

Product data sheet

Specifications



standard digital input kit - Modicon STB - 230 V AC - 2 I

STBDAI7220K

Main

Range of product	Modicon STB distributed I/O solution
Product or component type	Standard digital input kit
Kit composition	STBXTS1110, 5-terminal screw type connector STBDAI7220 module STBXTS2110, 5-terminal spring clamp connector STBXBA2000 base
Discrete input number	2
Discrete input voltage	230 V
Discrete input voltage type	AC

Complementary

Input voltage limits	0...40 V at state 0 159...256 V at state 1
Permissible voltage	265 V
Absolute maximum voltage	400 V 20 ms
Network frequency	50/60 Hz
Network frequency limits	47...63 Hz
Current state 0 guaranteed	<= 2 mA
Current state 1 guaranteed	>= 4 mA
Response time	1.5 ms off-to-on 1.5 ms on-to-off
Protection type	Power protection integrated fuse on PDM time lag 10 A Input protection resistor-limited
Insulation between channels and logic bus	1780 V for 1 minute
Cold swapping	Yes
Hot swapping	Yes for standard NIMs
Product compatibility	Power distribution module STBPDT2100/2105 I/O base STBXBA2000
[Us] rated supply voltage	115/230 V AC
Supply	Power distribution module
Current consumption	40 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	0.122 kg

Environment

Standards	EN/IEC 61131-2 type 1
Product certifications	CSA UL FM Class 1 Division 2
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	0...60 °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	139.0 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	4.318 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	62.272 kg

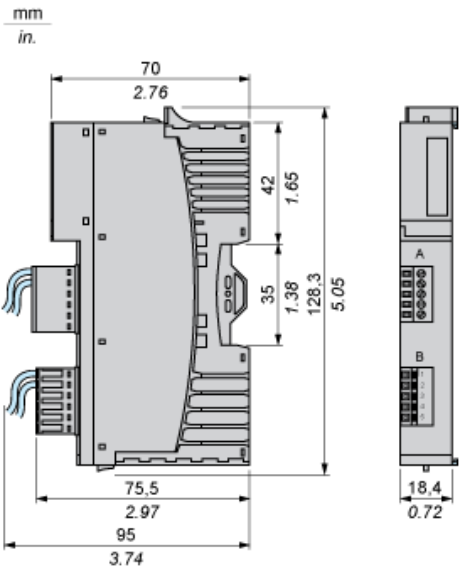
Offer Sustainability

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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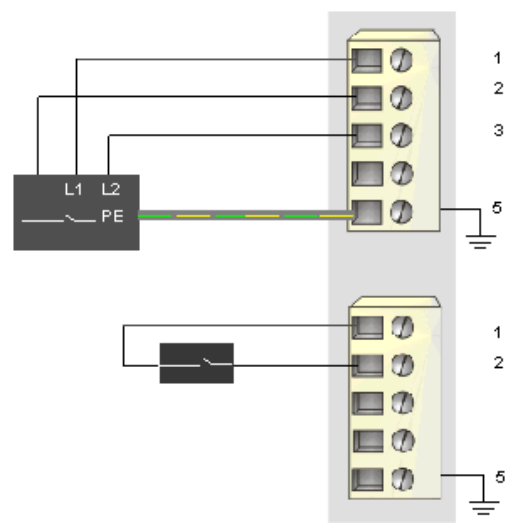
Dimensions



Wiring Diagram

Example

1 three-wire sensor and 1 two-wire sensor



Pin	Top Connector	Bottom Connector
1	230 VAC sensor bus power (L1)	230 VAC sensor bus power (L1)
2	input from sensor 1	input from sensor 2
3	field power neutral or L2 (to the module)	field power neutral or L2 (to the module)
4	field power neutral or L2 (to the module)	field power neutral or L2 (to the module)
5	protective earth	protective earth

Recommended replacement(s)