

Main

Range of product	Modicon Premium Automation platform
Product or component type	Measurement and counter module
I/O modularity	2 channels
Electrical circuit type	Auxiliary output

Complementary

Counting frequency	1000000 Hz
Incremental encoder frequency x1	500 kHz
Incremental encoder frequency x 4	250 kHz
Power dissipation in W	7...10 W
Module cycle time	1
Discrete input logic	Resistive encoder input Resistive 2/3-wire proximity sensors PNP/NPN conforming to IEC 1131 Type 2 Current sink auxiliary input (preset, enable and read) conforming to IEC 1131 Type 2
Input logic	Positive
Input compatibility	Absolute encoder parallel output ABE7CPA11 Incremental encoder 5 V DC RS422 Incremental encoder 10...30 V totem pole Absolute encoder SSI serial output
Input voltage	5 V 18 mA encoder input 24 V 8 mA auxiliary input (preset, enable and read) 24 V 16 mA 2/3-wire proximity sensors PNP/NPN
Input voltage limits	19...30 V auxiliary input (preset, enable and read) 19...30 V 2/3-wire proximity sensors PNP/NPN <= 5.5 V encoder input
Voltage state1 guaranteed	>= 2.4 V encoder input >= 11 V auxiliary input (preset, enable and read) >= 11 V 2/3-wire proximity sensors PNP/NPN
Current state 1 guaranteed	> 6 mA auxiliary input (preset, enable and read) > 6 mA 2/3-wire proximity sensors PNP/NPN > 3.6 mA encoder input
Voltage state 0 guaranteed	<= 5 V auxiliary input (preset, enable and read) <= 5 V 2/3-wire proximity sensors PNP/NPN <= 1.2 V encoder input
Current state 0 guaranteed	< 2 mA auxiliary input (preset, enable and read) < 2 mA 2/3-wire proximity sensors PNP/NPN < 1 mA encoder input
Response time	< 2.5 ms sensor voltage at loss of 24 V auxiliary input (preset, enable and read) < 10 ms sensor voltage at return of 24 V auxiliary input (preset, enable and read)
Input impedance	400 Ohm at Un encoder input 3400 Ohm at Un auxiliary input (preset, enable and read) 1500 Ohm at Un 2/3-wire proximity sensors PNP/NPN > 270 Ohm at U = 2.4 V 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 time	< 250 ms
Switching frequency	< 0.6/LI ² Hz on inductive 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	850 mA 5 V DC 15 mA 24 V DC
Module format	Standard
Local signalling	2 LED green axis diagnostics available (CH.) 1 LED red internal fault, module failure (ERR) 1 LED red external fault (I/O) 1 LED green module operating (RUN)
Electrical connection	2 connectors SUB-D 15 1 connector HE-10 20 pins
Product weight	0.34 kg

Environment

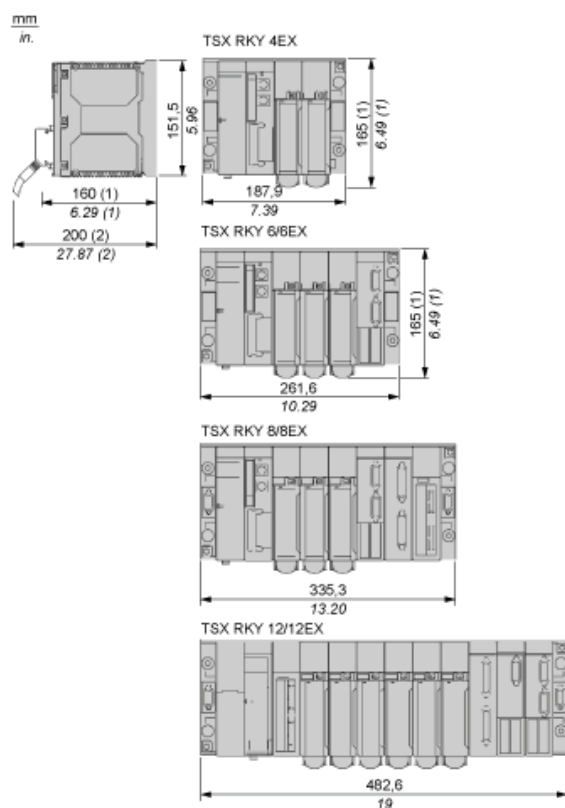
Protective treatment	Conformal coating Humiseal 1A33 TC
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-25...70 °C
Relative humidity	5...95 % without condensation
Operating altitude	<= 2000 m

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS	Compliant - since 0801 - Schneider Electric declaration of conformity download declaration of conformity

Standard and Extendable Racks for Modules Mounting

Dimensions of Modules and Racks



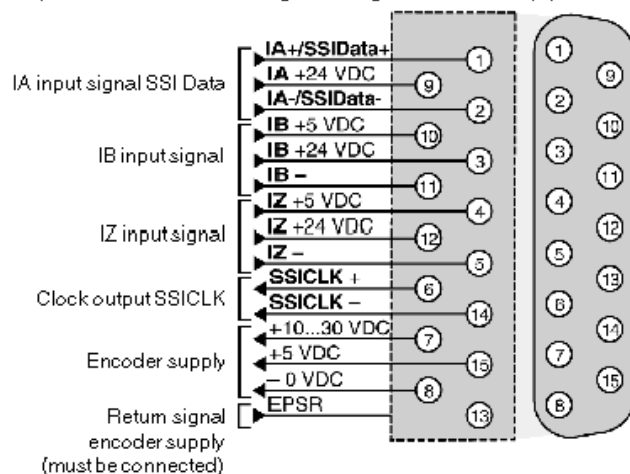
(1) With screw terminal block modules.

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

15-pin SUB-D Connectors of the Measurement and Counting Module

Pinout Configuration

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

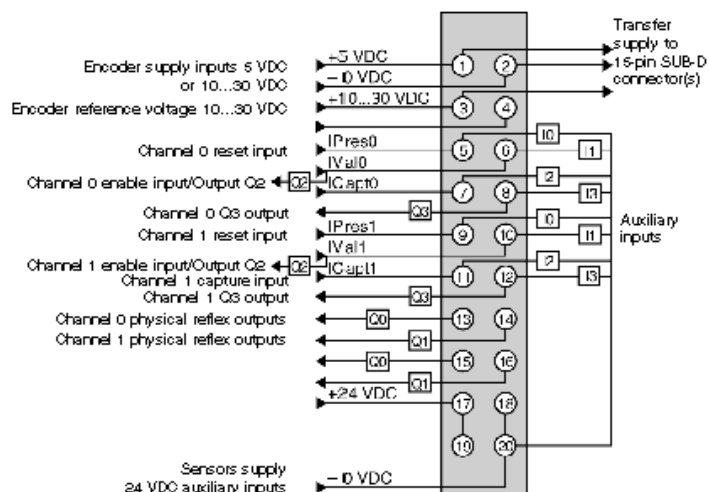


5 Vdc signal	Pins
+ IA input	1
- IA input	2
+ IB input	10
- IB input	11
+ IZ input	4
- IZ input	5
Encoder power supply:	
+5 Vdc	15
-0 Vdc	8
Encoder power supply feedback	13
10...30 Vdc signals	Pins
+ IA input	9
- IA input	2
+ IB input	3
- IB input	11
+ IZ input	12
- IZ input	5
Encoder power supply:	
+10...30 Vdc	7
-0 Vdc	8
Encoder power supply feedback	13
Serial signals (absolute encoder with serial or parallel outputs, using a TELEFAST ABE7CPA11 adapter)	
+ SSI Data	1
- SSI Data	2
+ SSI CLK input	6

Serial signals (absolute encoder with serial or parallel outputs, using a TELEFAST ABE7CPA11 adapter)	Pins
- SSI CLK input	14
Encoder power supply:	
+5 Vdc	15
-0 Vdc	8
Encoder power supply feedback	13

20-pin HE10 Connector of the Measurement and Counting Module

Wiring Diagram



24 Vdc signals	Pins
Channel 0 auxiliary input:	
Preset IPres0	5
Confirmation IVal0/Output Q2	6
Capture ICapt0	7
Output Q3	8
Channel 1 auxiliary input:	
Preset IPres1	9
Confirmation IVal1/Output Q2	10
Capture ICapt1	11
Output Q3	12
Channel 0 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
Encoder reference voltage +10...30 Vdc	4
Sensor power supply:	
+24 Vdc	17 or 19

Power Supplies	Pins
-0 Vdc	18 or 20