

# Product data sheet

Specifications



## basic digital input module, Modicon STB, 24V DC, 16

STBDDI3725

### Main

Range Of Product	Modicon STB distributed I/O solution
Product Or Component Type	Basic digital input module
Discrete Input Number	16
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
Discrete Input Current	4.5 mA
Current State 0 Guaranteed	<= 1.5 mA
Current State 1 Guaranteed	>= 2.5 mA
Discrete Input Logic	Positive
Response Time	2 ms off-to-on 2 ms on-to-off
Protection Type	Power protection integrated fuse on PDM time lag 5 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 basic NIMs
Product Compatibility	I/O base STBXBA3000 Power distribution module STBPDT3100/3105
[Us] Rated Supply Voltage	24 V DC
Supply	Power distribution module
Current Consumption	100 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 IN16)
Depth	65.1 mm
Height	18.4 mm
Width	125 mm

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Net Weight	0.086 kg
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## Environment

Standards	IEC 61131-2 type 3
Product Certifications	FM Class 1 Division 2 CSA UL
Pollution Degree	2 conforming to IEC 60664-1
Operating Altitude	<= 2000 m
Ip Degree Of Protection	IP20 conforming to IEC 61131-2 class 1
Ambient Air Temperature For Operation	-25...70 °C (without derating)
Ambient Air Temperature For Operation	32...140 °F without derating
Ambient Air Temperature For Storage	-40...85 °C without derating
Ambient Air Temperature For Storage	-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	3.0 cm
Package 1 Width	6.5 cm
Package 1 Length	13.0 cm
Package 1 Weight	95.0 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	48
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.6 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	768
Package 3 Height	75.0 cm
Package 3 Width	40.0 cm
Package 3 Length	80.0 cm
Package 3 Weight	97.96 kg

## Contractual warranty

Warranty	18 months
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## Sustainability



**Green Premium™** label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

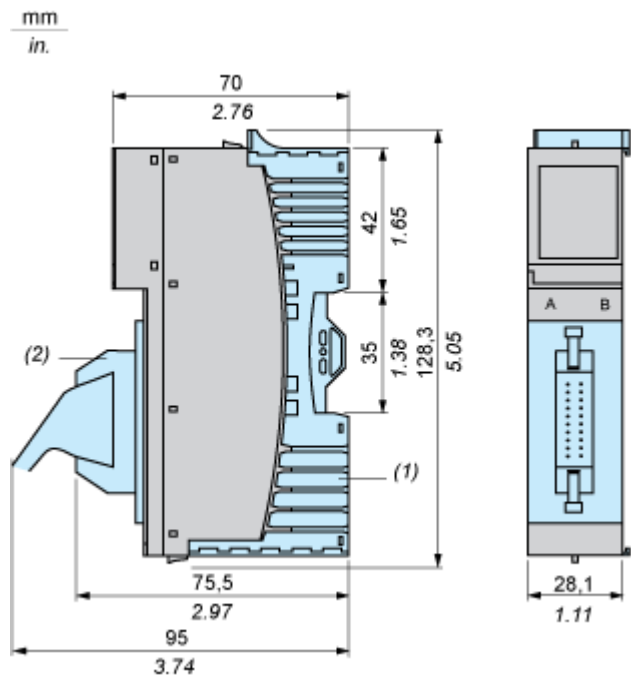
[Guide to assess a product's sustainability >](#)

## Well-being performance

 Mercury Free	
 Rohs Exemption Information	<a href="#">Yes</a>
Reach Regulation	<a href="#">REACH Declaration</a>
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	<a href="#">China RoHS declaration</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

Dimensions Drawings

Dimensions



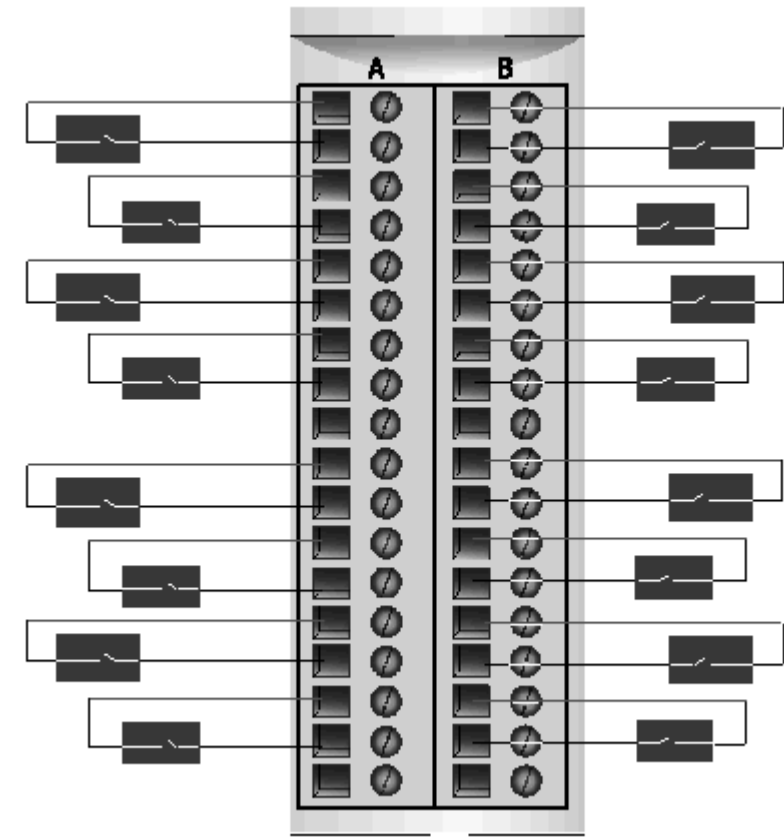
- (1) STBXBA3000 base (to be ordered separately)
- (2) STBXTS5510/5610/6510/6610 connector (to be ordered separately)

Connections and Schema

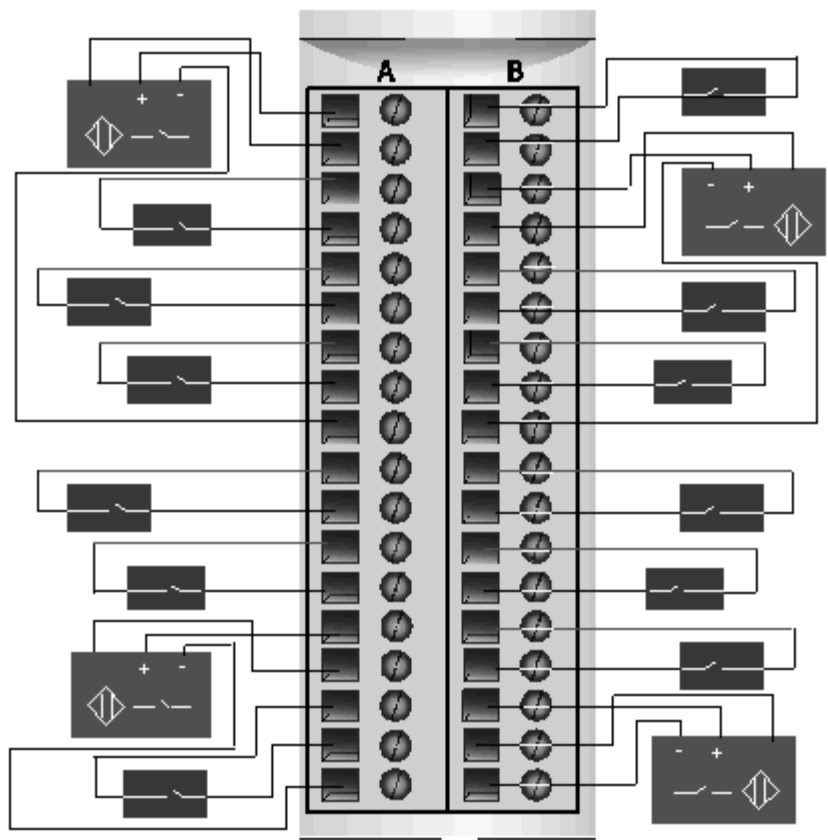
Wiring Diagrams

Examples

16 two-wire sensors



1 three-wire sensor per input group



Pin	Left Connector	Right Connector
1	Sensor power group 1 (+)	Sensor power group 3 (+)
2	Input from Sensor 1	Input from Sensor 9
3	Sensor power group 1 (+)	Sensor power group 3 (+)
4	Input from Sensor 2	Input from Sensor 10
5	Sensor power group 1 (+)	Sensor power group 3 (+)
6	Input from Sensor 3	Input from Sensor 11
7	Sensor power group 1 (+)	Sensor power group 3 (+)
8	Input from Sensor 4	Input from Sensor 12
9	Sensor power (-) for a 3-wire sensor (PDM-)	Sensor power (-) for a 3-wire sensor (PDM-)
10	Sensor power group 2 (+)	Sensor power group 4 (+)
11	Input from Sensor 5	Input from Sensor 13
12	Sensor power group 2 (+)	Sensor power group 4 (+)
13	Input from Sensor 6	Input from Sensor 14
14	Sensor power group 2 (+)	Sensor power group 4 (+)

Pin	Left Connector	Right Connector
15	Input from Sensor 7	Input from Sensor 15
16	Sensor power group 2 (+)	Sensor power group 4 (+)
17	Input from Sensor 8	Input from Sensor 16
18	Sensor power (-) for a 3-wire sensor (PDM-)	Sensor power (-) for a 3-wire sensor (PDM-)