

Product datasheet

Specifications



basic digital input kit, Modicon STB, 24V DC, 16I, spring clamp connector

STBDDI3725KC

Main

Range Of Product	Modicon STB distributed I/O solution
Product Or Component Type	Basic digital input kit
Kit Composition	STBXTS2180, 18-terminal spring clamp connector STBDDI3725 module STBXBA3000 base
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

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

Height	125 mm
Width	28.1 mm
Net Weight	0.086 kg

Environment

Standards	EN/IEC 61131-2 type 3
Product Certifications	FM Class 1 Division 2 UL 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)
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	3.5 cm
Package 1 Width	7.8 cm
Package 1 Length	13 cm
Package 1 Weight	188 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	20
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.246 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	320
Package 3 Height	75.0 cm
Package 3 Width	60.0 cm
Package 3 Length	80.0 cm
Package 3 Weight	78.96 kg

Contractual warranty

Warranty

18 months

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-CO₂ 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 >](#)

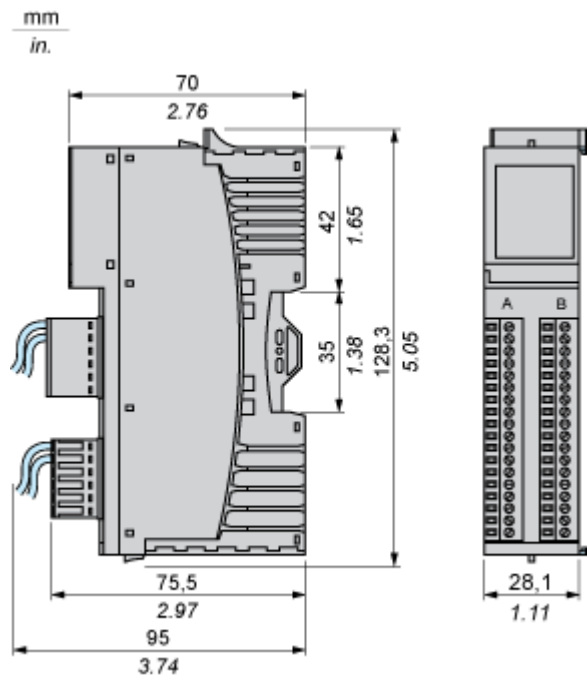
[Guide to assess a product's sustainability >](#)

Well-being performance

 Mercury Free	
 Rohs Exemption Information	Yes
Reach Regulation	REACH Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

Dimensions

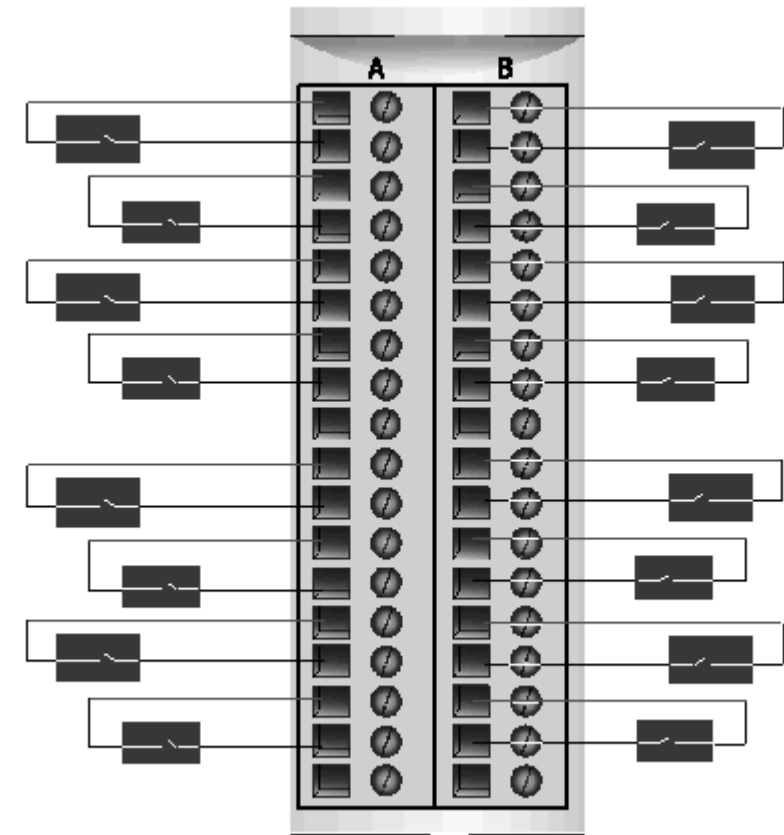


Connections and Schema

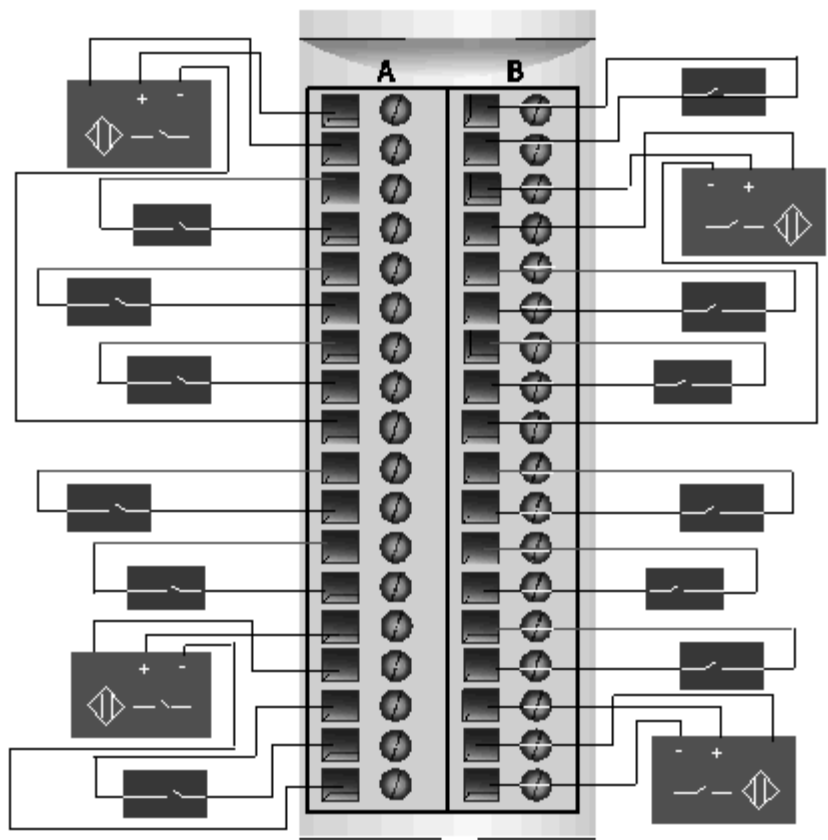
Wiring Diagrams

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-)