

## IB IL AI 8/IS


Order No.: 2742748

The illustration shows version IB IL AI 8/SF

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Inline analog input terminal, without accessories, 8 inputs, 0-20 mA, 4-20 mA, 0-40 mA,  $\pm 20$  mA,  $\pm 40$  mA, 2 and 3-wire connection method

### Commercial data

GTIN (EAN)	 4 017918 876623
sales group	K412
Pack	1 pcs.
Customs tariff	85389091
Catalog page information	Page 73 (AX-2007)

### Product notes

WEEE/RoHS-compliant since:  
10/28/2008



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### Product description

The terminal is designed for use within an Inline station. It serves to measure analog current signals from active and passive sensors.

Features:

- Eight analog single-ended signal inputs for the connection of active and passive current sensors
- Connection of the sensors using the 2 or 3-wire system
- Provides short-circuit protected supply voltage for passive sensors (U<sub>iS</sub>; default 24 V)
- Different current measuring ranges

- Configuration of the channels independently of one another via INTERBUS
- Measured values can be displayed in five different formats
- 16-bit analog/digital converters
- Process data multiplex operation
- Diagnostics display

## Technical data

### General data

Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm
Weight	125 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
Type of connection	Inline data jumper
Transmission speed	500 kbps
	500 kBit/s
Transmission physics	Copper

**Inline potential routing**

Communications power $U_L$	7.5 V DC (via voltage jumper)
Current consumption from $U_L$	max. 65 mA
	Typ. 52 mA
Current consumption from $U_M$	200 mA
Current consumption from $U_S$	0 A DC
I/O supply voltage $U_{ANA}$	24 V DC
Current consumption from $U_{ANA}$	max. 40 mA
	Typ. 31 mA

**Analog inputs**

Number of inputs	max. 8 (single ended)
Connection method	2-wire (shielded)
Input name	Analog inputs
A/D conversion time	Approx. 10 $\mu$ s
Limit frequency (3 dB)	3.5 kHz
Data formats	IBS IL, IBS ST, IBS RT, standardized representation, PIO format
Measuring principle	Successive approximation
Measured value resolution	16 bits (15 bits + sign)
Measured value representation	16-bit two's complement
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA
	-20 mA ... 20 mA
	0 mA ... 40 mA
	-40 mA ... 40 mA
Number of inputs	8 (single-ended current inputs)
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA
	-20 mA ... 20 mA
	0 mA ... 40 mA
	-40 mA ... 40 mA
Input resistance current input	25 $\Omega$ 0.01 %

**Certificates / Approvals**



Certification ABS, CUL, DNV, GL, GOST, UL

Certifications applied for: LR / BV

**Accessories**

Item Designation Description

**Marking**

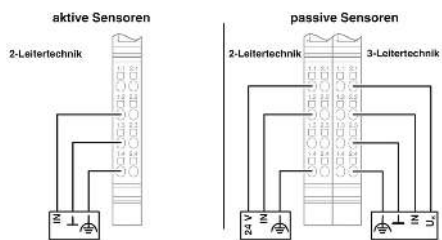
0809502	ESL 62X46	Insert strip for laser printer, lettering field: 62 x 46 mm
0809502	ESL 62X46	Insert strip for laser printer, lettering field: 62 x 46 mm
2727501	IB IL FIELD 2	Labeling field, width: 12.2 mm
2727515	IB IL FIELD 8	Labeling field, width: 48.8 mm

**Plug/Adapter**

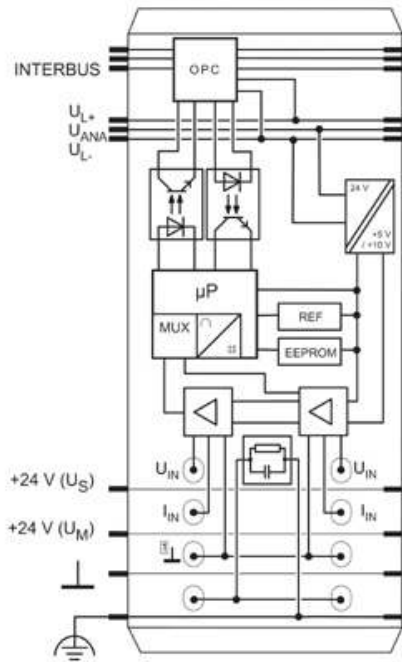
2740245	IB IL SCN 6-SHIELD-TWIN	Inline shield connector
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**Diagrams/Drawings**

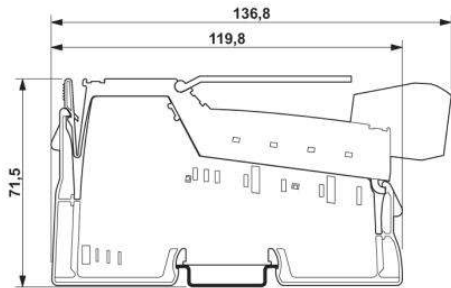
Connection diagram



Block diagram



Dimensioned drawing



**Address**

PHOENIX CONTACT Deutschland GmbH  
Flachmarktstr. 8  
32825 Blomberg, Germany  
Phone +49 5235 3 12000  
Fax +49 5235 3 41200  
<http://www.phoenixcontact.de>



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