



Automatización Eléctrica
Especialistas en Automatización

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Bus coupler - PB IL 24 BK DIO 16/16 - 2742638

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PROFIBUS bus coupler, 16 inputs, 24 V DC, 16 outputs, 24 V DC, 500 mA, with plug connectors



Product Description

The complete station for PROFIBUS combines a PROFIBUS bus terminal, a digital output terminal with 16 outputs, and a digital input terminal with 16 inputs. This package contains all the necessary Inline connectors for connecting the supply and the I/Os. For project planning, a diskette with the corresponding device master data file is delivered with the product. 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 ZBFM-6... Zack marker strip for labeling the terminal points.

Why buy this product

- 16 digital inputs
- 16 digital outputs
- Diagnostic and status indicators



Key Commercial Data

Packing unit	1 STK
GTIN	 4 017918 819347

Technical data

Note

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

Width	182.6 mm
Height	140.5 mm
Depth	71.5 mm

Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Permissible humidity (operation)	95 % (non-condensing)
Permissible humidity (storage/transport)	95 % (non-condensing)

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Technical data

Ambient conditions

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	395 g
Note on weight specifications	with connectors
Mounting type	DIN rail

Interfaces

Fieldbus system	PROFIBUS DP
Designation	PROFIBUS DP
Connection method	D-SUB-9 female connector
Transmission speed	9,6 kBit/s ... 12 MBit/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

Amount of process data	max. 176 Byte (per station)
	max. 176 Byte (Input)
	max. 176 Byte (Output)
Number of local bus devices that can be connected	max. 63
Number of devices with parameter channel	max. 16
Number of supported branch terminals with remote bus branch	0

Power supply for module electronics

Supply voltage	24 V DC
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)

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)

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Technical data

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	RS-485 interface / supply voltage 500 V AC
	RS-485 interface / local bus 500 V AC
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

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

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Classifications

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

EAC

Ex Approvals

Approvals submitted

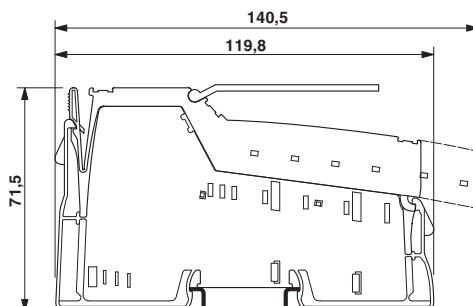
Approval details

EAC

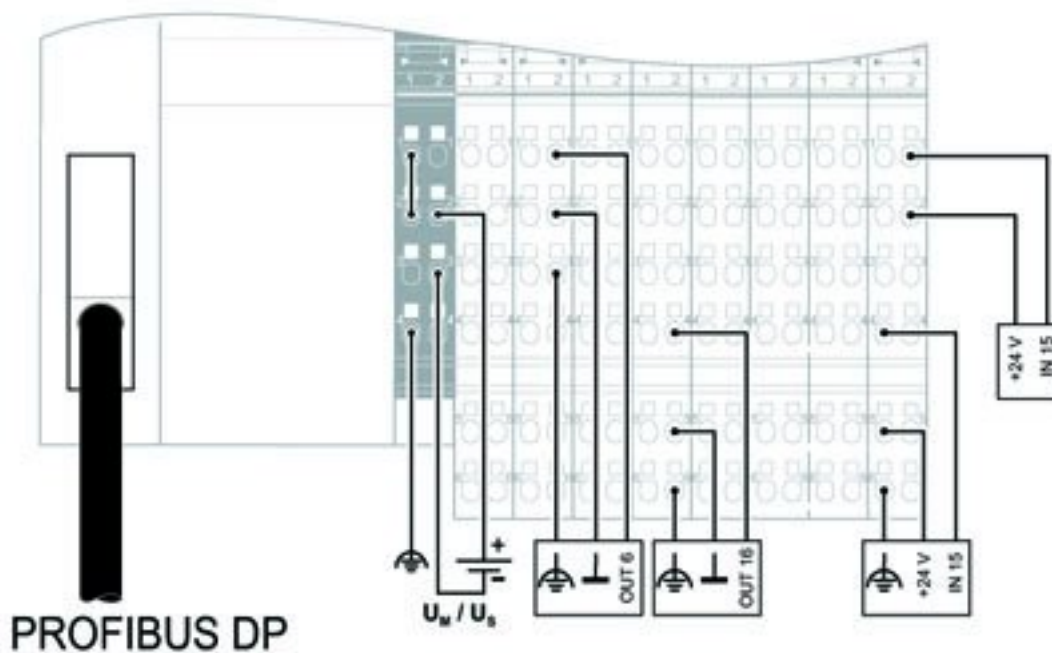
Drawings

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Dimensional drawing



Connection diagram





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Product	Code	Reference	Product link
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