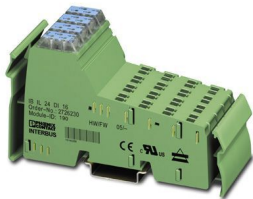


IB IL 24 DI16-2MBD - Inline terminal

2855114

<https://www.phoenixcontact.com/us/products/2855114>

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The figure shows the version IB IL 24 DI 16

Inline, Digital input terminal, Digital inputs: 16, 24 V DC, connection technology: 3-conductor, transmission speed in the local bus: 2 Mbps, degree of protection: IP20, without accessories

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	2855114
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	DR01
Product key	DRI131
GTIN	4017918876913
Weight per piece (including packing)	140.7 g
Weight per piece (excluding packing)	122 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

Interfaces

Inline local bus	
No. of channels	2
Connection method	Inline data jumper
Transmission speed	2 Mbps

System properties

Programming data (LocalbusSlave)	
Length code (hex)	01
ID code (dec.)	190
Length code (dec)	01
Process data channel	16 bit
Input address area	2 Byte
Output address area	0 Byte
Parameter channel (PCP)	0 Byte
Register length (bus)	16 bit
Fieldbus data telegram	
Required parameter data	1 Byte
Required configuration data	4 Byte

Input data

Digital:	
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Input name	Digital inputs
Description of the input	IEC 61131-2 type 1
Number of inputs	16
Connection method	Spring-cage connection
Connection technology	3-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 voltage U_{IN}	24 V DC
Nominal input current at U_{IN}	min. 3 mA (at nominal voltage)
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
Scope of supply	without accessories
No. of channels	16
Operating mode	Process data mode with one word

Electrical properties

Maximum power dissipation for nominal condition	14.5 W
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Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 80 mA
Power consumption	max. 0.6 W (at U_L)

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

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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 % (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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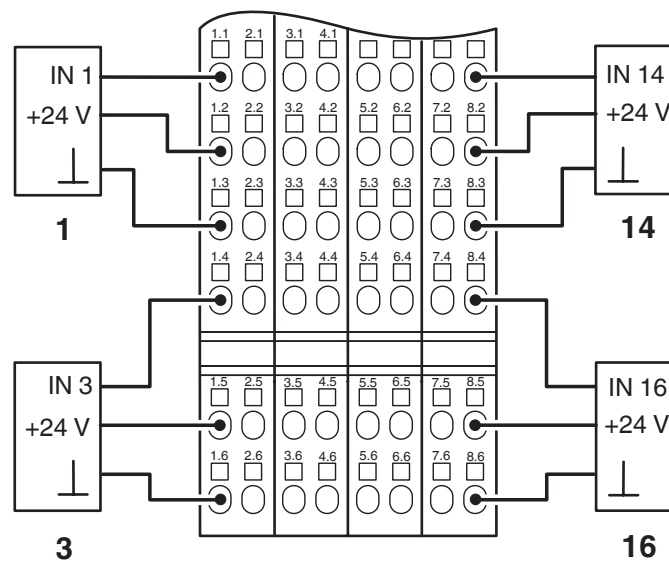
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Drawings

Dimensional drawing



Connection diagram



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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%
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