

TSXCTY2A

2 channels counter modules - 40 kHz - 30 mA at 24 V DC, 280 mA at 5 V DC

Product availability : Stock - Normally stocked in distribution facility

Price* : 1611.15 USD



Main

Range of product	Modicon Premium Automation platform
Product or component type	Counter modules
I/O modularity	2 channels
Electrical circuit type	Auxiliary output conforming to EN/IEC 61131

Complementary

Counting frequency	40 kHz
Power dissipation in W	4.5...6 W
Cycle time	5 ms
Discrete input logic	Current sink auxiliary input (preset, enable and read) conforming to IEC 1131 Type 2 Resistive 2/3-wire proximity sensors PNP/NPN input conforming to IEC 1131 Type 2 Resistive encoder input
Input logic	Positive
Input compatibility	2/3-wire proximity sensors PNP/NPN Incremental encoder 10...30 V totem pole Incremental encoder 5 V DC RS422
Input voltage	24 V 18 mA 2/3-wire proximity sensors PNP/NPN 24 V 7 mA auxiliary input (preset, enable and read) 5 V 18 mA encoder input
Input voltage limits	<= 5.5 V encoder input 19...30 V 2/3-wire proximity sensors PNP/NPN 19...30 V auxiliary input (preset, enable and read)
Voltage state 1 guaranteed	>= 11 V 2/3-wire proximity sensors PNP/NPN >= 11 V auxiliary input (preset, enable and read) >= 2.4 V encoder input
Current state 1 guaranteed	>= 3.7 mA encoder input >= 6 mA 2/3-wire proximity sensors PNP/NPN >= 6 mA auxiliary input (preset, enable and read)
Voltage state 0 guaranteed	<= 1.2 V encoder input <= 5 V 2/3-wire proximity sensors PNP/NPN

	<= 5 V auxiliary input (preset, enable and read)
Current state 0 guaranteed	<= 1 mA encoder input <= 2 mA 2/3-wire proximity sensors PNP/NPN <= 2 mA auxiliary input (preset, enable and read)
Response time	< 2.5 ms sensor voltage at loss of 24 V auxiliary input (preset, enable and read)
Input impedance	> 270 Ohm at U = 2.4 V encoder input 1400 Ohm at Un 2/3-wire proximity sensors PNP/NPN 3400 Ohm at Un auxiliary input (preset, enable and read) 400 Ohm at Un encoder input
Output voltage	24 V DC
Nominal output current	0.5 A
Output voltage limits	19...30 V
Voltage drop	< 0.5 V at state 1
Output compatibility	Positive logic DC inputs (resistance <= 15 kOhm) auxiliary output
Leakage current	< 0.1 mA
Switching frequency	< 0.6/LI ² Hz on inductive load
Output overload protection	Current limiter Thermal tripping via program or automatically
Output short-circuit protection	Current limiter Thermal tripping via program or automatically
Output overvoltage protection	Zener diode
Reverse polarity protection	Reverse diode on supply
Checks	Sensor power supply
Current consumption	280 mA 5 V DC 30 mA 24 V DC
Module format	Standard
Local signalling	2 LEDs green axis diagnostics available (CH.) 1 LED green module operating (RUN) 1 LED red external fault (I/O) 1 LED red internal fault, module failure (ERR)
Electrical connection	1 connector HE-10 20 pins 2 connectors SUB-D 15
Product weight	0.71 lb(US) (0.32 kg)

Environment

Protective treatment	TC
Ambient air temperature for operation	32...140 °F (0...60 °C)
Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Relative humidity	5...95 % without condensation
Operating altitude	<= 6561.68 ft (2000 m)

Ordering and shipping details

Category	22558 - TSX PREMIUM, ATRIUM & PL7 PRO
Discount Schedule	PC22
GTIN	00785901756972
Nbr. of units in pkg.	1
Package weight(Lbs)	0.9899999999999999
Returnability	N
Country of origin	FR

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0840 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold

Reference not containing SVHC above the threshold

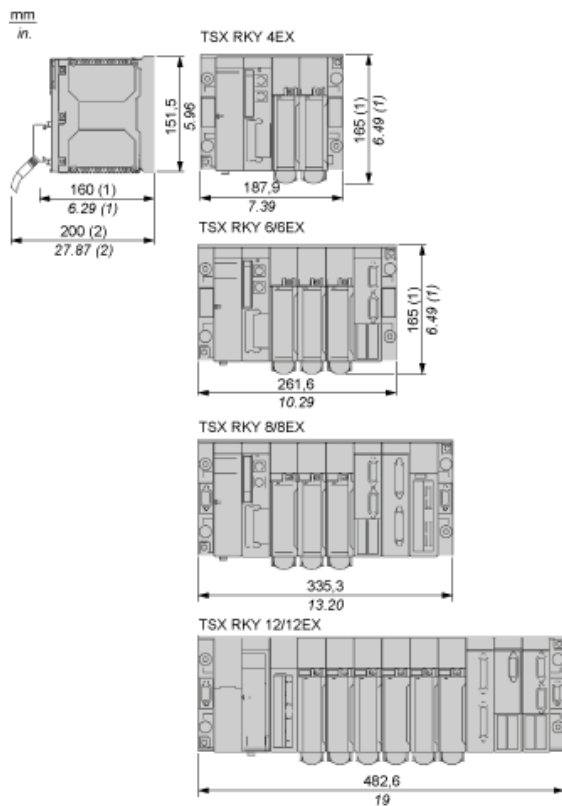
Product end of life instructions	Need no specific recycling operations
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Contractual warranty

Warranty period	18 months
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Standard and Extendable Racks for Modules Mounting

Dimensions of Modules and Racks



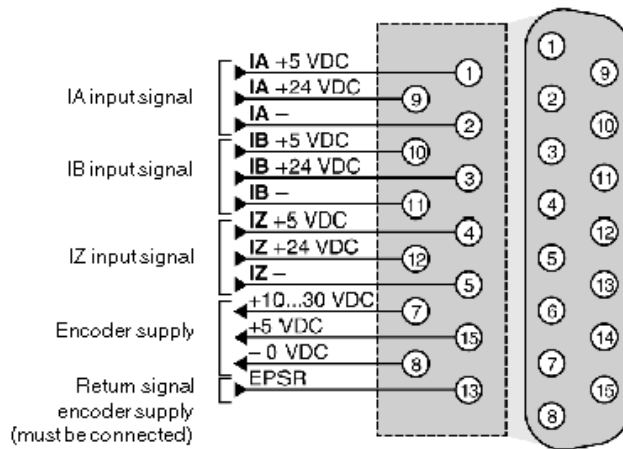
(1) With screw terminal block modules.

(2) Maximum depth for all types of modules and their associated connectors.

15-pin SUB-D Connectors of the Counting Module

Pinout Configuration

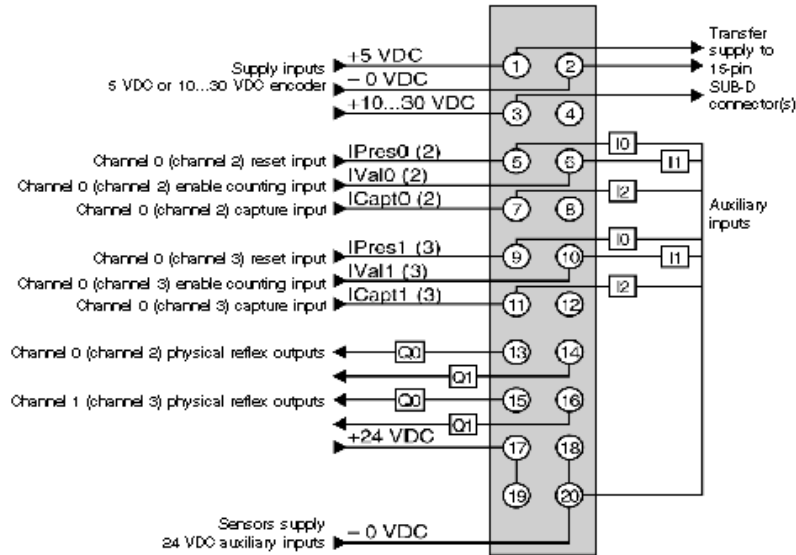
Standard 15-pin SUB-D connector for connecting the counting sensor to channels 0, 1, 2 or 3



5 Vdc signal	Pins
+ IA input	1
- IA input	2
+ IB input	10
- IB input	11
+ IZ input	4
- IZ input	5
Encoder power supply:	
+5 Vdc	15
-0 Vdc	8
Encoder power supply feedback	13
10...30 Vdc signals	Pins
+ IA input	9
- IA input	2
+ IB input	3
- IB input	11
+ IZ input	12
- IZ input	5
Encoder power supply:	
+10...30 Vdc	7
-0 Vdc	8
Encoder power supply feedback	13

HE10 20-pin Connector of the Counting Module

Wiring Diagram



24 Vdc signals	Pins
Channel 0 (channel 2) auxiliary input:	
Preset IPres0/2	5
Confirmation IVal0/2	6
Capture ICapt0/2	7
Channel 1 (channel 3) auxiliary input:	
Preset IPres1/3	9
Confirmation IVal1/3	10
Capture ICapt1/3	11
Channel 0 (channel 2) reflex output:	
Output Q0	13
Output Q1	14
Channel 1 reflex output:	
Output Q0	15
Output Q1	16
Power Supplies	
Encoder power supply:	
+5 Vdc	1
- 0 Vdc	2
+10...30 Vdc	3
Sensor power supply:	
+24 Vdc	17 or 19

Power Supplies	Pins
-0 Vdc	18 or 20