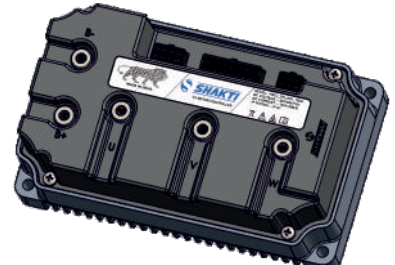
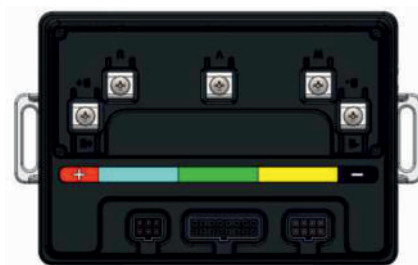




ENHANCE YOUR DRIVE WITH INNOVATIVE EV SOLUTIONS

## MOTOR CONTROL UNIT - 2W



# SHAKTI EV MOTOR CONTROL UNIT

## ABOUT THE PRODUCT

The Shakti EV Controller is a robust and efficient solution designed to enhance the performance of electric two-wheelers. Engineered with advanced features, this controller ensures optimal motor performance and safety. Its natural cooling system and IP67 ingress protection rating makes it highly durable and suitable for diverse environments. The Shakti EV Controller comes with CAN communication compatibility and provides reliable and efficient control, meeting the needs of a sustainable future.

## KEY FEATURES

1. Parking and drive modes functionality.

2. Multiple speed modes: Three standard and a sport mode.

3. Vector control with speed sensor integration.

4. High Brake Mode.

5. Side stand safety protection.

6. Throttle control functionality.

7. Forward and reverse mode control.

8. Regenerative braking control.

## PROTECTIONS

1. Short circuit protection.

2. Motor over temperature.

3. Controller over temperature.

4. DC Bus over voltage.

5. DC Bus under voltage.

6. Throttle signal error.

7. Hall Sensor signal error.

## APPLICATION

Designed for electric 2-wheelers.

## SPECIFICATION TABLE

PARAMETERS	SHAKTI EV CONTROLLER				
	86-02	86-03	86-10	86-04	86-24
INPUT(DC)					
Voltage	40V-71V	40V-71V	62V-85V	40V-85V	40V-85V
Max Input Current	30A	50A	50A	100 A	150 A
Maximum Power	1800 W	3000 W	3600 W	8400 W	11880 W
OUTPUT(AC)					
Nominal AC Voltage range	0-42 VAC	0-42 VAC	0-50 VAC	0-60 VAC	0-60 VAC
Frequency	0-400 Hz			0-500 Hz	0-500 Hz
Power Factor Range	0.8 - 1				
Connection Phases	3 phase only				
EFFICIENCY					
Max Efficiency	> 90%				
COMMUNICATION					
Communication Protocols	CAN				
GENERAL DATA					
Cooling Method	Natural Cooling				
Ambient Humidity	0-90%				
Position Feedback	Hall Sensor				
Mounting	Horizontal (tentative)				
Noise (dbA)	< 20 dbA				
Operating Temperature Range	-20°C to 60°C				
IP Rating	IP 67				
Dimensions (L*W*H)	200 x 125 x 65 mm <sup>3</sup>			190 x 111 x 72mm <sup>3</sup>	190 x 111 x 85mm <sup>3</sup>
Net Weight	1 Kg			1.3 Kg	1.9 Kg
Standard Warranty	1 year				