

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



2862165

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

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, 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

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



2862165

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

Technical data

Dimensions

Dimensional drawing	
Width	85 mm
Height	119.8 mm
Depth	71.5 mm

Material specifications

Color	green
-------	-------

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

Module

ID code (dec.)	04
ID code (hex)	04
Length code (hex)	00
Length code (dec)	00
Process data channel	0 bit
Input address area	0 Byte

Output address area	0 Byte
Register length	0 bit

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 $\pm 5\%$
----------------	--------------------

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 ² ... 1.5 mm ²
Conductor cross-section flexible	0.08 mm ² ... 1.5 mm ²
Conductor cross-section AWG	28 ... 16
Stripping length	8 mm

Inline connector

Connection method	Spring-cage connection
Conductor cross-section, rigid	0.08 mm ² ... 1.5 mm ²
Conductor cross-section, flexible	0.08 mm ² ... 1.5 mm ²

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



2862165

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

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)	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-LK/45-PAC - Bus coupler

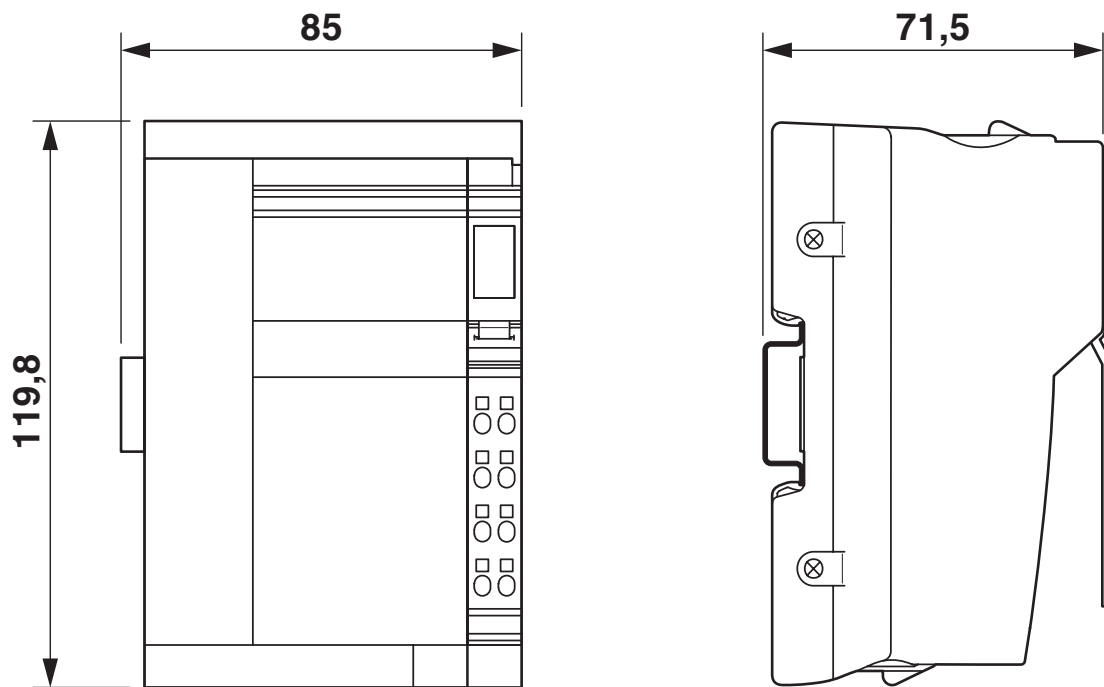
2862165

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

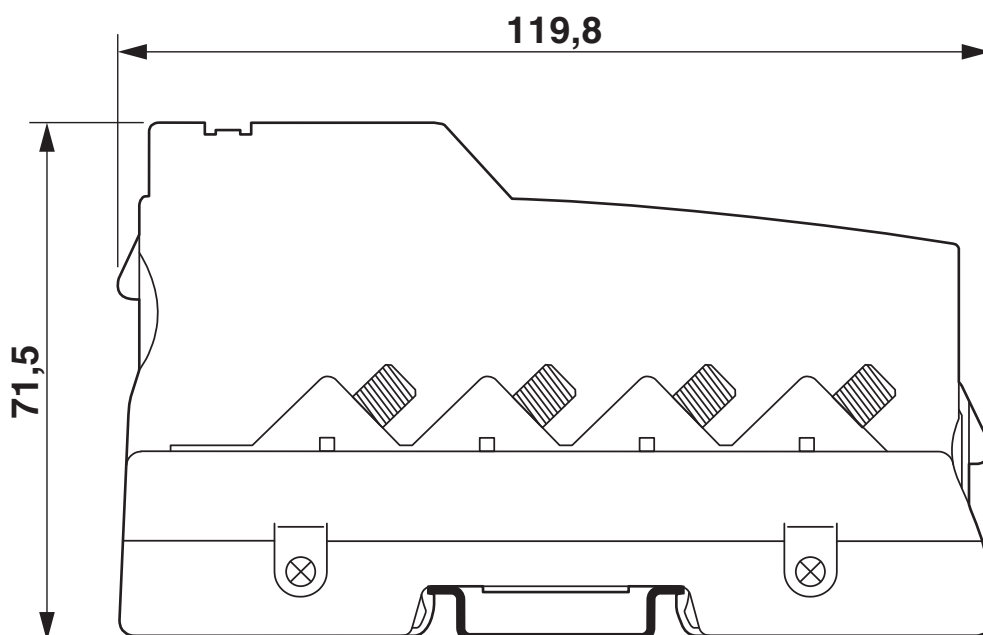


Drawings

Dimensional drawing



Dimensional drawing



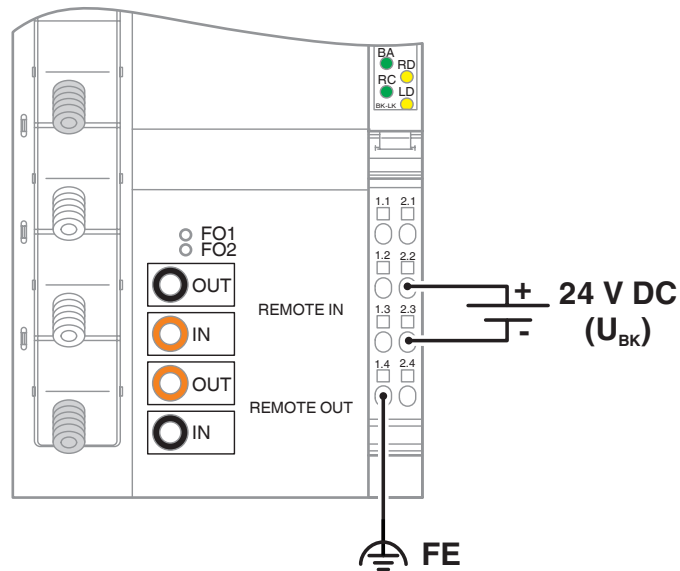
IBS IL 24 BK-LK/45-PAC - Bus coupler

2862165

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



Connection diagram



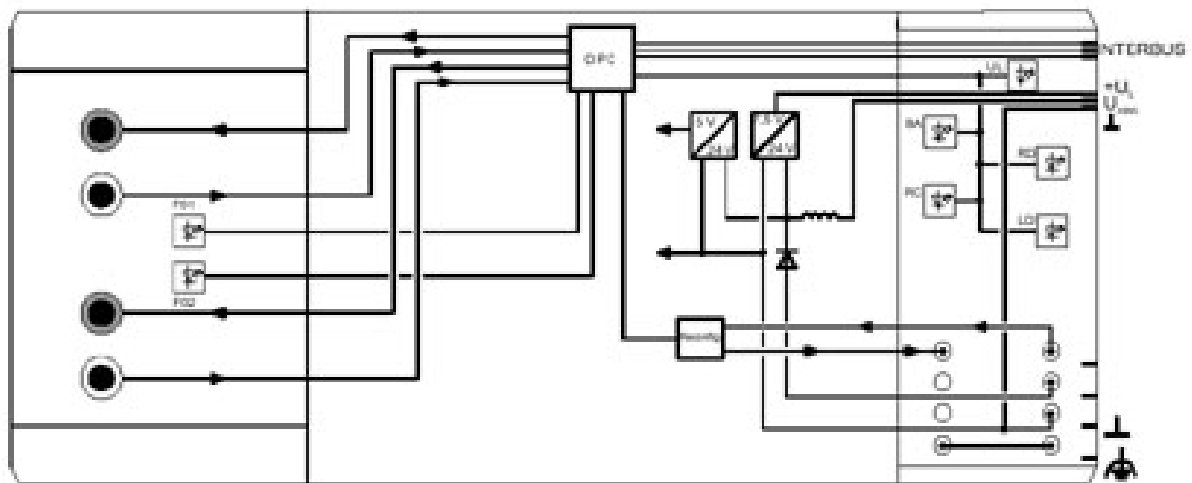
IBS IL 24 BK-LK/45-PAC - Bus coupler

2862165

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



Block diagram



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



2862165

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

Classifications

ETIM

ETIM 8.0	EC001604
----------	----------

UNSPSC

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

2862165

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

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

Phoenix Contact 2025 © - 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