

# IBS IL 24 BK RB-LK-PAC - Bus coupler



2861506

<https://www.phoenixcontact.com/us/products/2861506>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Inline, Bus coupler, INTERBUS, F-SMA connector, integrated remote bus branch, 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 also offers the option of creating a remote bus branch. The bus coupler provides the communications power for the connected devices and the supply voltage for the connected analog modules.

## Your advantages

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

## Commercial data

Item number	2861506
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	DR01
Product key	DRI111
Catalog page	Page 107 (C-6-2019)
GTIN	4017918894429
Weight per piece (including packing)	315.8 g
Weight per piece (excluding packing)	235 g
Customs tariff number	85389091
Country of origin	DE

# IBS IL 24 BK RB-LK-PAC - Bus coupler

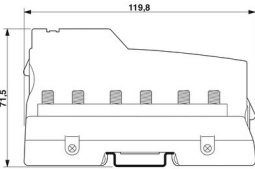


2861506

<https://www.phoenixcontact.com/us/products/2861506>

## Technical data

### Dimensions

Dimensional drawing	
Width	85 mm
Height	119.8 mm
Depth	71.5 mm

### Interfaces

#### INTERBUS

Number of interfaces	3
Connection method	F-SMA connector
Transmission speed	500 kbps
Transmission physics	FO

#### Inline local bus

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

### System properties

#### System limits

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

#### Module

ID code (dec.)	12
ID code (hex)	0C
Length code (hex)	0
Length code (dec)	0
Process data channel	0 bit
Input address area	0 Byte
Register length	0 bit

### Product properties

Type	modular
------	---------

Product type	I/O component
Product family	Inline
Scope of delivery	including Inline connector and labeling field

## Electrical properties

Maximum power dissipation for nominal condition	31.2 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. 1.3 A (with max. number of connected I/O terminal blocks) typ. 120 mA (without connected Inline I/O terminals)

Potentials: Communications power ( $U_L$ )

Supply voltage	7.5 V DC $\pm 5\%$
----------------	--------------------

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)

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.
---	-------------------------

## Connection data

Connection technology

Connection name	Inline connector
-----------------	------------------

Conductor connection

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

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

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
---------------------------------	------------------

# IBS IL 24 BK RB-LK-PAC - Bus coupler



2861506

<https://www.phoenixcontact.com/us/products/2861506>

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
---------------	-------------------

# IBS IL 24 BK RB-LK-PAC - Bus coupler

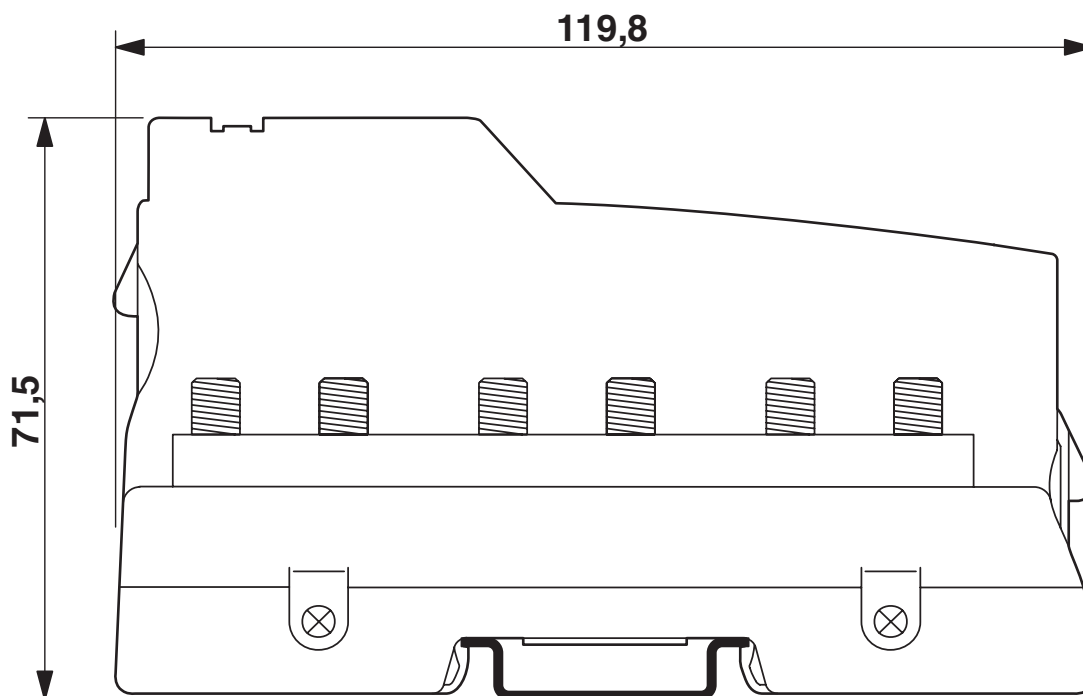


2861506

<https://www.phoenixcontact.com/us/products/2861506>

## Drawings

Dimensional drawing

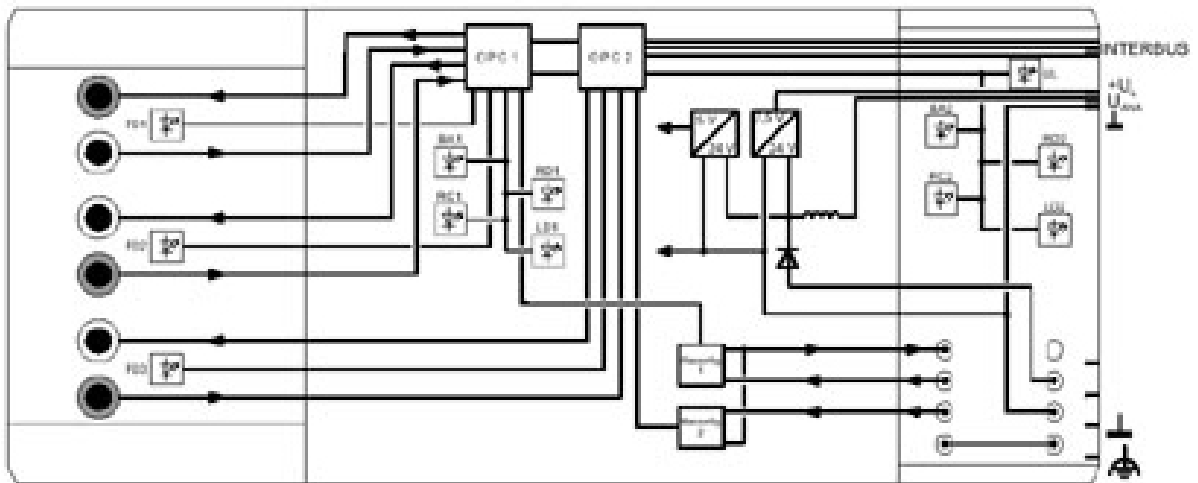


# IBS IL 24 BK RB-LK-PAC - Bus coupler

2861506

<https://www.phoenixcontact.com/us/products/2861506>

Block diagram



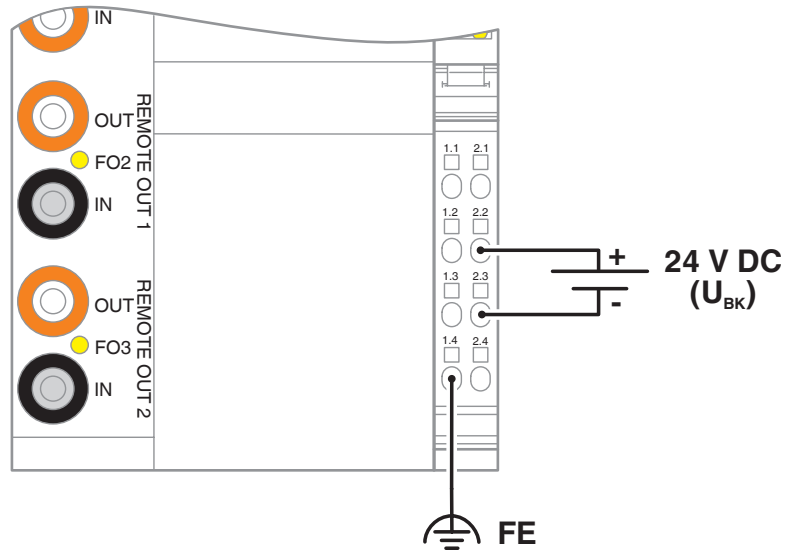
# IBS IL 24 BK RB-LK-PAC - Bus coupler

2861506

<https://www.phoenixcontact.com/us/products/2861506>



Connection diagram



# IBS IL 24 BK RB-LK-PAC - Bus coupler



2861506

<https://www.phoenixcontact.com/us/products/2861506>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2861506>



**EAC**

Approval ID: RU\*DE\*08.B.00529/19

**UAE-RoHS**

Approval ID: 22-04-13087



# IBS IL 24 BK RB-LK-PAC - Bus coupler



2861506

<https://www.phoenixcontact.com/us/products/2861506>

## Classifications

### ECLASS

ECLASS-11.0	27242608
ECLASS-12.0	27242608
ECLASS-13.0	27242608

### ETIM

ETIM 9.0	EC001604
----------	----------

### UNSPSC

UNSPSC 21.0	32151600
-------------	----------

# IBS IL 24 BK RB-LK-PAC - Bus coupler



2861506

<https://www.phoenixcontact.com/us/products/2861506>

## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# IBS IL 24 BK RB-LK-PAC - Bus coupler

2861506

<https://www.phoenixcontact.com/us/products/2861506>



## Accessories

### IB IL FIELD 2 - Marking field

2727501

<https://www.phoenixcontact.com/us/products/2727501>

Marking field, width: 12.2 mm



---

### ESL 62X10 - Insert strip

0809492

<https://www.phoenixcontact.com/us/products/0809492>

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, CMS-P1-PLOTTER, mounting type: insert, lettering field size: 62 x 10 mm, Number of individual labels: 72



# IBS IL 24 BK RB-LK-PAC - Bus coupler

2861506

<https://www.phoenixcontact.com/us/products/2861506>



## E/UK - End bracket

1201442

<https://www.phoenixcontact.com/us/products/1201442>

End bracket, Mounting on a DIN rail NS 32 or NS 35, material: PA, color: gray



---

## IB IL SCN-8-CP - Inline connector

2727608

<https://www.phoenixcontact.com/us/products/2727608>

Inline connector, colored



---

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)