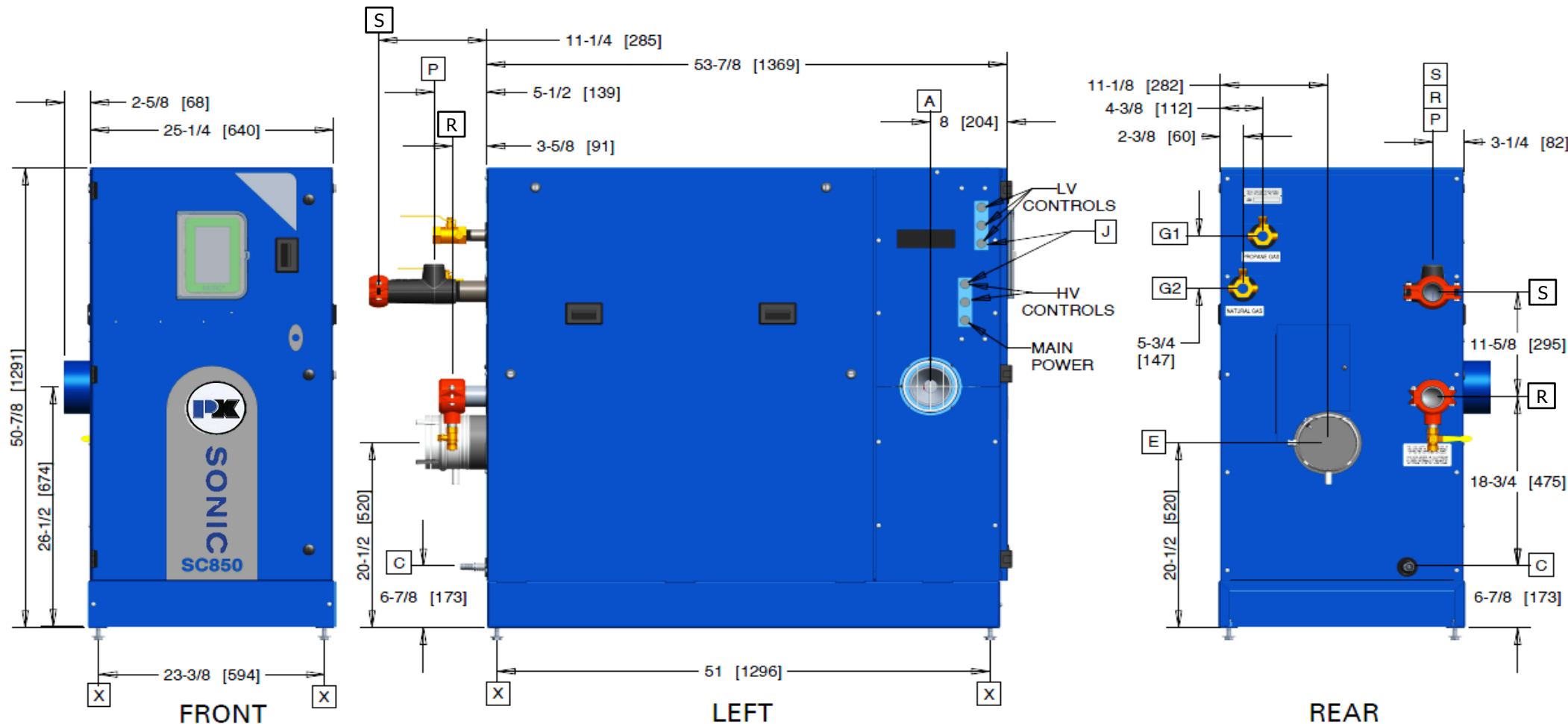


Rep Name: _____

Email: _____

Phone Number: _____

Date: _____ / _____ / _____



Primary dimensions are in inches. The secondary dimensions, [in brackets], are in millimeters.

This SONIC boiler requires Category IV venting (condensing-positive pressure) or Category II venting† (condensing -negative pressure as defined in ANSI Z223.1/NFPA 54/CSA-B.149 latest edition.

†Category II venting must include the optional combustion air damper

BOILER CONNECTIONS		
A	Combustion Air Inlet	6" dia. stub
C	Condensate Drain	3/4" hose
E	Exhaust Vent	6"
G1	Propane Gas	1" NPT-F
G2	Natural Gas	1" NPT-F
J	Wiring Junction Boxes	inside cabinet
P	Pressure Relief Valve	see list for options
R†	Boiler Return, Victaulic® clamp	2" pipe, grooved
S†	Boiler Supply, Victaulic clamp	2" pipe, grooved
X	Anchor Bolt Locations	(4) 1/2" Bolt Holes

†SCD Hot Water Supply Boiler models terminate with 2" copper tube, grooved

BOILER CONTROLS	
ASME CSD-1 is standard	
Complies with: GE GAP (IRI) guidelines GAP.4.1.0 and GAP.4.1.3 FM Global 6-4 Section 1.0	
Main Gas Train with Dual Shut-off	
Integrated Boiler Control, NURO Series	
Operating Thermostat, 42°-195°F (5.6°-91°C)	
High Limit Thermostat, Manual Reset, 100°-197°F (38°-92°C)	
High Exhaust Back Pressure Switch	
LWCO/Flow Switch, Paddle Type (Optional: LWCO, Probe Type)	
Combustion Air Proving Switch, Differential Pressure Type	
Combustion Blower, Variable Speed, 350 Watt (SC650-750-850) & 950 Watt (SC-1000)	

A.S.M.E. SECTION IV DESIGN DATA	SC-650	SC-750	SC-850	SC-1000
	SC-650D	SC-750D	SC-850D	SC-1000D
Max Pressure	160 PSIG			
Max Allowable Temperature	210°F			
Max Operating Temperature	194°F			
Heated Wet Surface Area	76.2	76.2	87	87
Flow Rate @ 20°FΔT	62	72	82	92
Min Flow Rate @ All Firing Rates (Flow Switch Setting)	25	25	30	30

MODEL SELECTION				
Boilers	<input type="checkbox"/> SC-650	<input type="checkbox"/> SC-750	<input type="checkbox"/> SC-850	<input type="checkbox"/> SC-1000
Hot Water Supply Boilers	<input type="checkbox"/> SCD-650	<input type="checkbox"/> SCD-750	<input type="checkbox"/> SCD-850	<input type="checkbox"/> SCD-1000
Fuel Options	<input type="checkbox"/> DUAL FUEL		<input type="checkbox"/> DUAL FUEL	
	<input type="checkbox"/> NG	<input type="checkbox"/> LP	<input type="checkbox"/> NG	<input type="checkbox"/> LP
Min Inlet Gas Pressure	3.5" w.c.			
Max Inlet Gas Pressure	14" w.c.			
Max Input (BTU/hr)	650,000	750,000	850,000	1,000,000
Max Output (BTU/hr)	612,000	706,000	800,000	923,000
Boiler HP	18.3	21.1	23.9	27.5
Min Input (BTU/hr)	125,000	125,000	141,000	143,000
Turndown Ratio	5.2:1	6:1	6:1	7:1
Operating & Shipping Weight †	780 lbs.	780 lbs.	800 lbs.	810 lbs.
Recovery Rate (gph)	734.4	847.2	960	1107.6
Boiler Water Content	<10 gallons			
Shipping Dimensions	84"x36"x57" (LxWxH)			
Power Supply	120V 1ph 60 Hz			
Operating Current	< 5 Amps		< 10 Amps	
Recommended Minimum Circuit Capacity	10 Amps			

†Add 50 lbs. to the listed values when considering a dual fuel models

PRESSURE RELIEF VALVE/PRESSURE-TEMPERATURE GAUGE	
Shipped Loose for Field Installation	
<input type="checkbox"/> 30 PSIG 1"x 1"	0-100 psi/30-240°F
<input type="checkbox"/> 50 PSIG 1"x 1-1/4"	0-100 psi/30-240°F
<input type="checkbox"/> 60 PSIG 1"x 1"	0-100 psi/30-240°F
<input type="checkbox"/> 75 PSIG 1"x 1"	0-240 psi/30-240°F
<input type="checkbox"/> 80 PSIG 1"x 1"	0-240 psi/30-240°F
<input type="checkbox"/> 100 PSIG 1"x 1-1/4"	0-240 psi/30-240°F
<input type="checkbox"/> 125 PSIG 1"x 1"	0-240 psi/30-240°F
<input type="checkbox"/> 150 PSIG 1"x 1"	0-240 psi/30-240°F

RECOMMENDED CLEARANCE FOR SERVICE ACCESS				
Front - 26"	Rear - 0"	Top - 12"	Left Side - 24"	Right Side - 0"

Notes:

- Victaulic is a registered trademark of Victaulic Company, Easton PA, USA
- Harsco Industrial Patterson-Kelley reserves the right to make changes at any time without notification
- Dual fuel models are not designed to run both fuels simultaneously

