

Product data sheet

Specifications



standard digital input kit - Modicon STB - 24 V DC - 2 I

STBDDI3230K

Main

Range of product Modicon STB distributed I/O solution

Product or component type Standard digital input kit

Kit composition
STBXTS2100, 6-terminal spring clamp connector
STBXTS1100, 6-terminal screw type connector
STBXBA1000 base
STBDDI3230 module

Discrete input number 2

Discrete input voltage 24 V

Discrete input voltage type DC

Complementary

Input voltage limits 11...30 V at state 1
-3...5 V at state 0

Permissible voltage 30 V

Absolute maximum voltage 56 V 1.3 ms

Discrete input current 7.5 mA

Current state 0 guaranteed <= 2 mA

Current state 1 guaranteed >= 6 mA

Discrete input logic Positive or negative

Response time 0.61 ms off-to-on 0.2 ms
0.625 ms on-to-off 0.2 ms

Protection type Power protection integrated fuse on PDM time lag 10 A
Input protection resistor-limited
Reverse polarity protection

Insulation between channels and logic bus 2000 V for 1 minute

Cold swapping Yes

Hot swapping Yes for standard NIMs

Input filtering
1 ms
2 ms
4 ms
8 ms
0.5 ms
16 ms +/- 0.1 ms
0.2 ms

Current supplied by sensor 100 mA per channel

Product compatibility I/O base STBXBA1000

[Us] rated supply voltage	24 V DC
Supply	Power distribution module
Current consumption	55 mA at 5 V DC for logic bus
Marking	CE
Overvoltage category	II
Status LED	1 LED (green) module status (RDY) 1 LED per channel (green) channel status (IN1 to IN2) 1 LED (red) module error (ERR)
Depth	65.1 mm
Height	18.4 mm
Width	125 mm
Net weight	0.11 kg

Environment

Standards	EN/IEC 61131-2 type 2
Product certifications	UL FM Class 1 Division 2 CSA
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	-25...70 °C (without derating) 32...140 °F without derating
Ambient air temperature for storage	-40...85 °C without derating -40...185 °F without derating
Relative humidity	95 % at 60 °C without condensation
Vibration resistance	3 gn at 58...150 Hz on 35 x 7.5 mm symmetrical DIN rail 5 gn at 58...150 Hz on 35 x 15 mm symmetrical DIN rail +/-0.35 mm at 10...58 Hz
Shock resistance	30 gn for 11 ms conforming to IEC 88 reference 2-27

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.7 cm
Package 1 Width	8.0 cm
Package 1 Length	13.0 cm
Package 1 Weight	130.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	28
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	3.94 kg
Unit Type of Package 3	PAL

Number of Units in Package 3	448
Package 3 Height	60.0 cm
Package 3 Width	80.0 cm
Package 3 Length	448.0 cm
Package 3 Weight	58.24 kg

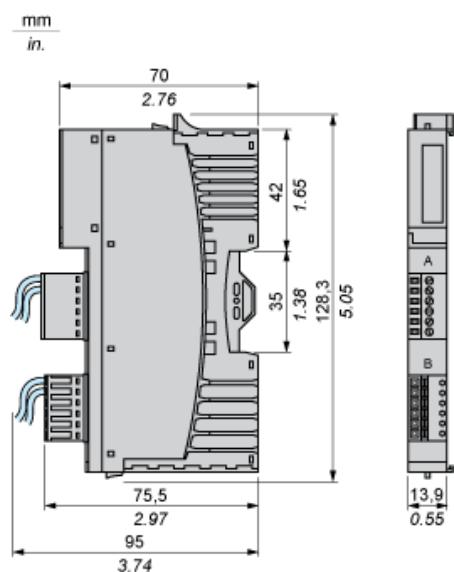
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
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
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months
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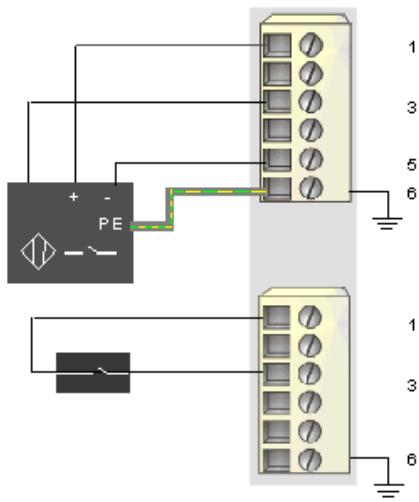
Dimensions



Wiring Diagram

Example

1 three-wire sensor and 1 two-wire sensor



Pin	Top Connector	Bottom Connector
1	+24 VDC from sensor bus for field device accessories	+24 VDC from sensor bus for field device accessories
2	+24 VDC from sensor bus for field device accessories	+24 VDC from sensor bus for field device accessories
3	input from sensor 1	input from sensor 2
4	field power return (to the module)	field power return (to the module)
5	field power return (to the module)	field power return (to the module)
6	protective earth	protective earth

Recommended replacement(s)