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Inline, Bus coupler, INTERBUS, Inline shield connector, transmission speed in the local bus: 2 Mbps, including Inline connectors and marking fields

#### **Product Description**

The bus coupler connects an Inline station to the INTERBUS remote bus and provides the supply voltages for the connected devices.

#### Why buy this product

- Remote bus connections using copper technology
- An Inline station can be supplied with all of the required 24 V voltages for low-level signals
- ☑ Up to 15 connected terminals with remote bus branch supported
- Electrical isolation of the remote bus segments



# **Key Commercial Data**

Packing unit	1 STK
GTIN	4 017918 974640
GTIN	4017918974640

#### 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
Ambient temperature (storage/transport)	-25 °C 85 °C



## Technical data

### Ambient conditions

Permissible humidity (operation)	10 % 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % 95 % (non-condensing)
Air pressure (operation)	70 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	142 g
Note on weight specifications	with connectors
Diagnostics messages	Peripheral fault yes, if the segment voltage U <sub>S</sub> is not present

## Interfaces

Designation	INTERBUS
No. of channels	2
Connection method	Inline shield connector
Transmission speed	2 Mbps
Transmission physics	Copper
Designation	Remote bus branch / Inline local bus
Connection method	Inline data jumper
Transmission speed	2 Mbps

## System limits of the bus coupler

Number of local bus devices that can be connected	max. 63
Number of devices with parameter channel	max. 62
Number of supported branch terminals with remote bus branch	max. 15

### Inline potentials

Designation	Bus coupler supply $U_{BC}$ ; 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 consumption	typ. 100 mA (without connected Inline I/O terminals)
	max. 1.25 A (with max. number of connected I/O terminal blocks)
Designation	Communications power (U <sub>L</sub> )
Supply voltage	7.5 V DC ±5 %
Power supply unit	max. 2 A DC (observe derating)
Designation	Supply of analog modules (U <sub>ANA</sub> )
Supply voltage	24 V DC
Supply voltage range	19.2 V DC 30 V DC (including all tolerances, including ripple)
Power supply unit	max. 0.5 A DC (observe derating)
Designation	Main circuit supply (U <sub>M</sub> )
Supply voltage	24 V DC



## Technical data

## Inline potentials

Supply voltage range	19.2 V DC 30 V DC (including all tolerances, including ripple)
Power supply unit	max. 8 A DC (sum of $U_M + U_S$ )
Designation	Segment circuit supply (U <sub>s</sub> )
Supply voltage	24 V DC
Supply voltage range	19.2 V DC 30 V DC (including all tolerances, including ripple)
Power supply unit	max. 8 A DC (sum of $U_M + U_S$ )

### Electrical isolation

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 communications power, 24 V analog supply, 24 V bus coupler 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 communications power, 24 V analog supply, 24 V bus coupler 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 communications power, 24 V analog supply, 24 V bus coupler supply/functional earth ground 500 V AC 50 Hz 1 min.
	7.5 V communications power, 24 V analog supply, 24 V bus coupler 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.

## Standards and Regulations

Protection class	III, IEC 61140, EN 61140, VDE 0140-1

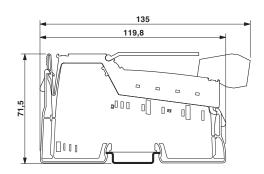
## **Environmental Product Compliance**

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

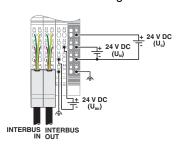
# Drawings



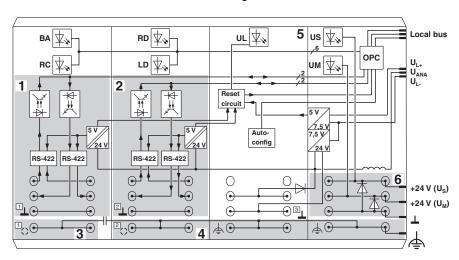
#### Dimensional drawing



#### Connection diagram



#### Block diagram



# Approvals

#### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

### Approval details

**UL** Listed



http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

FILE E 140324



## Approvals

cUL Listed



http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

FILE E 140324

cULus Listed



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