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Data Sheet

August 15, 2026

ANAHEIM AUTOMATION

Anaheim Automation MDC151-050301 Brushless DC Controller

The Anaheim Automation MDC151-050301 is a Brushless DC Controller designed for precise motor control. It offers efficient and reliable performance for various automation applications. This controller supports a range of operating voltages and currents, providing flexibility for different motor sizes. It features adjustable speed and current limit settings, along with protection mechanisms such as over-voltage and over-current protection, ensuring safe and stable operation. Ideal for robotics, CNC machines, and other motion control systems.



MODEL

**Anaheim
Automation
MDC151-050301**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MDC151-050301

LISTING

<https://aumictechlabs.com/products/mdc151-050301-3/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Anaheim Automation MDC151-050301 is a 50V, 30A peak Brushless DC Controller designed for precise motor control in various automation applications. This controller utilizes Hall sensor feedback to enable a constant velocity mode, ensuring stable and regulated motor speed. It has solid protection features, including over-current (cycle-by-cycle or latched), Hall sensor error, and under-voltage lockout, all indicated by a fault light and output for user notification. The unit supports both 2-quadrant operation and selectable ramp-up profiles for controlled motor starts.

Technical Specifications * Model: MDC151-050301 Power Requirements: * Input Voltage: 20VDC - 50VDC * Hall Sensor Power Output: 6.25VDC @ 30mA maximum Output Current Rating: * Maximum Current Limit Setting: 10.0A - 30.0A (peak) Control Features: * Speed Control: Internal or external potentiometer, or 0V to 5V external voltage * Constant Velocity Mode: Achieved via Hall sensor feedback * Operation Modes: Open Loop or Closed Loop (Constant Velocity Mode) * Ramp Up: Selectable profiles for startup * Motor Direction: Controllable via dedicated input Interfaces and Inputs/Outputs: * Control Inputs: TTL-CMOS compatible logic levels * Run/Stop Input * Freewheel Input * Direction Control Input * Control Outputs: * Speed Output (PG OUT): Provides motor speed feedback * Fault Output: Logic "1" (5V out) for normal operation, Logic "0" for fault conditions Protection Features: * Over Current Protection: Cycle-by-cycle or latched * Hall Sensor Error Protection * Under Voltage Lockout: Input voltage lockout at 9.1VDC; Hall Sensor voltage lockout at 4.5VDC * Short Circuit Protection Physical: * Dimensions: 6.25" x 3.28" x 1.65" * Mounting: Dual Mounting Option * Connectors: Screw type terminal blocks Environmental: * Operating Temperature (Heat Sink): 0°C - 70°C Compliance: * CE Certified * RoHS Compliant Compatibility * Motor Type: Designed for DC Brushless Motors Feedback: Utilizes Hall Sensor feedback Why Choose Aumictech for Anaheim Automation MDC151-050301? At Aumictech, we specialize in supplying automation components. Whether you need precise brushless DC motor control, reliable constant velocity operation, or solid motor protection, our team ensures the Anaheim Automation MDC151-050301 delivers maximum performance and operational stability for your application.

MDC151050301 Characteristics / Specifications

PARAMETER	VALUE
Model	MDC151-050301
Instrument Type	Brushless DC speed controller
Supply Range	20-50 VDC
Peak Current	30 A (adjustable 10.0-30.0 A per phase peak)
Continuous Current	5.0-15.0 A per phase maximum operating continuous
Max Power	500 W
Speed Command	internal pot or 0-5 VDC external
Quadrants	2-quadrant
Feedback	Hall sensors; constant velocity mode selectable
Logic Zero	0-0.8 VDC
Logic One	open (pulled up 20 kohm)
Direction	open clockwise; logic 0 counterclockwise
Freewheel	open enabled; logic 0 coast
Run Stop	open stop/hard stop; logic 0 run with ramp
Fault Output	TTL, sink 50 mA; low on fault when latch enabled
Speed Output	5 V pulses; 4/3/2 pulses per rev for 8/6/4-pole
Hall Supply	6.25 V at 30 mA maximum, typical 20 mA
Heat Sink Temperature	0-70 C
Dimensions	6.25 in x 3.28 in x 1.65 in
Closed Loop Two Pole	30,000 RPM maximum
Closed Loop Four Pole	15,000 RPM maximum
Closed Loop Six Pole	11,250 RPM maximum
Closed Loop Eight Pole	7,500 RPM maximum
Open Loop Max	50,000 RPM
Protection	over-current cycle-by-cycle or latched, Hall error, under-voltage, short circuit

PARAMETER	VALUE
Certifications	CE and RoHS
Manufacturer	Anaheim Automation
Literature	Anaheim L010409 spec sheet and L010403 user guide

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Notes

From Anaheim Automation MDC151-050301 spec sheet L010409 and user guide L010403. PWM-input sibling MDC151-050301PWM uses 1-10 kHz 0-100 percent duty; this file is the 0-5 V analog-speed MDC151-050301.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.