

STM23Q-2RE

NEMA 23 Integrated Drive+Motor w/ Q Programming & Encoder

1pc. - 447.00
50pc. - 335.25



Product Features

- *Sophisticated current control*
- *Anti-resonance*
- *Torque ripple smoothing*
- *Microstep emulation*
- *Modbus/RTU for easy PLC and HMI communication*
- *Q programming mode for stand-alone control*
- *Capable of all "S" control modes*
- *RS-485 port for programming and communications*
- *Built-in incremental encoder*



Description

The STM23Q-2RE integrated stepper is a drive+motor unit, fusing a NEMA 23 step motor and a sophisticated 5.0 A/phase (peak-of-sine) stepper drive into a single device. Power to the drive, located at the rear of the motor, must be supplied by an external DC supply. See Related and Recommended Products below for compatible 24 and 48 volt DC [power supplies](#) .

The STM23Q-2RE integrated stepper can operate in all of the same control modes as the S option, plus the ability to run a Q program stored in non-volatile memory. Q programs are created using Applied Motion's [Q Programmer™](#) software, which provides powerful commands for motion, I/O, conditional processing, multi-tasking, math functions, and more. All STM23 units are setup and configured using Applied Motion's [ST Configurator™](#) software.

An integral 1000-line (4000 count/rev) incremental encoder is housed inside the same enclosure as the drive electronics, providing protection from dust and debris. The integration of the encoder means the STM23Q-2RE can perform special functions not available otherwise. Stall Detection notifies the system as soon as the required torque is too great for the motor, which results in a loss of synchronization between the rotor and stator, also known as stalling. Stall Prevention actually prevents stalling of the step motor by dynamically adjusting motor speed to maintain synchronization of the rotor to the stator under all conditions. This unique feature allows step motors to operate in a much broader range of applications than previously available to step motors, such as torque-control applications. The Stall Prevention feature also performs static position maintenance, which maintains the position of the motor shaft when at rest.


Each STM23 integrated stepper comes with 3 digital inputs, 1 digital output, and 1 analog input. The digital inputs accept signals of 5-24 VDC and can be used for connecting pulse & direction signals, end-of-travel limit switches, jog switches, quadrature encoder signals, PLC outputs, sensors, or many other signal types. The digital output can be connected to PLC inputs, counters, lights, relays, or other devices. The analog input accepts 0-5 VDC signals and can be used for velocity and position control.

The STM23Q-2RE comes with an RS-485 port for programming and serial communications.

Specifications

| | |
|-------------------------------------|--|
| Part Number: | STM23Q-2RE |
| Supply Voltage: | 12-70 VDC |
| Supply Voltage Type: | DC |
| Control Modes: | Streaming Commands Analog Positioning Encoder Following Q Programming Modbus |
| Communication Ports: | RS-485 |
| Encoder Feedback: | Yes |
| Step Resolution: | Full Half Microstepping Microstep Emulation |
| Idle Current Reduction: | 0-90% |
| Setup Method: | Software setup |
| Digital Inputs: | 3 |
| Digital Outputs: | 1 |
| Analog Inputs: | 1 single-ended |
| Circuit Protection: | Short circuit Over-voltage Under-voltage Over-temp |
| Status LEDs: | 1 red, 1 green |
| Frame Size: | NEMA 23 |
| Holding Torque: | 125 oz-in |
| Step Angle: | 1.8 deg |
| Rotor Inertia: | 3.68E-03 oz-in-sec ² |
| Length: | 3.64 inches |
| Weight: | 30 oz |
| Operating Temperature Range: | 0 to 85 °C |
| Ambient Temperature Range: | 0 to 40 °C |
| Ambient Humidity: | 90% max, non-condensing |
| Insulation Class: | Class B (130 °C) |

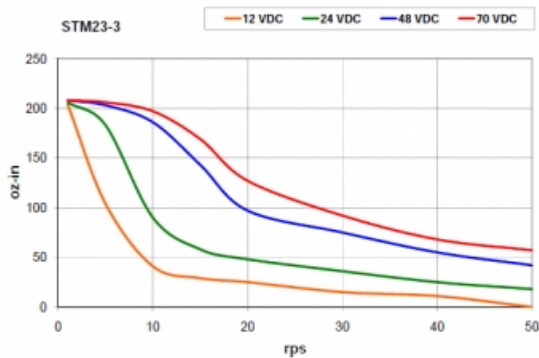
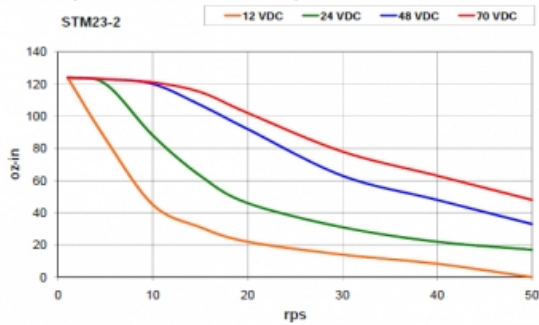
Downloads

| | |
|-----------------------------|---|
| Speed-Torque Curves: |  STM23-speed-torque.pdf |
| Manuals: |  STM23_Hardware_Manual_920-0021.pdf  Host Command Reference Rev I.pdf  STM23_24_S_Q_QuickSetup_920-0020E.pdf  ModbusManual_920-0072E.pdf |
| Datasheet: | http://s3.amazonaws.com/applied-motion-pdf/STM23Q-2RE.pdf |
| Family Datasheet: |  STM-Datasheet-925-0009.pdf |
| 2D Drawing: |  STM23X-2RX_RevB.pdf  STM23X-2RX_3D.pdf |
| 3D Drawing: |  STM23-2R.igs |
| Agency Approvals: |  STM17_23_24_CE_DOC.pdf |
| Application Notes: |  APPN0021_5V-Keepalive-Circuit.pdf  APPN0019_Analog-positioning-using-Q-program.zip  APPN0018_EZ-Series-Touchpanel-HMI.zip |

Torque Curves

Torque-Speed Curves

Note: all torque curves were measured at 20,000 steps/rev.



Software

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|---------------------|---|
| Software: | SCL Utility ST Configurator™ |
| Sample Code: |  scldemo.zip |

Pricing

| | STM23Q-2RE Part No. STM23Q-2RE |
|---------------|--|
| 1pc. | \$447.00 |
| 25pc. | \$384.42 |
| 50pc. | \$335.25 |
| 100pc. | Contact us for 100+ piece pricing. |

Products in the Series *Modbus Products*

| Part Number | Frame Size | Supply Voltage | Control Modes | Holding Torque | Communication Ports | Encoder Feedback | 1pc./50pc. |
|----------------------------|------------|----------------|---|----------------|---------------------|------------------|---------------------|
| 5000-128 | NA | 24-48 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | NA | RS-232 | No | \$467.00 / \$350.25 |
| 5000-130 | NA | 24-48 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | NA | RS-232 | Yes | \$540.00 / \$405.00 |
| 5000-132 | NA | 24-48 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | NA | RS-232, RS-485 | No | \$570.00 / \$427.50 |
| 5000-134 | NA | 24-48 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | NA | RS-232, RS-485 | Yes | \$625.00 / \$468.75 |
| 5000-138 | NA | 24-80 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | NA | RS-232 | No | \$515.00 / \$386.25 |
| 5000-140 | NA | 24-80 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | NA | RS-232 | Yes | \$580.00 / \$435.00 |
| 5000-142 | NA | 24-80 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | NA | RS-232, RS-485 | No | \$630.00 / \$472.50 |
| 5000-144 | NA | 24-80 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | NA | RS-232, RS-485 | Yes | \$690.00 / \$517.50 |
| STM17Q-1AE | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 31 | RS-232 | Yes | \$347.00 / \$260.25 |
| STM17Q-1AN | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 31 | RS-232 | No | \$272.00 / \$204.00 |
| STM17Q-1RE | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 31 | RS-485 | Yes | \$353.00 / \$264.75 |
| STM17Q-2AE | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 54 | RS-232 | Yes | \$350.00 / \$262.50 |
| STM17Q-2AN | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 54 | RS-232 | No | \$275.00 / \$206.25 |
| STM17Q-2RE | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 54 | RS-485 | Yes | \$356.00 / \$267.00 |
| STM17Q-2RN | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 54 | RS-485 | No | \$281.00 / \$210.75 |
| STM17Q-3AE | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 68 | RS-232 | Yes | \$353.00 / \$264.75 |
| STM17Q-3AN | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 68 | RS-232 | No | \$288.00 / \$216.00 |
| STM17Q-3RE | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 68 | RS-485 | Yes | \$360.00 / \$270.00 |
| STM17Q-3RN | NEMA 17 | 12-48 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 68 | RS-485 | No | \$295.00 / \$221.25 |
| STM20Q-2AE | NEMA 20 | 12-72 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet | 125 | RS-232 | Yes | \$440.00 / |

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|-----------------------------|---------|-----------|---|-----|---------|-----|---------------------|
| STM23Q-2AE | NEMA 23 | 12-70 VDC | Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | 125 | RS-232 | Yes | \$330.00 |
| STM23Q-2AN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | 125 | RS-232 | No | \$365.00 / \$273.75 |
| STM23Q-2RE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 125 | RS-485 | Yes | \$447.00 / \$335.25 |
| STM23Q-2RN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 125 | RS-485 | No | \$372.00 / \$279.00 |
| STM23Q-3AE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | 210 | RS-232 | Yes | \$456.00 / \$342.00 |
| STM23Q-3AN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | 210 | RS-232 | No | \$381.00 / \$285.75 |
| STM23Q-3RE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 210 | RS-485 | Yes | \$463.00 / \$347.25 |
| STM23Q-3RN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 210 | RS-485 | No | \$388.00 / \$291.00 |
| STM24QF-3AE | NEMA 24 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 340 | RS-232 | Yes | \$564.00 / \$423.00 |
| STM24QF-3AN | NEMA 24 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 340 | RS-232 | No | \$489.00 / \$366.75 |
| STM24QF-3RE | NEMA 24 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 340 | RS-485 | Yes | \$572.00 / \$429.00 |
| STM24QF-3RN | NEMA 24 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 340 | RS-485 | No | \$497.00 / \$372.75 |
| SWM24QF-3AE | NEMA 24 | 12-70 VDC | Step & Direction, Analog Torque / Velocity, Velocity (Oscillator), Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 340 | RS-232 | Yes | \$772.00 / \$579.00 |
| TSM17C-1CG | NEMA 17 | 12-48 VDC | Q Programming, CANopen | 40 | CANopen | Yes | \$547.00 / \$410.25 |
| TSM17C-2CG | NEMA 17 | 12-48 VDC | Q Programming, CANopen | 59 | CANopen | Yes | \$551.00 / \$413.25 |
| TSM17C-3CG | NEMA 17 | 12-48 VDC | Q Programming, CANopen | 73 | CANopen | Yes | \$554.00 / \$415.50 |
| TSM17P-1AG | NEMA 17 | 12-48 VDC | Step & Direction, Encoder Following | 40 | RS-232 | Yes | \$378.00 / \$283.50 |
| TSM17P-2AG | NEMA 17 | 12-48 VDC | Step & Direction, Encoder Following | 59 | RS-232 | Yes | \$380.00 / \$285.00 |
| TSM17P-3AG | NEMA 17 | 12-48 VDC | Step & Direction, Encoder Following | 73 | RS-232 | Yes | \$383.00 / \$287.25 |
| TSM17Q-1AG | NEMA 17 | 12-48 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 40 | RS-232 | Yes | \$412.00 / \$309.00 |
| TSM17Q-1RG | NEMA 17 | 12-48 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 40 | RS-485 | Yes | \$418.00 / \$313.50 |
| TSM17Q-2AG | NEMA 17 | 12-48 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 59 | RS-232 | Yes | \$415.00 / \$311.25 |
| TSM17Q-2RG | NEMA 17 | 12-48 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 59 | RS-485 | Yes | \$391.00 / \$293.25 |
| TSM17Q-3AG | NEMA 17 | 12-48 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 73 | RS-232 | Yes | \$418.00 / \$313.50 |
| TSM17Q-3RG | NEMA 17 | 12-48 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 73 | RS-485 | Yes | \$424.00 / \$318.00 |
| TSM23C-2CG | NEMA 23 | 12-70 VDC | Q Programming, CANopen | 125 | CANopen | Yes | \$562.00 / |

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|----------------------------|---------|-----------|--|-----|---------|-----|------------------------|
| TSM23C-2CG | NEMA 23 | 12-70 VDC | Q Programming, CANopen | 142 | CANopen | Yes | \$421.50 |
| TSM23C-3CG | NEMA 23 | 12-70 VDC | Q Programming, CANopen | 212 | CANopen | Yes | \$576.00 / \$432.00 |
| TSM23C-4CG | NEMA 23 | 12-70 VDC | Q Programming, CANopen | 340 | CANopen | Yes | \$631.00 / \$473.25 |
| TSM23P-2AG | NEMA 23 | 12-70 VDC | Step & Direction, Encoder Following | 142 | RS-232 | Yes | \$392.00 / \$294.00 |
| TSM23P-3AG | NEMA 23 | 12-70 VDC | Step & Direction, Encoder Following | 212 | RS-232 | Yes | \$403.00 / \$302.25 |
| TSM23P-4AG | NEMA 23 | 12-70 VDC | Step & Direction, Encoder Following | 340 | RS-232 | Yes | \$445.00 / \$333.75 |
| TSM23Q-2AG | NEMA 23 | 12-70 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 142 | RS-232 | Yes | \$507.00 / \$380.25 |
| TSM23Q-2RG | NEMA 23 | 12-70 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 142 | RS-485 | Yes | \$514.00 / \$385.50 |
| TSM23Q-3AG | NEMA 23 | 12-70 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 212 | RS-232 | Yes | \$521.00 / \$390.75 |
| TSM23Q-3RG | NEMA 23 | 12-70 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 212 | RS-485 | Yes | \$529.00 / \$396.75 |
| TSM23Q-4AG | NEMA 23 | 12-70 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 340 | RS-232 | Yes | \$576.00 / \$432.00 |
| TSM23Q-4RG | NEMA 23 | 12-70 VDC | Analog Torque / Velocity, Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Velocity Control, Modbus | 340 | RS-485 | Yes | \$584.00 / \$438.00 |

Products in the Series *STM23 Integrated Steppers*

| Part Number | Frame Size | Supply Voltage | Control Modes | Holding Torque | Communication Ports | Encoder Feedback | 1pc./50pc. |
|-----------------------------|------------|----------------|--|----------------|-----------------------|------------------|---------------------|
| STM23C-3CE | NEMA 23 | 12-70 VDC | CANopen | 210 | RS-232, CANopen | Yes | \$535.00 / \$401.25 |
| STM23C-3CN | NEMA 23 | 12-70 VDC | CANopen | 210 | RS-232, CANopen | No | \$460.00 / \$345.00 |
| STM23IP-2EE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP | 125 | Ethernet, EtherNet/IP | Yes | \$525.00 / \$393.75 |
| STM23IP-2EN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP | 125 | Ethernet, EtherNet/IP | No | \$450.00 / \$337.50 |
| STM23IP-3EE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP | 210 | Ethernet, EtherNet/IP | Yes | \$535.00 / \$401.25 |
| STM23IP-3EN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP | 210 | Ethernet, EtherNet/IP | No | \$460.00 / \$345.00 |
| STM23Q-2AE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | 125 | RS-232 | Yes | \$440.00 / \$330.00 |
| STM23Q-2AN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | 125 | RS-232 | No | \$365.00 / \$273.75 |
| STM23Q-2EE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming | 125 | Ethernet | Yes | \$452.00 / \$339.00 |
| STM23Q-2EN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming | 125 | Ethernet | No | \$377.00 / \$282.75 |
| STM23Q-2RE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 125 | RS-485 | Yes | \$447.00 / \$335.25 |
| STM23Q-2RN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 125 | RS-485 | No | \$372.00 / \$279.00 |
| STM23Q-3AE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | 210 | RS-232 | Yes | \$456.00 / \$342.00 |
| STM23Q-3AN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, SiNet Hub Compatible, Modbus | 210 | RS-232 | No | \$381.00 / \$285.75 |
| STM23Q-3EE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming | 210 | Ethernet | Yes | \$468.00 / \$351.00 |
| STM23Q-3EN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming | 210 | Ethernet | No | \$393.00 / \$294.75 |
| STM23Q-3RE | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 210 | RS-485 | Yes | \$463.00 / \$347.25 |
| STM23Q-3RN | NEMA 23 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, Modbus | 210 | RS-485 | No | \$388.00 / \$291.00 |
| STM23R-2ND | NEMA 23 | 12-70 VDC | Step & Direction | 125 | NA | No | \$172.00 / \$172.00 |
| STM23R-2NE | NEMA 23 | 12-70 VDC | Step & Direction | 125 | NA | Yes | \$219.00 / \$219.00 |
| STM23R-2NN | NEMA 23 | 12-70 VDC | Step & Direction | 125 | NA | No | \$172.00 / \$172.00 |
| STM23R-3ND | NEMA 23 | 12-70 VDC | Step & Direction | 210 | NA | No | \$189.00 / \$189.00 |
| STM23R-3NE | NEMA 23 | 12-70 VDC | Step & Direction | 210 | NA | Yes | \$230.00 / \$230.00 |
| STM23R-3NN | NEMA 23 | 12-70 VDC | Step & Direction | 210 | NA | No | \$189.00 / \$189.00 |
| STM23S-2AE | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, SiNet Hub Compatible | 125 | RS-232 | Yes | \$350.00 / \$262.50 |
| STM23S-2AN | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, SiNet Hub | 125 | RS-232 | No | \$275.00 / \$206.25 |

| | | | Compatible | | | | \$206.25 |
|-----------------------------|---------|-----------|---|-----|-----------------------|-----|---------------------|
| STM23S-2EE | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 125 | Ethernet | Yes | \$362.00 / \$271.50 |
| STM23S-2EN | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 125 | Ethernet | No | \$287.00 / \$215.25 |
| STM23S-2RE | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 125 | RS-485 | Yes | \$357.00 / \$267.75 |
| STM23S-2RN | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 125 | RS-485 | No | \$282.00 / \$211.50 |
| STM23S-3AE | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, SiNet Hub Compatible | 210 | RS-232 | Yes | \$366.00 / \$274.50 |
| STM23S-3AN | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands, SiNet Hub Compatible | 210 | RS-232 | No | \$291.00 / \$218.25 |
| STM23S-3EE | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 210 | Ethernet | Yes | \$378.00 / \$283.50 |
| STM23S-3EN | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 210 | Ethernet | No | \$303.00 / \$227.25 |
| STM23S-3RE | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 210 | RS-485 | Yes | \$373.00 / \$279.75 |
| STM23S-3RN | NEMA 23 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 210 | RS-485 | No | \$298.00 / \$223.50 |
| STM24IP-3EE | NEMA 24 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP | 340 | Ethernet, EtherNet/IP | Yes | \$626.00 / \$469.50 |
| STM24IP-3EN | NEMA 24 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming, EtherNet/IP | 340 | Ethernet, EtherNet/IP | No | \$551.00 / \$413.25 |
| STM24Q-3EE | NEMA 24 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming | 340 | Ethernet | Yes | \$576.00 / \$432.00 |
| STM24Q-3EN | NEMA 24 | 12-70 VDC | Streaming Commands, Analog Positioning, Encoder Following, Q Programming | 340 | Ethernet | No | \$501.00 / \$375.75 |
| STM24S-3EE | NEMA 24 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 340 | Ethernet | Yes | \$486.00 / \$364.50 |
| STM24S-3EN | NEMA 24 | 12-70 VDC | Step & Direction, Velocity (Oscillator), Streaming Commands | 340 | Ethernet | No | \$411.00 / \$308.25 |