

# STBDDI3420K

digital input kit, Modicon STB, standard, 24V DC, 4 I



## 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 STBDDI3420 module STBXTS1100, 6-terminal screw type connector STBXBA1000 base
Discrete input number	4
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	8 mA
Current state 0 guaranteed	<= 1.2 mA
Current state 1 guaranteed	>= 2.5 mA
Discrete input logic	Positive or negative
Response time	0.925 ms off-to-on 0.5 ms 1.35 ms on-to-off 0.5 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	1500 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 +/- 0.25 ms
Current supplied by sensor	100 mA per channel
Product Compatibility	I/O base STBXBA1000 Power distribution module STBPDT3100/3105
[Us] rated supply voltage	24 V DC
Supply	Power distribution module
Current consumption	45 mA 5 V DC logic bus
Marking	CE
Overvoltage category	II
Status LED	1 LED (Green) module status (RDY) 1 LED per channel (Green) channel status (IN1 to IN4) 1 LED (Red) module error (ERR)
Depth	2.56 in (65.1 mm)
Height	0.72 in (18.4 mm)
Width	4.92 in (125 mm)
Net Weight	0.24 lb(US) (0.111 kg)

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## Environment

Standards	IEC 61131-2 Type 1
Product Certifications	CSA[RETURN]FM Class 1 Division 2[RETURN]UL
Pollution degree	2 IEC 60664-1
Operating altitude	<= 6561.68 ft (2000 m)
IP degree of protection	IP20 conforming to IEC 61131-2 class 1
Ambient air temperature for operation	-13...158 °F (-25...70 °C) without derating
Ambient air temperature for operation	32...140 °F without derating
Ambient air temperature for storage	-40...185 °F (-40...85 °C) without derating
Ambient air temperature for storage	-40...185 °F without derating
Relative humidity	95 % 140 °F (60 °C) without condensation
Vibration resistance	3 gn 58...150 Hz 35 x 7.5 mm symmetrical DIN rail 5 gn 58...150 Hz 35 x 15 mm symmetrical DIN rail +/-0.35 mm 10...58 Hz
Shock resistance	30 gn 11 ms IEC 88 reference 2-27


## Ordering and shipping details

Category	18215-ADVANTYS STB I/O
Discount Schedule	PC32
GTIN	3595863948905
Returnability	No
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.98 in (2.5 cm)
Package 1 Width	3.15 in (8.0 cm)
Package 1 Length	5.12 in (13.0 cm)
Package 1 Weight	4.62 oz (131.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	28
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	9.03 lb(US) (4.094 kg)
Unit Type of Package 3	PAL
Number of Units in Package 3	448
Package 3 Height	23.62 in (60.0 cm)
Package 3 Width	31.50 in (80.0 cm)
Package 3 Length	176.38 in (448.0 cm)
Package 3 Weight	131.36 lb(US) (59.584 kg)

## Offer Sustainability

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>
REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

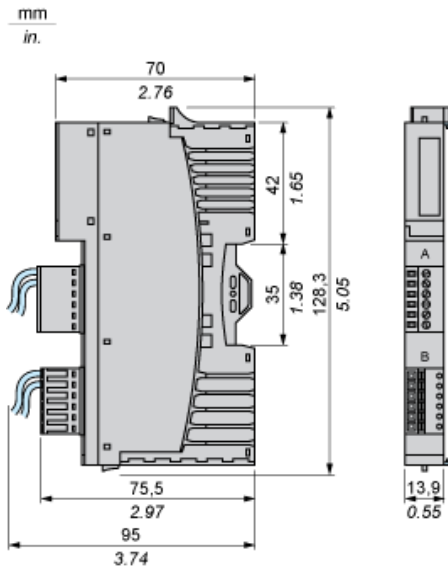
## Contractual warranty

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Warranty	18 months
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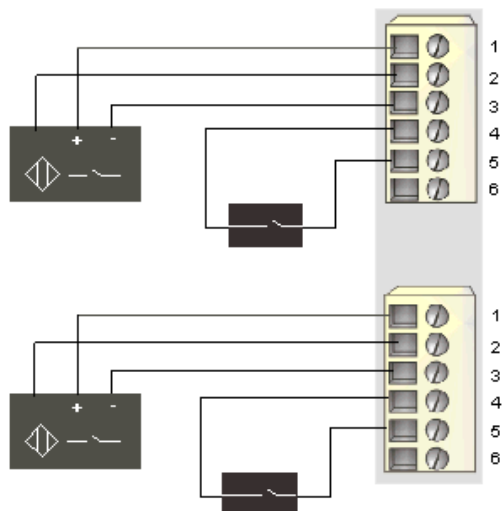
Dimensions



Wiring Diagram

Example

2 three-wire sensor and 2 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	input from sensor 1	input from sensor 3
3	field power return (to the module)	field power return (to the module)
4	+24 VDC from sensor bus for field device accessories	+24 VDC from sensor bus for field device accessories
5	input from sensor 2	input from sensor 4
6	field power return (to the module)	field power return (to the module)