

# IB IL AI 2/SF-230-PAC


Order No.: 2861577



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2861577>

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



Commercial data	
GTIN (EAN)	 4 017918 907440
sales group	K412
Pack	1 pcs.
Customs tariff	85389091
Catalog page information	Page 280 (AX-2009)

### Product notes

WEEE/RoHS-compliant since:  
02/28/2007



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### 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.

## Technical data

### General data

Width	12.2 mm
Height	136.8 mm
Depth	71.5 mm
Weight	47 g
Mounting type	DIN rail
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
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

### Interface

Name	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kbps
	500 kBit/s

Transmission physics	Copper
<b>Inline potential routing</b>	
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
	Typ. 13 mA
<b>Analog inputs</b>	
Number of inputs	max. 2 (single ended)
Connection method	2-wire (shielded)
Input name	Analog inputs
A/D conversion time	120 $\mu$ s (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 k $\Omega$
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 k $\Omega$
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 $\Omega$ 0.02 %

## Certificates / Approvals



Certification

CUL, GOST, UL

## Accessories

Item	Designation	Description
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### Marking

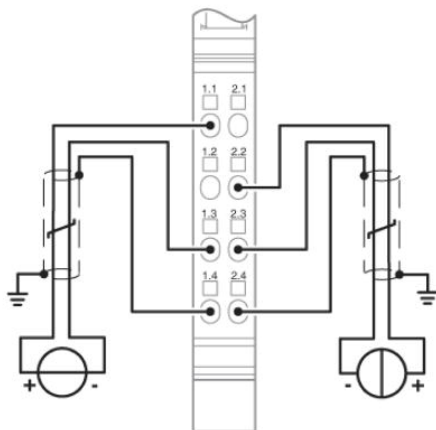
0809492	ESL 62X10	Insert strip for laser printer, lettering field: 62 x 10 mm
2727501	IB IL FIELD 2	Labeling field, width: 12.2 mm

### Plug/Adapter

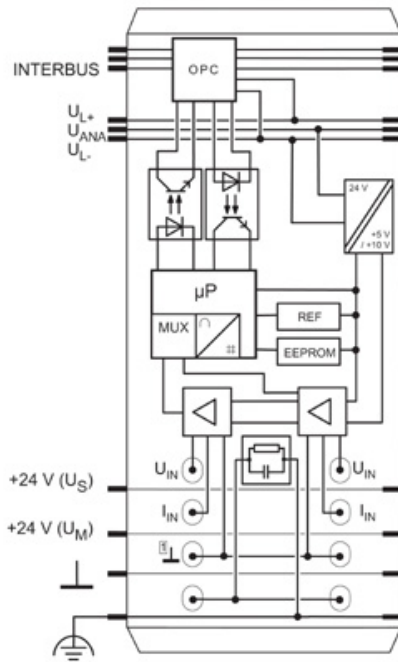
2740245	IB IL SCN 6-SHIELD-TWIN	Inline shield connector
2726353	IB IL SCN-6 SHIELD	Inline shield connector

## Diagrams/Drawings

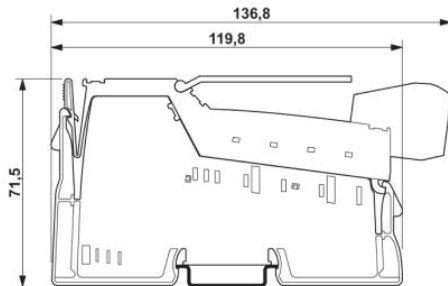
Connection diagram



Block diagram



Dimensioned drawing



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