IB IL 24 DI 16-ME - Digital module

2897156

https://www.phoenixcontact.com/in/products/2897156

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

Product description

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

Your advantages

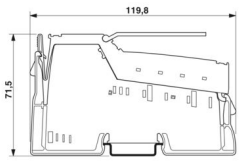
- 16 digital inputs
- Connection of sensors in 2- and 3-conductor technology
- Maximum permissible load current per sensor: 250 mA
- Maximum permissible load current from the terminal: 4 A

Commercial data

Item number	2897156
Packing unit	4 pc
Minimum order quantity	4 pc
Sales key	DRI
Product key	DRI131
Catalog page	Page 123 (C-6-2019)
GTIN	4046356148207
Weight per piece (including packing)	193.45 g
Weight per piece (excluding packing)	122 g
Customs tariff number	85389099
Country of origin	DE

Technical data

Dimensions

Dimensional drawing	
Width	48.8 mm
Height	119.8 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	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

Number of inputs	16
Cable length	max. 30 m (to the sensor)
Connection method	Spring-cage connection
Connection technology	3-conductor
Input voltage	24 V DC
Input voltage range "0" signal	-3 V DC ... 5 V
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)
Sensor current per channel	max. 250 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

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

Data management status

Article revision	03

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
	min. 0 A (No-load)

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

Conductor connection

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

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 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

Standards and regulations

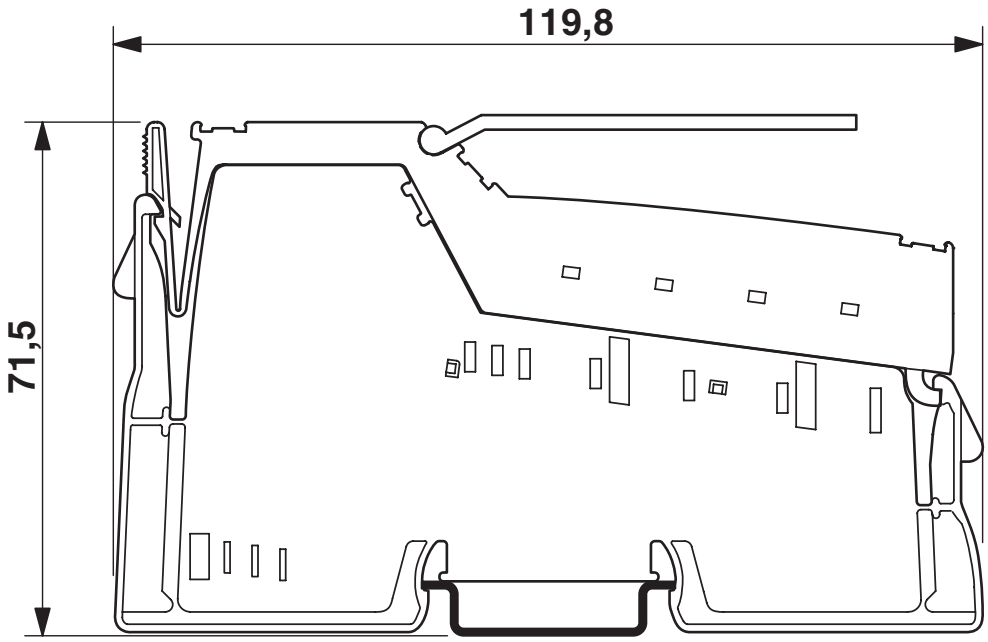
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

Mounting

Mounting type	DIN rail mounting

Drawings

Dimensional drawing



Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/in/products/2897156

cUL Recognized
Approval ID: E140324

UL Recognized
Approval ID: FILE E 140324

EAC
Approval ID: TR TS_D_01921-19

UAE-RoHS
Approval ID: 22-04-13078

cULus Recognized

Classifications

ECLASS

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

ETIM

ETIM 9.0	EC001599

UNSPSC

UNSPSC 21.0	32151600

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	95bd7460-7287-4334-8fea-387ceaa7fe4d

Accessories

IB IL FIELD 2 - Marking field

2727501

https://www.phoenixcontact.com/in/products/2727501

Marking field, width: 12.2 mm

IB IL FIELD 8 - Marking field

2727515

https://www.phoenixcontact.com/in/products/2727515

Marking field, width: 48.8 mm

ESL 62X10 - Insert strip

0809492

https://www.phoenixcontact.com/in/products/0809492

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

ESL 62X46 - Insert strip

0809502

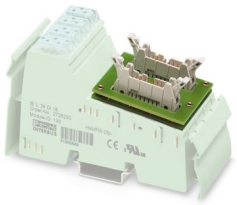
https://www.phoenixcontact.com/in/products/0809502

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

FLKM 14-PA-INLINE/IN16 - Front adapter

2302751

https://www.phoenixcontact.com/in/products/2302751



VARIOFACE front adapter for Inline modules, for transferring 16 (2 x 8) digital input signals.

IB IL PD 24V-PAC - Potential distributors

2862987

https://www.phoenixcontact.com/in/products/2862987

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 24 DI 16-ME - Digital module

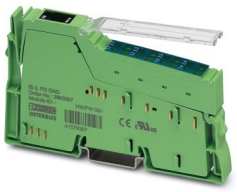
2897156

https://www.phoenixcontact.com/in/products/2897156

IB IL PD GND-PAC - Potential distributors

2862990

https://www.phoenixcontact.com/in/products/2862990



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

PHOENIX CONTACT (I) Pvt. Ltd.
A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420
info@phoenixcontact.co.in