

Product data sheet

Specifications



counter kit, Modicon STB, 1 channel, 0-40000Hz, 2 I

STBEHC3020KC

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range Of Product	Modicon STB distributed I/O solution
Product Or Component Type	Counter kit
Number Of Channels	1

Complementary

Kit Composition	STBEHC3020 module STBXBA3000 base STBXTS215018 terminal spring clamp connector
Counting Input Number	2
Maximum Counting Frequency	40000 Hz
Counter Functions	Measure time periods Up/down counting Down counting Frequency meter Loop (modulo) counting Count events
Counter Configuration	Modicon configuration software
Input Compatibility	2/3 wire photo-electric sensor Mechanical contact With 2-wire/3-wire proximity sensors Incremental encoder
Input Voltage	24 V
Input Voltage Limits	19.2...30 V
Input Voltage Type	DC
Input Current	6 mA
Input Logic	Positive
Voltage State 0 Guaranteed	-3...5 V
Voltage State 1 Guaranteed	11...30 V
Current State 0 Guaranteed	<= 1.5 mA
Current State 1 Guaranteed	>= 2 mA
Filter Time	0 ms digital 40000 Hz counting inputs 0.4 ms digital 1000 Hz counting inputs 1.2 ms digital 400 Hz counting inputs 2.5 µs analog counting inputs 25 µs analog auxiliary input
Output Voltage	24 V
Output Voltage Limits	19.2...30 V
Output Voltage Type	DC

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Nominal Output Current	0.5 A
Discrete Output Logic	Positive or negative configurable
Maximum Leakage Current	0.1 mA at state 0
Maximum Voltage Drop	<3 V at state 1
Maximum Load Inductance	500 mH 4 Hz
Protection Type	Overload protection electronic tripping manual or automatic reset Short-circuit protection electronic tripping manual or automatic reset Overload protection current limiter Short-circuit protection current limiter
Fallback Status	Hold last value configured State 0 for output channels by default State 0 or 1 for each channel configured
Cold Swapping	Yes
Hot Swapping Fallback	Fallback output depending on parameter setting configured mandatory standard network interface module Fallback to 0 not configured mandatory standard network interface module Fallback to 0 basic network interface module
Product Compatibility	Mounting base STBXBA3000 Power distribution module STBPDT3100/3105
[Us] Rated Supply Voltage	24 V DC
Supply	Power distribution module
Current Consumption	60...100 mA 5 V DC logic bus
Insulation Between Channels And Bus	500 V
Marking	CE
Overvoltage Category	II
Status Led	1 LED (Green) EN validation input status (EN) 1 LED (Green) module status (RDY) 1 LED (Green) reset input status (RST) 1 LED per counting input (Green) counting input status (INA, INB) 1 LED per output (Green) output status (OUT1, OUT2) 1 LED (Red) module error (FLT)
Height	1.11 in (28.1 mm)
Depth	2.76 in (70 mm)
Width	5.05 in (128.3 mm)

Environment

Product Certifications	FM Class 1 Division 2 CSA 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 Storage	-40...185 °F (-40...85 °C)
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	US1PC3218215
Discount Schedule	PC32
Gtin	3595863933116
Returnability	Yes
Country Of Origin	FR

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.20 in (8.13 cm)
Package 1 Width	1.40 in (3.56 cm)
Package 1 Length	5.30 in (13.46 cm)
Package 1 Weight	0.35 lb(US) (0.16 kg)
Unit Type Of Package 2	S02
Number Of Units In Package 2	20
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	8.08 lb(US) (3.666 kg)
Unit Type Of Package 3	PAL
Number Of Units In Package 3	320
Package 3 Height	23.62 in (60 cm)
Package 3 Width	31.50 in (80 cm)
Package 3 Length	125.98 in (320 cm)
Package 3 Weight	114.29 lb(US) (51.84 kg)

Contractual warranty

Warranty	18 months
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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 >](#)

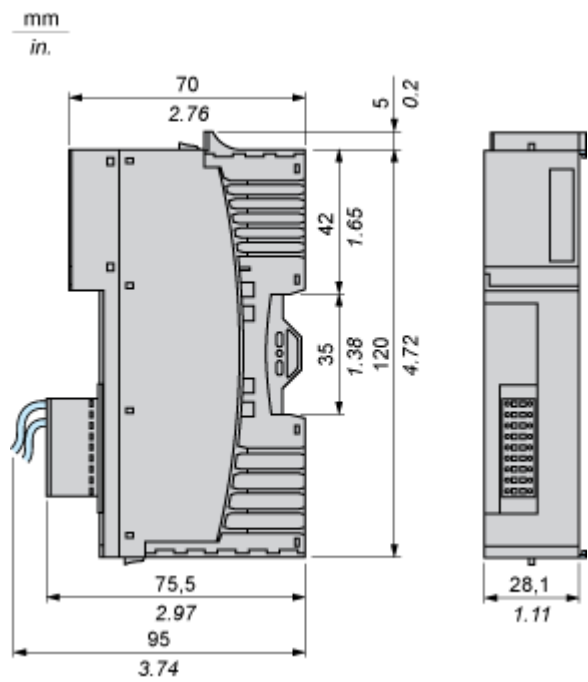
[Guide to assess a product’s sustainability >](#)

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.
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

Dimensions Drawings

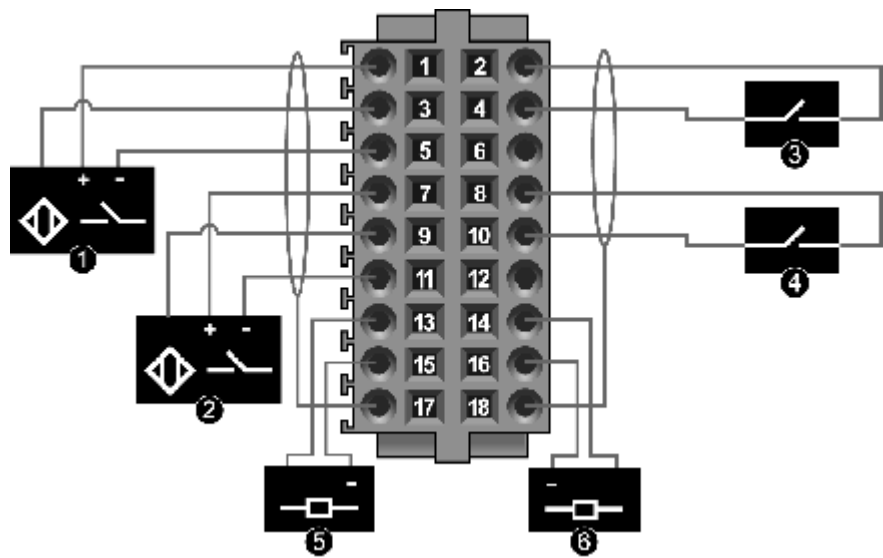
Dimensions



Connections and Schema

Wiring Diagram

Connection to STBXTS2150KC Removable Spring-Type Terminals



- 1 IN A
- 2 IN B
- 3 EN
- 4 RST
- 5 OUT1
- 6 OUT2

Pin	Function	Pin	Function
1	+24 VDC field power (from the PDM) for input IN A	2	+24 VDC field power (from the PDM) for the input EN
3	input IN A	4	input EN
5	field power return for input IN A	6	field power return for input EN
7	+24 VDC field power (from the PDM) for input IN B	8	+24 VDC field power (from the PDM) for input RST
9	input IN B	10	input RST
11	field power return for input IN B	12	field power return for input RST
13	output OUT1	14	output OUT2
15	output OUT1 return	16	output OUT2 return
17	shield connection for input IN A and input IN B.	18	shield connection for input EN and input RST.