IB IL DI 8/S0-PAC - Digital module

2897020

https://www.phoenixcontact.com/us/products/2897020

Inline, Digital input terminal, Digital inputs: 8 (S0 counter inputs), 24 V DC, connection technology: 4-conductor, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields

Product description

The IB IL DI 8/S0-PAC terminal is designed for use within an Inline station. It is ideal for recording counting pulses from impulse encoders with an S0 interface in acc. with DIN 43864 and for Class A impulse encoders in acc. with IEC 62053-31.

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

• 32-bit counter (up and down)

• Diagnostic and status indicators

Commercial data

| Item number	2897020
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR18
Product key	DRHABA
Catalog page	Page 125 (C-6-2019)
GTIN	4046356133098
Weight per piece (including packing)	205.933 g
Weight per piece (excluding packing)	118 g
Customs tariff number	85389099
Country of origin	DE

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Technical data

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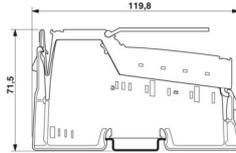
Dimensional drawing	
Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area

Interfaces

Inline local bus

Connection method	Inline data jumper
Transmission speed	500 kbps

System properties

Module

ID code (dec.)	191
ID code (hex)	BF
Length code (hex)	02
Length code (dec)	02
Process data channel	32 bit
Input address area	4 Byte
Output address area	4 Byte
Register length	4 Byte
Required parameter data	1 Byte
Required configuration data	5 Byte

Input data

Digital:

Input name	Digital inputs
Description of the input	IEC 62053-31 and DIN 43864

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Number of inputs	8 (S0 counter inputs)
Connection method	Spring-cage connection
Connection technology	4-conductor
Input voltage	24 V DC
Nominal input voltage U_{IN}	24 V DC
Nominal input current at U_{IN}	9 mA
Sensor current per channel	max. 250 mA

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
Operating mode	Process data mode with two words

Electrical properties

Potentials: Communications power (U_L)

Supply voltage	7.5 V DC (via voltage jumper)
Current draw	max. 55 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 (incl. sensor supply)
	max. 70 mA (without sensor supply, inputs active)

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)	80 kPa ... 106 kPa (up to 2000 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

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Drawings

Dimensional drawing

119,8

71,5
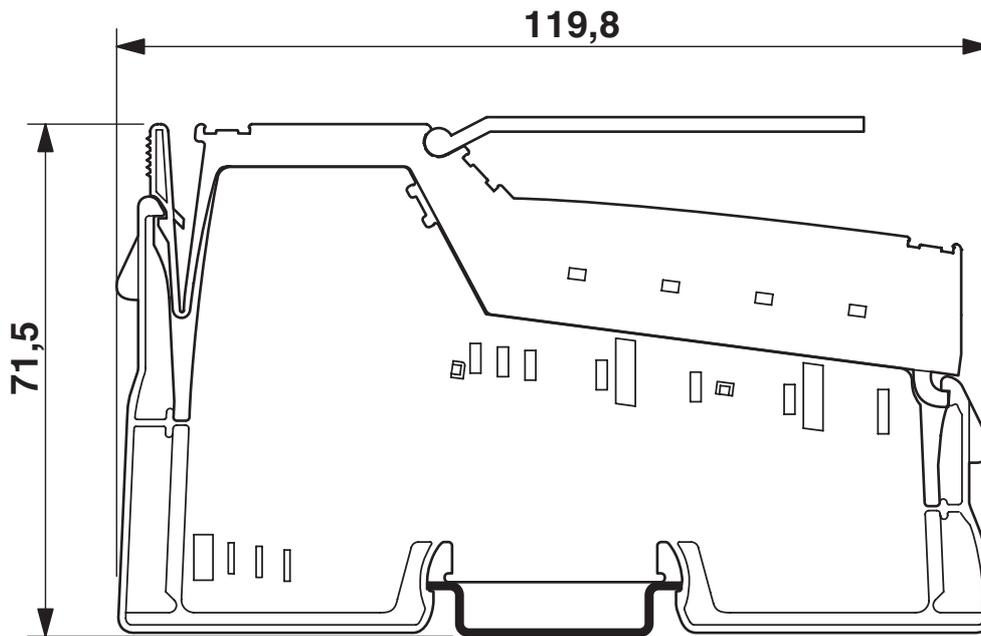
Connection diagram

1.1 2.1
1.2 2.2
1.3 2.3
1.4 2.4

IN 1
+24 V

+24 V
IN 8
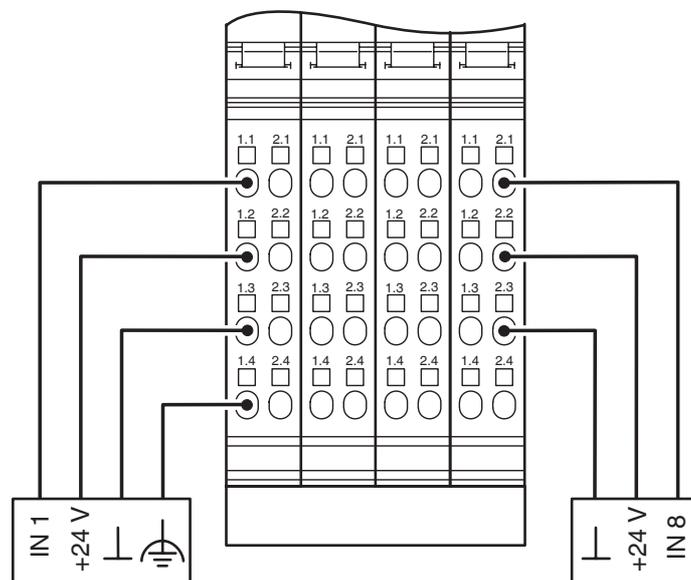
Classifications

ECLASS

ECLASS-11.0	27242605
ECLASS-12.0	27242605
ECLASS-13.0	27242605

ETIM

ETIM 9.0	EC001601

UNSPSC

UNSPSC 21.0	32151600

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

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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Accessories

IB IL DI/DO 8-PLSET - Connector set

2860950

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Connector set

IB IL SCN-8-CP - Inline connector

2727608

https://www.phoenixcontact.com/us/products/2727608

Inline connector, colored

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2897020
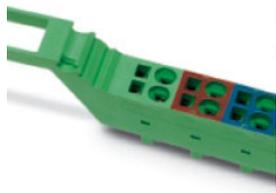
https://www.phoenixcontact.com/us/products/2897020

IB IL SCN-8 - Inline connector

2726337

https://www.phoenixcontact.com/us/products/2726337

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

https://www.phoenixcontact.com/us/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

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2897020

https://www.phoenixcontact.com/us/products/2897020

ESL 62X46 - Insert strip

0809502

https://www.phoenixcontact.com/us/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