

## Inline terminal - IB IL 24 DI 32/HD-NPN-PAC - 2878243

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Inline, Digital input terminal, Digital inputs: 32 (NPN), 24 V DC, connection method: 1-wire, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connectors and marking fields

The figure shows the product version  
IB IL 24 DI 32/HD-PAC

### Product Description


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

### Your advantages

- 32 digital inputs, NPN-wired
- Connection of sensors in single-wire technology



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 048507
GTIN	4046356048507
Weight per Piece (excluding packing)	218.300 g
Custom tariff number	85389099
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Width	48.8 mm
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## Technical data

### Dimensions

Height	119.8 mm
Depth	71.5 mm
Note on dimensions	Housing dimensions

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
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)
Degree of protection	IP20

### General

Mounting type	DIN rail
Color	green
Net weight	191.31 g
Note on weight specifications	with connectors
Operating mode	Process data operation with 2 words

### Interfaces

Designation	Inline local bus
No. of channels	2
Connection method	Inline data jumper
Transmission speed	500 kbps

### Inline potentials

Designation	Communications power ( $U_L$ )
Supply voltage	7.5 V DC (via voltage jumper)
Current consumption	max. 90 mA
Power consumption	max. 0.675 W
Designation	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 consumption	max. 100 mA
Power consumption	max. 2.16 W (Module, complete)

### Digital inputs

Input name	Digital inputs
Description of the input	EN 61131-2 type 1

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### Technical data

#### Digital inputs

Connection method	Spring-cage connection
Connection technology	1-wire
Number of inputs	32 (NPN)
Typical response time	< 1 ms
Nominal input voltage $U_{IN}$	24 V DC
Nominal input current at $U_{IN}$	typ. 2.6 mA
Input voltage	24 V DC
Input voltage range "0" signal	-30 V DC ... 5 V DC
Input voltage range "1" signal	15 V DC ... 30 V DC
Typical input current per channel	2.6 mA
Delay at signal change from 0 to 1	2 ms
Delay at signal change from 1 to 0	4 ms

#### Electrical isolation

Test section	7.5 V supply (bus logics)/24 V supply (I/O) 500 V AC 50 Hz 1 min.
	24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min.
	7.5 V supply (bus logics) / functional earth ground 500 V AC 50 Hz 1 min.

#### Standards and Regulations

Connection in acc. with standard	CUL
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

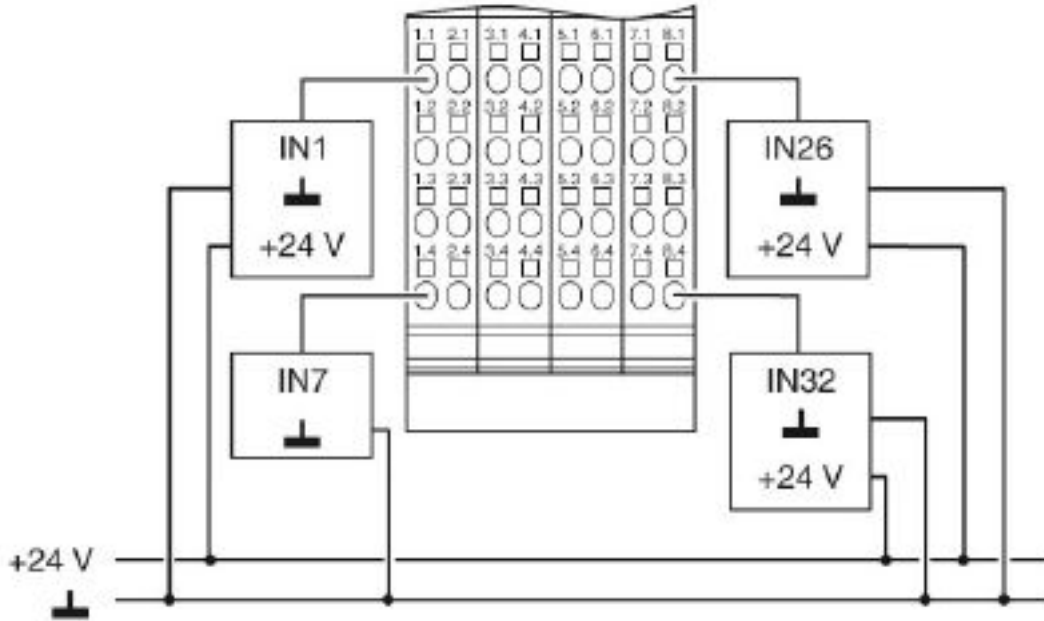
#### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

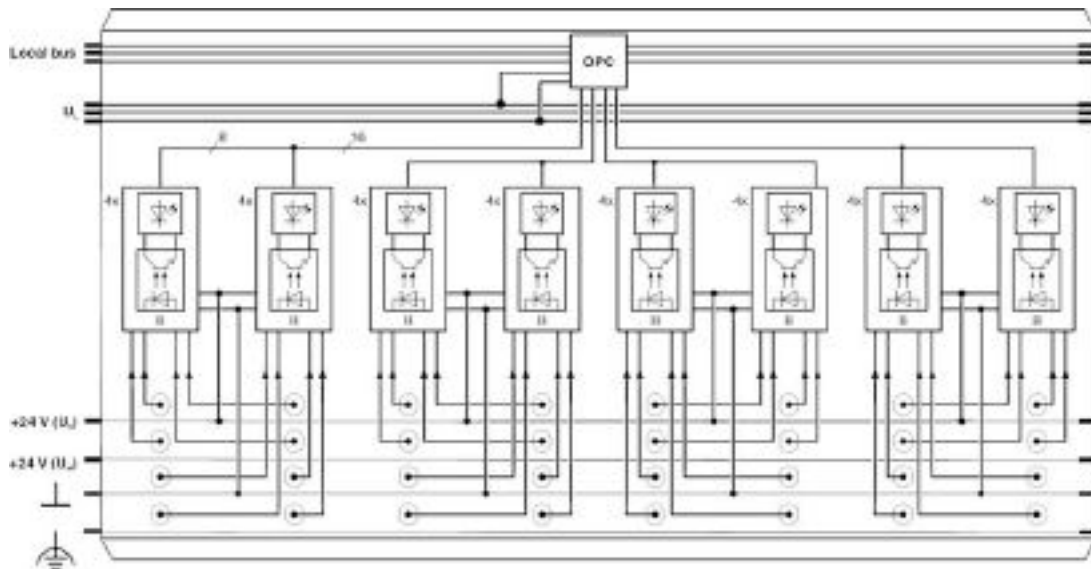
### Drawings

# Inline terminal - IB IL 24 DI 32/HD-NPN-PAC - 2878243

Connection diagram

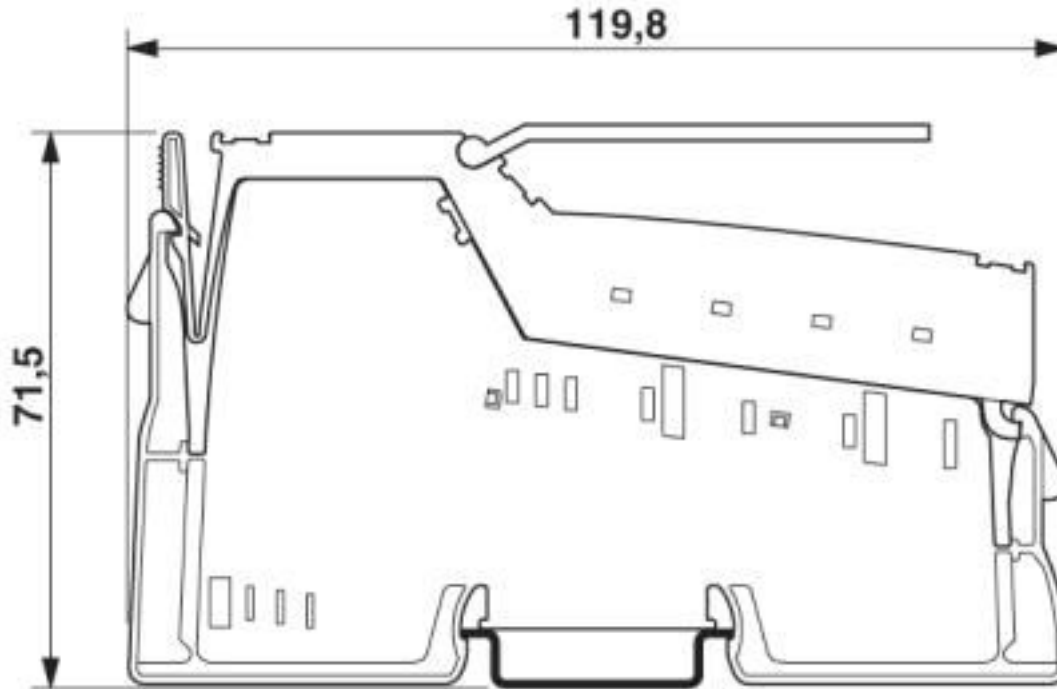


Block diagram



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Dimensional drawing



## Classifications

### eCl@ss

eCl@ss 10.0.1	27242604
eCl@ss 4.0	27250300
eCl@ss 4.1	27250300
eCl@ss 5.0	27250300
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242604
eCl@ss 8.0	27242604
eCl@ss 9.0	27242604

### ETIM

ETIM 2.0	EC001430
ETIM 3.0	EC001599
ETIM 4.0	EC001599
ETIM 5.0	EC001599
ETIM 6.0	EC001599
ETIM 7.0	EC001599

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## Classifications

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602

## Approvals

### Approvals

#### Approvals

DNV GL / BV / LR / ABS / UL Recognized / cUL Recognized / EAC / cULus Recognized

#### Ex Approvals

### Approval details

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA00002CU
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BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	20989/B2_BV
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LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	08/20033
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ABS		<a href="http://www.eagle.org/eagleExternalPortalWEB/">http://www.eagle.org/eagleExternalPortalWEB/</a>	17-HG1621871-PDA
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## Approvals

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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EAC		EAC-Zulassung
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cULus Recognized	
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## Accessories

### Accessories

#### Connector set

Connector set - IB IL DI/DO 8-PLSET - 2860950



Connector set

### I/O component

Inline terminal - IB IL PD 24V-PAC - 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)

## Inline terminal - IB IL 24 DI 32/HD-NPN-PAC - 2878243

### Accessories

Inline terminal - IB IL PD GND-PAC - 2862990



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

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### Labeling panel

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm



### Terminal marking

Insert strip - ESL 62X10 - 0809492



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

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Insert strip - ESL 62X46 - 0809502



Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems: Laser printer, mounting type: insert, lettering field size: 62 x 46 mm, Number of individual labels: 120



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### Accessories

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