

## Inline function terminal - IB IL RS 485-ECO - 2702141

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Inline ECO communication terminal, for serial data transmission, 1 serial input and output channel in RS-485 format, with connector plug

### Product Description

The terminal is designed for use within an Inline station.

The terminal is used to operate standard I/O devices with serial interfaces on a bus system.


Inline ECO terminals are approved for the temperature range from 0°C to +55°C. The electronics base and Inline connector are supplied as standard.

### Your advantages

- One serial input and output channel in RS-485 format
- Data is transmitted in transparent mode
- Transmission speeds can be set up to 38400 Baud
- Number of data bits, stop bits and parity can be set
- Parameterization via process data



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 983235
GTIN	4046356983235
Weight per Piece (excluding packing)	84.800 g
Custom tariff number	85389091
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Caption	Dimensions
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## Technical data

### Dimensions

Width	12.2 mm
Height	119.8 mm
Depth	71.5 mm

### Connection data

Designation	Inline connector
Connection method	Spring-cage connection
Conductor cross section solid min.	0.08 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.08 mm <sup>2</sup>
Conductor cross section flexible max.	1.5 mm <sup>2</sup>
Conductor cross section AWG min.	28
Conductor cross section AWG max.	16
Stripping length	8 mm

### Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
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)
Degree of protection	IP20

### General

Mounting type	DIN rail
Color	green
Net weight	84.8 g
Note on weight specifications	with connector

### Interfaces

Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kbps
Interface	RS-485
Connection method	Spring-cage connection
Transmission physics	Copper
Protocols supported	Transparent
Data bits	6 ... 8
Stop bits	1 or 2
Input buffer	4 kByte
Output buffer	1 kByte

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### Technical data

#### Inline potentials

Designation	Communications power ( $U_L$ )
Supply voltage	7.5 V DC (via voltage jumper)
Current consumption	typ. 70 mA
	max. 85 mA
Power consumption	typ. 525 mW (at $U_L$ )

#### Serial input/output channel

Parity	Even, odd or no parity
Transmission type	Transparent mode

#### Electrical isolation

Test section	Serial interface/7.5 V supply (bus logic) 500 V AC 50 Hz 1 min.
	Serial interface/24 V supply $U_M$ 500 V AC 50 Hz 1 min.
	Serial interface/functional earth ground 500 V AC 50 Hz 1 min.
	7.5 V supply (bus logics) / functional earth ground 500 V AC 50 Hz 1 min.
	24 V supply ( $U_M$ )/functional earth ground 500 V AC 50 Hz 1 min.

#### Standards and Regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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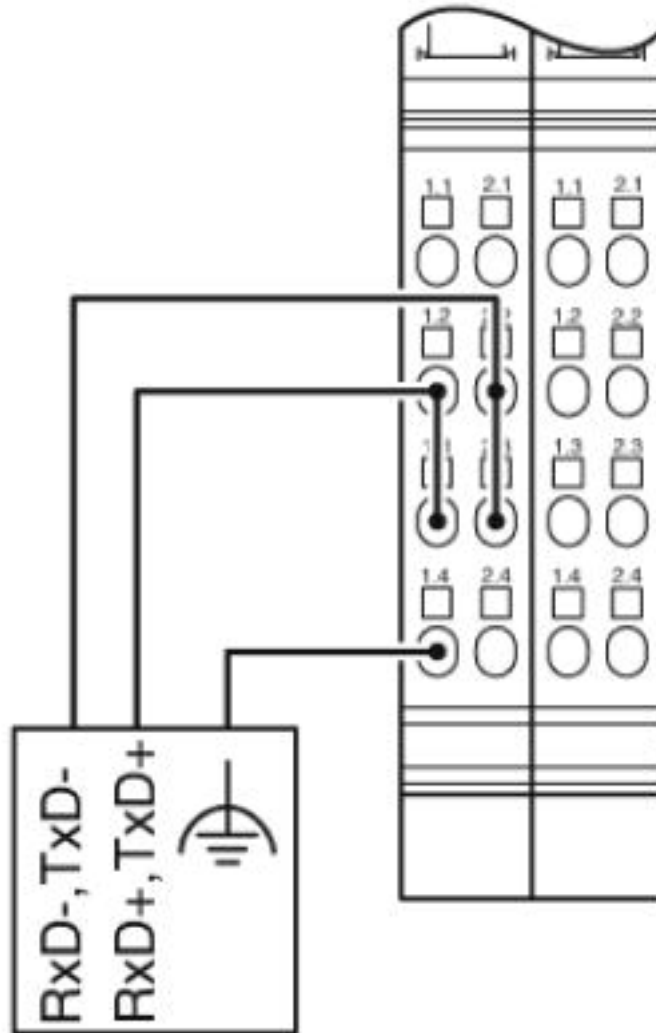
#### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

# Inline function terminal - IB IL RS 485-ECO - 2702141

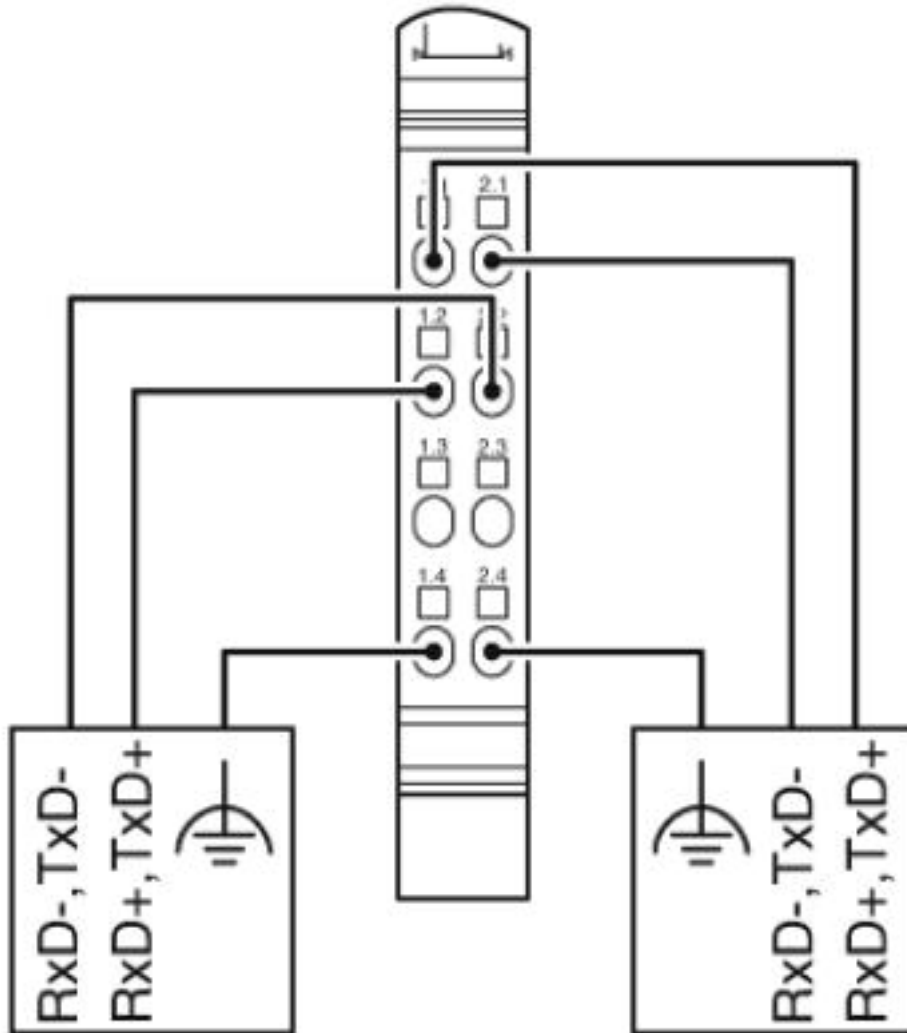
Connection diagram



Inline terminal as network end point

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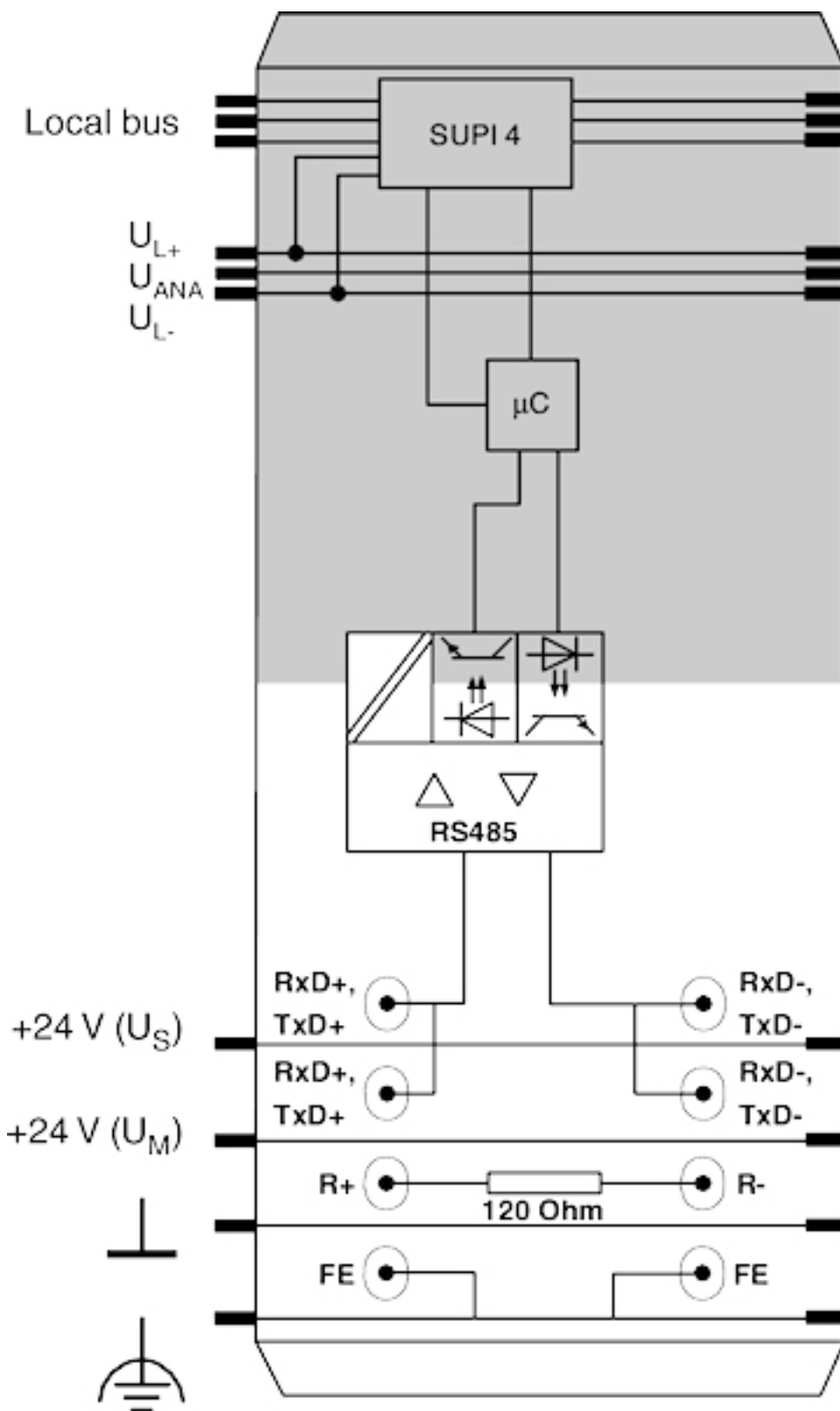
Connection diagram



Inline terminal in the network center

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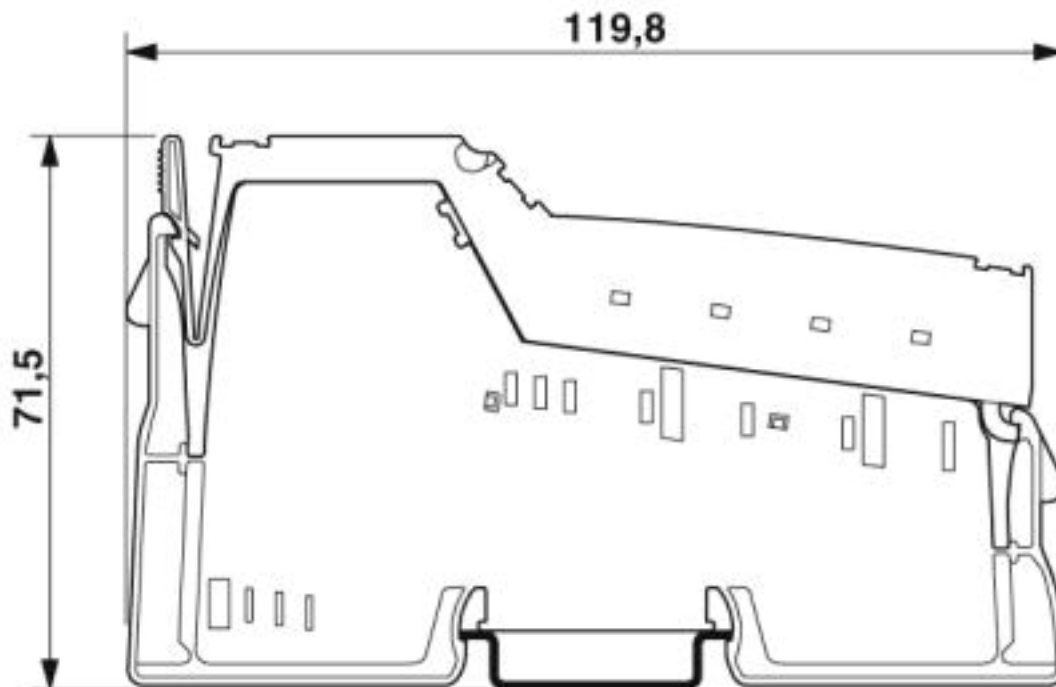
Block diagram



Internal wiring of the terminal points

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Dimensional drawing



Dimensions

Classifications

eCl@ss

eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242605
eCl@ss 8.0	27242605
eCl@ss 9.0	27242605

ETIM

ETIM 5.0	EC001601
ETIM 6.0	EC001601
ETIM 7.0	EC001601

UNSPSC

UNSPSC 13.2	32151602
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Approvals

Approvals

<https://www.phoenixcontact.com/gb/products/2702141>



## Inline function terminal - IB IL RS 485-ECO - 2702141

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

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Ex Approvals

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### Approval details

UL Listed



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm> FILE E 238705

cUL Listed



<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm> FILE E 238705

cULus Listed



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