

## IB ST ZF 24 AI 4/I

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Order No.: 2721264

The illustration shows version IB ST 24 AI 4/I



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INTERBUS-ST analog input module, 4 electrically isolated inputs, 0 - 20 mA, 4 - 20 mA, 0 - 10 V, IP20 protection, consisting of: Terminal part with spring-cage connection and module electronics

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### Commercial data

EAN	4017918140489
Pack	1 pcs.
Customs tariff	85389091
Weight/Piece	0.59 KG

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### Product description

INTERBUS ST analog input modules

The wide range of INTERBUS analog input modules makes it possible to choose the ideal product for a variety of applications.

All commercially available analog standard sensors with voltage or current signals can be detected. Particular features of the INTERBUS analog input modules are:

- High accuracy of measurement
- Extremely rapid acquisition of measurement values
- Very good interference and common mode suppression
- A constant voltage source for the connection of passive sensors

Moreover, a host of measures guarantee a high standard of operational reliability, even under extreme industrial environmental conditions. In addition to integrated safety systems, such as:

- Watchdog monitoring of the processor, or
- Monitoring the supply voltage, in particular, comprehensive EMC measures, for example, a new shielding concept.

There is a separate shield connection option for each input, without extra external wiring necessary. The connection to protective earth ground is created automatically when the module is snapped onto the DIN rail.

### Technical data

#### Interfaces

Interface	ST local bus
Type of connection	ST local bus connector
Transmission physics	Copper

#### Power supply

Communications voltage $U_L$	9 V DC (from the ST local bus)
Typical current consumption	45 mA (no supply of sensors)
Max. current consumption	80 mA (no supply of sensors)
I/O voltage	$\pm 24$ V DC 5 % (ripple)
Peripherals voltage range	18.5 V DC ... 30.2 V DC
Max. power consumption from the local bus	100 mA (from the ST local bus)
	65 mA (from the ST local bus)

#### Electrical isolation

Test section	Bus/Inputs 500 V AC 50 Hz 1 min
	Supply voltage/inputs 500 V AC 50 Hz 1 min
	Supply voltage/Ground conductor 500 V AC 50 Hz 1 min
	Input/Input 500 V AC 50 Hz 1 min
	I/O voltage/Ground conductor 500 V AC 50 Hz 1 min

#### Inputs

No. of channels	4
Note on the number of channels	2 differential inputs, voltage or current can be chosen separately
Connection method	2-wire
Voltage input signal	0 V ... 10 V
Input resistance of voltage input	> 200 k $\Omega$ (voltage)
Voltage input quantization	2.44 mV
Wire break diagnostics	No
Overrange diagnostics	Yes, diagnostic bit
Basic error limit	0.025 %

Current input signal	4 mA ... 20 mA
	0 mA ... 20 mA
Input resistance current input	50 Ω (current)
Current input quantization	3.91 μA (4.88 μA at 0 mA ... 20 mA)
Wire break diagnostics	Yes, diagnostic bit
Overrange diagnostics	Yes, diagnostic bit
Basic error limit	0.02 %
Measuring principle	Successive approximation
Measured value monitoring to the PLC	4 channels simultaneously in 4 process data words
Representation of measured value	16-bit two's complement
Measured value resolution	12 bits
A/D conversion time	10 μs (per channel)
Process data update	0.5 ms (per channel/2 ms all channels)
Limit frequency (3 dB)	30 Hz

#### General data

Weight	465 g
Width	118 mm
Height	117 mm
Length	116 mm
Mounting type	DIN rail

#### Accessories

Item	Designation	Description
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#### Assembly

2763756	UFBK-SAS	Shield connection clamp for two PLUGTRAB base elements in versions: UFBK..., UAK...
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#### Cable/conductor

2836492	IB ST LBC	Spare local bus cable, for INTERBUS-ST modules
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#### Fuse

2753478	IBS TR5 0,4AT	Replacement fuse, for INTERBUS-ST modules
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#### Replacement clamping part

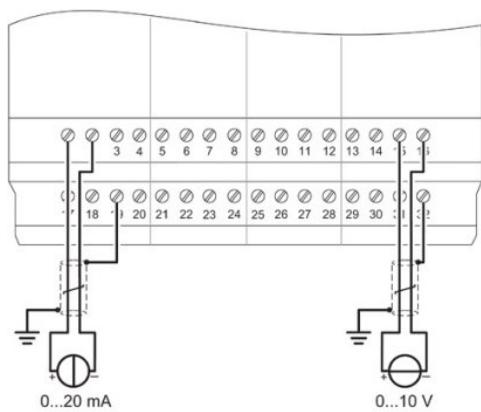
2727336	IB STTB ZF 24 AI 4/I	Replacement clamping part for IB ST ZF 24 AI 4/I
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### Replacement module electronics

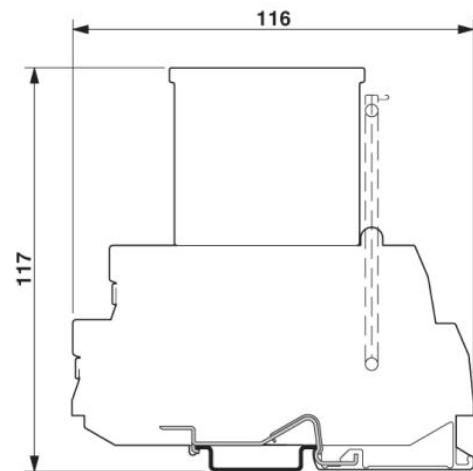
2719645	IB STME 24 AI 4/I	Replacement module electronics for IB ST (ZF) AI 4/I
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### Drawings

Connection diagram



Dimensioned drawing



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