

IBS IL 24 BK-LK-PAC - Bus coupler



2861218

<https://www.phoenixcontact.com/us/products/2861218>

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Inline, Bus coupler, INTERBUS, F-SMA connector, 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. It 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 | 2861218 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | DR01 |
| Product key | DRI111 |
| GTIN | 4017918894160 |
| Weight per piece (including packing) | 282.8 g |
| Weight per piece (excluding packing) | 220 g |
| Customs tariff number | 85389091 |
| Country of origin | DE |

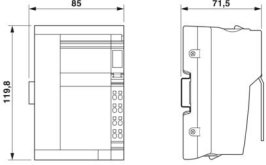
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Technical data

Dimensions

| | |
|---------------------|--|
| Dimensional drawing |  |
| Width | 85 mm |
| Height | 119.8 mm |
| Depth | 71.5 mm |

Notes

Note on application

| | |
|---------------------|-------------------------|
| Note on application | Only for industrial use |
|---------------------|-------------------------|

Material specifications

| | |
|-----------------|------------------|
| Color (Housing) | green (RAL 6021) |
|-----------------|------------------|

Interfaces

INTERBUS

| | |
|----------------------|-----------------|
| Number of interfaces | 2 |
| 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 |

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 | max. 62 |
| Number of supported branch terminals with remote bus branch | max. 15 |

Programming data

| | |
|-------------------|----|
| Length code (hex) | 00 |
| ID code (dec.) | 04 |
| Length code (dec) | 00 |

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| | |
|--------------------------|-----------|
| Process data channel | 0 bit |
| Input address area | 0 Byte |
| Output address area | 0 Byte |
| Parameter channel (PCP) | 0 Byte |
| Register length (bus) | 0 bit |
| Register length (master) | 1024 Byte |

Product properties

| | |
|-----------------|---|
| Product type | I/O component |
| Product family | Inline |
| Type | modular |
| Scope of supply | including Inline connector and labeling field |

Electrical properties

| | |
|---|--|
| Maximum power dissipation for nominal condition | 5.4 W |
| Protective circuit | Short-circuit protection of the communications power; electronic |
| | Short-circuit protection of the analog supply; electronic |
| | Surge protection (bus coupler supply) |
| | Protection against polarity reversal (bus coupler supply) |

Potentials

| | |
|--------------------|--|
| Protective circuit | Surge protection of the supply voltage |
| | Polarity reversal protection of the supply voltage |

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. 1.35 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 $\pm 5\%$ |
| Power supply | max. 2 A |

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 |

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 |
|-----------------|------------------|

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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 |
| 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) | 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) |
| Ambient temperature (storage/transport) | -25 °C ... 85 °C |
| Permissible humidity (operation) | 10 % ... 95 % (non-condensing) |
| Permissible humidity (storage/transport) | 10 % ... 95 % (non-condensing) |

Standards and regulations

| | |
|------------------|---------------------------------------|
| Protection class | III (IEC 61140, EN 61140, VDE 0140-1) |
|------------------|---------------------------------------|

Mounting

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

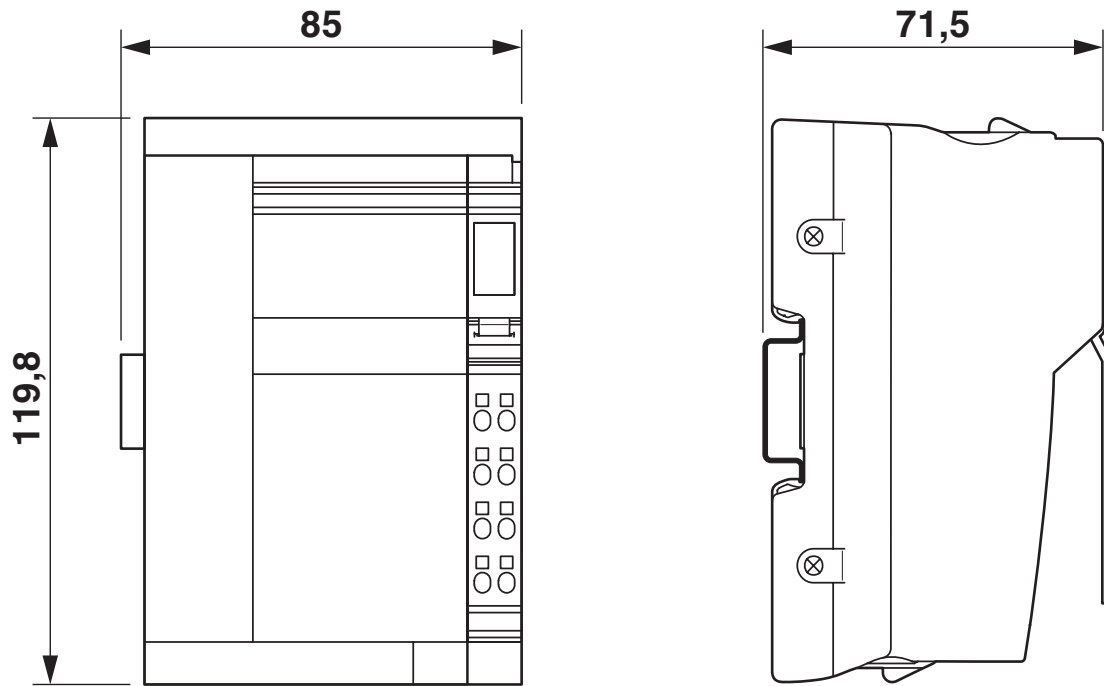
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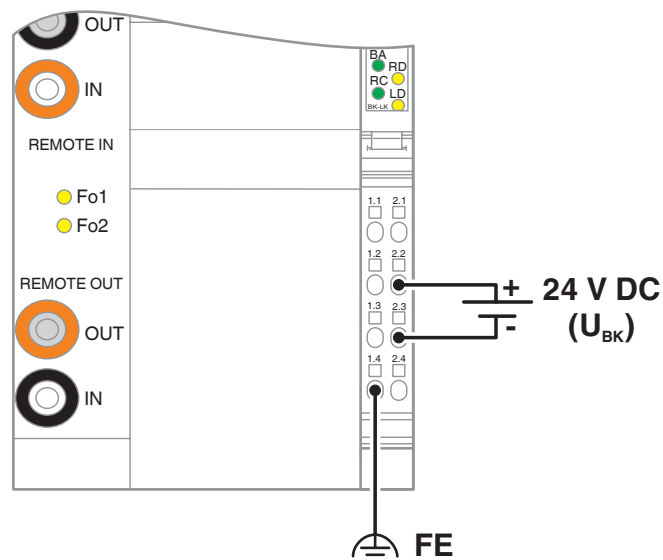
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Drawings

Dimensional drawing



Connection diagram

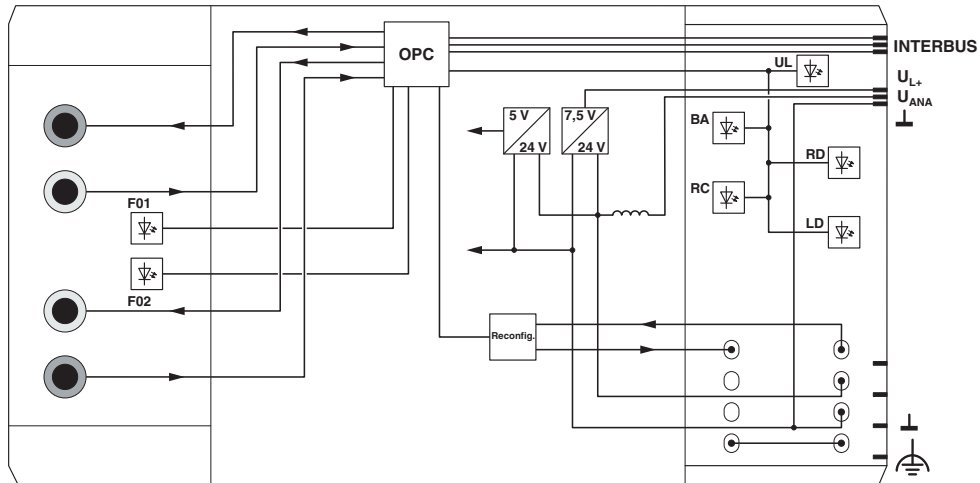


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Block diagram



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Approvals

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EAC

Approval ID: TR TS_S_03508-21



DNV GL

Approval ID: TAA00000BN

BSH

Approval ID: 658a



cULus Recognized

Approval ID: E140324

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27242608 |
| ECLASS-15.0 | 27242608 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC001604 |
|-----------|----------|

UNSPSC

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

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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.) | Dodecamethylcyclohexasiloxane(CAS: 540-97-6) |
| | Lead(CAS: 7439-92-1) |
| SCIP | af64eba8-a4c4-40dc-abd5-7e211e08c985 |

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