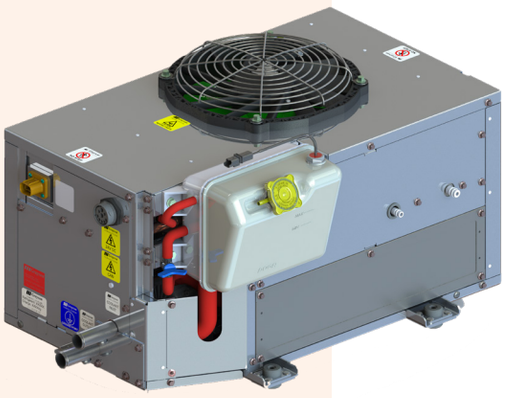
BATTERY THERMAL MANAGEMENT SYSTEM (BTMS)

GEN3 COMPACT



RANGE OPTIONS

3A-6720-0A00 - Active and Passive Cooling & Heating

3A-6720-0B00 - Active and Passive Cooling Only

3A-6720-0C00 - Active Cooling & Heating

3A-6720-0D00 - Active Cooling Only

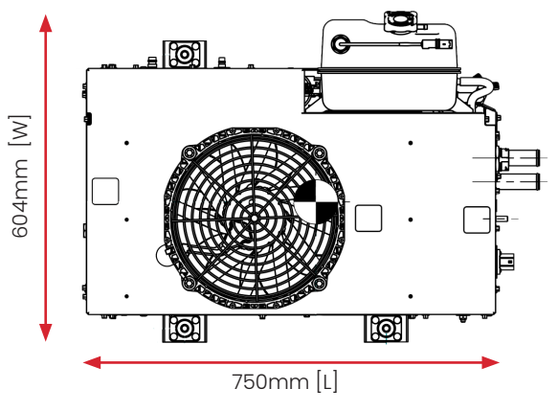
BTMS FEATURES

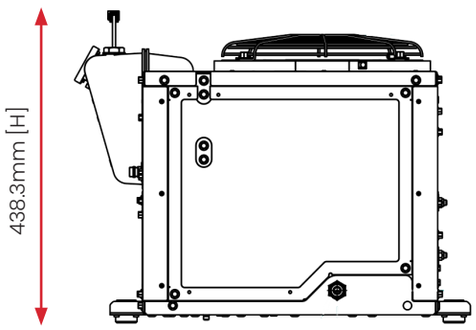
Incorporating all the same advancements and features of the Gen3 Standard, the Compact design gives a single unit solution. Ideal for installations where space is at a premium, the Compact still has all the controls and integration of the Standard model, bringing the benefits of the BTMS development into a single module. GTS have brought together their experience gained in the HVAC and BTMS markets to ensure the Gen3 Compact has all the durability and reliability our customers have come to expect but in an efficient compact module that still gives the critical battery thermal management that is needed for long operational life.

GEN3 Features

- Configurable with the options of active cooling, passive cooling and/or heating.
- Suitable for roof mounting or chassis / body mounting.
- Integrated water pump.
- CAN J1939 “plug and play” control.
- CAN boot loader for easy software updates.
- DM1 diagnostics messages on CAN network.
- Fuse-less smart power distribution on HV and LV circuits.
- Power consumption reporting (optional).
- Electric expansion valves.
- Pressure transducers for Analogue fan regulation.
- Brushless fans.
- Lightweight header tank.
- 24VDC for controller, fans and pump

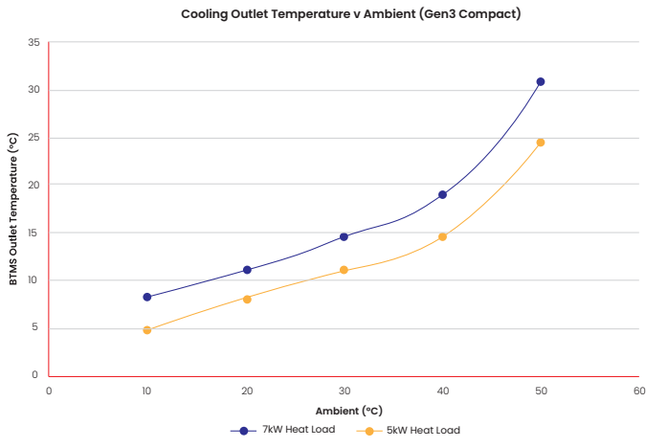
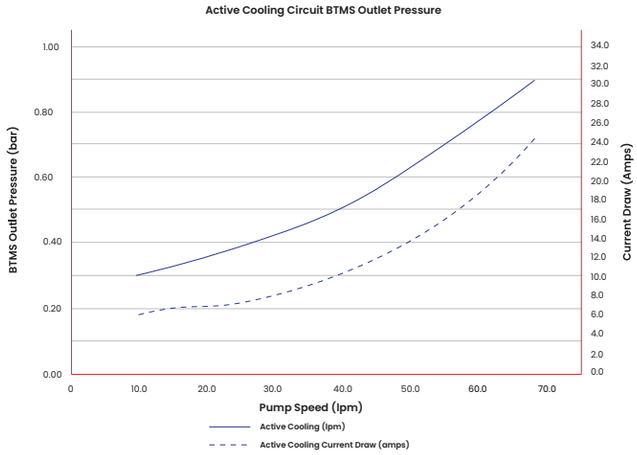
DIMENSIONS





Grayson
Thermal Systems

TECHNICAL INFORMATION

GEN 3 Compact	40°C	50 °C
Maximum cooling capacity (kW) at: outside temperature (°C) of coolant outlet (°C) of coolant flow (l/m)	5.8 40 25 40	4.4 45 25 40
Water heating capacity	3.6Kw (5kW Optional)	
Operating voltage	600V DC / 24V DC	
24V DC Maximum power consumption (pump / fan) (1 fan)	18 + 24A	
600VDC Maximum power consumption (compressor / heater)	6.25A	
Maximum weight (without coolant) (kg) (0AXX variant - active and passive cooling and heating)	55kg	
Dimensions L x W x H (mm)	750mm (L) x 604mm (W) x 438.3mm (H)	
Refrigerant type Charge weight (kg)	R134a / 407c Optional 0.9	
Connector types (High Voltage (4-Pin) 24V DC & Control Protocol via CAN J1939	HVA280 Deutsch HDP24	
Integrated Header Tank	Yes	
Outlet Size O.D. (mm)	28.75 mm	
Anti-Vibration mounts	Included	
Fan technology	Brushless Motor	
Integrated water pump	Yes (brushless motor)	
Option for remote water heater	Yes – upto 35kW	

(Cooling curves at 40 l/min) Flow Rate