Product data sheet

Specifications



Discontinued - Service only

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

TSXCFY11

Discontinued on: Dec 2, 2020

To be end-of-service on: Dec 31, 2026

Product availability: Non-Stock - Not 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 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

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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	1 LED (green) for module operating (RUN) 1 LED (red) for external fault (I/O) 1 LED (red) for internal fault, module failure (ERR) 2 LEDs (green) for axis diagnostics available (CH.)
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
Product 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	US1PC2222558
Discount Schedule	PC22
GTIN	3389110756999
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.2 in (5.5 cm)
Package 1 Width	7.09 in (18.0 cm)
Package 1 Length	10.2 in (26.0 cm)
Package weight(Lbs)	16.3 oz (462.0 g)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Use Longer

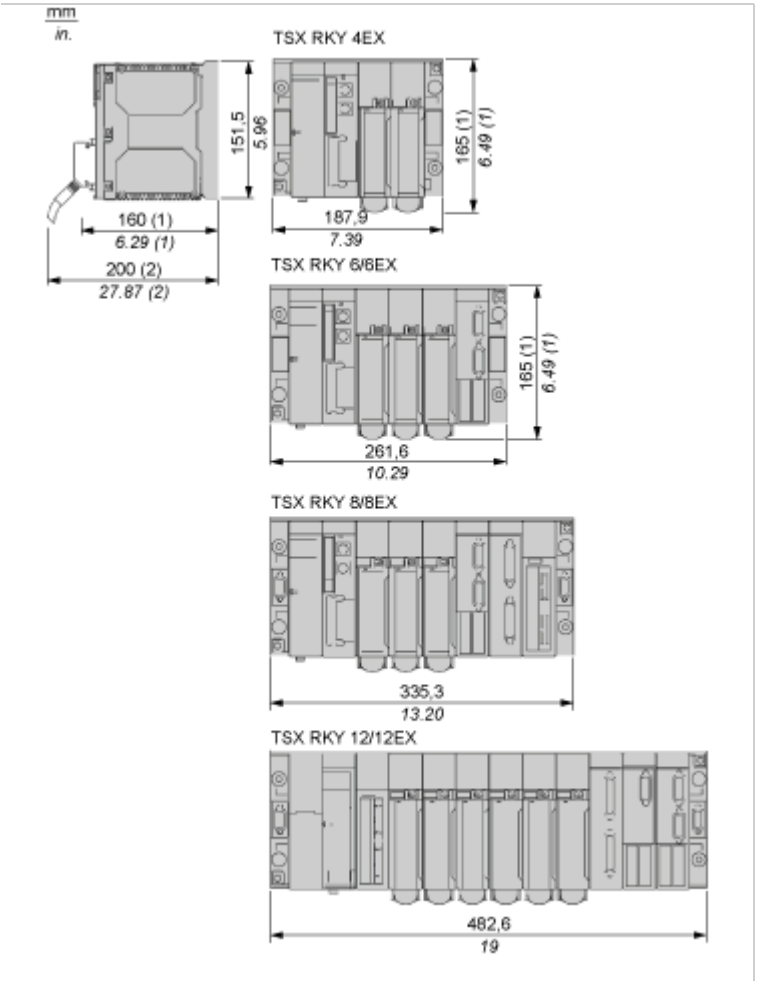
Lifetime extension

Repair	No

Dimensions Drawings

Standard and Extendable Racks for Modules Mounting

Dimensions of Modules and Racks

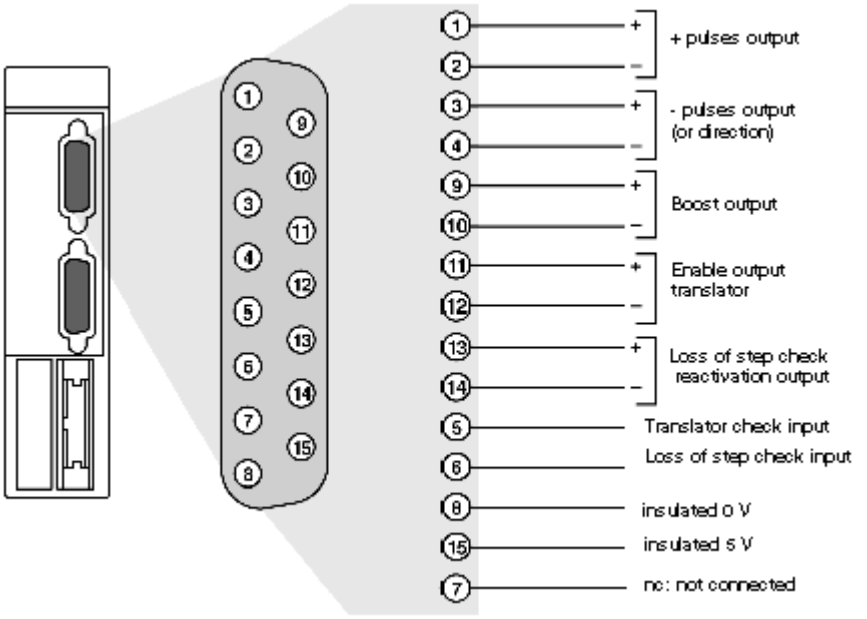


(**1**) With screw terminal block modules.
(**2**) Maximum depth for all types of modules and their associated connectors.

Connections and Schema

Connection of Translator Signals

Connector Pinout



Connection of Sensors/Pre-Actuators

Connector Pinout

