

TSXCFY21

motion control module - for stepper motors -
Unity Pro - 2 axes - 5.6 W



Main

Range of Product	Modicon Premium Automation platform
Product or Component Type	Motion control module
Product Specific Application	For stepper motors
Software designation	Unity Pro

Complementary

I/O modularity	2 axes
Maximum pulse frequency	187 kHz
Power dissipation in W	5.6 W
Input type	Current sink auxiliary input EN/IEC 61131 type 2 Resistive amplifier input
Discrete input logic	Negative amplifier input Positive auxiliary input
Input voltage	24 V 7 mA auxiliary input 5 V 4.5 mA amplifier input
Input voltage limits	19...30 V auxiliary input
Voltage state 1 guaranteed	< 2 V amplifier input >= 11 V auxiliary input
Current state 1 guaranteed	>= 6 mA auxiliary input)
Voltage state 0 guaranteed	<= 5 V auxiliary input > 3.6 V amplifier input
Current state 0 guaranteed	<= 2 mA auxiliary input)
Input impedance	3400 Ohm auxiliary input
Input immunity	< 250 µs auxiliary input for homing cam and event inputs 15...30 µs amplifier input for loss of step input 3000...10000 µs auxiliary input for limit switch, emergency stop and external stop inputs 3000...16000 µs amplifier input for amplifier fault input
Power supply monitoring	0...14 V auxiliary input at fault state 18...24 V auxiliary input at OK state
Maximum detection time	< 30 ms auxiliary input from fault to OK state > 1 ms auxiliary input from OK to fault state
Input compatibility	With 2-wire/3-wire sensor auxiliary input
Output type	Open collector PNP brake output EN/IEC 61131-2 RS422, TTL 5 V open collector NPN compatible amplifier output
Output differential voltage	+/- 2 V <= 100 Ohm amplifier output
Maximum output short-circuit current	150 mA amplifier output
Permissible common mode voltage	7 V amplifier output
Maximum permissible differential voltage	12 V amplifier output
Output voltage	24 V DC 19...30 V brake output
Nominal output current	0.5 A <0.3 mA 0.625 A brake output
Maximum voltage drop	<1 V at state on brake output
Switching time	< 0.25 ms brake output
Output compatibility	Positive logic DC inputs (resistance <= 15 kOhm) brake output

Short-circuit protection	Thermal tripping via program or automatically brake output
Output overload protection	Current limiter brake output
Output overvoltage protection	Zener diode brake output
Reverse polarity protection	Brake output reverse mounted diode on supply
Speed profile path	Trapezoidal
Operating Mode	Manually AUTO OFF Direct drive mode
Checks	Sensor power supply Consistency of commands Validity of parameters Short circuit (one signalling bit per channel) Correct execution by software position limits, loss of step Amplifier, limits switches, emergency stop
Optional commands	Brake Boost
Local signalling	For module operating (RUN) 1 LED (green) For external fault (I/O) 1 LED (red) For internal fault, module failure (ERR) 1 LED (red) For axis diagnostics available (CH.) 2 LEDs (green)
Electrical connection	1 connector HE-10, 20 pins 2 connectors SUB-D 15
Current consumption	100 mA 24 V DC 650 mA 5 V DC
Module format	Standard
Net Weight	1.06 lb(US) (0.48 kg)

Environment

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	3389110757002
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.17 in (5.5 cm)
Package 1 Width	7.09 in (18.0 cm)
Package 1 Length	10.24 in (26.0 cm)
Package 1 Weight	16.49 oz (467.5 g)
Unit Type of Package 2	S04
Number of Units in Package 2	12
Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	15.75 in (40.0 cm)
Package 2 Length	23.62 in (60.0 cm)
Package 2 Weight	12.51 lb(US) (5.676 kg)

Offer Sustainability

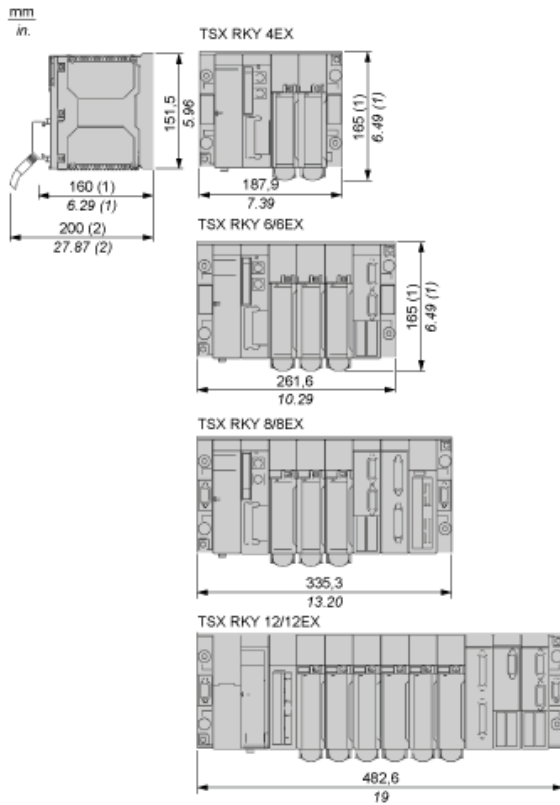
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov
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Contractual warranty

Warranty	18 months
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Standard and Extendable Racks for Modules Mounting

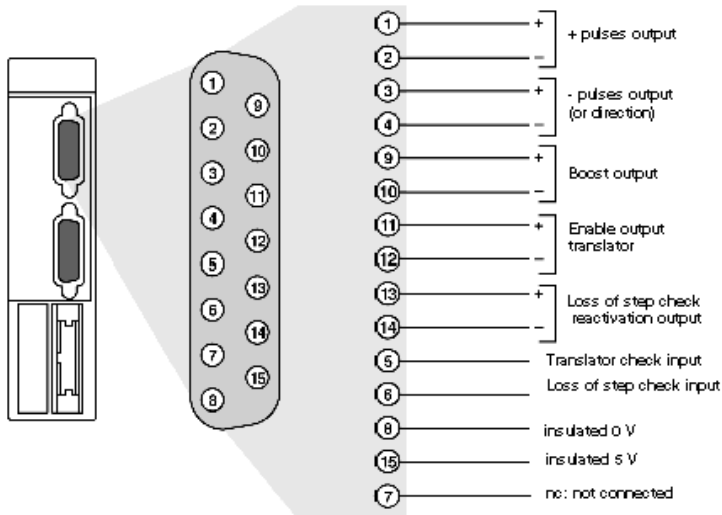
Dimensions of Modules and Racks



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

Connection of Translator Signals

Connector Pinout



Connection of Sensors/Pre-Actuators

Connector Pinout

