

# Bus coupler - IBS ST ZF 24 BK DIO 8/8/3-T - 2750798

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



INTERBUS-ST I/O bus terminal module, 8 digital inputs, 8 digital outputs, 500 mA, I/Os additionally available via FLK plug, IP20 protection, consisting of: Terminal part with spring-cage connection and module electronics

The illustration shows version IBS ST 24 BK DIO 8/8/3-LK

## Product description

INTERBUS ST bus terminal modules with additional interfaces (I/O)

In addition to the actual bus terminal module functions, 8 digital inputs and 8 digital outputs are integrated into the INTERBUS input/output bus terminal modules. On top of this, the modules can be extended by up to four INTERBUS-ST input/output modules. All the bus terminal module functions, such as switching of the input/output modules from the INTERBUS network remain available without restrictions.

This bus terminal module is particularly suitable for use in applications for which very little space is available, or where only a few input/output points are required.

The IBS ST 24 BK DIO 8/8/3-T or -LK modules provide the option of assigning inputs and outputs either by screw terminal blocks in the termination block, or using an FLK system connector. This permits the ELR 319 electronic load relay or VARIOFACE input/output modules to be connected simply using 14-pos. FLK connectors.

The IBS ST 24 BK RB-T or IBS ST 24 BK RB-LK modules have an additional remote bus branch. This remote bus branch has the same restrictions regarding structure as any remote bus. All devices with remote bus interface can be linked in here.

All INTERBUS bus terminal modules make it possible to individually enable/disable the additional bus interfaces. To some extent, they perform the role of two bus terminal modules in the INTERBUS system and are also treated as such in the address lists and configuring software (CMD).


Note: When configuring buses branching off from the bus terminal modules, please observe the topology supported by INTERBUS controller boards.

## Product Features

- Remote bus connections using copper technology
- Electrical isolation
- 8 digital inputs
- 8 digital outputs
- Diagnostic and status indicators
- DIN rail mounting



## Key commercial data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 017918 108410 |
| Weight per Piece (excluding packing) | 706.6 GRM   |

## Bus coupler - IBS ST ZF 24 BK DIO 8/8/3-T - 2750798

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

#### Dimensions

|        |        |
|--------|--------|
| Width  | 118 mm |
| Height | 117 mm |
| Depth  | 116 mm |

#### Ambient conditions

|  |  |
|--|--|
| Ambient temperature (operation)          | 0 °C ... 55 °C   |
| Ambient temperature (storage/transport)  | -25 °C ... 70 °C                                       |
| Permissible humidity (operation)         | 75 % (on average, 85% infrequently, non-condensing)    |
| Permissible humidity (storage/transport) | 75 % (on average, 85% infrequently, non-condensing)    |
| Air pressure (operation)                 | 80 kPa ... 106 kPa (up to 2000 m above mean sea level) |
| Air pressure (storage/transport)         | 80 kPa ... 106 kPa (up to 2000 m above mean sea level) |
| Degree of protection                     | IP20   |

#### Interfaces

|                              |                              |
|------------------------------|------------------------------|
| Fieldbus system              | INTERBUS                     |
| Designation                  | INTERBUS                     |
| Connection method            | 9-pos. D-SUB plug/socket     |
| Designation connection point | Incoming/Outgoing Remote Bus |
| Number of positions          | 9                            |
| Fieldbus system              | Lokalbus                     |
| Designation                  | ST local bus                 |
| Connection method            | ST local bus connector       |
| Transmission speed           | 500 kBit/s                   |

#### Digital inputs

|                                |   |
|--------------------------------|---|
| Input name                     | Digital inputs                          |
| Connection method              | Screw-cage connection or FLK connectors |
|                                | 3-conductor                             |
| Number of inputs               | 8                                       |
| Typical response time          | ≥ 1 ms (typical)                        |
| Protective circuit             | Overload protection Fuse in header      |
| Input voltage                  | 24 V DC                                 |
| Input voltage range "0" signal | -30 V DC ... 5 V DC                     |

## Bus coupler - IBS ST ZF 24 BK DIO 8/8/3-T - 2750798

### Technical data

#### Digital inputs

|                                   |                         |
|-----------------------------------|-------------------------|
| Input voltage range "1" signal    | 13 V DC ... 30 V DC     |
| Nominal input current at $U_{IN}$ | typ. 5 mA (per channel) |

#### Digital outputs

|  |   |
|--|---|
| Output name  | Digital outputs                         |
| Connection method                                  | Screw-cage connection or FLK connectors |
|  | 3-conductor                             |
| Number of outputs                                  | 8                                       |
| Protective circuit                                 | Short-circuit protection Electronic     |
| Maximum output current per channel                 | 500 mA                                  |
| Maximum output current per module / terminal block | 4 A                                     |
| Maximum output current per group                   | 2 A                                     |
| Nominal load, lamp                                 | 12 W                                    |
| Nominal load, ohmic                                | 12 W                                    |

#### Power supply for module electronics

|                      |  |
|----------------------|--|
| Supply voltage       | 24 V DC  |
| Supply voltage range | 18.5 V DC ... 30.5 V DC (including ripple)             |
| Ripple               | 3.6 V <sub>pp</sub> within the allowable voltage range |
| Current consumption  | typ. 150 mA  |

#### General

|                  |  |
|------------------|--|
| Weight           | 690 g  |
| Mounting type    | DIN rail   |
| Protection class | III, IEC 61140, EN 61140, VDE 0140-1                           |
| Test section     | Incoming remote bus / Outgoing remote bus 500 V AC 50 Hz 1 min |
|                  | Incoming remote bus / I/O interface 500 V AC 50 Hz 1 min       |
|                  | Incoming remote bus/ST interface 500 V AC 50 Hz 1 min          |

### 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 |

# Bus coupler - IBS ST ZF 24 BK DIO 8/8/3-T - 2750798

## Classifications

### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001434 |
| ETIM 3.0 | EC001604 |
| ETIM 4.0 | EC001604 |
| 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

---

#### Approvals

UL Recognized / cUL Recognized / GOST / INTERBUS CLUB / cULus Recognized

---

#### Ex Approvals

---

#### Approvals submitted

---

### Approval details

|               |
|---------------|
| UL Recognized |
|---------------|

|                |
|----------------|
| cUL Recognized |
|----------------|

|      |
|------|
| GOST |
|------|

# Bus coupler - IBS ST ZF 24 BK DIO 8/8/3-T - 2750798

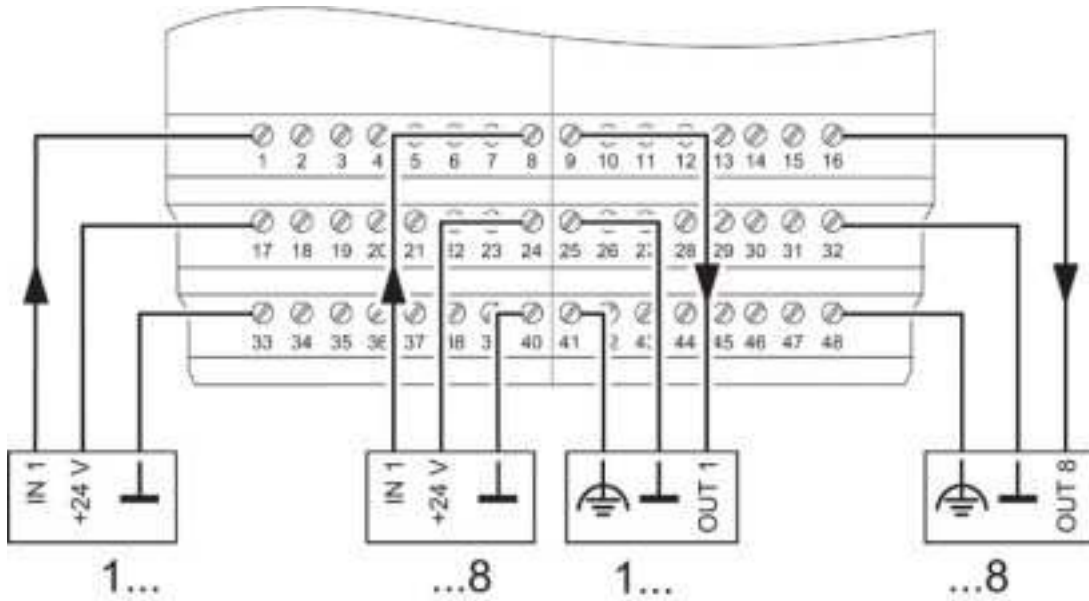
## Approvals

INTERBUS CLUB

cULus Recognized US

## Drawings

Connection diagram



# Bus coupler - IBS ST ZF 24 BK DIO 8/8/3-T - 2750798

Dimensioned drawing

