

# ILB IB 24 DI16 DO16 - I/O module



2862385

<https://www.phoenixcontact.com/us/products/2862385>

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Inline, Block IO, INTERBUS, Inline shield connector, Digital inputs: 16, 24 V DC, connection technology: 3-conductor, Digital outputs: 16, 24 V DC, connection technology: 3-conductor, degree of protection: IP20, including Inline connector



## Your advantages

- 16 digital inputs
- 16 digital outputs
- Maximum permissible load current per sensor: 125 mA
- Maximum permissible load current from the terminal: 2 A
- Nominal current per output: 500 mA
- Total current of the terminal: 8 A
- Diagnostic and status indicators

## Commercial data

Item number	2862385
Packing unit	1 pc
Sales key	DR01
Product key	DRI1A1
GTIN	4017918923860
Weight per piece (including packing)	548.1 g
Weight per piece (excluding packing)	500 g
Customs tariff number	85389091
Country of origin	DE

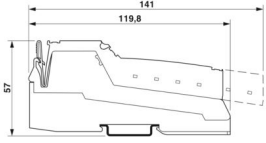
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## Technical data

### Dimensions

Dimensional drawing	
Width	156 mm
Height	141 mm
Depth	57 mm
Note on dimensions	Specifications with connectors

### Material specifications

Color	green
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### Interfaces

#### INTERBUS

Connection method	Inline shield connector
Transmission speed	500 kbps

### Input data

#### Digital:

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Number of inputs	16
Connection method	Spring-cage connection
Connection technology	3-conductor
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC
Nominal input voltage $U_{IN}$	24 V DC
Nominal input current at $U_{IN}$	5 mA
Total sensor current	max. 2 A
Typical response time	approx. 500 $\mu$ s
Protective circuit	Short-circuit protection, overload protection of the sensor supply

### Output data

#### Digital:

Output name	Digital outputs
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Connection method	Spring-cage connection
Connection technology	3-conductor
Number of outputs	16
Protective circuit	Short-circuit and overload protection
Output voltage	24 V DC
Maximum output current per channel	500 mA
Maximum output current per module / terminal block	8 A
Maximum output current per module	8 A
Nominal output voltage	24 V DC
Nominal load, inductive	12 VA
Nominal load, lamp	12 W
Nominal load, ohmic	12 W

## Product properties

Product type	I/O component
Product family	Inline
Type	Block design
Scope of supply	including Inline connector
No. of channels	32

## Electrical properties

### Potentials: Communications power ( $U_L$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A
Current draw	80 mA

### Potentials

Power supply	max. 8 A
Current draw	2 A

### Potentials: Power supply to the actuator ( $U_{A1}$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A
Current draw	4 A

### Potentials: Power supply to the actuator ( $U_{A2}$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A
Current draw	4 A

### Potentials

Power supply	max. 8 A
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Current draw	80 mA
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## Potentials

Power supply	max. 8 A
Current draw	2 A

## Electrical isolation/isolation of the voltage ranges

Test voltage: I/Os / incoming remote bus	500 V AC, 50 Hz, 1 min
Test voltage: I/Os / outgoing remote bus	500 V AC, 50 Hz, 1 min
Test voltage: I/O area / FE	500 V AC, 50 Hz, 1 min
Test voltage: Incoming remote bus / FE	500 V AC, 50 Hz, 1 min
Test voltage: Outgoing remote bus / FE	500 V AC, 50 Hz, 1 min
Test voltage: Incoming remote bus / outgoing remote bus	500 V AC, 50 Hz, 1 min

## 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

Ambient temperature (operation)	-25 °C ... 60 °C
Degree of protection	IP20
Air pressure (operation)	80 kPa ... 108 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	66 kPa ... 108 kPa (up to 3500 m above sea level)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	max. 85 % (non-condensing)
Permissible humidity (storage/transport)	95 % (non-condensing)

### Mechanical test

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	25g

## Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
Noise emission	Class B (residential)

## Mounting

Mounting type	NS 35/7,5
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DIN rail mounting

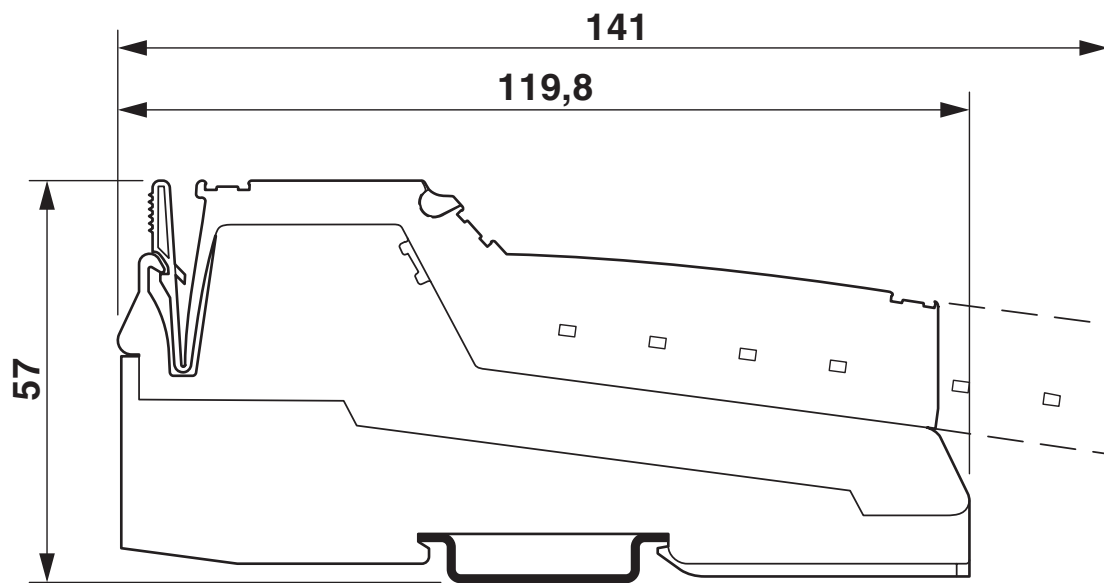
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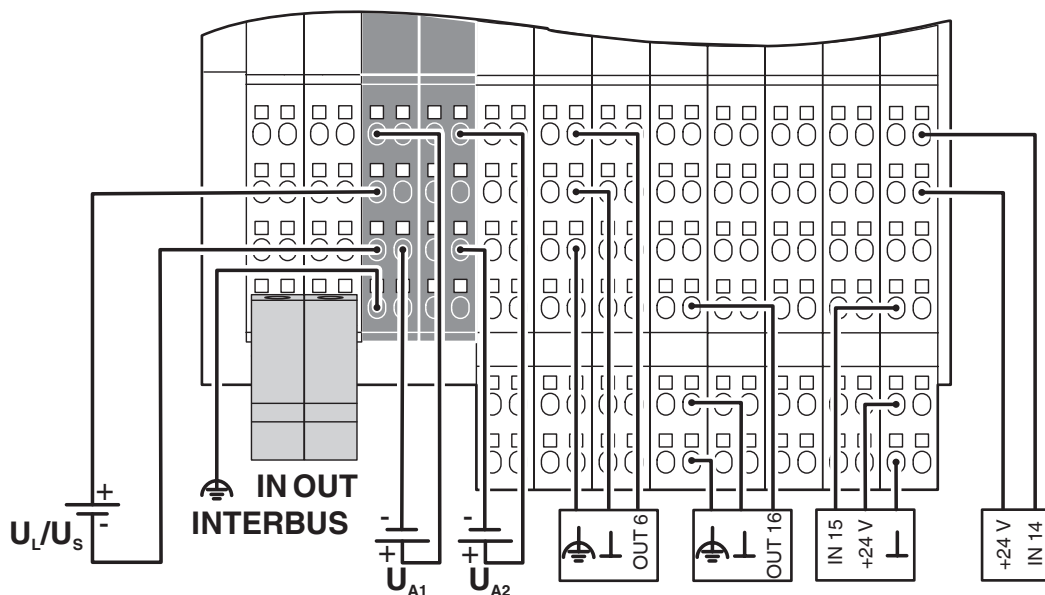
## Drawings

Dimensional drawing



The figure shows the general dimensional drawing of the Inline Block IO product family

Connection diagram

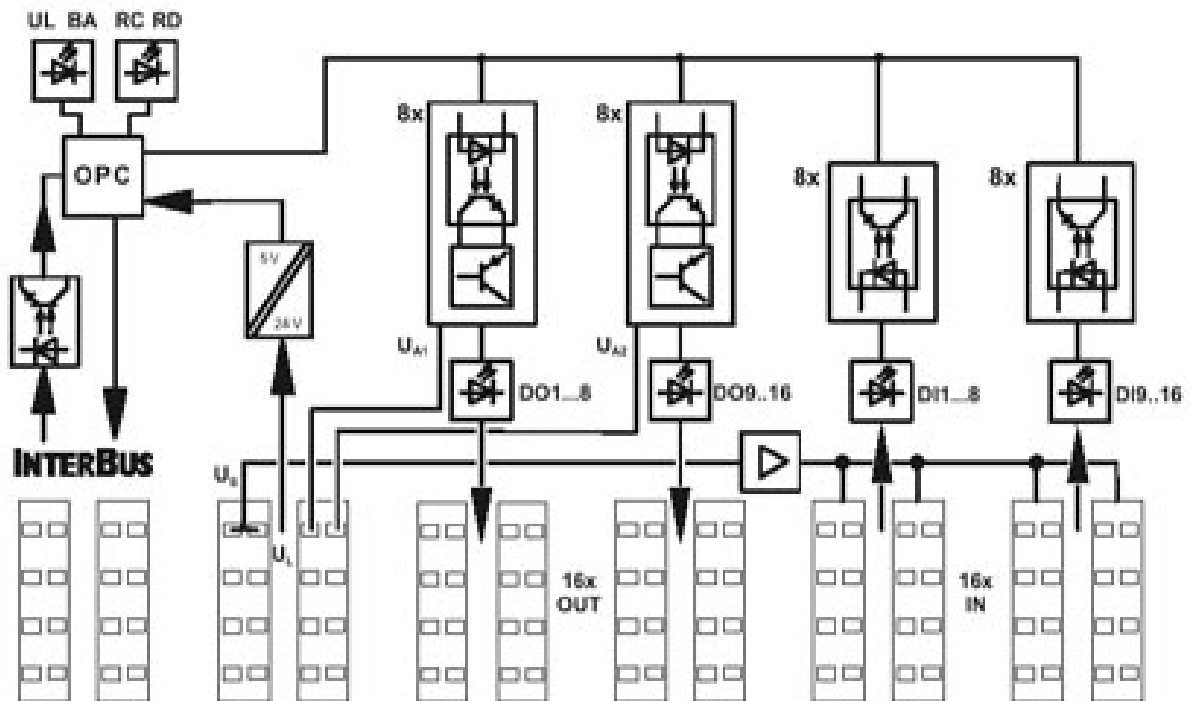


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Block diagram



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## Classifications

### 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-E
	No hazardous substances above the limits

### EU REACH SVHC

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