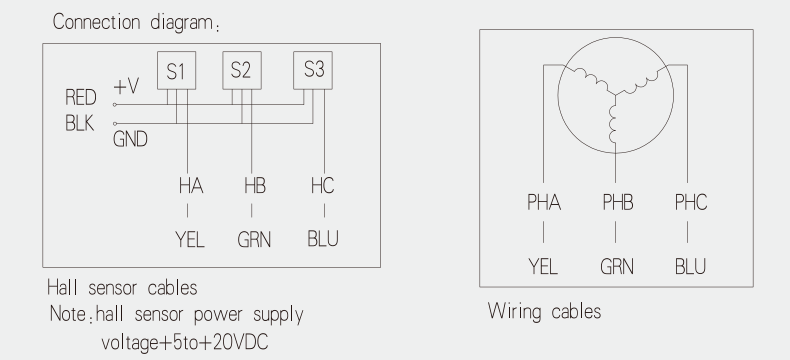


### 接线图 Wiring Diagram



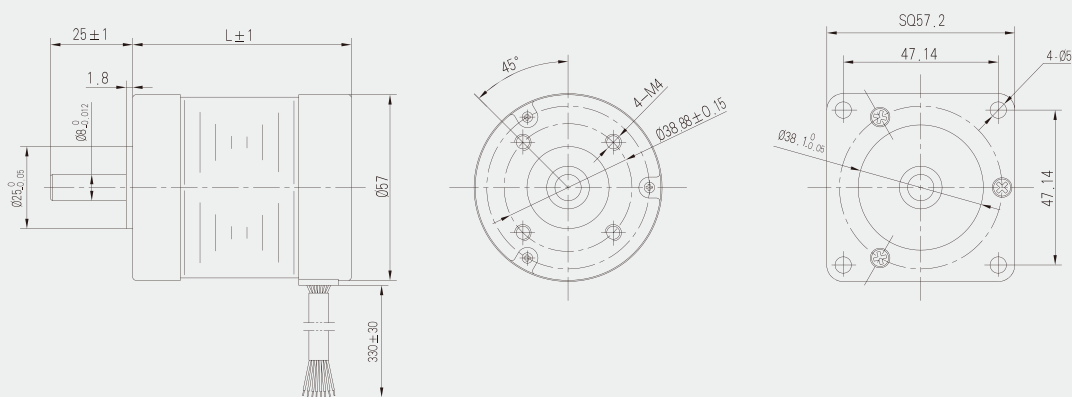
### 直流无刷电机 HIGH PERFORMANCE BRUSHLESS DC MOTOR 86BLF系列



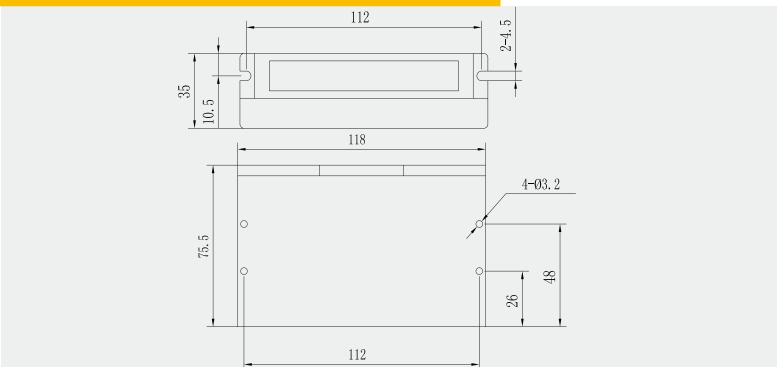
### 技术数据 Electrical Specifications

型号 Model	86BLF01	86BLF02	86BLF03	86BLF04
磁极数 Number of Poles				8
相数 Number of Phases				3
额定电压 Nominal Voltage (VDC)				48
额定转数 Rated speed (RPM)				3000
保持力矩 Continuous Torque (N-m)	1.4	1.05	0.7	0.35
输出功率 Output Power (Watts)	440	330	220	110
峰值力矩 Peak Torque1 (N-m)	4.2	3.2	2.1	1.05
峰值电流 Peak Current (Amps)	38.0	29.0	19.8	10.8
线电阻 Line to line Resistance (Ohms)	0.47	0.67	1.26	3.2
线电感 Line to line Inductance (mH)	0.71	0.91	1.30	2.1
转矩常数 Torque constant (N-m/Amps)	0.115	0.115	0.112	0.11
反电势 Back EMF (V/kRPM)	12.0	12.0	11.8	11.5
转动惯量 Rotor inertia (g · cm <sup>2</sup> )	1250	950	650	350
机身长 Body Length (L) (mm)	94	81	67	57
重量 Mass (kg)	2.75	2.2	1.75	1.1

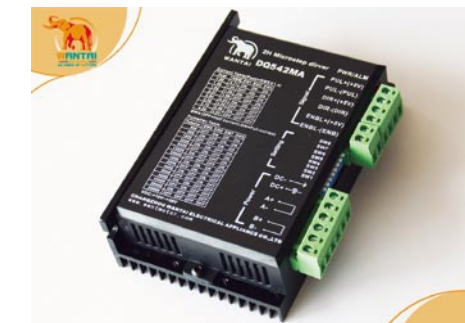
### 外型图 Mechanical Dimensions



### 安装尺寸 Mechanical Specification



### 混合式步进电机驱动器 HYBRID STEPPING MOTOR DRIVER DQ542MA



### 概述 Descriptions

DQ542MA型细分型两相混合式步进电机驱动器，采用直流18~50V供电，适合驱动电压18V~50V，电流小于4.0A外径42~86毫米的两相混合式步进电机。此驱动器采用交流伺服驱动器的电流环进行细分控制，电机的转矩波动很小，低速运行很平稳，几乎没有振动和噪音。高速时力矩也大大高于其它二相驱动器，定位精度高。广泛适用于雕刻机、数控机床、包装机械等分辨率要求较高的设备上。

DQ542MA is a type of two-phase hybrid stepping motor driver, the drive voltage of it is from 18VDC to 50VDC. It is designed for use with 2-phase hybrid stepper motor of all kinds with 42mm to 86mm outside diameter and less than 4.0A phase current. This circuit that it adopts is similar to the circuit of servo control which enables the motor to run smoothly almost without noise and vibration. Holding torque when DQ542MA runs under high speed is also significantly higher than the other two-phase driver, what's more, the positioning accuracy is also higher. It is widely used in middle and big size numerical control devices such as curving machine, CNC machine, Computer embroider machine, packing machines and so on.

### 特点 Features

- ▷ 平均电流控制，两相正弦电流驱动输出
- ▷ 直流18~50V供电
- ▷ 光电隔离信号输入/输出
- ▷ 有过压、欠压、过流、相间短路保护功能
- ▷ 十五档细分和自动半流功能
- ▷ 八档输出相电流设置
- ▷ 具有脱机命令输入端子
- ▷ 电机的扭矩与它的转速有关，而与电机每转的步数无关
- ▷ 高启动转速
- ▷ 高速力矩大
- ▷ Average current control, 2-phase sinusoidal output current drive
- ▷ Supply voltage from 18VDC to 50VDC
- ▷ Opto-isolated signal I/O
- ▷ Overvoltage, under voltage, overcurrent, phase short circuit protection
- ▷ 15 channels subdivision and automatic idle-current reduction
- ▷ 8 channels output phase current setting
- ▷ Offline command input terminal
- ▷ Motor torque is related to speed, but not related to step/revolution
- ▷ High start speed
- ▷ High holding torque under high speed

### 性能指标 Mechanical Dimmensions

输入电压	直流18~50V输入	Input voltage	18-50VDC
输入电流	小于4安培	Input current	< 4A
输出电流	1.0A~4.2A	Output current	1.0A~4.2A
功耗	功耗：80W；内部保险：6A	Consumption	Consumption：80W；Internal Insurance：6A
温度	工作温度-10~45℃；存放温度-40℃~70℃	Temperature	Working Temperature -10~45℃；Stocking temperature -40℃~70℃
湿度	不能结露，不能有水珠	Humidity	No condensation, no water droplets
气体	禁止有可燃气体和导电灰尘	gas	Prohibition of combustibile gases and conductive dust
重量	200克	weight	200G