IB IL DI 8/S0-PAC - Digital module

2897020

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

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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

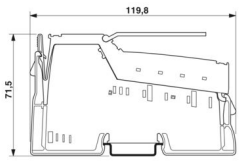
- 8 digital inputs
- Connection of sensors in 2-, 3-, and 4-conductor technology
- Maximum permissible load current per sensor: 250 mA
- Maximum permissible load current from the terminal: 2 A
- 32-bit counter (up and down)
- Diagnostic and status indicators

Commercial data

Item number	2897020
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR18
Product key	DRHABA
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

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

Material specifications

Color (Housing)	green (RAL 6021)

Interfaces

Inline local bus

Connection method	Inline data jumper
Transmission speed	500 kbps

System properties

Programming data (LocalbusSlave)

Length code (hex)	02
ID code (dec.)	191
Length code (dec)	02
Process data channel	32 bit
Input address area	4 Byte
Output address area	4 Byte
Parameter channel (PCP)	0 Byte
Register length (bus)	4 Byte

Fieldbus data telegram

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
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
Installation location	Control cabinet
Scope of supply	including Inline connectors and marking fields
No. of channels	8
Operating mode	Process data mode with two words

Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

Electrical properties

Potentials

Power supply	max. 70 mA (without sensor supply, inputs active)

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

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)

Mechanical test

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	25g

Standards and regulations

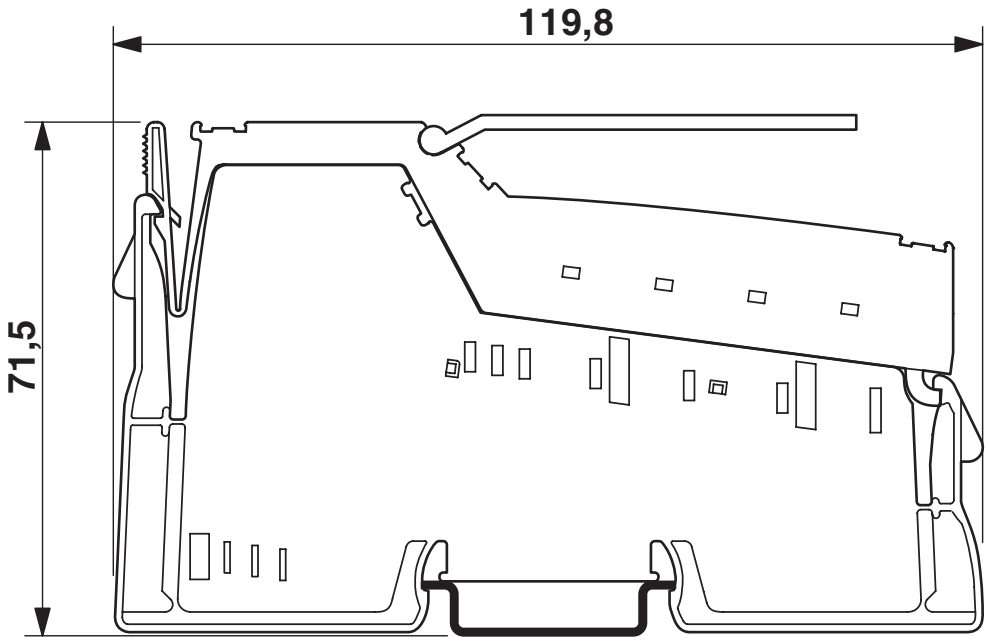
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

Mounting

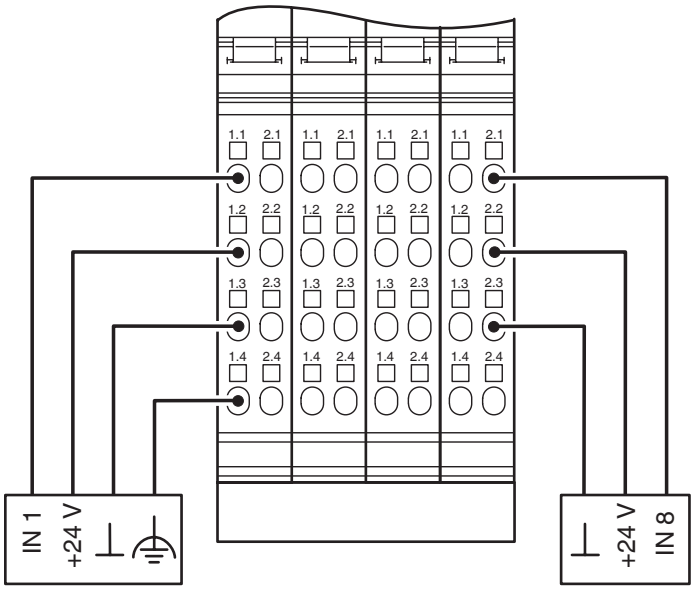
Mounting type	DIN rail mounting

Drawings

Dimensional drawing



Connection diagram



Classifications

ECLASS

ECLASS-13.0	27242605
ECLASS-15.0	27242605

ETIM

ETIM 10.0	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%

EF3.1 Climate Change

CO2e kg	10.666 kg CO2e

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com