SSD2608H Close-loop Driver

Feature

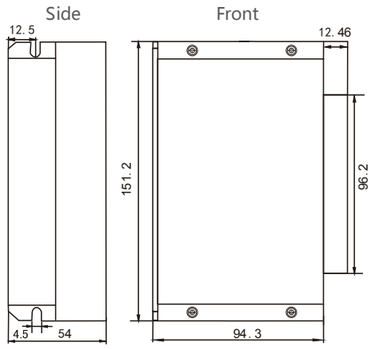
- 32 bit DSP control technology
- Digital and analog combination with advanced power angle close-loop control
- Current automatically change according to load
- 16 constant-torque microstep settings, 200 microsteps the highest
- Suitable for 57~86mm (NEMA 23~34) close-loop motor
- Photoelectric isolated signal input/output, high anti-interference ability
- 200Kpps pulse response frequency
- Input voltage range: DC24~80V/ AC20~80V/DC30~110V
- Fault protection: over current, over voltage, low voltage protection, position warning
- Small size: 152*95*54mm, 0.5kg

Description

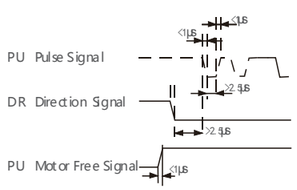
SSD2608H takes the advantages of 32-bit DSP control technology and power angle control technology, maximum speed reaches more than 3000rmp. It's high-speed torque attenuation is much lower than ordinary open-loop stepper drive, which can greatly enhance the high-speed performance and torque efficiency, and reduce motor heating/vibration, thus to enhancing machine's efficiency and accuracy.

The use of load-based current control technology can effectively reduce motor heat, extend motor life. The position and warning output signal will assist host computer to monitor and control. And the position warning function ensures safe operation of processing machine.

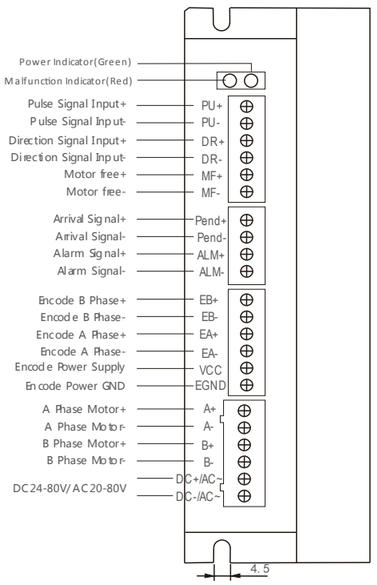
Installation Dimensions (mm)



Input Signal Timing Diagram



Driver Connection



SSD2608H Microstep Setting

Microstep	2	4	8	16	32	64	128	256	5	10	20	25	40	50	100	200
PU/Rev	400	800	1600	3200	6400	12800	25600	51200	1000	2000	4000	5000	8000	10000	20000	40000
SW8	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
SW6	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
SW5	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF

SW4 Reservation

SW3 Position Error Value:OFF=90°, ON=360°

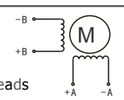
SW2 Motor Rotate Direction:OFF=CW, ON=CCW

SW1 Single/Double Signal:OFF=PU&DR, ON=CW&CCW

SSD2608H Motor Selection

Model No.	Voltage	Max. Current	Matched Motors		Motor Encoder
					Last letter of motor item No. shows the motor lines.1 means 1000 lines,2 shows 2500 lines.If user need 2500 lines,then change last letter from "1" to "2".
SSD2608H	AC(20-80V)	6A	60	YK260EC86C1	
	DC(30-110V)		86	YK286EC80C1 YK286EC118A1 YK286EC118B1 YK286EC156B1 YK286EC156C1	

Terminal Introduction

Mark	Function	Specification
PWR	Power Indicator	When power on, the green LED lights
ALM	Malfunction Indicator	Flicker 1 time:Over-current or short-curcuit;Flicker continuously two times:Over-voltage;Flicker continuously 3 times:Under-voltage;Flicker continously 5 times:tracking error or overproof.
PU+	Input signal photoelectric isolate+	+5V is standard signal input voltage.Add a resistor to shift to 24V input voltage.
PU-	SW1=OFF PU is Pulse Signal	Effects on falling edge ,motor runs one step as pulse input change from high to low.Input resistance is 220Ω.Requirement:input low:0-0.5V,input high:4-5V, pulse width>2.5μs
	SW1=ON PU is clockwise pulse signal	
DR+	Direction input signal pulse +	+5V is standard signal input voltage.Add a resistor to shift to 24V input voltage.
DR-	SW1=OFF PU is Pulse Signal	Use it to change the direction. Input resistance is 220Ω. Requirement:low level:0-0.5V,high level:4-5V
	SW1=ON PU is CCW Pulse signal	Effects on falling edge,motor goes one step as the pulse input change from "high" to "low". Input resistance is 220Ω.Requirement:low level:0-0.5V,high level:4-5V.Pulse width>2.5μs.
MF+	Input signal photoelectric isolate+	+5V is standard signal input voltage.Add a resistor to shift to 24V input voltage.
MF-	Motor Free Signal -	When effects, it cut off motor current, the driver stops working and sets the motor free.
Pend+	Arrival Output Input +	When driver finished input pulse directive,and Arrival siganl effective.Pend+ connect pull-up resistor to power supply positive,Pend- connect with power suply negative. Max drive current is 50mA.
Pend-	Arrival Output Input -	
ALM+	Arrival Signal Input +	When Over-current,over-voltage,low-voltage or error happens,Alarm Siganl is effective. ALM+ connect with pull-up resistor to power supply positive and ALM- connect with Power suppy negative.
ALM-	Arrival Signal Input -	
EB+/EB-	Encoder B phase input +/-	Encoder B phase input +/-
EA+/EA-	Encoder A phase input +/-	Encoder A phase input +/-
VCC	Encoder Power Supply	The 5V power supply for Encoder.
EGND	Encoder GND	Encoder Ground.
+A,-A	Motor Connection	
+B,-B		