

# JKBLD120 BLDC MOTOR DRIVER

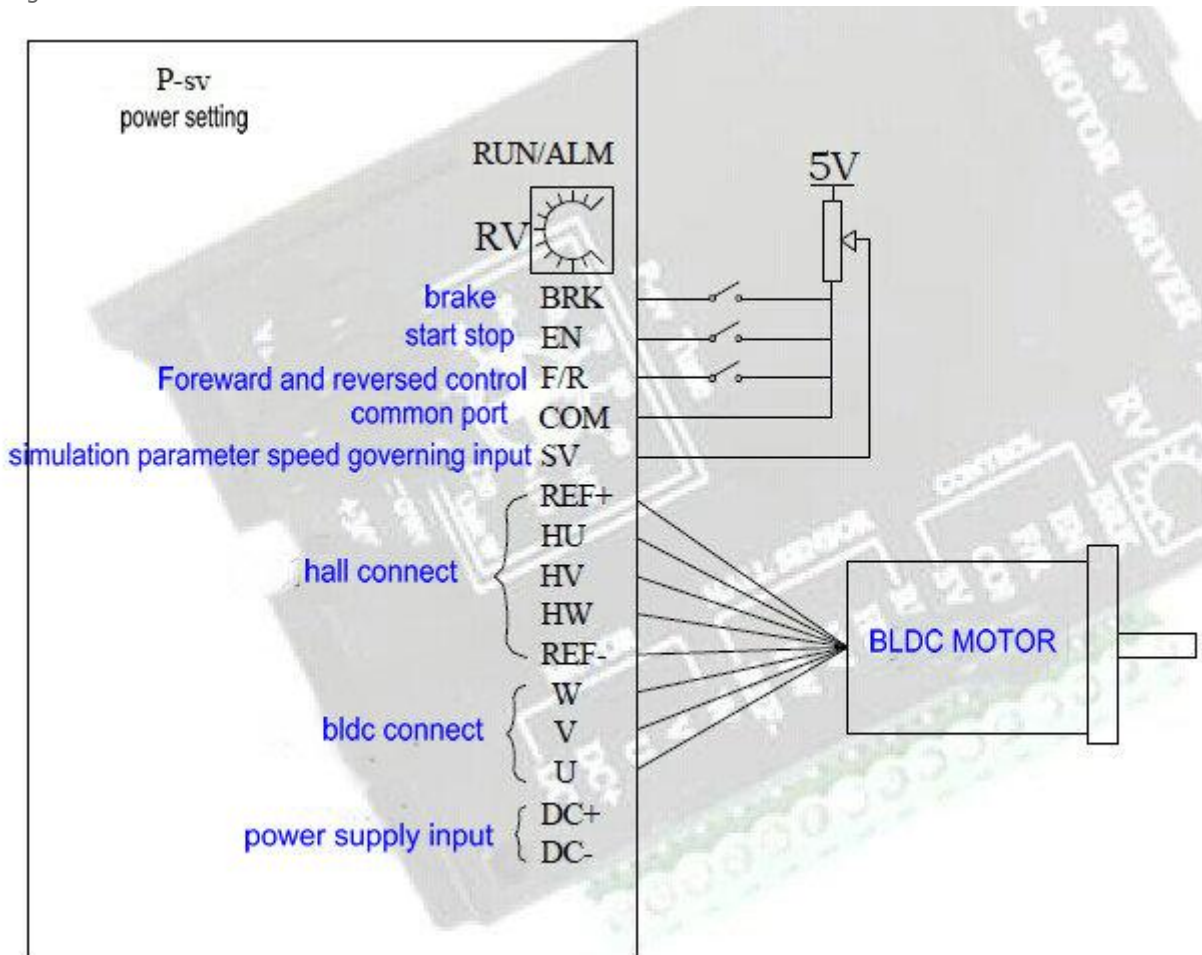
## OVERVIEW:

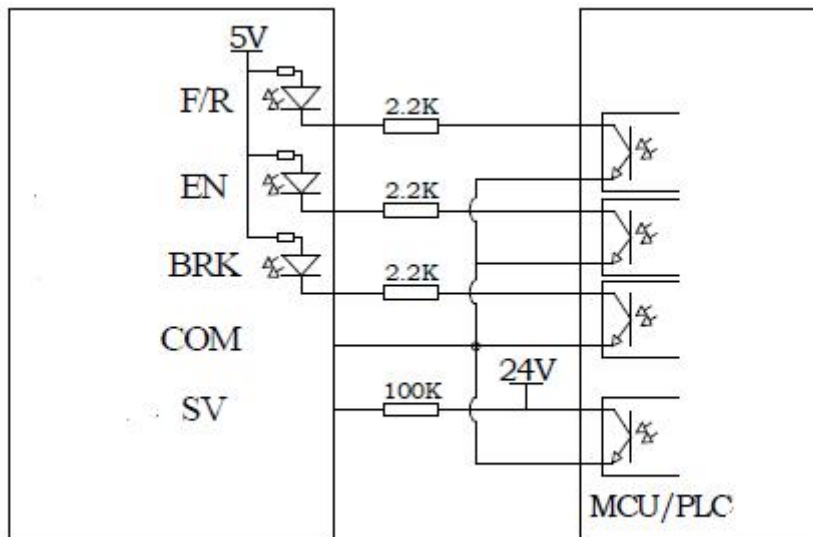
The model of brushless dc motor drive is suitable for use in power for 125 va and under three-phase brushless dc motor. This product design adopts advanced DSP control technology, with large torque, low noise, low vibration, fast Stop-start features, at the same time have the PID current and speed closed loop control, overvoltage, undervoltage, over current, over temperature Protection function, can realize PWM external input, analog input speed regulating a variety of ways.

## Electrical parameters:

Parameters	Min	Rated	Max	Unit
Hall effect angle	120°/240°			
Power supply input voltage	12	24	30	V
Driver current output		5	8	A
Motor speed	0		20000	rpm
Hall signal voltage	4.5	5	5.5	V
Hall signal current		20		mA
External potentiometer		10K		Ω

## Wiring definition:





Mark	define
DC+/DC-	Power supply input (DC12V~DC30V) don't make mistake for + and -
U, V, W	Motor leading wires connect thick wires
Hu, Hv, Hw	Hall signal leading wire connect (thin wires Hu, Hv, Hw)
REF+	Hall power supply + (for motor hall input +5V)
REF-	Hall power supply - (hall ground connect this port)
VCC	External potentiometer power supply port (just can use for potentiometer, can't for other external circuits)
SV	External potentiometer terminal (See note speed regulation)
COM	common port (Low level)
F/R	Direction: dangling or high level forward, low-level inversion <b>note 1</b>
EN	Enable: high level/stop low-level/run note 1
BRK	Fast brake: high level/stop low-level/run note 1

Note 1: F/R and COM disconnect the motor forward, closed for reversal. EN closed with COM for running, disconnect for standby. BRK and COM side closed to run, disconnect for the brake. When using BRK control, shorter EN received COM port, when using EN control, shorter BRK received COM port.

### Speed regulation way (see instructions):

- A. the internal potentiometer RV can be used for motor speed adjustment
  - B. the external potentiometer can be used for motor speed adjustment
  - C. the external analog input voltage can be used for motor speed adjustment
  - D. the external PWM input can be used for motor speed adjustment: pulse duty ratio from 10% to 90%
- Linear speed adjustment, pulse frequency, 1 k - 10 KHZ, pulse amplitude: 5 v

**Wiring note:** note that the sequence of wiring UVW three-phase motor and sale of hall signal lines and the connection sequence of the power cord

### power parameter setting :

Note: to prevent electric pilot time to super power operation and damage Motor, please according to the above numerical combined with electrical power Properly set. Great changes have taken place when the load and lead to electricity Actual operation power more than setting will go into the drive Protected mode.