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Data Sheet

August 15, 2026

COPLEY CONTROLS CORP

Copley Controls Corp 413H DC Brush Servo Amplifier

Copley Controls 413H DC Brush Servo Amplifier The Copley Controls 413H isaDC brush servo amplifier. OEM Copley 413H literature covers a PWM servo amplifier for DC brush motors with analog command and current-mode control. DC brush motor servo drives in automation, robotics, and positioning stages. Instrument Type: DC brush servo amplifier The Copley Controls 413H isaDC brush servo amplifier. OEM Copley 413H literature covers a PWM servo amplifier for DC brush motors with analog command and current-mode control. DC brush motor servo drives in automation, robotics, and positioning stages. Instrument Type: DC brush servo amplifier Documentation Type: OEM Copley 413H listing



MODEL

**Copley Controls
Corp 413H**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

413H

LISTING

<https://aumictechlabs.com/products/413h-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Copley Controls Corp 413H is a DC brush servo amplifier engineered for precise motor control across torque, velocity, and voltage feedback modes. Operating from unregulated DC supplies between +24VDC and +225VDC, it delivers continuous output current of 15A @ ~80V and peak current of 30A @ ~80V with settable limits. The amplifier accepts industry-standard $\pm 10V$ differential control signals and employs a MOSFET H-bridge output stage for four-quadrant bidirectional operation. Technical Specifications Input Power Supply: +24VDC to +225VDC

(unregulated) Continuous Output Current: 15A @ ~80V (settable) Peak Output Current: 30A @ ~80V (settable) Control Signal Input: $\pm 10\text{V}$ differential, $100\text{k}\Omega$ impedance, $\pm 20\text{V}$ maximum rating Bandwidth: 3kHz (current mode, $200\mu\text{H}$ load at maximum supply voltage) PWM Switching Frequency: 25kHz Load Inductance: Selectable $200\mu\text{H}$ to 40mH via header socket components Technology: Surface-mount construction Key Features Three operating modes: torque (with encoder feedback), velocity (brush-tachometer feedback for low-speed regulation), and voltage feedback with IR compensation Differential control signal interface with switch-selectable logic levels Logic inputs: /Enable, /Pos Enable, /Neg Enable supporting ground-to-enable or ground-to-inhibit configurations Configurable gain and current limits via internal 40-pin header socket (no soldering required) DIP switch configuration support Output short-circuit protection (output-to-output and output-to-ground faults) Heatplate overtemperature protection with latch-off or self-reset modes (50ms interval) Undervoltage and overvoltage protection Status LEDs: Normal/Enable, Power-OK, Fault (Short or Overtemp) Typical Applications Motor positioning systems requiring closed-loop encoder feedback, speed regulation via brush-tachometer, and cost-effective open-loop speed control in tachless implementations. Compatibility & Integration The 413H interfaces with standard $\pm 10\text{V}$ control electronics and supports multiple enable/inhibit logic configurations for integration with industrial control cards and embedded systems.

413H Characteristics / Specifications

PARAMETER	VALUE
Model	413H
Instrument Type	DC brush servo amplifier
Manufacturer	Copley Controls
Form Factor	servo amplifier
Application Class	DC brush motor drive
System Role	PWM servo amplifier
Use Case	automation and positioning
Documentation Type	OEM Copley 413H listing
Motor Class	DC brush
Control Mode	current-mode class
Command Class	analog command
Supply Class	413H bus voltage on the sheet
Current Class	413H continuous/peak current on the sheet
Pwm Class	413H switching frequency on the sheet
Protection Class	overcurrent and overvoltage on the sheet
Brand Lineage	Copley Controls
Literature	Copley Controls 413H DC brush servo amplifier literature
Mounting Class	panel/heatsink
Cooling Class	413H cooling on the sheet
Enable Class	inhibit/enable
Fault Class	fault output
Connector Class	motor, bus, and command terminals
Operating Temperature Class	413H ambient on the sheet
Feedback Class	413H feedback on the sheet
Bandwidth Class	current loop on the sheet

PARAMETER	VALUE
Bandwidth	Class: current loop on the sheet
Operating temperature	Class: 413H ambient on the sheet

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 413H ambient on the sheet
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Feedback Class	413H feedback on the sheet
Bandwidth Class	current loop on the sheet Notes From Copley Controls 413H DC brush servo amplifier listings. Bus voltage, amps, and PWM frequency are on the 413H sheet; do not invent ampere ratings.

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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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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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.