

Product datasheet

Specifications



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

STBDDI3725KS

Main

| | |
|-----------------------------|--|
| Range Of Product | Modicon STB distributed I/O solution |
| Product Or Component Type | Basic digital input kit |
| Kit Composition | STBXTS1180, 18-terminal screw type 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 | 18.4 mm |
| Width | 125 mm |
| Net Weight | 0.086 kg |

Environment

| | |
|---------------------------------------|---|
| Standards | IEC 61131-2 type 3 |
| Product Certifications | UL FM Class 1 Division 2 CSA |
| 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 | 3.54 cm |
| Package 1 Width | 8.002 cm |
| Package 1 Length | 13.128 cm |
| Package 1 Weight | 210.0 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 | 4.72 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 | 83 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 >](#)

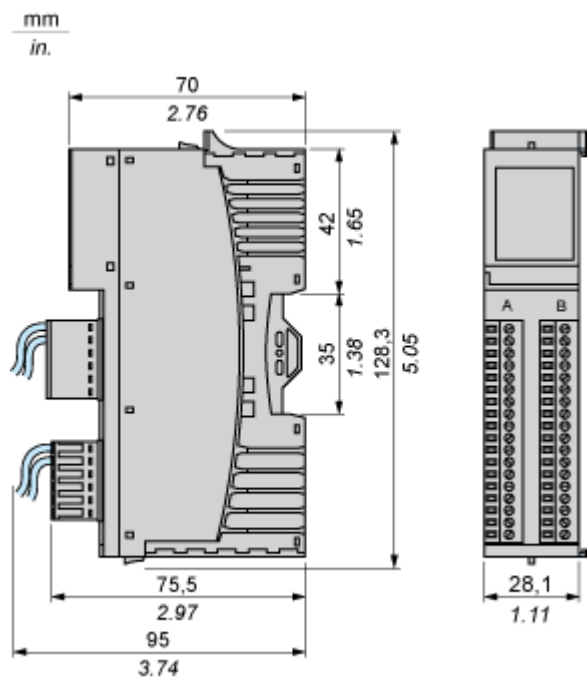
[Guide to assess a product's sustainability >](#)

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

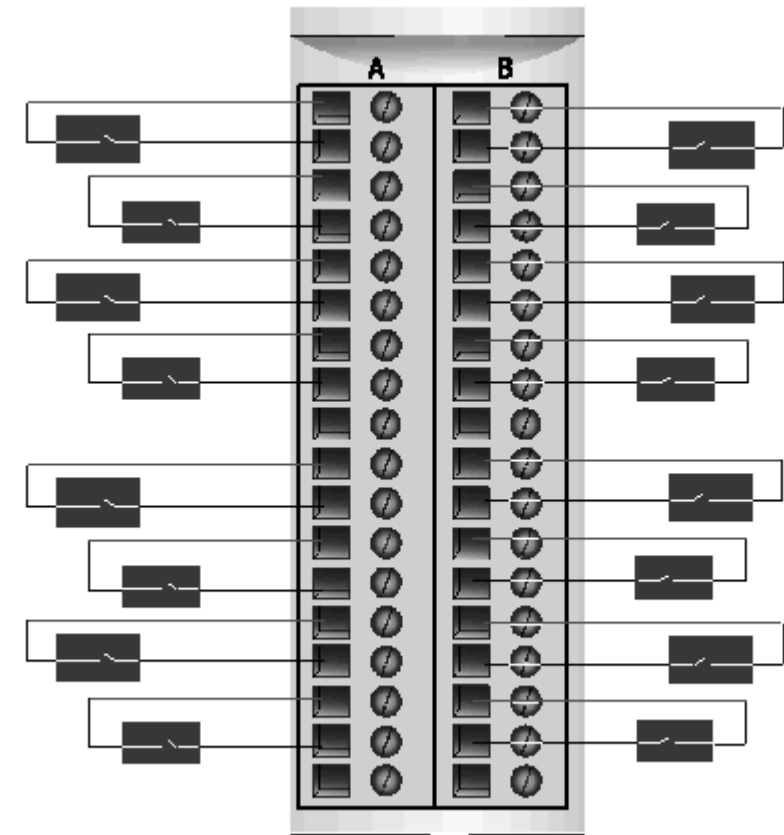


Connections and Schema

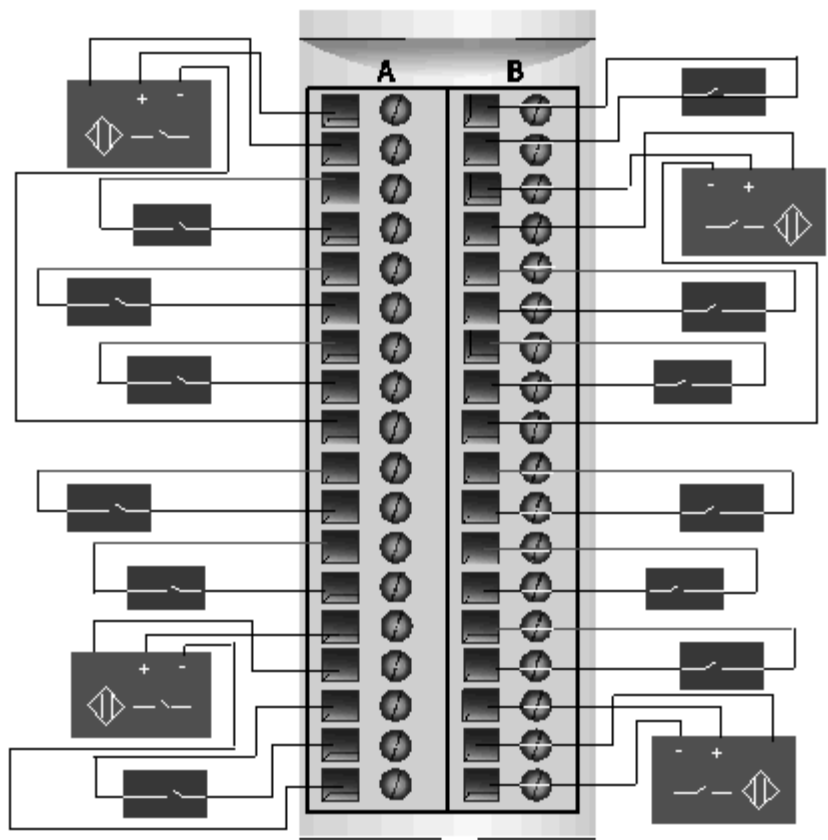
Wiring Diagrams

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-) |