

## Inline terminal - IB IL AI 8/IS - 2742748

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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

The illustration shows version IB IL AI 8/SF

### 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 iS; 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



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	158.05 g
Custom tariff number	85389091
Country of origin	Germany

### Technical data

#### Dimensions

Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
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### Technical data

#### Ambient conditions

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	131.06 g

#### Interfaces

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. 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

Input name	Analog inputs
Number of inputs	max. 8 (single ended)
Connection method	2-wire (shielded)
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 bit)
Measured value representation	16 bit two's complement
Current input signal	0 mA ... 20 mA
	4 mA ... 20 mA

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### Technical data

#### Analog inputs

	-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 Ω 0.01 %

#### Standards and Regulations

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.
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

### 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

#### ETIM

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

#### UNSPSC

UNSPSC 6.01	43172015
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### Classifications

#### UNSPSC

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

### Accessories

#### Accessories

##### Labeling panel

Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm



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Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



##### Plug

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



Inline shield connector

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### Terminal marking

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## Accessories

Insert strip - ESL 62X46 - 0809502

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 46 mm



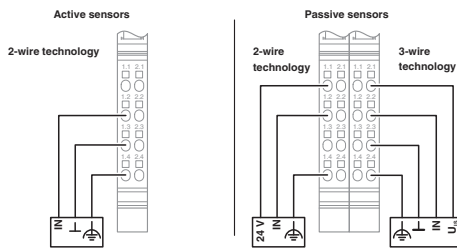
Insert strip - ESL 62X46 - 0809502

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 46 mm

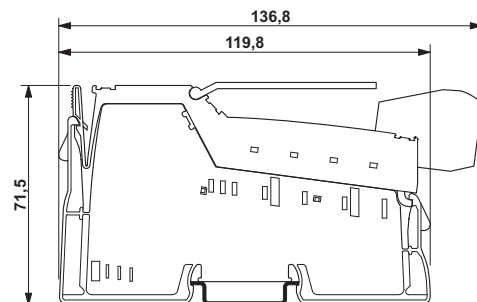


## Drawings

Connection diagram

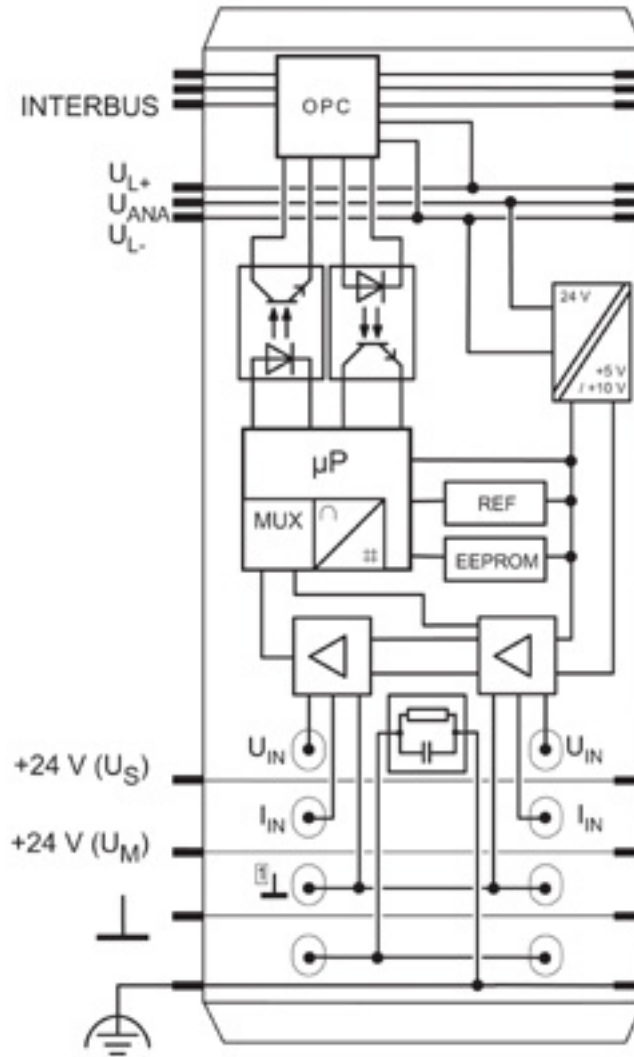


Dimensional drawing



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Block diagram



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