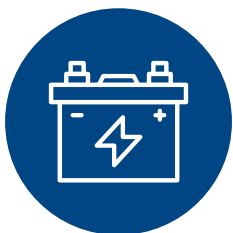


BATTERY COOLING MANAGEMENT SYSTEMS



ENSURING OPTIMAL BATTERY TEMPERATURE IN CRITICAL HEAVY DUTY ELECTRIC VEHICLES.

KEY FEATURES



OPTIMAL BATTERY
LIFE & PERFORMANCE



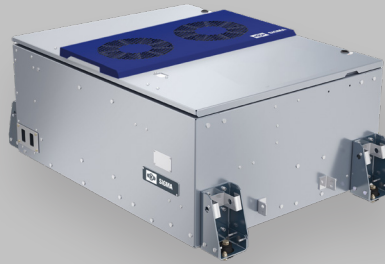
REAL TIME SYSTEM
MONITORING



DECARBONISATION
PARTNER OF CHOICE



72, 400 & 600 VDC
POWER OPTIONS



Battery Cooling Management System (BCMS)

Rechargeable lithium-ion (Li-ion) batteries are now regarded as the most suitable energy storage device for EVs because of their high energy density, specific power, low self-discharge rate, high recyclability and longer cycle life. A battery cooling system in electric vehicles regulates the temperature of the battery pack. The battery thermal management in electric vehicles uses cooling loops that contain liquid coolants such as ethylene glycol. An electric pump circulates the coolant through the batteries.

Why is BCMS Important?

Optimum battery performance, life and safety is reliant on a narrow temperature range (35°C to 40°C). Inevitable because batteries are affected by environmental conditions, and release heat by a series of chemical reactions during charging and discharging. There is a critical need for battery cooling in ambient temperature above 35°C.

Therefore, an efficient battery cooling management system (BCMS) is required to maintain the proper temperature range, minimise the temperature gradient and safeguard both the user and the battery by ensuring that the cell operates within its safe operating parameters.

Key Features

- Free Cooling capability below 32°C ambient
- Optimised battery life through efficient cooling (free cooling & active cooling)
- Plug n Play connections for simple installation
- High efficiency operation, low energy consumption
- Brushless eDrive compressor, brushless motors & variable speed fluid pump
- Smart control logic & remote health check capability

SPECIFICATIONS

	IPF7XX1	IPF12XX1
Max Capacity air cooled	2 kW	2kW
Max Capacity refrigerant cooled	7 kW	12 kW
Operation ambient	0 to 50 °C	
Voltage	72V 400V 600V	
Coolant flow rate	20 l/min	
Refrigerant	R134a R513a R1234yf	
Weight	70 kgs	80 kgs
Dimension (L x W x H)	700mm x 300mm x 800mm (V) 800mm x 700mm x 300mm (H)	

