

## Inline terminal - IB IL AI 2/SF-230-PAC - 2861577

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Inline analog input terminal block, complete with accessories (connector and labeling field), 2 inputs, 0-20 mA, 4-20 mA, 20 mA, 0-10 V, 10 V, 3 dB base frequency at 230 Hz, 2-wire connection method

### Product description

The analog Inline input terminals are suited for connecting conventional sensors for the acquisition of current and voltage signals.

Particular features of the modules are:

- High accuracy of measurement
- Extremely rapid acquisition of measurement values
- Excellent noise suppression and common mode rejection, and
- Measurement value acquisition with a resolution of 16 bits

It goes without saying that you also have advantages in handling with the analog Inline input terminals, such as multi-wire connection or the automatic contact with the grounding conductor when the terminal is snapped onto the DIN rail.

The Inline terminals can be labeled using hinged labeling fields. The fields have insert cards that can be labeled individually to suit the application. Additionally, there is the proven ZBFM-6... Zack strip for labeling the terminal points.

### Product Features

- ✓ 2 analog single-ended signal inputs for the connection of either voltage or current signals
- ✓ Connection of sensors in 2 and 3-wire technology
- ✓ Current ranges: 0 mA ... 20 mA, 4 mA ... 20 mA,  $\pm 20$  mA
- ✓ Voltage ranges: 0 V ... 10 V,  $\pm 10$  V
- ✓ Measured values can be represented in four different formats



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	94.3 GRM
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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## Inline terminal - IB IL AI 2/SF-230-PAC - 2861577

### Technical data

#### Dimensions

Width	12.2 mm
Height	136.8 mm
Depth	71.5 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °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

Weight	47 g
Mounting type	DIN rail
Protection class	III, IEC 61140, EN 61140, VDE 0140-1
Test section	5 V supply, incoming remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	5 V supply, outgoing remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min
	7.5 V supply (bus logic), 24 V supply $U_{ANA}$ / I/O 500 V AC 50 Hz 1 min
	7.5 V supply (bus logic), 24 V supply $U_{ANA}$ /functional earth ground 500 V AC 50 Hz 1 min
	I/O / functional earth ground 500 V AC 50 Hz 1 min

#### Interfaces

Fieldbus system	Lokalbus
Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kBit/s
Transmission physics	Copper

#### Inline potentials

Communications power $U_L$	7.5 V DC (via voltage jumper)
Current consumption from $U_L$	max. 60 mA
	typ. 45 mA
Current consumption from $U_S$	0 A DC
I/O supply voltage $U_{ANA}$	24 V DC
Current consumption from $U_{ANA}$	max. 18 mA

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### Technical data

#### Inline potentials

	typ. 13 mA
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#### Analog inputs

Number of inputs	max. 2 (single ended)
Connection method	Inline shield connector
	2-wire (shielded)
Input name	Analog inputs
A/D conversion time	120 µs (per channel)
Resolution A/D	16 bit
Limit frequency (3 dB)	40 Hz
	230 Hz
Data formats	IL, IB ST, IB RT, standardized display
Measured value representation	16 bits (15 bits + sign bit)
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA
	-20 mA ... 20 mA
Voltage input signal	0 V ... 10 V
	-10 V ... 10 V
Input resistance of voltage input	> 220 kΩ
Precision	0.02 %
Number of inputs	2 (single-ended voltage inputs)
Voltage input signal	0 V ... 10 V
	-10 V ... 10 V
Input resistance of voltage input	> 220 kΩ
Number of inputs	2 (single-ended current inputs)
Current input signal	0 mA ... 40 mA
	4 mA ... 20 mA
	-20 mA ... 20 mA
Input resistance current input	50 Ω 0.02 %

### Classifications

#### eCl@ss

eCl@ss 4.0	27250303
eCl@ss 4.1	27250303
eCl@ss 5.0	27250303
eCl@ss 5.1	27242601
eCl@ss 6.0	27242601

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### Classifications

#### eCl@ss

eCl@ss 7.0	27242601
eCl@ss 8.0	27242601

#### ETIM

ETIM 2.0	EC001431
ETIM 3.0	EC001596
ETIM 4.0	EC001596
ETIM 5.0	EC001596

#### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

### Approvals

#### Approvals

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#### Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

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#### Ex Approvals

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#### Approvals submitted

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#### Approval details



## Inline terminal - IB IL AI 2/SF-230-PAC - 2861577

### Approvals

GOST 

cULus Recognized 

### Accessories

#### Accessories

#### Labeling panel

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



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#### Plug

Inline shield connector - IB IL SCN 6-SHIELD-TWIN - 2740245



Inline shield connector

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Inline shield connector - IB IL SCN-6 SHIELD - 2726353



Inline shield connector

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#### Terminal marking

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## Accessories

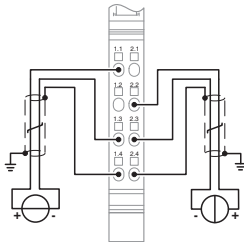
Insert strip - ESL 62X10 - 0809492

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 10 mm

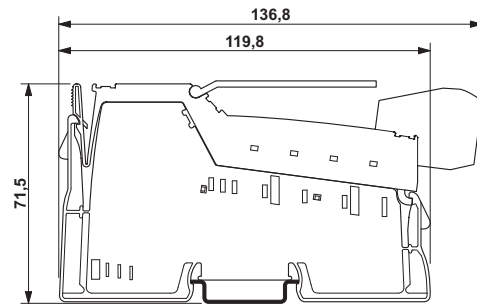


## Drawings

Connection diagram

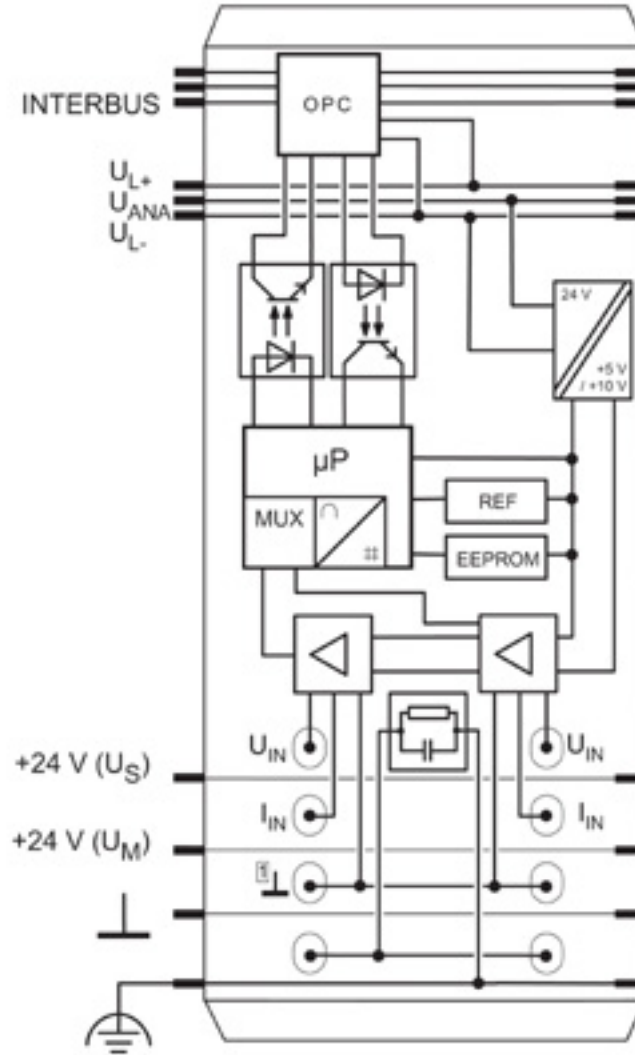


Dimensioned drawing



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Block diagram



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Catalog photo

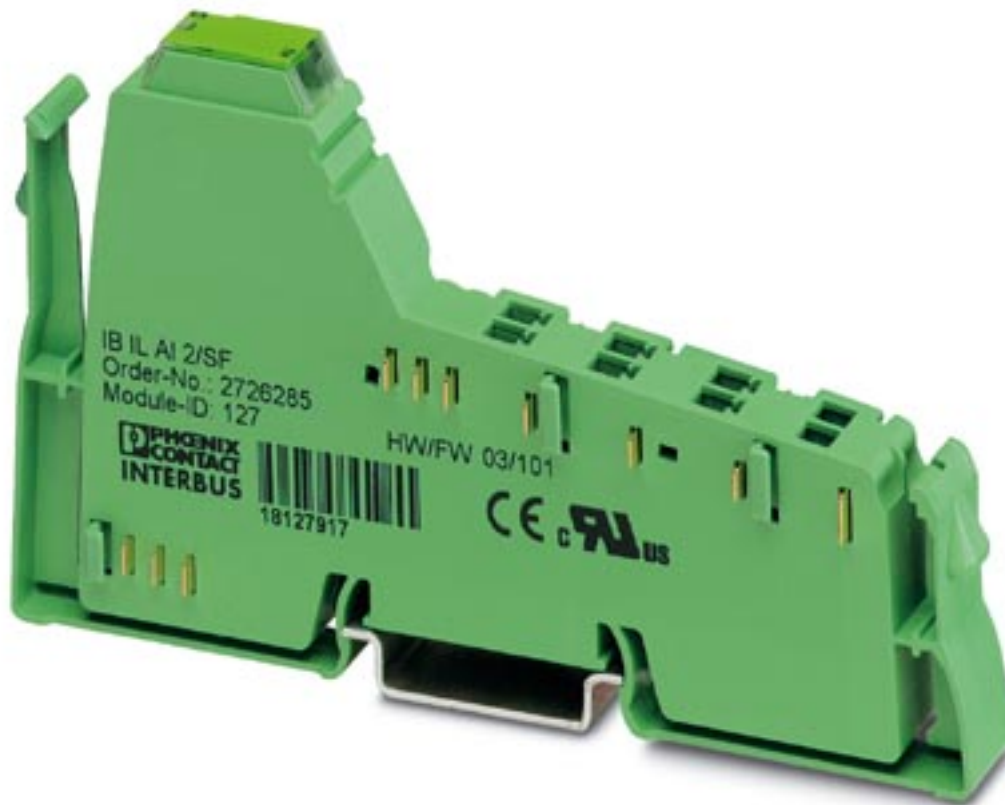


Figure may contain other products.