

Commercial status

End of Commercialisation :

△ End of Commercialisation

Main

Range of product	Modicon Premium Automation platform
Product or component type	Counter modules
I/O modularity	4 channels
Electrical circuit type	Auxiliary output conforming to EN/IEC 61131

Complementary

Counting frequency	40 KHz
Power dissipation in W	8...11.5 W
Cycle time	10 Ms
Discrete input logic	Current sink for auxiliary input (preset, enable and read) conforming- to IEC 1131 Type 2 Resistive for 2/3-wire proximity sensors PNP/NPN conforming- to IEC 1131 Type 2 Resistive for encoder input
Input logic	Positive
Input compatibility	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 for 2/3-wire proximity sensors PNP/NPN >= 11 V for auxiliary input (preset, enable and read) >= 2.4 V for 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 for encoder input <= 5 V for 2/3-wire proximity sensors PNP/NPN <= 5 V for 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	Encoder input: > 270 Ohm at U = 2.4 V 2/3-wire proximity sensors PNP/NPN: 1400 Ohm at Un Auxiliary input (preset, enable and read): 3400 Ohm at Un Encoder input: 400 Ohm at Un
Output voltage	24 V DC
Nominal output current	0.5 A
Output voltage limits	19...30 V
Maximum voltage drop	<0.5 V at state 1
Output compatibility	Positive logic DC inputs (resistance <= 15 kOhm) for auxiliary output
Maximum leakage current	0.1 mA
Switching frequency	< 0.6/LI ² Hz on inductive load load
Output overload protection	Thermal tripping via program or automatically Current limiter
Output short-circuit protection	Thermal tripping via program or automatically Current limiter
Output overvoltage protection	Zener diode
Reverse polarity protection	Reverse diode on supply

Checks	Sensor power supply
Current consumption	330 µA at 5 V DC 36 mA at 24 V DC
Module format	Standard
Local signalling	1 LED (green)module operating (RUN): 1 LED (red)external fault (I/O): 1 LED (red)internal fault, module failure (ERR): 4 LEDs (green)axis diagnostics available (CH.):
Electrical connection	2 connectors HE-10, 20 pins 4 connectors SUB-D 15
Net weight	0.43 Kg

Environment

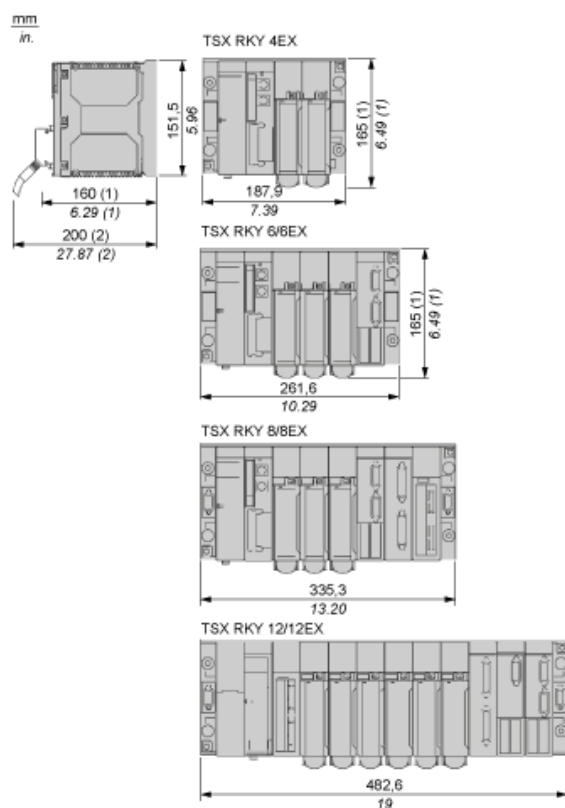
Protective treatment	TC
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-25...70 °C
Relative humidity	5...95 % without condensation
Operating altitude	<= 2000 m

Contractual warranty

Warranty	18 months
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Standard and Extendable Racks for Modules Mounting

Dimensions of Modules and Racks



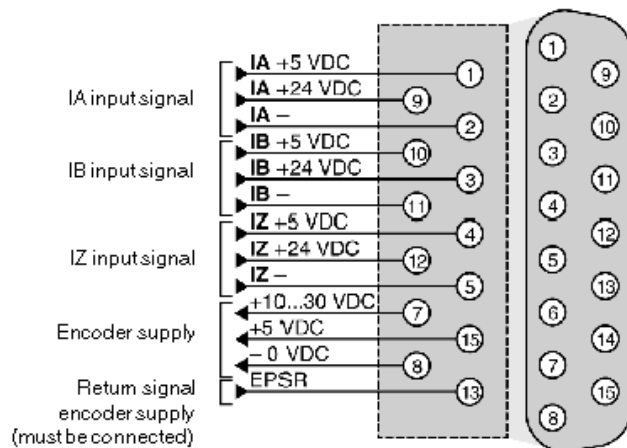
(1) With screw terminal block modules.

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

15-pin SUB-D Connectors of the Counting Module

Pinout Configuration

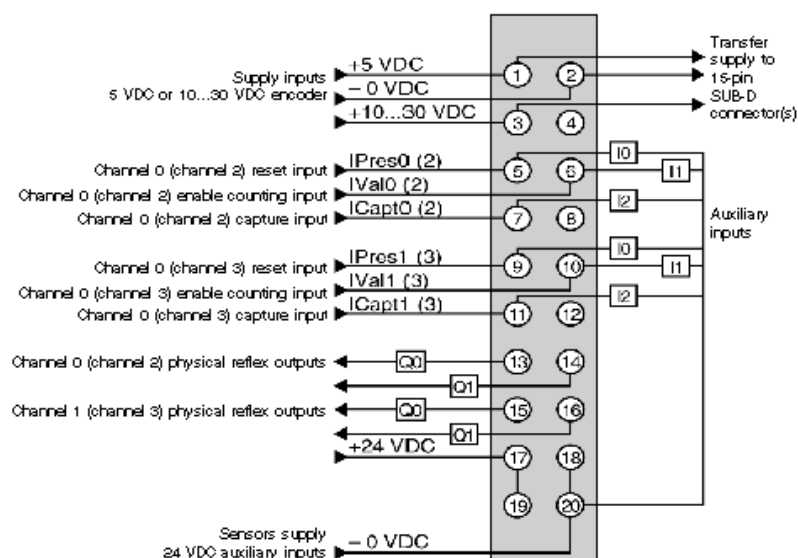
Standard 15-pin SUB-D connector for connecting the counting sensor to channels 0, 1, 2 or 3



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
-0 Vdc	18 or 20

Product Life Status : **Post commercialisation**

TSXCTY4A may be replaced by any of the following products:



BMXEHC0200

high speed counter module M340 - 2 channels

Qty 1

Reason for Substitution: End of life | Substitution date: 10 Apr 2017 |



BMXEHC0200

high speed counter module M340 - 2 channels

Qty 1

Reason for Substitution: End of life | Substitution date: 30 Jun 2018 |



BMXEHC0200

high speed counter module M340 - 2 channels

Qty 1

Reason for Substitution: End of life | Substitution date: 31 Dec 2018 | Not same dimensions/design - less channel density 2-ch < Premium 4-ch



BMXEHC0200

high speed counter module M340 - 2 channels

Qty 1

Reason for Substitution: End of life | Substitution date: 31 Dec 2018 | Not same dimensions/design - less channel density 2-ch < Premium 4-ch



BMXEHC0200

high speed counter module M340 - 2 channels

Qty 1

Reason for Substitution: End of life | Substitution date: 31 Dec 2018 | Not same dimensions/design - less channel density 2-ch < Premium 4-ch



BMXEHC0200

high speed counter module M340 - 2 channels

Qty 1

Reason for Substitution: End of life | Substitution date: 31 Dec 2018 |