YKD3608MH 3 Phase DSP Stepper Drive

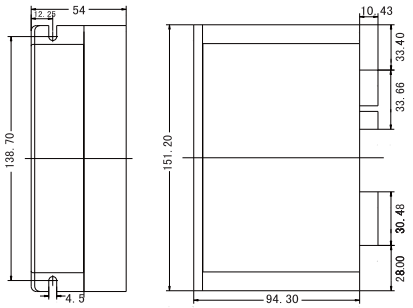
Features

- 32-bit DSP control, low noise and superior vibration performance
- 16 constant torque microstep, the highest resolution is 60000 steps/rev.
- Smooth and accurate current control, effectively reduce motor heating
- The highest pulse response frequency is 350Kpps
- When the pulse stops over 200ms, the motor current is halved
- Excellent smoothness in low frequency microsteps
- Optically isolated differential signal input, strong anti-interference ability
- Drive current is adjustable below 5.9A
- Voltage input range: AC18~80V
- With over voltage, under voltage etc. fault protection
- Small size, volume 151*94*54 (mm³), weight 0.65kg
- Suitable for 57-86mm(NEMA23-34) 3 phase open-loop stepper motors.

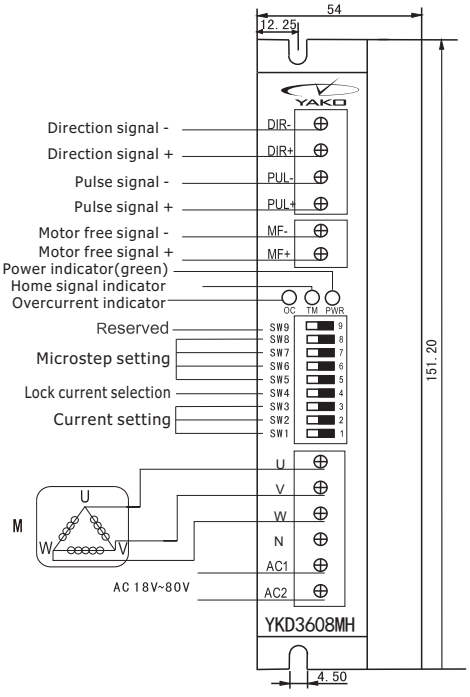
Application: Mainly used in engraving machines, laser equipment, labeling machines, electronic equipment, advertising equipment, packaging equipment

Dimensions

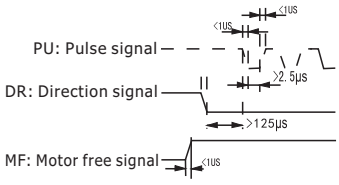
Dimensions (mm)



Drive Wiring Diagram



Input Signal Timing Diagram



YKD3608MH Microstep Setting

PU/REV	400	500	600	800	1000	1200	2000	3000	4000	5000	6000	10000	12000	20000	30000	60000
SW5	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
SW6	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW7	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
SW8	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

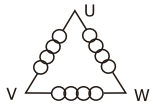
SW9 : Reserved

YKD3608MH Current Setting

Current RMS	Default	2.3	2.9	3.5	4.1	4.6	5.2	5.9
Current Peak	Default	3.2	4.0	4.9	5.7	6.4	7.3	8.3
SW3	ON	ON	ON	ON	OFF	OFF	OFF	OFF
SW2	ON	ON	OFF	OFF	ON	ON	OFF	OFF
SW1	ON	OFF	ON	OFF	ON	OFF	ON	OFF

SW4:OFF=Half Current
ON=Full Current

Terminal Introduction

Symbol	Function	Specification
PWR	Power indicator	When power on, the green indicator lights up.
TM	Work indicator	Pulse signal indicator, when there is continuous pulse input, the green indicator light flashes; when there is no pulse input, it is always on
O.C	Fault indicator	When over current or under voltage, the red indicator lights up.
DIR-	Direction signal +	Effects on falling edge, the motor moves a step when pulse goes from high to low. The input resistance is 220Ω. It requires: low level 0~0.5V, high level 4~5V, pulse width>2.5us.
DIR+	Direction signal -	Connect with the signal power supply, 5V~24V can drive, need to connect a current limiting resistor with DR- when >5V
PUL-	Pulse signal -	Effects on falling edge, the motor moves a step when pulse goes from high to low. The input resistance is 220Ω. It requires: low level 0~0.5V, high level 4~5V, pulse width>2.5us.
PUL+	Pulse signal +	Connect with power supply, 5V~24V can drive, need to connect a current limiting resistor with PUL- when >5V
MF-	Motor free signal -	When effective (low level), the motor coil current is turned off and motor free.
MF+	Motor free signal +	Connect with power supply, 5V~24V can drive, need to connect a current limiting resistor when >5V
+V	Power supply +	AC18-80V
-V	Power supply -	
U	Motor connection	
V		
W		

Notice

1. Do not reverse the power supply, input voltage should not exceed AC80V.
2. The input control signal level is 5V. The current limiting resistor needs to be connected when > 5V. (Please refer to page 4 for connection)
3. When overcurrent, overvoltage or undervoltage, the O.C light flashes, please restart the power supply after eliminating motor connection and other short-circuit faults.
4. The green PWR indicator lights up when the drive is powered on.
5. When there is a pulse input, the TM indicator flashes; when there is no pulse input, the TM indicator is always on.