

# IB IL INC-PAC - Inline function terminal



2861849

<https://www.phoenixcontact.com/us/products/2861849>

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Inline positioning terminal, complete with accessories (connector and marking field), 1 incremental encoder input, 4 digital inputs 24 V DC, 4 digital outputs 24 V DC, 500 mA, 3-conductor connection technology

## Your advantages

- Startup using hand-held operator panel mode
- Integrated monitoring functions
- 5 V and 24 V encoder supply including monitoring
- 24 V sensor supply incl. monitoring
- Backlash and friction compensation
- Gear ratio can be parameterized
- 3 digital inputs
- 4 digital outputs
- Position detection via symmetrical or asymmetrical incremental encoder with or without Z trace
- Software limit switch

## Commercial data

Item number	2861849
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DRI162
GTIN	4017918894542
Weight per piece (including packing)	247.7 g
Weight per piece (excluding packing)	210 g
Customs tariff number	85389091
Country of origin	DE

## Technical data

### Dimensions

Dimensional drawing	
Width	48.8 mm
Height	140.5 mm
Depth	71.5 mm

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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### Interfaces

#### Inline local bus

Connection method	Inline data jumper
Transmission speed	500 kbps
Transmission physics	Copper

### System properties

#### Module

ID code (dec.)	191
ID code (hex)	BF
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	4 Byte
Required parameter data	6 Byte
Required configuration data	5 Byte

### Input data

#### Digital

Number of inputs	3
Input voltage	24 V DC

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Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	13 V DC ... 30 V DC
Connection method	Inline connector
Connection technology	3-conductor

## Incremental encoder

Number of inputs	1
Input frequency (5 V)	0 kHz ... 500 kHz (symmetrical)
Input frequency (24 V)	0 Hz ... 50 kHz (asymmetrical)
Encoder signals	symmetrical encoders according to EIA-422 and asymmetrical encoders

## Counter:

Number of inputs	3
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## Output data

### Digital

Number of outputs	4
Output voltage	24 V DC
Protective circuit	electronic short-circuit / overload protection

## Product properties

Product type	I/O component
Product family	Inline
Type	modular

## Electrical properties

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 logics)/24 V supply (I/O) 500 V AC 50 Hz 1 min
	7.5 V supply (bus logic)/functional ground of the encoder supply 500 V AC 50 Hz 1 min
	24 V supply (I/O) / functional ground 500 V AC 50 Hz 1 min
	24 V supply (I/O)/functional ground of the encoder supply 500 V AC 50 Hz 1 min
	Functional ground of the encoder supply/functional ground 500 V AC 50 Hz 1 min

## Supply

Drawing encoder supply voltage	Main circuit $U_M$
Encoder supply voltage	5 V DC (sym./asym.)
	24 V DC (Only asymmetrical encoders)
Encoder supply current	500 mA
	500 mA
I/O voltage	24 V DC

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I/O voltage range	19.2 V DC ... 30 V DC
Residual ripple	± 1.2 V
Max. current consumption	110 mA

## Potentials: Communications power ( $U_L$ )

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 110 mA

## Potentials: Main circuit supply ( $U_M$ )

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. 1 A

## Potentials: Segment circuit supply ( $U_S$ )

Supply voltage	24 V DC (via voltage jumper)
Current draw	max. 2 A

## Connection data

### Connection technology

Connection name	Inline connector
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### Inline connector

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

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (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)

## Mounting

Mounting type	DIN rail mounting
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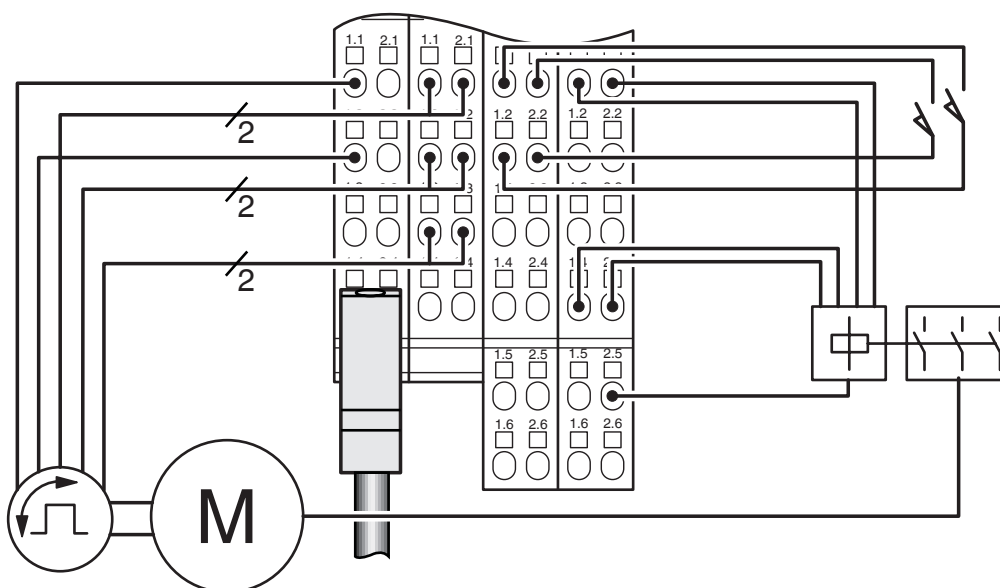
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## Drawings

Dimensional drawing



Connection diagram



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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-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
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