

BATTERY THERMAL MANAGEMENT SYSTEM (BTMS)

GEN3 COMPACT



PART NUMBERS:

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

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

SYSTEM OVERVIEW

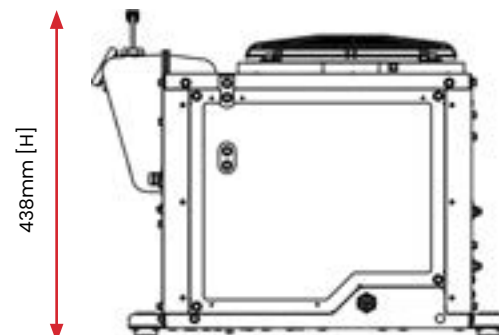
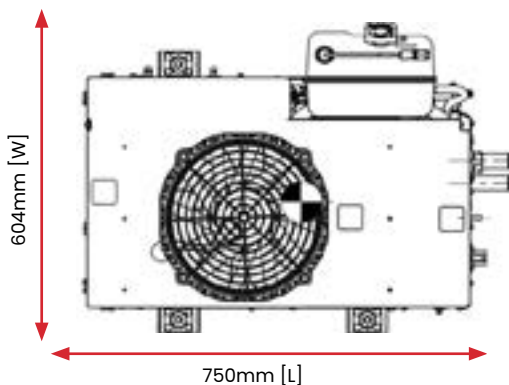
Providing precise thermal regulation for high-capacity, temperature-sensitive batteries, the BTMS GEN3 Compact is the ideal single unit battery thermal management solution for installations where space is at a premium.

Capable of providing battery heating and cooling in even the most extreme of climates, the BTMS GEN3 Compact includes the same controls and integration as the GEN3 Standard while its smaller footprint provides more packaging flexibility.

KEY 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
- DMI diagnostics messages on CAN network
- Fuseless smart power distribution on LV circuits
- Electric expansion valve
- Pressure transducers for fan speed regulation
- Brushless fan
- Lightweight header tank
- 24VDC for controller, fans and pump
- 600V DC nominal, 750V DC max

DIMENSIONS

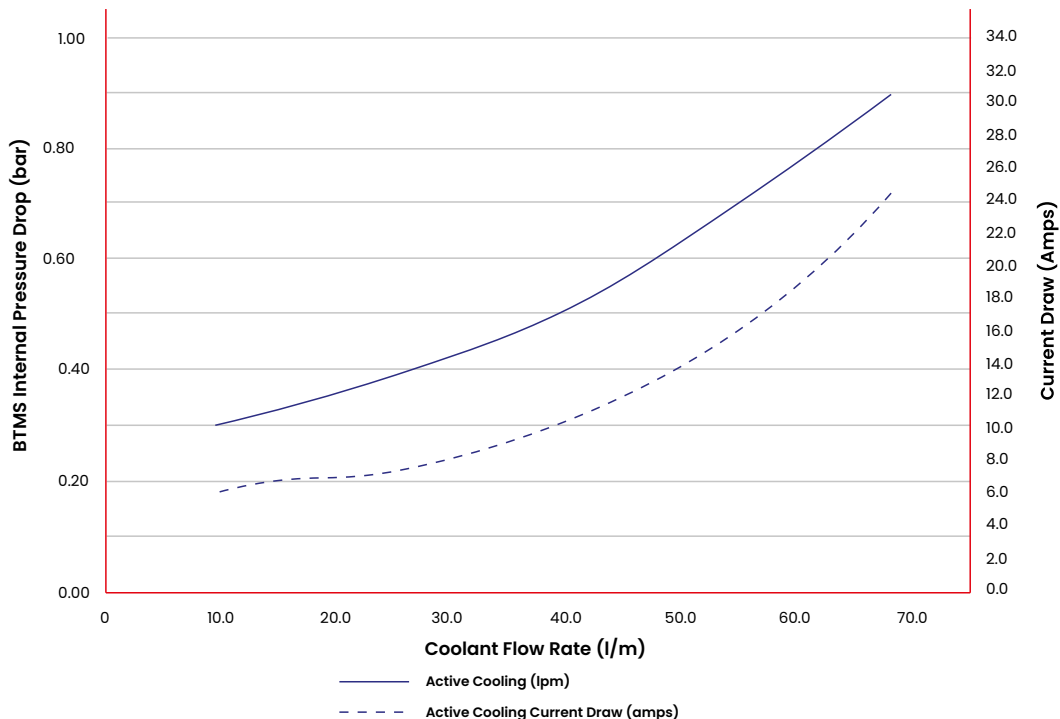


TECHNICAL INFORMATION

GEN3 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 50 25 40
Water heating capacity	3.6kW (5kW Optional)	
Operating voltage	600V DC / 24V DC	
24V DC Maximum power consumption (pump / 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 450mm (H) x 483mm (W)	
Refrigerant type Charge weight (kg)	R134a/ 407C Opional 0.9	
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

