



SUBMITTAL : GS5-45HPC

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
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	2.8
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 ₂)
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
Noise Level (DbA)	37
Weight (lbs)	108lbs
Storage Tank Model #'s	SAN-43SSAQA
	ECO-43SSAQB
	SAN-83SSAQA
	ECO-83SSAQB
	SAN-119GLBK
	ECO-119GLASME
	ECO-200GLBK
	ECO-285GLNST
	ECO-360GLNST
	ECO-455GLNST
	ECO-505GLNST
Piping - Tank to Heat Pump & return to Tank	
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
Certifications	
Safety	ETL/ETLc
Energy Star	US & Canada
Residential Warranty	
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 (CO₂). 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

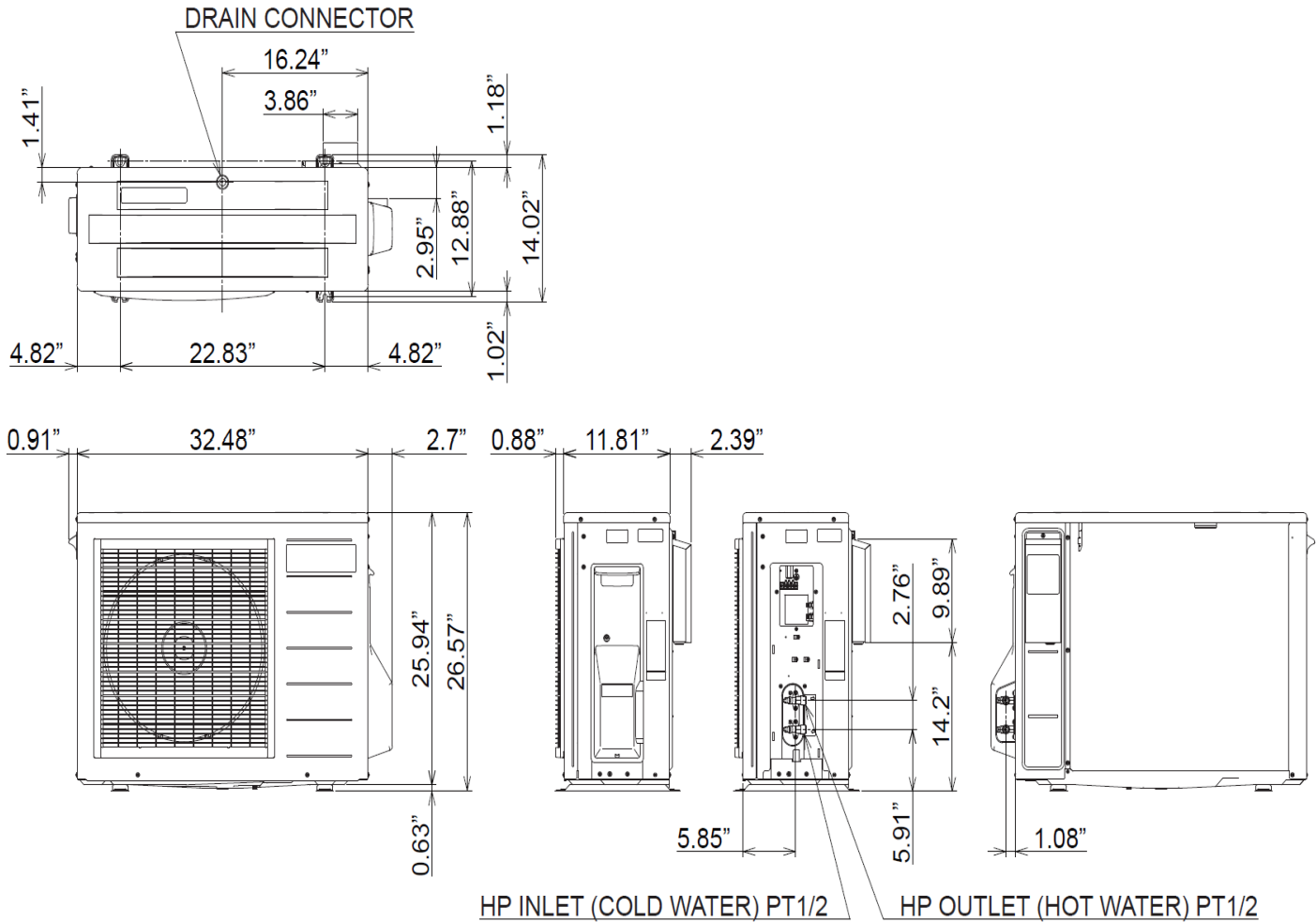
Interconnect Piping

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 shall be used to prevent pipes from freezing

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GS5-45HPC Dimensions



Unit: inch