

# MECWIN EV CONTROLLERS



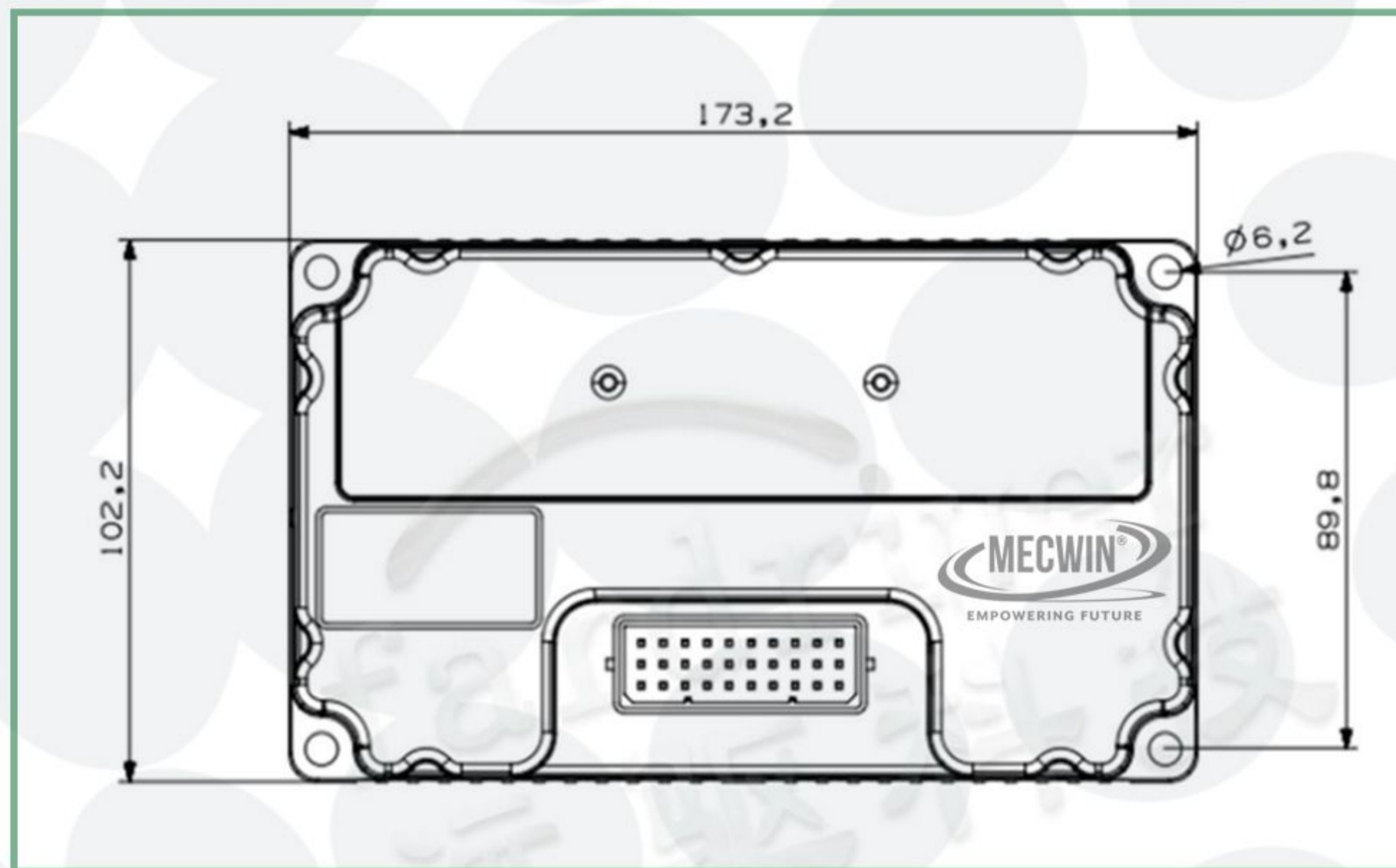
# Advanced Solution For A Green Future

Discover how your small actions can make a big impact as we work together to reduce waste, conserve resources, and protect our planet for generations to come



**Mecwin High Power Controller**

## 2D Drawing Controller



# Specification of High Power Controller



**Rated Voltage : 48V / 60V / 72V**



**Rated Power : 3000W - 5000W**



**Busbar Current : 100A - 200A**



**Peak Power : 6000W - 10000W**



**Phase Line Current : 200A - 600A**



**Motor sensor : Hall Sensor & Encoder**



**Application : MID Drive Motor**



**Product Size : 174\*102\*52**

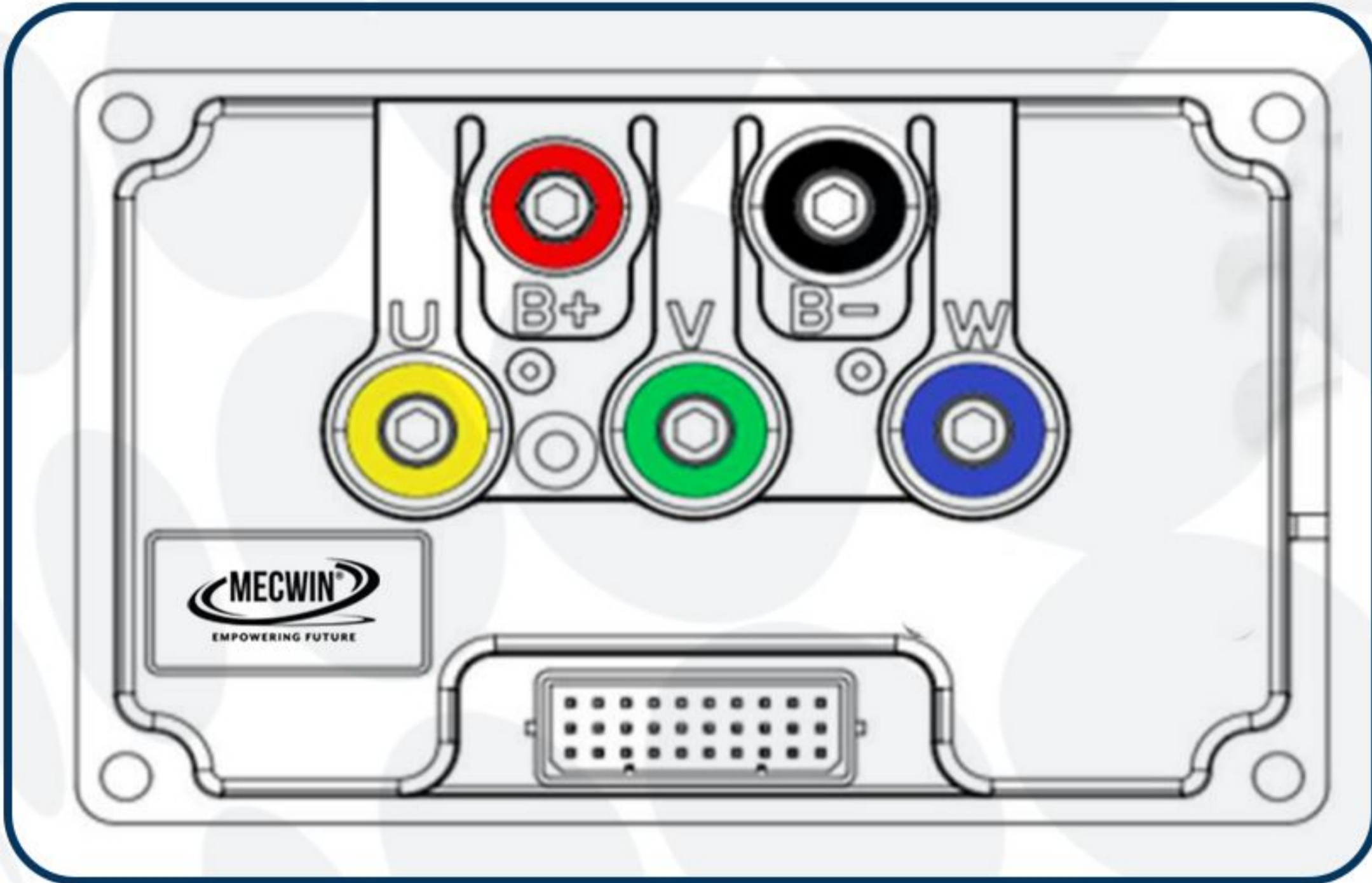


**Wireless Communication : Android App**



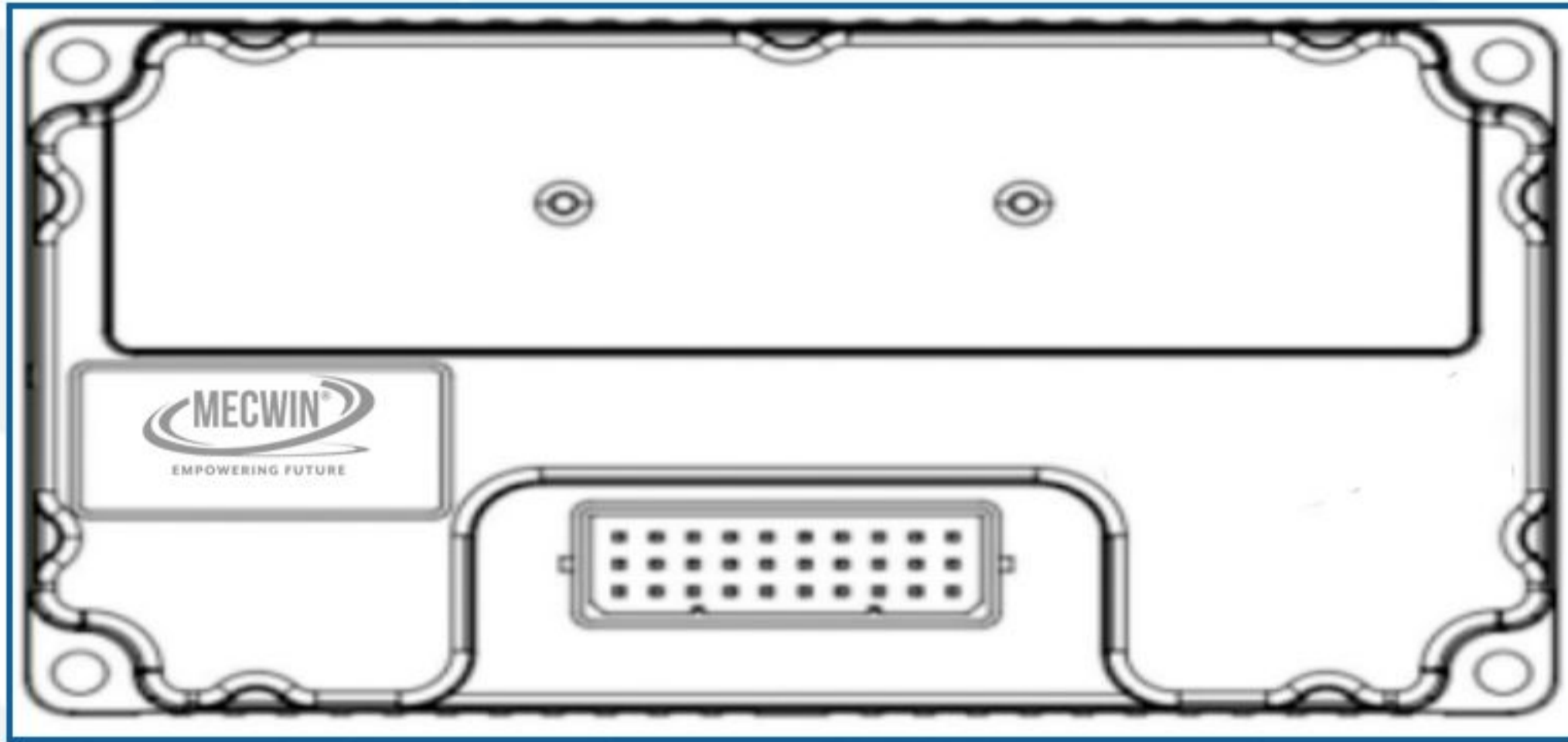
**Adaptive Interface type : CAN communication, 485 communication**

# Controller Connection Diagram



Terminal block	Functionality
B +	Battery Positive
B -	Battery Positive
U	Motor Phase line U
V	Motor Phase line V
W	Motor Phase line W

# Function Definition :



Sl.no	Function defination	voltage
1	Low brake power off	0-5V
2	Motor Hall C	0-3.3 V
3	485B TXD	0-5V
4	Motor Temperature	0-5V
5	Unoccupied	0-5V
6	GND	0V
7	Turn Signal	0-5V
8	Turnbuckle Power Supply	5V
9	Bluetooth Power Supply	5V
10	Anti-theft Power Supply	B+ Supply
11	High-Brake Power Supply	1-12V
12	Motor Hall B	0-3.3V
13	485A RXD/ Speed pulse	0-5V
14	Anti-theft Signal	0-5V
15	CAN High	0-5V
16	GND Land	0V
17	Cruise, P	0-5V
18	Boost	0-5V
19	Anti- theft Phase line	0-B+
20	Anti- theft electric door lock	B+ Supply
21	Motor Hall A	0-3.3V
22	Third rate low	0-5V
23	Three stage high	0-5V
24	Motor Hall +	0-5V
25	CAN Low	0-5V
26	Hall GND	0V
27	GND	0V
28	Reverse	0-5V
29	Analog instrument	0-B+
30	Electric door lock	B+ Supply

# Lead Wire Function Diagram



Description	Colour	Define	Controller Pin
Motor P line	White	PWM	17
Motor C line	Blue	Z	2
Motor B line	Green	B	12
Motor A line	Yellow	A	21
Motor Temperature	Brown	Temp	4
Motor GND	Black	GND	26
Motor Supply B +	Red	12V	24



Description	Colour	Define	Controller Pin
Ground	Black	BL	26
Low Braking	Yellowish green	SPA	1



Description	colour	Define	Controller Pin
Electric door lock key	Orange	KEY	30



Description	colour	Define	Controller Pin
Analog Speedometer	Purple	SPA	29



Description	Colour	Define	Controller Pin
Cruise/ p	Blue	P	17



Description	colour	Define	Controller Pin
Come to a halt	Gray	BH	11



**Throttle lenthgth  
290MM**

Description	colour	Define	Controller Pin
Ground	Black	GND	27
Thottle signal	Ivory	SV	7
Throttle Power	Red and White	ACC +	8



**Anti theft Power  
Supply**

Description	colour	Define	Controller Pin
Battery +ve	Pink	60VC	30
Battery -ve	Black	GND	7



**Anti theft signal  
lenth 290mm**

Description	colour	Define	Controller Pin
Guard against theft	Bitonal	FW	14
Phase line	Reddish Browr	W	19
Electric door lock	orange	KEY	20



**High & Low  
Speed Lenth  
290mm**

Description	colour	Define	Controller Pin
High Speed	Sallow	FW	3
GND	Black	GND	7
Low Speed	Blue- white	FW2	2



**Anti theft signal  
lenth 290mm**

Description	colour	Define	Controller Pin
Bluetooth Power	Dark brown	BW5V	29
Serial port reciever	dark red	485/RXD	13
Serial port	navy blue	485/TXD	23
GND	Black	GND	16



**Backward Gear  
lenth 290mm**

Description	colour	Define	Controller Pin
Black	Palm fiber	RE	8
Brown	Black	GND	16





Description	colour	Define	Controller Pin
Speed	Pale Blue	SPD	13



Description	colour	Define	Controller Pin
CAN bus high	Red and Yellow	CAN H	15



Description	colour	Define	Controller Pin
CAN bus low	Light brown	CAN L	5

# Fault Signal alarm Description

Sl.No	Fault Description	Number of sounds	
1	Motor Hall Failure	1	The signal wire between the controller and the motor isn't connected properly
2	Throttle Failure	2	Throttle not returning zero or throttle not connected properly
3	Current protection restart	3	Abnormal protection alarm
4	Phase overcurrent	4	Abnormal protection alarm
5	Voltage Fault	5	Voltage is too or too high, outside the controller's permissible range
6	Anti- theft alarm signal	6	Reservation
7	Motor over temperature	7	Motor temperature too low high out of operating range
8	Controller over temperature	8	Controller temperature too low high out of operating range
9	Phase line flow overflow	9	Abnormal protection alarm
10	Phase current zero fault	10	Phase wire short circuit or motor failure
11	Line current zero fault	11	Controller internal alarm
12	Mosfet uppset bridge failure	12	Controller upper bridge damage
13	Mosfet lower bridge failure	13	Controllerlower bridge damage
14	peak line current protection	14	Hardware over current protection alarm



Manufacturing Site

# Mecwin Green Propulsions Pvt Ltd

478/479, Magadi Main Rd, adjacent to Sri Lakshmi Multi Speciality Hospital,  
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