

# BATTERY THERMAL MANAGEMENT SYSTEM (BTMS)

## GEN3 STANDARD



### PART NUMBERS:

**3A-6725-0A00** - Active and Passive Cooling & Heating

**3A-6725-0B00** - Active and Passive Cooling Only

**3A-6725-0C00** - Active Cooling & Heating

**3A-6725-0D00** - Active Cooling Only

900V DC capability will be available from January 2024.  
Enquire today for more information.

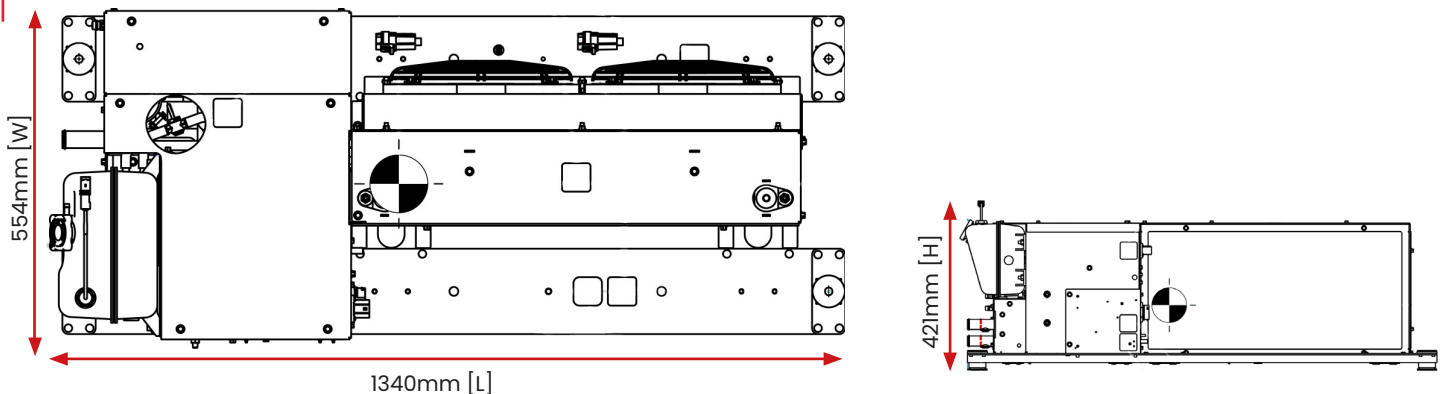
## SYSTEM OVERVIEW

Utilising the latest advancements in control and design, our GEN3 BTMS provides advanced functions for the critical thermal management of vehicle battery systems. Designed to work across a wide range of applications and markets across the world the GEN3 builds on the performance and reliability of the previous generation BTMS designs. The standard model maximises performance with a condenser module separate to the chiller, pump and controls unit.

### KEY FEATURES:

- Configurable with active cooling, passive cooling and/or heating options
- Suitable for roof mounting or chassis/body mounting
- Integrated water pump
- CAN J1939 "plug and play" control
- CAN boot loader for easy software updates
- DMI diagnostics messages on CAN network
- Fuseless smart power distribution on LV circuits
- Electric expansion valve
- Pressure transducers for fan speed regulation
- Brushless fans
- Lightweight header tank
- 24VDC for controller, fans and pump
- 600V DC nominal, 750V DC max
- Available as a split system to improve integration with vehicle architecture

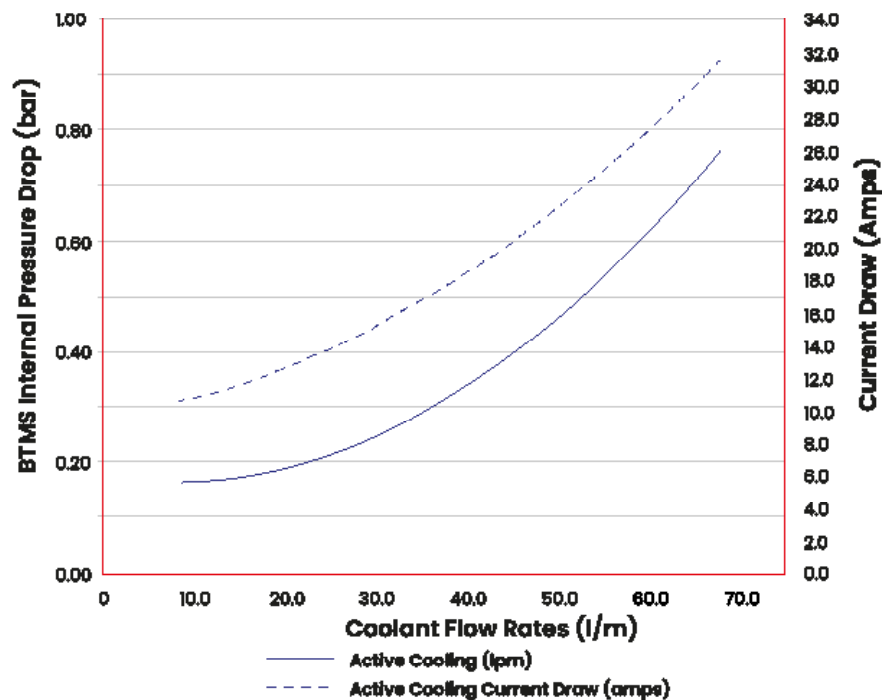
## DIMENSIONS



# TECHNICAL INFORMATION

GEN3 STANDARD	40°C	50°C
Maximum cooling capacity (kW) at: outside temperature (°C) of coolant outlet (°C) of coolant flow (l/m)	11.5 40 25 40	10 50 25 40
Water heating capacity	3.6kW or 5kW	
Operating voltage	600V DC / 24V DC	
24V DC maximum power consumption (pump / fan)	18 + 48A	
600VDC Maximum power consumption (compressor / heater)	6.25A	
Maximum weight (without coolant) (kg) (0AXX variant - active and passive cooling and heating)	74kg	
Dimensions L x W x H (mm)	1340mm (L) x 554mm (W) x 421mm (H)	
Refrigerant type Charge weight (kg)	R134a / 407C Optional 1.2kg	
Connector types (High voltage (4-Pin)) 24V DC & Control Protocol via CAN J1939	TE Connectivity (HVA280) Deutsch (HDP24/26)	
Integrated header tank	Yes	
Outlet size O.D. (mm)	Ø 28.75 mm	
Anti-vibration mounts	Included	
Fan technology	Brushless Motor	
Integrated water pump	Yes (brushless motor)	
Option for remote water heater	Yes – up to 35kW	

**Active Cooling Circuit Internal Pressure Drop**



Enquire today

[www.graysonts.com](http://www.graysonts.com)

