

Product datasheet

Specifications



basic digital input kit STB - 24 V DC - 16 I

Local distributor code:

389839015

STBDDI3725KC

⚠ To be discontinued on: 1 Dec 2027

⚠ To be end-of-service on: 31 Dec 2035

⚠ To be discontinued

EAN Code: 3595863932980

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
Product compatibility	I/O base STBXBA3000 Power distribution module STBPDT3100/3105
Discrete input number	16
Discrete input voltage	11...30 V for type 1 - 3...5 V
Discrete input logic	Positive

Complementary

Discrete input compatibility	16 type 1 at 24 V DC
Discrete input current	4.5 mA at 24 V DC
Voltage state 1 guaranteed	At state 1: 15...30 V
Voltage state 0 guaranteed	-3...5 V at state 0
Current state 1 guaranteed	>= 2.5 mA
Current state 0 guaranteed	<= 1.5 mA
Response time on input	2 ms (off to on) 2 ms (on to off)
Input filtering	1 ms
Input protection type	Input protection resistor-limited Reverse polarity protection
Power supply type	Power distribution module
Typical current consumption	100 mA at 5 V DC for logic bus
Electrical connection	Spring terminal
Local signalling	1 LED (green) for module status (RDY) 1 LED per channel (green) for channel status (IN1 to IN2)
Height	125 mm
Width	28.1 mm
Depth	65.1 mm
Product weight	0.086 kg

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

Environment

IP degree of protection	IP20
Marking	CE
Product certifications	FM Class 1 Division 2 UL CSA
Standards	IEC 61131-2 type 3
Ambient air temperature for operation	-25...70 °C (without derating)
Ambient air temperature for storage	-40...85 °C without derating
Relative humidity	95 % at 60 °C without condensation
Operating altitude	<= 2000 m
Pollution degree	2
Vibration resistance	3 gn (f = 58...150 Hz) on 35 mm DIN rail 5 gn (f = 58...150 Hz) on 35 mm DIN rail +/- 3.5 mm (f = 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	3.500 cm
Package 1 Width	8.000 cm
Package 1 Length	13.000 cm
Package 1 Weight	194.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.400 kg
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	78.960 kg

Logistical informations

Country of origin	ID
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Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Total lifecycle Carbon footprint	33 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	10 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	23 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	Yes
SCIP Number	6830dd70-e4bc-47df-85c7-e41f888576f4
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again

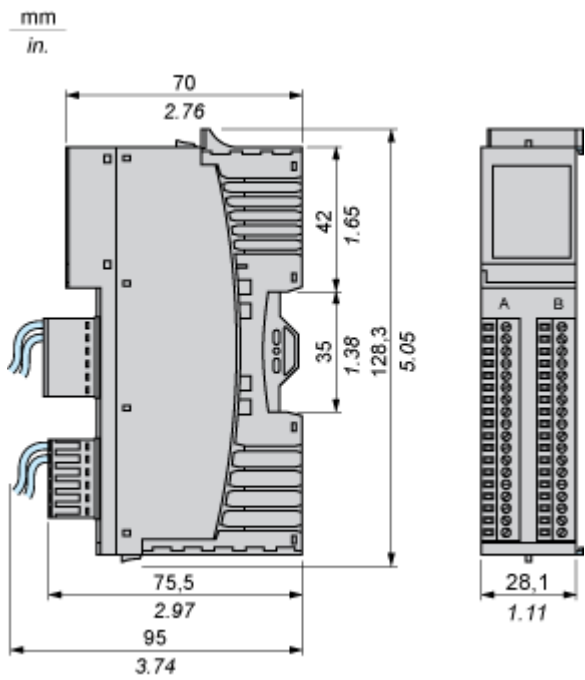


Repack and remanufacture

End of life manual availability	End of Life Information
Take-back	No

Dimensions Drawings

Dimensions

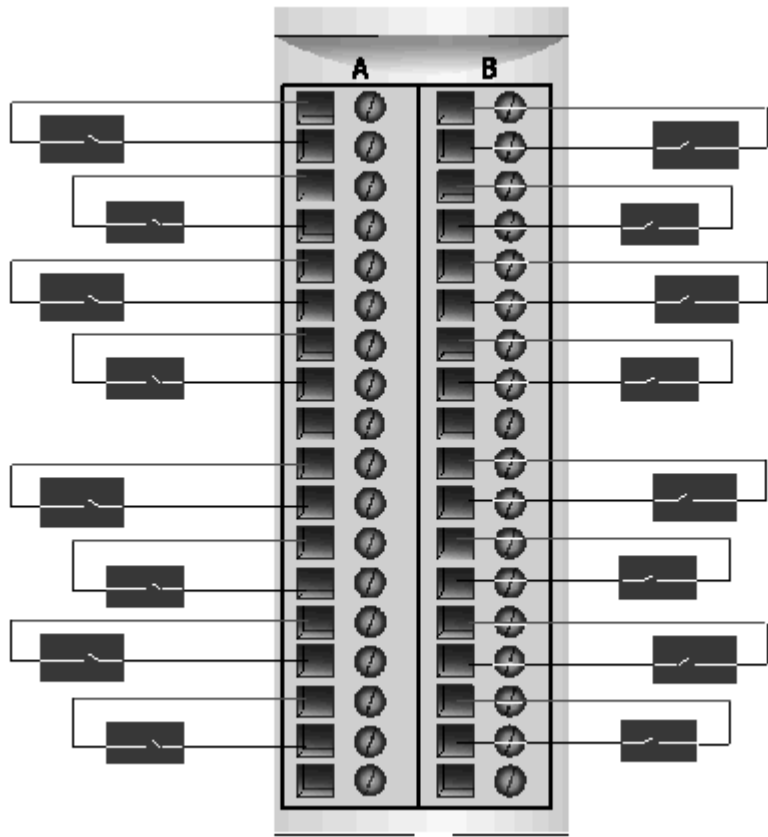


Connections and Schema

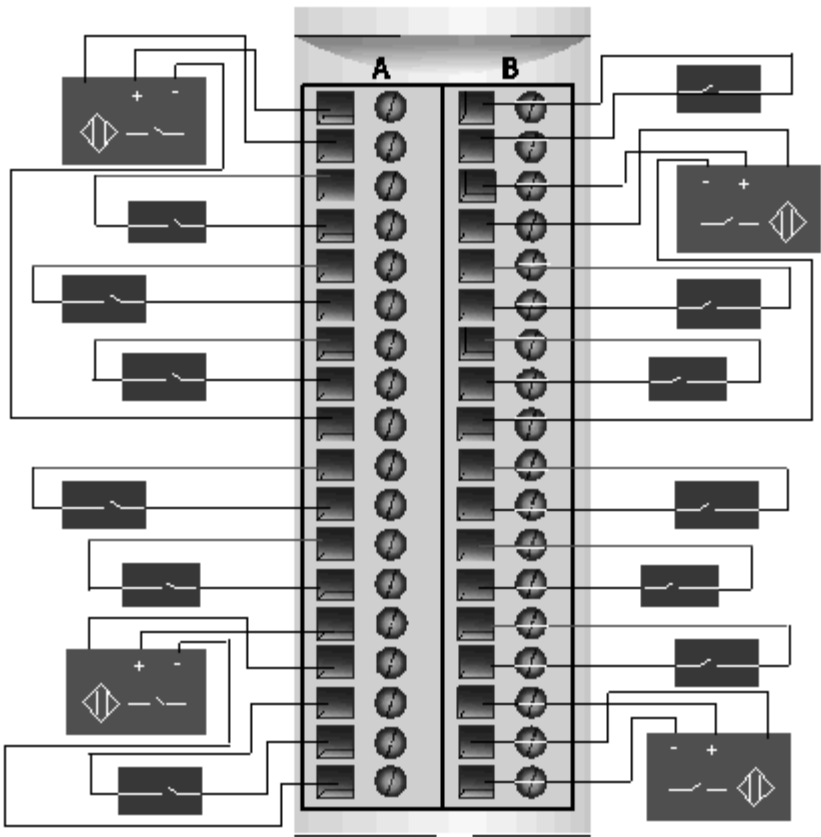
Wiring Diagrams

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-)