

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.

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 pc
Weight per Piece (excluding packing)	710.9 g
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 % (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

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

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

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Technical data

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 %
Power supply at U_{ANA}	max. 0.5 A DC (observe derating)

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
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
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.

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Standards and Regulations

	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: 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
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Classifications

UNSPSC

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

Ex Approvals

Approvals submitted

Approval details

UL Recognized 

cUL Recognized 

EAC

cULus Recognized 

Accessories

Accessories

End block

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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

Labeling panel

Labeling field - IB IL FIELD 8 - 2727515

Labeling field, width: 48.8 mm



Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



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



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

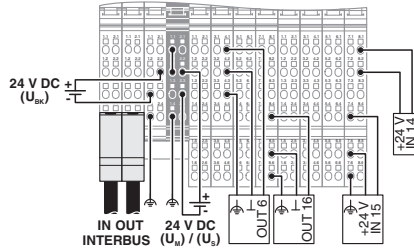


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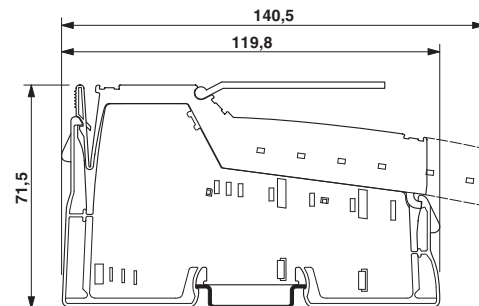
Accessories

Drawings

Connection diagram



Dimensional drawing



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