

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



2878324

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

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



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

2878324

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

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
----------	---

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

2878324

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

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 Ω)
Nominal load, lamp	12 W
Nominal load, ohmic	12 VA (48 Ω)

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
-----------------	------------------

Inline connector

Connection method	Spring-cage connection
-------------------	------------------------

2878324

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

Conductor cross-section, rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.08 mm ² ... 1.5 mm ²
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)
------------------	---------------------------------------

Mounting

Mounting type	DIN rail mounting
---------------	-------------------

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



2878324

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

Drawings

Dimensional drawing



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



2878324

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

Environmental product compliance

EU REACH SVHC

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

Phoenix Contact 2026 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com