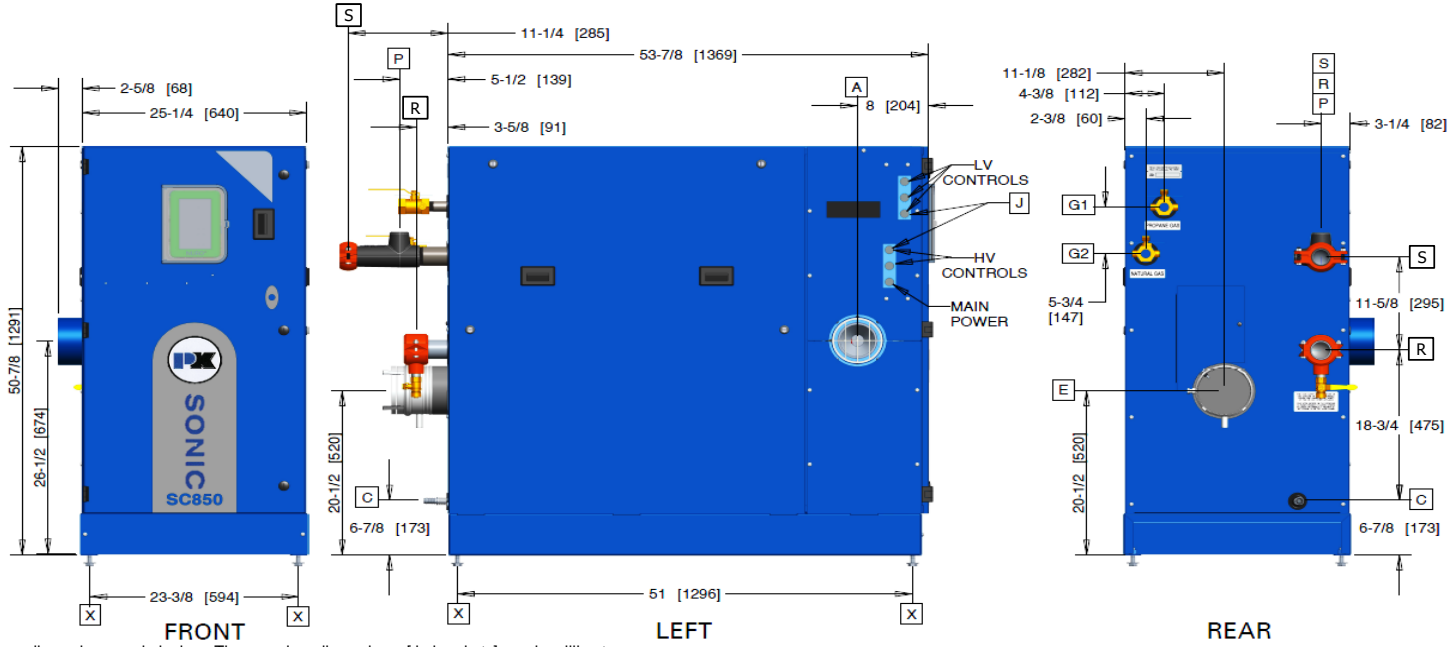


Rep Name: _____

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" dia holes |

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

| MODEL SELECTION | | SC-650 | | SC-750 | | SC-850 | | SC-1000 | |
|--------------------------------------|--|--------|--|--------|--|--------|--|---------|--|
| Boilers | | | | | | | | | |
| Hot Water Supply Boilers | | | | | | | | | |
| Fuel Options | | | | | | | | | |
| Min Inlet Gas Pressure | | | | | | | | | |
| Max Inlet Gas Pressure | | | | | | | | | |
| Max Input (BTU/hr) | | | | | | | | | |
| Boiler HP | | | | | | | | | |
| Min Input (BTU/hr) | | | | | | | | | |
| Turndown Ratio | | | | | | | | | |
| Operating & Shipping Weight † | | | | | | | | | |
| Boiler Water Content | | | | | | | | | |
| Shipping Dimensions | | | | | | | | | |
| Power Supply | | | | | | | | | |
| Operating Current | | | | | | | | | |
| Recommended Minimum Circuit Capacity | | | | | | | | | |

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

| 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, 70°-195°F (21°-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) | |

| 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 |

| A.S.M.E. SECTION IV DESIGN DATA | SC-650 | SC-750 | SC-850 | SC-1000 |
|--|----------|----------|----------|----------|
| 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 | 61.2 GPM | 70.6 GPM | 80.0 GPM | 92.3 GPM |
| Recovery 40-140°F | 734 GPH | 847 GPH | 960 GPH | 1108 GPH |
| Flow Rate 60-120°F | 1223 GPH | 1412 GPH | 1600 GPH | 1846 GPH |
| Min Flow Rate @ All Firing Rates (Flow Switch Setting) | 25 GPM | 25 GPM | 30 GPM | 30 GPM |

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

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

