BATTERY THERMAL MANAGEMENT SYSTEM (BTMS)

BTMS X-800V



PART NUMBER:

3A-10025-0A02 - Active and Passive Cooling & Heating

APPLICATIONS:









SYSTEM OVERVIEW

Designed specifically for chassis side mount applications, the BTMS X-800V provides precise thermal regulation of temperature-sensitive batteries in the even hottest and coldest of conditions.

The plug-and-play module seamlessly integrates with on- and off-highway applications, managing all battery thermal requirements through its active cooling, passive cooling, and heating modes.

KEY FEATURES

- -35°C to +45°C operational ambient range
- 8.5kW cooling capacity*
- Operating voltage range of 575VDC to 800VDC
- Plug-and-play with pre-charged refrigerant gas
- CAN control (J1939)
- Fully integrated refrigerant circuit
- Active cooling, passive cooling and heating modes
- 10kW water heater fitted as standard
- Tailorable heating requirement (5kW to 30kW) to suit operating environment
- Stainless steel frame optional

*At 40°C ambient and 25°C coolant temperature

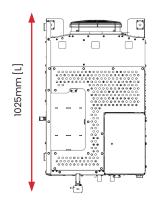
KEY BENEFITS

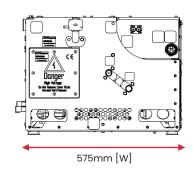
Longer battery life, lower TCO: Protects the life and optimises the performance of high-value batteries to lower your battery electric or fuel cell electric vehicle's total cost of ownership.

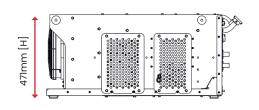
Easy installation and integration: Cut installation time and cost with our plug-and-play solution, featuring a fully integrated refrigerant circuit supplied pre-assembled and pre-charged with refrigerant gas.

Maximum efficiency, minimal power draw: Our ultra-efficient BTMS includes variable control speed pumps, compressor, fans, and multi-stage water heating to limit battery power consumption.

DIMENSIONS









TECHNICAL INFORMATION

BTMS X-800V

Maximum cooling capacity (kW) at: outside temperature (°C) of coolant outlet (°C) of coolant flow (I/m)	8.5 40 25 60
Water heating capacity	10kW as standard
Operating voltage	575V DC / 800V DC
HV DC Maximum power consumption (compressor / heater)	7.8kW / 10.4A @ 750V DC
LV DC Maximum power consumption (pump / fan)	1.1kW / 42.1A @ 25.5V DC
Maximum weight (without coolant) (kg)	119kg
Dimensions L x W x H (mm)	1025mm (L) x 471mm (H) x 575mm (W)
Refrigerant type Charge weight (kg)	R134a 2.4
Connector types (High voltage (4-Pin)) Connector types (Low voltage)	PL184X-41-6 DEUTSCH HDP24
Integrated header tank	Yes
Outlet size O.D. (mm)	Ø 25mm
Anti-vibration mounts	Included
Fan technology	Brushless motor
Integrated water pump	Yes (brushless motor)

Cooling capacity vs Ambient @ 25°C coolant

