JYQD_V6.3B Brushless DC Motor Driver Board

Model Number	JYQD_V6.3B
Operating temp.（℃）	-20—85 （℃）
Operating voltage （V）	7-48V
Max. current	10A
Cont.working current	8A
PWM speed control	PWM frequency:1-20KHZ; Duty cycle 0-100%
Analog voltage speed regulation(v)	0-5V
Speed pulse signal output	YES

Application notes:

1. Confirm that the voltage and power parameters of the motor not exceed the range of the driver board as specified.

2. This driver board is used for 3-phase brushless sensorless motor, but not suit for all 3-phase brushless sensorless motors directly. If the driving effect is not good (such as starting jitter, reversing, the motor noload working current is too large, the speed is not stable, the efficiency is low, and can't start-up with load.) Customers can adjust the resistance and capacitance of the driver board according to the actual situation to achieve the best driving effect (see the attachment for how to do the adjustment)

3.JYQD_V6.3B drive board is bare board, drive power below 100W motor does not need to force heat dissipation, need to ensure normal ventilation.

4.The 5V output port on the driver board is prohibited from connecting to external electrical equipment. It is only suitable for connecting external potentiometers and switches to this board for speed regulation and reversal.

5.The Signal on the JYQD_V6.3B driver board is the motor speed pulse output signal, and the output current is less than 5mA.

Driver Board Diagram

Port Description

1.Control Port

GND — Used for Driver board internal control

VR — Speed control port. Analog voltage speed regulation 0V-5V speed regulation, linear speed regulation from low to high. PWM speed regulation needs to be grounded with the driver board.

Z/F — Rotating direction control ports.Connect 5V or no connect in one direction, connect GND to the other direction.

Signal — Motor speed pulse signal output port, 5V pulse signal

5V — Driver board internal output voltage, external potentiometer or switch for speed adjustment and reversing operation.

2. Power Port

P+/VCC — DC +

P-/GND — DC -

MC — Motor Phase C

MB — Motor Phase B

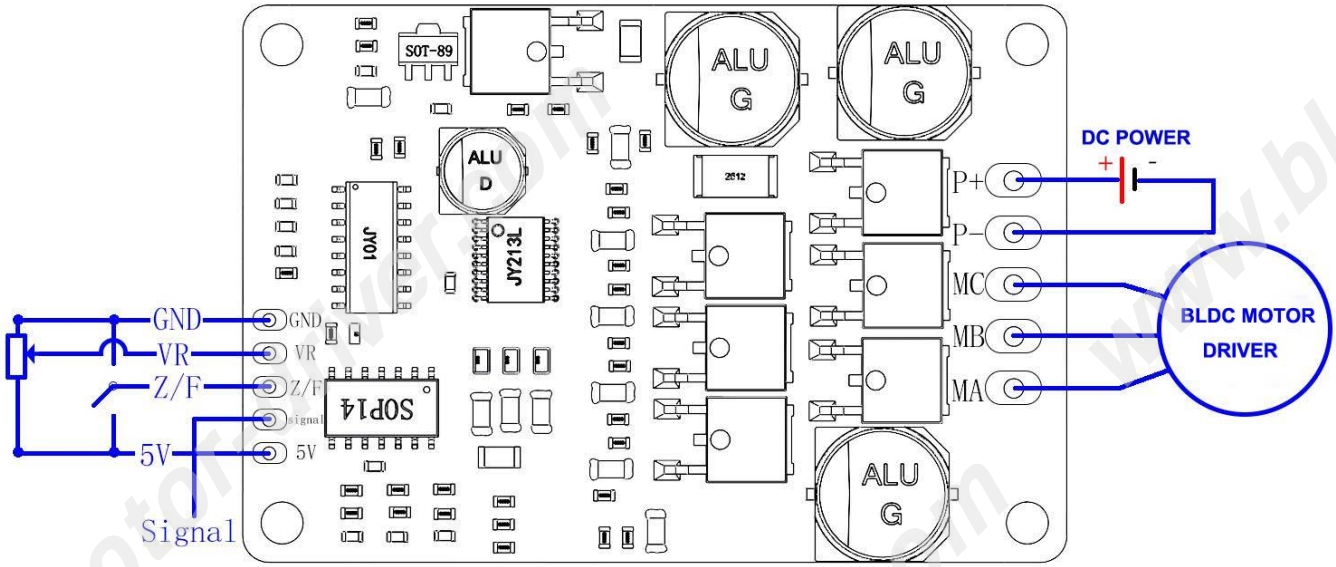
MA — Motor Phase A

3. Please pay attention to the motor phase wire and Hall wire not to be too long. It will cause signal interference If the wire is too long.

4. Control port distance: 2.54mm,Power port distance:3.96 mm.

5. Pay attention to the insulation between the driver MOSFET and the heatsink or the installation plate.

Wiring diagram



Dimensional drawing

Unit: mm
Weight: 17g