PRODUCT BROCHURE

MC QD 1140/1141/1240/1241 2A Driver



Compact Stepper Driver. SCU5 Powered. Zero External Power Supply.

Key Features

- **SCU5-powered operation** – receives both 24 VDC power and RS485 communication through a single pre-wired motor communication cable; no separate power supply needed
- **High-precision 256 microstep driver** – constant current driver with 256 microsteps per full step for smooth, vibration-free actuator motion
- **Automatic parameter initialization** – driver parameters are stored in the SCU5 controller memory and loaded to the driver 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 to 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 in either direction; can be tied together for a single enable/disable switch
- **Bi-polar stepper output** – M12 4-pin female connector drives bi-polar 4-wire stepper motors up to 2.8A per coil
- **Flexible mounting** – compact aluminum enclosure mounts in a machine cabinet or on the machine frame; wall mounting brackets included
- **Quick disconnect connectors** – all connections use industrial M8 and M12 connectors for fast, reliable installation

Benefits

- **Eliminate external power supplies** – the MC QD 2A driver is powered directly from the SCU5 controller, reducing component count, cabinet space, and installation time
- **Simplify wiring and commissioning** – one pre-wired cable carries both power and communication; plug in and go with no separate DC supply to wire or fuse
- **Stop losing precision at low speeds** – 256 microstep resolution keeps the actuator smooth and vibration-free even at crawl speeds during fine positioning
- **Prevent actuator over-travel damage** – electronic stroke limits and hardware limit switch inputs provide dual-layer protection against mechanical damage
- **Reduce downtime with quick disconnect** – industrial M8/M12 connectors allow fast driver replacement without re-wiring; swap and run in minutes

Specifications

Specification	MC QD 1140/1141/1240/1241
Driver Type	Bipolar stepper motor driver
Microstep Resolution	256 microsteps per full step
Maximum Motor Current	2.8A per coil (RMS)
Input Voltage	24 VDC (from SCU5 controller)
Communication	RS485 via M8 4-pin twisted pair
Actuator Output	M12 4-pin 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)
Sensor Connector	M8 6-pin male
Power Source	SCU5 controller (via motor communication cable)
Housing	Aluminum wall-mounting enclosure
Reverse Polarity Protection	No — ensure correct SCU5 power polarity
Compatible Actuators	LHS-005, LHS-020 (up to 200 lbf)
Compatible Controllers	SCU5 MD / SCU5 MCD

Applications

- Intermediate web guides for converting, coating, printing, and packaging lines
- Low-profile web guide installations where space is constrained
- Web guide upgrade kits replacing pneumatic or hydraulic actuators
- Compact web guiding systems for narrow-web applications
- Any application using LHS-005 or LHS-020 actuators with the SCU5 controller

Available Configurations

Part Number	Configuration
`7-130011`	MC QD 1141

Part Number	Configuration
7-130012	MC QD 1140
7-130018	MC QD 1240

Supporting Documentation

Manuals (1)

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

3D Models (1)

- MC QD 1140-1141-1240

Scan for datasheets, 3D models & full documentation
https://r2r.tech/products/motor-drivers/mc-qd-1140114112401241-2a-driver

Ready to Get Started?

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