



Mod Con Commercial Condensing Heating Boiler Submittal

JOB NAME:

LOCATION:

ARCH./ENGR.:

WHOLESALE:

MECH. CONTRACTOR:

MODEL NUMBER:

TYPE OF GAS:

BTU/HR INPUT LOW – HIGH FIRE:

NOTES:

Heat Exchanger

- All Stainless Steel Construction. 160 PSI ASME stamped construction. National Board listed.
- Gasketless heat exchanger design
- ASME 75 PSI relief valve
- Front service access to combustion chamber and burner
- Inlet and outlet temperature sensor

Combustion System

- Modulating burner with up to 5 to 1 turndown
- Up to 98% thermal efficiency
- High-Grade Inconel burner design
- Spark ignition
- Models available for Natural or LP Gas
- Dual flame monitoring (Spark and Flame probe)
- Gas Valve pressure range 3 ½” minimum to 14” maximum Water Column

Integrated Control System

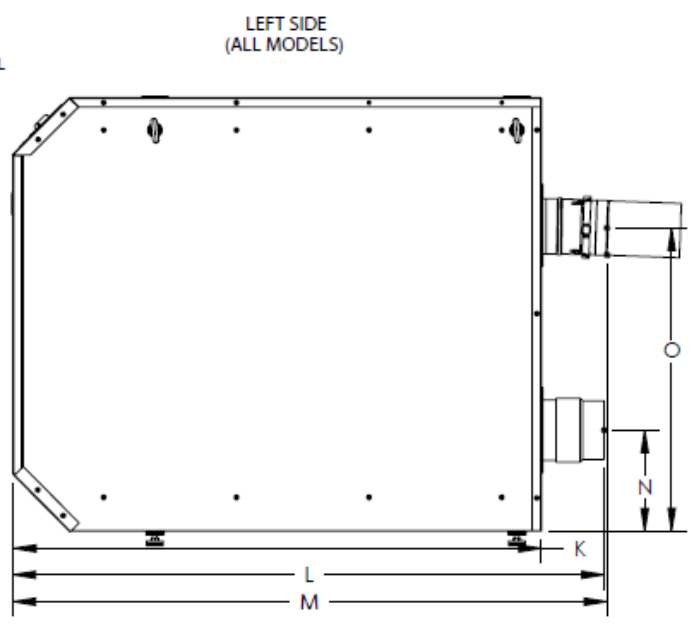
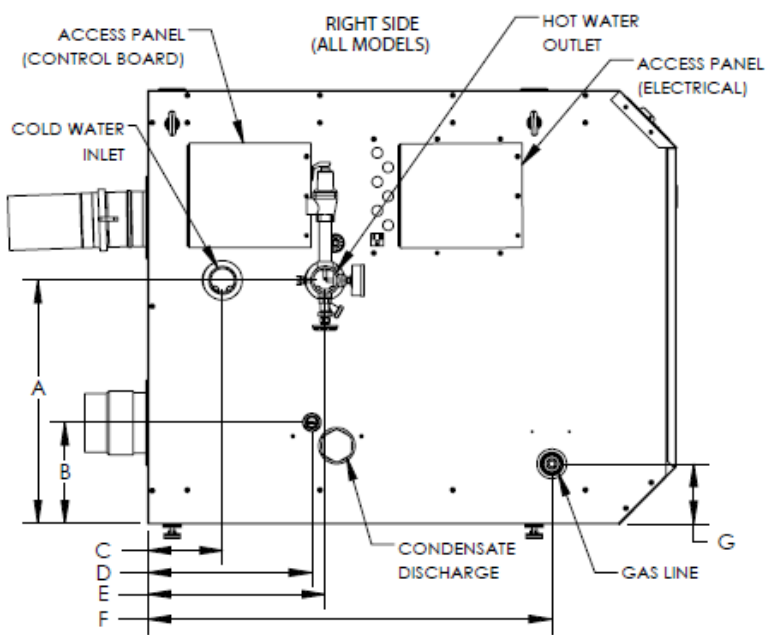
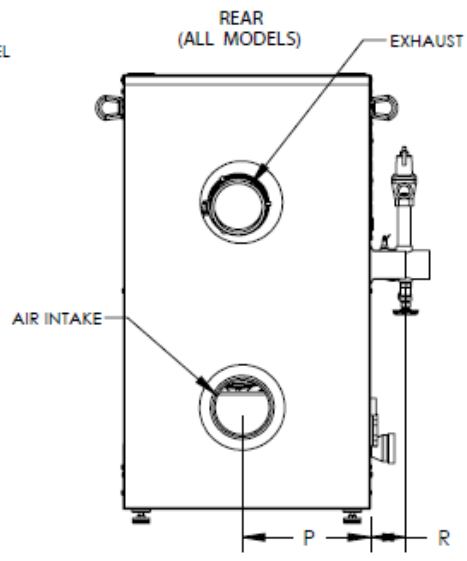
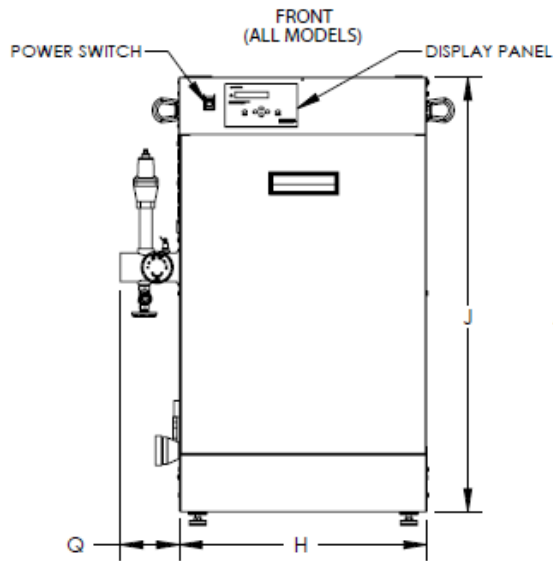
- 926 Digital operating control with LED display
- LED indicators for System Pump – Boiler Pump – DHW Pump – System Fault – System Operation – Freeze Protection – Flame On – Fault Indication
- On/Off Switch
- Password protected
- Outdoor reset with indirect priority
- Multiple 120 volt pump outputs – boiler pump – system pump - DHW pump
- 24 volt monitoring
- 0-10 VDC input from a building management system
- Boiler output regulation (adjustment of boiler output down to 50% of rated capacity)
- Field wiring connection board / Cascade wiring CAT 3 or 5
- A/C convenience receptacle for condensate pump
- Dry contact for alarm output
- Cascade up to 8 boilers

Additional Features

- Superior condensate collection system with float switch (patent pending)
- 10 year limited warranty
- Vents in PVC - CPVC - stainless steel – up to 200 equivalent feet (combined intake and exhaust)
- Optional stacking kit allows boilers to be double stacked for space savings
- Built-in low water cut-off
- Adjustable leveling legs
- Flue / Water High temperature limit with Manual reset
- Blocked vent pressure switch
- Pressure and temperature gauge
- Low NOx emissions – SCAQMD Certified

Optional Equipment

- Indirect Sensor (Part # 7250P-325)
- System Sensor (Part # 7250P-324)
- 4” Stainless Steel Outside Termination Vent Kit (Part # V2000)
- 6” Stainless Steel Outside Termination Vent Kit (Part # V3000)
- High and Low Gas Pressure Switch Kit with Manual Reset (Part # 7350P-600)
- Flow Switch Kit (Part # 7350P-605)
- U.L. 353 Compliant Low Water Cut-Off Interface Kit w/ Manual Reset (Part # 7450P-225)
- Alarm System to monitor any failure (Part # 7350P-602)
- Condensate Neutralizer (Part # 7350P-611)
- Boiler Stacking Kit (Part # 7350P-603)
- Boiler Caster Kit (Part # 7350P-604)
- PC Connection Cable w / Software (Part # 7250P-738)
- MODBUS / BACnet (7350P-636)



MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R
500	20"	14-3/4"	6-1/4"	13-1/4"	14-1/2"	33-1/4"	5-1/8"	20-1/2"	36"	43-3/4"	46"	48"	8-1/4"	25-1/2"	10-1/2"	5"	3"
700	20"	20"	6-1/4"	16-1/4"	18-3/4"	43-1/2"	20"	20-1/2"	36"	62-1/4"	68-1/2"	73"	8-1/4"	25-1/2"	10-1/2"	5"	3"
850	20"	20"	6-1/4"	16-1/4"	18-3/4"	43-1/2"	20"	20-1/2"	36"	62-1/4"	68-1/2"	73"	8-1/4"	25-1/2"	10-1/2"	5"	3"

NOTE: ALL DIMENSIONS ARE APPROXIMATE AND HEIGHTS DO NOT INCLUDE ADJUSTABLE LEGS.

MODEL	BTU/HR INPUT RANGE	Gross Output BTU/hr	Net I=B=R BTU/hr	Thermal Efficiency	Boiler Water	Supply/Return Connection	Gas Conn.	Vent Dia.	Ship. Wt.	High Fan Speed	Low Fan Speed	Fan Speed at Ignition
500	100,000 - 500,000	470,000	408,900	94%	4.2 gal.	2"	1-1/2"	4"	505	7200	1950	3000
700	170,000 - 700,000	686,000	596,820	98%	5.8 gal.	2"	2"	6"	580	5700	2200	3000
850	170,000 - 850,000	799,000	695,130	94%	5.8 gal.	2"	2"	6"	580	6800	2200	3000

Model		500	700	850
Installation		Indoor, Floor Standing, Fully Condensing		
Minimum / Maximum Input (Btu/Hr)		100,000 / 500,000	170,000 / 700,000	170,000 / 850,000
Heating Capacity (MBH)		470	686	799
Flue System		Category IV, Sealed Combustion Direct Vent, Power Vent		
Minimum Combined Vent Run		16 feet		
Maximum Combined Vent Run		4" (200 feet)	6" (200 feet)	
Approved Exhaust Vent Materials		PVC, CPVC, PP, Stainless Steel		
Shipping Weight (lbs)		505	580	
Gas Supply Pressure	NG	3.5" to 14" WC		
	LP			
Manifold Pressure	Min / Max	NG/LP: -0.01" WC		
Power Supply		120V 60 Hz, 6.3A		
General Operating Conditions		Ambient Temperature Range: 33 – 104°F (0.6 – 40°C) Product Approvals and Requirements: ANSI Z21.13 / CSA 4.9		
Ignition System		Direct Electronic Spark Ignition / Flame Rectification		
Burner System		Premixed Fuel Modulation / Stainless Steel Metal Fiber Burner		
Gas Valve System		Air Ratio Valve		
Dimensions (in Inches)	W	20.5		
	H	36		
	D	46	68.5	
Boiler Water Content (Gallons)		4.2	5.8	
Minimum Flow Rate @ 30°F ΔT (GPM)		33	54	
Boiler Setpoint Temperature Range		50 – 190°F / 32 - 190°F (with Outdoor Reset Curve)		
DHW Indirect Setpoint Temperature Range		70 – 185°F		
Water Pressure (PSI)	Heat Exchanger MAWP	160		
	Pressure Relief Valve	75		
Control Panel / Main Controller		LCD Display with LED Indicators / 926 SIT Control		
Connection Sizes	Supply / Return	2" NPT		
	Gas Inlet	1 1/2" NPTF	2" NPTF	
Materials	Cabinet	Powder Coated Galvaneal Steel		
	Heat Exchanger	316L Stainless Steel Water Tube		
Safety Devices		Flame Rectifier Probe, Water Temperature High Limit Switch (190°F), Freeze Protection, Condensate Trap with Overflow Switch, Included LWCO (Optional UL 353 LWCO), Blocked Vent Pressure Switch, Optional Gas High/Low Pressure Switch		

NOTE: HTP reserves the right to make product changes or updates without notice and will not be held liable for typographical errors in literature.