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# SPECIFICATION

## Brushless DC Motor and Driver for Small CNC Milling and Drilling Machine

KL22-BLMC-300H

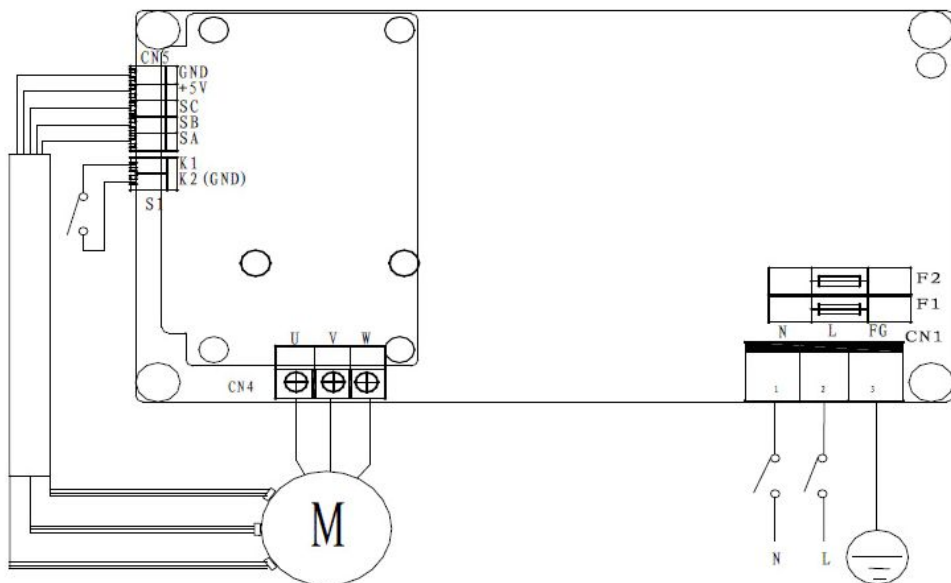
Input Voltage (V)	Input current	Power	Rated Speed	Min Speed	Motor Voltage
AC220V (50Hz)	16A (AC220V)	2200W	3000RPM	400RPM	DC300V

### Product Overview:

**Features :** This series of Brushless DC Motor Drive Unit is designed as specific systems for some small milling machine. This control system with perfect function, simple operation, capability of anti-interference, energy saving, low breakdown rate and easy maintenance which can achieve maximum torque and smoothness when at low speed.

The whole system include brushless DC Motor (123 IN- KL - 300HA) and brushless DC motor driver ( KL22-BLMC-300H ), Function Board(KL -2200), KL-LCD , as shown in Figure F1-1. Before the installation, Please choose the brushless DC motor with voltage, power and speed of the corresponding driver.

**Application :** Lathe , Milling Machine , Drilling Machine

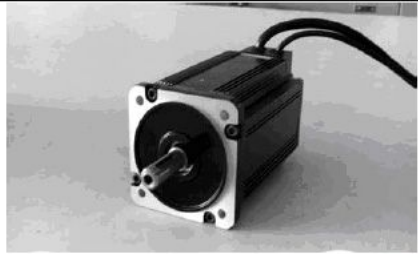
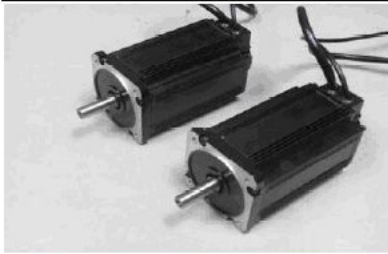


F1-1

**Please read safety warning below carefully before  
Installing and operating this controller**



1. This product should be installed and serviced by a qualified technician , electrician ,or electrical maintenance person familiar with its operation and the hazards involved
2. Insulated adjustment tools must be used when working under power .Do not touch the PCB board and junctions when working under power
3. All output and input terminals are NOT isolated from the incoming supply



Photos of brushless motor and control driver

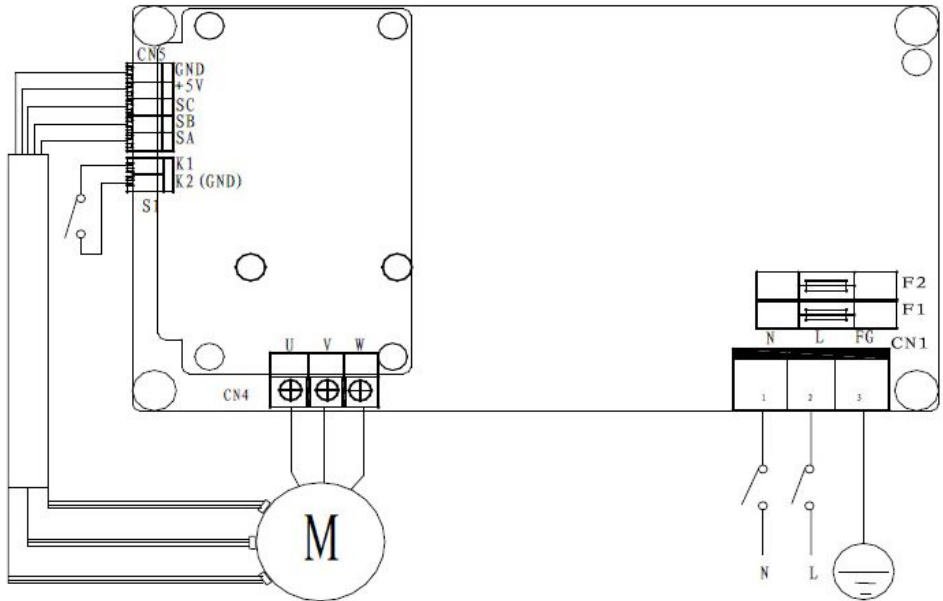
## The First Unit:

### DC Brushless Motor Drive Controller Unit (CNC Machine, Mechanical Equipment)

#### Main function:

- ◆ Start, Stop, accelerate or decelerating, forward and reverse function
- ◆ A LCD displays real-time speed, the current state, protection
- ◆ A flow, over-voltage, overload, voltage protection function
- ◆ Provide the user interface should choose function. Panel
- ◆ Speed 400~3000rpm
- ◆ Drivers can access AC220V Voltage

The controller description of the terminal block in  
Figure F1-1 and F1-2



F 1 - 2

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## Function of the terminal block

CN1						CN2					S2	
Electrical Wiring			Power Supply			Hall sensor					Functionswitch line	
U	V	W	FG	N	L	SA	SB	SC	+5V	GND	K1	K2

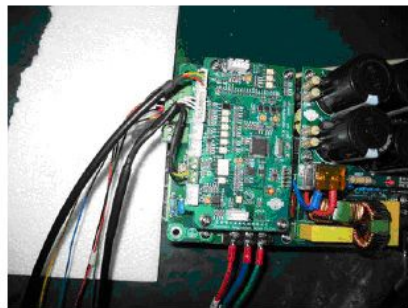
**CN1- U, V, W**, respectively, then the U-phase motor, V-phase, W phase;

FG then the earth, N then zero line, L line of fire then.

**CN2-Hall sensor**, respectively, from the electrical terminals of the Hall sensor line

**S2 of the K1, K2** can be used for the threshold switch, stop switch, such as the protective effect, as long as the K1, K2 short circuit, the controller immediately stop working.

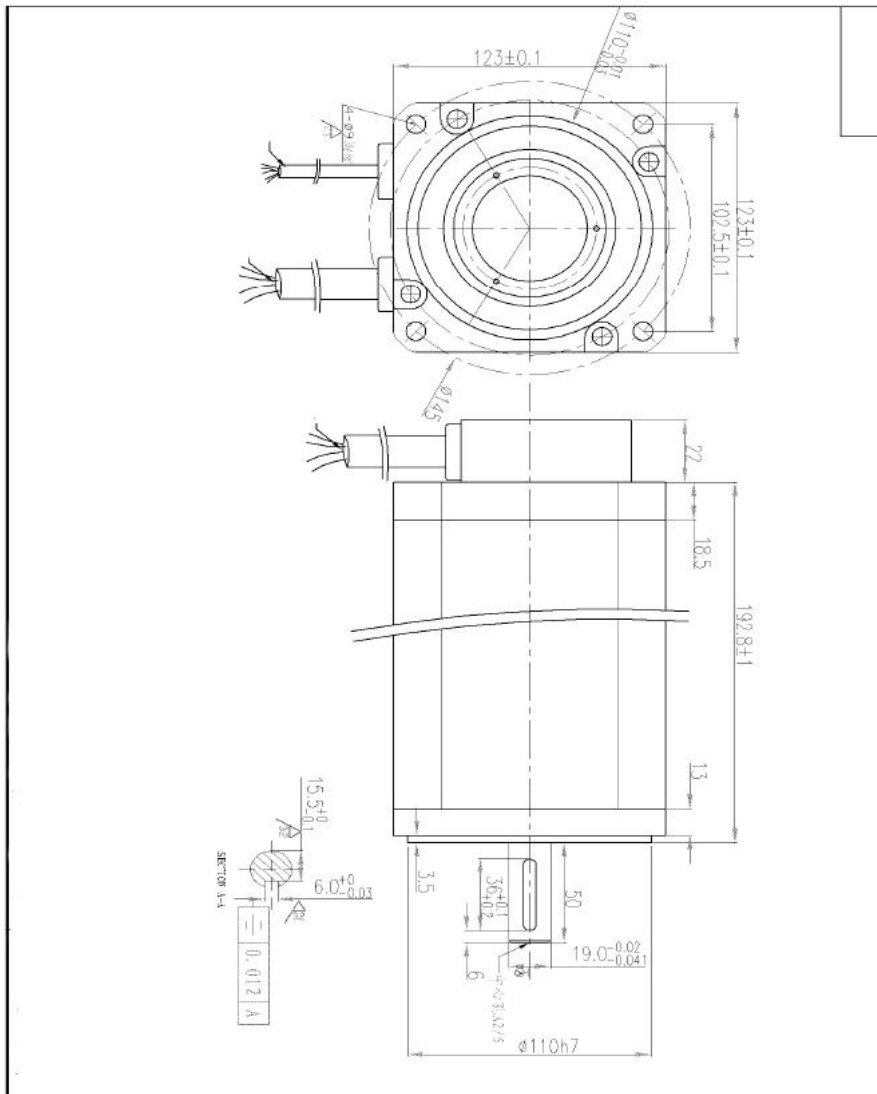
### Photos about the motor and controller



## Second Unit: DC Brushless Motor (2200W3000RPM)

(machine tool spindle motor, mechanical equipment motors)

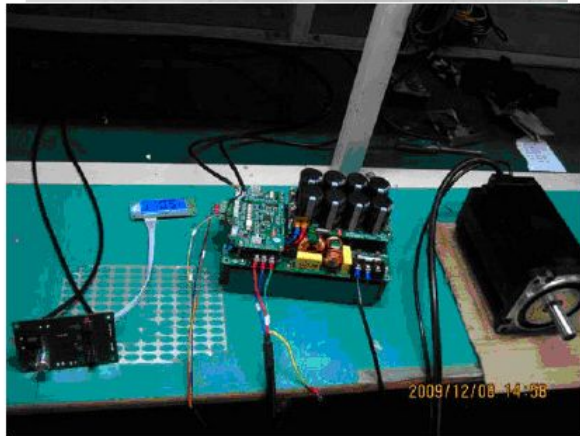
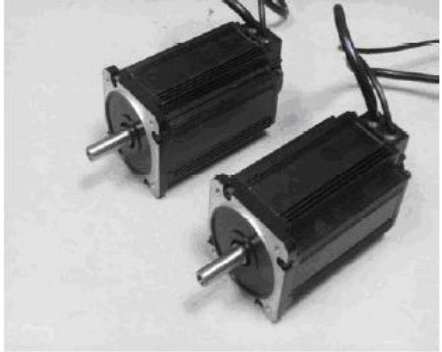
# 123# Brushless Motor Dimension Chart (2200W 3000RPM)





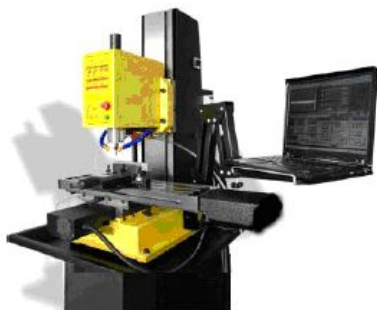
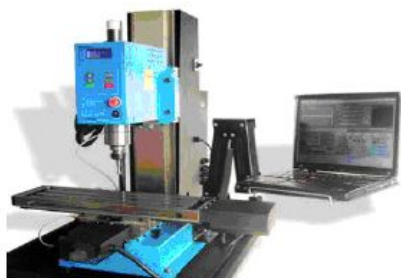
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Some Photos of the Brushless motor



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**This series of machine brushless motor and controller applications are as follows:**



Welcome to contact us directly, we will have a professional technical staff to answer your questions, Thank you choose our company's products.