



July 2009



Bus Voltage Input

• 24 – 180 VDC

Continuous Current Rating

• 2 – 15 amps

Description

The A-Series servo drive is a high performance cost effective solution for powering brush servomotors with an analog tachometer feedback. The packaging is small for producing over 2 kW. An LED indicates drive status for easy trouble shooting.

The A-Series is designed and manufactured to UL standards.



Technical Specifications

A Series (VDC)						
Input Voltage	24 VDC - 180 VDC					
Output Current	Continuous current @ 40° C (A rms)	2	4	8	12	15
	Peak (A rms)	6	12	24	24	30
	Peak Current Time (sec.)	3				



Performance Specifications

Control Logic Voltage	Internal DC/DC converter		
Current Loop BW	2.5kHz		
Velocity Loop BW	400Hz		
PWM Frequency	16kHz		
Analog Input	+/-10V, Differential		
Input Impedance	40 kOhm		
Feedback	Tachometer: (+/-50V max.)		
Analog Output	+/-10V, Current monitor		
Digital Inputs	3 Inputs, 5-28VDC control voltage, 1x Enable/Reset, 2x Limit Switches		
Digital Outputs	Fault Output, 5-28VDC, 100mA max., Open Collector or 0~12V		
Commissioning/ Diagnostics	Jumpers, LEDs		
Operating Modes	Torque, Velocity		
Operating Ambient Temperature	0 °C to 50 °C (Shutdown 80 °C heatsink temperature)		
Relative Humidity	5 - 95% non-condensing		
Weight	1.0lbs (0.45kgr)		

Adjustments

Peak Current	Potentiometer, 0 to (6/12/24/30)
RMS Current	Potentiometer, 0 to (2/4/8/12/15)
Signal Command	Potentiometer, Input Scaling
Balance	Potentiometer, Zero velocity offset
Compensation	Potentiometer, System response
Tachometer	Potentiometer, Input Scaling
Operating Mode	Jumper Select: Velocity, Torque
Enable/Reset Input Logic	Jumper Select: Active Hi / Active Lo
Limit Switch Input Logic	Jumper Select: Active Hi / Active Lo
Fault Output Input Logic	Jumper Select: Active Hi / Active Lo

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Status LED Flash Codes

Constant Flashing	Servo Off
Solid	Servo On
1 Flash	Current Surge
2 Flashes	Over Voltage
3 Flashes	Over Temperature
4 Flashes	Over RMS current
5 Flashes	Limit Switch + Active
6 Flashes	Limit Switch - Active

SERVO DRIVE MODEL NUMBER



Note:

- 1. Selecting 48 VDC is for 24 48 VDC bus
- 2. Selecting 180 VDC is for 48 180 VDC bus

Examples:

A-48-15 A-180-4 A-180-15



A SERIES SERVO DRIVE



MOUNTING DRAWING, UNITS: MM (INCH)



DSP Automation, Inc.