



Elite FT Heating Boiler Submittal Sheet

Model: EFT-285 / EFT-399 Manufactured On or After 10/30/17 with 10:1 Turndown Ratio

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 ASME “H” Stamped Construction
- National Board listed
- Low pressure drop, gasketless, vertical tube combustion heat exchanger design – provides maintenance-free operation on internal buildup of material inside the combustion chamber
- 80 PSI Relief Valve

Combustion System

- Modulating burner with up to 10 to 1 turndown
- Up to AFUE rating up to 95.1% (285 model) and thermal efficiency up to 97.1 (399 model)
- High Grade Burner Design
- Spark Ignition
- Models Available for Natural or LP Gas
- Flame Monitoring (Flame Probe)

Integrated Control System

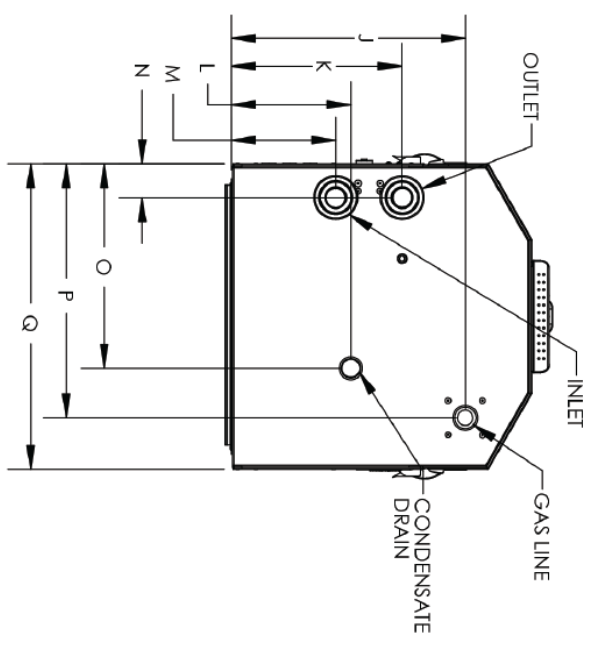
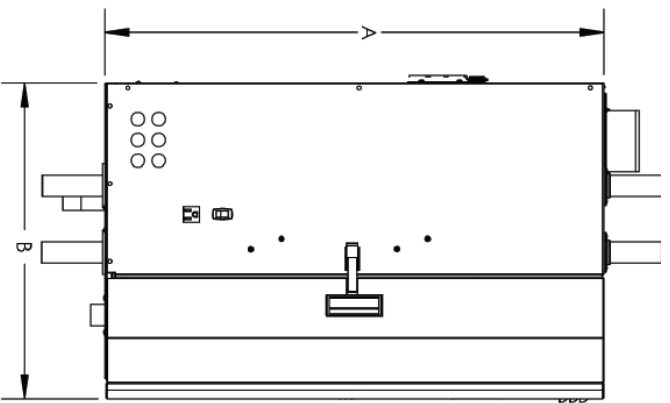
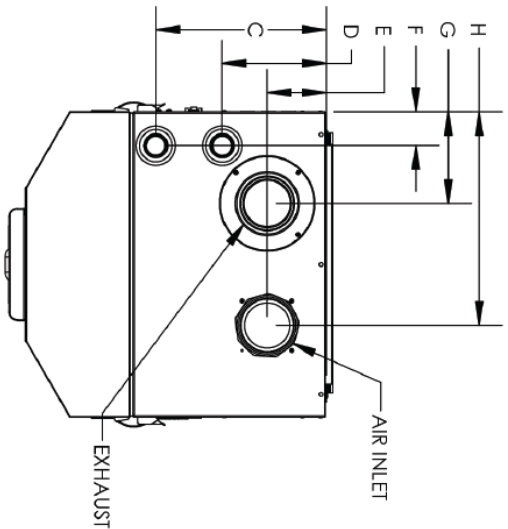
- Digital operating control with 2 line / 20 character LCD text display to program and monitor boiler operation
- Three pump outputs– Boiler Pump – System Pump – DHW Pump / Domestic Hot Water priority with timing
- Programmable settings: Outdoor Reset Curve – DHW Supply Set Point – Step Sequence for delayed response for smart zones – Boost Response - Cascade up to 8 boilers
- Field Connection Board – Line voltage terminal strip with 120 VAC / 60 Hertz power / low voltage terminal strip with multiple contacts - Cascade wiring CAT 5 / CAT 3
- 24 Volt monitoring
- 0-10 VDC input for Building Management System
- Boiler output regulation (Adjustment of boiler output down to 50 percent of rated capacity)
- Low water protection device
- Password Security - Flashing maintenance indicator with optional programmed installer contact information
- Time Clock / Data logging – Last 10 fault codes with date and time
- Customized freeze protection parameters
- Modbus enable through external adapter to monitor or control boiler through BMS system

Additional Features

- Superior condensate collection system with overflow protection switch
- Vents in Plastic PVC - CPVC - Stainless Steel – ULC S636 flexible polypropylene vent liner (chimney lining only)
- Vents up to 150 combined equivalent feet (285 model)
- Vents up to 200 combined equivalent feet (399 model)
- 12 Year Limited Warranty
- Manual reset high temperature limit
- Dry contact for alarm output
- Included wall mount bracket
- Low NOx emissions – SCAQMD Certified

Optional

- System / Pipe Sensor (Part # 7250P-324)
- Indirect Water Heater Sensor (7250P-325)
- 3” Polypro Flex Vent Kit (8400P-001)
- 3” (80mm) PP Concentric Vent Kit (KGAVT0601CVT)
- 3” Stainless Steel Termination Vent Kit (V1000)
- 4” Stainless Steel Termination Vent Kit (V2000)
- Flow Switch (7450P-213)
- Condensate Neutralizer (7450P-212)
- U.L. 353 Compliant Low Water Cut-Off Interface Kit w/ Manual Reset (7600P-990)
- Alarm System (7350P-602) to monitor any failure
- PC Connection Cable w / Software (7250P-738)
- MODBUS / BACnet (7350P-636)



MODEL	MAX MBH	MIN MBH	AFUE	HEATING CAP. MBH	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q
285	285	28.5	95.1	261	32-5/8"	20-5/8"	11-1/8"	6-7/8"	3-7/8"	2-1/4"	6"	14"	15-1/4"	11-1/8"	7-3/4"	6-7/8"	2-1/4"	13-3/8"	16-5/8"	20"
399	399	39.9	97.1 *	372 **	36-3/8"	23-5/8"	13-5/8"	8-1/2"	4-3/4"	2-3/4"	7-3/8"	18-1/8"	18-3/4"	13-5/8"	9-3/4"	8-1/2"	2-3/4"	16-1/2"	19-1/4"	25-1/2"

* THERMAL EFFICIENCY (NOT AFUE)
 ** GROSS OUTPUT

MODEL	GAS CONNECTION	WATER CONNECTION	AIR INLET	VENT SIZE	PSI RATING	SHIPPING WT. (LBS)
285	1"	1-1/4"	3"	3"	80 PSI	203
399	1"	1-1/2"	4"	4"	80 PSI	298

ALL DIMENSIONS ARE APPROXIMATE

Model		285	399
Installation		Indoor, Wall Hung, Fully Condensing	
Minimum / Maximum Input (Btu/Hr)		28,500 / 285,000	39,900 / 399,000
Heating Capacity (MBH)		262	367*
Flue System		Category IV, Sealed Combustion Direct Vent, Power Vent	
Minimum Combined Vent Run		16 feet	
Maximum Combined Vent Run		3" (150 feet)	4" (200 feet)
Approved Exhaust Vent Materials		PVC, CPVC, PP, Stainless Steel	
Shipping Weight (lbs)		203	298
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	25.5
	H	32.6	36.4
	D	20.6	23.6
Boiler Water Content (Gallons)		6.1	7.9
Minimum Flow Rate @ 30°F ΔT (GPM)		17.9	25.0
Boiler Setpoint Temperature Range		50 – 190°F / 32 – 190°F (with Outdoor Reset Curve)	
DHW Indirect Setpoint Temperature Range		70 – 18°F	
Water Pressure (PSI)	Heat Exchanger MAWP	80	
	Pressure Relief Valve	80	
Control Panel / Main Controller		LCD Display with LED Indicators / 926 SIT Control	
Connection Sizes	Supply / Return	1 1/4" Copper SWT	1 1/2" Copper SWT
	Gas Inlet	1" NPTF	
Materials	Cabinet	Powder Coated Galvaneal Steel	
	Heat Exchanger	S43932 Stainless Steel Fire Tube	
Safety Devices		Flame Rectifier Probe, Dual Water Supply Temperature Sensor (199°F), Water Pressure Switch (Min. 10 PSI), Freeze Protection, Blocked Condensate Pressure Switch, Condensate Trap with Float, Flue Temperature High Limit Sensor (210°F), Blocked Vent Pressure Switch, Optional UL353 Low Water Cut-Off	

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