

SUBMITTAL : GS5-45HPC Heat Pump Water Heater



Job Name	Location
Purchaser	Engineer
Submitted to	Reference Approval Construction
Unit Designation	Schedule #

Unit Designation		
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	3 Years Labor	
Heat Pump	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

ECO2 Systems LLC

PO Box 1358, Walled Lake MI 48390, Tel : 1-844 SAND CO2 (1-844 726 3262)

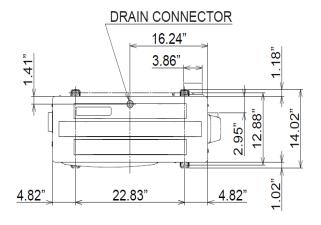


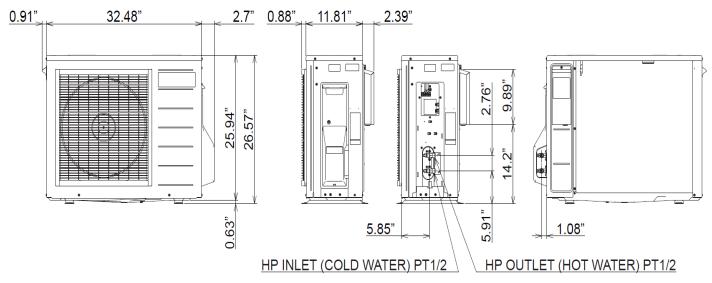
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GS5-45HPC Dimensions





Unit:inch