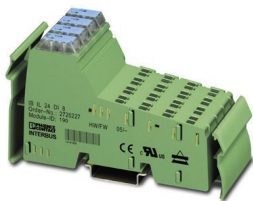


# IB IL 24 DI8-2MBD - Inline terminal

2819040

<https://www.phoenixcontact.com/us/products/2819040>

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.



The figure shows the version IB IL 24 DI 8

Inline digital input terminal, without accessories, 8 inputs, 24 V DC, 2 Mbaud transmission speed, 4-conductor connection technology

## Product description

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

## Your advantages

- 8 digital inputs
- Connection of sensors in 2-, 3-, and 4-conductor technology
- Maximum permissible load current per sensor: 250 mA
- Maximum permissible load current from the terminal: 2 A
- Diagnostic and status indicators

## Commercial data

Item number	2819040
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR01
Product key	DRI131
GTIN	4017918876500
Weight per piece (including packing)	138.8 g
Weight per piece (excluding packing)	118 g
Customs tariff number	85389091
Country of origin	DE

# IB IL 24 DI8-2MBD - Inline terminal

2819040

<https://www.phoenixcontact.com/us/products/2819040>

## Technical data

### Dimensions

Dimensional drawing	
Width	48.8 mm
Height	119.8 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)	81
ID code (dec.)	190
Length code (dec)	129
Process data channel	8 bit
Input address area	1 Byte
Output address area	0 Byte
Parameter channel (PCP)	0 Byte
Register length (bus)	8 bit

#### Fieldbus data telegram

Required parameter data	1 Byte
-------------------------	--------

### Input data

#### Digital:

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

# IB IL 24 DI8-2MBD - Inline terminal



2819040

<https://www.phoenixcontact.com/us/products/2819040>

Number of inputs	8
Connection method	Spring-cage connection
Connection technology	2-, 3-, 4-conductor
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 $U_{IN}$	5 mA
Typical response time	< 1 ms
Protective circuit	Short-circuit and overload protection

## Product properties

Product type	I/O component
Product family	Inline
Type	modular
	Inline
No. of channels	8

## Electrical properties

Maximum power dissipation for nominal condition	24.12 W
---	---------

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

Supply voltage	7.5 V DC
Current draw	max. 85 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. 2 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
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

# IB IL 24 DI8-2MBD - Inline terminal



2819040

<https://www.phoenixcontact.com/us/products/2819040>

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 DI8-2MBD - Inline terminal

2819040

<https://www.phoenixcontact.com/us/products/2819040>

## Drawings

Dimensional drawing



Connection diagram



# IB IL 24 DI8-2MBD - Inline terminal



2819040

<https://www.phoenixcontact.com/us/products/2819040>

## Environmental product compliance

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### 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](mailto:info@phoenixcon.com)