



**Typical Specifications For DynaFlame  
Domestic Hot Water Supply  
(DFX Series)  
Models DF(N),(P)W 1501 - 3001**

The domestic hot water boiler shall be a CAMUS DYNAFLAME (DFX) model \_\_\_\_\_ having a recovery capacity of \_\_\_\_\_ gph (lph) at 100°F (56°C) for DHW.

The domestic hot water boiler shall be design certified by CSA International and shall meet the requirements of ANSI Z21.10, and CSA 4.3 and shall be vented as a Category II condensing appliance.

**Combustion Chamber:**

The combustion chamber shall be fully enclosed by a stainless-steel chamber inside of which is assembled a cylindrical copper coil Heat Exchanger having a maximum allowable working pressure of 160 psig (1100 kPa). An access door shall be provided for ease of service and inspection of the Heat Exchanger.

**Burner:**

The burner shall be constructed of stainless steel. The burner shall provide equal distribution of heat through the entire heat exchanger. A window view port shall be provided for visual inspection of the boiler during firing.

**Heat Exchanger:**

The heat exchanger shall be inspected and tested to A.S.M.E. Section IV requirements. The A.S.M.E. Section IV seal of approval will not be provided as standard for jurisdictions not requiring the A.S.M.E. Section IV seal of approval. The heat exchanger shall be a four-pass heat exchanger with maximum working pressure of 160 psig (1100 kPa). The heat exchanger is of cylindrical design, with integral copper finned tube  $\frac{7}{8}$ " I.D., 0.064" minimum wall thickness, 7 fins per inch, with nominal fin height of  $\frac{3}{4}$ ". Each end of the tubes shall be expanded by mechanical rolling process into the headers. The heat exchanger shall be gasket-less. All header castings shall be bronze. A pressure relief valve of \_\_\_\_\_ lb/hr shall be furnished with the heater.

**Controls:**

Standard controls include an electronic proportional integrated combination limit/operator control accurate to 1°F (0.5°C) having a 4-20 mA output signal suitable for control of a variable frequency motor drive. The control shall also provide readouts of boiler target, differential and inlet/outlet temperatures as well as accumulated runtime. On/off switch, and full diagnostic light package shall be provided. The complete control package shall be mounted on the front panel with hinged door for easy access to all control modules. A flow switch shall be provided loose.

**Firing Mode:**

The burner shall operate as fully modulating down to 20% of the heating load. Light off shall be at no more than 50% input to assure rattle free soft start.

**Venting Options**

The following venting options shall be utilized: 1. Combined Venting. 2. Horizontal & Vertical Outside air Venting. 3. Through-Wall Venting. 4. Outdoor Venting. 5. Direct Venting.

**Gas Train:**

The gas train shall consist of a gas valve with a pressure regulating electro-hydraulic actuator to provide slow opening, fast closing, safety shutoff and air/gas ratio control. A factory pre-set combination metering valve and orifice shall be provided for setting combustion parameters.

**Ignition Module:**

The ignition module shall employ a proved igniter with 3 tries for ignition followed by lockout. Trial for ignition shall be 10 seconds with 15 seconds between retrievals.

**External Jacket and Fasteners:**

The external jacket shall be of stainless steel mirror finish panels assembled utilizing interference fit locks and minimal non-strip self tap screws.

# SUBMITTAL DATA SHEET – DYNAFLAME (DHW) 1501-3001 (DFX Series)

Engineer: \_\_\_\_\_ Job Location: \_\_\_\_\_ Date: \_\_\_\_\_

Prepared by: \_\_\_\_\_ Buyer's Name: \_\_\_\_\_ Quote #: \_\_\_\_\_

Job Name: \_\_\_\_\_ Buyer's Address: \_\_\_\_\_

**Input & Output (MBTUH)**

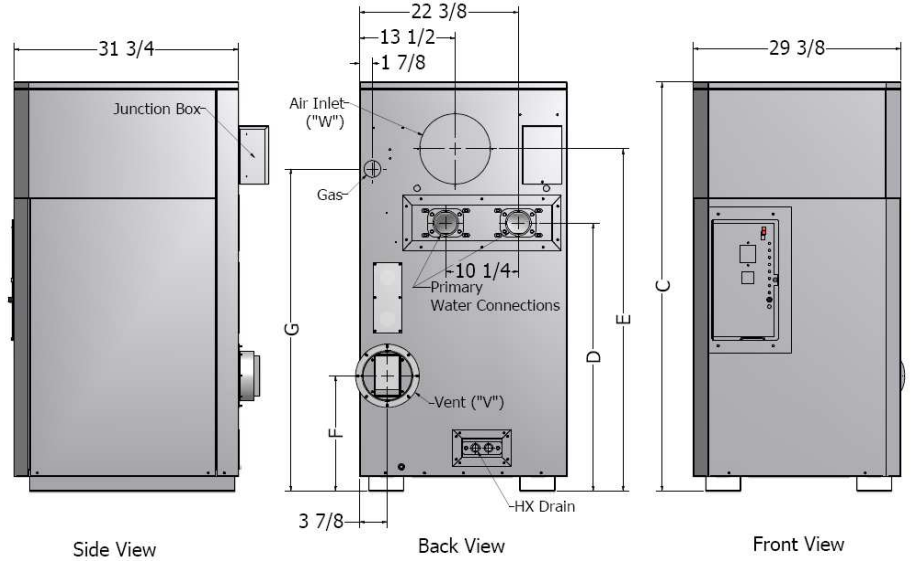
Model	Near Condensing	
	Input	Output
1501	1500	1320
1751	1750	1540
2001	2000	1760
2501	2500	2200
3001	3000	2640

**Shipping Weight (lbs.)**

Model	Near Cond.
1501	578
1751	695
2001	775
2501	875
3001	920

**DynaFlame Near-Condensing**

Model	Vent ("V") Diameter Inches			
	Outdoor	Cat IV Up to 50 ft	Cat IV Up to 100 ft	Cat II
1501	7	7	10	8
1751	7	7	10	8
2001	8	8	12	9
2501	8	8	12	9
3001	8	8	12	10



**Dimensions Near-Condensing**

Model	Height Dim. "C"	Water Conn. "D"	Air Inlet "E"	Flue Height "F"	Gas Height "G"	Air Inlet Dia. "W"	Water Conn. Prim.†	Gas Conn. (NPT)
1501	58 1/8"	38 1/4"	48 5/8"	16 3/8"	45 7/8"	10"	2 1/2" NPT	1 1/4"
1751	62 5/8"	42 5/8"	53 1/8"	16 3/8"	50 3/8"	10"	2 1/2" NPT	1 1/4"
2001	66 7/8"	46 7/8"	57 3/8"	20"	53 5/8"	12"	3" NPT	1 1/4"
2501	73 1/2"	52 5/8"	63 5/8"	25 3/4"	60 3/8"	12"	3" NPT	1 1/2"
3001	79 1/2"	58 5/8"	69 5/8"	31 3/4"	66 3/8"	12"	3" NPT	1 1/2"

†For models 1500 - 3000 appliance inlet/outlet connections are 3" NPT.

**Current drawn by Boiler @ 115 Volts single phase 60 Hz**

Models	Max Amps Draw - Boiler Only
1501 thru 2001	11 Amp
2501 thru 3001	14 Amps

**Recovery Capacity**

Model	NEAR CONDENSING					
	100°F Rise	56°C Rise	80°F Rise	44°C Rise	60°F Rise	33°C Rise
	GPH	LPH	GPH	LPH	GPH	LPH
1501	1581	5984	1976	7480	2635	9974
1751	1845	6983	2306	8729	3075	11639
2001	2109	7983	2636	9978	3515	13304
2501	2636	9977	3295	12472	4393	16629
3001	3164	11976	3955	14970	5273	19960

**Primary Heat Exchanger Head Loss & Flow**

Model	Temperature Rise Across Heat Exchanger			
	30°F		35°F	
	USGPM	ΔP - Ft.	USGPM	ΔP - Ft.
1501	83.9	1.9	71.9	1.4
1751	97.9	2.9	83.9	2.2
2001	111.9	4.1	95.9	3.1
2501	139.9	6.1	119.9	4.6
3001	167.9	8.4	143.9	7.0

Model # \_\_\_\_\_ # Of Units \_\_\_\_\_ Type of Gas \_\_\_\_\_

Total Input \_\_\_\_\_ BTU/hr Flow \_\_\_\_\_ USGPM @ Allowable Pressure Drop \_\_\_\_\_ ft.

Total Output \_\_\_\_\_ BTU/hr

Optional Accessories \_\_\_\_\_