

## Inline terminal - IB IL RTD 4/PT100-ECO - 2702499

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Inline ECO, Temperature measurement terminal, Analog RTD inputs: 4 (Pt 100), connection method: 2-wire, transmission speed in the local bus: 500 kbps, including Inline connector

### Product Description

The terminal is designed for use within an Inline station. It is used to acquire signals from resistive temperature sensors. The measured values are depicted in standardized representation format. 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.

### Why buy this product

- 4 analog inputs
- Connection of sensors in 2-wire technology
- Supported sensors: Pt 100
- Data format: standardized representation
- Diagnostic information in the process data word
- Diagnostic indicator



### Key Commercial Data

Packing unit	1 STK
GTIN	
GTIN	4055626203195

### Technical data

#### Note

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

Width	12.2 mm
Height	119.8 mm
Depth	71.5 mm

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## Technical data

### Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)
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
Net weight	69 g
Note on weight specifications	with connector
Diagnostics messages	Failure of the internal I/O supply I/O error message sent to the bus coupler
	Checksum error I/O error message sent to the bus coupler

### Interfaces

Designation	Inline local bus
No. of channels	2
Connection method	Inline data jumper
Transmission speed	500 kbps

### Inline potentials

Designation	Communications power ( $U_L$ )
Supply voltage	7.5 V DC (via voltage jumper)
Current consumption	typ. 56 mA
	max. 85 mA
Designation	Supply of analog modules ( $U_{ANA}$ )
Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	typ. 7.3 mA
	max. 14 mA
Power consumption	typ. 0.67 W

### Analog inputs

Number of inputs	4 (Pt 100)
Input name	Analog RTD inputs
Description of the input	Input for resistive temperature sensors
Connection method	Inline connector
Connection technology	2-wire
Note regarding the connection technology	shielded
Sensor types (RTD) that can be used	Pt 100 (IEC 60751/EN 60751)
Nominal value of the current sources	1 mA (pulsed current, the data is valid during the sampling phase)

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## Technical data

### Analog inputs

A/D conversion time	typ. 120 ms
Resolution A/D	24 bit
Process data update	< 10 ms
Type of protection	Overload protection
	Transient protection
Data formats	Standardized representation
Input filter time	120 ms (per channel)
Input filter	Digital filter

### Electrical isolation

Test section	Bus logic (local bus, communications power) 500 V AC 50 Hz 1 min.
	Analog I/O 500 V AC 50 Hz 1 min.
	Functional earth ground 500 V AC 50 Hz 1 min.

### Standards and Regulations

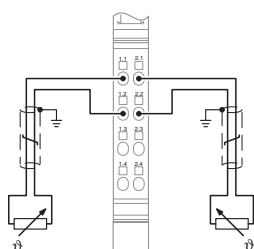
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
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### Environmental Product Compliance

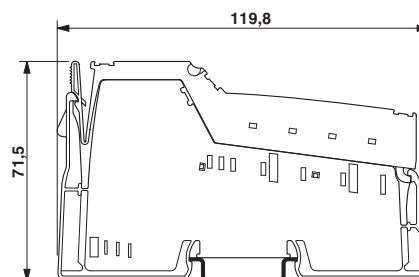
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Connection diagram



Dimensional drawing



Connecting the sensors

## Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed


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## Approvals

Ex Approvals

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### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705
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cULus Listed			
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