

# Inline terminal - IB IL 24 DI 2-PAC - 2861221

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Inline digital input terminal block, complete with accessories (connector and labeling field), 2 inputs, 24 V DC, 4-wire connection method

## Product Description

Digital Inline input terminals are designed for the connection of digital signals as are emitted from control switches, limit switches or proximity switches. All the typical applications are covered by the standard automation terminals. The I/O equipment is connected using the Inline plug, providing you with multiple conductor connection technology. The Inline terminals can be labeled using pull-out labeling fields. The fields have insert cards that can be labeled individually to suit the application. Additionally, there is the proven ZBFM-6... Zack marker strip for labeling the terminal points.

## Product Features

- Connections for 2 digital sensors
- Connection of sensors in 2, 3, and 4-wire technology
- Maximum permissible load current per sensor: 250 mA
- Diagnostic and status indicators



## Key commercial data

|                         |               |
|-------------------------|---------------|
| <b>package_quantity</b> | 1             |
| <b>GTIN</b>             | 4017918894153 |

## Technical data

### Note

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

### Dimensions

|                           |                    |
|---------------------------|--------------------|
| <b>Width</b>              | 12.2 mm            |
| <b>Height</b>             | 119.8 mm           |
| <b>Depth</b>              | 71.5 mm            |
| <b>Note on dimensions</b> | Housing dimensions |

### Ambient conditions

|   |   |
|---|---|
| <b>Ambient temperature (operation)</b>          | -25 °C ... 55 °C                                  |
| <b>Ambient temperature (storage/transport)</b>  | -25 °C ... 85 °C                                  |
| <b>Permissible humidity (operation)</b>         | 10 % ... 95 % (according to DIN EN 61131-2)       |
| <b>Permissible humidity (storage/transport)</b> | 10 % ... 95 % (according to DIN EN 61131-2)       |
| <b>Air pressure (operation)</b>                 | 70 kPa ... 106 kPa (up to 3000 m above sea level) |

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## Technical data

### Ambient conditions

|   |   |
|---|---|
| <b>Air pressure (storage/transport)</b> | 70 kPa ... 106 kPa (up to 3000 m above sea level) |
| <b>Degree of protection</b>             | IP20  |

### General

|                                      |  |
|--------------------------------------|--|
| <b>Weight</b>                        | 38 g   |
| <b>Note on weight specifications</b> | Without plug   |
| <b>Mounting type</b>                 | DIN rail   |
| <b>Protection class</b>              | III, IEC 61140, EN 61140, VDE 0140-1   |
| <b>Test section</b>                  | 5 V supply, incoming remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min |
| <b>Test section</b>                  | 5 V supply, outgoing remote bus/7.5 V supply (bus logics) 500 V AC 50 Hz 1 min |
| <b>Test section</b>                  | 7.5 V supply (bus logics)/24 V supply (I/O) 500 V AC 50 Hz 1 min               |
| <b>Test section</b>                  | 24 V supply (I/O) / functional earth ground 500 V AC 50 Hz 1 min               |

### Interfaces

|                           |                    |
|---------------------------|--------------------|
| <b>Fieldbus system</b>    | Lokalbus           |
| <b>Designation</b>        | Inline local bus   |
| <b>Connection method</b>  | Inline data jumper |
| <b>Transmission speed</b> | 500 kBit/s         |

### Power supply for module electronics

|  |  |
|--|--|
| <b>Supply voltage</b>                        | 24 V DC (via voltage jumper)                                       |
| <b>Supply voltage range</b>                  | 19.2 V DC ... 30 V DC (including all tolerances, including ripple) |
| <b>Supply current</b>                        | 35 mA  |
| <b>Communications power <math>U_L</math></b> | 7.5 V (via voltage jumper)   |
| <b>Current consumption</b>                   | max. 35 mA (from the local bus)                                    |

### Inline potentials

|  |                               |
|--|-------------------------------|
| <b>Communications power <math>U_L</math></b>     | 7.5 V DC (via voltage jumper) |
| <b>Current consumption from <math>U_L</math></b> | max. 35 mA                    |
| <b>Main circuit supply <math>U_M</math></b>      | 24 V DC                       |
| <b>Current consumption from <math>U_M</math></b> | max. 8 A DC                   |
| <b>Segment supply voltage <math>U_S</math></b>   | 24 V DC (nominal value)       |
| <b>Current consumption from <math>U_S</math></b> | max. 0.5 A                    |

### Digital inputs

|                                       |                                       |
|---------------------------------------|---------------------------------------|
| <b>Input name</b>                     | Digital inputs                        |
| <b>Connection method</b>              | Spring-cage connection                |
| <b>Connection method</b>              | 2, 3, 4-wire                          |
| <b>Number of inputs</b>               | 2 (EN 61131-2 type 1)                 |
| <b>Typical response time</b>          | < 1 ms                                |
| <b>Protective circuit</b>             | Short-circuit and overload protection |
| <b>Input voltage</b>                  | 24 V DC (via voltage jumper)          |
| <b>Input voltage range "0" signal</b> | -3 V DC ... 5 V DC                    |

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## Technical data

### Digital inputs

|                                |                     |
|--------------------------------|---------------------|
| Input voltage range "1" signal | 15 V DC ... 30 V DC |
|--------------------------------|---------------------|

## classifications

### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27250302 |
| eCl@ss 4.1 | 27250302 |
| eCl@ss 5.0 | 27250302 |
| eCl@ss 5.1 | 27242604 |
| eCl@ss 6.0 | 27242604 |
| eCl@ss 7.0 | 27242604 |
| eCl@ss 8.0 | 27242604 |

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001430 |
| ETIM 3.0 | EC001599 |
| ETIM 4.0 | EC001599 |
| ETIM 5.0 | EC001599 |

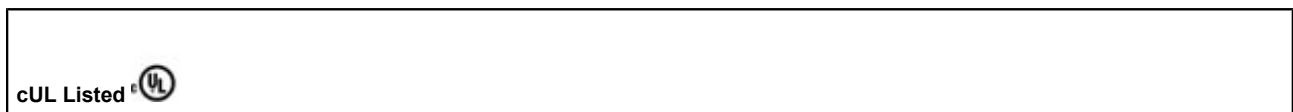
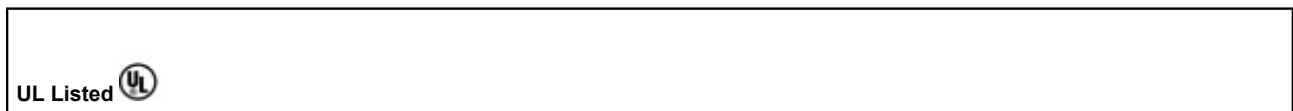
### UNSPSC

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

## approvals

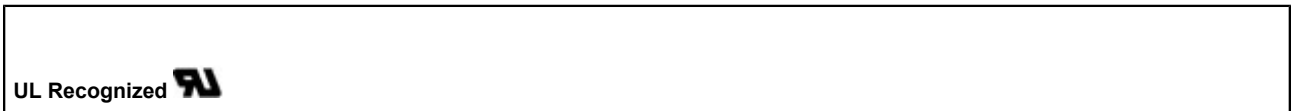
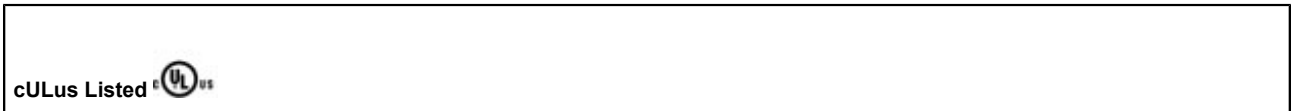
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### Approval details



# Inline terminal - IB IL 24 DI 2-PAC - 2861221

approvals



LR

| GL                         |   |
|----------------------------|---|
| Nominal voltage UN         |   |
| Nominal current IN         |   |
| mm <sup>2</sup> /AWG/kcmil | 6 |

BV

DNV

ABS

RINA

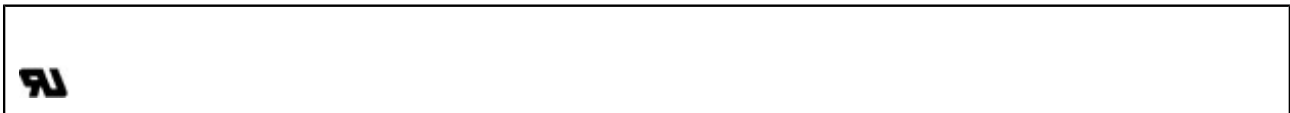
GL-SW

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## approvals

|                            |   |
|----------------------------|---|
|                            |   |
| Nominal voltage UN         |   |
| Nominal current IN         |   |
| mm <sup>2</sup> /AWG/kcmil | 6 |

BSH




|                            |   |
|----------------------------|---|
|                            |   |
| Nominal voltage UN         |   |
| Nominal current IN         |   |
| mm <sup>2</sup> /AWG/kcmil | 6 |

|                            |   |
|----------------------------|---|
|                            |   |
| Nominal voltage UN         |   |
| Nominal current IN         |   |
| mm <sup>2</sup> /AWG/kcmil | 6 |

## Inline terminal - IB IL 24 DI 2-PAC - 2861221

approvals

cULus Recognized  US

accessories

**Plug**

IB IL SCN-8 - 2726337



IB IL SCN-8-CP - 2727608



**Labeling panel**

IB IL FIELD 2 - 2727501



**Terminal marking**

ESL 62X10 - 0809492



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### accessories

ZB 6/WH-100:UNBEDRUCKT - 5060935



ZB 6:UNBEDRUCKT - 1051003



ZBFM 6/WH:UNBEDRUCKT - 0803618



### Labeled terminal marker

ZB 6,QR:FORTL.ZAHLEN - 1051029



### Marker pen

B-STIFT - 1051993



## Inline terminal - IB IL 24 DI 2-PAC - 2861221

### accessories

X-PEN 0,35 - 0811228



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### accessories

ZB 6,QR:GLEICHE ZAHLEN - 1051045



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ZB 6:SO/CMS - 1050499



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ZBFM 6/OG:UNBEDRUCKT - 0807193



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ZBFM 6:SO/CMS - 0803650



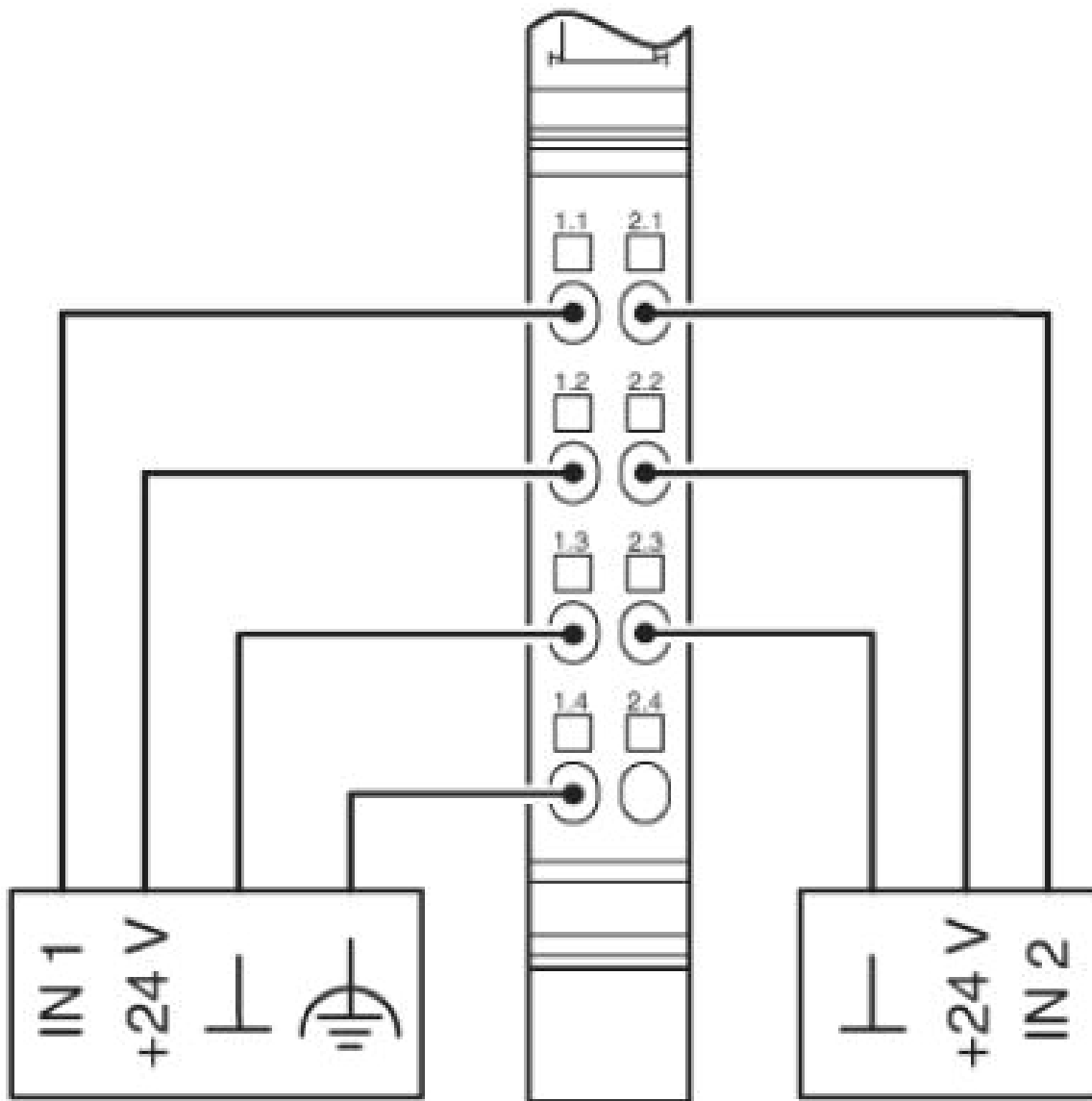
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### Drawings



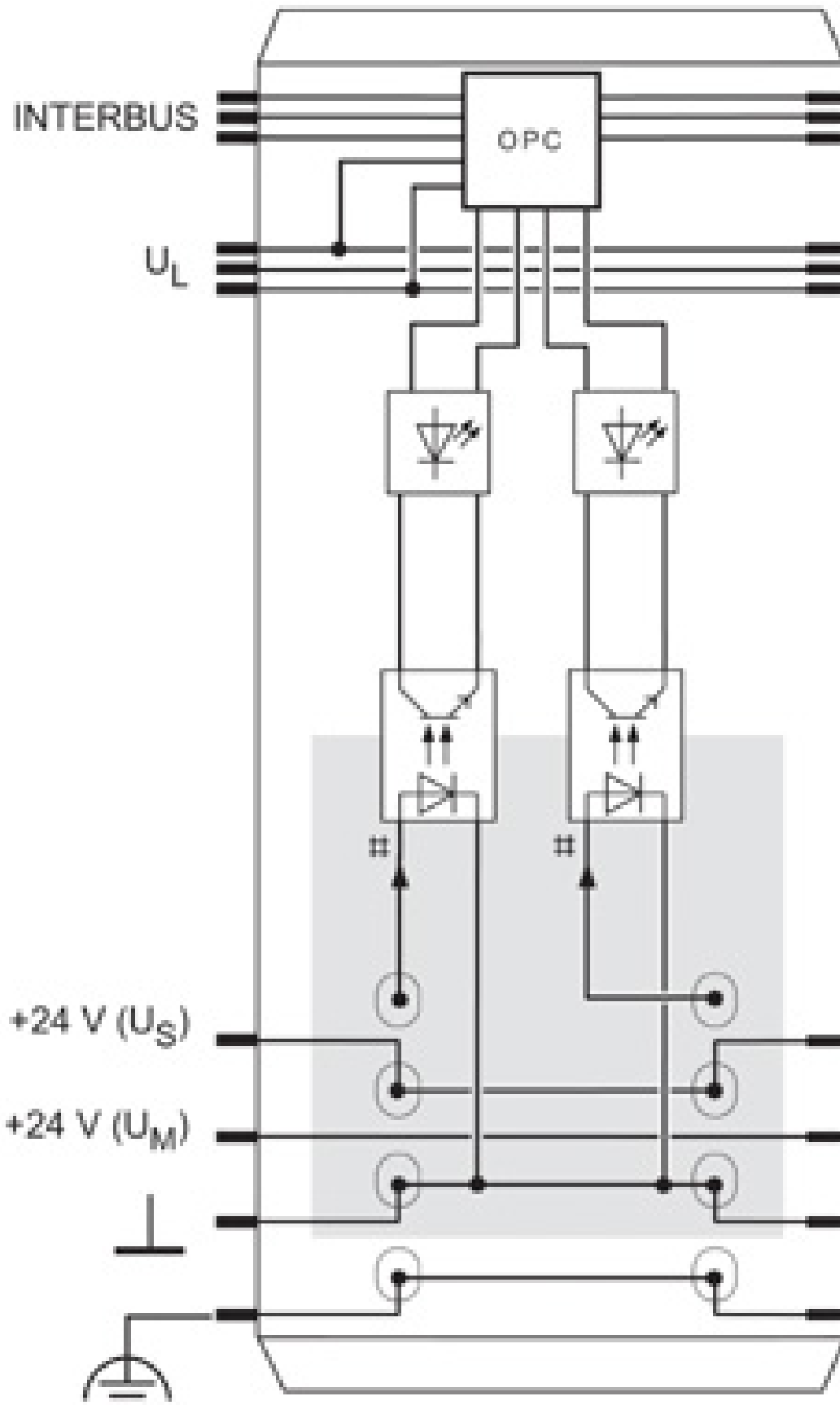
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Connection diagram



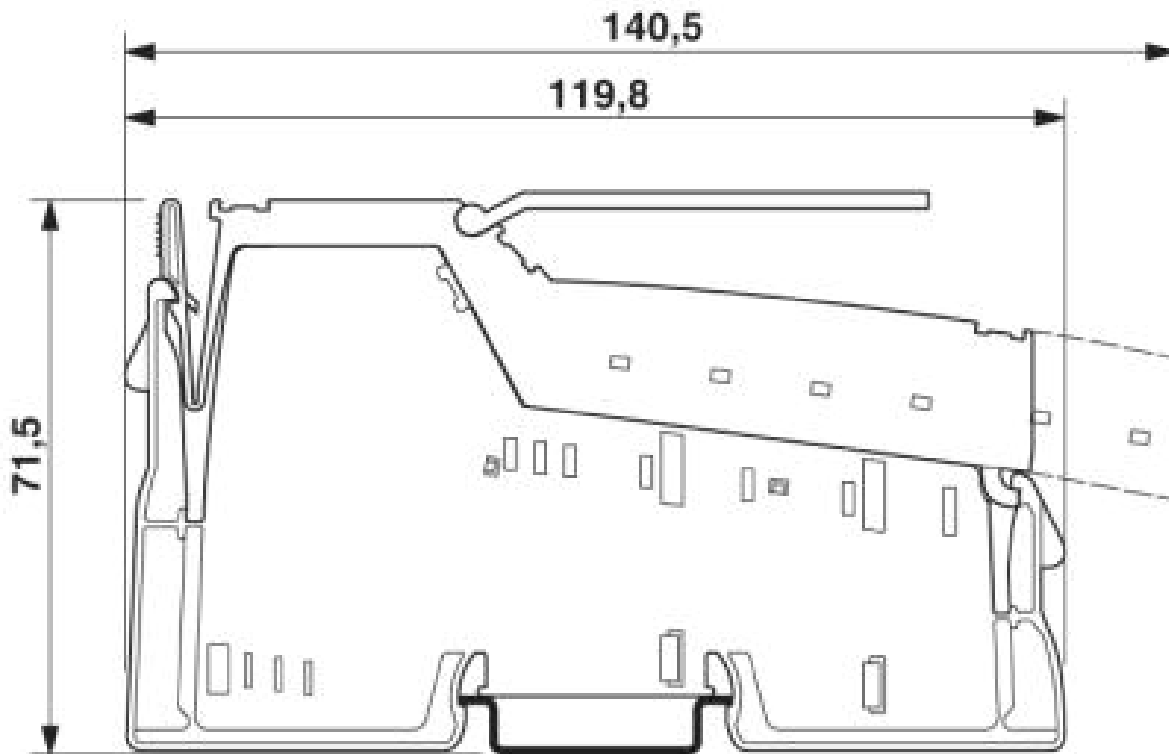
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Block diagram



## Inline terminal - IB IL 24 DI 2-PAC - 2861221

Dimensioned drawing



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