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Elite XL Commercial Condensing Heating Boiler Submittal (ELX-400FBN / 500 / 650 / 800 / 1000 / 1500 / 2000)

JOB NAME:

LOCATION:

ARCH./ENGR.:

WHOLESALE:

MECH. CONTRACTOR:

MODEL NUMBER:

TYPE OF GAS:

BTU/HR INPUT LOW – HIGH FIRE:

NOTES:

Heat Exchanger

- 316L Stainless Steel Water Tube 160 PSI ASME stamped construction. National Board listed
- Gasketless heat exchanger design
- ASME 50 PSI relief valve
- Front service access to combustion chamber and burner

Combustion System

- Modulating burner with up to 10 to 1 turndown
- Up to 97% thermal efficiency
- High-Grade stainless-steel burner design
- Reliable spark ignition with high capacity transformer
- 400 – 1000 Models - Natural or LP Gas Operation; 1500 - 2000 Models – Natural Gas Operation Only
- Flame monitoring (Flame probe)
- Pneumatic Gas Valve System
- Gas Valve pressure range 3 ½" minimum to 14" maximum Water Column - 400 – 1000 models; 3 ½" minimum to 10.5" maximum WC – 1500 - 2000 models

Integrated Control System

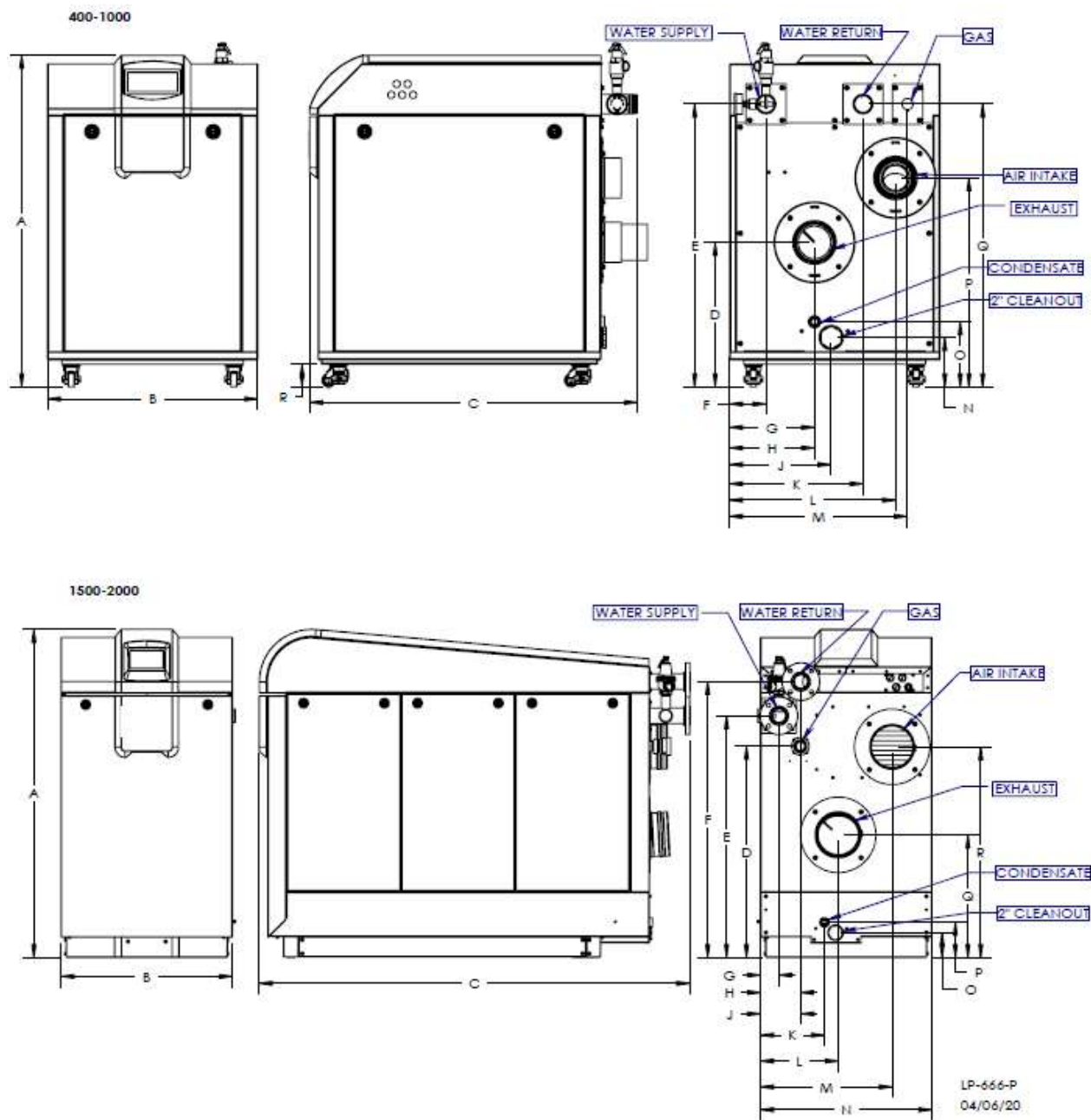
- 928 Digital operating control with color touchscreen display
- Embedded Wi-Fi control standard on all models
- Fault indicators for System Pump – Boiler Pump – DHW Pump – System Fault – System Operation – Freeze Protection – Flame On – Fault Indication
- On/Off Switch
- Password protected
- Outdoor reset with indirect priority – An outdoor sensor is supplied with the boiler
- Multiple 120-volt pump outputs – boiler pump – system pump - DHW pump
- 0-10 VDC input from a building management system
- 0-10V output A allows offers variable speed pump support, which controls pump speed via an analog VDC signal
- 0-10V output B relates to one of the following values: boiler or cascade power, fan speed, alarm status, temperature based on outdoor reset curve, or flame
- Boiler output regulation (adjustment of boiler output down to 10% of rated capacity)
- Field wiring connection board / Cascade wiring CAT 3 or 5
- Dry contact for alarm output
- Cascade up to 8 boilers
- Return temperature sensor

Additional Features

- Superior condensate collection system with float switch and 2" clean out
- Five (5) year basic / Ten (10) year extended limited warranty
- High resolution flow switch to ensure minimum flow rates through the heat exchanger (All Models)
- Vents in PVC - CPVC - stainless steel – polypropylene
- Integrated UL 353 certified CSD-1 compliant low water cut-off with manual reset
- Dual Water Supply Temperature Sensor / High Limit (210°F)
- Caster wheel with adjustable leveling pads (400 – 1000 Models)
- Flue High temperature limit with Manual reset
- Blocked vent pressure switch
- Pressure and temperature gauge
- Low NOx emissions – SCAQMD Certified

Optional Equipment

- ☐ Indirect Tank Sensor (Part # 7250P-325)
- ☐ System Sensor (7250P-324)
- ☐ 4" Stainless Steel Outside Termination Vent Kit (V2000)
- ☐ 6" Stainless Steel Outside Termination Vent Kit (V3000)
- ☐ 8" Stainless Steel Elbow (7550P-067)
- ☐ 8" Stainless Steel to PVC / CPVC Vent Pipe Adapter (7550P-064)
- ☐ High and Low Gas Pressure Switch Kit with Manual Reset 500 – 2000 Model (7550P-988)
- ☐ Alarm System to monitor any failure (7350P-602)
- ☐ Condensate Neutralizer (7350P-611)
- ☐ Modbus / BACnet (7350P-636)
- ☐ Mechanical Manual Reset High Temperature Limit (6300P-998)
- ☐ 928 PC Connection Kit (7450P-330)
- ☐ Optimized System Flow (OSF) Kit 400 - 1000 Models (7550P-985); 1500 – 2000 Models (7550P-986)
- ☐ Stack Rack Kit 400 – 500 Models (7550P-983); 650 – 1000 Models (7550P-984)
- ☐ Outdoor Installation Kit 400 – 1000 Models (7550P-987); 1500 – 2000 Models (7550P-982)
- ☐ Flush Kit (7550P-606)



400 - 2000 Model Dimensions

MODEL #	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R
ELX-400-500	41.0	26.0	40.7	17.9	35.0	4.1	10.1	10.5	12.6	16.1	20.5	22.0	6.1	8.1	25.8	35.0	2.8*
ELX-650-1000			56.5														
ELX-1500	60.8	31.8	67.5	39.2	44.8	51.2	3.4	7.4	7.5	11.9	14.4	24.4	31.8	4.6	6.5	22.7	39.1
ELX-2000			80.0														

MODEL	SUPPLY / RETURN CONNECTION	VENT SIZE	AIR INTAKE	GAS CONNECTION	CONDENSATE
400	2" NPT	4"	4"	1"	3/4" PVC
500					
650		6"	6"	1-1/4"	
800					
1000					
1500	2 ½" Flange	8"	8"	1-1/2"	1" PVC
2000				2"	

400 – 2000 Model Dimensions and Specifications - *NOTE: All dimensions are approximate - *FOR REFERENCE ONLY

MODEL		400	500	650	800	1000	1500	2000
Installation		Indoor or Outdoor (with Optional Kit), Floor Standing, Fully Condensing						
Minimum / Maximum Input (Btu/Hr)		39,900 / 399,000	50,000 / 500,000	65,000 / 650,000	80,000 / 800,000	100,000 / 1,000,000	150,000 / 1,500,000	200,000 / 2000,000
Heating Capacity		387	485	630	776	970	1,455	1,940
Flue System		Category IV, Sealed Combustion Direct Vent, Power Vent						
Min Combined Vent Run		10 feet					15 feet	
Max Combined Vent Run		4" (125 feet)		6" (125 feet)			8" (150 feet)	
Approved Exhaust Vent Materials		PVC, CPVC, PP, Stainless Steel						
Packaging Dimensions (in Inches)	W	32.25				43.25		
	H	49.625				64.25		
	D	48		64			76	86
Shipping Weight (lbs)		538	545	680	700	745	1400	1750
Gas Supply Pressure		3.5" to 14" WC (NG or LP)						3.5" to 10.5" WC (NG ONLY)
Manifold Pressure	Min/Max	-0.08" WC (NG or LP)						-0.07" WC (NG ONLY)
Power Supply		120V 60Hz, less than 12A						208/3PH WYE, 60HZ, 15A/Leg
Customer Connection Board Fuse Amperage Ratings		2 Amps						5 Amps
General Operating Conditions		Minimum Ambient Temperature: Greater than 32°F (0°C) Product Approvals and Requirements: ANSI Z21.13 / CSA 4.9, CSD-1 ASME Code						
Ignition System		Direct Electronic Spark Ignition/Flame Rectification						
Burner System		Premixed Fuel Modulation/Stainless Steel Burner						
Gas Valve System		Pneumatic Gas Valve						
Dimensions (in Inches)	W	26				31.8		
	H	41				60.8		
	D	40.7		56.5			66.5	79
Boiler Water Content (Gallons)		3.8	4.3	5.6	6.6	8.1	12.9	16.25
Minimum Flow Rate @ 20°F ΔT at Low Fire (GPM)		4	5	6.5	8	10	15	20
Flow Switch Activation (GPM)		4				9		
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						
	Relief Valve	50						
Control Panel		LCD Display with LED Indicators						
Main Controller		928 SIT Control						
Connection Sizes	Supply / Return	2" NPT				2 ½" Flange		
	Gas Inlet	1" NPT			1 ¼" NPT		1 ½" NPT	2" NPT
Materials	Cabinet	Powder Coated Galvanneal Steel						
	Heat Exchanger	316L Stainless Steel Water Tube						
Safety Devices		Flame Rectifier Probe, Dual Water Supply Temperature Sensor / High Limit (210°F), Freeze Protection, Condensate Trap with Float, Dual Flue Sensor (210°F), Blocked Vent Pressure Switch, Internal UL 353 Approved Low Water Cut-Off (LWCO), High Resolution Flow Switch						

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