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Especialistas en Automatización

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## 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 connector 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.

### Why buy this product

- 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 STK
GTIN	4 017918 603984

### Technical data

#### Note

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

Width	146.4 mm
Height	140.5 mm
Depth	71.5 mm

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## Technical data

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Permissible humidity (operation)	95 % (non-condensing)
Permissible humidity (storage/transport)	95 % (non-condensing)
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

Net weight	394 g
Note on weight specifications	with connectors
Mounting type	DIN rail

### Interfaces

Fieldbus system	INTERBUS
Designation	INTERBUS
Connection method	Inline shield connector
Transmission speed	500 kBit/s
Fieldbus system	Lokalbus
Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kBit/s
Designation	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 supported branch terminals with remote bus branch	max. 15

### Power supply for module electronics

Supply voltage	24 V DC (via Inline connector)
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 % (acc. to EN 61131-2)
Power supply at $U_M$	max. 8 A DC (Sum of $U_M$ + $U_S$ )
Segment circuit supply $U_S$	24 V DC -15 % / +20 % (acc. to 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 %

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## Technical data

### Inline potentials

Power supply at U <sub>ANA</sub>	max. 0.5 A DC (observe derating)
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### Digital inputs

Input name	Digital inputs
Description of the input	EN 61131-2 type 1
Connection method	Spring-cage connection
	3-conductor
Number of inputs	16 (PNP)
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

Output name	Digital outputs
Connection method	Spring-cage connection
	3-conductor
Number of outputs	16 (PNP)
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

### Standards and Regulations

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.

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## Technical data

### Standards and Regulations

	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: 25g, 11 ms duration, semi-sinusoidal shock impulse
Connection in acc. with standard	CUL

## 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	27242604
eCl@ss 9.0	27242604

### ETIM

ETIM 2.0	EC001434
ETIM 3.0	EC001604
ETIM 4.0	EC001604
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

### Approvals

#### Approvals

UL Recognized / cUL Recognized / EAC / cULus Recognized

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## Approvals

Ex Approvals

Approvals submitted

Approval details

UL Recognized

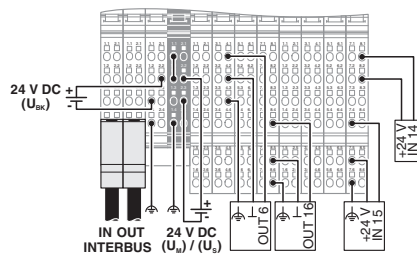
cUL Recognized

EAC

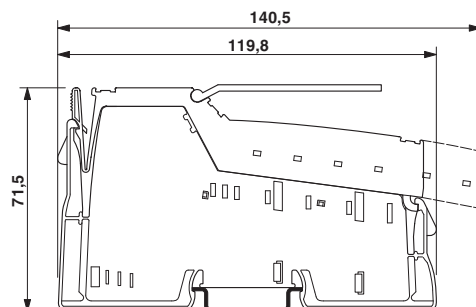
cULus Recognized

## Drawings

Connection diagram



Dimensional drawing



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



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Product	Code	Reference	Product link
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