

P-K STORM™

Model ST-650, ST-800, & ST-1000
Natural Gas with NURO® Control

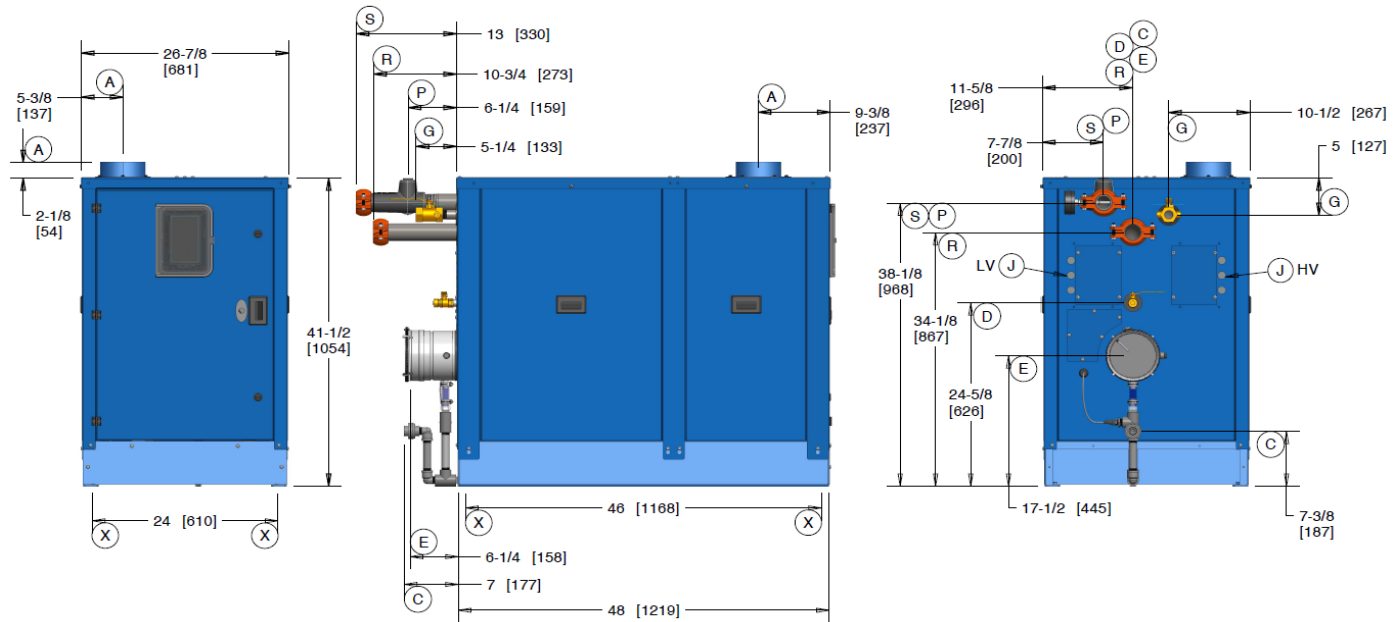


Rep Name: _____

Email: _____

Phone Number: _____

Date: _____ / _____ / _____



This MACH 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" FPT
E	Exhaust Vent	6" PVC/CPVC Pipe Size
G	Natural Gas	1" NPT-F
J	Wiring Junction Boxes	back panel, internal
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

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 (38°-92°C)	
High Limit Thermostat, Manual Reset, 100°-197°F (38°-92°C)	
High Exhaust Back Pressure Switch	
LWCO, Probe Type, Manual Reset	
Combustion Air Proving Switch, Differential Pressure Type	
Combustion Blower, Variable Speed, 350 Watt (ST-650 & ST-800) & 950 Watt (ST-1000)	
Condensate Blockage, Cut-Off Probe	
Flow Switch, Paddle Type	

A.S.M.E. SECTION IV DESIGN DATA	ST-650	ST-800	ST-1000
Max Pressure	160 PSIG		
Max Allowable Temperature	210°F		
Max Setpoint	194°F		
Heated Wet Surface Area	47.25 sq. ft.	55.12 sq. ft.	68.24 sq. ft.
Flow Rate @ 20°FΔT	63.05 GPM	77.6 GPM	97 GPM
Min Flow Rate @ All Firing Rates (Flow Switch Setting)	18 GPM	22.2 GPM	27.7 GPM

MODEL SELECTION			
Boilers	<input type="checkbox"/> ST-650	<input type="checkbox"/> ST-800	<input type="checkbox"/> ST-1000
Fuel Options	<input type="checkbox"/> Natural Gas		
Min Inlet Gas Pressure	3.5" w.c.		
Max Inlet Gas Pressure	14.0" w.c.		
Input (BTU/hr)	650,000	800,000	1,000,000
Output (BTU/hr)	630,500	776,000	970,000
Boiler HP	19.4	23.9	29.9
Turndown Ratio	10:1		
Boiler Water Content	5.6 gal	6.6 gal	8.1 gal
Shipping Dimensions	64.3"x29.8"x46.6" (LxWxH)		
Power Supply	120V 1ph 60Hz		
Operating Current	< 6 Amps		< 10 Amps
Recommended Minimum Circuit Capacity	10 Amps		

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 - 18"	Top - 0"	Left Side - 6"	Right Side - 0"
Rear - 12"			

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