

Electrification Package For Light Duty Vehicles



Range Estimation

Intelligent Fault detection

Driver Information System

Enhanced Safety

High efficiency

Made in India

Unmatched features

Enhanced Thermal Performance

Funded by

Ministry of
Electronics &
Information Technology
Government of India



Designed & Developed by



Indian
Institute of
Technology
Kharagpur

Industry Partner



Brushless
Motor
India

Electric Vehicles For the Indians By the Indians

1.2kW BLDC Motor

Rated Torque : 4Nm @ 2800 RPM

Peak Torque : 22Nm @ 350 RPM

Efficiency : >90%

Weight : 5.9 kg

Suitable for High Gradeability



Integrated Controller (MCU + VCU)*

Nominal Power : 1.5 kW

Peak Power : 2.5 kW

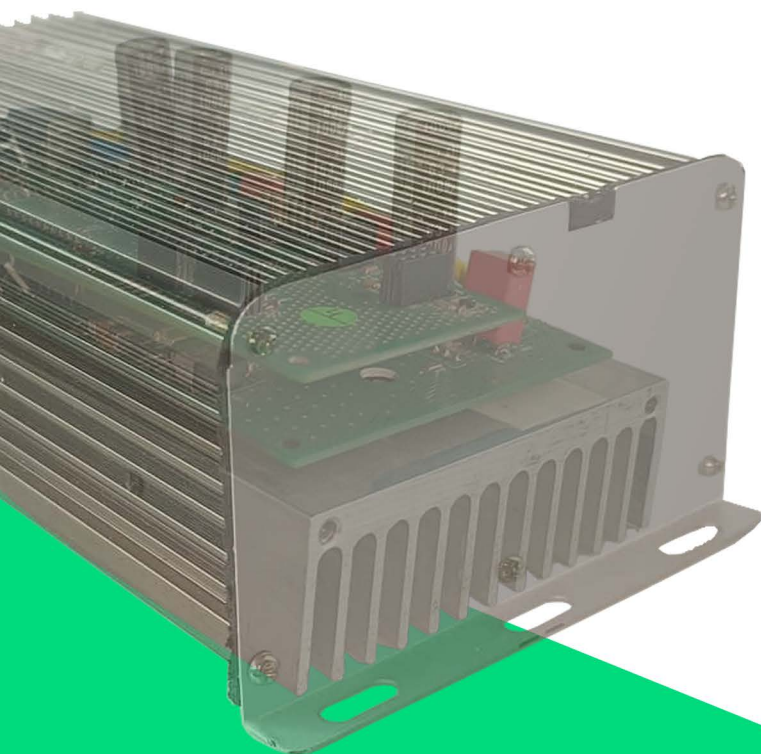
Input Voltage : 48 - 60 V

Efficiency : ~95%

Peak current : 50 A DC

Peak current AC : 150 A(rms)

Scalable for different Power Levels



Industry First Features

- Range Estimation incorporating Indian conditions
- Improved multi-featured Driver Information System
- Regenerative and Mechanical braking for enhancing range and safety
- Intelligent fault sensing and reporting for the safety of driver and passengers

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* MCU : Motor Control Unit
VCU : Vehicle Control Unit

ICAT Certifications under progress (AIS 041, AIS 004:Part3, IP67)