## Product data sheet Characteristics

# STBDDI3420K

# standard digital input kit STB - 24 V 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	1130 V at state 1 -35 V at state 0	
Acceptable Input 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)	

#### Environment

Standards	EN/IEC 61131-2type 1+	
Product Certifications	CSA FM Class 1 Division 2 UL	
Pollution degree	2 IEC 60664-1	
Operating altitude	<= 6561.68 ft (2000 m)	
IP degree of protection	IP20 conforming to EN 61131-2 class 1	
Ambient air temperature for operation	-13158 °F (-2570 °C) without derating)	
Ambient air temperature for operation	32140 °F without derating	
Ambient air temperature for storage	-40185 °F (-4085 °C) without derating	
Ambient air temperature for storage	-40185 °F without derating	
Relative humidity	95 % 140 °F (60 °C) without condensation	
Vibration resistance	3 gn 58150 Hz 35 x 7.5 mm symmetrical DIN rail 5 gn 58150 Hz 35 x 15 mm symmetrical DIN rail +/-0.35 mm 1058 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

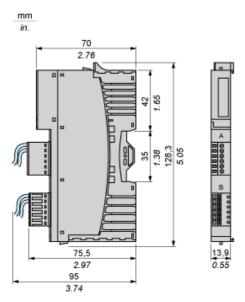
Sustainable offer status	Green Premium product	
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov	
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.	
Contractual warranty		
Warranty	18 months	

# Product data sheet Dimensions Drawings

# STBDDI3420K

#### **Dimensions**

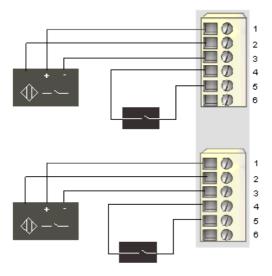


# STBDDI3420K

## 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)