

# Product data sheet

Specifications



## standard digital input kit STB - 24 V DC - 6 I

STBDDI3610K

### Main

**Range of product** Modicon STB distributed I/O solution

**Product or component type** Standard digital input kit

**Kit composition** STBDDI3610 module  
STBXTS2100, 6-terminal spring clamp connector  
STBXTS1100, 6-terminal screw type connector  
STBXBA1000 base

**Discrete input number** 6

**Discrete input voltage** 24 V

**Discrete input voltage type** DC

### Complementary

**Input voltage limits** 15...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** 4.5 mA

**Current state 0 guaranteed** <= 0.5 mA

**Current state 1 guaranteed** >= 2.5 mA

**Discrete input logic** Positive or negative

**Response time** 1.21 ms off-to-on  
1.74 ms on-to-off

**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** 1500 V for 1 minute

**Cold swapping** Yes

**Hot swapping** Yes for standard NIMs

**Input filtering** 1 ms

**Product compatibility** I/O base STBXBA1000  
Power distribution module STBPDT3100/3105

**[Us] rated supply voltage** 24 V DC

**Supply** Power distribution module

**Current consumption** 55 mA at 5 V DC for logic bus

<b>Marking</b>	CE
<b>Overvoltage category</b>	II
<b>Status LED</b>	1 LED (green) module status (RDY) 1 LED per channel (green) channel status (IN1 to IN6) 1 LED (red) module error (ERR)
<b>Depth</b>	65.1 mm
<b>Height</b>	18.4 mm
<b>Width</b>	125 mm
<b>Net weight</b>	0.112 kg

## Environment

<b>Standards</b>	EN/IEC 61131-2 type 1
<b>Product certifications</b>	FM Class 1 Division 2 UL CSA
<b>Pollution degree</b>	2 conforming to IEC 60664-1
<b>Operating altitude</b>	<= 2000 m
<b>IP degree of protection</b>	IP20 conforming to EN 61131-2 class 1
<b>Ambient air temperature for operation</b>	-25...70 °C (without derating)  32...140 °F without derating
<b>Ambient air temperature for storage</b>	-40...85 °C without derating  -40...185 °F without derating
<b>Relative humidity</b>	95 % at 60 °C without condensation
<b>Vibration resistance</b>	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
<b>Shock resistance</b>	30 gn for 11 ms conforming to IEC 88 reference 2-27

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	2.7 cm
<b>Package 1 Width</b>	8.0 cm
<b>Package 1 Length</b>	13.0 cm
<b>Package 1 Weight</b>	135.0 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	28
<b>Package 2 Height</b>	15 cm
<b>Package 2 Width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Package 2 Weight</b>	4.206 kg

## Offer Sustainability

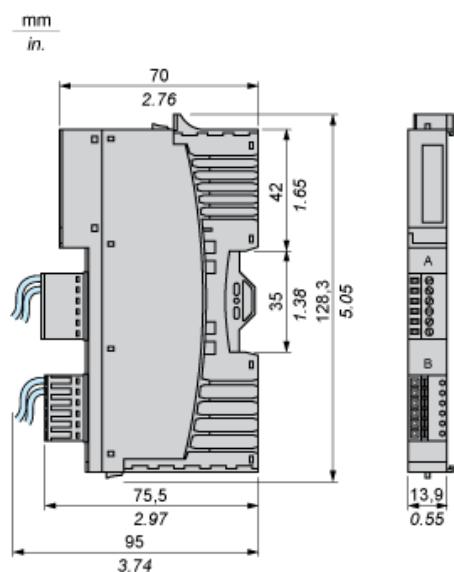
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>

<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## **Contractual warranty**

<b>Warranty</b>	18 months
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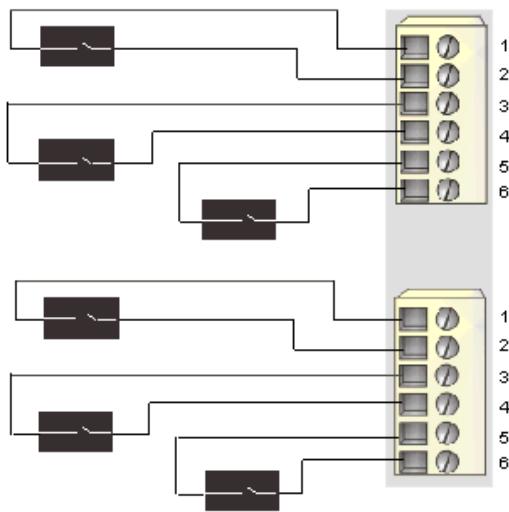
Dimensions



### Wiring Diagram

#### Example

6 two-wire sensors



Pin	Top Connector	Bottom Connector
1	+24 VDC sensor bus power	+24 VDC sensor bus power
2	input from sensor 1	input from sensor 4
3	+24 VDC sensor bus power	+24 VDC sensor bus power
4	input from sensor 2	input from sensor 5
5	+24 VDC sensor bus power	+24 VDC sensor bus power
6	input from sensor 3	input from sensor 6

#### Recommended replacement(s)