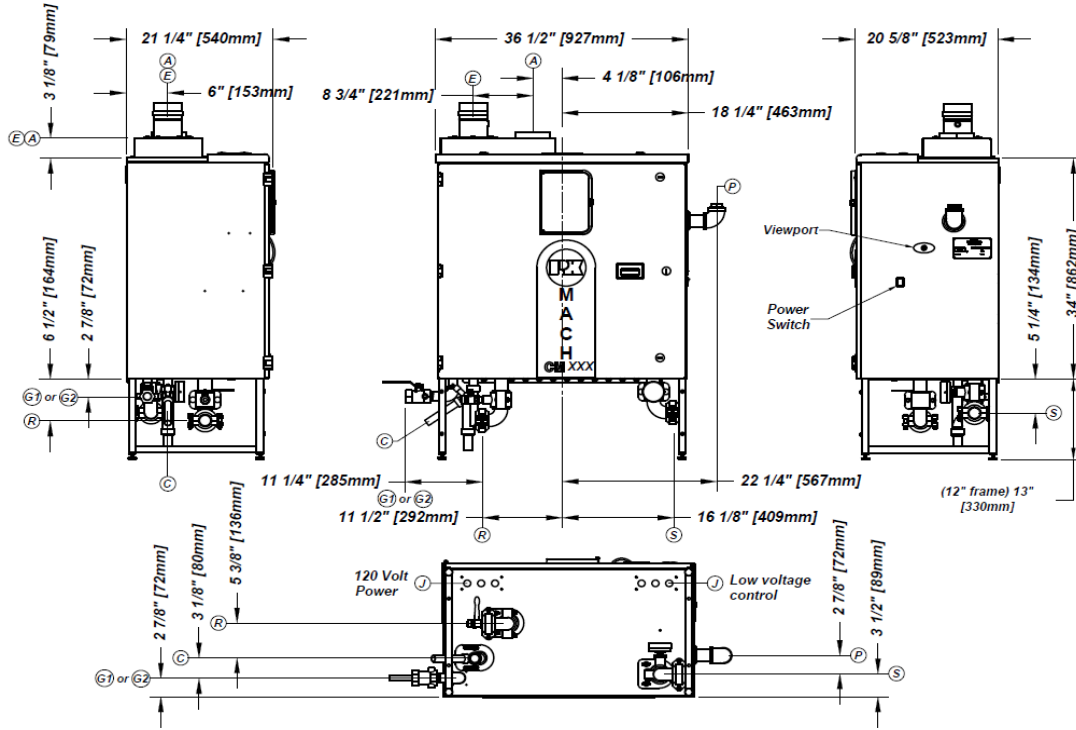


Rep Name: _____

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 CONECTIONS		
A	Combustion Air Inlet	5" dia. stub
C	Condensate Drain	3/4" hose
E	Exhaust Vent	4"
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	1 1/2" pipe, grooved
S	Boiler Supply, Victaulic clamp	1 1/2" pipe, grooved

MODEL SELECTION				
Boilers	□ CM-399		□ CM-500	
Fuel Options	□ Natural Gas	□ Liquid Propane	□ Natural Gas	□ Liquid Propane
Min Inlet Gas Pressure	3.5" w.c.	7.0" w.c	6" w.c. or 3.5" w.c.	7.0" w.c.
Max Inlet Gas Pressure	14" w.c.			
Input (BTU/hr)	399,000		500,000	
Output (BTU/hr)	371,000		456,000	
Boiler HP	11.0		13.7	
Operating Weight	313 lbs.			
Shipping Weight	402 lbs.		440 lbs.	
Boiler Water Content	1.58 gallons			
Shipping Dimensions	53"x29"x60" (LxWxH)			
Power Supply	120V 1ph 60 Hz			
Operating Current	< 5 Amps			
Recommended Minimum Circuit Capacity	10 Amps			

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, Probe Type, Manual Reset	
Combustion Air Proving Switch, Differential Pressure Type	
Combustion Blower, Variable Speed, 300 Watt	

PRESSURE RELIEF VALVE/PRESSURE-TEMPERATURE GAUGE		
Shipped Loose for Field Installation		
<input type="checkbox"/> 30 PSIG 3/4" x 1"	15-160 psi/0-250°F	
<input type="checkbox"/> 50 PSIG 3/4" x 1"	15-160 psi/0-250°F	
<input type="checkbox"/> 60 PSIG 3/4" x 1"	15-160 psi/0-250°F	
<input type="checkbox"/> 75 PSIG 3/4" x 1"	15-160 psi/0-250°F	
<input type="checkbox"/> 80 PSIG 3/4" x 1"	15-160 psi/0-250°F	

A.S.M.E. SECTION IV DESIGN DATA	CM-399	CM-500
Max Pressure	80 PSIG	
Max Allowable Temperature	250°F	
Max Setpoint	185°F	
Heated Wet Surface Area	15.72 sq. ft.	
Flow Rate @ 20°FΔT	37.1 GPM	45.6 GPM
Flow Rate @ 40°FΔT	18.6 GPM	22.8 GPM

RECOMMENDED CLEARANCE FOR SERVICE ACCESS				
Front - 36"	Rear - 0"	Top - 24"	Left Side - 2"	Right Side - 24"

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