

# IB IL 24 DO16-2MBD-PAC/SN - Inline terminal



2878324

<https://www.phoenixcontact.com/us/products/2878324>

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Inline digital output terminal complete with accessories (connector and labeling field), 16 outputs, 24 V DC, transmission speed 2 Mbaud, 3-conductor connection method, standard numbering

## Product description

Inline terminals with "2 MBD" added to their item designation work with a transmission speed of 2 Mbps. These terminal blocks are discontinued or no longer in the range. If you require this transmission speed, please ask your local Phoenix Contact representative. If you can work with a transmission speed of 500 kbps, select as a replacement the corresponding variant that does not have "2MBD" added to its item designation. Please note that a uniform transmission speed must always be used within one inline station. The terminal is designed for use within an Inline station. It is used to output digital signals.

## Your advantages

- 16 digital outputs
- Diagnostic and status indicators
- Total current of the terminal: 8 A
- Short-circuit and overload-protected outputs
- Connection of actuators in 2- and 3-conductor technology
- Nominal current per output: 500 mA

## Commercial data

Item number	2878324
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR01
Product key	DRI132
GTIN	4017918980894
Weight per piece (including packing)	238.6 g
Weight per piece (excluding packing)	130 g
Customs tariff number	85389091
Country of origin	DE

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## Technical data

### Dimensions

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

### 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	2 Mbps

### System properties

#### Programming data

Length code (hex)	01
ID code (dec.)	189
Length code (dec)	01
Process data channel	16 bit
Input address area	0 Byte
Output address area	2 Byte
Parameter channel (PCP)	0 bit
Register length (bus)	16 bit

### Output data

#### Digital:

Output name	Digital outputs
Connection method	Spring-cage connection
Connection technology	3-conductor
Number of outputs	16

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Protective circuit	Overload protection, short-circuit protection of outputs
Output voltage	$U_S - 1 \text{ V}$
Output current	max. 500 mA (per channel)
	max. 8 A (Device)
Nominal output voltage	24 V DC (voltage difference at $I_{nom} \leq 1 \text{ V}$ )
Nominal load, inductive	12 W (1.2 H, 48 $\Omega$ )
Nominal load, lamp	12 W
Nominal load, ohmic	12 VA (48 $\Omega$ )

## Product properties

Product type	I/O component
Product family	Inline
Type	modular
	Inline
Scope of supply	including Inline connectors and marking fields
No. of channels	16
Operating mode	Process data mode with one word

## Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

## Electrical properties

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

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 90 mA

### Potentials: 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 draw	max. 8 A

### Electrical isolation/isolation of the voltage ranges

Test voltage: 5 V supply, incoming remote bus/7.5 V supply (bus logics)	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply, outgoing remote bus/7.5 V supply (bus logics)	500 V AC, 50 Hz, 1 min
Test voltage: 7.5 V supply (bus logics)/24 V supply (I/O)	500 V AC, 50 Hz, 1 min
Test voltage: 24 V supply (I/O) / functional ground	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
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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 ... 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)
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## Mounting

Mounting type	DIN rail mounting
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## Drawings

Dimensional drawing



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## Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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