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INTERBUS-ST analog input module, 4 inputs, RTD, 2, 3 and 4-wire connection, IP20 protection, consisting of: Terminal part with spring-cage connection and module electronics

The illustration shows version IB ST 24 PT 100 4/4

#### Product description

INTERBUS ST analog input modules for temperature and resistance measurement

These analog input modules are suitable for recording temperature signals.

Commercially available temperature measuring resistors or thermocouples can be connected.

In addition to the various types of sensors, different characteristics can also be programmed. Further features are:

- A new shielding concept for sensors makes it possible to meet more severe EMC requirements. For each input, there is a separate shield connection. External circuit elements are not necessary.
- Diagnostic LEDs provide information on the operating status at any time.
- All modules can be individually labeled on the large pull-out labeling field. The insert cards can be prepared by hand, or by plotter or printer.
- In the event of failure or malfunction, the electronics of the module can be easily replaced. The passive termination block remains mounted on the rail. This means that the replacement process can be carried out in a just a few seconds and without the need for tools.
- The fuses are accessible from outside, so that a fault can be cleared quickly.
- The connection to protective earth ground is made directly via the DIN rail.
- The conventional labeling materials (Zack strip ZB-6, etc.) can be used to label the termination blocks.

#### **Product Features**

- Spring-cage connection with direct plug-in technology



#### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	576.0 GRM
Custom tariff number	85389091
Country of origin	Germany

### Technical data

Note



### Technical data

#### Note

Utilization restriction	area
Dimensions	
Width	118 mm

117 mm

116 mm

### Ambient conditions

Degree of protection	IP20

### Interfaces

Height

Length

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

### Power supply

Communications power U <sub>L</sub>	9 V DC (from the ST local bus)
I/O voltage	24 V DC
Typical current consumption	85 mA (from the ST local bus)
	50 mA (to U <sub>S</sub> )
Max. current consumption	100 mA (from the ST local bus)
	85 mA (to U <sub>S</sub> )

### 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

Number of inputs	4
Connection method	2, 3, 4-wire
Sensor types (RTD) that can be used	PT: -200 °C +850 °C, Ni: -60 °C +250 °C
Measuring principle	Sigma/Delta process
Measured value representation	16 bit two's complement
Measured value resolution	16 bits
Quantization	0.1 K (for Celsius scale, 0.056 K for Fahrenheit scale)
Process data update	258 ms (per channel/816 ms all channels (for 50 Hz suppression))
Basic error limit of the range of values	0.003 %



### Technical data

### General

Weight	540 g
Mounting type	DIN rail
Connection method	Spring-cage connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Connection method	2, 3, 4-wire

# 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

# Approvals

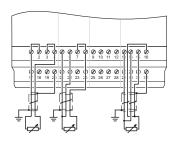
### Approvals



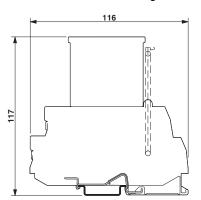
Approvals	
Approvals	
GOST	
Ex Approvals	
Approvals submitted	
Approval details	
GOST C	

## Drawings

### Connection diagram



### Dimensioned drawing



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