Bus coupler - IL PB BK DP/V1-PAC - 2862246

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Inline, Bus coupler, PROFIBUS DP, D-SUB-9 female connector, Transmission speed in the local bus 500 kBit/s, Degree of protection IP20, including Inline connector and labeling field

Product Description

The bus coupler is the link between PROFIBUS DP and the Inline installation system.
63 Inline devices can be connected at any point to an existing PROFIBUS DP system using the bus coupler.
The bus coupler does not support PROFIsafe modules. Use the IL PB BK DI8 DO4/EF-PAC bus coupler for this.

Product Features

- PROFIBUS connection via 9-pos. D-SUB socket
- DP/V1 for class 1 and class 2 masters
- Baud rate of up to 12 Mbaud (automatic baud rate detection)
- Up to 63 I/O terminals can be connected

Key Commercial Data

Packing unit	1 pc
GTIN	4 017918 907471
Weight per Piece (excluding packing)	240.0 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

Environmental Product Compliance

REACh SVHC	DEHP 117-81-7
	Lead monoxide (lead oxide) 1317-36-8
	Diboron trioxide 1303-86-2

Dimensions

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Dimensions

Width	85 mm
Height	119.8 mm
Depth	71.5 mm

Ambient conditions

Ambient temperature (operation)	0 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	85 % (non-condensing)
Permissible humidity (storage/transport)	85 % (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	240 g
Note on weight specifications	with connectors

Interfaces

Fieldbus system	PROFIBUS DP
Designation	PROFIBUS DP
Connection method	D-SUB-9 female connector
Transmission speed	9,6 kBit/s ... 12 MBit/s
Number of positions	9
Fieldbus system	Lokalbus
Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kBit/s

System limits of the bus coupler

Designation	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 supported devices	max. 63 (per station)
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

Connection method	Inline connector
Designation	Bus coupler supply U_{BC}; Communications power U_L (7.5 V) and the analog supply U_{ANA} (24 V) are generated from the bus coupler supply.
Supply voltage	24 V DC

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Power supply for module electronics

Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	max. 1.25 A (from U_{BK})

Inline potentials

Communications power U_L	7.5 V DC ±5 %
Power supply at U_L	max. 2 A DC
Main circuit supply U_M	24 V DC
Supply voltage range U_M	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply at U_M	max. 8 A DC (Sum of U_M + U_S)
Segment circuit supply U_S	24 V DC
Supply voltage range U_S	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply at U_S	max. 8 A DC (Sum of U_M + U_S)
I/O supply voltage U_{ANA}	24 V DC
Supply voltage range U_{ANA}	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply at U_{ANA}	max. 0.5 A DC

Standards and Regulations

Conformity with EMC directives	Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B, 6 kV contact discharge, 8 kV air discharge
	Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
	Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion A, all interfaces 1 kVCriterion B, all interfaces 2 kV
	Noise immunity test in accordance with EN 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B, supply lines DC: 0.5 kV/0.5 kV (symmetrical/asymmetrical), fieldbus cable shield 1 kV
	Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A; Test voltage 10 V
	Noise emission test as per EN 61000-6-4 EN 55011 Class A
Test section	RS-485 interface / supply voltage 500 V
	RS-485 interface / local bus 500 V
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
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

Classifications

eCl@ss

eCl@ss 4.0	27250203
eCl@ss 4.1	27250203

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Classifications

eCl@ss

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
eCl@ss 9.0	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

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC / EAC / cULus Listed

Ex Approvals

UL Listed / cUL Listed / cULus Listed

Approvals submitted

Approval details

UL Listed

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Approvals

cUL Listed

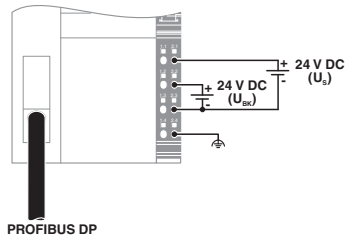
EAC

EAC

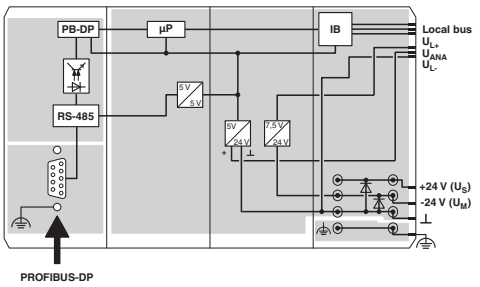
cULus Listed

Drawings

Connection diagram



Block diagram



Dimensional drawing