

“MINI-RESIDENTIAL” TANK HEATER PUMP CONTROLLER

TANK SPECIFICATIONS *SUN EQUINOX HEATING SYSTEMS*

Tank

Volume:	79 Gal.
Empty Weight:	121 lbs.
Filled Weight:	782 lbs.
Max Temperature:	185° F
Material:	Polypropylene
Insulation:	Rigid PU Foam

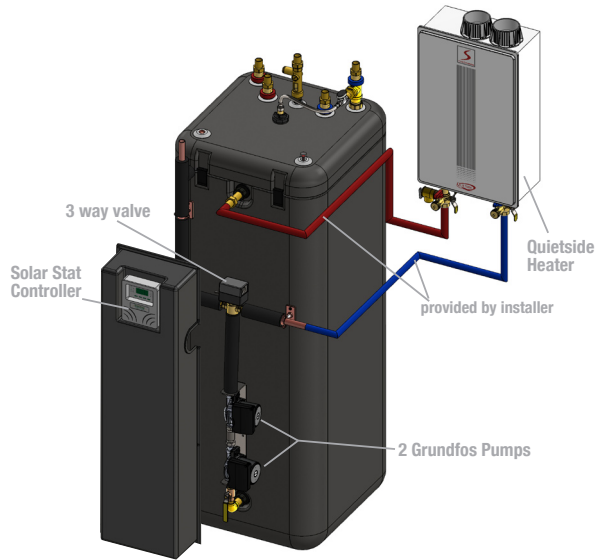
Heat Exchanger Coils

DHW Coil:

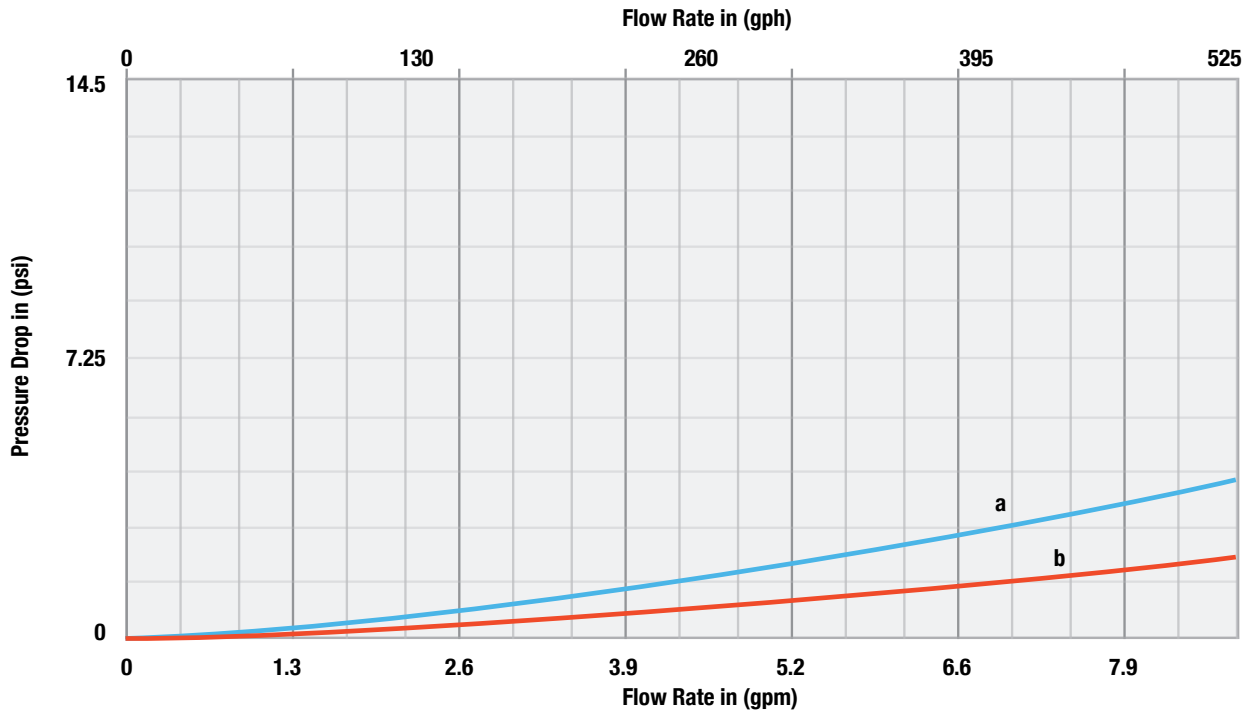
BTU Capacity	at 65°F Δ T
Length:	92 ft.
Material:	Stainless Steel

Heating Coil:

BTU Capacity	at 65°F Δ T
Length:	46 ft.
Material:	Stainless Steel



Pressure Drop Curve for Heat Exchangers



- a) Domestic water heat exchanger (92 ft)
- b) Storage tank loading heat exchanger (46 ft)

(Pressure Drop in psi)

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TANK SPECIFICATIONS SUN EQUINOX HEATING SYSTEMS

Heating connections (A)

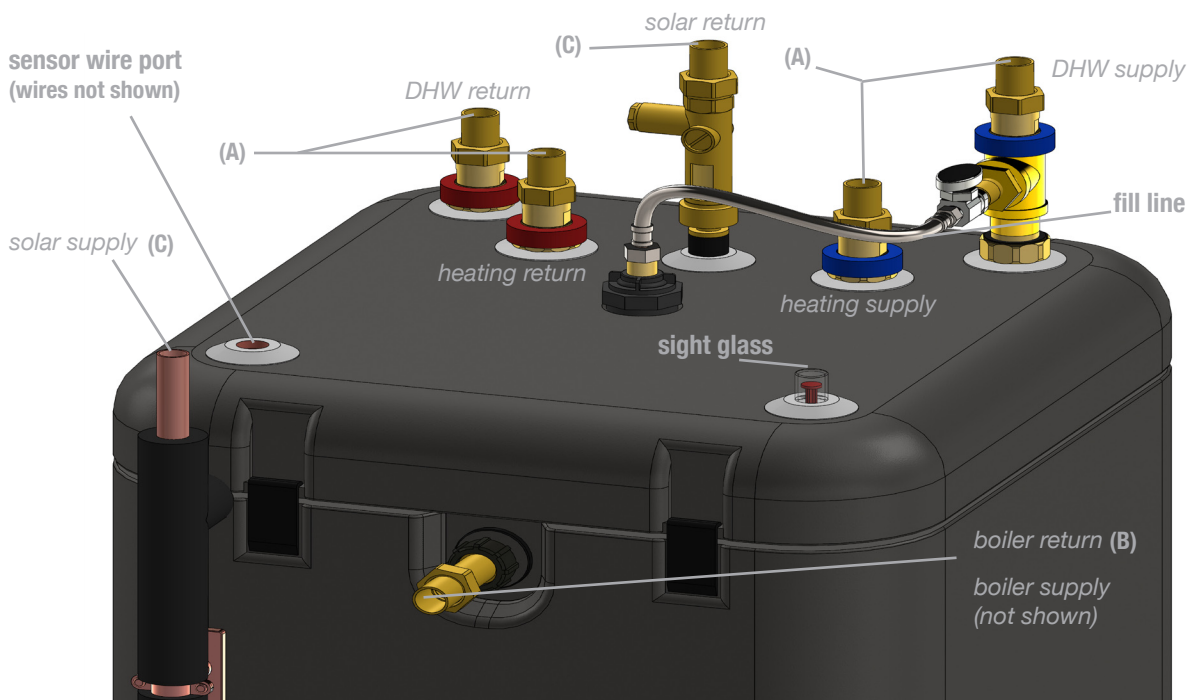
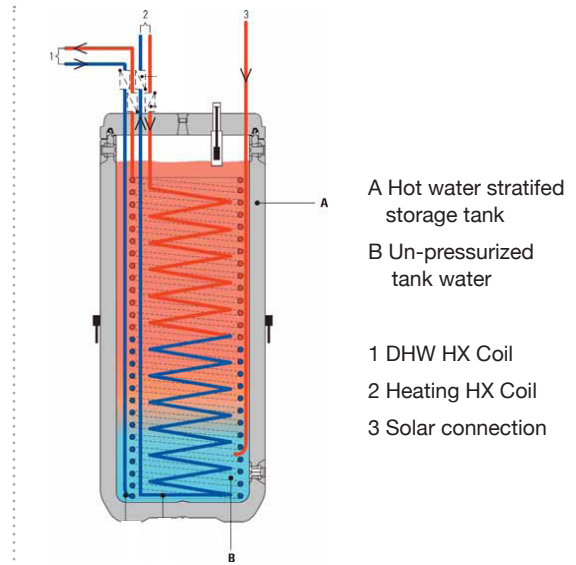
Connection Type:	Sweat
Diameter:	1”
Material:	Brass
Amount:	4

Boiler connections (B)

Connection Type:	Sweat
Diameter:	3/4”
Material:	Brass/ Copper
Amount:	2

Solar connections (C)

Connection Type:	Sweat
Diameter:	3/4” & 1”
Material:	Brass/ Copper
Amount:	2



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HEATER SPECIFICATIONS

SUN EQUINOX HEATING SYSTEMS

Quietside ODW Specification

Heat Input (Btu/h)	199,000 Btu/h	120,000Btu/h
Modulation Range (Btu/h)	26,000-199,000 Btu/h	18,000-120,000Btu/h
Energy Factor (%)	0.92	0.91
Output Temperature (°F)	98-158 °F	98-158 °F
Operating Pressure (PSI)	15-145 Psig	15-145Psig
Minimum Flow Rate (GPM)	0.5-0.7 GPM	0.5-0.7GPM
Ignition Type	Electronic	Electronic
Vent Type	Direct Vent PVC	Direct Vent PVC

General Data

Fuel Type	Natural Gas or LP	Natural Gas or LP
Inlet Gas Pressure - NG	3.5" - 10.5 "	3.5 - 10.5
Inlet Gas Pressure - LP	9" - 13"	9" - 13"
Minimum Gas Line Size (in)	3/4"	3/4"
Power (V)	115V-1Ph-60Hz	115V-1Ph-60Hz
Power Consumption (W)	82 W	60W
Freeze Protection	Ceramic Heaters	Ceramic Heaters
Max Flue Temp (°F)	136 °F	136 °F
Max Vent Length (ft)	45 ft	45 ft
Max Number of Elbows	3	3
Self Diagnostics	15 Error Codes	15 Error Codes

Connections

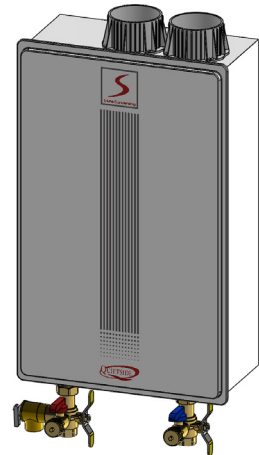
Gas Connection (in)	3/4"	3/4"
DHW Inlet/Supply (in)	3/4"	3/4"(At Valve)
Intake Air Diameter (in)	4" PVC	3" PVC
Exhaust Flue Diameter (in)	4" PVC	3" PVC

Dimensions

Height (in)	28 5/8"	25 1/2"
Width (in)	18 1/2"	15 3/4"
Depth (in)	9 3/16"	8"
Weight (lbs)	64 lbs	51 lbs

Approvals

Safety	ETL & ETLc	ETL & ETLc
Performance	Energy Star	Energy Star
Warranty	12 Years HX	12 Years HX
	5 Year Parts	5 Year Parts



“MINI-RESIDENTIAL” TANK HEATER **PUMP** CONTROLLER

PUMP SPECIFICATIONS *SUN EQUINOX HEATING SYSTEMS*

Pumps

Product name:	Grundfos
Product model:	UP 15-100 SU7
EAN number:	5700394939614
Pumps per system:	2 in series

Technical

Speed number:	1
Max flow:	8.37 US. gpm
Head max:	36.1 ft.
Max. operating pressure:	145 psi
Nameplate approvals:	UL, CSA

Materials

Pump housing:	Stainless Steel
	EN-JL1030
	ASTM 30B
Impeller:	Composite, PES

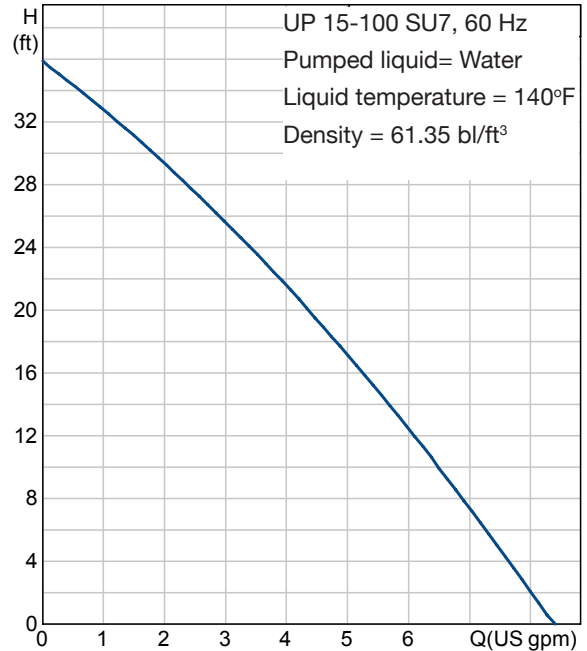
Installation

Max. ambient temperature:	104 °F
Ambient max at 176 °F liquid:	176°F
Max. operating pressure:	145 psi
Connection type:	3/4"
Port-to-port length:	6 1/2 in

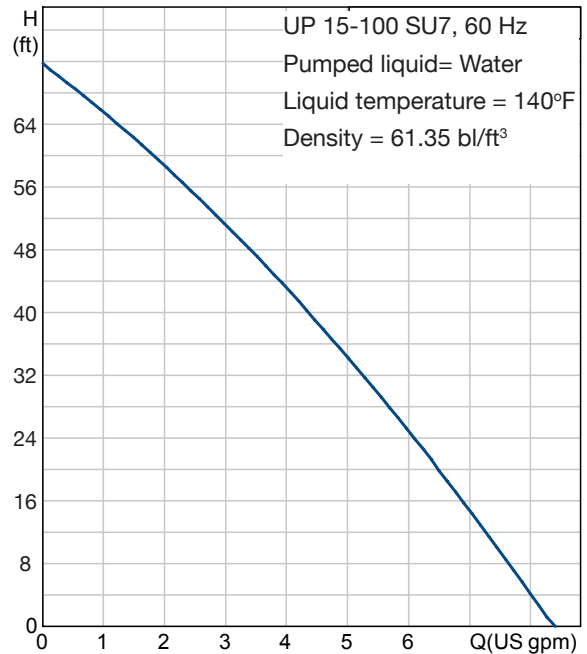
Electrical Data

Max. power Input:	135 W
Main frequency:	60Hz
Rated voltage:	1 x 115 V
Current in speed 3:	1.1 A
Thermal protection:	internal

1 Pump



2 Pumps



“MINI-RESIDENTIAL” TANK HEATER PUMP CONTROLLER

CONTROLLER SPECIFICATIONS

SUN EQUINOX HEATING SYSTEMS

Controller

Product:	SolaStat GDF
Type:	Differential
Sensors:	2 tank 1 collector
Delivered:	pre-programed
Protection:	freeze /over-heat

Pre-programmed Settings

Pump off:	5 °F
Pump on:	30 °F
Holdoff:	off
Reheat Lower:	129 °F
Reheat Upper:	145 °F
Biosafe:	off
Top-out Temperature:	176 °F
Frost:	off
Pump Timer:	°F

All settings are installer adjustable.

