Brushless DC Motor Driver



In some applications, which require speed control, some people would select DC Brushed motors. Generally, DC Brushed motors are large size, much maintenance, lower efficiency, high temperature...etc. With development of material science and electric technology, it comes to achievement of new motor for speed control — Brushless DC motor (BLDC Motor). Because there is no brush in BLDC motor, it is maintenance free, good performance no matter in high or low speed region, CW/CCW direction change. For the same power output, BLDC motor is only half size compared with DC Brushed motor.

SPECIFICATIONS

Product /	DC Brushless Motor Driver/		
Model	BL150-0		
Power Voltage	DC24V		
Rated Current	4A (continuous)		
Motor Power	<100W		
Speed control range	3001		
PWM frequency	25KHz		
Functions	Motor Swift CW/ CCW Internal / External speed control selection 60° / 120° Hall Sensor position selection		
Speed setting	Internal speed control External speed control (20KΩ, 0~5V)		
Input signal	CW/CCW, RUN/STOP		
Operating temp.	0 ~ +60°C		
Operating humidity	< 85% RH		
Dimensions	60(L) x 108(W) x 30(H)		

FEATURES

- Good performance
- Low noise, long life
- Compact size, high efficiency
- Low speed fluctuation
- Internal/ external speed control selection
- Cost effective, easy operation

- Swift CW/ CCW direction change
- Low temperature rise after continual operation
- Available internal potentiometer or External potentiometer speed control.

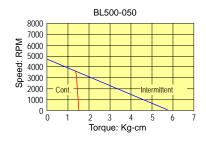
APPLICATIONS

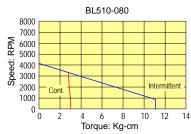
- Conveyors
- Medical electrical bed
- Rolling transmission equipment
- Packing machine
- Pressure Pump equipment
- Cutting machine

- Coil winding equipment
- Electrical bicycle
- Electrical stir machine
- Labeling print machine
- Indoor air conditioner
- Automatic door

Motor

	Unit	Model			
	Unit	BL500-050	BL510-080	BL520-110	
Voltage	volts	24	24	24	
Speed (No load)	RPM	4400	3550	3900	
Power	watt	50	80	110	
Torque (cont.)	N-m	0.194	0.285	0.378	
Current (cont.)	amper	3.75	4.2	6.5	
Torque (peak)	N-m	0.56	1.06	1.34	
Current (peak)	amper	10	18.5	25.3	
Rotor inertia	g-cm-sec ²	200	330	500	
Inductance	Ohms	1.4	0.8	0.4	
Winding resistan	mH	1.6	0.9	0.7	
Motor length	mm	50.8	76.2	101.6	
Weight	Kg	0.59	0.87	1.32	







Dimensions (Unit: mm)

