

## Bus coupler - IBS IL 24 BK-T/U-XC-PAC - 2701150

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INTERBUS bus coupler, version for extreme conditions, copper connection, 24 V DC, complete with accessories (connector plug and labeling field)

### Product Features

- Remote bus connections using copper technology
- Electrical isolation
- Can be used under extreme ambient conditions
- Extended temperature range of -40°C ... +70°C (see "Tested successfully: use under extreme ambient conditions" in the data sheet)
- Coated PCBs



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	260.0 g
Custom tariff number	85389091
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Width	48.8 mm
Height	135 mm
Depth	71.5 mm

#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
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### Technical data

#### Ambient conditions

	-40 °C ... 70 °C (Extended, see section "Tested successfully: use under extreme ambient conditions" in the data sheet.)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)
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)
Degree of protection	IP20

#### General

Mounting type	DIN rail
Net weight	214 g
Note on weight specifications	with connectors

#### Interfaces

Fieldbus system	INTERBUS
Designation	INTERBUS
Connection method	Inline shield connector
Transmission speed	500 kBit/s
Transmission physics	Copper
Fieldbus system	Lokalbus
Designation	Inline local bus
Connection method	Inline data jumper
Transmission speed	500 kBit/s

#### System limits of the bus coupler

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

#### Power supply for module electronics

Connection method	Inline connector
Supply voltage	24 V DC (via Inline connector)
Supply voltage range	19.2 V DC ... 30 V DC (including all tolerances, including ripple)
Current consumption	max. 1.25 A (with max. number of connected I/O terminal blocks)

#### Inline potentials

Communications power $U_L$	7.5 V DC $\pm 5\%$
Power supply at $U_L$	max. 2 A DC (observe derating)
Main circuit supply $U_M$	24 V DC -15 % / +20 % (acc. to EN 61131-2)

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### Technical data

#### Inline potentials

Power supply at $U_M$	max. 8 A DC (Sum of $U_M + U_S$ )
Segment circuit supply $U_S$	24 V DC -15 % / +20 % (acc. to EN 61131-2)
Power supply at $U_S$	max. 8 A DC (Sum of $U_M + U_S$ )
I/O supply voltage $U_{ANA}$	24 V DC -15 % / +20 %
Power supply at $U_{ANA}$	max. 0.5 A DC (observe derating)

#### Standards and Regulations

Test section	5 V supply, incoming remote bus/5 V supply outgoing remote bus 500 V AC 50 Hz 1 min.
	5 V supply, incoming remote bus/7.5 V logics supply, 24 V analog supply, 24 V bus terminal module supply 500 V AC 50 Hz 1 min.
	5 V supply, incoming remote bus/24 V main supply, 24 V segment supply 500 V AC 50 Hz 1 min.
	5 V supply incoming remote bus / functional earth ground 500 V AC 50 Hz 1 min.
	5 V supply, outgoing remote bus/24 V main supply, 24 V segment supply 500 V AC 50 Hz 1 min.
	5 V supply, outgoing remote bus/7.5 V logics supply, 24 V analog supply, 24 V bus terminal module supply 500 V AC 50 Hz 1 min.
	5 V supply outgoing remote bus / functional earth ground 500 V AC 50 Hz 1 min.
	7.5 V logics supply, 24 V analog supply, 24 V bus terminal module supply/ functional earth ground 500 V AC 50 Hz 1 min.
	7.5 V logics supply, 24 V analog supply, 24 V bus terminal module supply / 24 V main supply, 24 V segment supply 500 V AC 50 Hz 1 min.
	24 V main supply, 24 V segment supply/functional earth ground 500 V AC 50 Hz 1 min.
Connection in acc. with standard	CUL
Protection class	III, IEC 61140, EN 61140, VDE 0140-1

### Classifications

#### eCl@ss

eCl@ss 4.0	27250203
eCl@ss 4.1	27250203
eCl@ss 5.0	27250203
eCl@ss 5.1	27242608
eCl@ss 6.0	27242608
eCl@ss 7.0	27242608
eCl@ss 8.0	27242608

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## Classifications

### ETIM

ETIM 3.0	EC001604
ETIM 4.0	EC001599
ETIM 5.0	EC001604

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

## Approvals

### Approvals

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#### Approvals

UL Recognized / cUL Recognized / cULus Recognized

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#### Ex Approvals

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#### Approvals submitted

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### Approval details

UL Recognized 
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cUL Recognized 
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cULus Recognized 
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## Bus coupler - IBS IL 24 BK-T/U-XC-PAC - 2701150

### Accessories

#### Accessories

#### Connector set

Connector set - IB IL BK-PLSET/CP - 2860374



Connector set for Inline bus coupler, color-coded

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### End block

End clamp - E/UK - 1201442



End clamp, Width: 9.5 mm, Height: 35.3 mm, Length: 50.5 mm, Color: gray

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### Labeling panel

Labeling field - IB IL FIELD 2 - 2727501

Labeling field, width: 12.2 mm



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### Terminal marking

Insert strip - ESL 62X10 - 0809492

Insert strip, Sheet, white, unlabeled, can be labeled with: Office printing systems, Plotter: Laser printer, Mounting type: Insert, Lettering field: 62 x 10 mm

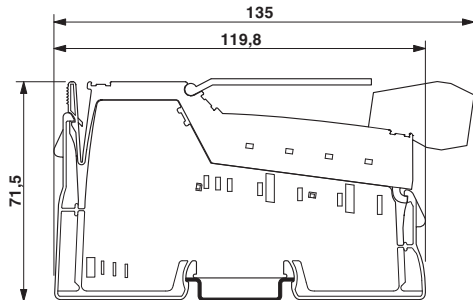


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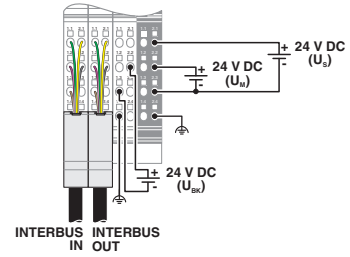
### Drawings

# Bus coupler - IBS IL 24 BK-T/U-XC-PAC - 2701150

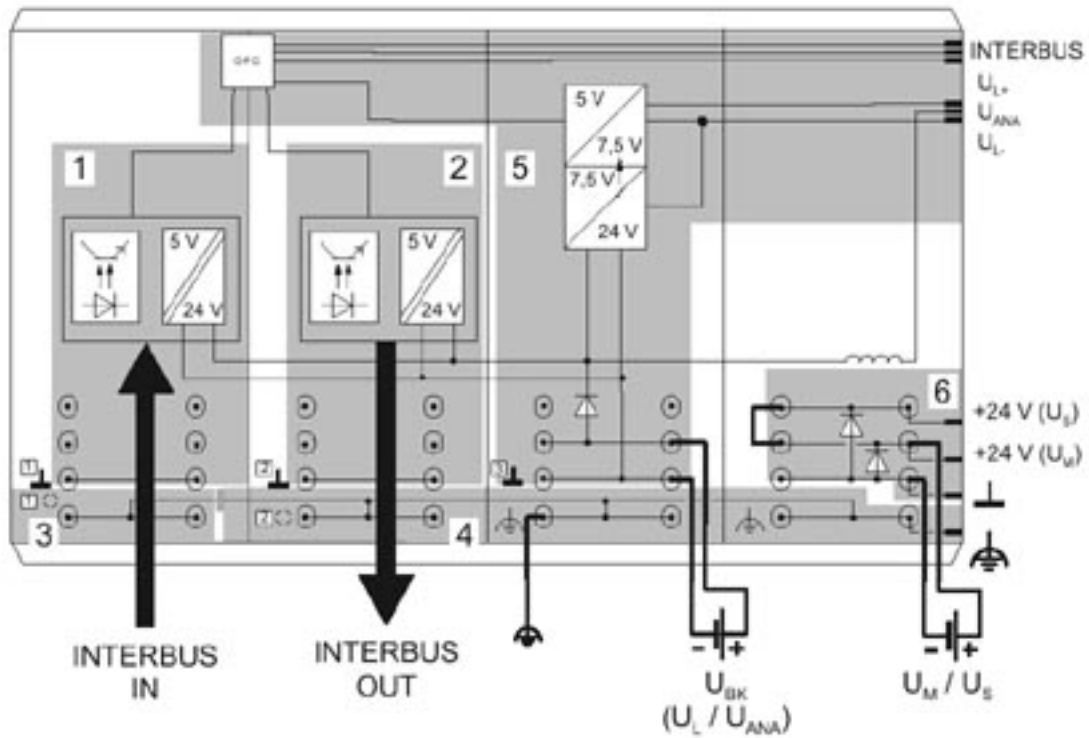
Dimensional drawing



Connection diagram



Block diagram



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