

## Inline terminal - IB IL 24 DI16-2MBD - 2855114

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Inline digital input terminal, without accessories, 16 inputs, 24 V DC, transmission speed 2 Mbaud, 2, 3-conductor connection method

The illustration shows the version IB IL 24 DI 16

### Product Description

The digital Inline input terminals are designed for the connection of digital signals as are supplied from control switches, limit switches or proximity switches.

All the typical applications are covered by the standard automation terminals.

The I/O equipment is connected by a simple or an extended Inline connector, depending on the number of channels. The multi-wire connection method is available in both cases.

The Inline terminals can be labeled using hinged labeling fields. The fields have insert cards that can be labeled individually to suit the application. Additionally, there is the proven ZBFM-6... Zack strip for labeling the terminal points.

### Product Features

- 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
Weight per Piece (excluding packing)	140.7 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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#### Dimensions

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## Technical data

### Dimensions

Width	48.8 mm
Height	119.8 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

### Interfaces

Fieldbus system	Lokalbus
Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	2 MBit/s

### Digital inputs

Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Connection method	Spring-cage connection
	3-conductor
Number of inputs	16
Typical response time	< 1 ms
Protective circuit	Short-circuit and overload protection
Input voltage	24 V DC (via voltage jumper)
Input voltage range "0" signal	-3 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC
Nominal input current at $U_{IN}$	min. 3 mA

### Power supply for module electronics

Supply voltage	24 V DC (via voltage jumper)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Supply current	80 mA
Communications power $U_L$	7.5 V (via voltage jumper)
Current consumption	max. 80 mA (from the local bus)

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## Technical data

### Power supply for module electronics

Power consumption	max. 0.6 W
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### General

Mounting type	DIN rail
Net weight	122 g
Note on weight specifications	Without plug

### Inline potentials

Communications power $U_L$	7.5 V DC
Current consumption from $U_L$	max. 80 mA
Current consumption from $U_M$	0 A DC
Segment circuit supply $U_S$	24 V DC (nominal value)
Current consumption from $U_S$	max. 4 A
Current consumption from $U_{ANA}$	0 A DC

### Standards and Regulations

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.
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

## Classifications

### eCl@ss

eCl@ss 4.0	27250302
eCl@ss 4.1	27250302
eCl@ss 5.0	27250302
eCl@ss 5.1	27242604
eCl@ss 6.0	27242604
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

### ETIM

ETIM 2.0	EC001430
ETIM 3.0	EC001599

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## Classifications

### ETIM

ETIM 4.0	EC001599
ETIM 5.0	EC001599

### UNSPSC

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

## Approvals

### Approvals

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Approvals

UL Listed / cUL Listed / cULus Listed

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Ex Approvals

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Approvals submitted

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### Approval details

UL Listed

cUL Listed

cULus Listed

## Inline terminal - IB IL 24 DI16-2MBD - 2855114

### Accessories

#### Accessories

#### 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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#### Labeled terminal marker

Zack marker strip - ZB 6,QR:FORTL.ZAHLEN - 1051029



Zack marker strip, Strip, white, labeled, can be labeled with: Plotter, Printed vertically: Consecutive numbers 1 - 10, 11 - 20, etc. up to 491 - 500, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

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#### Labeling panel

Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm



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Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



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#### Marker pen

## Inline terminal - IB IL 24 DI16-2MBD - 2855114

### Accessories

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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Marker pen - X-PEN 0,35 - 0811228



Marker pen without ink cartridge, for manual labeling of markers, labeling extremely wipe-proof, line thickness 0.35 mm

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### Plug

Inline connector - IB IL SCN-12 - 2726340



Connector, for digital 4 or 16-channel Inline terminals

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



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

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### Terminal marking

Insert strip - ESL 62X10 - 0809492



Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 10 mm

## Inline terminal - IB IL 24 DI16-2MBD - 2855114

### Accessories

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#### Insert strip - ESL 62X46 - 0809502



Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 46 mm

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#### Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

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#### Zack marker strip - ZB 6/WH-100:UNBEDRUCKT - 5060935



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

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#### Flat zack marker sheet - ZBFM 6/WH:UNBEDRUCKT - 0803618



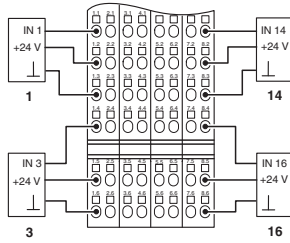
Flat zack marker sheet, Sheet, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into flat marker groove, for terminal block width: 6.2 mm, Lettering field: 5 x 5.5 mm

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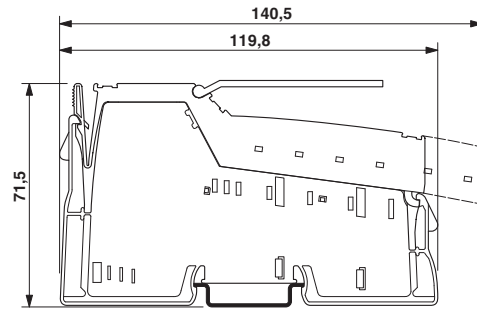
### Drawings

# Inline terminal - IB IL 24 DI16-2MBD - 2855114

Connection diagram



Dimensional drawing





# Mouser Electronics

Authorized Distributor

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