# Inline terminal - IB IL 24 DI 8/HD-ECO - 2702792

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Inline ECO, Digital input terminal, Digital inputs: 8, 24 V DC, connection method: 1-wire, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector

## Product Description

The terminal is designed for use within an Inline station.
It is used to acquire digital signals.
Inline ECO terminals are approved for the temperature range from 0°C to +55°C. The electronics base and Inline connector are supplied as standard.

## Your advantages

- 8 digital inputs
- Connection of sensors in single-wire technology

RoHS

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 pc |
| GTIN | 4 055626 355221 |
| GTIN | 4055626355221 |

## Technical data

### Note

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

### Dimensions

| | |
|---|---|
| Width | 12.2 mm |
| Height | 119.8 mm |
| Depth | 71.5 mm |

### Ambient conditions

| | |
|---|---|
| Ambient temperature (operation) | 0 °C ... 55 °C |
| Ambient temperature (storage/transport) | -25 °C ... 85 °C |
| Permissible humidity (operation) | 10 % ... 95 % (according to DIN EN 61131-2) |

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## Technical data

### Ambient conditions

| | |
|---|---|
| Permissible humidity (storage/transport) | 10 % ... 95 % (according to DIN EN 61131-2) |
| 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 |

### Connection data

| | |
|---|---|
| Designation | Inline connector |
| Connection method | Spring-cage connection |
| Conductor cross section solid min. | 0.08 mm² |
| Conductor cross section solid max. | 1.5 mm² |
| Conductor cross section flexible min. | 0.08 mm² |
| Conductor cross section flexible max. | 1.5 mm² |
| Conductor cross section AWG min. | 28 |
| Conductor cross section AWG max. | 16 |
| Stripping length | 8 mm |

### General

| | |
|---|---|
| Mounting type | DIN rail |
| Net weight | 83.38 g |
| Note on weight specifications | with connector |

### 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. 30 mA |
| Power consumption | max. 0.25 W (at $U_L$) |
| 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. 5.5 mA |

### Digital inputs

| | |
|---|---|
| Input name | Digital inputs |
| Description of the input | EN 61131-2 types 1 and 3 |
| Connection method | Spring-cage connection |
| Connection technology | 1-wire |
| Number of inputs | 8 |

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## Technical data

### Digital inputs

| | |
|---|---|
| Typical response time | 1 ms |
| Input voltage | 24 V DC |
| Input voltage range "0" signal | -3 V DC ... 5 V DC |
| Input voltage range "1" signal | 11 V DC ... 30 V DC |
| Nominal input current at $U_{IN}$ | typ. 2.4 mA |
| Typical input current per channel | 2.4 mA |
| Delay at signal change from 0 to 1 | 1 ms |
| Delay at signal change from 1 to 0 | 1 ms |

### Electrical isolation

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

### Standards and Regulations

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

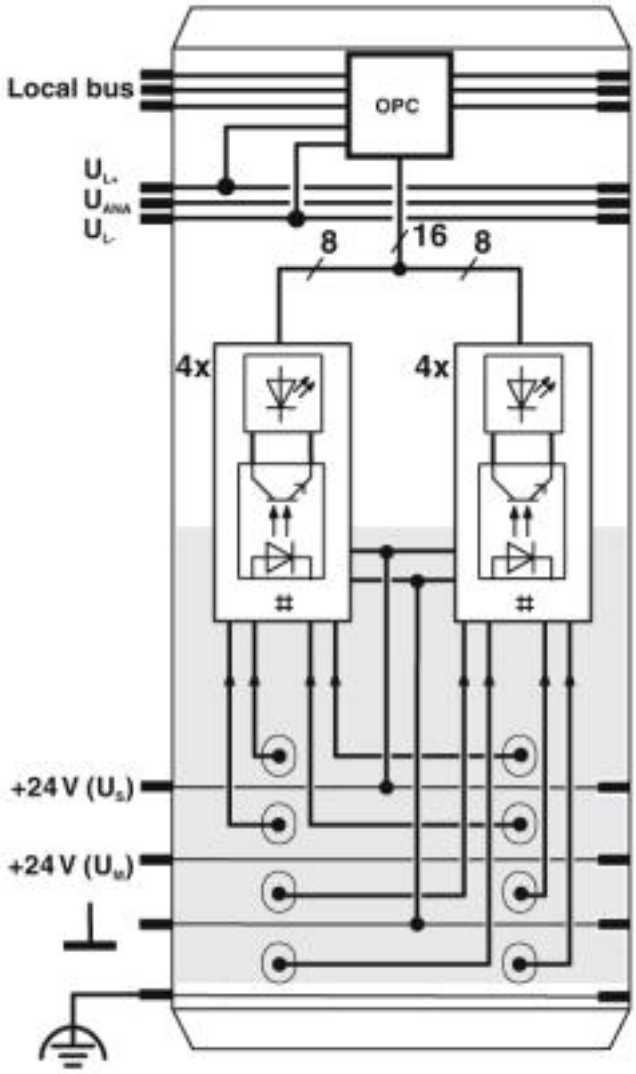
### Environmental Product Compliance

| | |
|---|---|
| | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 |
| | For details about hazardous substances go to tab “Downloads”, Category “Manufacturer's declaration” |

## Drawings

# Inline terminal - IB IL 24 DI 8/HD-ECO - 2702792

Block diagram




Internal wiring of the terminal points

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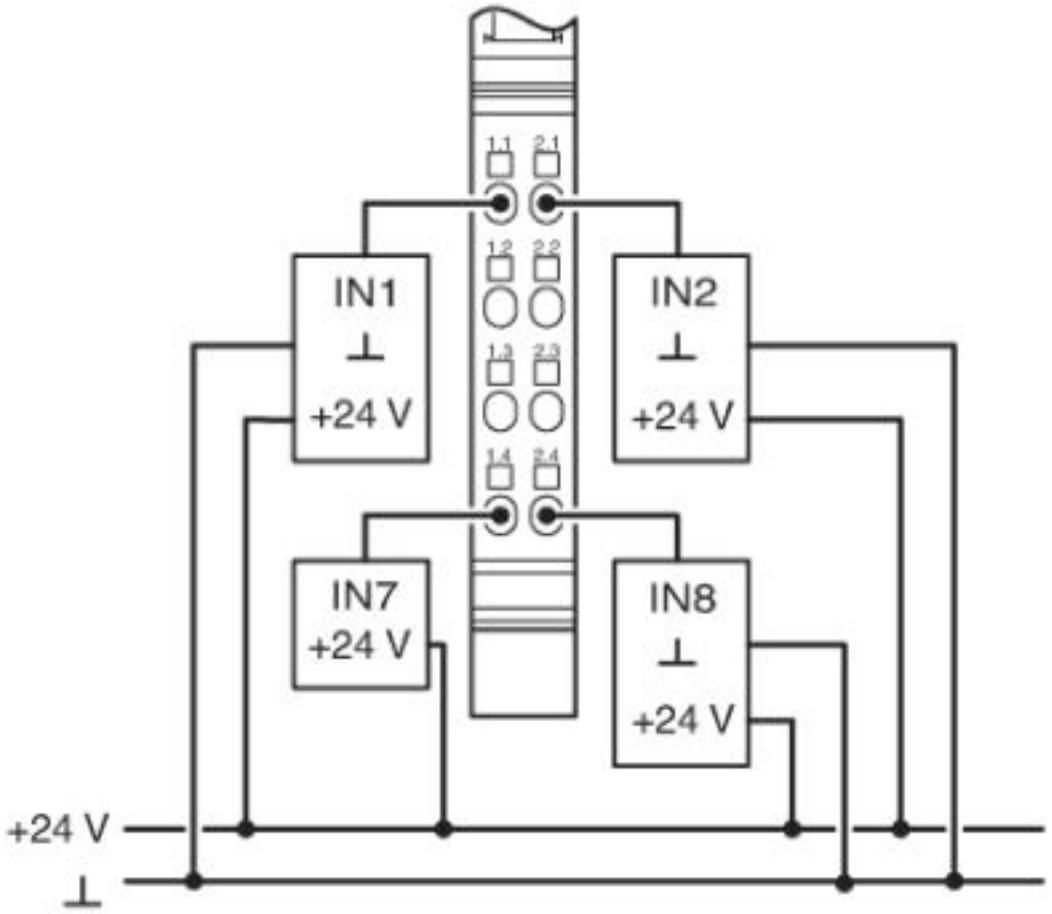
Connection diagram



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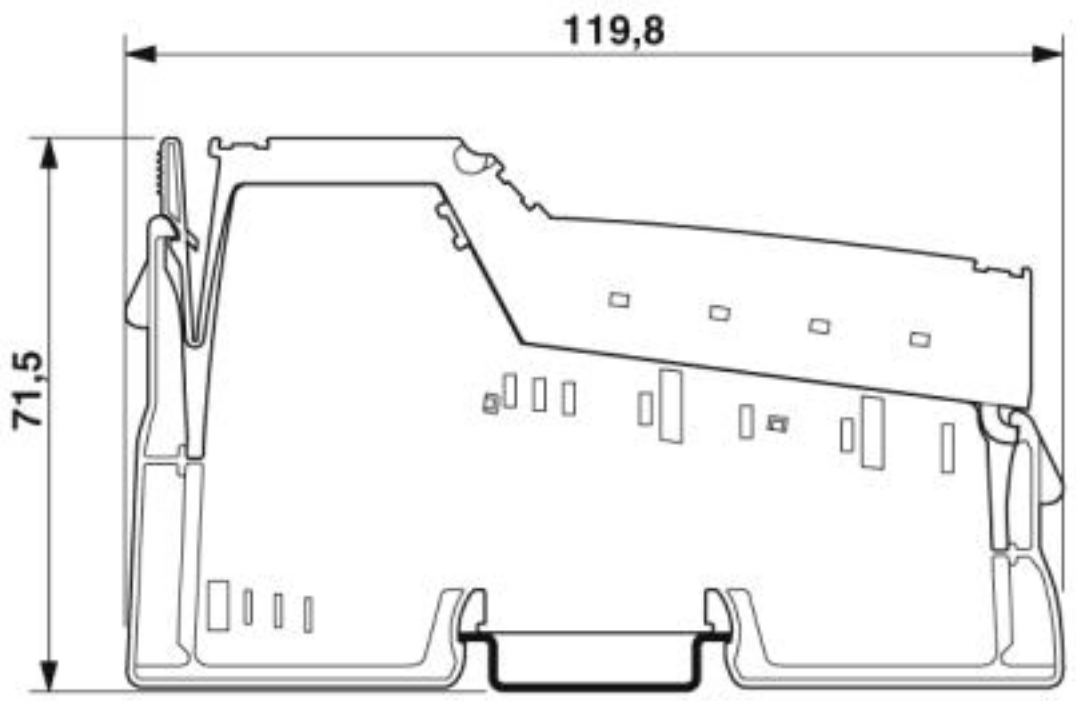
Dimensional drawing




## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

### Approval details

| | | | |
|---|---|---|---|
| UL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 140324 |
| cUL Listed | | http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm | FILE E 140324 |
| cULus Listed | | | |

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