YC TECH

YKD Grass Series

Brushless DC Driver Features

This brushless DC speed controller is fully enclosed in a small rugged aluminum case which can be mounted for easy integration. It has been developed for applications such as e-scooter,e-wheelchair,e-wheelbarrow,e-cleaning machines and other e-vehicles.

Protection Features

Thermal protection:
If the controller temperature exceeds 80℃.The Current will half reduce to avoid the thermal increase. The controller will power off when temperature over 100℃.
Under&Over Voltage protection:
When the power supply is under or over voltage, the controller will power off.
Over Current protection:
If the controller is over current, it will keep current under current limited.
Water proof protection:
The controller is designed with IP54 Protection Class.
Start up against accidental protection:
Operation cannot begin if the controller are not get the zero speed signal on first power on time.

Operation Features

Speed control.
Kinetic energy recovery.
-When throttle partially released(deceleration)
-When operation the electric break.
Direction inversion CW&CCW.
Electrical break system.
High efficiency of motor and battery due to high frequency commutations.

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YKD Grass Series

Brushless DC Driver Specification

YKD Grass Series Driver are rated operation voltage from 24V-72VDC,and speed adjust from 100rpm to 4000rpm.Supports up to 70 amps continuous current. It's high density allows the drive to deliver a peak of 2400 W of power and 1600 W of continuous power.

Table 1

Voltage / Type		YKDG01		YKDG02	
Rated Voltage	Max Voltage	Continours Current	Peak Current limit	Continours Current	Peak Current limit
24V	30	14.5	18	15	21
36V	43	9.5	17	10	20
48V	57	7	17	7	18
60V	70	5.5	15	5.5	17
72V	80	5	13	5	15
Dimensions		126mm*66mm*39mm		144mm*83mm*43mm	
Weight		0.3Kg		0.35Kg	

Table 2

Voltage / Type		YKDG03		YKDG04	
Rated Voltage	Max Voltage	Continours Current	Peak Current limit	Continours Current	Peak Current limit
24V	30	17	25	18	30
36V	43	12.5	25	14	28
48V	57	9.5	23	11	26
60V	70	7.5	23	8.5	25
72V	80	6.2	23	7	25
Dimensions		154mm*83mm*43mm		174mm*83mm*43mm	
Weight		0.5Kg		0.6Kg	

Table 3

Voltage / Type		YKDG05		YKDG06	
Rated Voltage	Max Voltage	Continours Current	Peak Current limit	Continours Current	Peak Current limit
24V	30	35	50	45	75
36V	43	25	50	40	75
48V	57	21	50	30	75
60V	70	17	45	25	70
72V	80	14	40	20	60
Dimensions		211mm*115mm*50mm		211mm*115mm*50mm	
Weight		1.8Kg		2Kg	

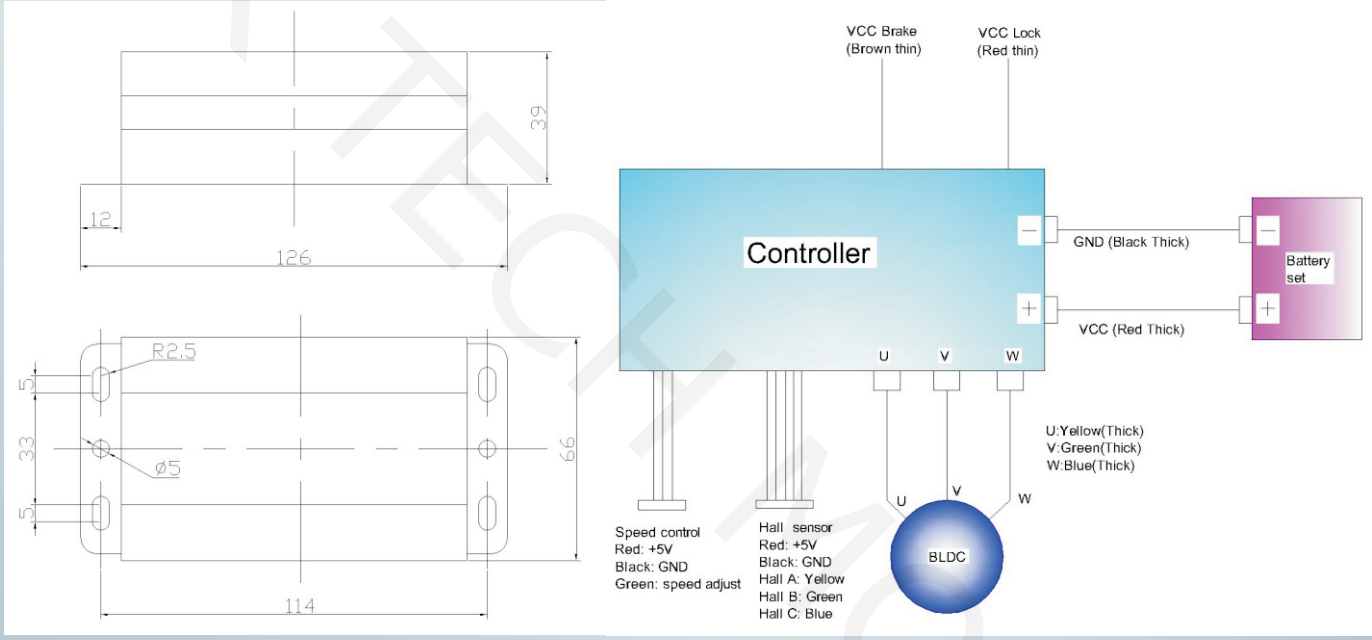
YC TECH

YKDG-01

Brushless DC Speed Driver

This brushless DC speed controller is fully enclosed in a small rugged aluminum case which can be mounted for easy integration. The driver includes acceleration, EBS braking function. The driver is protected against over-current, over temperature and motor short-circuit and incorporate state of the art MOSFET technology for maximum efficiency. Continuous output power is 350W.

Dimension&Connection:



Wire defines:

Phase U	Phase V	Phase W	Hall A	Hall B	Hall C	Hall +5V	Hall GND
Yellow(thick)	Green(thick)	Blue(thick)	Yellow(thin)	Green(thin)	Blue(thin)	Red(thin)	Black(thin)

Speed +5V	Speed	Speed GND	Break				
Red(thin)	Green(thin)	Black(thin)	Brown(thin)				

Install:

-Connect the power supply(keep right polarity).
-Connect the hall sensor socket(5pin).
-Connect motor's three phase to controller(color same).
-Connect speed adjust socket(3pin)
-Connect lock wire to an lock switch and connect to power supply's positive polarity.

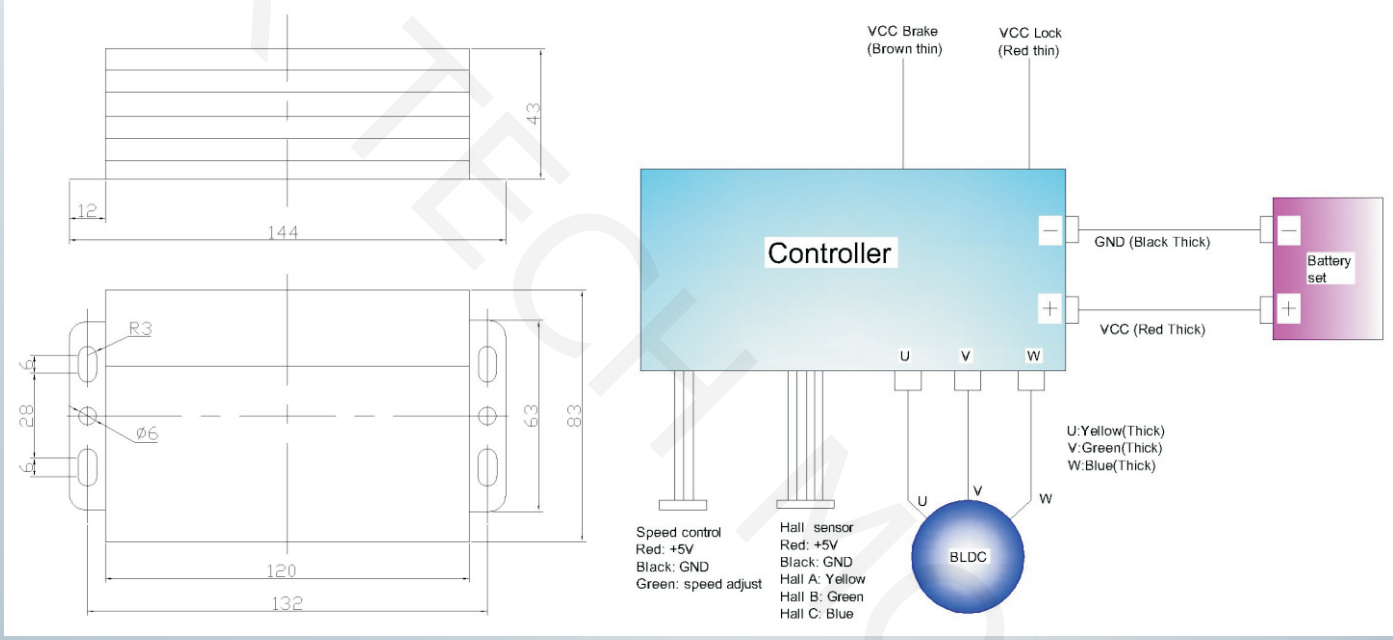
***Warn: Check all connections before power on operation.**

YKDG-02

Brushless DC Speed Driver

This brushless DC speed controller is fully enclosed in a small rugged aluminum case which can be mounted for easy integration. The driver includes acceleration, EBS braking function. The driver is protected against over-current, over temperature and motor short-circuit and incorporate state of the art MOSFET technology for maximum efficiency. Continuous output power is 400W.

Dimension&Connection:



Wire defines:

Phase U	Phase V	Phase W	Hall A	Hall B	Hall C	Hall +5V	Hall GND
Yellow(thick)	Green(thick)	Blue(thick)	Yellow(thin)	Green(thin)	Blue(thin)	Red(thin)	Black(thin)

Speed +5V	Speed	Speed GND	Break				
Red(thin)	Green(thin)	Black(thin)	Brown(thin)				

Install:

-Connect the power supply(keep right polarity).
-Connect the hall sensor socket(5pin).
-Connect motor's three phase to controller(color same).
-Connect speed adjust socket(3pin)
-Connect lock wire to an lock switch and connect to power supply's positive polarity.

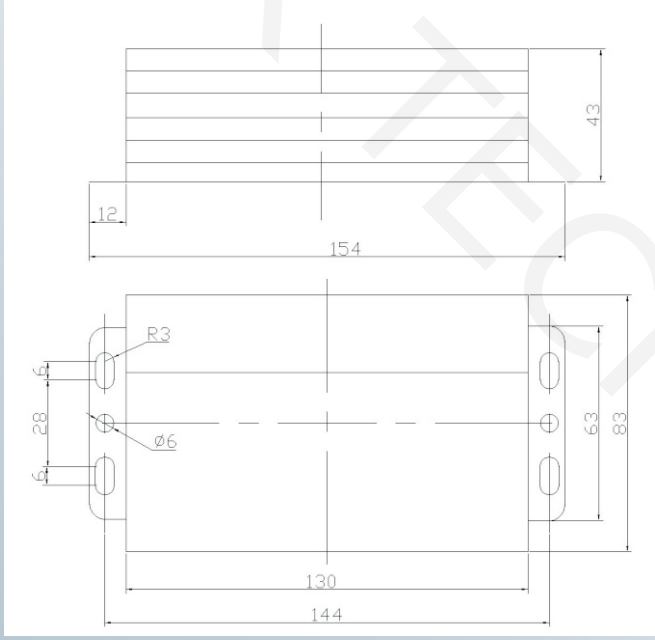
***Warn: Check all connections before power on operation.**

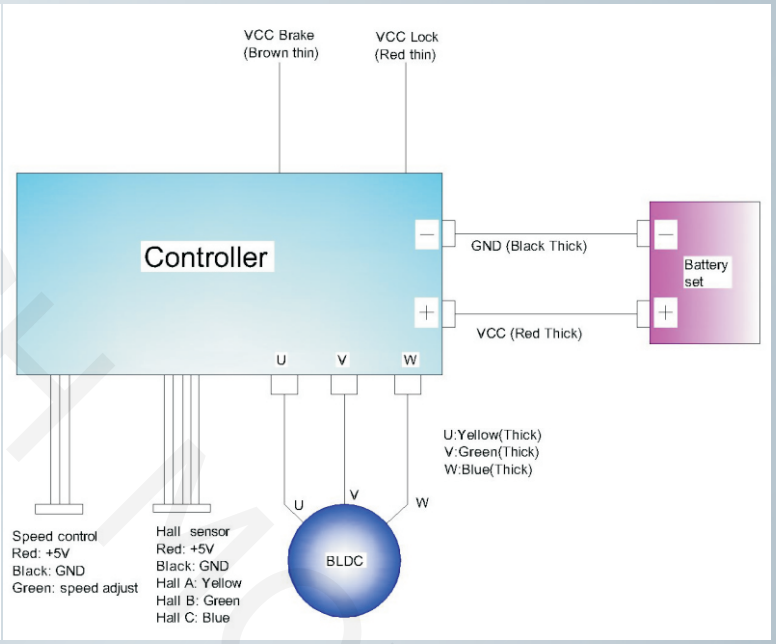
YKDG-03

Brushless DC Speed Driver

This brushless DC speed controller is fully enclosed in a small rugged aluminum case which can be mounted for easy integration. The driver includes acceleration, EBS braking function. The driver is protected against over-current, over temperature and motor short-circuit and incorporate state of the art MOSFET technology for maximum efficiency.Maximum power is 450W.

Dimension&Connection:





Wire defines:

Phase U	Phase V	Phase W	Hall A	Hall B	Hall C	Hall +5V	Hall GND
Yellow(thick)	Green(thick)	Blue(thick)	Yellow(thin)	Green(thin)	Blue(thin)	Red(thin)	Black(thin)

Speed +5V	Speed	Speed GND	Break				
Red(thin)	Green(thin)	Black(thin)	Brown(thin)				

Install:

-Connect the power supply(keep right polarity).
-Connect the hall sensor socket(5pin).
-Connect motor's three phase to controller(color same).
-Connect speed adjust socket(3pin)
-Connect lock wire to an lock switch and connect to power supply's positive polarity.

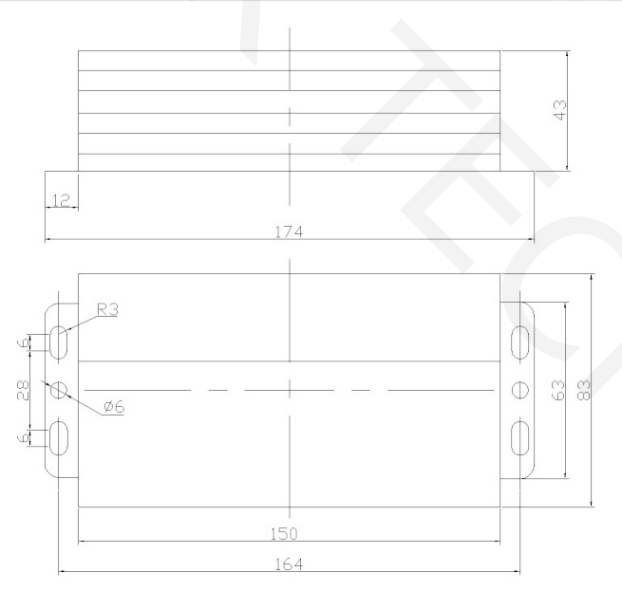
***Warn: Check all connections before power on operation.**

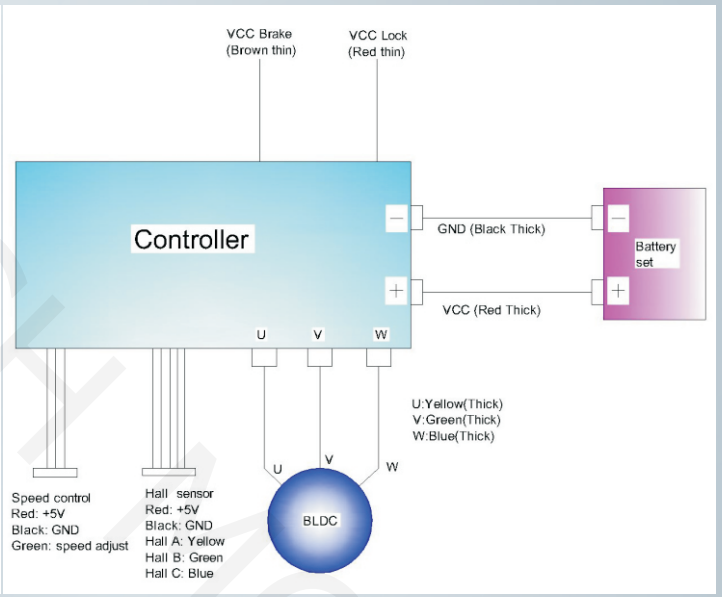
YKDG-04

Brushless DC Speed Driver

This brushless DC speed controller is fully enclosed in a small rugged aluminum case which can be mounted for easy integration. The driver includes acceleration, EBS braking function. The driver is protected against over-current, over temperature and motor short-circuit and incorporate state of the art MOSFET technology for maximum efficiency. Continuous output power is 600W.

Dimension&Connection:





Wire defines:

Phase U	Phase V	Phase W	Hall A	Hall B	Hall C	Hall +5V	Hall GND
Yellow(thick)	Green(thick)	Blue(thick)	Yellow(thin)	Green(thin)	Blue(thin)	Red(thin)	Black(thin)

Speed +5V	Speed	Speed GND	Break				
Red(thin)	Green(thin)	Black(thin)	Brown(thin)				

Install:

-Connect the power supply(keep right polarity).
-Connect the hall sensor socket(5pin).
-Connect motor's three phase to controller(color same).
-Connect speed adjust socket(3pin)
-Connect lock wire to an lock switch and connect to power supply's positive polarity.

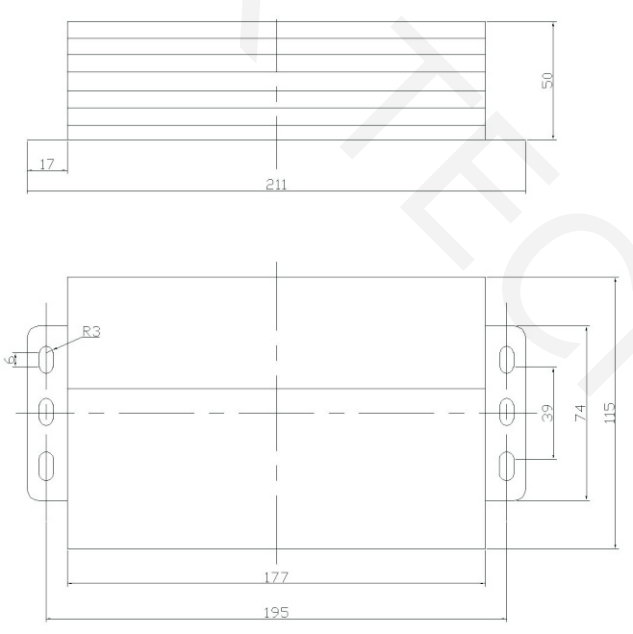
***Warn: Check all connections before power on operation.**

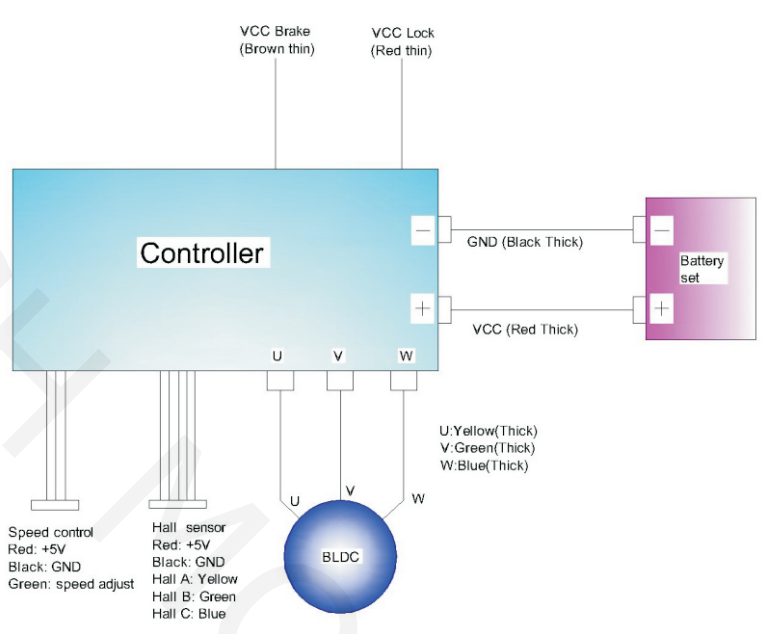
YKDG-05

Brushless DC Speed Driver

This brushless DC speed controller is fully enclosed in a small rugged aluminum case which can be mounted for easy integration. The driver includes acceleration, EBS braking function. The driver is protected against over-current, over temperature and motor short-circuit and incorporate state of the art MOSFET technology for maximum efficiency. Continuous output power is 1000W.

Dimension&Connection:





Wire defines:

Phase U	Phase V	Phase W	Hall A	Hall B	Hall C	Hall +5V	Hall GND
Yellow(thick)	Green(thick)	Blue(thick)	Yellow(thin)	Green(thin)	Blue(thin)	Red(thin)	Black(thin)

Speed +5V	Speed	Speed GND	Break				
Red(thin)	Green(thin)	Black(thin)	Brown(thin)				

Install:

-Connect the power supply(keep right polarity).
-Connect the hall sensor socket(5pin).
-Connect motor's three phase to controller(color same).
-Connect speed adjust socket(3pin)
-Connect lock wire to an lock switch and connect to power supply's positive polarity.

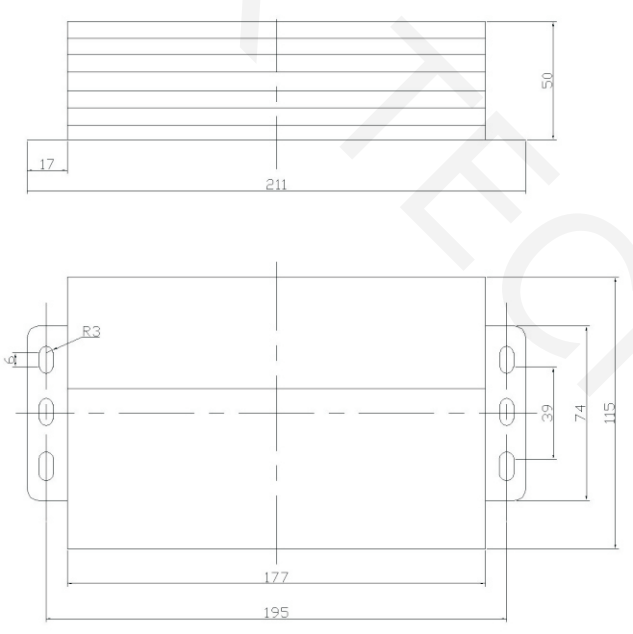
***Warn: Check all connections before power on operation.**

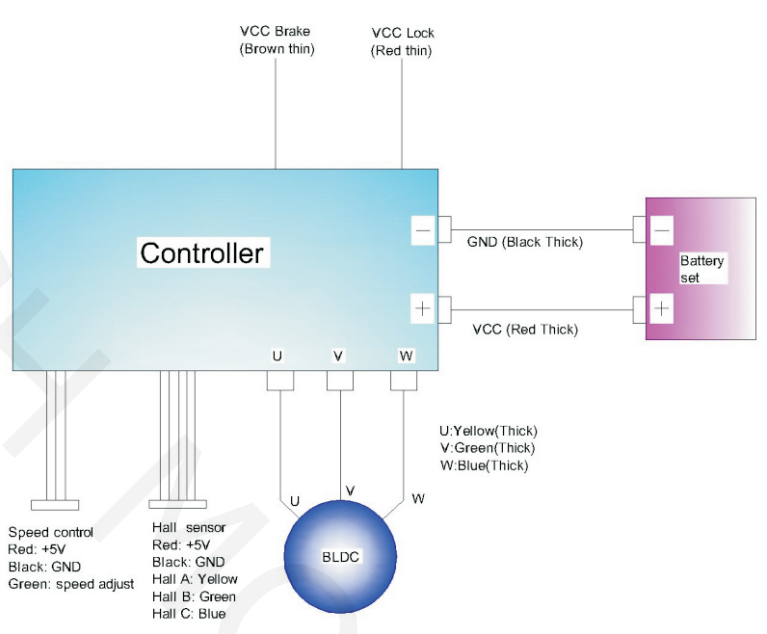
YKDG-06

Brushless DC Speed Driver

This brushless DC speed controller is fully enclosed in a small rugged aluminum case which can be mounted for easy integration. The driver includes acceleration, EBS braking function. The driver is protected against over-current, over temperature and motor short-circuit and incorporate state of the art MOSFET technology for maximum efficiency. Continuous output power is 1600W.

Dimension&Connection:





Wire defines:

Phase U	Phase V	Phase W	Hall A	Hall B	Hall C	Hall +5V	Hall GND
Yellow(thick)	Green(thick)	Blue(thick)	Yellow(thin)	Green(thin)	Blue(thin)	Red(thin)	Black(thin)

Speed +5V	Speed	Speed GND	Break				
Red(thin)	Green(thin)	Black(thin)	Brown(thin)				

Install:

-Connect the power supply(keep right polarity).
-Connect the hall sensor socket(5pin).
-Connect motor's three phase to controller(color same).
-Connect speed adjust socket(3pin)
-Connect lock wire to an lock switch and connect to power supply's positive polarity.

***Warn: Check all connections before power on operation.**