

MOTOR CONTROLLERS

L5 Vehicle Segment



Designed and developed in India for high-performance electric vehicles. It offer advanced features and precise control over the motor's speed and power, resulting in smooth and efficient ride together with ingress, thermal and current related protections.

This Motor Controller feature high-power rating, allowing for maximum output to the motor. The current limit of the controller is also customizable, ensuring that the motor operates within safe limits.

In addition, our L5 Motor Controllers come with advanced features such as regenerative braking, temperature / voltage monitoring, and real-time data feedback and diagnostics. The controller is programmable thus allowing for optimal customization and performance.

SORVIA



MOTOR CONTROLLERS

L5 VEHICLE SEGMENT

Parameter	Values
• Operating voltage	30 to 60V
• Nominal	51.2V
• Motor type	PMSM/BLDC/IM
• Motor position Feedback	Hall / Analog Sin-cos/ U/VW
• Motor Back emf Type	FOC with Field Weakening
• Maximum Electrical Frequency	500Hz
• Peak Current	350Arms (2min boost)
• Continuous 60 min current	180Arms
• Efficiency	> 95 %
• Cooling Type	Force/FAN Cooled
• Operating Temperature	- 5 to 55 °C
• Dimension (LxWxH)	264x218x85 mm
• Weight	<2.8 kg
• No. of Drive modes Supported	3 (configurable)
• Component qualification	AEC
• CAN for vehicle integration(CAN 2.0B)	Yes
• Functional safety(ISO 26262)	QM
• Regeneration (CAT A / CAT B)	Configurable braking current
• Safety	Reverse polarity protection
	Short Circuit protection
	Thermal cutback warning and shutdown for motor and controller
	Ingress Protection IP65
	Vibration : 3g as per ISO 16750
	Voltage withstand : 500Vrms/60Hz
	Insulation Resistance: >10Mohm/500Vdc