

I/O module - IB ST ZF 24 AI 4/SF4 - 2750594

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

The illustration shows version IB ST 24 AI 4/SF

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.

Product Features

- Temperature measurement modules
- Standard signal types (voltage and current)
- Connection of sensors in 2, 3, and 4-wire technology
- Spring-cage connection with direct plug-in technology with a release mechanism

Key commercial data

Packing unit	1 pc
GTIN	 4 017918 140014
Weight per Piece (excluding packing)	650.1 GRM
Custom tariff number	85389091
Country of origin	Germany

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Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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Dimensions

Width	118 mm
Height	117 mm
Length	116 mm

Interfaces

Interface	ST local bus
Connection method	ST local bus connector
Transmission speed	500 kBit/s
Transmission physics	Copper

Power supply

Communications power U_L	9 V DC (from the ST local bus)
Typical current consumption	65 mA (without passive sensors)
Max. current consumption	125 mA (without passive sensors)
I/O voltage	± 24 V DC 5 % (ripple)
I/O voltage range	20 V DC ... 30 V DC
Max. power consumption from the local bus	150 mA (from the ST local bus)
	120 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
	I/O voltage/Ground conductor 500 V AC 50 Hz 1 min

Inputs

No. of channels	4
Note on the number of channels	differential inputs, voltage or current
Connection method	2, 3, 4-wire
Voltage input signal	0 V ... 10 V
Input resistance of voltage input	>
Voltage input quantization	2.44 mV
Basic error limit	0.05 %
Current input signal	4 mA ... 20 mA
Current input quantization	3.91 μ A
Wire break diagnostics	Yes, diagnostic bit

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Basic error limit	0.06 %
Measuring principle	Successive approximation
Measured value monitoring to the PLC	All channels simultaneously
Measured value representation	16 bit two's complement
Measured value resolution	12 bits
A/D conversion time	10 µs (per channel)
Process data update	0.75 ms (per channel/3 ms all channels)
Limit frequency (3 dB)	29.9 Hz

General

Weight	600 g
Mounting type	DIN rail

Classifications

eCl@ss

eCl@ss 4.0	27250303
eCl@ss 4.1	27250303
eCl@ss 5.0	27250303
eCl@ss 5.1	27242601
eCl@ss 6.0	27242601
eCl@ss 7.0	27242601
eCl@ss 8.0	27242601

ETIM

ETIM 2.0	EC001431
ETIM 3.0	EC001596
ETIM 4.0	EC001596
ETIM 5.0	EC001596

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	43201404

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Approvals

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UL Recognized / cUL Recognized / GOST / cULus Recognized

Ex Approvals


Approvals submitted

Approval details

UL Recognized 

cUL Recognized 

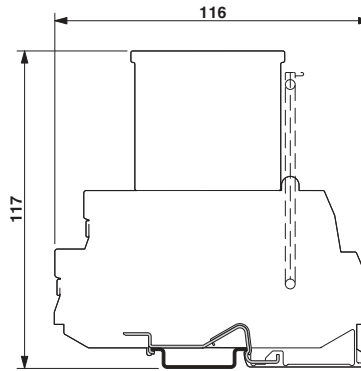
GOST 

cULus Recognized 

Drawings

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Dimensioned drawing



Connection diagram

