WATER HEAT PUMP SYSTEM



RANGE OPTIONS

3H-6720-0CXX - Refrigerant Heat Pump and Electric Water Heater

3H-6720-0DXX - Refrigerant Heat Pump Only

WATER HEAT PUMP SYSTEM FEATURES

Born from our GEN3 BTMS, the Water Heat Pump System has been developed as a compact unit to provide a hot water supply from a refrigerant heat pump circuit. Ideal for installations where space is at a premium, the small footprint design is ideal for a number of vehicle applications where efficient hot water generation is required.

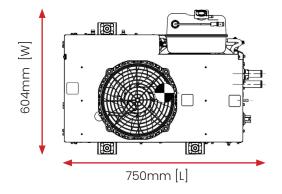
Taking standard components and controls from our BTMS range, GTS has combined its experience in heating and refrigeration to provide an energy-efficient system that delivers sufficient heating capacity for the target applications and markets, providing a durable and reliable system.

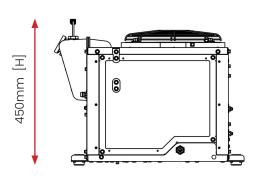
Key Features

- Supplies hot water for your vehicle heating system
- Configurable options with refrigerant heat pump and/or electric water heater for low ambient territories
- Suitable for roof mounting or body/chassis mounting
- Integrated water pump
- 420VDC to 756VDC voltage range for compressor and heater
- CAN J1939 "plug and play" control
- CAN boot loader for easy software updates

- DMI diagnostic messages on CAN network
- Fuse-less smart power distribution on LV circuits
- Electric expansion valve
- Pressure transducers for fan speed regulation
- Brushless fan
- Lightweight header tank
- 24VDC for controller, fan and pump
- Shared components from GEN3 BTMS for proven reliability

DIMENSIONS







TECHNICAL INFORMATION

Water Heat Pump System

Maximum heating capacity (kW) at: outside temperature (°C) of coolant outlet (°C) of coolant flow (I/min)	12 0 45 401/min
Electric water heating capacity	3.6Kw (5kW Optional)
Nominal operating voltage	600V DC / 24V DC
24V DC Maximum power consumption (pump / fan)	18A / 24A
600VDC Maximum power consumption (compressor / heater)	3.6kW 5kW 7A 6A 7A
Maximum weight (without coolant) (kg)	60kg
Dimensions L x W x H (mm)	750mm (L) x 450mm (H) x 604mm (W)
Refrigerant type Charge weight (kg)	R407C 1.0
Coolant Pressure Drop (Bar)	See graph
Connector types High Voltage (4-Pin) 24V DC & Control Protocol via CAN J1939	HVA280 P Deutsch HDP24
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)
Coolant Flow (I/min)	See graph



Coolant Flow (Ipm)

Pressure Drop

Coolant Flow vs Outlet Pressure

