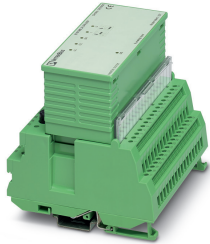


I/O module - IB ST 24 BAI 8/EF - 2700842

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 analog input module, 8 inputs, 0 - 5 V, 0 - 10 V, 0 - 25 V, 0 - 50 V, 0 - 20 mA, 4 - 20 mA, 0 - 40 mA, 0 - 60 mA, IP20 protection, consisting of: terminal part with screw connection and module electronics

Product Description

The module is designed for use within an ST station. It is used to acquire analog voltage and current signals.

Your advantages

- ✓ 8 analog inputs for the connection of either voltage or current signals
- ✓ Connection of sensors in 2-conductor technology



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 660631
GTIN	4046356660631
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	116 mm
Depth	117 mm

I/O module - IB ST 24 BAI 8/EF - 2700842

Technical data

Ambient conditions

Ambient temperature (operation)	-25 °C ... 55 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	10 % ... 95 % (non-condensing)
Air pressure (operation)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Air pressure (storage/transport)	80 kPa ... 106 kPa (up to 2000 m above sea level)
Degree of protection	IP20

General

Mounting type	DIN rail mounting
Net weight	591.5 g
Operating mode	Process data mode with 4 words
Diagnostics messages	Failure of the internal I/O supply I/O error message sent to the bus coupler
	F1 fuse failure I/O error message sent to the bus coupler
	I/O supply failure I/O error message sent to the bus coupler

Interfaces

Designation	ST local bus
Number	2
Connection method	ST local bus connector
Transmission speed	500 kbps
Transmission physics	Copper

Power supply for module electronics

Connection method	ST local bus connector
Designation	Communications power
Supply voltage	9 V DC (from the ST local bus)
Current consumption	typ. 54 mA
	max. 80 mA
Power consumption	typ. 0.5 W
Designation	U _s
Voltage	24 V DC

Analog inputs

Input name	Analog inputs
Number of inputs	max. 8 (Voltage or current)
Connection technology	2, 3-conductor
A/D conversion time	max. 10 µs (per channel)
Measuring principle	Successive approximation

I/O module - IB ST 24 BAI 8/EF - 2700842

Technical data

Analog inputs

Measured value representation	8 bit straight binary (default) or 12 bit two's complement (can be parameterized)
Number of inputs	8 (Voltage inputs)
Voltage input signal	0 V ... 10 V
	0 V ... 5 V
	0 V ... 25 V
	0 V ... 50 V
Input resistance of voltage input	150 kΩ
Number of inputs	8 (Current inputs)
Current input signal	4 mA ... 20 mA
	0 mA ... 20 mA
	0 mA ... 40 mA
	0 mA ... 60 mA (rms)
	0 mA ... 100 mA (peak)
Input resistance current input	77 Ω

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.

Standards and Regulations

Immunity to ESD	Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B, 6 kV contact discharge, 8 kV air discharge
Immunity to EF	Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
Immunity to burst	Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion B, 2 kV
Immunity to surge	Noise immunity test in accordance with EN 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B, supply lines DC: ±0.5 kV/±0.5 kV (symmetrical/asymmetrical), ±1 kV to shielded I/O cables
Immunity to conducted interference	Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V
Interference emission	Noise emission test as per EN 61000-6-4 EN 55011 Class A
Protection class	III (IEC 61140, EN 61140, VDE 0140-1)

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years

I/O module - IB ST 24 BAI 8/EF - 2700842

Technical data

Environmental Product Compliance

	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"
--	---

Classifications

eCl@ss

eCl@ss 10.0.1	27242601
eCl@ss 11.0	27242601
eCl@ss 4.0	27250300
eCl@ss 4.1	27250300
eCl@ss 5.0	27250300
eCl@ss 5.1	27242600
eCl@ss 6.0	27242600
eCl@ss 7.0	27242601
eCl@ss 9.0	27242601

ETIM

ETIM 3.0	EC001596
ETIM 4.0	EC001596
ETIM 6.0	EC001596
ETIM 7.0	EC001596

UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	32151602
UNSPSC 18.0	32151602
UNSPSC 19.0	32151602
UNSPSC 20.0	32151602
UNSPSC 21.0	32151602