



Description

The DigiDrive LP is a flexible OEM motor drive platform. The 16sq" PCB contains Anacon's AS901 motor control chip and special power circuitry. DigiDrive LP meets UL508c and CSA standard 22.2.No.18 and carries the c UL us mark.

Overview

- Low Power Variable Frequency Drive
- Speed control of single-phase induction motors
 - Permanent Split Capacitor
 - Shaded Pole
- Single Board
- Up to 2.8Amp output
- True PWM output offers superior control to triac methods.
 - Low distortion
 - More efficient
 - Lower acoustic noise
 - Better speed regulation
 - Longer motor life
- Factory Configurable Software Parameters
 - Accel, Decel, Fmin, Fmax, etc.

Features

- 5 – 127 Hz Frequency Range
- Speed control signal
 - 0 - 5V analog, non-isolated
 - Isolated 100Hz PWM optional (contact factory)
 - Serial control, non-isolated, 9600 baud (consult factory)
- Disable signal to force shut-down
- 0.11" spade signal connections
- Power LED
- Uses Anacon's AS901 Motor Control IC
- Universal 50/60Hz input frequency



Specifications

- 115, 230 or 277Vrms (+/-10%) Input
- 115, 230 or 277Vrms (+/-10%) Output
- 2.8A (rms) Max Output Current
- 4.0A (rms) Max Input Current
- 2W stand-by power
- Power Line Filter for FCC Class A compliance
- Thermal shutdown
- Mounting plate and isolated heatsink bar
- 80°C Max heatsink temperature
- Isolated PWM speed control (optional, factory enabled)
- In-rush and fuse protection
- 1/4" spade power and motor connections
- 5.0" x 4.0" x 2.0" approximate size

Hardware Options

- 10K potentiometer (consult factory)
- Flying leads for power and motor connections

Factory Configurable Parameters

- Speed Input Source (PWM, 0-5V, Serial)
- Run/Stop Threshold (Stop %, Start %)
- Fail-Safe Timeout Duration
- Frequency Range (Fmin, Fmax)
- Accel / Decel (Hz/sec)
- Voltage vs. Frequency Curve (16 points)
- Boost Time and Boost Frequency
- Boost Voltage Ramp (Start/Stop Voltage)



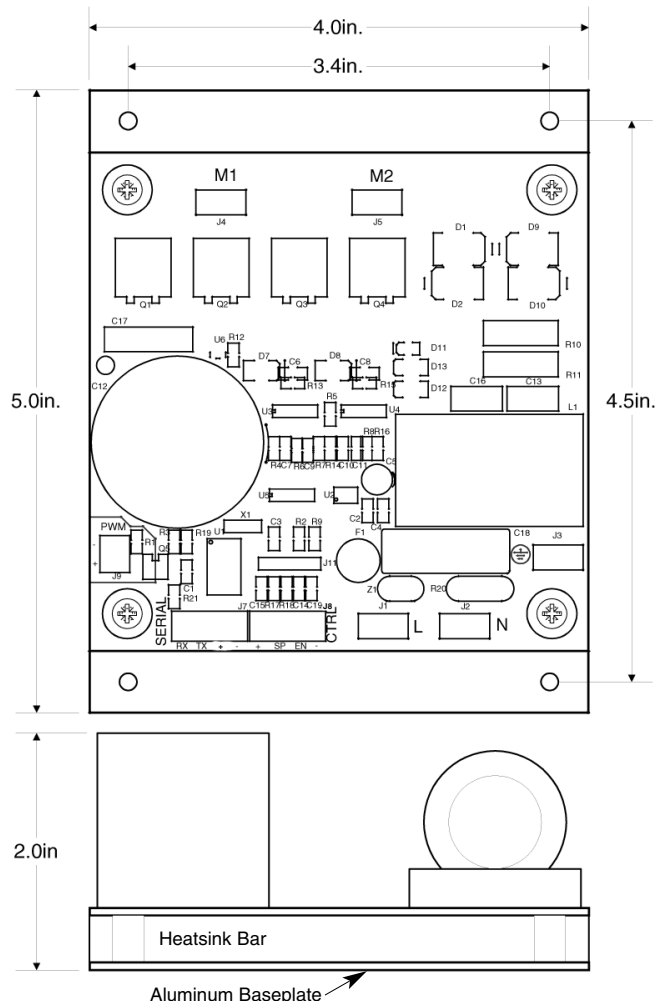
Serial Commands

Serial communications commands are detailed in the “AS901 Serial Command” datasheet.

Electrical Connections

Connector	Name	Function
J1	LINE	Power Input
J2	NEUTRAL	Power Input
J3	EARTH	Earth Ground
J4	MOTOR1	Motor Output
J5	MOTOR2	Motor Output
J7-1	RX	Serial Data Receive – Active High
J7-2	TX	Serial Data Transmit – Active High
J7-3	+5V	+5V Output @ 1mA
J7-4	- COM	Logic Common
J8-1	+5V	+5V Output @ 1mA
J8-2	SPEED	0-5V Speed Input Signal
J8-3	ENABLE	Connect to Logic Common to disable drive output
J8-4	- COM	Logic Common
J9-1	SPD +	Optional 100Hz PWM speed control
J9-2	SPD -	Optional 100Hz PWM speed control

Mechanical Drawing



Ratings for Standard Drives

	SO164002A	SO174003A	SO184003A
Input Voltage – typical (RMS)	115V	230V	277V
Input Voltage – range (RMS)	103 – 127V	200 – 253V	249 – 305V
Input Frequency – range	45 – 65Hz	45 – 65Hz	45 – 65Hz
Output Current – (1) (RMS)	2.8A	2.5A	2.3A
Output Power – (1)	250W	425W	475W
Typical Motor Rating – (1)	1/4 HP	1/3 HP	1/3 HP
Output Current – (2) (RMS)	2.0A	1.8A	1.8A
Output Power – (2)	175W	310W	350W
Typical Motor Rating – (2)	1/6 HP	1/4 HP	1/4 HP

(1) At 25°C Ambient. Mounted to 2°C/W heatsink in still air.

(2) At 40°C Ambient. Mounted to 2°C/W heatsink in still air.

For assistance call 888-456-3398

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