

IB IL 24 DI 8-2MBD-PAC - Digital module



2861690
<https://www.phoenixcontact.com/us/products/2861690>

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Inline, Digital input terminal, Digital inputs: 8, 24 V DC, connection technology: 4-conductor, transmission speed in the local bus: 2 Mbps, 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

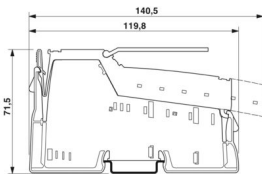
- 8 digital inputs
- Connection of sensors in 2-, 3-, and 4-conductor technology
- Maximum permissible load current per sensor: 250 mA
- Maximum permissible load current from the terminal: 2 A
- Diagnostic and status indicators

Commercial data

Item number	2861690
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI131
Catalog page	Page 271 (AX-2009)
GTIN	4017918974596
Weight per piece (including packing)	196.1 g
Weight per piece (excluding packing)	118 g
Customs tariff number	85389091
Country of origin	DE

Technical data

Dimensions

Dimensional drawing	
Width	48.8 mm
Height	119.5 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

Notes

Note on application	
Note on application	Only for industrial use

Interfaces

Inline local bus	
Number of interfaces	2
Connection method	Inline data jumper
Transmission speed	2 Mbps

System properties

Module	
ID code (dec.)	190
ID code (hex)	BE
Length code (hex)	81
Length code (dec)	129
Process data channel	8 bit
Input address area	1 Byte
Output address area	0 Byte
Register length	8 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

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Number of inputs	8
Connection method	Spring-cage connection
Connection technology	4-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
Typical response time	< 1 ms
Protective circuit	Short-circuit and overload protection

Product properties

Product type	I/O component
Product family	Inline
Type	modular
Scope of delivery	including Inline connectors and marking fields
No. of channels	8

Data management status

Article revision	06
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Electrical properties

Maximum power dissipation for nominal condition	24.12 W
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Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 50 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
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Conductor connection

Connection method	Spring-cage connection
Conductor cross section rigid	0.08 mm ² ... 1.5 mm ²

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Conductor cross section flexible	0.08 mm² ... 1.5 mm²
Conductor cross section AWG	28 ... 16
Stripping length	8 mm

Inline connector

Connection method	Spring-cage connection
Conductor cross section, rigid	0.08 mm² ... 1.5 mm²
Conductor cross section, flexible	0.08 mm² ... 1.5 mm²
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

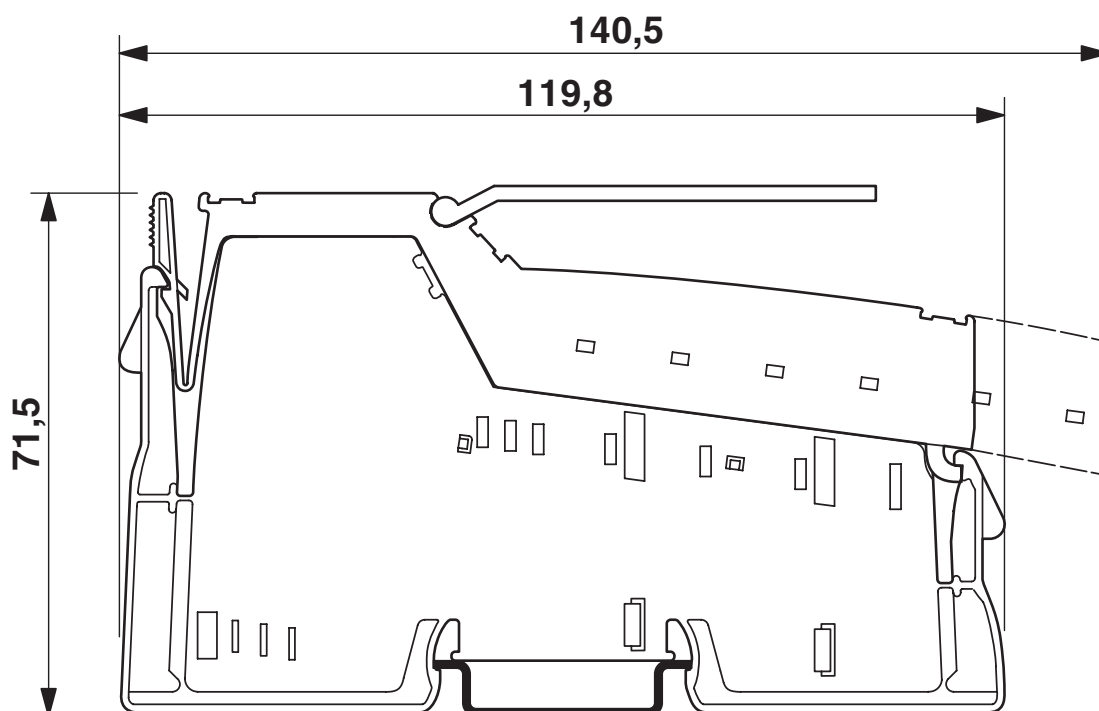
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

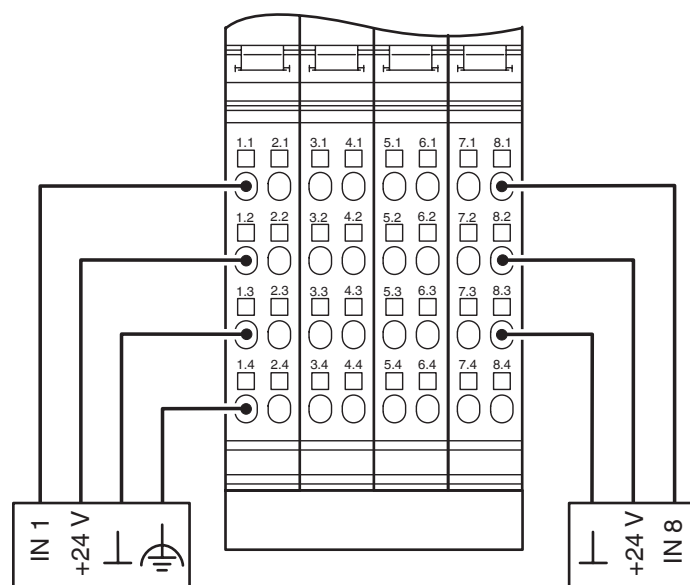
Mounting type	DIN rail mounting
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Drawings

Dimensional drawing



Connection diagram



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Approvals

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UL Listed
Approval ID: E140324



cUL Listed
Approval ID: E140324

cULus Listed

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001599
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UNSPSC

UNSPSC 21.0	32151600
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	aac8324a-1e75-4945-980b-84945d0d48c7

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Accessories

IB IL DI/DO 8-PLSET - Connector set

2860950

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Connector set

IB IL SCN-8-CP - Inline connector

2727608

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Inline connector, colored

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IB IL SCN-8 - Inline connector

2726337

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Connector, for digital 1, 2 or 8-channel Inline terminals



IB IL FIELD 2 - Marking field

2727501

<https://www.phoenixcontact.com/us/products/2727501>

Marking field, width: 12.2 mm



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IB IL FIELD 8 - Marking field

2727515

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Marking field, width: 48.8 mm



ESL 62X10 - Insert strip

0809492

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Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, CMS-P1-PLOTTER, mounting type: insert, lettering field size: 62 x 10 mm, Number of individual labels: 72



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ESL 62X46 - Insert strip

0809502

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Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, CMS-P1-PLOTTER, mounting type: insert, lettering field size: 62 x 46 mm, Number of individual labels: 15



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