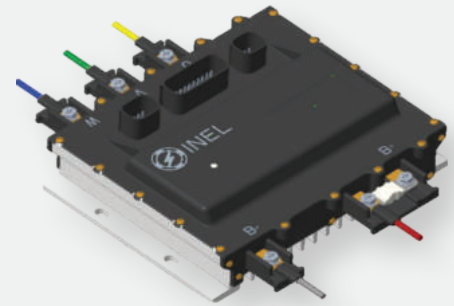




BLDC Motor Controller



Product Outline

The BLDC Motor Controller is a high-performance unit designed to ensure efficient, precise, and reliable operation of brushless motors in EVs. Tailored for the Indian market, it offers advanced control over speed, torque, and direction, ensuring smooth and responsive vehicle performance. With robust design and energy-saving features, it supports regenerative braking, optimized power delivery, and seamless acceleration, making it ideal for electric scooters, motorcycles, and other EVs.

Specifications

Sl. No	Parameters	Specifications
1	Operating Mode	Trapezoidal, Hall sensors
2	Input Voltage Range	41VDC to 57VDC
3	Rated Voltage	48 VDC
4	Maximum Speed	3000RPM
5	Input Current	50ADC
6	Output Current	200ARMS
7	Rated Output Power	2.3kW
8	Standby Current	40mA
9	Controller Efficiency	96%
10	Enclosure IP Rating	IP67
11	Shock	50G, 10 Msec
12	Vibration	20G, 50Hz to 500Hz
13	Operating Temperature	-20C to +60C
14	Storage Temperature	-20C to +80C
15	Overall Dimensions	205x189x65(LxWXH)
16	Weight	1.7Kg

Salient Features

- ✓ Design to meet EMI/EMC as per AIS 004
- ✓ Energy regenerative braking
- ✓ Three speed selection
- ✓ Over voltage and under voltage protection
- ✓ Over load and short circuit protection
- ✓ Anti-theft
- ✓ Hill accent and hill descent control
- ✓ Forward and reverse mode operation
- ✓ Temperature based derating and cut-off
- ✓ Motor over heat protection
- ✓ LED Fault Indicator
- ✓ CAN Communication
- ✓ Analog and digital tacho output

Application

Electric Scooter and Small Electric Vehicle (3W)

Performance Graph

