



Mod Con VWH Commercial Condensing Hot Water Supply 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 150 PSI relief valve
- Front service access to combustion chamber and burner
- Inlet and outlet temperature sensor

Combustion System

- Modulating burner with 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

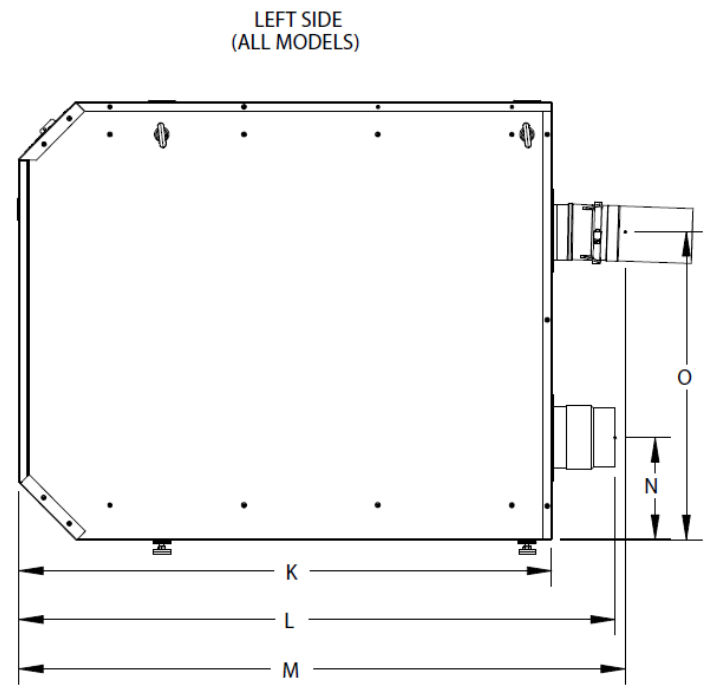
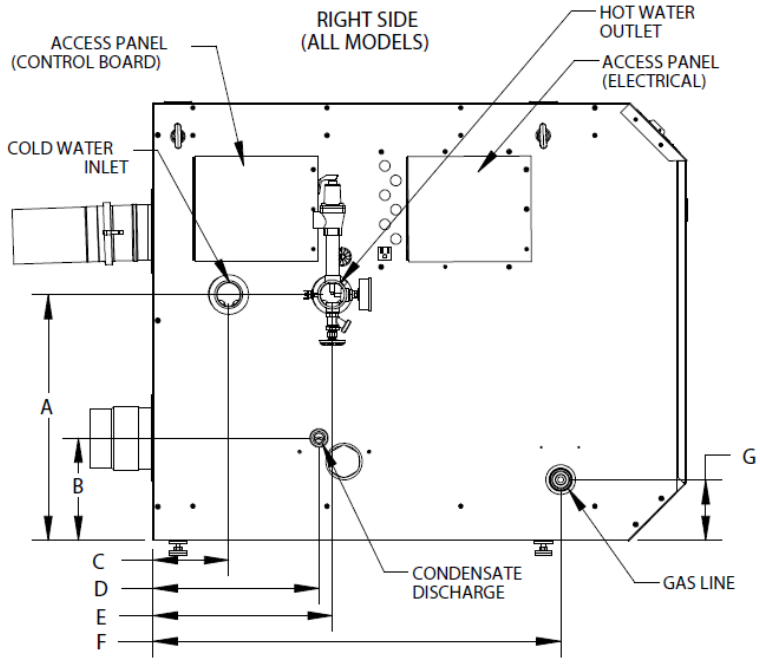
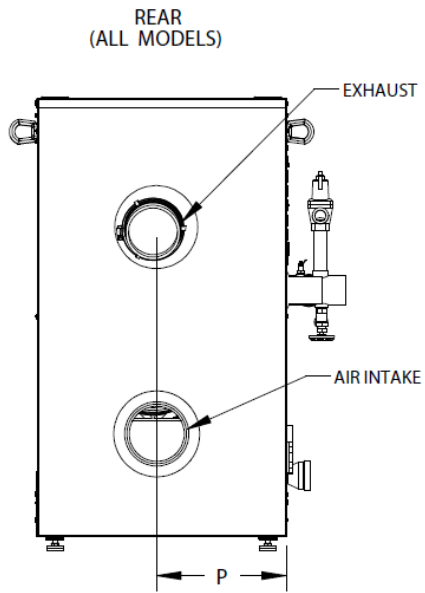
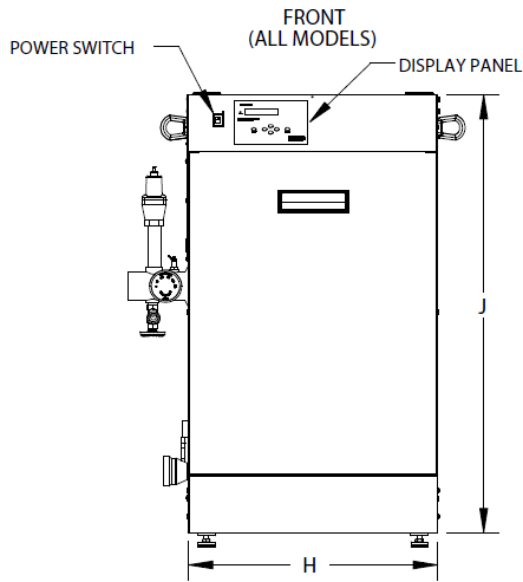
- 926 Digital operating control with LED display
- LED indicators for System Pump – Boiler Pump – DHW Pump – System Fault – System Operation – Freeze Protection – Flame On – Fault Indication
- On/Off Switch
- Password protected
- Multiple 120 volt pump outputs – boiler pump – system pump - DHW pump
- 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)
- Dry contact for alarm output
- Field wiring connection board / Cascade wiring CAT 3 or 5
- A/C convenience receptacle for condensate pump
- Cascade up to 8 boilers

Additional Features

- Superior condensate collection system with float switch
- 5 year limited warranty
- Vents in PVC - CPVC - stainless steel – up to 200 equivalent feet (combined intake and exhaust)
- Optional stacking kit double stacks boilers for space savings
- Flow Switch
- 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
- System / Pipe sensor – one (1) supplied with unit
- Lead Free Compliant, as required by the Safe Drinking Water Act, Section 1417
- Low NOx emissions – SCAQMD Certified

Optional Equipment

- Indirect Sensor (Part # 7250P-325)
- Additional 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)
- 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
500 VWH	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"
700 VWH	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"
850 VWH															

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 VWH	100,000 - 500,000	490,000	426,300	98%	4.2 gal.	2"	1-1/2"	4"	505	7200	1950	3000
700 VWH	170,000 - 700,000	686,000	596,820	98%	5.8 gal.	2"	2"	6"	580	5700	2200	3000
850 VWH	170,000 - 850,000	824,500	717,315	97%	5.8 gal.	2"	2"	6"	580	6800	2200	3000

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

LP-446-B
03/12/18

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	
DHW Setpoint Temperature Range		95 – 180°F		
Water Pressure (PSI)	Heat Exchanger MAWP	160		
	Pressure Relief Valve	150		
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, Flow 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.