

HB3422 & 86BYG350-156

Three-phase stepper motor 86BYG350-156

Basic introduction:

- Motor frame 86 * 86
- Fuselage length 156mm
- Shaft 14mm
- There keyway 4 * 4 * 25 and keyway 5 * 5 * 25 optional
- Operating voltage 220V
- rated current 4A
- Motor power button 12Nm
- Maximum speed of 1200rpm
- Rated speed 1000rpm

Motor superior quality, high positioning accuracy, widely used in automation equipment industry, engraving machines, packaging machines, non-standard equipment, XY-axis motion platform, CNC machine tools, precision machine tools, cutting machine, feeder, embroidery machines.

Fully sealed design, fully sealed so that the motor can easily deal with moisture, water vapor, dust and other applications, greatly improving the impact of external factors on the quality of the motor, enhance the quality of the motor.

Ample torque, the stepping motor Class A high temperature materials are used special materials resistant to high current, high current sufficient to ensure the continuous output torque.

Random equipped with 3 m power extension cable, users no longer need external power supply lines, both to ensure the quality, but also bring convenience.

Stepper motor driver HB3422

Driver features

- A16Gear angle constant torque subdivision, a maximum resolution of 60000step/turn
- Maximum reaction frequency up to200Kpps
- Step pulse stop over1.5sThe coil current is automatically reduced to a half of the setting current.
- Photoelectric isolated signal input/Free selection within the output DC5-24V range
- Driving current2.2/Is to4.8A/mutually,branch16Adjustable gear
- Single supply input, voltage range:AC60-270V
- Phase memory function (Note: input stops over3After the second, the driver automatically

memory at the time of the motor phase, re power up or MFThe signal from the low level to high power, the drive automatic recovery of motor phase.

Driver basic introduction:

The drive power supply voltage of AC 220V, 86 high pressure type /110 series stepper motor speed performance, after repeated tests, the motor speed can reach up to 900 /min at 600 rpm in the operation of the motor speed and torque are very stable. The current output of powerful (4.8A), pulse subdivision of up to 60000 step \ \ turn, effectively guarantee the accuracy of the motor, build quality, superior quality. Widely used in automation equipment industry, engraving machine, packing machine, non-standard equipment, XY axis platform, CNC machine tools, precision machine, cutting machine, feeding machine, embroidery machine, has been highly recognized by the majority of customers.

Characteristic

- A16Gear angle constant torque subdivision, the highest resolution60000step/turn
- Maximum reaction frequency up to200Kpps
- Step pulse stop over1.5sThe coil current is automatically reduced to a half of the setting current.
- Photoelectric isolated signal input/output
- Driving current2.2A/Is to4.8A/(phase3.3A/Is to6.0A/Phase)16Adjustable gear
- Single supply input, voltage range:AC110V-220V
- Phase memory function (Note: input stops over3AAfter the second, the driver automatically memory at the time of the motor phase, re power up orMFThe signal from the low level to high power, the drive automatic recovery of motor phase.

Current setting

Drive operating currentD1-D4Terminal settings, operating current for the normal operation of the output current setting switch (see table below)

Operating current(A)	HB3422	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6
	HB3722	1.3	1.6	2.1	2.3	2.5	3.0	3.2	3.5
D1	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
D2	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
D3	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON
D4	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON

Operating current(A)	HB3422	3.8	4.0	4.2	4.4	4.6	4.8	4.8	4.8
	HB3722	4.0	4.5	5.0	5.3	5.8	6.2	6.5	7.0
D1	ON	ON	ON	ON	ON	ON	ON	ON	ON
D2	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON
D3	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON
D4	OFF	ON	OFF	ON	OFF	ON	OFF	ON	ON

Subdivision setting

Driver subdivision by D5-D8 Terminal setting, Co16File, D9 and D10 Set for function. Schedule such as: fine score (pulse/Turn)

Fine fraction	400	500	600	800	1000	1200	2000	3000
D5	ON	ON	ON	ON	ON	ON	ON	ON
D6	ON	ON	ON	ON	OFF	OFF	OFF	OFF
D7	ON	ON	OFF	OFF	ON	ON	OFF	OFF
D8	ON	OFF	ON	OFF	ON	OFF	ON	OFF
Fine fraction	4000	5000	6000	10000	8000	20000	30000	60000
D5	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
D6	ON	ON	ON	ON	OFF	OFF	OFF	OFF

D7	ON	ON	OFF	OFF	ON	ON	OFF	OFF
D8	ON	OFF	ON	OFF	ON	OFF	ON	OFF
D9	ON, Double pulse: PU Forward stepping pulse signal, DR Reverse step pulse signal							
	OFF, Single pulse: PU Step pulse signal, DR Direction control signal							
D10	Automatic detection switch OFF External pulse, ON Internal drive 30turn/Speed (run)							

Be careful!

1. The input voltage can not exceed the exchange 220V;
2. Input control signal level 5V When higher than 5V When the current needs to be connected to the current limiting resistance;
3. Input pulse signal down along the effective;
4. Drive temperature over 80°C When the driver stops working, the fault indicator light ALM Light until the drive temperature is reduced to 50°C When the driver needs to be powered up again to resume work. Overheating protection, please install the radiator;
5. Over current (load short circuit) fault indicator ALM Light, please check motor wiring and other short circuit faults, excluding the need to re power recovery;
6. No motor fault indicator light ALM Bright, please check motor wiring, excluding the need to re power recovery.

Pin function description

Port definition	Joint pin number	Mark symbol	function	Notes
DB15	1	PUL+	Input signal photoelectric isolation positive terminal	meet +5V Power supply, +5V-+24V Can drive higher than +5V Current limiting resistor
	2	PUL-	DP9= OFF, PU Step pulse signal DP9= ON, PU Step pulse signal	When the pulse is changed from high to low, the motor goes one step further 220. Requirements:

				low level0-0.5V, high level4-5V, pulse
3	DIR+	Input signal photoelectric isolation positive terminal		width>2.5 S meet+5VPower supply,+5V-+24VCan drive higher than+5VCurrent limiting resistor
4	DIR-	DP9= OFF, DRDirection control signal		For changing motor steering. Input resistance220.Requirements: low level0-0.5V,
		DP9=ON, DRBackward stepping pulse signal		high level4-5V, pulse width>2.5 S
7	ENA+	Input signal photoelectric isolation positive terminal		meet+5VPower supply,+5V-+24VCan drive higher than+5VCurrent limiting resistor
8	ENA-	Motor release signal		Switch off the motor current when the motor is active (low) and the driver stops working
9	ALM+	Drive fault output signal		When the driver is over current and overheat, the driver outputs the fault signal
10	ALM-	Drive fault output signal		
11	RDY+	The driver is ready to output the signal to the photoelectric isolated positive end		The drive is in normal condition and is ready to accept the controller signal when the signal is active (low)
12	RDY-	The driver is ready to output the signal to the negative side of the photoelectric isolation		

Motor, power supply end	1,2	L,N	Power Supply	Power Supply : AC60-270V
	3	PE	Ground	The earth (inner drive housing)
	4	U	Motor plug pin1	130Motor plug pin1
	5	V	Motor plug pin2	130Motor plug pin3
	6	W	Motor plug pin3	130Motor plug pin5

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