

# IB IL 24 DI 16-PAC/SN - Digital module



2862958

<https://www.phoenixcontact.com/us/products/2862958>

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 input terminal, Digital inputs: 16, 24 V DC, connection technology: 3-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields, connectors numbered individually

## 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-conductor technology
- Maximum permissible load current per sensor: 250 mA
- Diagnostic and status indicators

## Commercial data

Item number	2862958
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI131
Catalog page	Page 271 (AX-2009)
GTIN	4017918904968
Weight per piece (including packing)	236.833 g
Weight per piece (excluding packing)	210 g
Customs tariff number	85389099
Country of origin	DE

# IB IL 24 DI 16-PAC/SN - Digital module

2862958

<https://www.phoenixcontact.com/us/products/2862958>

## 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

CCCex note	Use in potentially explosive areas is not permitted in China.
------------	---

### Interfaces

#### Inline local bus

Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	500 kbps

### System properties

#### Module

ID code (dec.)	190
ID code (hex)	BE
Length code (hex)	01
Length code (dec)	01
Process data channel	16 bit
Input address area	2 Byte
Output address area	0 Byte
Register length	16 bit
Required parameter data	1 Byte
Required configuration data	4 Byte

### Input data

#### Digital

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

# IB IL 24 DI 16-PAC/SN - Digital module



2862958

<https://www.phoenixcontact.com/us/products/2862958>

Number of inputs	16
Connection method	Spring-cage connection
Connection technology	3-conductor
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
Nominal input voltage $U_{IN}$	24 V DC
Nominal input current at $U_{IN}$	min. 3 mA (at nominal voltage)
Typical response time	< 1 ms

## Product properties

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

## Electrical properties

Maximum power dissipation for nominal condition	14.5 W
---	--------

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

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 60 mA
Power consumption	max. 0.45 W

### 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. 4 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
-----------------	------------------

### Conductor connection

Connection method	Spring-cage connection
Conductor cross section rigid	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>

# IB IL 24 DI 16-PAC/SN - Digital module



2862958

<https://www.phoenixcontact.com/us/products/2862958>

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

## 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
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 DI 16-PAC/SN - Digital module



2862958

<https://www.phoenixcontact.com/us/products/2862958>

## Classifications

### ECLASS

ECLASS-11.0	27242604
ECLASS-12.0	27242604
ECLASS-13.0	27242604

### ETIM

ETIM 9.0	EC001599
----------	----------

### UNSPSC

UNSPSC 21.0	32151600
-------------	----------

# IB IL 24 DI 16-PAC/SN - Digital module



2862958

<https://www.phoenixcontact.com/us/products/2862958>

## Environmental product compliance

REACH SVHC

Lead 7439-92-1

Phoenix Contact 2024 © - 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)