

CPP-B06V48A-SA-CAN

ElectroCraft CompletePower™ Plus Universal Servo Drive

More Power in a Smaller Package



TECHNICAL SPECIFICATIONS

Pinouts:

J1 – Supply

- 1 Gnd
- 2 Power
- 3 PE

J2 – Motor

- 1 A / A+
- 2 B / A-
- 3 C / B+
- 4 Brake / B-
- 5 Frame

J3 – Hall

- 1 Hall 1
- 2 Hall 2
- 3 Hall 3
- 4 Temp+
- 5 Frame
- 6 +5V_{OUT}
- 7 Gnd
- 8 Temp-

J4 – Encoder

- 1 +5V_{OUT}
- 2 +5V_{OUT}
- 3 A+
- 4 B+
- 5 Z+
- 6 Frame
- 7 Gnd
- 8 A-
- 9 B-
- 10 Z-

J5 - I/O

- 1 Frame-
- 2 A In+
- 3 Step / A In2+
- 4 Limit+
- 5 Enable
- 6 eBrake
- 7 Fault
- 8 +5V_{OUT}
- 9 A Out1
- 10 A In1-
- 11 Dir / A In2-
- 12 Limit-
- 13 Brake
- 14 Capture
- 15 Ready
- 16 Gnd

J6 - USB

USB Communications

Indicators (LED)

- Green - Ready
- Red - Fault

J7 - CAN In

- 1 CAN-H In
- 2 CAN-L In
- 3 Gnd
- 4 Enbl / In+
- 5 Enbl / In-
- 6 Shield

J8 - CAN Out

- 1 CAN-H Out
- 2 CAN-L Out
- 3 Gnd
- 4 +5V_{OUT}
- 5 Enbl / Out
- 6 Shield

SW 1- Axis ID

- 1 ID-Bit0
- 2 ID-Bit1
- 3 ID-Bit2
- 4 ID-Bit3

Features:

- +12 to +48 VDC power supply input.
- 6 Amps Cont., 6 Amps Peak (2 seconds).
- 2 and 4 quadrant modes.
- Sinusoidal and Trapezoidal commutation.
- 20 kHz, 40 kHz and 80 kHz of programmable PWM frequency options.
- Current, Speed and Position modes of operation.
- USB Communications.
- CAN Bus Communications.
- Drive status diagnostics.
- +/-10V Analog command input.
- +/-10V Analog output (configurable).
- Built in short circuit, over current, over temperature, and over voltage detection.
- Digital Step and Direction inputs.
- Halls only operation mode.
- Integrated electromagnetic brake control circuit.
- Encoder mode for low speed performance.
- Integrated braking circuit control.
- +/- Travel limit inputs.
- Configurable ramp for current and speed.
- 97% efficiency at full load.
- Selectable software protection options.
- Windows®-based setup and tuning utility software included.
- Hardware CAN Axis ID selection switches.
- Open and Closed loop stepper control

Model Specifications:

DC Input	VDC	+12 to +48
Output	VDC	+12 to +48
Output Power, Peak	Watts	249
Phase Cur. Peak	Amps	6 (peak of sine)
Phase Cur. Cont.	Amps	6 (peak of sine)
Output Frequency	kHz	20, 40, 80 (selectable)
Motor Inductance	mH	0.1 to 50
Aux Output power	VDC	+5, 5% reg.
Aux Output current	mA	250 max.
Ambient Temp. Range	°C	0 to 40
Humidity		5% to 95% RH, Non-Condensing

Control Loops

Speed loop update rate	Digitally adjustable up to 10 kHz
Current loop update rate	20 kHz
Position loop update rate	Digitally adjustable up to 10 kHz
Loop operation	Velocity, Torque, Position

Feedback

Halls sensors	120°
Encoder	4 MHz, Differential or Single-ended
Current resolution	12 bit
Speed resolution	32 bit
Position resolution	32 bit
Motors	BLDC / PMDC / Stepper

CPP Model Number:

CPP — B **0 6** V **4 8** **A** — **S A** — **C A N**

Continuous Current
Voltage
Revision
Form Factor
Interface

SA = Stand Alone



Your Genius. Our Drive.

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