PRODUCT BROCHURE

MC QD 1180/1181/1260 5.5A Driver

High-Current Stepper Driver for Heavy-Load Actuators.

Key Features

- **High-current output up to 5.5A** – drives high-thrust bi-polar stepper motors for large LHS actuators and RLA models that exceed the 2A driver capacity
- **Separate power supply input** – M12 4-pin S-coded connector accepts 24 VDC (MC QD 1181) or 24–48 VDC (MC QD 1180/1260) from a dedicated power supply for maximum motor performance
- **High-precision 256 microstep driver** – constant current driver with 256 microsteps per full step for smooth, vibration-free motion even under heavy loads
- **RS485 communication from SCU5** – M8 4-pin twisted pair motor communication cable; 24 VDC on the cable powers the servo center (not the drive logic or the motors)
- **Automatic parameter initialization** – driver parameters stored in SCU5 controller memory are loaded on every power-up
- **Ramp profile generation** – generates acceleration/deceleration ramp profiles based on speed and acceleration settings for controlled actuator positioning
- **Electronic stroke limits** – configurable step counts for electronic stroke limits protect the actuator from over-travel
- **Servo center input** – M8 6-pin connector supports a 24V NPN inductive proximity sensor for home/servo center positioning
- **Limit switch inputs** – two normally-closed limit switch inputs to restrict actuator travel; can be tied together for a single enable/disable switch via the same M8 6-pin

connector

- **T-coded actuator output** – M12 4-pin T-coded female connector for higher-current actuator cables (distinguished from standard M12 to prevent cross-connection)
- **Aluminum wall-mounting enclosure** – mounts in a machine cabinet or on the machine frame close to the actuator

Benefits

- **Drive the heaviest actuators in the lineup** – 5.5A output powers the LHS-030 (up to 300 lbf) and the RLA Series (500–2,000 lbf nominal) for large unwind/rewind stands
- **Choose the right voltage for your application** – 24 VDC models (MC QD 1181) for moderate loads, 48 VDC models (MC QD 1180/1260) for maximum speed and thrust
- **Stop losing precision under heavy loads** – 256 microstep resolution maintains smooth, vibration-free positioning even at maximum thrust
- **Prevent actuator over-travel damage** – electronic stroke limits and hardware limit switch inputs provide dual-layer protection for expensive large-stroke actuators
- **Same communication interface as the 2A driver** – identical RS485 cable and SCU5 setup; operators and technicians need to learn only one system

Specifications

Specification	MC QD 1181	MC QD 1180/1260
Driver Type	Bipolar stepper motor driver	
Microstep Resolution	256 microsteps per full step	
Maximum Motor Current	5.5A per coil (RMS)	5.5A per coil (RMS)
Driver Power Input	24 VDC (max 26V)	24–48 VDC (max 50V)
Driver Power Connector	M12 4-pin S-coded female	
Communication	RS485 via M8 4-pin twisted pair (from SCU5)	
Actuator Output	M12 4-pin T-coded female (bi-polar 4-wire stepper)	
Servo Center Input	24V NPN inductive proximity sensor (NO or NC)	
Limit Switch Inputs	2x normally-closed (M8 6-pin connector)	
Housing	Aluminum wall-mounting enclosure	
Reverse Polarity Protection	No — verify power polarity before connecting	
Compatible Actuators	LHS-030 (up to 300 lbf), RLA Series (500–2,000 lbf nominal)	
Compatible Controllers	SCU5 MD / SCU5 MC(x)D / SCU5 MC(x)DIO	
3D Model	Download STEP file	

Applications

- Large intermediate web guides using LHS-030 actuators (300 lbf thrust)
- Terminal web guides for unwind/rewind stands using the RLA Series (500–2,000 lbf nominal)
- Heavy-duty web guiding in paper mills, steel processing, and heavy converting operations
- Any application requiring high-thrust stepper actuators with the SCU5 controller

Available Configurations

Part Number	Configuration
`7-130015`	MC QD 1180
`7-130016`	MC QD 1181

Part Number	Configuration
7-130017	MC QD 1260

Supporting Documentation

Manuals (1)

- Motor Driver MC QD 1140/1141/1161/1180/1181/1211/1230/1231/1240/1260

3D Models (1)

- MC QD 1180-1181-1260

Scan for datasheets, 3D models & full documentation
https://r2r.tech/products/motor-drivers/mc-qd-118011811260-55a-driver

Ready to Get Started?

Contact our experts to discuss how this product fits your application.
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