YKB2608MG/H With microstep Driver

Feature

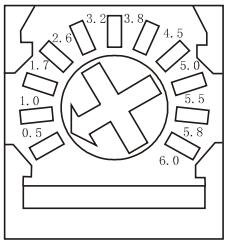
- High performance, low price
- Provides 12/8 kinds microstep selection,upmost microstep can be set to 200x.
- Special circuit design,reduce noise, enhance steadiness.
- The upmost pulse response frequence amounts to 200Kpps
- Once the pulse stops for 100ms,phase current automatically cut by half.
- Bipolar constant current chopper control
- Photocoupler isolated input/output
- Adjustable drive current range from 0.5A/phase-6.0A/phase
- Single power input, voltage range from DC24-80V
- Protection circuit
  ----Overheat protection
  ----Overcurrent, under voltage protection
- Dimension:45x136x92mm,Net Weight:0.5kg.

Description

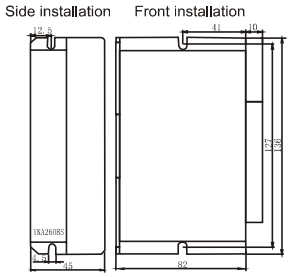
YKB2608MG/H is a constant torque high performance driver with microstep, voltage range from DC24-80V，single power input. It can match two phase hybrid step motors whose rated current under 6.0A、flange size range from 57～86mm.

Owe to bipolar constant current chopper control of the driver circuit, the motor can run smoothly and hardly has any noise. Rising the voltage can greatly improve high speed performance and output torque of the motor. Once the pulse stops for 100ms，the phase current will automatically cut by half, which can reduce chances of overheat. Users can operate the driver with microstep in low speed occasion.The upmost microstep can be set to 200.

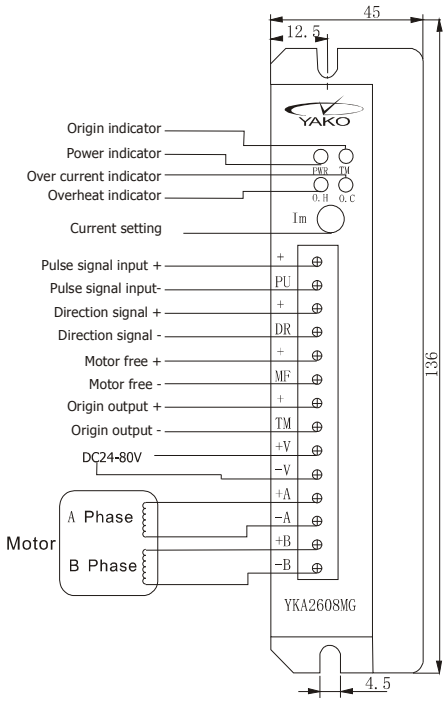
Running current setting



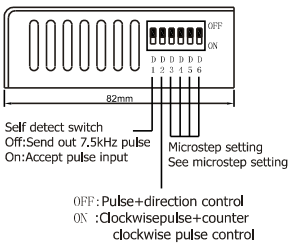
Installation dimensions(Unit:mm)



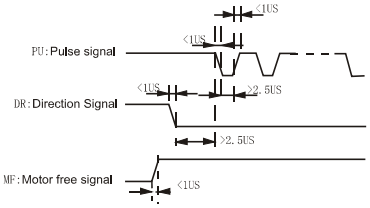
Driver Connection



Function setting



Input signal timing diagram



YKB2608MG Microstep setting

Microstep	1	2	4	5	8	10	20	25	40	50	100	200	200	200	200	200
D6	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF
D5	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF	ON	ON	OFF	OFF
D4	ON	ON	ON	ON	OFF	OFF	OFF	OFF	ON	ON	ON	ON	OFF	OFF	OFF	OFF
D3	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
D2	ON:Double Pulse.PU is Clockwise pulse Signal;DR is Counter Clockwise pulse Signal.															
	OFF:Single Pulse.PU is pulse Signal;DR is Position pulse Signal.															
D1	Self detect switch															

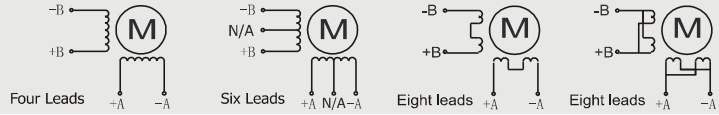
Note:D1,Self detect switch,when D1=OFF accept external signal; when D1=ON driver internal send 7.5kHz pulse,then the microstep should be set as 10-50.

YKB2608MH Microstep setting

Microstep	1	2	4	5	8	10	20	25
D6	ON	OFF	ON	OFF	ON	OFF	ON	OFF
D5	ON	ON	OFF	OFF	ON	ON	OFF	OFF
D4	ON	ON	ON	ON	OFF	OFF	OFF	OFF
D3	NULL							
D2	ON:Double Pulse.PU is Clockwise pulse Signal;DR is ...							
	OFF:Single Pulse.PU is pulse Signal;DR is Position pulse Signal.							
D1	Self detect switch							

Note:Self detect switch,when D1=OFF accept external signal; when D1=ON driver internal send 7.5kHz pulse,then the microstep should be set as 16-64.

Terminal Assignment

Mark	Function	Instruction
POWER	Power indicator	When power on, the green LED lights
TM	Origin/Pulse output indicator	Passing the origin or there is pulse output, the green LED lights
O.H	Overheat indicator	When overheat occurs, the red LED lights
O.C	Overcurrent/Under voltage indicator	When current exceeds rated value or voltage lower rated value, the red LED lights.
Im	Phase current setting adjuster	Turning it clockwise will increase the current,clockwisely decrease current.
+	Input signal positive side	+5V is standard signal input voltage.But we can revise it according to clients' request.
PU	D2=OFF,PU is pulse signal	Effects on falling edge ,the motor goes one step as the 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
	D2=ON,PU is clockwise pulse signal	
+	Input signal positive side	+5V is standard signal input voltage.But we can revise it according to clients' request.
DR	D2=OFF,DR is direction control signal	Use it to change the direction. Input resistance is 220Ω. Requirement:low level:0-0.5V,high level:4-5V, pulse width>2.5μs
	D2=ON,PU is counter clockwise pulse signal	
+	Input signal positive side	+5V is standard signal input voltage.But we can revise it according to clients' request.
MF	Motor free signal	When effects, it cut off motor current, the driver stops working and sets the motor free
+	Input signal positive side	+5V is standard signal input voltage.But we can revise it according to clients' request.
TM	Origin output signal negative side	TM+ connects to the resistor,TM- connects to GND. Max output current 50mA,max voltage 50V.
+V	Power+	DC24-48V
-V	Power-	
AC,BC	Connect to the motor	
+A,-A		
+B,-B		

Caution

1. Do not reverse the power input,input voltage should not exceed DC80V。
2. Input logic should be 5V，otherwise it should connect a resistor
3. Due to the special control circuit, this module for 4 leads or 6 leads or 8 leads step motors.
4. O.H is malfunction indicator. Once the driver temperature exceeds 70°C,the current will be cut off automatically and the driver will resume working till the temperature drops to 50°C. If this happens,please install ventilation equipment.
5. Once over current (short circuit)/under voltage occur, LED O.C lights, please shut off power and check the electricity circuit to solve the problem, then restore power supply
6. PWR is power indicator，it lights when power on
7. Passing the origin or there is pulse output, TM LED lights