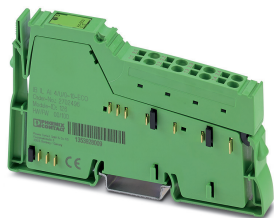


## Inline terminal - IB IL AI 4/U/0-10-ECO - 2702496

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Inline ECO, Analog input terminal, Analog inputs: 4, 0 V ... 10 V, connection technology: 2-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector

### Product Description

The terminal is designed for use within an Inline station.

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.

### Your advantages

- 4 analog input channels
- Connection of sensors in 2-conductor technology
- Voltage range: 0 V ... 10 V
- Data format: standardized representation
- Resolution: 12 bits
- Diagnostic indicator



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 205021
GTIN	4055626205021

### 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

# Inline terminal - IB IL AI 4/U/0-10-ECO - 2702496

## Technical data

### Dimensions

Depth	71.5 mm
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### 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
Color	green
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
Number	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. 60 mA
	max. 70 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. 15 mA
	max. 20 mA
Power consumption	typ. 0.8 W

### Analog inputs

Description of the input	Single-ended inputs, voltage
Input name	Analog inputs
Number of inputs	4
Connection method	Inline connector
Connection technology	2-conductor

## Inline terminal - IB IL AI 4/U/0-10-ECO - 2702496

### Technical data

#### Analog inputs

Note regarding the connection technology	shielded, twisted pair
A/D converter resolution	12 bit
Type of protection	Overload protection
	Transient protection
Data formats	Standardized representation
Measured value representation	16 bits
Voltage input signal	0 V ... 10 V
Input resistance of voltage input	115 kΩ
Precision	typ. 0.1 %

#### 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 ground 500 V AC 50 Hz 1 min.

#### Standards and Regulations

Immunity to ESD	Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B, 6 kV contact discharge, 8 kV air discharge
Immunity to EF	Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
Immunity to burst	Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion B, 2 kV
Immunity to surge	Noise immunity test in accordance with EN 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B, supply lines DC: ±1 kV/±0,5 kV (symmetrical/asymmetrical), shielded I/O cables: ±1 kV
Immunity to conducted interference	Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V
Interference emission	Noise emission test as per EN 61000-6-4 Class A
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

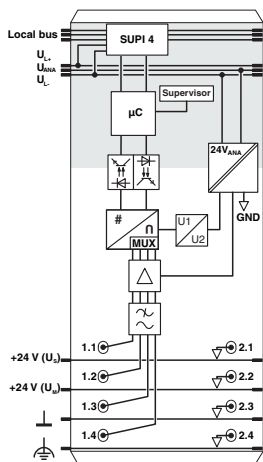
#### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
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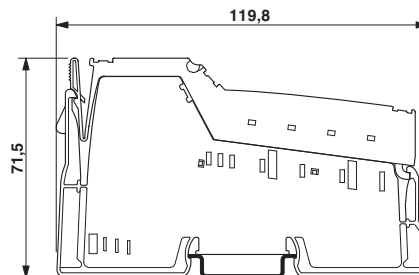
### Drawings

# Inline terminal - IB IL AI 4/U/0-10-ECO - 2702496

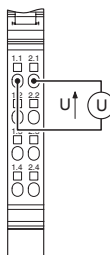
Block diagram



Dimensional drawing



Connection diagram



Connecting the sensors

## Classifications

### eCl@ss

eCl@ss 10.0.1	27242601
eCl@ss 11.0	27242601
eCl@ss 4.0	27250303
eCl@ss 4.1	27250303
eCl@ss 5.0	27250303
eCl@ss 5.1	27242601
eCl@ss 6.0	27242600
eCl@ss 7.0	27242601
eCl@ss 9.0	27242601

### ETIM

ETIM 3.0	EC001596
ETIM 4.0	EC001599
ETIM 6.0	EC001596
ETIM 7.0	EC001596

# Inline terminal - IB IL AI 4/U/0-10-ECO - 2702496

## Classifications

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

## Approvals

### Approvals

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#### Approvals

UL Listed / cUL Listed / cULus Listed

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#### 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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## Accessories

### Accessories

Installation terminal block

## Inline terminal - IB IL AI 4/U/0-10-ECO - 2702496

### Accessories

Connection terminal block - AKG 4 GNYE - 0421029



Connection terminal block, nom. voltage: 300 V, nominal current: 41 A, connection method: Screw connection, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting: Neutral busbar, color: green-yellow

Connection terminal block - AKG 4 BK - 0421032



Connection terminal block, nom. voltage: 300 V, nominal current: 41 A, connection method: Screw connection, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting: Neutral busbar, color: black

### Labeling panel

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



### Neutral conductor rail

Neutral busbar - NLS-CU 3/10 SN 1000MM - 0402174



Neutral busbar, DIN VDE 0611-4: 1991-02, material: Copper, tin-plated, color: silver

### Pick-off terminal block

Connection terminal block - AK 4 - 0404017



Connection terminal block, connection method: Screw connection, Rated cross section: 4 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 6 mm<sup>2</sup>, mounting: Neutral busbar, color: silver

### Plug

## Inline terminal - IB IL AI 4/U/0-10-ECO - 2702496

### Accessories

Inline connector - IB IL SCN-8 - 2726337

Connector, for digital 1, 2 or 8-channel Inline terminals



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### Shield connection clamp

Shield connection clamp - SK 8 - 3025163



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

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Shield connection clamp - SK 14 - 3025176



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

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Shield connection clamp - SK 20 - 3025189



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

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Shield connection clamp - SK 35 - 3026463



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

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### Support

## Inline terminal - IB IL AI 4/U/0-10-ECO - 2702496

### Accessories

Support bracket - AB-SK - 3025341

Support bracket for busbars



Support bracket - AB-SK 65 - 3026489

Support bracket, Bracket for busbars, set every 20 cm, length: 95.5 mm, width: 6.2 mm, number of positions: 1, color: gray



Support bracket - AB-SK/E - 3026476

Support bracket, Bracket for busbars, set every 20 cm, length: 10 mm, width: 56 mm, height: 20 mm, number of positions: 2, color: silver



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