JKBLD300
Brushless DC Motor Drive

Description

The JKBLD300 is a high performance, cost-effective 3 phase BLDC motor drive which can provide power output 300VA max. The design is based on advanced DSP technology and feature high torque, low noise, low vibration, PID speed loop, PID current loop, over current protection, over load protection.

Electrical Specifications:

Parameter	Min	Rated	Max	Unit
Motor Hall Sensor Angle		120°/240°		
DC Power Input	18	48	50	V
Drive Current Output	0	15	35	A
Suitable Motor Speed	0		20000	rpm
Hall Sensor Voltage	4.5	5	5.5	V
Hall Sensor Current		20		mA
External Potentiometer		10K		Ω

Connection Definition:

Mark	Definition
DC+/DC-	DC Power Input （DC24V~DC48V）
U,V,W	Motor lead wire
Hu,Hv,Hw	Hall sensor lead wire
REF+	Hall sensor power supply +
REF-	Hall sensor power supply -
VCC	External potentiometer power supply +
SV	External potentiometer
COM	Public (low level)
F/R	Direction: High level/CW Low Level/CCW
EN	Enable: High Level/Stop Low Level/Run
BRK	Quick Brake: High Level/Stop Low Level/Run
SPEED	Speed signal output
ALARM	Alarm signal output

Speed Adjustment Instruction:

A. Motor speed adjusted by the internal potentiometer RV
B. Motor speed adjusted by the external potentiometer
C. Motor speed adjusted by analog signal 0V~+5V input
D. Motor speed adjusted by analog signal 0V~+10V input
E. Motor speed adjusted by PWM input:
Pulse duty ratio 10%-90% / Speed linear modulation
Pulse rate: 1K-10K/ pulse amplitude 5V

Motor Speed Quick Response Setting:

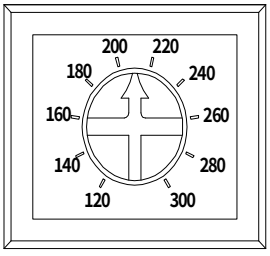
OP/CL Connected (user setting):
PID Closed loop－Motor quick response
OP/CL Disconnected (factory setting):
NO PID Closed loop－Motor normal response

Lead Wire Connection:

Take care of the sequence of U,V,W

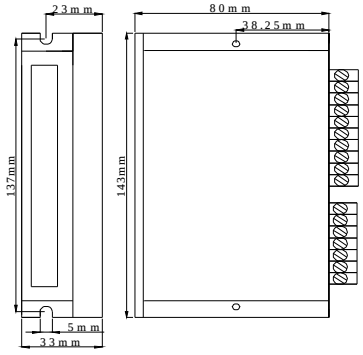
Peak Power Setting:

P-sv Tune Unit:W



Note: To protect the motor, set the arrow number as the same as the motor nominated power. Whenever overload occurs the drive will turn out to be the protection mode.

Mechanical Drawings:



Indicator Instruction:

Indicator	Green	Power indicator
	Red	Over-current, hall error
	Red flickering	Stall/over-heat/over-voltage protection