

## Bus coupler - IBS IL 24 BK DIO 16/16 - 2742586

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INTERBUS bus coupler, 16 inputs, 24 V DC, 16 outputs, 24 V DC, 500 mA, with connecting plugs



### Product description

The complete Inline station consists of an INTERBUS bus terminal, a digital output terminal with 16 outputs, and a digital input terminal with 16 inputs. This package contains all the necessary Inline plugs to connect the bus, the supply and the I/Os.

The Inline terminals can be labeled using hinged labeling fields. The fields have insert cards that can be labeled individually to suit the application. Additionally, there is the ZBFM -6... Zack strip for labeling the terminal points.

### Product Features

- ✓ 16 digital inputs
- ✓ 16 digital outputs
- ✓ Connection of sensors in 2 and 3-wire technology
- ✓ Connection of actuators in 2 and 3-wire technology
- ✓ Maximum permissible load current per sensor: 250 mA
- ✓ Nominal current per output: 500 mA
- ✓ Diagnostic and status indicators



### Key commercial data

|                                      |           |
|--------------------------------------|-----------|
| Packing unit                         | 1 PCE     |
| Weight per Piece (excluding packing) | 710.9 GRM |
| 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 |
|-------------------------|---------------------------------------------------------------------------|

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## Technical data

### Dimensions

|        |          |
|--------|----------|
| Width  | 146.4 mm |
| Height | 140.5 mm |
| Depth  | 71.5 mm  |

### Ambient conditions

|                                          |                                                   |
|------------------------------------------|---------------------------------------------------|
| Ambient temperature (operation)          | -25 °C ... 55 °C                                  |
| Permissible humidity (operation)         | 95 % (no condensation)                            |
| Permissible humidity (storage/transport) | 95 % (no condensation)                            |
| Air pressure (operation)                 | 80 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

|                               |                                                                                                                                       |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Weight                        | 394 g                                                                                                                                 |
| Note on weight specifications | with male connectors                                                                                                                  |
| Mounting type                 | DIN rail                                                                                                                              |
| Test section                  | 5 V supply, incoming remote bus/5 V supply outgoing remote bus 500 V AC 50 Hz 1 min                                                   |
|                               | 5 V supply, incoming remote bus/7.5 V logics supply, 24 V analog supply, 24 V bus terminal module supply 500 V AC 50 Hz 1 min         |
|                               | 5 V supply, incoming remote bus/24 V main supply, 24 V segment supply 500 V AC 50 Hz 1 min                                            |
|                               | 5 V supply incoming remote bus / functional earth ground 500 V AC 50 Hz 1 min                                                         |
|                               | 5 V supply, outgoing remote bus/7.5 V logics supply, 24 V analog supply, 24 V bus terminal module supply 500 V AC 50 Hz 1 min         |
|                               | 5 V supply, outgoing remote bus/24 V main supply, 24 V segment supply 500 V AC 50 Hz 1 min                                            |
|                               | 5 V supply outgoing remote bus / functional earth ground 500 V AC 50 Hz 1 min                                                         |
|                               | 7.5 V logics supply, 24 V analog supply, 24 V bus terminal module supply/ functional earth ground 500 V AC 50 Hz 1 min                |
|                               | 7.5 V logics supply, 24 V analog supply, 24 V bus terminal module supply / 24 V main supply, 24 V segment supply 500 V AC 50 Hz 1 min |
|                               | 24 V main supply, 24 V segment supply/functional earth ground 500 V AC 50 Hz 1 min                                                    |
| Mechanical tests              | Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6 5g                                                                       |
|                               | Shock in acc. with EN 60068-2-27/IEC 60068-2-27 Operation: 25 g, 11 ms duration, semi-sinusoidal shock impulse                        |

### Interfaces

|                 |                  |
|-----------------|------------------|
| Fieldbus system | Lokalbus         |
| Name            | Inline local bus |

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## Technical data

### Interfaces

|                    |                                    |
|--------------------|------------------------------------|
| Connection method  | Inline data jumper                 |
| Transmission speed | 500 kBit/s                         |
| Fieldbus system    | INTERBUS                           |
| Name               | INTERBUS remote bus                |
| Connection method  | 2x 6-pos. Inline shield connectors |
| Name               | Supply                             |
| Connection method  | 8-pos. Inline power connector      |

### System limits of the bus coupler

|                                                   |                                                    |
|---------------------------------------------------|----------------------------------------------------|
| Number of local bus devices that can be connected | 63 (observe total permissible current consumption) |
| Number of devices with parameter channel          | 16                                                 |
| Number of branch terminals with remote bus branch | max. 15                                            |

### Power supply for module electronics

|                      |                                                                                  |
|----------------------|----------------------------------------------------------------------------------|
| Supply voltage       | 24 V DC (via Inline plug)                                                        |
| Supply voltage range | 19.2 V DC ... 30 V DC (including ripple)                                         |
| Current consumption  | max. 1.25 A (with max. number of connected I/O terminal blocks (24 V DC supply)) |

### Inline potentials

|                              |                                               |
|------------------------------|-----------------------------------------------|
| Communications power $U_L$   | 7.5 V DC $\pm 5\%$                            |
| Power supply at $U_L$        | max. 2 A DC                                   |
| Main circuit supply $U_M$    | 24 V DC -15% / +20% (in acc. with EN 61131-2) |
| Power supply at $U_M$        | max. 8 A DC (Sum of $U_M + U_S$ )             |
| Segment supply voltage $U_S$ | 24 V DC -15% / +20% (in acc. with EN 61131-2) |
| Power supply at $U_S$        | max. 8 A DC (Sum of $U_M + U_S$ )             |
| I/O supply voltage $U_{ANA}$ | 24 V DC -15% / +20%                           |
| Power supply at $U_{ANA}$    | max. 0.5 A DC (observe derating)              |

### Digital inputs

|                                   |                                    |
|-----------------------------------|------------------------------------|
| Input name                        | Digital inputs                     |
| Connection method                 | Spring-cage connection             |
|                                   | 2, 3-wire                          |
| Number of inputs                  | max. 16 (EN 61131-2 type 1)        |
| Protective circuit                | Polarity reversal Suppressor diode |
| Input voltage                     | 24 V DC                            |
| Input voltage range "1" signal    | 15 V DC ... 30 V DC                |
| Typical input current per channel | typ. 3 mA                          |

### Digital outputs

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### Technical data

#### Digital outputs

|                                    |                                                            |
|------------------------------------|------------------------------------------------------------|
| Output name                        | Digital outputs                                            |
| Connection method                  | Spring-cage connection                                     |
|                                    | 2, 3-wire                                                  |
| Number of outputs                  | 16                                                         |
| Protective circuit                 | Short-circuit and overload protection Free running circuit |
| Output voltage                     | 24 V DC -1 V (At nominal current)                          |
| Nominal output voltage             | 24 V DC                                                    |
| Maximum output current per channel | 500 mA                                                     |
| Maximum output current per module  | 8 A                                                        |
| Nominal load, inductive            | 12 VA                                                      |
| Nominal load, lamp                 | 12 W                                                       |
| Nominal load, ohmic                | 12 W                                                       |

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27250203 |
| eCl@ss 4.1 | 27250203 |
| eCl@ss 5.0 | 27250203 |
| eCl@ss 5.1 | 27242608 |
| eCl@ss 6.0 | 27242608 |
| eCl@ss 7.0 | 27242608 |
| eCl@ss 8.0 | 27242608 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001434 |
| ETIM 3.0 | EC001604 |
| ETIM 4.0 | EC001604 |
| ETIM 5.0 | EC001604 |

#### UNSPSC

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



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## Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

Ex Approvals

Approvals submitted

## Approval details

UL Recognized 

cUL Recognized 

GOST 

cULus Recognized 

## Accessories

Accessories

End block

## Bus coupler - IBS IL 24 BK DIO 16/16 - 2742586

### Accessories

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

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### Labeling panel

Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm



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Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



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### Terminal marking

Insert strip - ESL 62X46 - 0809502

Insert strip, Sheet, white, Unlabeled, Can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 46 mm



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Insert strip - ESL 62X10 - 0809492

Insert strip, Sheet, white, Unlabeled, Can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 10 mm

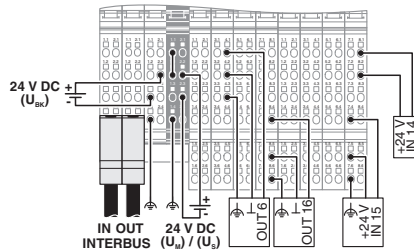


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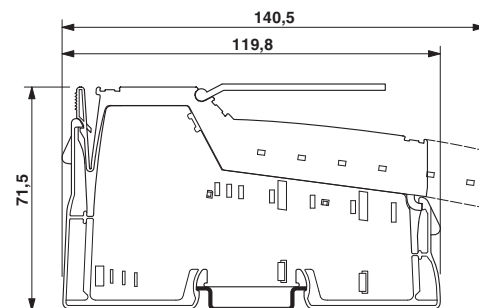
### Accessories

### Drawings

Connection diagram



Dimensioned drawing



单击下面可查看定价，库存，交付和生命周期等信息

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