# Inline terminal - IB IL 24 DO 4/EF-ECO - 2702825

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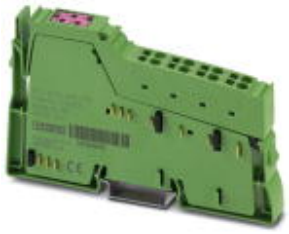

Inline ECO, Digital output terminal, Digital outputs: 4, 24 V DC, 500 mA, connection method: 3-wire, transmission speed in the local bus: 500 kbps, including Inline connector

## Product Description

The terminal is designed for use within an Inline station.
It is used to output 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.

## Why buy this product

- 4 digital outputs
- Connection of actuators in 2 and 3-wire technology
- Nominal current per output: 500 mA
- Total current of the terminal: 2 A
- Short-circuit-proof and overload-protected outputs
- Diagnostic and status indicators
- Approved for use in a safety-related segment circuit

RoHS

## Key Commercial Data

| | |
|---|---|
| Packing unit | 1 STK |
| GTIN | 4 055626 381473 |
| GTIN | 4055626381473 |

## 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 |

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## Technical data

### Dimensions

| | |
|---|---|
| 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) |
| 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 | 83.85 g |
| Note on weight specifications | with connector |
| Diagnostics messages | Short-circuit / overload of the digital outputs Error message in the diagnostic code (bus) and display (2 Hz) via the LED (D) on the module |

### 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. 44 mA |
| Power consumption | max. 0.33 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. 2 A |

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## Technical data

### Inline potentials

| | |
|---|---|
| | 0 A |

### Digital outputs

| | |
|---|---|
| Output name | Digital outputs |
| Connection method | Spring-cage connection |
| Connection technology | 3-wire |
| Number of outputs | 4 |
| Type of protection | Overload protection, short-circuit protection of outputs |
| Output voltage | 24 V DC ($U_S$ - 1 V) |
| Nominal output voltage | 24 V DC |
| Maximum output current per channel | 500 mA |
| Maximum output current per module | 2 A |
| Nominal load, inductive | 12 VA (1.2 H, 50 Ω) |
| Nominal load, lamp | 12 W |
| Nominal load, ohmic | 12 W (48 Ω) |

### Electrical isolation

| | |
|---|---|
| Test section | 5 V supply, incoming remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min. |
| | 5 V supply, outgoing remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min. |
| | 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. |

### Standards and Regulations

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

### Environmental Product Compliance

| | |
|---|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

## Drawings

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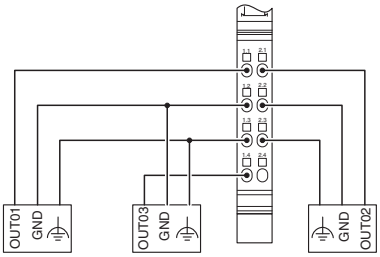
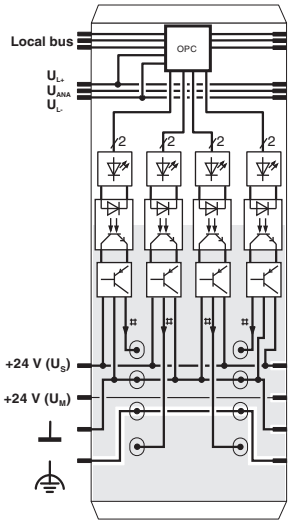
Connection diagram

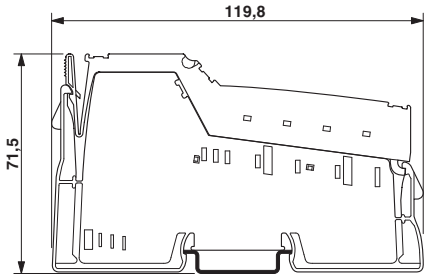



Block diagram




Internal wiring of the terminal points

Dimensional drawing




## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

### Approval details

# Inline terminal - IB IL 24 DO 4/EF-ECO - 2702825

## Approvals

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



PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
http://www.phoenixcontact.com