

IB IL 24 DI 32/HD-NPN-PAC - Digital module



2878243

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Inline, Digital input terminal, Digital inputs: 32 (NPN), 24 V DC, connection technology: 1-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields

Product description

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

Your advantages

- 32 digital inputs, NPN-wired
- Connection of sensors in 1-conductor technology

Commercial data

Item number	2878243
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	DRI131
Catalog page	Page 125 (C-6-2019)
GTIN	4046356048507
Weight per piece (including packing)	218.3 g
Weight per piece (excluding packing)	191.31 g
Customs tariff number	85389099
Country of origin	DE

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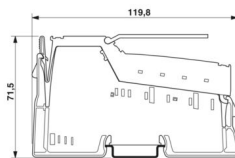


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Technical data

Dimensions

Dimensional drawing	
Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

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)	02
Length code (dec)	02
Process data channel	32 bit
Input address area	4 Byte
Output address area	0 Byte
Register length	32 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
Number of inputs	32 (NPN)
Connection method	Spring-cage connection
Connection technology	1-conductor
Input voltage	24 V DC

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Input voltage range "0" signal	-30 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}	typ. 2.6 mA
Typical input current per channel	2.6 mA
Typical response time	< 1 ms
Delay at signal change from 0 to 1	2 ms
Delay at signal change from 1 to 0	4 ms

Product properties

Type	modular
Product type	I/O component
Product family	Inline
Scope of delivery	including Inline connectors and marking fields
No. of channels	32
Operating mode	Process data operation with 2 words

Electrical properties

Potentials

Power consumption	max. 2.16 W (Module, complete)
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Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 90 mA
Power consumption	max. 0.675 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. 100 mA

Electrical isolation/isolation of the voltage ranges

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.
Test voltage: 7.5 V supply (bus logic)/functional ground	500 V AC, 50 Hz, 1 min.

Connection data

Connection technology

Connection name	Inline connector
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Conductor connection

Connection method	Spring-cage connection
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

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Stripping length	8 mm
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Inline connector

Connection method	Spring-cage connection
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 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

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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