

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 | 85389091 |
| Country of origin | Germany |

Technical data

Note

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

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) |

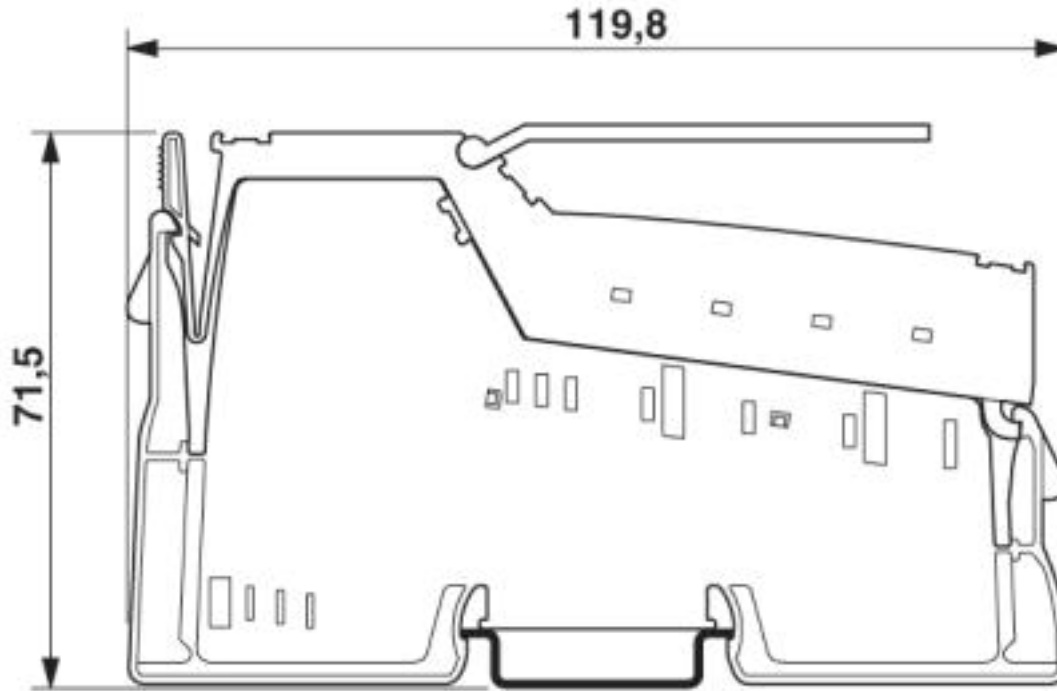
Environmental Product Compliance

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

Drawings

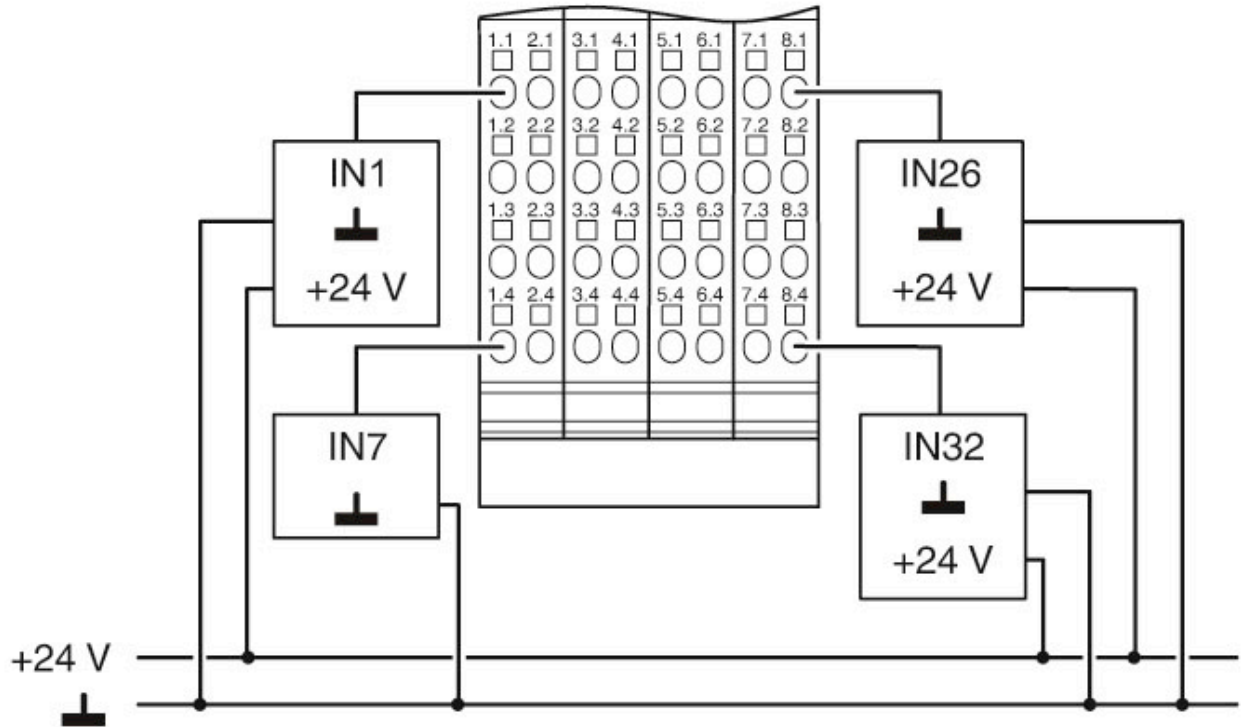
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Dimensional drawing



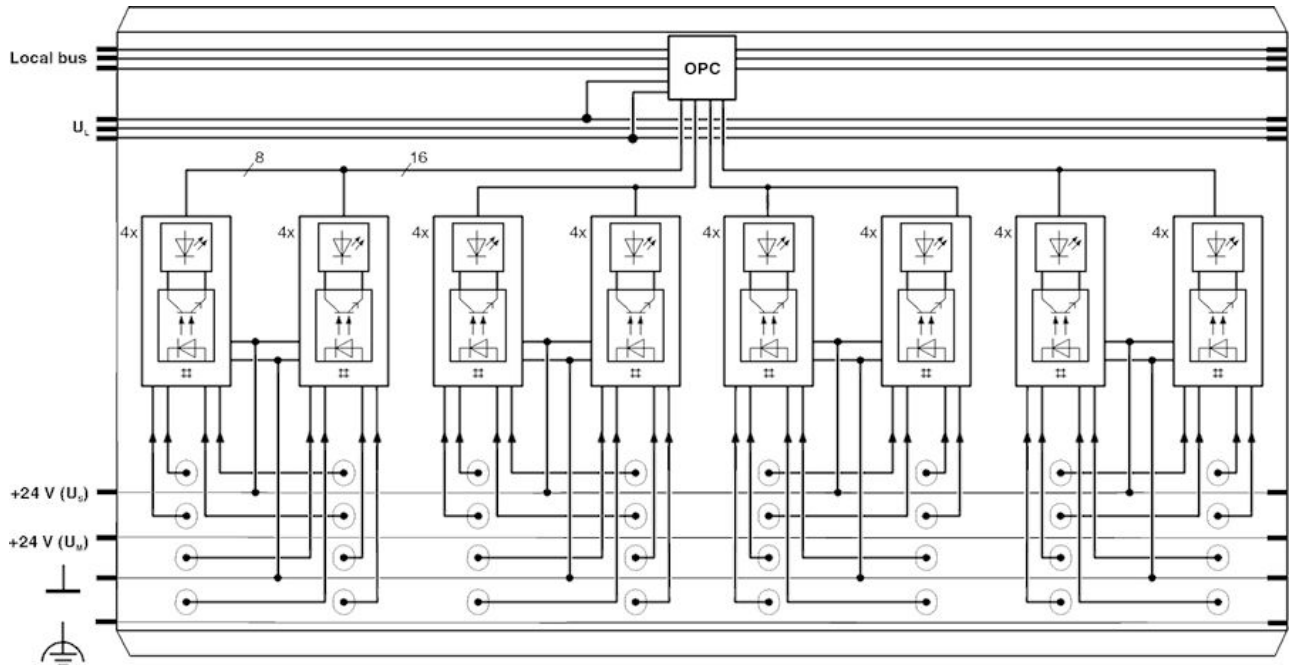
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Connection diagram



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Block diagram



Classifications

eCl@ss

| | |
|------------|----------|
| eCl@ss 4.0 | 27250300 |
| eCl@ss 4.1 | 27250300 |
| eCl@ss 5.0 | 27250300 |

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Classifications

eCl@ss

| | |
|------------|----------|
| 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 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 43172015 |
| UNSPSC 7.0901 | 43201404 |
| UNSPSC 11 | 43172015 |
| UNSPSC 12.01 | 43201404 |
| UNSPSC 13.2 | 32151602 |

Approvals

Approvals

Approvals

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

Ex Approvals

Approval details

| | | | |
|--------|--|---|------------|
| DNV GL | | https://approvalfinder.dnvgl.com/ | TAA00002CU |
|--------|--|---|------------|

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Approvals

| | | | |
|------------------|--|---|------------------|
| BV | | http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials | 20989/B2_BV |
| LR | | http://www.lr.org/en | 08/20033 |
| ABS | | http://www.eagle.org/eagleExternalPortalWEB/ | 17-HG1621871-PDA |
| UL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 140324 |
| cUL Recognized | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 140324 |
| EAC | | | EAC-Zulassung |
| cULus Recognized | | | |

Accessories

Accessories

Connector set

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



Connector set

I/O component

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

Accessories

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 PD GND-PAC - 2862990



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

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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Accessories

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
