

MLA05101 - Microstep Driver

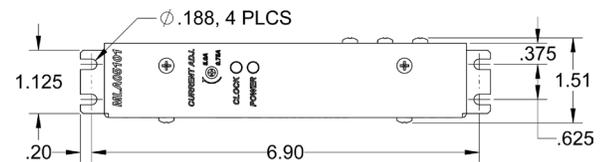
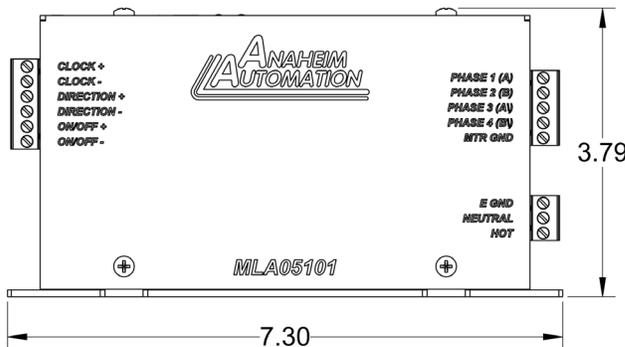


FEATURES

- 120VAC Power Input
- 0.75 - 1.5 Amp Current Range
- 2000 Steps per Revolution
- Optically Isolated Inputs
- Short Circuit Protection
- Automatic Current Reduction
- Sinking and Sourcing Inputs
- Power and Clock LEDs
- Motor ON/OFF Input



DIMENSIONS



DESCRIPTION

If you're looking for big time stepper performance from a small driver, the MLA05101 is your answer. This powerful microstepping driver provides excellent torque in a compact and low profile enclosure. The MLA05101 is also very easy to use. It features rugged terminal blocks, a rotary pot for current settings, and a visible silkscreen for easy installation.

Versatile as well as powerful, the MLA05101 has a wide amperage range. It is designed to handle small stepper motors rated as low as 0.75 Amps/phase, mid-sized steppers such as NEMA 23's and 34's, as well as larger motors with current ratings up to 5.0 Amps. It operates from an AC voltage of 90-132 Volts, making it a great fit for almost any stepper application.

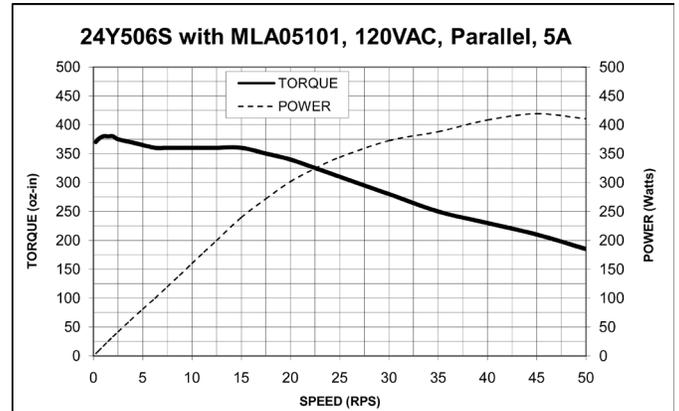
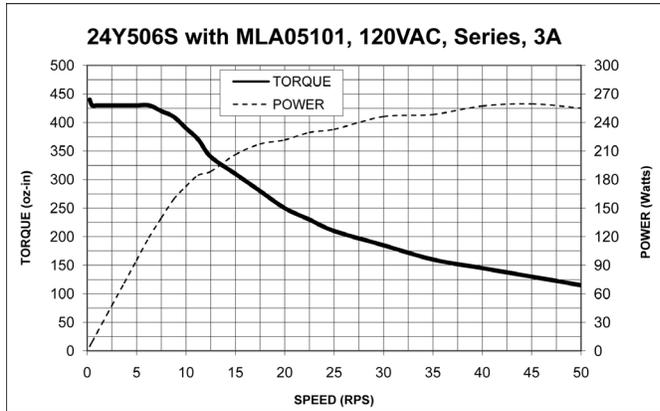
The MLA05101 features optically isolated inputs that are 3.5 - 8.6VDC compatible. The clock input can be set to receive either sinking or sourcing clock signals at frequencies up to 100KHz. The driver also features direction control, motor on/off capabilities, and a built in short circuit and miswire shutdown protection.

The MLA05101 is a bipolar type driver designed for use with 4, 6, or 8 lead stepper motors, making it compatible for series and parallel installations. The driver has a 2000 steps per revolution or 0.18° per step resolution, with respect to a 1.8° stepper motor. It also has a motor current reduction feature that will help keep stepper motors cool at standstill, and LEDs that indicate power and pulses being received.

Ideal Applications:

Automated machinery or processes that involve food, cosmetic, or medical packaging, labeling, or tamper-evident requirements, cut-to-length applications, electronic assembly, robotics, factory automation, special filming and project effects, medical diagnostics, inspection and security devices, conveyor and material handling systems, metal fabrication (CNC machinery), pump flow control, XY and rotary tables, equipment upgrades or wherever precise positioning or speed control is required.

Torque Speed Curves



Specifications

Power Requirements: 90 - 132 VAC

Output Current Range: 0.75 - 5.0 Amps (Peak)

Microstepping Resolution: 2000 Steps/Revolution (Div-by-10)

Input Signal Voltage: 3.5 - 8.6 VDC

Input Clock Frequency: 0 - 100 kHz

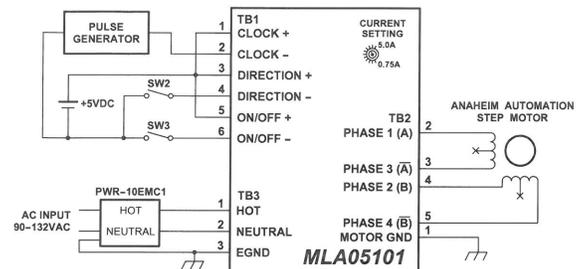
Minimum Input Current:
(Isolated Inputs) 1.0 mA

Storage Temperature: 0° - 50° C

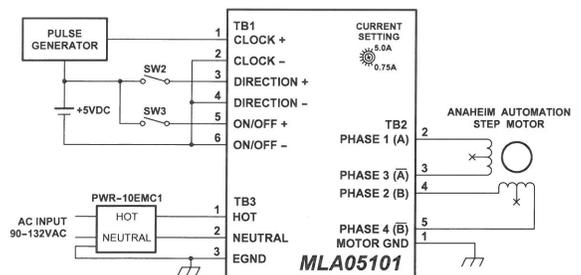
Absolute Maximum Driver
Temperature: 80° C

Driver Type: Bipolar, Compatible with 4, 6, and
8 Lead Motors. Series or Parallel
Connection

Sinking Inputs



Sourcing Inputs:



*Note: The 10EMC1 filter may be required at the power input of the MLA05101 Driver.

Additional Ordering Information

Model #	Description	Input Voltage
PCL601	Single Axis Simple Programmable Controller, RS232/485 Compatible	24 VDC
PCL601USB	Single Axis Simple Programmable Controller, USB Compatible	24 VDC
PWR-10EMC1	Dual Stage RFI Power Line Filters	90-250 VAC
LIN-AA4254	110 Volt Line cord with DNF18-250-FIB connectors (when using the PWR-10EMC1).	