

TSXCFY21C

coated 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
Pulse frequency	≤ 187 kHz
Power dissipation in W	5.6 W
Input type	Resistive amplifier input Current sink auxiliary input conforming to EN/IEC 61131 type 2
Discrete input logic	Positive auxiliary input Negative amplifier input
Input voltage	5 V 4.5 mA amplifier input 24 V 7 mA auxiliary input
Input voltage limits	19...30 V auxiliary input
Voltage state1 guaranteed	≥ 11 V auxiliary input < 2 V amplifier input
Current state 1 guaranteed	> 6 mA auxiliary input
Voltage state 0 guaranteed	> 3.6 V amplifier input ≤ 5 V auxiliary input
Current state 0 guaranteed	< 2 mA auxiliary input
Input impedance	3400 Ohm auxiliary input
Input immunity	3000...16000 μ s amplifier input for amplifier fault input 3000...10000 μ s auxiliary input for limit switch, emergency stop and external stop inputs 15...30 μ s amplifier input for loss of step input < 250 μ s auxiliary input for homing cam and event inputs
Power supply monitoring	> 18 V auxiliary input at OK state < 14 V auxiliary input at fault state
Maximum detection time	> 1 ms auxiliary input from OK to fault state < 30 ms auxiliary input from fault to OK state
Input compatibility	With 2-wire/3-wire sensor auxiliary input
Output type	RS422, TTL 5 V open collector NPN compatible amplifier output Open collector PNP brake output conforming to EN/IEC 61131-2
Output differential voltage	± 2 V ≤ 100 Ohm amplifier output
Output short-circuit current	< 150 mA amplifier output
Permissible common mode voltage	≤ 7 V amplifier output
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
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	Reverse mounted diode on supply brake output
Speed profile path	Trapezoidal
Operating mode	AUTO Direct drive mode Manually OFF
Checks	Amplifier, limits switches, emergency stop Consistency of commands Correct execution by software position limits, loss of step Sensor power supply Short circuit (one signalling bit per channel) Validity of parameters
Optional commands	Boost Brake
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
Current consumption	650 mA 5 V DC 100 mA 24 V DC
Module format	Standard
Product weight	0.48 kg
Protective treatment	Conformal coating Humiseal 1A33

Environment

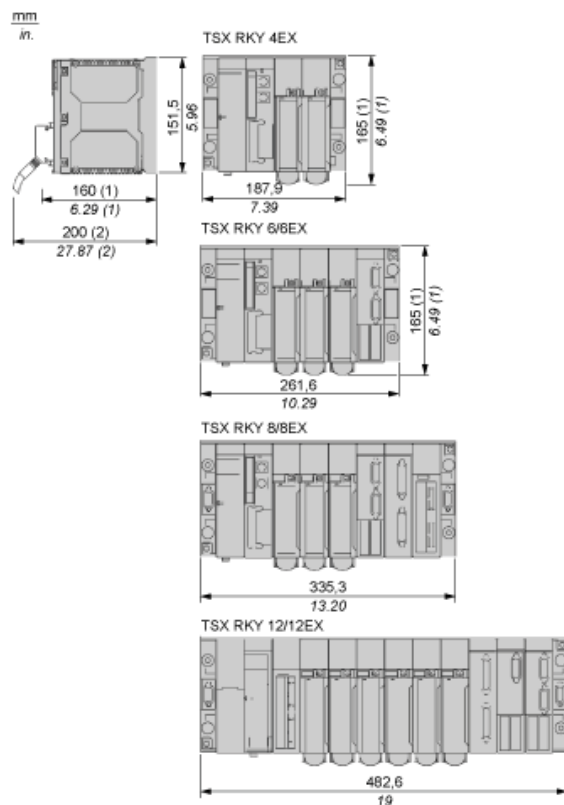
Ambient air temperature for operation	0...60 °C
Ambient air temperature for storage	-25...70 °C
Relative humidity	5...95 % without condensation
Operating altitude	<= 2000 m

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS	Compliant - since 0828 - Schneider Electric declaration of conformity download declaration of conformity

Standard and Extendable Racks for Modules Mounting

Dimensions of Modules and Racks

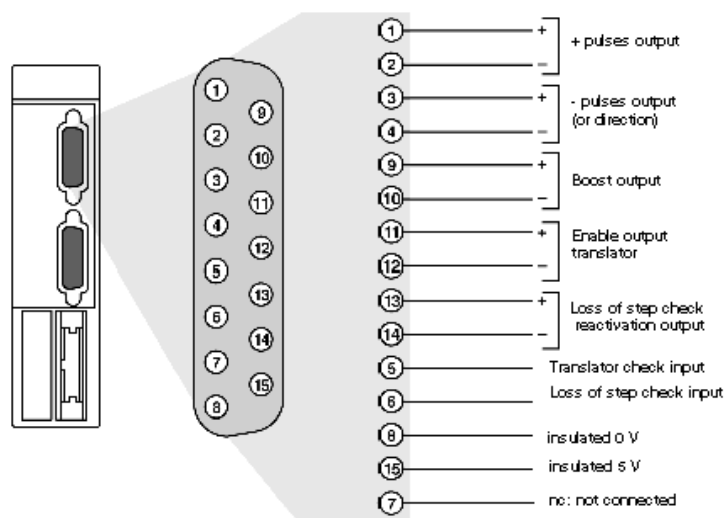


(1) With screw terminal block modules.

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

Connection of Translator Signals

Connector Pinout



Connection of Sensors/Pre-Actuators

Connector Pinout

