



# SUBMITTAL : GS5-45HPC-D

## Heat Pump Water Heater



Job Name	Location
Purchaser	Engineer
Submitted to	Reference <input type="checkbox"/> Approval <input type="checkbox"/> Construction <input type="checkbox"/>
Unit Designation	Schedule #

Specifications	GS5-45HPC-D
Uniform Energy Factor	Dependent on Tank
Uniform First Hour Rating	Dependent on Tank
Recovery rate @ 90°F Temp Rise	20.6 GPH
Nom Heating Capacity (Btu/h)	15,400 Btu/h
Nom Heating Capacity (kw)	4.5kw
Ambient Operating Range	-25 to 114°F
Heating COP @ 80°F Ambient	5.5
Heating COP @ 43°F Ambient	4.2
Heating COP @ 17°F Ambient	2.6
Hot Water Temperature (°F)	145°F / 150°F
Tank Temperature to Start	113°F
GS5 Inlet Water Temp to Stop	118°F
Refrigerant Type	R744 (CO <sub>2</sub> )
Refrigerant Charge (Oz)	25.4oz (720g)
Power Voltage	208/230v-1Ph-60Hz
Breaker Size	15A
MCA (Amps)	7.2A
Compressor MRC (Amps)	5.0A
Fan Motor MOC/Watts	0.3A / 30W
Pump MOC/Watts	0.6A / 60W
Drain Pan Heater MOC/Watts	0.6A / 132W
Noise Level (DbA)	37
Weight (lbs)	110lbs
<b>Storage Tank Model #'s</b>	ECO-43SSAQB
	SAN-43SSAQA
	ECO-83SSAQB
	SAN-83SSAQA
	SAN-119GLBK
	ECO-119GLASME
	ECO-200GLBK
	ECO-285GLNST
	ECO-360GLNST
	ECO-455GLNST
	ECO-505GLNST
<b>Piping - Tank to Heat Pump and back to Tank</b>	
Cold & Hot Water pipe size	1/2" & 1/2"
Max Pipe Length including	66ft
Max Vertical Separation of	23ft
Max Incoming Water Pressure	75 Psi
<b>Certifications</b>	
Safety	ETL/ETLc
Energy Star	US & Canada
<b>Residential Warranty</b>	
Heat Pump	3 Years Labor
	10 Years Parts

### Construction

The Outdoor unit shall be galvanized steel with a baked on powder coated finish on all panels except unit base

### Heat Exchangers

Evaporator coil shall be mechanically bonded Aluminum fin to copper tube. Fins shall be coated to resist corrosion

The Refrigerant to Water HX (Gas Cooler) shall be a Double Wall co-axial type pressure tested to 6000 psi

### Refrigerant System

Compressor shall be a hermetically sealed DC Inverter drive Rotary type. Refrigerant shall be R744 (CO<sub>2</sub>). Refrigerant flow shall be controlled by an Electronic Expansion Valve

### Fan & Motor

The GS5 fan shall be propeller, driven by a BLDC motor

### Water Pump

The pump shall be a BLDC Impeller type, with a maximum lift of 23ft and total piping length of 66ft

### Controls

The unit shall be operated using Eco2 Systems supplied Temperature sensor(s) installed in the Storage tank The ECO/SAN-43, ECO/SAN-83, SAN-119, ECO-119 & ECO-200 Tanks shall have Tank sensors installed and shall be wired directly to the GS5 Heat Pump with 18-2AWG stranded , shielded wire

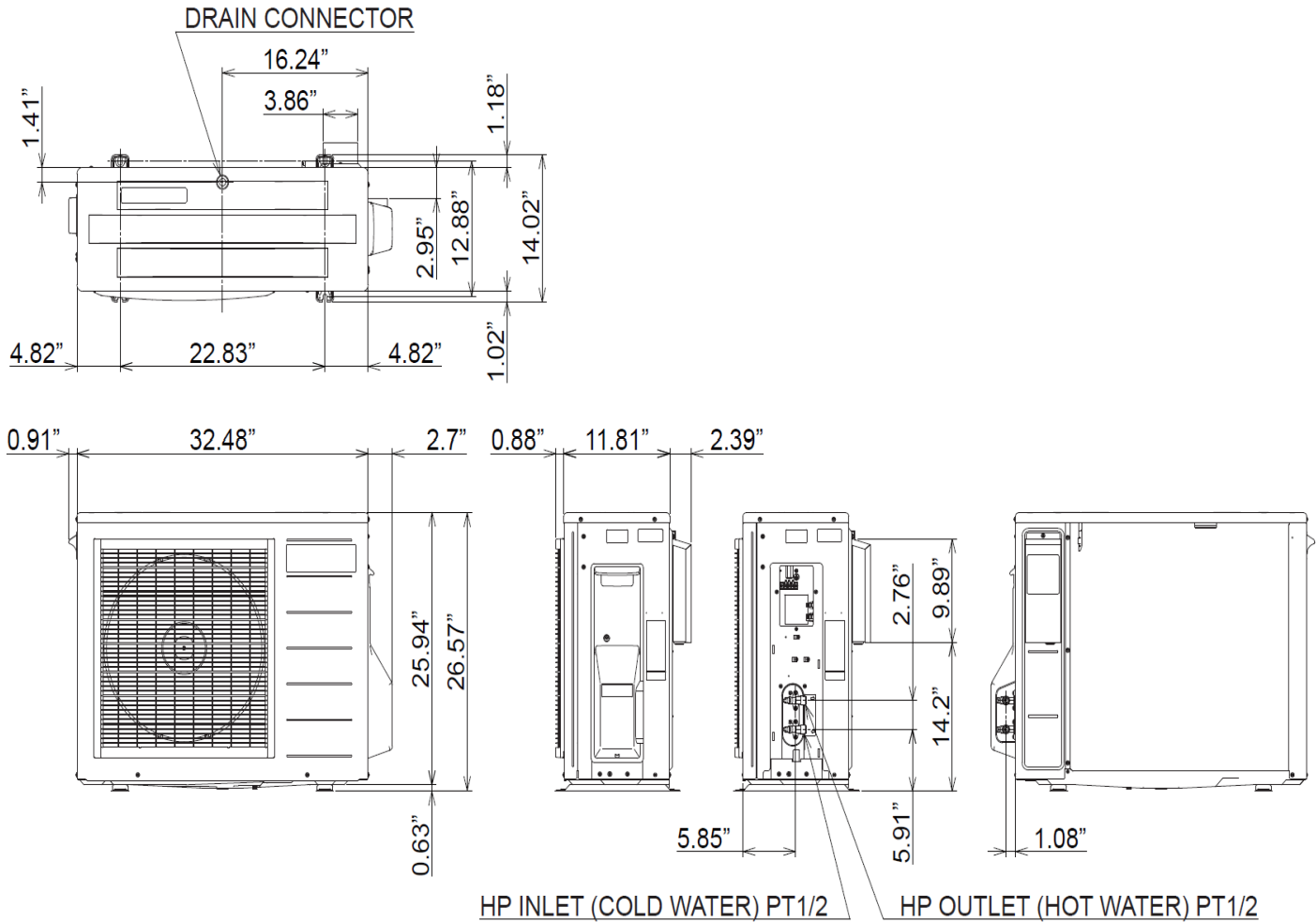
A Modbus communication signal shall be accepted by the GS5 Heat Pump via a Controller that shall be supplied by ECO2 Systems as an accessory The accessory Controller shall be wired to the GS5

### Interconnect Piping

Interconnect Piping shall be 1/2" copper or where permitted 1/2" PEX tubing directly to the Heat Pump(s) More than 2 Heat Pumps connected to the same tank shall utilize a reverse return manifold piping system Both Cold and Hot piping should be insulated with min 3/4" closed cell foam and where required Heat Trace & Freeze Protection Valves shall prevent freezing

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### GS5-45HPC-D Dimensions



Unit: inch