Product data sheet Characteristics

STBAVI1255K

basic analog input kit STB - 0..10 V - 2 I - 10 bits





Main

Range of product	Modicon STB distributed I/O solution
Product or component type	Basic analog input kit
Kit composition	STBAVI1255 module STBXTS2100, 6-terminal spring clamp connector STBXTS1100, 6-terminal screw type connector STBXBA1000 base
Analogue input type	Voltage 010 V
Analogue input number	2
Analogue input resolution	10 bits
Type of filter	Single low pass input filter 25 Hz

Complementary

Absolute maximum input	50 V DC
Response time	5 ms
Cold swapping	Yes
Hot swapping fallback	No for basic NIMs
Data format	EN 61131-2 IEC 61131-2
Update time	10 ms
Integral linearity	+/- 0.2 %FS
Differential linearity	Monotonic
Input impedance	400 kOhm
Maximum supply current for sensors	100 mA per input channels
Maximum source impedance	1 kOhm
Absolute accuracy error	+/- 0.5 % of full scale 25 °C
Temperature drift	+/-0.01 %/°C
Insulation between channels and logic bus	1500 V for 1 minute
Insulation between channels and sensor bus	30 V
Addressing requirement	2 input words
Product compatibility	Mounting base STBXBA1000 Power distribution module STBPDT3100/3105
[Us] rated supply voltage	24 V DC
Supply	Power distribution module
Current consumption	30 mA at 5 V DC for logic bus
Marking	CE
Overvoltage category	II
Status LED	1 LED (green)module status (RDY)
Net weight	0.116 kg

Environment

Product certifications	FM Class 1 Division 2	
	ATEX Cat 3G	
	UL	
	CSA	
	C-Tick	
Pollution degree	2 conforming to IEC 60664-1	
Operating altitude	<= 2000 m	
IP degree of protection	IP20 conforming to EN 61131-2 class 1	
Ambient air temperature for operation	060 °C	
Ambient air temperature for operation	32140 °F without derating	
Ambient air temperature for storage	-4085 °C without derating	
Ambient air temperature for storage	-40185 °F without derating	
Relative humidity	95 % at 60 °C without condensation	
Vibration resistance	+/-0.35 mm at 1058 Hz	
	3 gn at 58150 Hz on 35 x 7.5 mm symmetrical DIN rail	
	5 gn at 58150 Hz on 35 x 15 mm symmetrical DIN rail	
Shock resistance	30 gn for 11 ms conforming to IEC 88 reference 2-27	

Packing Units

Package 1 Weight	0.135 kg
Package 1 Height	25.000 mm
Package 1 width	80.000 mm
Package 1 Length	130.000 mm

Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	☑ REACh Declaration	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	₫Yes	
China RoHS Regulation	☐ China RoHS Declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

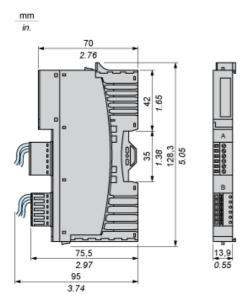
Contractual warranty

Warranty	18 months

Product data sheet Dimensions Drawings

STBAVI1255K

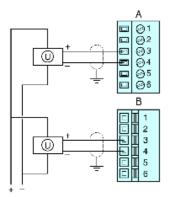
Dimensions



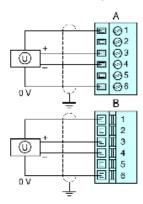
Wiring Diagrams

Examples

2 isolated analog sensors, external 24 VDC power supply



2 non-isolated analog sensors, 24 VDV supplied by the PDM



Pin	Top Connections	Bottom Connections
1	+24 VDC from field power bus for field device accessories	+24 VDC from field power bus for field device accessories
2	no connection	no connection
3	input from sensor 1	input from sensor 2
4	analog input return	analog input return
5	no connection	no connection
6	field power return (to the module)	field power return (to the module)