

IB IL AO 2/U/BP-PAC - Analog module



2861467

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Inline, Analog output terminal, Analog outputs: 2, 0 V ... 10 V, -10 V ... 10 V, connection technology: 2-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector and labeling field

Product description

The terminal is designed for use within an Inline station. It is used to output analog voltage signals.

Your advantages

- 2 analog output channels
- Connection of actuators in 2-conductor technology
- Voltage ranges: 0 V ... 10 V, ± 10 V
- Output values can be represented in two different formats
- Behavior of the outputs in the event of an error can be configured
- Process data update including conversion time of the digital/analog converter < 1 ms
- Very good output driver characteristics, making it also suitable for long actuator cables

Commercial data

Item number	2861467
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI142
GTIN	4017918894382
Weight per piece (including packing)	94 g
Weight per piece (excluding packing)	48 g
Customs tariff number	85389099
Country of origin	DE

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Technical data

Dimensions

Dimensional drawing	
Width	12.2 mm
Height	136.8 mm
Depth	71.5 mm

Notes

Note on application

Note on application	Only for industrial use
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Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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Interfaces

Inline local bus

Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	500 kbps
Transmission physics	Copper

System properties

Module

ID code (dec.)	91
ID code (hex)	5B
Length code (hex)	02
Length code (dec)	02
Process data channel	32 bit
Input address area	4 Byte
Output address area	4 Byte
Register length	32 bit
Required parameter data	6 Byte
Required configuration data	5 Byte

Output data

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Analog:

Output name	Analog outputs
Output description	Single-ended
Connection technology	2-conductor
Note regarding the connection technology	shielded
Number of outputs	2
D/A conversion time	< 100 ns
Protective circuit	Transient protection of outputs
Data formats	IB IL, IB ST
Representation of output values	16 bits (15 bits + sign)
DAC resolution	13 bit
Process data update	< 1 ms
Voltage output signal	0 V ... 10 V -10 V ... 10 V
Load/output load voltage output	> 2 kΩ
Permissible cable length	max. 500 m (The specifications refer to nominal operation after complying with installation instructions. The specifications refer to the following reference cable type: Shielded power station cable: LiYCY; 2 x 2 x 0,5 mm²; VDE0812)

Product properties

Product type	I/O component
Product family	Inline
Type	modular
Installation location	Control cabinet
Scope of supply	including Inline connector and labeling field
Diagnostics messages	Failure of or insufficient communications power U_L I/O error message sent to the bus coupler

Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

Electrical properties

Maximum power dissipation for nominal condition	1.15 W
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Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 40 mA typ. 33 mA

Potentials: 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 draw	max. 35 mA (Full load ($R_L = 2 \text{ k}\Omega$)) max. 28 mA (No-load)

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	typ. 25 mA (Full load ($R_L = 2\text{ k}\Omega$))
	typ. 18 mA (No-load)

Electrical isolation/isolation of the voltage ranges

Test voltage: 7.5 V supply (bus logic), 24 V supply U_{ANA} / I/O	500 V AC, 50 Hz, 1 min
Test voltage: 7.5 V supply (bus logic), 24 V supply U_{ANA} / functional ground	500 V AC, 50 Hz, 1 min
Test voltage: 24 V supply (I/O) / functional ground	500 V AC, 50 Hz, 1 min

Connection data

Connection technology

Connection name	Inline connector
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Conductor connection

Connection method	Spring-cage connection
Conductor cross-section rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross-section flexible	0.08 mm ² ... 1.5 mm ²
Conductor cross-section AWG	28 ... 16
Stripping length	8 mm

Inline connector

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.08 mm ² ... 1.5 mm ²
Conductor cross-section AWG	28 ... 16
Stripping length	8 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Degree of protection	IP20
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)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

Mounting type	DIN rail mounting
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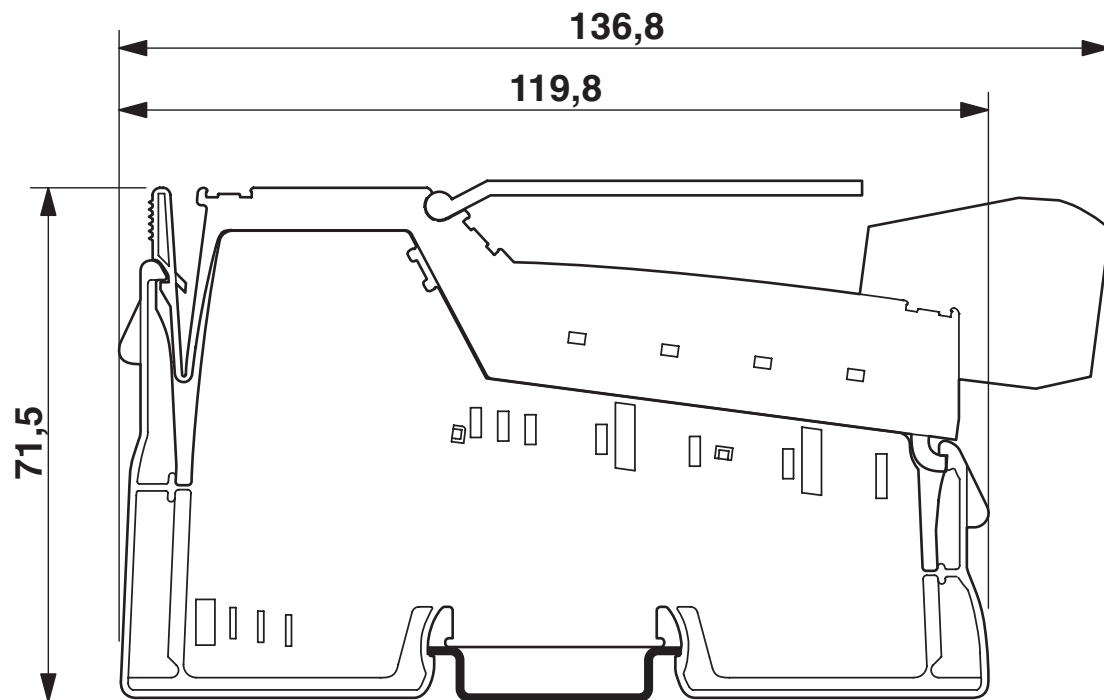


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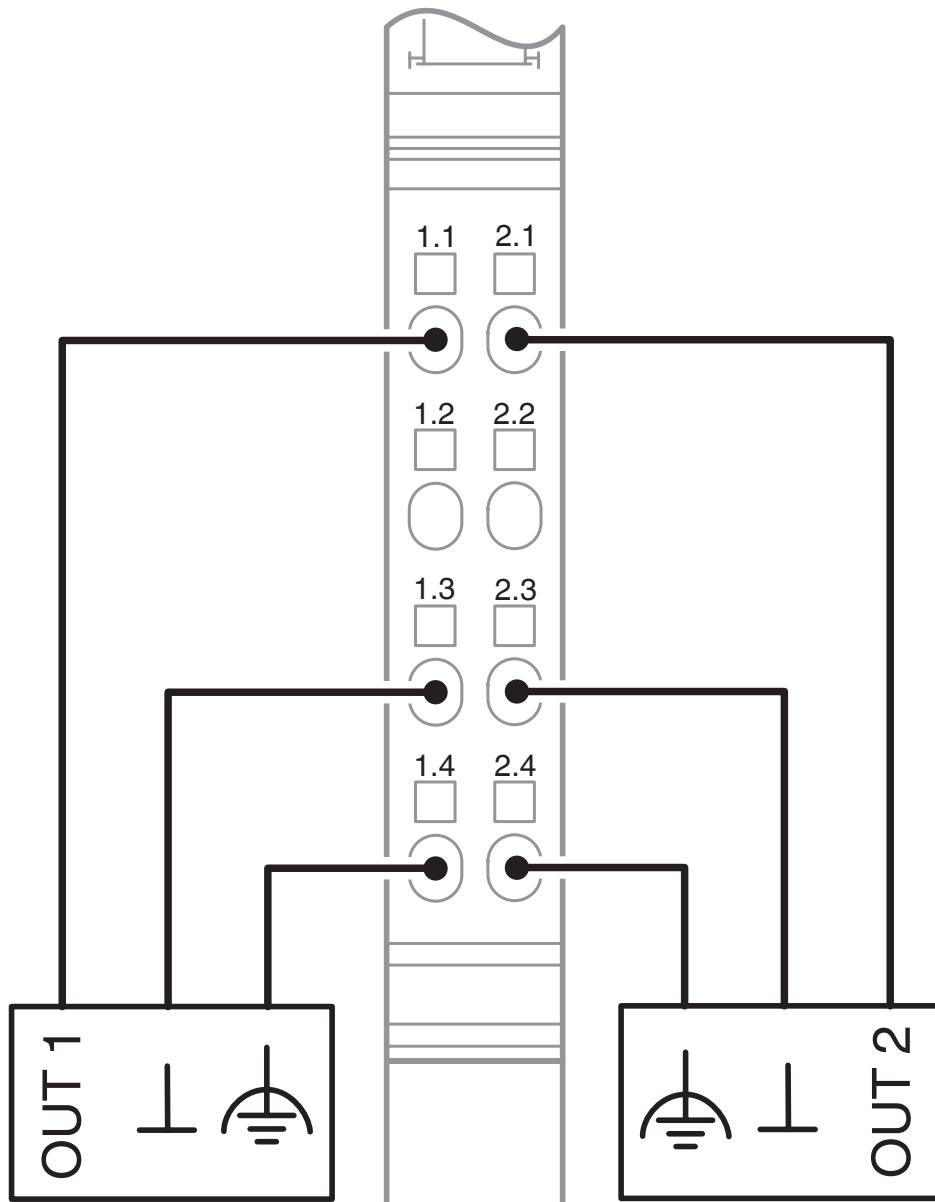
<https://www.phoenixcontact.com/us/products/2861467>

Drawings

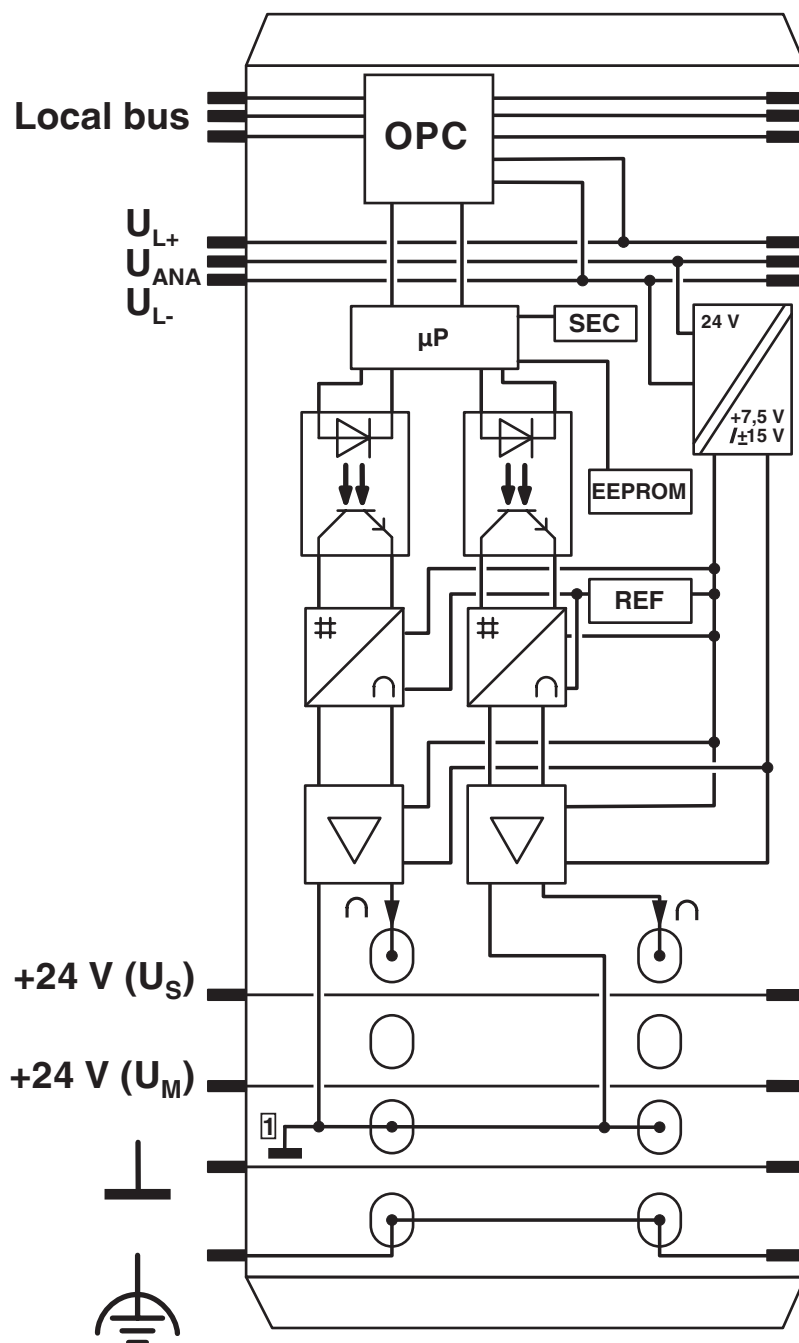
Dimensional drawing



Connection diagram



Block diagram



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Approvals

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BV

Approval ID: 20989_C1 BV

BSH

Approval ID: 658a



RINA

Approval ID: ELE121121XG

ABS

Approval ID: 22-2226444-PDA

DNV

Approval ID: TAA00002CU



cULus Recognized

Approval ID: E140324



cULus Listed

Approval ID: E199827

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Classifications

ECLASS

ECLASS-13.0	27242601
ECLASS-15.0	27242601

ETIM

ETIM 9.0	EC001596
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UNSPSC

UNSPSC 21.0	32151600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	1a76c769-0176-4a2b-8746-c149e84bdc0f

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