

TSXCCY1128C

electronic cam module - Modicon Premium -
128cams - 1 axis - 7W -standard format

Product availability : Stock - Normally stocked in distribution facility

Price* : 5218.70 USD



Main

Range of product	Modicon Premium Automation platform
Product or component type	Electronic cam module
Number of cams	128
Number of tracks	32
Function of module	Generation of events Measurement capture Switching feedforward Elimination of axis backflash Position recalibration Parts counter Position, monostable, brake
I/O modularity	1 axis
Electrical circuit type	Auxiliary input positive conforming to EN/IEC 61131 type 1 Incremental encoder with 10...30 V positive or negative Incremental encoder with RS422 differential

Complementary

Clock frequency	200 kHz SSI absolute encoder
Incremental encoder frequency x1	500 kHz
Incremental encoder frequency x 4	250 kHz
Power dissipation in W	7 W
Output refresh cycle	<= 100 μ s 32 <= 200 μ s 128 <= 50 μ s 16
Input compatibility	Absolute encoder SSI serial output Incremental encoder 10...30 V totem pole Incremental encoder 5 V DC RS422/485 line emitter Absolute encoder parallel output ABE7CPA11
Input voltage	24 V auxiliary input 24 V encoder with 10...30 V

Input current	8 mA auxiliary input 10 mA RS422 15.5 mA encoder with 10...30 V
Input voltage limits	<= 5.5 V RS422 19...30 V auxiliary input 19...30 V encoder with 10...30 V
Voltage state 1 guaranteed	<= 11 V auxiliary input <= 11 V encoder with 10...30 V > 3 V RS422
Current state 1 guaranteed	>= 5 mA encoder with 10...30 V >= 5.8 mA RS422 >= 3 mA auxiliary input
Voltage state 0 guaranteed	< 5 V auxiliary input < 5 V encoder with 10...30 V <= -3 V RS422
Current state 0 guaranteed	<= 1.5 mA auxiliary input <= 2 mA encoder with 10...30 V <= -5.8 mA RS422
Response time	< 100 µs auxiliary input
Input impedance	3000 Ohm for nominal U auxiliary input 1500 Ohm for nominal U encoder with 10...30 V
Output type	Track output conforming to EN/IEC 61131-2
Output voltage	24 V DC
Nominal output current	0.5 A
Rated current	<= 12 A per module <= 6 A per connector <= 0.6 A per output
Output voltage limits	19...30 V
Output compatibility	Positive logic DC inputs (resistance <= 15 kOhm)
Tungsten load	10 W
Switching frequency	< 0.6/LI ² inductive
Preactuator voltage detection threshold	< 14 V fault state > 18 V OK state
Output overload protection	Thermal circuit breaker Current limiter
Output short-circuit protection	Current limiter Thermal circuit breaker
Output overvoltage protection	Zener diode
Reverse polarity protection	Reverse diode on power supply
Checks	Monitoring peactuator power supply
Local signalling	1 LED green processor running (RUN) 1 LED red I/O module or configuration fault (I/O) 1 LED red processor or system fault (ERR)
Electrical connection	1 connector HE-10 20 pins for connecting the auxiliary inputs and the encoder power supply 1 connector HE-10 20 pins for connecting the track outputs on group 0 and 1 1 connector HE-10 20 pins for connecting the track outputs on group 2 and 3 1 connector SUB-D 15 for connecting incremental or absolute encoder
Current consumption	660 mA 5 V DC 15 mA 24 V DC
Module format	Standard
Product weight	1.06 lb(US) (0.48 kg)

Environment

Electromagnetic discharge time	< L/R s
Protective treatment	TC Conformal coating Humiseal 1A33
Ambient air temperature for operation	32...140 °F (0...60 °C)
Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Relative humidity	10..95 % without condensation for operation 5...95 % without condensation for storage

Operating altitude	0...6561.68 ft (0...2000 m)
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Ordering and shipping details

Category	22558 - TSX PREMIUM, ATRIUM & PL7 PRO
Discount Schedule	PC22
Nbr. of units in pkg.	1
Package weight(Lbs)	2.2000000000000002
Returnability	N
Country of origin	FR

Offer Sustainability

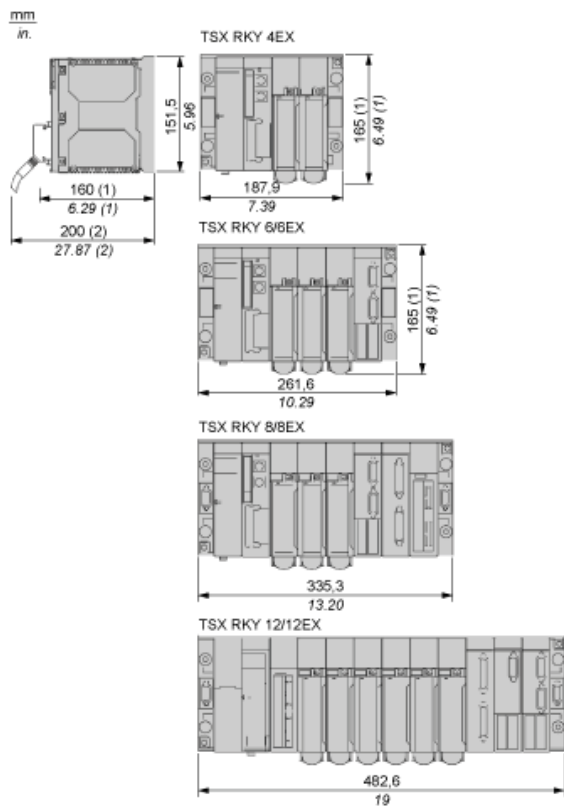
Sustainable offer status	Not Green Premium product
RoHS (date code: YYWW)	Compliant - since 0901 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold

Contractual warranty

Warranty period	18 months
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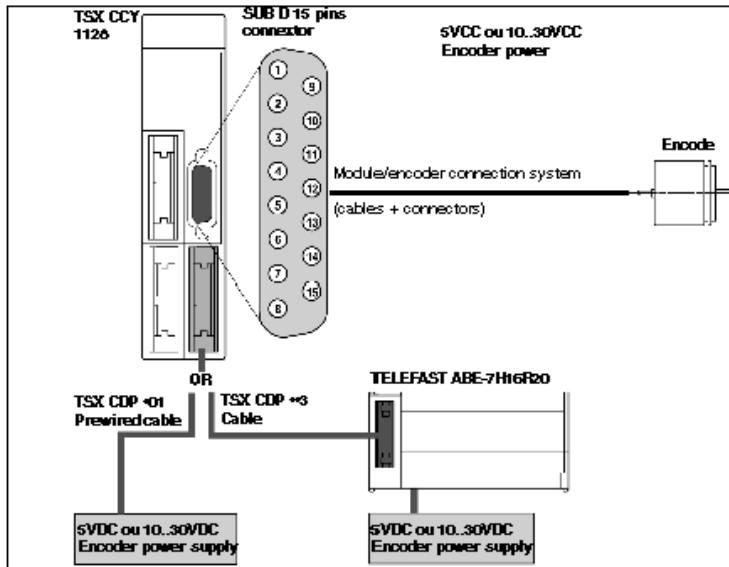
Standard and Extendable Racks for Modules Mounting

Dimensions of Modules and Racks



- (1) With screw terminal block modules.
- (2) Maximum depth for all types of modules and their associated connectors.

Connecting an Encoder to an Electronic Cam Module



Connecting an Incremental Encoder with RS422 Outputs

Pinouts of the Module's 15-pin SUB D Connector

Diagram (front view)	Pin No.	Signal	Designation
	1	A+ 5V	Encoder input, pulse A+ (5VDC)
2	A-	Encoder input, pulse A-	
3	-	-	
4	Z+ 5V	Encoder input, zero latch pulse Z+ (5VDC)	
5	Z-	Encoder input, zero latch pulse Z-	
6	-	-	
7	10...30 V	Encoder supply output (+ 10...30VDC)	
8	0 V	Encoder supply output (- 0VDC)	
9	-	-	
10	B+	Encoder input, pulse B+ (5VDC)	
11	B-	Encoder input, pulse B-	
12	-	-	
13	EPSR	Positive encoder supply feedback input. Receives positive supply feedback from the encoder, which allows the module to verify the encoder's presence.	
14	-	-	
15	5 V	Encoder supply output (+ 5VDC)	

Connecting an Incremental Encoder with Totem Pole Outputs

Pinout Configuration of the Module's 15-pin SUB D Connector

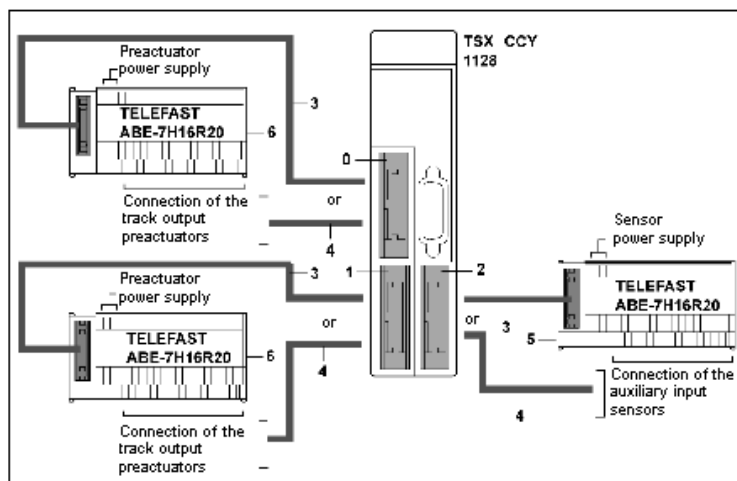
Diagram (front view)	Pin No.	Signal	Designation
	1	-	-
2	A-	Input to be connected to 0V encoder	
3	B+ 24V	Encoder input, pulse B+ (10... 30VDC)	
4	-	-	
5	Z-	Input to be connected to 0V encoder	
6	-	-	
7	10...30 V	Encoder supply output (+ 10... 30VDC)	
8	0 V	Encoder supply output (- 0VDC)	
9	A+ 24V	Encoder input, pulse A+ (10... 30VDC)	
10	-	-	
11	B-	Input to be connected to 0V encoder	
12	Z+ 24V	Encoder input, zero latch pulse Z+ (10... 30VDC)	
13	EPSR	Positive encoder supply feedback input. Receives positive supply feedback from the encoder, which allows the module to verify the encoder's presence.	
14	-	-	
15	5 V	Encoder supply output (+ 5VDC)	

Connecting an Absolute SSI Encoder

Pinout Configuration of the Module's 15-pin SUB D Connector

Diagram (front view)	Pin No.	Signal	Designation
	1	positive SSI data	Encoder input, positive SSI data (5VDC)
2	negative SSI data	Encoder input, negative SSI data	
3	-	-	
4	-	-	
5	-	-	
6	CLK +	Encoder output, positive SSI CLK (5VDC)	
7	10...30 V	Encoder supply output (+ 10...30VDC)	
8	0 V	Encoder supply output (- 0VDC)	
9	-	-	
10	-	-	
11	-	-	
12	-	-	
13	EPSR	Positive encoder supply feedback input. Receives positive supply feedback from the encoder, which allows the module to verify the encoder's presence.	
14	CLK -	Encoder output, negative SSI CLK	
15	5 V	Encoder supply output (+ 5VDC)	

Connecting Auxiliary Inputs and Track Outputs



Connection of the Auxiliary Inputs

Pinout Configuration of the Module's HE10 Connector

Diagram (front view)	Pin No.	Signal	Designation
	1	5 V	Encoder supply input +5 VDC
2	0 V	Encoder supply input - 0VDC	
3	10...30V	Encoder supply input + 10...30VDC	
4	VRef	Reference input voltage for encoder supply monitoring	
5	IREF	Auxiliary adjustment input	
6	-	Not wired	
7	ICAPT0	Auxiliary capture input 0	
8	ICAPT1	Auxiliary capture input 1	
9	-	Not wired	
10	-	Not wired	
11	-	Not wired	
12	-	Not wired	
13	-	Not wired	
14	-	Not wired	
15		Not wired	
16		Not wired	
17	24 V	Sensor supply input + 24VDC	
18	0 V	Sensor supply input - 0VDC	
19	24 V	Sensor supply input + 24VDC	
20	0 V	Sensor supply input - 0VDC	

Connection of the Track Outputs

Wiring Diagram

