

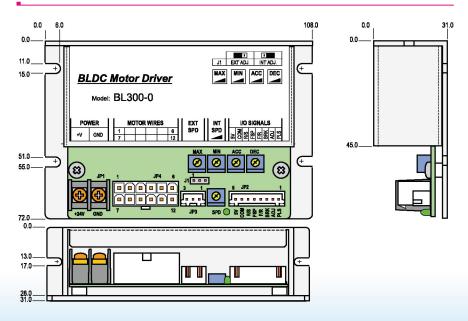
# **DRIVERS**

# **SPECIFICATION**

Product /Model	DC Brushless Motor Driver/ BL300-0
Power Input	DC12V/24V (Jumper Setting)
Driving Current	10A (continuous) , 20A (peak)
Motor watts	<300W
Speed control range	40:1
Functions	Motor Swift CW / CCW Internal / External speed control selection ACC/DEC time setting, Brake
Speed setting	Internal speed control External speed control (VR or 0~5V)
Input signal	CW/CCW, RUN/STOP, Full speed, Voltage adj. speed
Op. temp./Humidity	0 ~ +60 C / <85% RH
Dim. /weight	72(L)x108(W)x31(H) 0.5mm / 230g

<sup>■</sup> To customize motors, please contact with us or our agent.

# **DIMENSION**

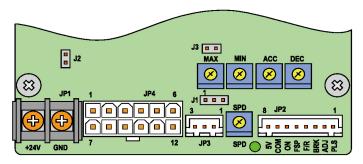


## PRODUCT FEATURES

- Flat torque performance
- Low noise, long lifetime
- Compact size, high efficiency
- Cost effective, easy operation
- Swift CW/ CCW direction change

- Internal/ external speed control selection
- Available variable resistance or voltage control via external speed control
- Output pulse per round from motor to exam calculation

# NAMES AND FUNCTIONS OF DRIVER



#### JP2 Connector [Function control, 8 Pin]

Pos.	Name	Descriptions	Wires color	
1	PLS	Pulse signal output. 12 pulse/r (5V, 100uS)	(Yellow)	
2	ADJ	J Speed control It can accept 0-5V input to do speed control. (The jumper must be free)		
3	BRK	K Stop immediately or naturally control When BRK is short with COM, if motor comes from ON to OFF condition, the motor will stop immediately. When BRK is opened with COM, if motor comes from ON to OFF condition, the motor will stop naturally.		
4	F/R	Direction control (Motor in active condition) When CW is short with COM, the motor will reverse its direction	(Blue)	
5	FSP	Full speed control (Motor in active condition) When FPS is short with COM. The motor will rotate in its full speed	(Orange)	
6	R/S	ON/OFF Control It must be short with COM, then the motor will be active	(White)	
7	СОМ	0V	(Black)	
8	5V	5V DC5V/0.1A Power supply output		

#### JP3 Connector [External speed control selection, 3 Pin]

Pos.	Name	Descriptions	Wires color
1	LV	External speed control terminal	(Black)
2	Wiper	External speed control terminal	(Green)
3	HV	External speed control terminal	(Red)

NOTE: Please use 20K VR  $\circ$  Voltage adj. speed Range is 0~+5V  $\circ$ 

# JP4 Connector [Motor power, I/O signal connection, 12 Pin]

Pos.	Descriptions	BLDC 90	BLDC 56
1	Motor U phase	(Black)	(Blue)
2	Power DC24V+ (Short with JP1_+24)		
3	GND, DC0V (Short with JP1_GND)		
4	NONE		
5	Hall Sensor Power, H-	(Black)	(Black)
6	Hall Sensor Power, H+	(Orange)	(Orange)
7	Motor V phase	(Red)	(White)
8	Motor W phase	(White)	(Brown)
9	NONE		
10	Hall Sensor, HU	(White)	(Yellow)
11	Hall Sensor, HV	(Brown)	(Gray)
12	Hall Sensor, HW	(Gray)	(Green)

#### JP1 Connector [Input position, 2 Pin]

Name	Description
+24V	DC24V+ (Short with JP4_Pin2)
GND	GND (Short with JP4_Pin3)

### Speed control button [Setting parameter, 5 Pin]

Name	Description		
SPD	Speed control (CW →fast, CCW→slow)		
MAX Max speed control (CW →fast, CCW→slow)			
MIN	Min speed control (CW →fast, CCW→slow)		
ACC	Acceleration time setting, range is from 0.5~10sec  Deceleration time setting, range is from 0.5~10sec		
DEC			

### J1 Connector [Internal/External speed control selection, 3 Pin]

Setting	Name	Descriptions	
•	EXT	External knob for motor speed adjustment	
	INT	Internal knob for motor speed adjustment	

#### J2 Connector [12V/24V selection, 3 Pin]

Setting	Name	Descriptions
Short	12V	Setting DC12V for Motor/Driver Power
Open	24V	Setting DC24V for Motor/Driver Power