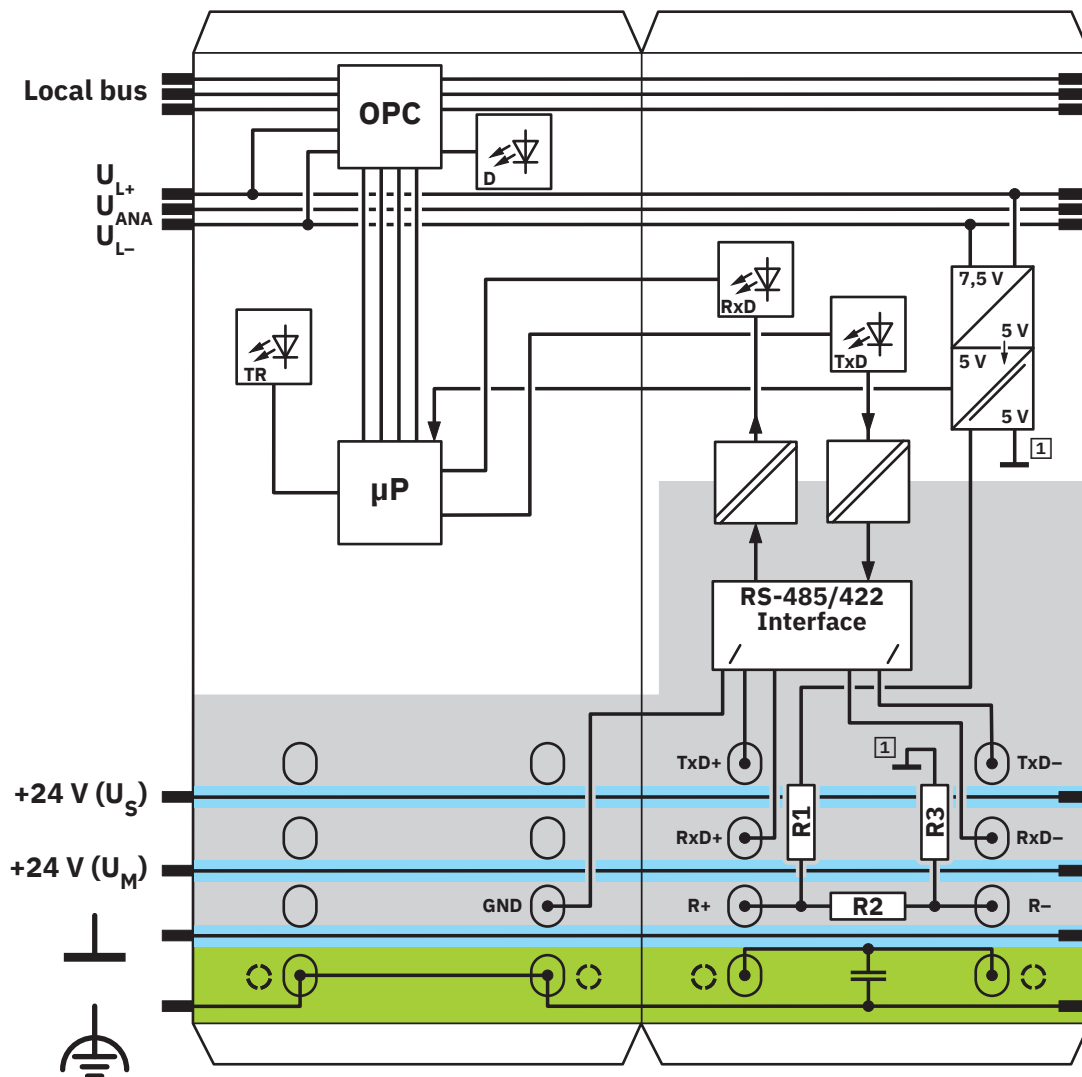
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

Mounting type	DIN rail mounting
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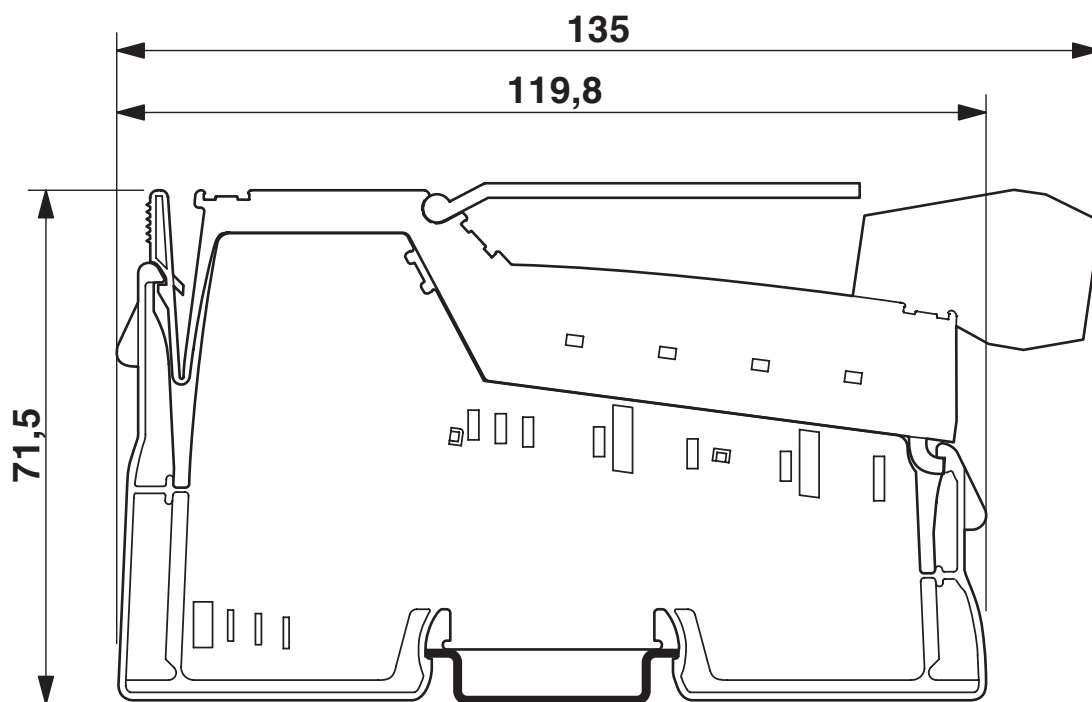
Drawings

Block diagram



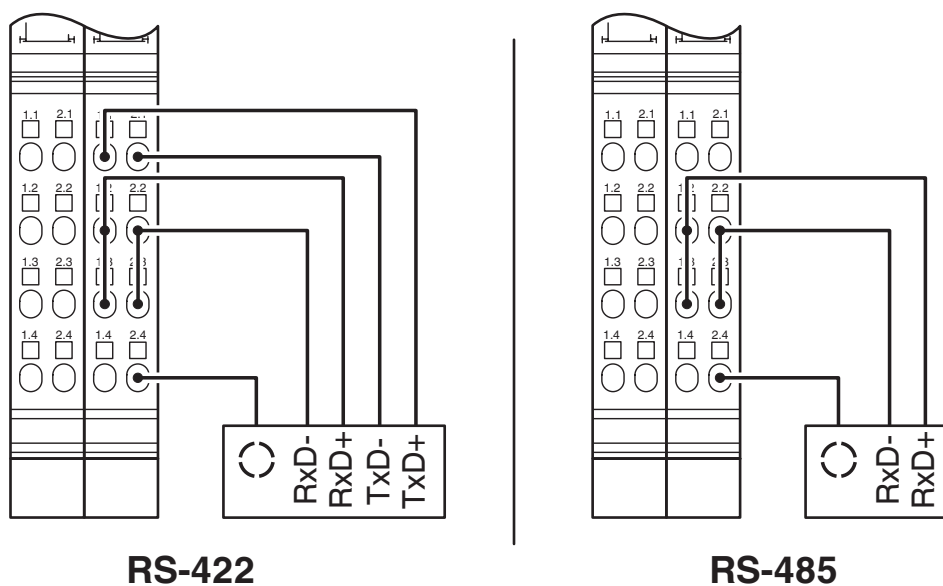
Internal wiring of the terminal points

Dimensional drawing



Dimensions

Connection diagram



Approvals

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UL Recognized

Approval ID: FILE E 140324



DNV GL

Approval ID: TAA00000BN



LR

Approval ID: LR23398855TA



BV

Approval ID: 21595/C0 BV



RINA

Approval ID: ELE121121XG

ABS

Approval ID: 22-2226444-PDA

Classifications

ECLASS

ECLASS-11.0	27242605
ECLASS-12.0	27242605
ECLASS-13.0	27242608

ETIM

ETIM 9.0	EC001601
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UNSPSC

UNSPSC 21.0	32151600
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
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