

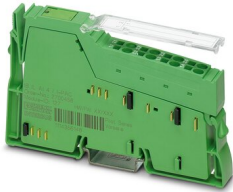
IB IL AI 4/I-PAC - Analog module



2700458

<https://www.phoenixcontact.com/us/products/2700458>

Please be informed that the data shown in this PDF document is generated from our Online Catalog. Please find the complete data in the user documentation. Our General Terms of Use for Downloads are valid.



Inline, Analog input terminal, Analog inputs: 4, 0 mA ... 20 mA, 4 mA ... 20 mA, connection technology: 2-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector and labeling field

Your advantages

- 4 analog differential input channels for connecting current signals
- Connection of sensors in 2-conductor technology
- Current ranges: 0 mA ... 20 mA, 4 mA ... 20 mA
- Mean-value generation of the inputs
- Process data update of all channels in 250 μ s
- Diagnostic and status indicators

Commercial Data

Item number	2700458
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	DR01
Product Key	DRI141
Catalog Page	Page 135 (C-6-2019)
GTIN	4046356566544
Weight per Piece (including packing)	89.4 g
Weight per Piece (excluding packing)	66 g
Customs tariff number	85389091
Country of origin	DE

Technical Data

Dimensions

Dimensional drawing	
Width	12.2 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

Material specifications

Color	green
-------	-------

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.)	127
ID code (hex)	7F
Length code (hex)	04
Length code (dec)	04
Process data channel	64 bit
Input address area	8 Byte
Output address area	8 Byte
Register length	64 bit
Required parameter data	10 Byte
Required configuration data	5 Byte

Input data

Analog

Input name	Analog inputs
Description of the input	Differential inputs, current

IB IL AI 4/I-PAC - Analog module



2700458

<https://www.phoenixcontact.com/us/products/2700458>

Number of inputs	4
A/D conversion time	max. 6.5 µs
A/D converter resolution	12 bit
Connection method	Inline connector
Connection technology	2-conductor
Current input signal	0 mA ... 20 mA 4 mA ... 20 mA
Input resistance current input	typ. 113 Ω
Data formats	IB IL, S7-compatible
Filtering	None or mean-value generation over 4, 16, or 32 measured values
Limit frequency (3 dB)	300 Hz
Measured value resolution	13 bits (12 bits + sign bit)
Measured value representation	13 bits (12 bits + sign bit)

Product properties

Type	modular
Product type	I/O component
Product family	Inline
Scope of delivery	including Inline connector and labeling field
Diagnostics messages	Failure of the internal I/O supply I/O error message sent to the bus coupler I/O supply failure Message in the diagnostic code (in the IB IL format) Overrange or underrange Message in the diagnostic code (in the IB IL format) Configuration invalid Message in the diagnostic code (in the IB IL format)

Electrical properties

Maximum power dissipation for nominal condition	7.68 W
---	--------

Potentials

Power consumption	typ. 0.94 W (total)
-------------------	---------------------

Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 60 mA typ. 55 mA

Potentials: Supply of analog modules (U_{ANA})

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 35 mA typ. 30 mA

Connection data

IB IL AI 4/I-PAC - Analog module



2700458

<https://www.phoenixcontact.com/us/products/2700458>

Connection technology

Connection name	Inline connector
-----------------	------------------

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 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)

Standards and regulations

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

Mounting

Mounting type	DIN rail mounting
---------------	-------------------

IB IL AI 4/I-PAC - Analog module

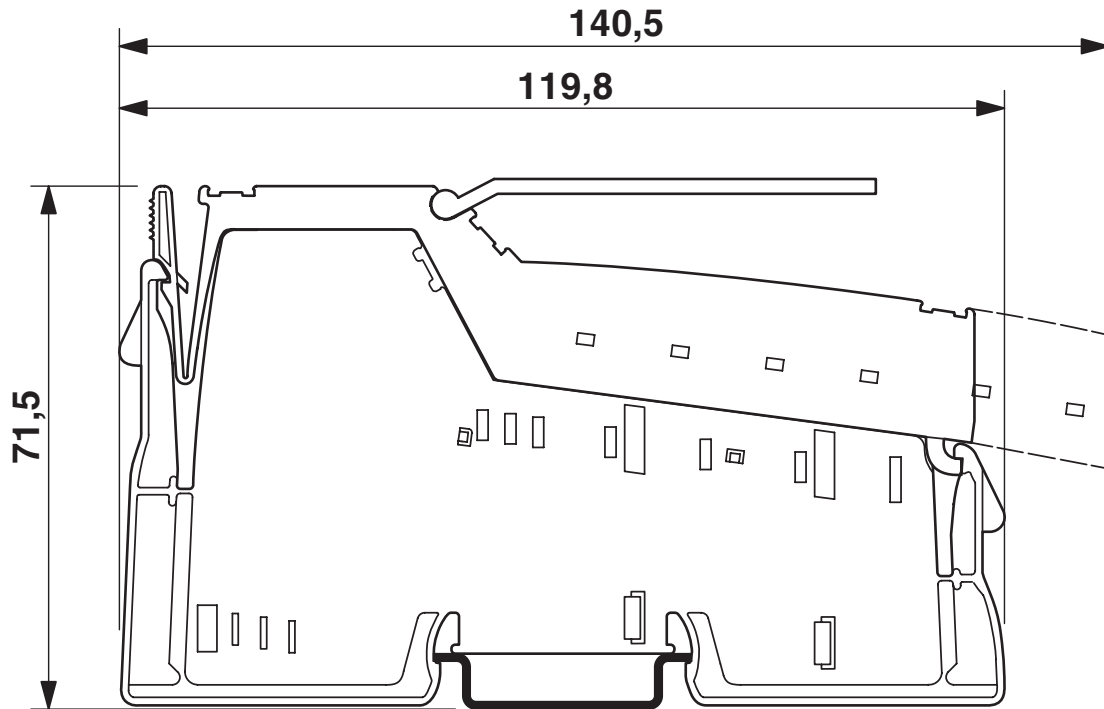
2700458

<https://www.phoenixcontact.com/us/products/2700458>

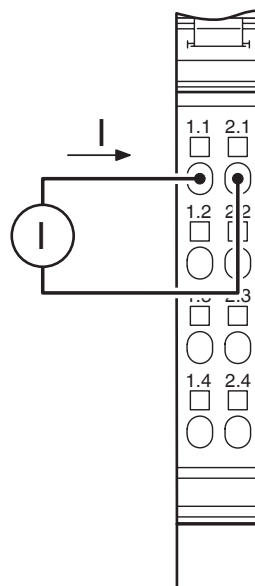


Drawings

Dimensional drawing



Connection diagram



IB IL AI 4/I-PAC - Analog module



2700458

<https://www.phoenixcontact.com/us/products/2700458>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2700458>



EAC

Approval ID: TR TS_D_01921-19



UL Listed

Approval ID: FILE E 140324



cUL Listed

Approval ID: FILE E 140324

IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



Classifications

ECLASS

ECLASS-11.0	27242601
ECLASS-12.0	27242601
ECLASS-13.0	27242601

ETIM

ETIM 8.0	EC001596
----------	----------

UNSPSC

UNSPSC 21.0	32151600
-------------	----------

IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



Environmental Product Compliance

REACH SVHC

Lead 7439-92-1

IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



Accessories

SK 8 - Shield connection clamp

3025163

<https://www.phoenixcontact.com/us/products/3025163>



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

SK 14 - Shield connection clamp

3025176

<https://www.phoenixcontact.com/us/products/3025176>



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



SK 20 - Shield connection clamp

3025189

<https://www.phoenixcontact.com/us/products/3025189>



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

SK 35 - Shield connection clamp

3026463

<https://www.phoenixcontact.com/us/products/3026463>



Shield connection clamp, for shield on busbars, contact resistance < 1 mΩ

IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



AB-SK - Support bracket

3025341

<https://www.phoenixcontact.com/us/products/3025341>

Support bracket for busbars



AB-SK 65 - Support bracket

3026489

<https://www.phoenixcontact.com/us/products/3026489>

Support bracket, Bracket for busbars, set every 20 cm, length: 95.5 mm, width: 6.2 mm, number of positions: 1, color: gray



IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



AB-SK/E - Support bracket

3026476

<https://www.phoenixcontact.com/us/products/3026476>

Support bracket, Bracket for busbars, set every 20 cm, length: 10 mm, width: 56 mm, height: 20 mm, diameter: 4.5 mm, number of positions: 2, color: silver



NLS-CU 3/10 SN 1000MM - Neutral busbar

0402174

<https://www.phoenixcontact.com/us/products/0402174>

Neutral busbar, DIN VDE 0611-4: 1991-02, material: Copper, tin-plated, color: silver



IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



AK 4 - Connection terminal block

0404017

<https://www.phoenixcontact.com/us/products/0404017>



Connection terminal block, connection method: Screw connection, Rated cross section: 4 mm², cross section: 0.5 mm² - 6 mm², mounting: Neutral busbar, color: silver

AKG 4 GNYE - Connection terminal block

0421029

<https://www.phoenixcontact.com/us/products/0421029>



Connection terminal block, nom. voltage: 300 V, nominal current: 41 A, connection method: Screw connection, Rated cross section: 4 mm², cross section: 0.5 mm² - 6 mm², mounting: Neutral busbar, color: green-yellow

IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



AKG 4 BK - Connection terminal block

0421032

<https://www.phoenixcontact.com/us/products/0421032>



Connection terminal block, nom. voltage: 300 V, nominal current: 41 A, connection method: Screw connection, Rated cross section: 4 mm², cross section: 0.5 mm² - 6 mm², mounting: Neutral busbar, color: black

IB IL SCN-8 - Inline connector

2726337

<https://www.phoenixcontact.com/us/products/2726337>

Connector, for digital 1, 2 or 8-channel Inline terminals



IB IL AI 4/I-PAC - Analog module

2700458

<https://www.phoenixcontact.com/us/products/2700458>



IB IL FIELD 2 - Labeling field

2727501

<https://www.phoenixcontact.com/us/products/2727501>

Labeling field, width: 12.2 mm



ESL 62X10 - Insert strip

0809492

<https://www.phoenixcontact.com/us/products/0809492>

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, CMS-P1-PLOTTER, mounting type: insert, lettering field size: 62 x 10 mm, Number of individual labels: 72



Phoenix Contact 2023 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com