

# 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  $\mu$ s analog counting inputs  
25  $\mu$ s 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.

<b>nominal output current</b>	0.5 A
<b>Discrete output logic</b>	Positive or negative configurable
<b>Maximum leakage current</b>	0.1 mA at state 0
<b>Maximum voltage drop</b>	<3 V at state 1
<b>Maximum load inductance</b>	500 mH 4 Hz
<b>Protection type</b>	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
<b>Fallback status</b>	Hold last value configured State 0 for output channels by default State 0 or 1 for each channel configured
<b>Cold swapping</b>	Yes
<b>Hot swapping fallback</b>	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
<b>Product Compatibility</b>	Mounting base STBXBA3000 Power distribution module STBPDT3100/3105
<b>[Us] rated supply voltage</b>	24 V DC
<b>Supply</b>	Power distribution module
<b>Current consumption</b>	60...100 mA 5 V DC logic bus
<b>Insulation between channels and bus</b>	500 V
<b>Marking</b>	CE
<b>Overvoltage category</b>	II
<b>Status LED</b>	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)
<b>Height</b>	1.1 in (28.1 mm)
<b>Depth</b>	2.8 in (70 mm)
<b>Width</b>	5.05 in (128.3 mm)

## Environment

<b>Product Certifications</b>	FM Class 1 Division 2 CSA UL
<b>Pollution degree</b>	2 IEC 60664-1
<b>Operating altitude</b>	<= 6561.68 ft (2000 m)
<b>IP degree of protection</b>	IP20 conforming to IEC 61131-2 class 1
<b>Ambient air temperature for operation</b>	-13...158 °F (-25...70 °C) (without derating)
<b>Ambient Air Temperature for Storage</b>	-40...185 °F (-40...85 °C)
<b>Relative humidity</b>	95 % 140 °F (60 °C) without condensation
<b>Vibration resistance</b>	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
<b>Shock resistance</b>	30 gn 11 ms IEC 88 reference 2-27

## Ordering and shipping details

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Category	US1PC3218215
Discount Schedule	PC32
GTIN	3595863933116
Returnability	No
Country of origin	ID

## Packing Units

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Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.34 in (3.400 cm)
Package 1 Width	3.15 in (8.000 cm)
Package 1 Length	5.20 in (13.200 cm)
Package weight(Lbs)	5.750 oz (163.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	8.296 lb(US) (3.763 kg)

## Contractual warranty

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Warranty	18 months
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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 >](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	No
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	6830dd70-e4bc-47df-85c7-e41f888576f4
REACH Regulation	<a href="#">REACH Declaration</a>
California proposition 65	<b>WARNING:</b> 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>

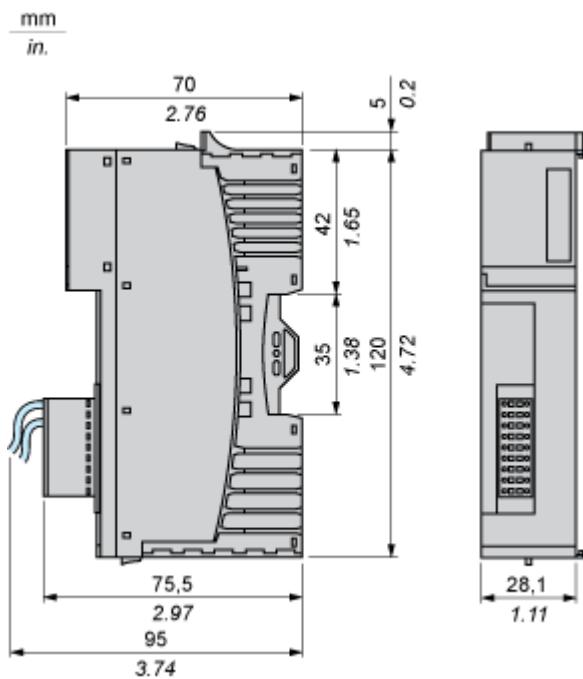
## Use Again

### Repack and remanufacture

Take-back	No
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## Dimensions Drawings

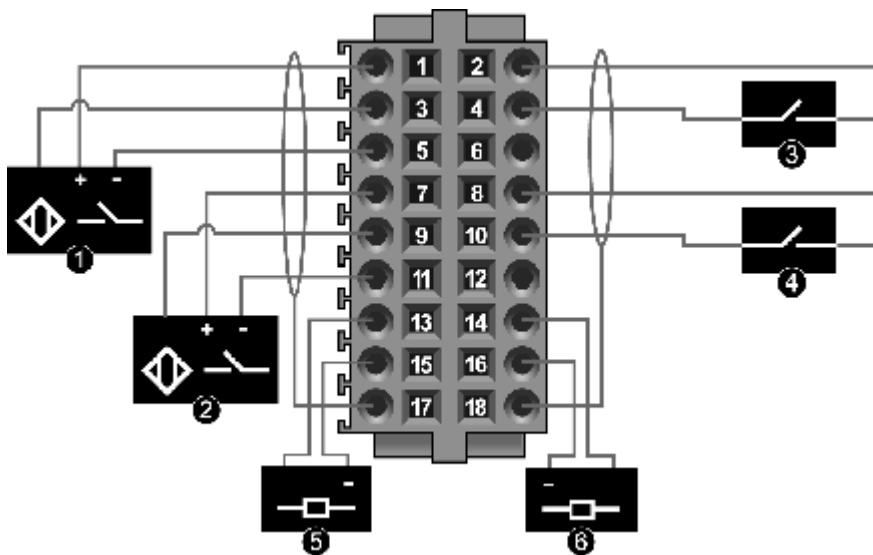
## Dimensions



## 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.