

# IBS IL 24 BK-LK/45-PAC - Bus coupler



2862165

<https://www.phoenixcontact.com/us/products/2862165>

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Inline, Bus coupler, INTERBUS, F-SMA connector, 45° angled FO connection, 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 analog modules.

## Your advantages

- Remote bus connections using fiber optic technology
- Optical path diagnostics

## Commercial data

Item number	2862165
Packing unit	1 pc
Sales key	DR01
Product key	DRI111
GTIN	4017918894658
Weight per piece (including packing)	297.3 g
Weight per piece (excluding packing)	210 g
Customs tariff number	85389091
Country of origin	DE

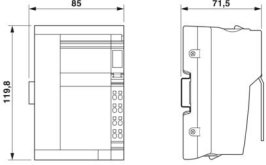
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## Technical data

### Dimensions

Dimensional drawing	
Width	85 mm
Height	119.8 mm
Depth	71.5 mm

### Material specifications

Color	green
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### Interfaces

#### INTERBUS

Number of interfaces	2
Connection method	F-SMA connector
Note on the connection method	slanted
Transmission speed	500 kbps
Transmission physics	FO

#### 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

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

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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
Special properties	45° angled FO connection

## Electrical properties

Maximum power dissipation for nominal condition	30 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. 90 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)

Electrical isolation/isolation of the voltage ranges

Test voltage: 7.5 V communications power, 24 V analog supply, 24 V bus coupler supply/functional ground	500 V AC, 50 Hz, 1 min
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## Connection data

Connection technology

Connection name	Inline connector
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Inline connector

Connection method	Spring-cage connection
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

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## Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Degree of protection	IP20
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)
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Permissible humidity (operation)	75 % ... 85 %
Permissible humidity (storage/transport)	75 % ... 85 %

## Mounting

Mounting type	DIN rail mounting
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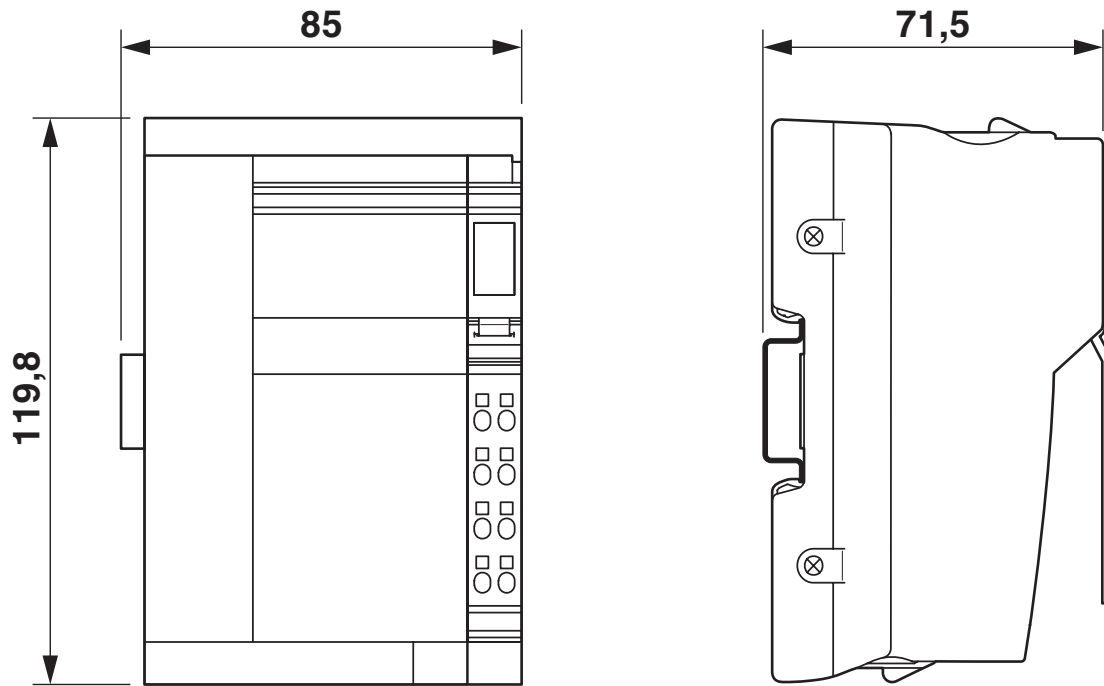
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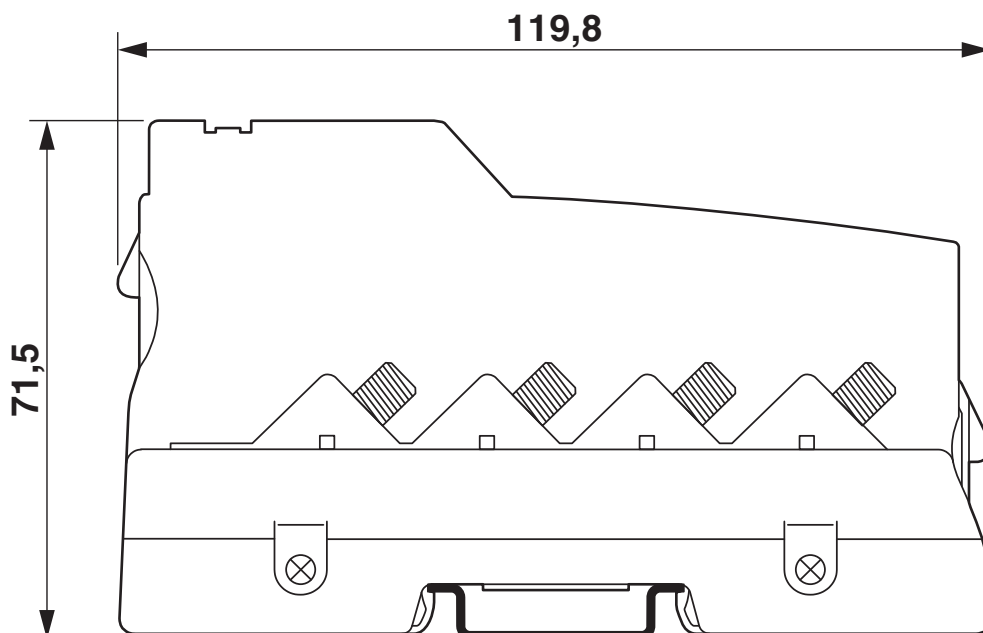
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## Drawings

Dimensional drawing



Dimensional drawing



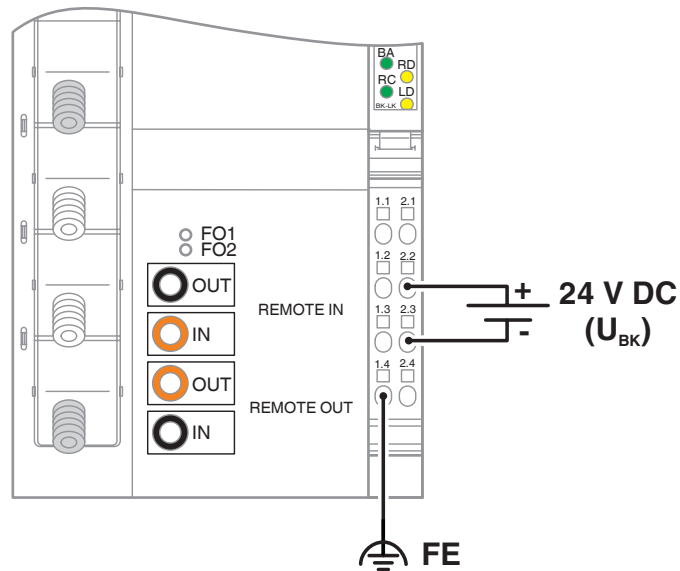
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Connection diagram

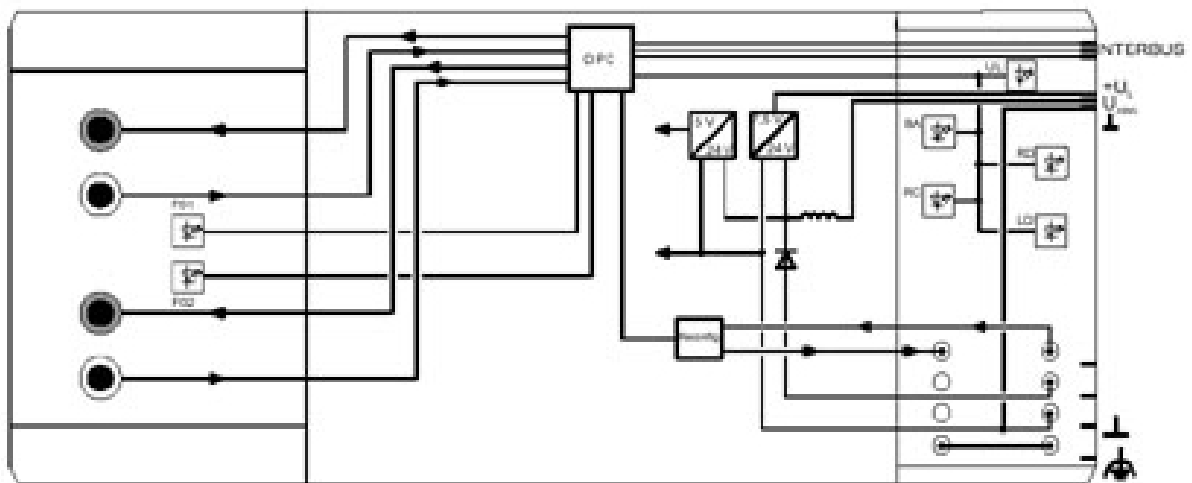


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Block diagram



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## Classifications

### UNSPSC

UNSPSC 21.0	32151600
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	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.)	Lead(CAS: 7439-92-1)
SCIP	3c72de50-4b30-4a53-8642-1cbf1b70af21

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