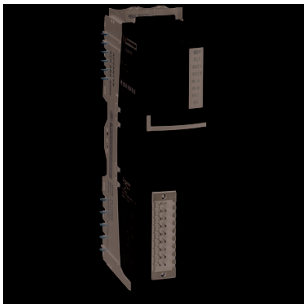
Product datasheet

Specifications



To be discontinued

counter kit STB - 1 CH - 0..40000 Hz - 2 I

Local distributor code:

389839196 STBEHC3020KC

To be discontinued on: 1 Dec 2027

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

EAN Code: 3595863933116

Main

Range of product	Modicon STB distributed I/O solution
Product or component type	Counter kit
Number of channels	1
Kit composition	STBEHC3020 module STBXBA3000 base STBXTS215018 terminal spring clamp connector

Complementary

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

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

Output voltage type	DC
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 at 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 at 5 V DC for 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	28.1 mm
Depth	70 mm
Width	128.3 mm
DC supply voltage	24 V

Environment

Product certifications	FM Class 1 Division 2 CSA UL
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 storage	-40…85 °C
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	3.400 cm
Package 1 Width	8.000 cm
Package 1 Length	13.200 cm
Package 1 Weight	163.000 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	3.763 kg

Logistical informations

Country of origin	ID

Contractual warranty

Warranty (in months)	18

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 >

Use Better

Materials and Substances

Packaging made with recycled cardboard	**No**
Packaging without single use plastic	**No**
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**

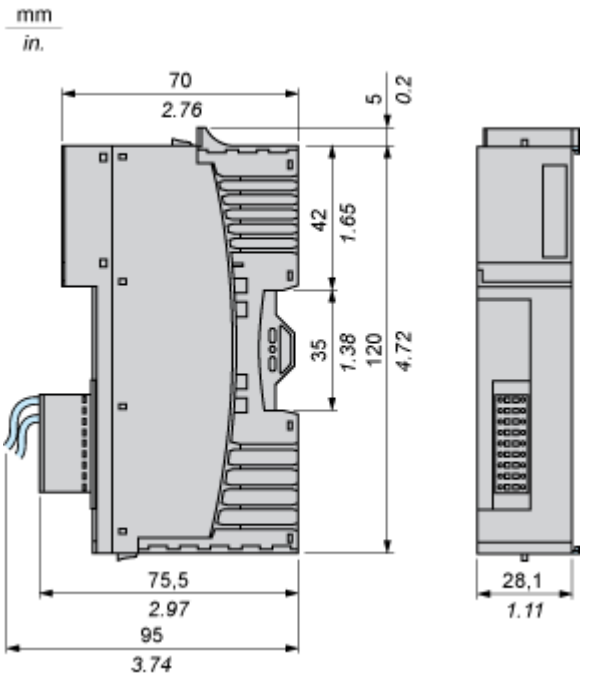
Use Again

Repack and remanufacture

Take-back	**No**

Dimensions Drawings

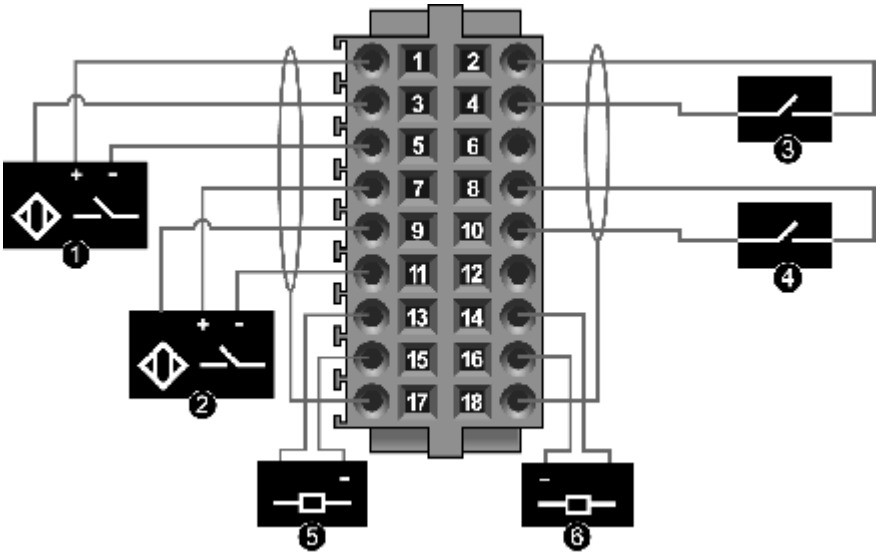
Dimensions



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.