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EFTU Heating Boiler Submittal Sheet

Models: Heating only EFTU-85WBN / EFTU-110WBN / EFTU-150WBN / EFTU-199WBN – Wall Mount Models

JOB NAME:

LOCATION:

ARCH. / ENGR.:

WHOLESALE:

MECH. CONTRACTOR:

MODEL NUMBER:

BTU/HR INPUT LOW - HIGH FIRE:

TYPE OF GAS:

NOTES:

Heat Exchanger

- Constructed of SA-240-S43932 Stainless Steel Vertical Fire Tube – ASME “H” Stamped
- National Board listed
- Low pressure drop, gasketless, vertical tube combustion heat exchanger design provides maintenance-free operation by reducing internal buildup of material inside the combustion chamber
- 30 PSI Relief Valve for all EFTU models

Combustion System

- Modulating burner with up to 10 to 1 turndown
- Up to 96% AFUE
- High-Grade Stainless-Steel Burner Design
- Spark Ignition with Ignition Transformer
- Shipped Ready for Natural Gas Operation – Propane Gas Conversion Kits are Included
- Flame safety probe to monitor flame

Integrated Control System

- Digital operating control with LCD display to program and monitor boiler operation
- Pump outputs for Boiler Pump – System Pump – DHW Pump with Timed Domestic Hot Water priority
- Line voltage (120V) connection shall provide dry-contact 120-volt AC rated start/stop outputs for the system pump
- Programmable settings: Outdoor Heating Curve – DHW Supply Set Point – Step Sequence for delayed response for small zones – Boost Function - Field Program Service reminders with date or runtime activation
- Connection Board – Line voltage terminal strip with 120 VAC / 60 Hertz power / low voltage terminal strip with multiple contacts - Cascade wiring
- Boiler output regulation (Adjustment of boiler output from 100 to 50 percent)
- Built in water pressure switch
- Error History Logging – Last 10 Error Codes
- Factory Default Freeze Protection Parameters

Additional Features

- Superior condensate collection system with overflow protection switch and clean out for easy maintenance
- Vents in PVC - CPVC – Polypropylene - Stainless Steel
- Intake and exhaust vents up to 100 feet in 2-inch or 150 feet in 3-inch pipe (EFTU-199WBN vents in 3-inch ONLY)
- Built-in highly efficient ECM pump
- Built-in Three-Way Valve for easy connection to an external indirect water heater
- Built-in automatic bypass prevents need for expensive primary / secondary piping in smaller heating systems
- 15 Year Limited Residential Warranty
- Manual reset high temperature limit
- Included wall mount bracket
- Corrugated condensation hose
- Automatic air vent installed on boiler
- Additional Fittings for Relief Valve installation
- Included 2 and 3-inch vent screens (2 each)
- Outdoor Sensor
- Tridicator to monitor temperature and pressure
- 0-10 VDC input for Building Management System (with optional Analog Clip-In Board)

Optional

- ☐ 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)
- ☐ Condensate Neutralizer (7450P-212)
- ☐ Optional Analog Clip-In Board – 0-10 VDC Input (3319457)

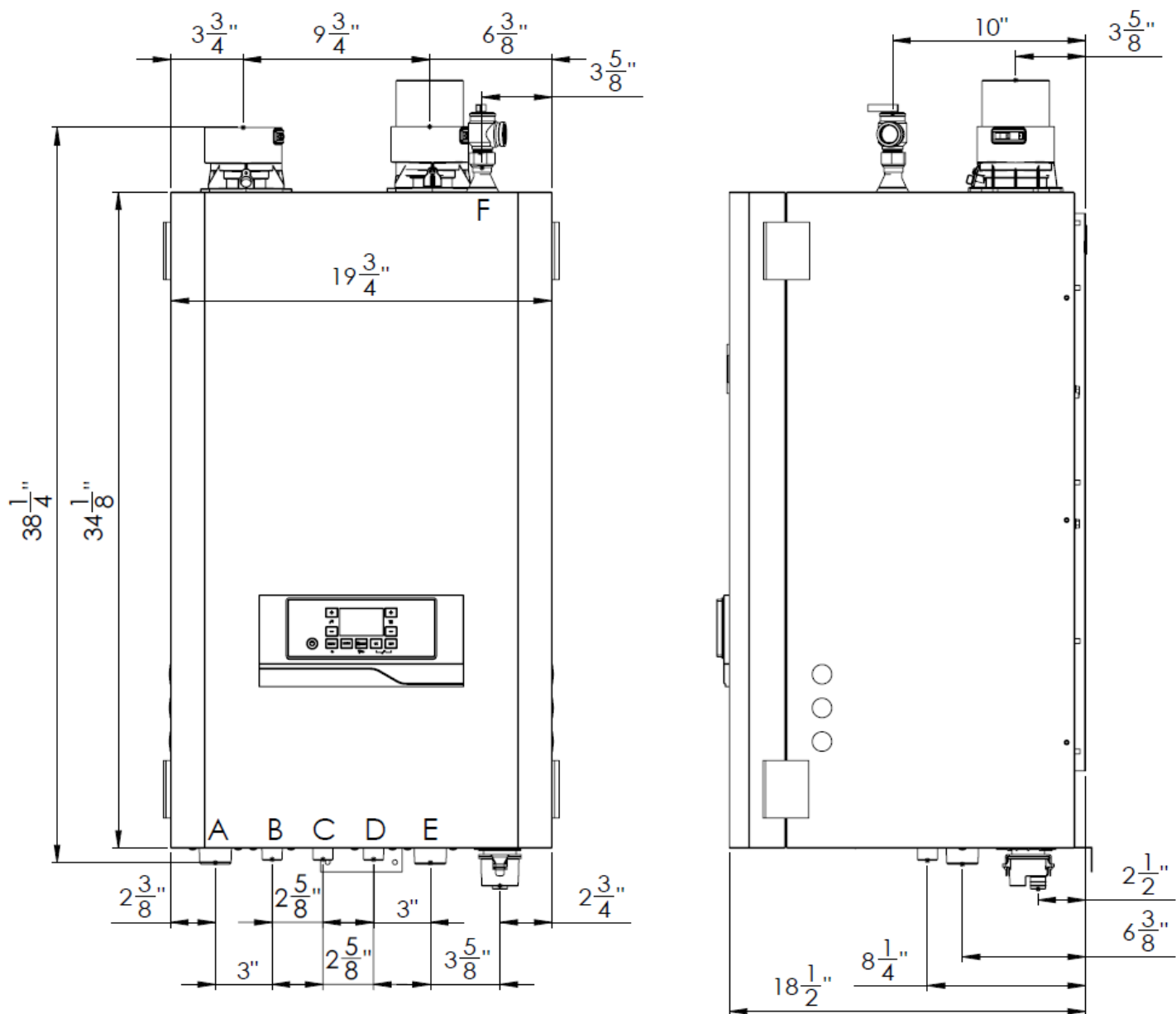


Figure 1 – Boiler Dimensions – NOTE: All Dimensions Are Approximate

Model	EFTU-85WBN / EFTU-110WBN / EFTU-150WBN / EFTU-199WBN
A – Central Heating Supply	1 1/4" NPT
B – Return from Indirect Water Heater	3/4" NPT
C – Gas Inlet	3/4" NPT
D – Domestic Hot Water Inlet	N/A
E – Central Heating Return	1 1/4" NPT
F – Pressure Relief Valve	3/4" NPT

Table 1 – Boiler Adapter Dimensions

Model		EFTU-85WBN	EFTU-110WBN	EFTU-150WBN	EFTU-199WBN
Type		Boiler			
Installation		Indoor, Wall Hung, Fully Condensing			
Minimum / Maximum Input (Btu/Hr) ¹		8,500 / 85,000	11,000 / 110,000	15,000 / 150,000	19,900 / 199,000
DOE AFUE ² (%)		96	95	95	95
Heating Capacity ^{1,2} (MBH)		79	101	138	184
Net AHRI Rating, Water (MBH) ²		69	88	120	160
Flue System		Category IV, Sealed Combustion Direct Vent, Power Vent			
Minimum – Maximum Exhaust Vent Run ³		2" (6 - 100 feet), 3" (6 - 150 feet)			3" (6 - 150 feet)
Minimum – Maximum Intake Air Pipe Run ³		2" (0 - 100 feet), 3" (0 - 150 feet)			3" (0 - 150 feet)
Approved Exhaust Vent Materials ³		PVC, CPVC, PP, Stainless Steel			
Shipping Weight (lbs)		110	110	120	131
Gas Supply Pressure	NG	3.5" to 10.5" WC			
	LP	8" to 13" WC			
Power Supply		120V 60 Hz, less than 12A			
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 Ignition / Flame Rectification			
Burner System		Premixed Fuel Modulation / Stainless Steel Burner			
Gas Valve System		Air Ratio Valve			
Dimensions	W	19.75"			
	H	38.25"			
	D	17"		18.5"	
Approximate Full Boiler Weight (lbs)		107	107	122	139.5
Boiler Water Content (Gallons)		1.4	1.4	2.0	2.8
Boiler Setpoint Temperature Range		68 – 122°F Low Temperature / 86 – 179°F High Temperature			
DHW Indirect Setpoint Temperature Range		97 – 149°F			
Water Pressure (PSI)	Heat Exchanger MAWP	50			
	Pressure Relief Valve	30			
Control Panel / Main Controller		AristonThermo LCD Display / AristonThermo GALEVO2 Control			
Connection Sizes	CH Supply / Return	1 ¼" Male NPT			
	Indirect Return	¾" Male NPT			
	Gas Inlet	¾" Male NPT			
Materials	Cabinet	Painted Steel			
	Heat Exchanger	SA-240-S43932 Stainless Steel Water Tube			
Safety Devices		Flame Rectifier Probe, Temperature Limit Control (190°F), Water Pressure Switch (Min. 8 PSI), Freeze Protection, Blocked Condensate Pressure Switch, Condensate Trap, Flue Temperature High Limit Sensor (210°F), Blocked Vent Pressure Switch			

Table 2 – 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.

¹Listed Input and Output Ratings are at minimum vent lengths at an altitude of 0 – 2000 ft. Numbers will be lower with longer venting and/or altitudes greater than 2000 ft.

²Ratings based on standard test procedures prescribed by the US Department of Energy.

³The EFTU requires a special venting system. Use only the vent materials and methods detailed in these installation instructions.