

IBS IL 24 BK-T/U-2MBD - Bus coupler

2855240

<https://www.phoenixcontact.com/us/products/2855240>

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.



INTERBUS bus coupler, copper connection, transmission speed 2 Mbaud, 24 V DC, without accessories

The figure shows the version IBS IL 24 BK-T/U

Your advantages

- Remote bus connections using copper technology
- Electrical isolation

Commercial data

Item number	2855240
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	DRI111
GTIN	4017918901882
Weight per piece (including packing)	190 g
Weight per piece (excluding packing)	190 g
Customs tariff number	85389091
Country of origin	DE

Technical data

Product properties

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

System properties

INTERBUS-Master

Number of devices with parameter channel	63
Number of supported branch terminals with remote bus branch	max. 15

Programming data

Length code (hex)	00
ID code (dec.)	04
Input address area	0 Byte
Output address area	0 Byte
Parameter channel (PCP)	0 Byte
Register length (bus)	0 bit
Register length (master)	8192 bit

Electrical properties

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)

Potentials: Main circuit supply (U_M)

Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Power supply	max. 8 A DC (sum of $U_M + U_S$)

Potentials: Segment circuit supply (U_S)

Supply voltage	24 V DC -15 % / +20 % (in accordance with EN 61131-2)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)

IBS IL 24 BK-T/U-2MBD - Bus coupler



2855240

<https://www.phoenixcontact.com/us/products/2855240>

Power supply	max. 8 A DC (sum of $U_M + U_S$)
Electrical isolation/isolation of the voltage ranges	
Test voltage: 5 V supply, incoming remote bus / 5 V supply outgoing remote bus	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply incoming remote bus / 7.5 V communications power, 24 V analog supply, 24 V bus coupler supply	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply, incoming remote bus / 24 V main supply, 24 V segment supply	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply incoming remote bus / functional ground	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply outgoing remote bus / I/O (U_M, U_S)	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply outgoing remote bus / communications power (U_{BK}, U_L, U_{ANA})	500 V AC, 50 Hz, 1 min
Test voltage: 5 V supply outgoing remote bus / functional ground	500 V AC, 50 Hz, 1 min
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
Test voltage: Communications power (U_{BK}, U_L, U_{ANA}) / I/O (U_M, U_S)	500 V AC, 50 Hz, 1 min
Test voltage: 24 V main supply, 24 V segment supply/functional ground	500 V AC, 50 Hz, 1 min

Connection data

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
Conductor cross-section AWG	28 ... 16

Interfaces

INTERBUS

No. of channels	2 (Connected to functional ground with a capacitor)
Connection method	Inline shield connector
Number of positions	6
Transmission speed	2 Mbps
Transmission physics	Copper

Inline local bus

Connection method	Inline data jumper
-------------------	--------------------

Supply

Connection method	8-pos. Inline connector
-------------------	-------------------------

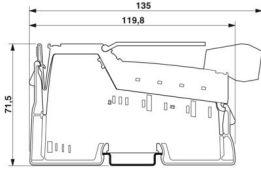
Dimensions

IBS IL 24 BK-T/U-2MBD - Bus coupler



2855240

<https://www.phoenixcontact.com/us/products/2855240>

Dimensional drawing	
Width	48.8 mm
Height	119.8 mm
Depth	71.5 mm

Material specifications

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

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 % (in the range of -25°C ... +55°C, appropriate measures against increased humidity (> 85%) must be taken.)
Permissible humidity (storage/transport)	75 % ... 85 % (Slight temporary condensation may sometimes appear on the housing, e.g. when the terminal block is brought out of a vehicle into an enclosed room.)

Mounting

Mounting type	DIN rail mounting
---------------	-------------------

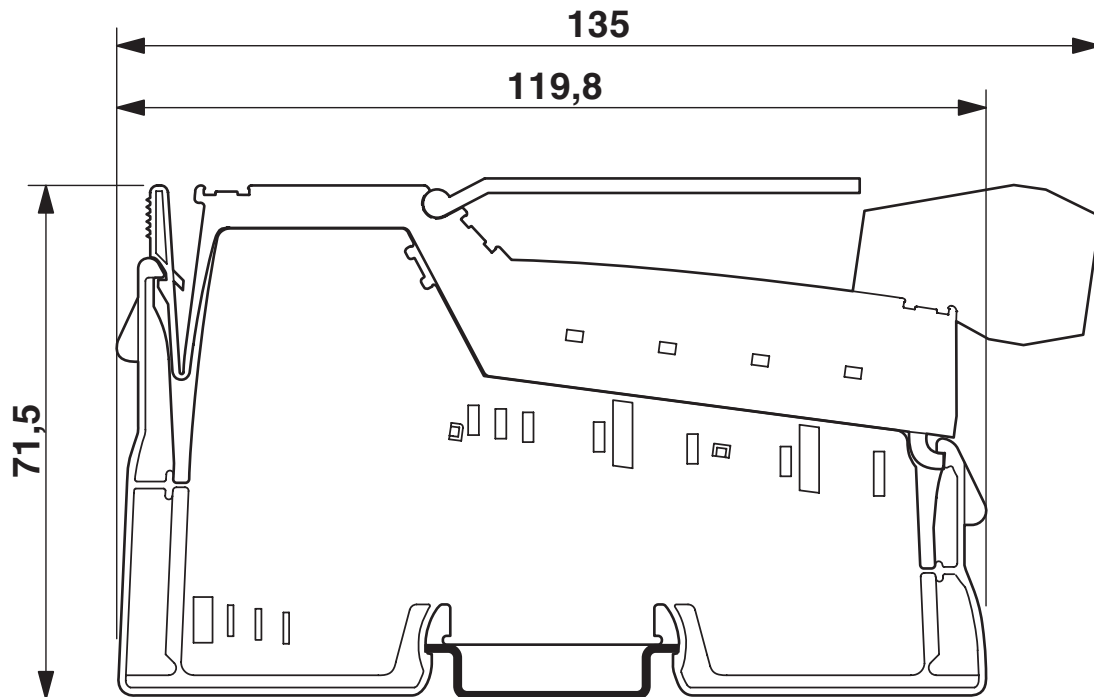
IBS IL 24 BK-T/U-2MBD - Bus coupler

2855240

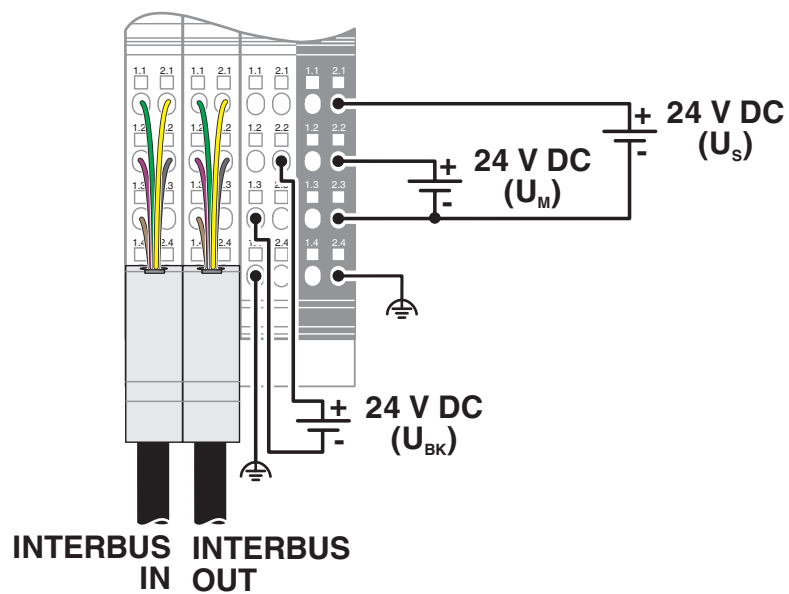
<https://www.phoenixcontact.com/us/products/2855240>

Drawings

Dimensional drawing



Connection diagram



IBS IL 24 BK-T/U-2MBD - Bus coupler



2855240

<https://www.phoenixcontact.com/us/products/2855240>

Environmental product compliance

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - 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