Stepper motor Driver

Leadshine

Analog Driver
Model MD882

Analog Technology, max. 80VDC / 8.2A

Product Description:

The MD882 is a high performance microstepping drive based on pure-sinusoidal current control technology. Owing to that and the self-adjustment technology (self-adjust current control parameters) according to different motors, the driven motors can run with less noise, generating less heat, move smoother and have better performance at higher speed than most of the drives on the market..

Features:

- High performance, cost-effective
- Supply voltage up to +80 VDC, Output current up to 8.2A
- Output current selectable in 8 steps via DIP-switch
- Automatic idle-current reduction (in standstill mode) to reduce motor heating; function switchable
- Self-adjustment technology
- Pure-sinusoidal current control technology
- Pulse input frequency up to 300 kHz
- TTL compatible and optically isolated input
- 16 selectable resolutions in decimal and binary, up to 10,000 steps/rev
- Suitable for 2-phase and 4-phase motors
- Support PUL/DIR and CW/CCW modes
- Short-voltage, over-voltage, over-current protections

Electrical Specifications:

Parameters	Min	Typ.	Max	Unit
Output current	1.8	-	8.2 (5.86 RMS)	A
Supply voltage	+24	+68	+80	VDC
Logic signal current	7	10	16	mA
Puls input frequency	0	-	300	kHz
Insulation resistance	500			MΩ

Further Specifications:

Microsteps / 1,8 °	400		10000
PUL / PUL CW		X	
Double pulse CCW		X	
NEMA sizes	17		34
Motor type Mecheltron	42BYGH-XXXX		86BYGH-XXXX

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Mechanical Specifications: mm [inch]
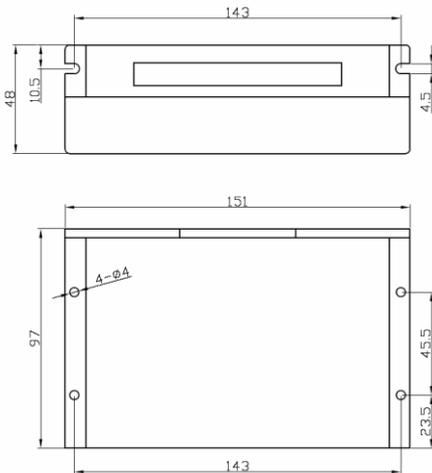
Applications:

Suitable for a wide range of stepping motors of NEMA sizes 17,23 and 34 (42x42 mm to 86x86 mm). It can be used in various kinds of machines, such as X-Y tables, engraving machines, labeling machines, laser cutters, pick-place devices, and so on. Particularly well suited for applications where low noise levels, less heat development, high speed and high precision are desired.

Typical Connection Schematic:

A typical system consists of stepper motor, stepper motor driver, power supply and controller. The following image shows a typical connection schematic:


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R=0 if VCC=5V;
R=1K(Power>0.125W) if VCC=12V;
R=2K(Power>0.125W) if VCC=24V;
R must be connected to control signal terminal.
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