

# IBS IL 24 BK-DSUB-PAC - Bus coupler



2861593

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Inline, Bus coupler, INTERBUS, D-SUB-9 female/D-SUB-9 male, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector and labeling field

## Product description

The bus coupler connects an Inline station to the INTERBUS remote bus and provides the supply voltages for the connected devices.

## Your advantages

- Remote bus connections using copper technology
- Electrical isolation

## Commercial data

Item number	2861593
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI111
GTIN	4017918894443
Weight per piece (including packing)	292 g
Weight per piece (excluding packing)	210 g
Customs tariff number	85389091
Country of origin	DE

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## Technical data

### Dimensions

Dimensional drawing	
Width	85 mm
Height	119.8 mm
Depth	71.5 mm

### Notes

#### Note on application

Note on application	Only for industrial use
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#### Utilization restriction

CCCex note	Use in potentially explosive areas is not permitted in China.
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### Material specifications

Color (Housing)	green (RAL 6021)
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### Interfaces

#### INTERBUS

Number of interfaces	2
Connection method	D-SUB-9 female/D-SUB-9 male
Transmission speed	500 kbps
Transmission physics	Copper

#### Inline local bus

Number of interfaces	1
Connection method	Inline data jumper
Transmission speed	500 kbps

### System properties

#### System limits

Number of supported devices	max. 63
Number of local bus devices that can be connected	max. 63
Number of devices with parameter channel	62
Number of supported branch terminals with remote bus branch	max. 15

#### Programming data

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Length code (hex)	00
ID code (dec.)	04
Length code (dec)	00
Process data channel	0 bit
Input address area	0 Byte
Output address area	0 Byte
Parameter channel (PCP)	0 Byte
Register length (bus)	0 bit
Register length (master)	1024 Byte

## Product properties

Product type	I/O component
Product family	Inline
Type	modular
Scope of supply	including Inline connector and labeling field

## Insulation characteristics

Overvoltage category	II (IEC 60664-1, EN 60664-1)
Pollution degree	2 (IEC 60664-1, EN 60664-1)

## Electrical properties

Maximum power dissipation for nominal condition	3 W
Protective circuit	Reverse polarity protection

Potentials: Bus coupler supply  $U_{BK}$ ; 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 (via Inline connector)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current draw	max. 1.25 A (with max. number of connected I/O terminal blocks) typ. 100 mA (without connected Inline I/O terminals)

## Potentials: Communications power ( $U_L$ )

Supply voltage	7.5 V DC $\pm 5\%$
Power supply	max. 2 A DC (observe derating)

## Potentials: Supply of analog modules ( $U_{ANA}$ )

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 0.5 A DC (observe derating)

## Connection data

### Connection technology

Connection name	Inline connector
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### Inline connector

Connection method	Spring-cage connection
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Conductor cross-section, rigid	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section, flexible	0.08 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section AWG	28 ... 16
Stripping length	8 mm

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Degree of protection	IP20
Air pressure (operation)	70 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)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)

### Mechanical test

Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6	5g
Shock in accordance with EN 60068-2-27/IEC 60068-2-27	25g

## Standards and regulations

Protection class	III (IEC 61140, EN 61140, VDE 0140-1)
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## Mounting

Mounting type	DIN rail mounting
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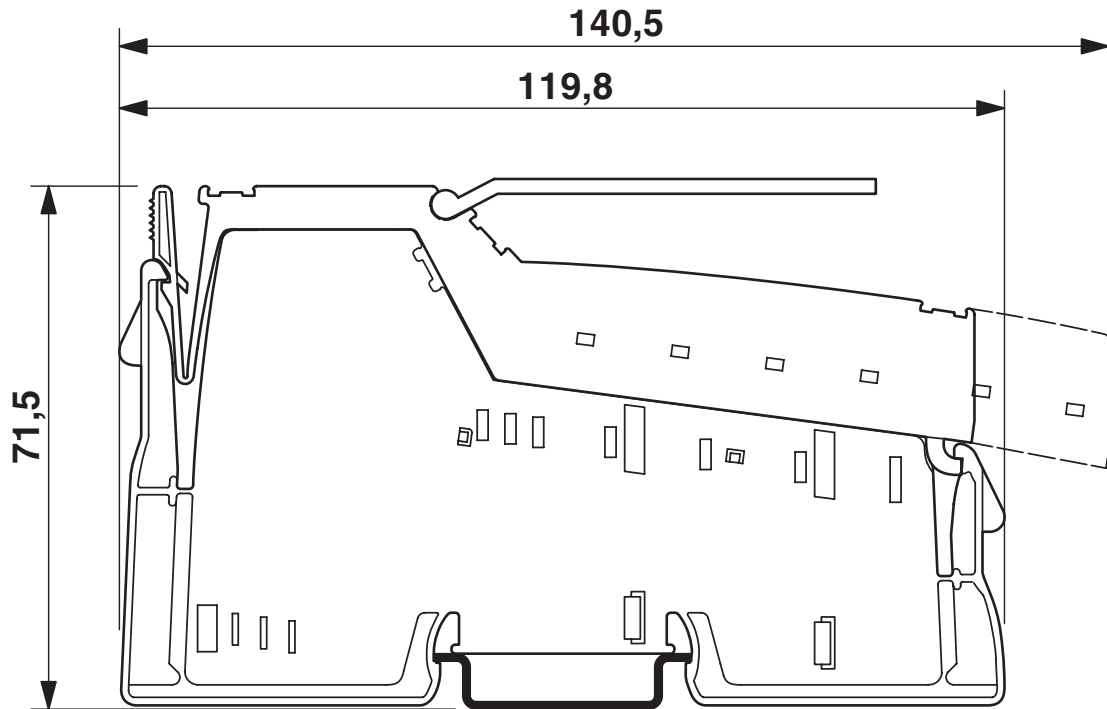
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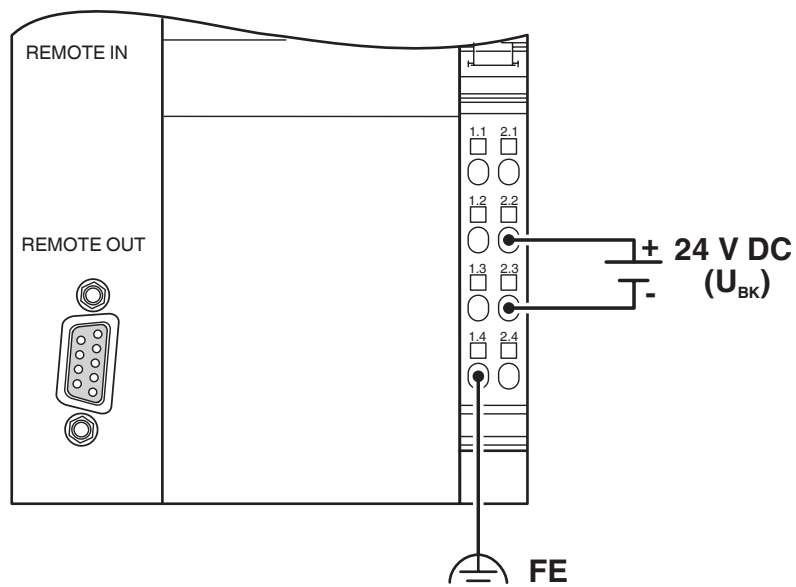
<https://www.phoenixcontact.com/us/products/2861593>

## Drawings

Dimensional drawing



Connection diagram



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## Approvals

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**DNV GL**

Approval ID: TAA00000BN



**BV**

Approval ID: 21594/C1 BV

**BSH**

Approval ID: 658a

**ABS**

Approval ID: 22-2226444-PDA



**cULus Recognized**

Approval ID: E140324



**cULus Listed**

Approval ID: E199827

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## Classifications

### ECLASS

ECLASS-13.0	27242608
ECLASS-15.0	27242608

### ETIM

ETIM 10.0	EC001604
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### UNSPSC

UNSPSC 21.0	32151600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 7(a), 7(c)-I

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	Dodecamethylcyclohexasiloxane(CAS: 540-97-6)
	Lead(CAS: 7439-92-1)
SCIP	0d59c351-7464-4983-bf00-d5644d1bb680

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