# HYDROGEN FUEL CELL COOLER

# 9-Fan Cooling Module



#### **PART NUMBERS:**

1A-6813-0A00 - 9-fan cooling module

### SYSTEM OVERVIEW

The GTS range of hydrogen fuel cell cooling solutions has a proven track record of meeting the design and packaging needs of OEMs across various vehicle sectors.

Expertly integrating into applications, our lightweight and efficient heat exchanger platforms complement the electric fan airflow characteristics to provide modular cooling solutions to achieve the thermal parameter set out by you and fuel cell manufacturers.

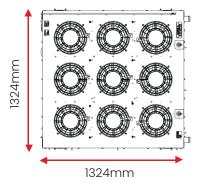
Currently our largest cooling module providing cooling capacity for the largest available fuel cells, our roof-mounted cooling module comprises of 9 x 24VDC axial fans and a brazed aluminium heat exchanger secured in a mounting frame, with anti-vibration mounts also included in the assembly.

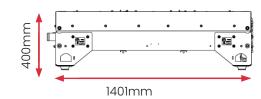
#### **KEY FEATURES:**

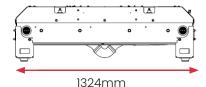
- Plug and play system with simple installation
- Brazed aluminium heat exchangers, de-ionised water compatible
- PWM controlled fans via the vehicle CAN network
- Lightweight aluminium heat exchanger technology
- Fans orientated for air flow through the core and exhausted into atmosphere
- Designed for roof mounting

- Option to include plate heat exchanger for waste heat recycling
- Long life brushless electric fan (18V to 32V DC)
- EMC R10 certified electric fan
- Reverse fan function for heat exchanging cleaning and de-clogging
- Low maintenance system

## DIMENSIONS









### **TECHNICAL INFORMATION**

#### Hydrogen Fuel Cell Cooler (9-Fan Unit)

*Rated cooling capacity	172kW 40°C ambient 290 I/min water flow 61°C coolant temperature
Ambient operating temperature range	-30°C to +50°C
Working pressure	1.5 bar max
Flow rate at rated cooling capacity	290 I/min
Pressure drop through heat exchanger	189 mbar
Nominal voltage	24V DC
Current draw	288A (32A per fan)
Maximum weight (without coolant)	211kg
External dimensions	1400mm (L) x 1319mm (W) x 394mm (H)
Heat exchanger material	Brazed aluminium (suitable for de-ionised water)
Frame material	Mild Steel (powder coated RAL9010)
Connector types	DELPHI METRI-PACK 150-480
Inlet & Outlet Size (mm)	51
Coolant	Cooling liquid/water ethylene glycol

\* Rated cooling capacity (kW) will vary depending on the input data including ambient temperature, coolant outlet temperature and flow rate. Contact us today to discuss your requirements and your independent thermal study.