

IB IL 24 DI 8/HD-ECO - Digital module



2702792

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Inline, Digital input terminal, Digital inputs: 8, 24 V DC, connection technology: 1-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector

Product description

The terminal is designed for use within an Inline station. It is used to acquire digital signals. Inline ECO terminals are approved for the temperature range from 0°C to +55°C. The electronics base and Inline connector are supplied as standard.

Your advantages

- 8 digital inputs
- Connection of sensors in 1-conductor technology

Commercial data

Item number	2702792
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI131
Catalog page	Page 117 (C-6-2019)
GTIN	4055626355221
Weight per piece (including packing)	81.9 g
Weight per piece (excluding packing)	83.38 g
Customs tariff number	85389099
Country of origin	DE

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Technical data

Dimensions

Dimensional drawing	
Width	12.2 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)	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 types 1 and 3
Number of inputs	8
Connection method	Spring-cage connection
Connection technology	1-conductor
Input voltage	24 V DC

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Input voltage range "0" signal	-3 V DC ... 5 V DC
Input voltage range "1" signal	11 V DC ... 30 V DC
Nominal input voltage U_{IN}	24 V DC
Nominal input current at U_{IN}	typ. 2.4 mA
Typical input current per channel	2.4 mA
Typical response time	1 ms
Delay at signal change from 0 to 1	1 ms
Delay at signal change from 1 to 0	1 ms

Product properties

Type	modular
Product type	I/O component
Product family	Inline
Scope of delivery	including Inline connector
No. of channels	8
Operating mode	Process data mode with one byte

Electrical properties

No. of channels	8
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Potentials

Power consumption	max. 0.8 W (Module, complete)
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Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 30 mA
Power consumption	max. 0.225 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. 5.5 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: 7.5 V supply (bus logic)/functional ground	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
Conductor cross section flexible	0.08 mm ² ... 1.5 mm ²

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Conductor cross section AWG	28 ... 16
Stripping length	8 mm

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)	0 °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

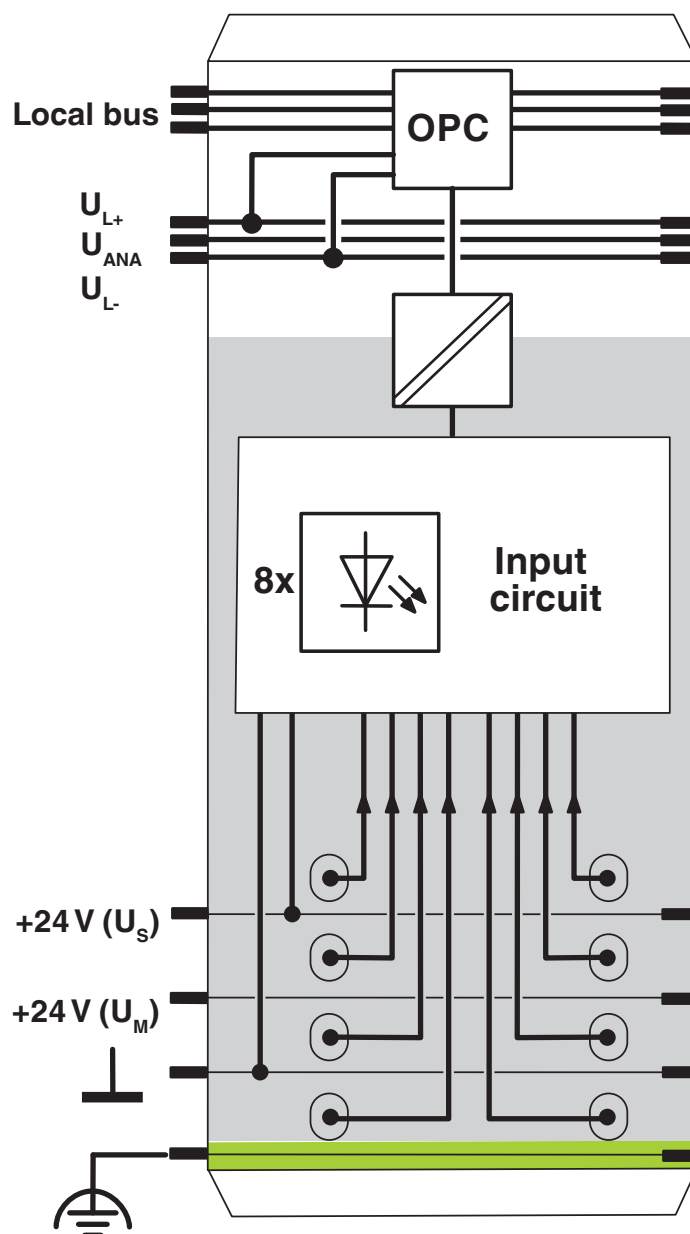
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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Mounting

Mounting type	DIN rail mounting
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Drawings

Block diagram



Internal wiring of the terminal points

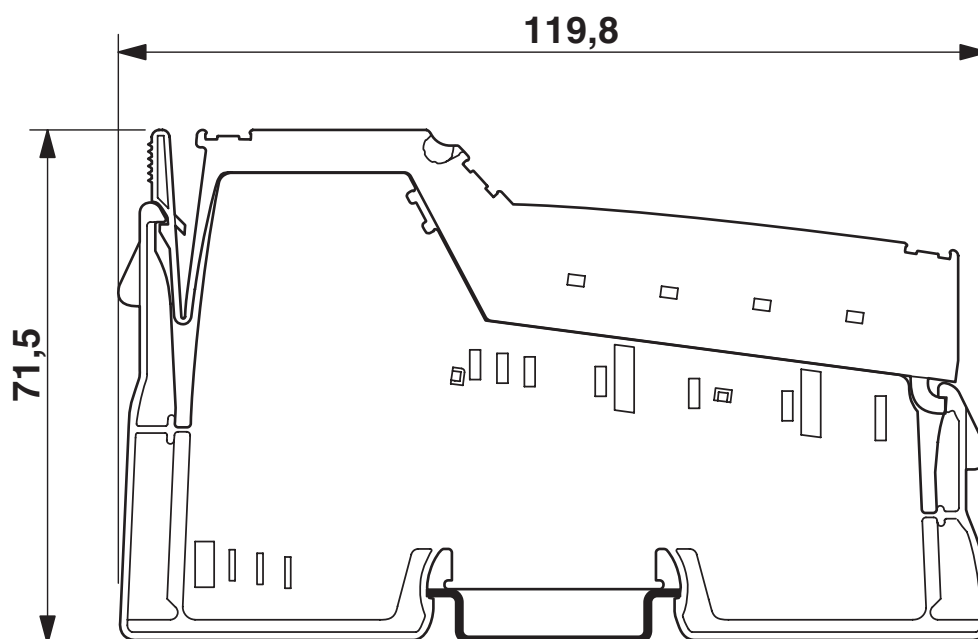
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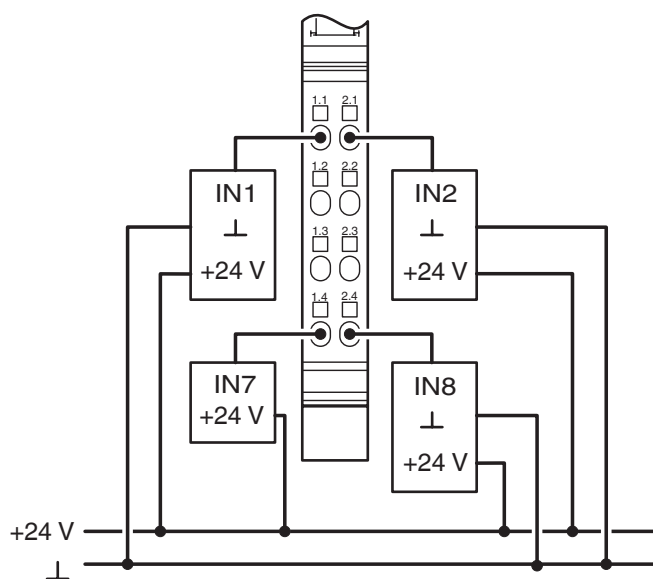
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Dimensional drawing



Connection diagram




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Approvals

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UL Listed

Approval ID: FILE E 140324



cUL Listed

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Classifications

ECLASS

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

ETIM

ETIM 8.0	EC001599
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UNSPSC

UNSPSC 21.0	32151600
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

IB IL PD 24V-PAC - Potential distributors

2862987

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Inline terminal for power distribution (24 V), complete with accessories, (connector and labeling field) 24 V supply voltage is fed out from the segment circuit (US)

IB IL PD GND-PAC - Potential distributors

2862990

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Inline terminal for power distribution (GND), complete with accessories, (connector and labeling field) connections for GND

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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

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Marking field, width: 12.2 mm



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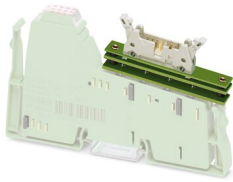


FLKM 14-PA-INLINE/DIO8 - Front adapter

2900889

<https://www.phoenixcontact.com/us/products/2900889>

VARIOFACE front adapter for Inline HD modules, for transferring 8 digital signals.



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