

## 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

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Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

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Ex Approvals


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Approvals submitted


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### 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

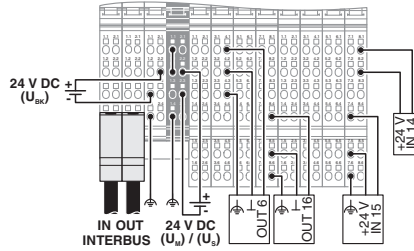


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## Accessories

## Drawings

Connection diagram



Dimensioned drawing

