

Product data sheet

Specifications



motion control module - for stepper motors - Unity Pro - 1 axis - 3.8 W

TSXCFY11

! Discontinued on: 02 December 2020

! To be end-of-service on: 31 December 2026

! Discontinued - Service only

Product availability : Stock - Normally stocked in distribution facility

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	1 axis
Maximum pulse frequency	187 kHz
Power dissipation in W	3.8 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 μ s auxiliary input for homing cam and event inputs 15...30 μ s amplifier input for loss of step input 3000...10000 μ s auxiliary input for limit switch, emergency stop and external stop inputs 3000...16000 μ s 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	OFF Manually Direct drive mode AUTO
Checks	Sensor power supply Amplifier, limits switches, emergency stop Short circuit (one signalling bit per channel) Correct execution by software position limits, loss of step Validity of parameters Consistency of commands
Optional commands	Boost Brake
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 1 connector SUB-D 15
Current consumption	510 mA 5 V DC 50 mA DC
Module format	Standard
Net Weight	0.97 lb(US) (0.44 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	3389110756999
Returnability	No

Country of origin	FR
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Packing Units

Unit Type of Package 1	PCE
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Package 1 Length	10.24 in (26.0 cm)
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Number of Units in Package 1	1
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Package 2 Width	15.75 in (40.0 cm)
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Package 2 Height	11.81 in (30.0 cm)
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Package 2 Weight	13.83 lb(US) (6.271 kg)
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Package 1 Width	7.09 in (18.0 cm)
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Package 1 Height	2.17 in (5.5 cm)
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Package 1 Weight	16.30 oz (462.0 g)
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Number of Units in Package 2	12
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Unit Type of Package 2	S04
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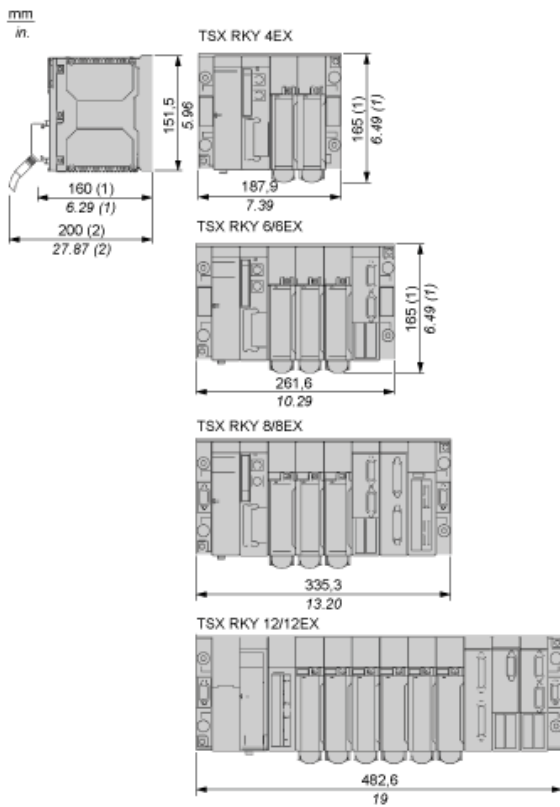
Package 2 Length	23.62 in (60.0 cm)
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Contractual warranty

Warranty	18 months
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Standard and Extendable Racks for Modules Mounting

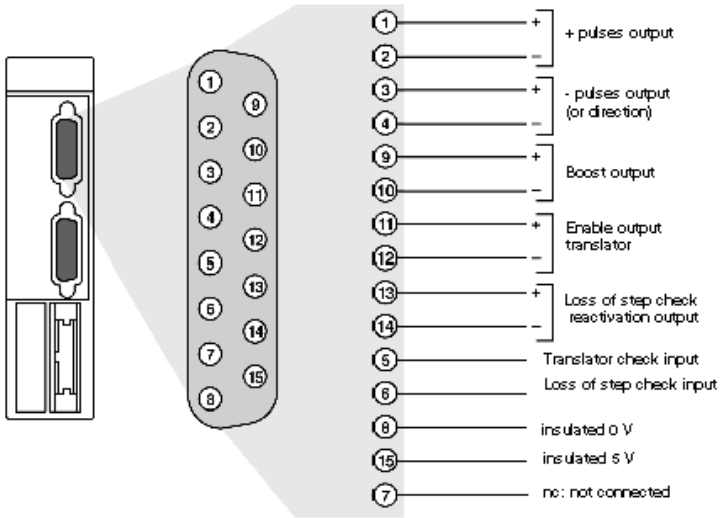
Dimensions of Modules and Racks



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

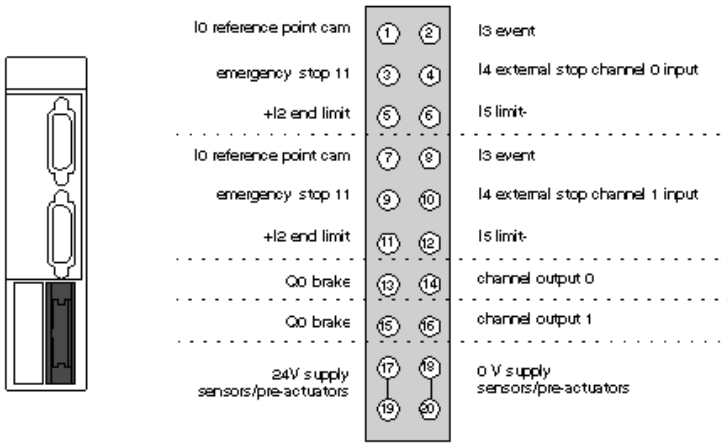
Connection of Translator Signals

Connector Pinout



Connection of Sensors/Pre-Actuators

Connector Pinout



Recommended replacement(s)

TSXCFY11 is replaced by:

1x



PTO module - 2 channels - 4 input - 24 V DC - 4.3 mA - 2 connectors 28 pins
BMXMSP0200