# IBS IL 24 BK-DSUB-PAC - Bus coupler

2861593

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CRA-READY



Inline, Bus coupler, INTERBUS, D-SUB-9 female/D-SUB-9 male, transmission speed in the local bus: 500 kbps, degree of protection: IP20, including Inline connector and labeling field; The product is being prepared for compliance with the Cyber Resilience Act (CRA).

## Product description

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

## Your advantages

- Remote bus connections using copper technology
- Electrical isolation

ELEKTROGERÄTE RÜCKNAHME

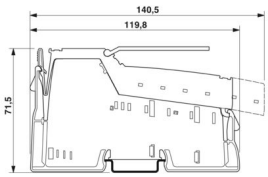
## Commercial data

| | |
|---|---|
| Item number | 2861593 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | DR01 |
| Product key | DRI111 |
| GTIN | 4017918894443 |

| | |
|---|---|
| Weight per piece (including packing) | 292 g |
| Weight per piece (excluding packing) | 210 g |
| Customs tariff number | 85389091 |
| Country of origin | DE |

## Technical data

### Dimensions

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

### Notes

| | |
|---|---|
| Note on application | Only for industrial use |
| Note on application | As things stand now, we are preparing the product so that, as of December 11, 2027, it will comply with the requirements of the EU Cyber Resilience Act (CRA) based on the information currently available regarding the CRA. |

Utilization restriction

| | |
|---|---|
| CCCex note | Use in potentially explosive areas is not permitted in China. |

### Mounting

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

### Material specifications

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

### Interfaces

INTERBUS

| | |
|---|---|
| Number of interfaces | 2 |
| Connection method | D-SUB-9 female/D-SUB-9 male |
| Transmission speed | 500 kbps |
| Transmission physics | Copper |

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 |

Programming data

| | |
|---|---|
| Length code (hex) | 00 |
| ID code (dec.) | 04 |
| Length code (dec) | 00 |
| 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 |
| Special properties | The product is being prepared for compliance with the Cyber Resilience Act (CRA) |

Insulation characteristics

| | |
|---|---|
| Overvoltage category | II (IEC 60664-1, EN 60664-1) |
| Pollution degree | 2 (IEC 60664-1, EN 60664-1) |

## Electrical properties

| | |
|---|---|
| Maximum power dissipation for nominal condition | 3 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. 100 mA (without connected Inline I/O terminals) |

Potentials: Communications power ($U_L$)

| | |
|---|---|
| Supply voltage | 7.5 V DC ±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) |

## Connection data

Connection technology

| | |
|---|---|
| Connection name | Inline connector |

Inline connector

| | |
|---|---|
| Connection method | Spring-cage connection |
| Conductor cross-section, rigid | 0.08 mm² ... 1.5 mm² |
| Conductor cross-section, flexible | 0.08 mm² ... 1.5 mm² |
| 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) |

Mechanical test

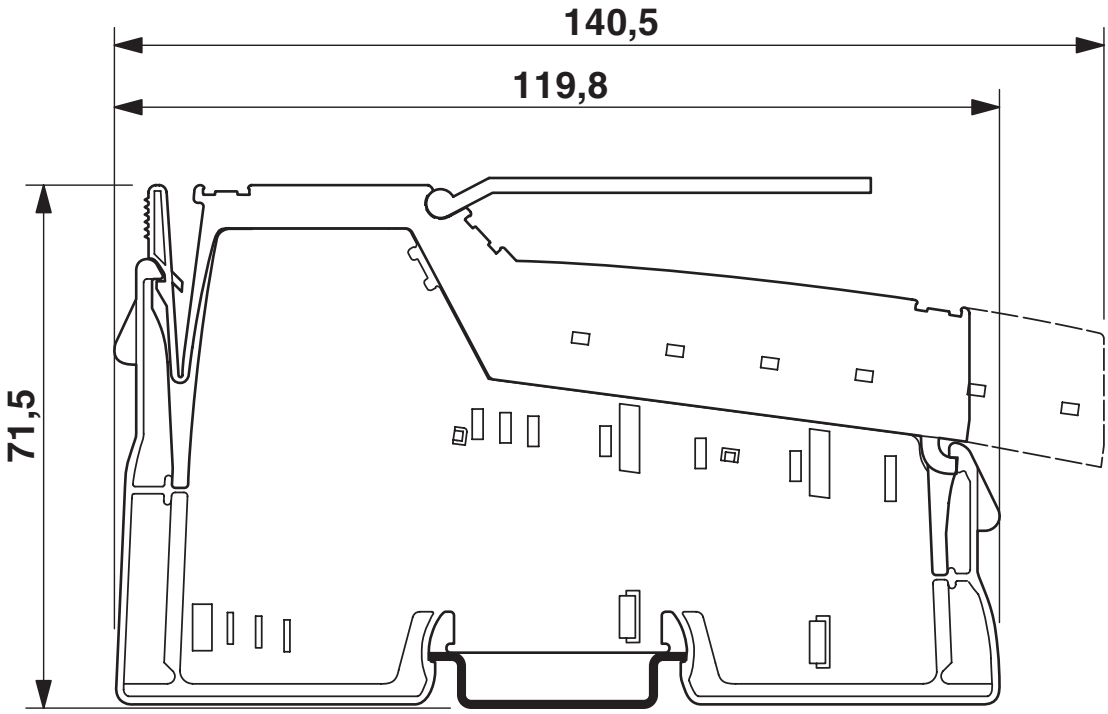
| | |
|---|---|
| Vibration resistance in accordance with EN 60068-2-6/IEC 60068-2-6 | 5g |
| Shock in accordance with EN 60068-2-27/IEC 60068-2-27 | 25g |

## Standards and regulations

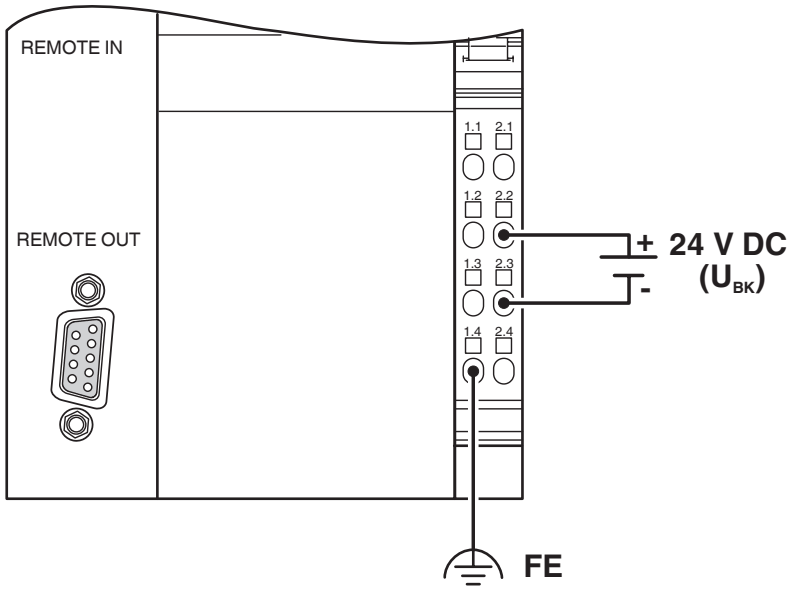
| | |
|---|---|
| Protection class | III (IEC 61140, EN 61140, VDE 0140-1) |

## Drawings

Dimensional drawing




Connection diagram



## Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/2861593

**BV**
Approval ID: 21594/C1 BV

**BSH**
Approval ID: 658a

**ABS**
Approval ID: 22-2226444-PDA

**cULus Recognized**
Approval ID: E140324

**cULus Listed**
Approval ID: E199827

## Classifications

### ECLASS

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

### ETIM

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

### UNSPSC

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

## Environmental product compliance

EU RoHS

| | |
|---|---|
| Fulfills EU RoHS substance requirements | Yes |
| Exemption | 6(c), 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 | 0d59c351-7464-4983-bf00-d5644d1bb680 |


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