Typical Specifications For DynaFlame Domestic Hot Water Supply (DFX Series) Models DF(N),(P)W 0501 - 1201

The domestic hot water boiler shall be a CAMUS DYNAFLAME (DFX) model _____ having a recovery capacity of _____ gph (lph) at 100℉ (56℃) fo r 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 ⅞" I.D., 0.064" minimum wall thickness, 7 fins per inch, with nominal fin height of ⅜". 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 of valve of _____ lb/hr shall be furnished with the heater.

Controls:
Standard controls include an electronic proportional integrated combination limit/operator control accurate to 1^0F (0.5^0C) 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 rumble 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 retrials.

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) 0501-1201 (DFX Series)

Engineer: _____ Job Location: _____ Date: _____

Prepared by: _____ Buyer's Name: _____ Quote #: _____

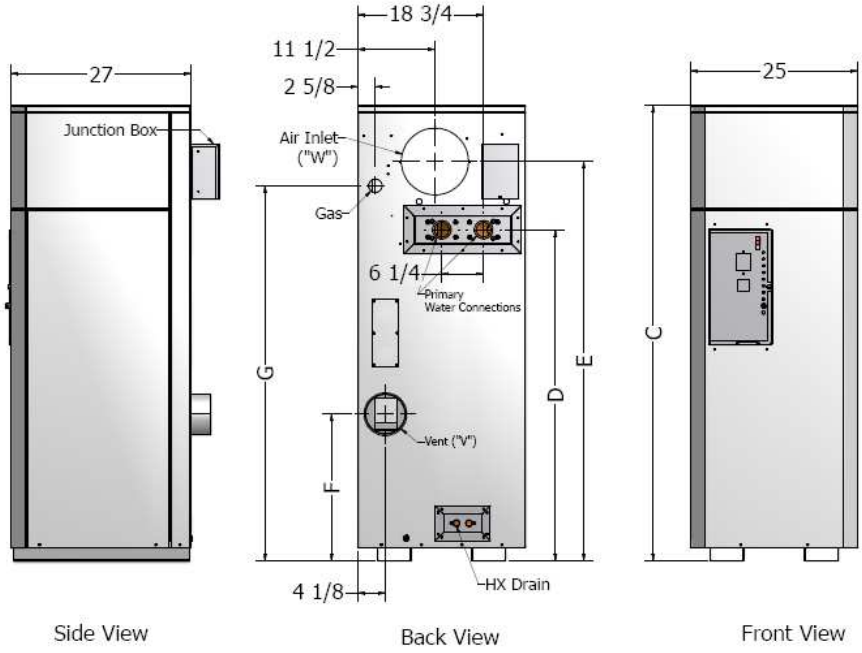
Job Name: _____ Buyer's Address: _____

Input & Output (MBTUH)

Models	Near Condensing	
	Input	Output
0501	500	440
0751	750	660
1101	1100	968
1201	1200	1056

Shipping Weight (lbs.)

Models	Near Cond.
0501	375
0751	400
1101	480
1201	485



DynaFlame Near-Condensing

Model	Vent ("V") Diameter Inches*			
	Outdoor	Cat IV Up to 50 ft	Cat IV Up to 100 ft	Cat II
0501	4	4	6	5
0751	6	6	8	6
1101	6	6	8	7
1201	6	6	8	7

* Models 500 thru 1200 are shipped with minimum vent opening sizes. Adapter is required for applications indicating larger vent opening

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)
0501	45 5/8"	27"	37 1/4"	13 1/4"	33 5/8"	6"	2" NPT	1"
0751	55"	36 3/8"	46 5/8"	15 3/4"	43"	8"	2" NPT	1"
1101	68 1/4"	49 5/8"	59 7/8"	22"	56 1/4"	8"	2" NPT	1"
1201	68 1/4"	49 5/8"	59 7/8"	22"	56 1/4"	8"	2" NPT	1"

Current drawn by Boiler @ 115 Volts single phase 60 Hz

Models	Max Amps Draw - Boiler Only
All	7 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
0501	527	1995	659	2493	878	3325
0751	790	2990	988	3738	1317	4984
1101	1159	4387	1449	5484	1932	7311
1201	1265	4788	1581	5985	2108	7980

Primary Heat Exchanger Head Loss & Flow

Models	Temperature Rise Across Heat Exchanger			
	30°F		35°F	
	USGPM	ΔP - Ft.	USGPM	ΔP - Ft.
0501	28.0	0.7	24.0	0.5
0751	42.0	1.4	36.0	1.0
1101	61.6	2.7	52.8	2.1
1201	68.0	2.9	58.3	2.2

Model # _____ # Of Units _____ Type of Gas _____

Total Input _____BTU/hr Flow _____USGPM @ Allowable Pressure Drop _____ft.

Total Output _____BTU/hr

Optional Accessories _____