

## Inline terminal - IB IL 24 DI16-2MBD-PAC - 2861959

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Inline, Digital input terminal, Digital inputs: 16 , 24 V DC, connection method: 3-wire, transmission speed in the local bus: 2 Mbps, degree of protection: IP20, including Inline connectors and marking fields

The figure shows the version IB IL 24  
DI 16

### Product Description

The terminal is designed for use within an Inline station.  
It is used to acquire digital signals.

### Your advantages

- 16 digital inputs
- Connection of sensors in 2 and 3-wire technology
- Maximum permissible load current per sensor: 250 mA
- Diagnostic and status indicators



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 974619
GTIN	4017918974619
Weight per Piece (excluding packing)	234.500 g
Custom tariff number	85389091
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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## Technical data

### Dimensions

Width	48.8 mm
Height	140.5 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
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
Color	green
Net weight	122 g
Note on weight specifications	with connectors
Operating mode	Process data mode with one word

### Interfaces

Designation	Inline local bus
No. of channels	2
Connection method	Inline data jumper
Transmission speed	2 Mbps

### Inline potentials

Designation	Communications power ( $U_L$ )
Supply voltage	7.5 V DC
Current consumption	max. 80 mA
Power consumption	max. 0.6 W
Designation	Segment circuit supply ( $U_S$ )
Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	max. 4 A

### Digital inputs

Input name	Digital inputs
Description of the input	EN 61131-2 type 1

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### Technical data

#### Digital inputs

Connection method	Spring-cage connection
Connection technology	3-wire
Number of inputs	16
Typical response time	< 1 ms
Protective circuit	Short-circuit and overload protection
Nominal input voltage $U_{IN}$	24 V DC
Nominal input current at $U_{IN}$	min. 3 mA (at nominal voltage)
Input voltage	24 V DC
Input voltage range "0" signal	-3 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC

#### Electrical isolation

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.
	24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min.

#### Standards and Regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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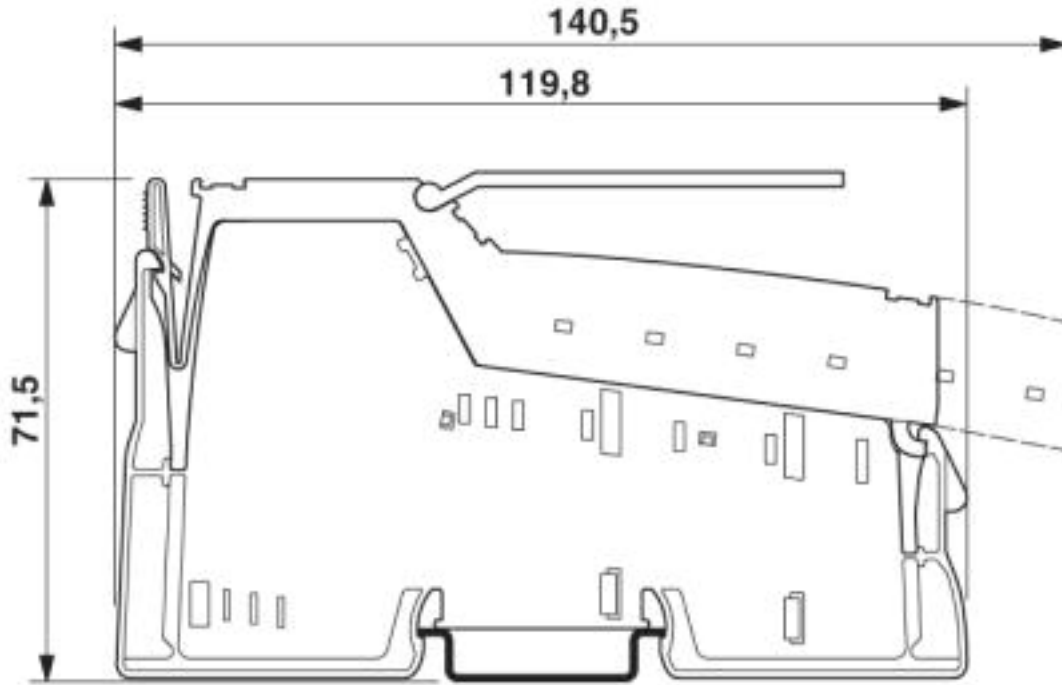
#### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

### Drawings

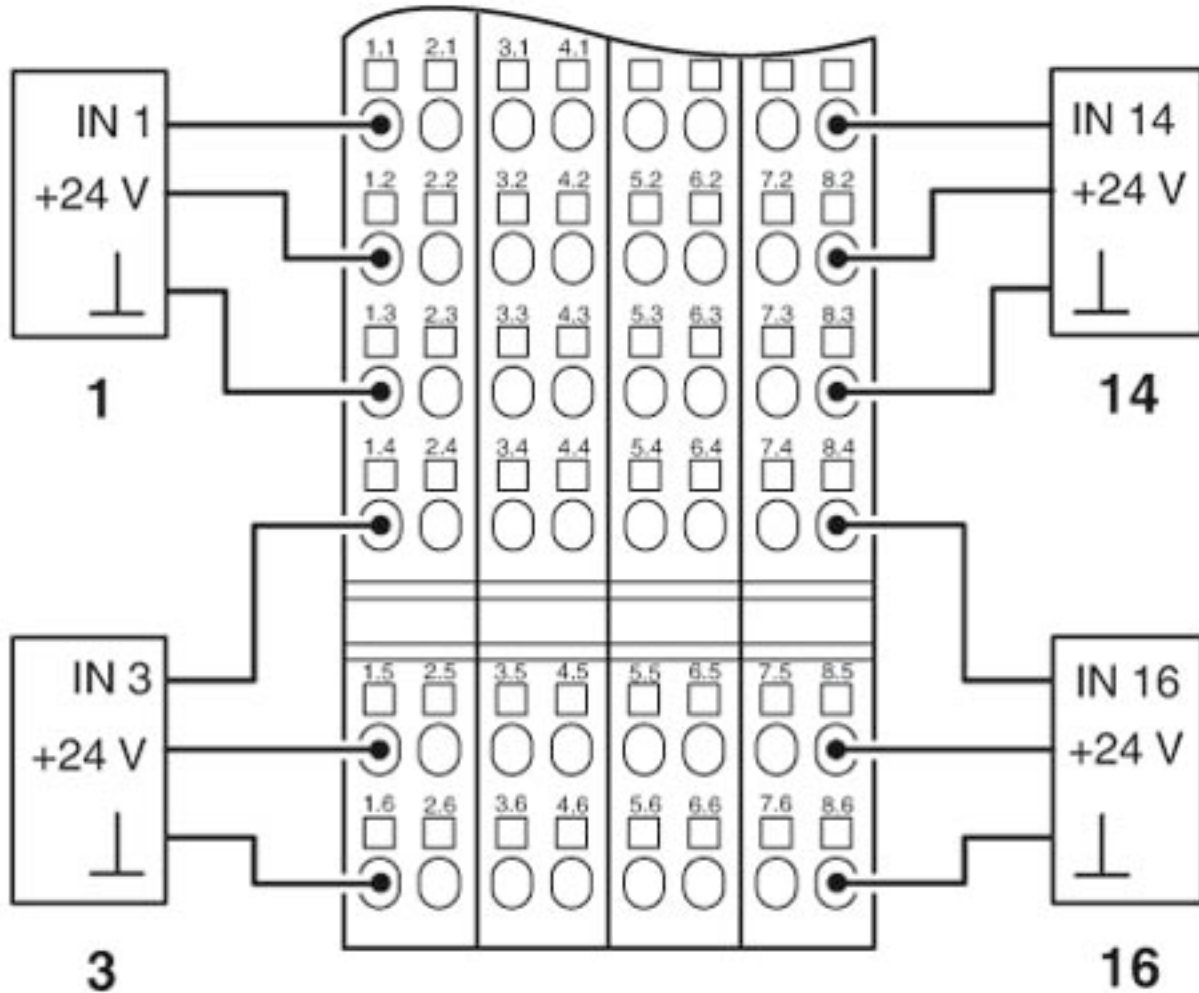
# Inline terminal - IB IL 24 DI16-2MBD-PAC - 2861959

Dimensional drawing



# Inline terminal - IB IL 24 DI16-2MBD-PAC - 2861959

Connection diagram



## Classifications

eCl@ss

eCl@ss 4.0	27250300
eCl@ss 4.1	27250300
eCl@ss 5.0	27250300
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

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## Classifications

### ETIM

ETIM 2.0	EC001430
ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 5.0	EC001599
ETIM 6.0	EC001599
ETIM 7.0	EC001599

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602

## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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cULus Listed			
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## Inline terminal - IB IL 24 DI16-2MBD-PAC - 2861959

### Accessories

#### Accessories

##### Connector set

Connector set - IB IL DI16-PLSET/ICP - 2860989



Connector set, for IB IL DI 16, copper, colored identification.

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##### Front adapter

Front adapters - FLKM 14-PA-INLINE/IN16 - 2302751



VARIOFACE front adapter for Inline modules, for transferring 16 (2 x 8) digital input signals.

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##### Labeling panel

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm



##### Plug

## Inline terminal - IB IL 24 DI16-2MBD-PAC - 2861959

### Accessories

Inline connector - IB IL SCN-12-ICP - 2727611



Connector, color coded, for digital 4, or 16-channel Inline input terminals

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Inline connector - IB IL SCN-12 - 2726340



Connector, for digital 4 or 16-channel Inline terminals

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### Terminal marking

Insert strip - ESL 62X10 - 0809492



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

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Insert strip - ESL 62X46 - 0809502



Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems: Laser printer, mounting type: insert, lettering field size: 62 x 46 mm, Number of individual labels: 120

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Connector set - IB IL DI/DO16-PLSET - 2860976

Connector set, for IB IL DI/DO 16, copper, consecutively numbered, no colored identification,

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