



Typical Specifications For DynaMax Combination Heating and Domestic Hot Water Boilers Models DM(N,P)C 0083-DM(N,P)C 0503

The boiler shall be a CAMUS DYNAMAX model _____ having a modulating input rating of _____ Btu (kW) /hr. an output of _____ Btu (kW)/hr and a recovery capacity of _____ GPH (LPH) at 100°F (56°C) and shall be operated on Natural gas or L.P. Gas. The boiler shall be capable of full modulation firing down to 20% of rated input with turn down ratio of 5 to 1.

The boiler shall be design certified by CSA International and shall meet the requirements of ANSI Z21.13 and CSA 4.9. The boiler shall bear the ASME "H" stamp and shall be national board listed where required.

Combustion Chamber:

The combustion chamber shall be sealed and completely enclosed, independent of the outer jacket assembly. The Stainless Steel combustion chamber shall be designed to drain condensation to the bottom of the heat exchanger assembly. A condensate collection box shall be employed to trap and neutralize flue product condensate.

Burner:

The burner shall be a premix design and constructed of high temperature Stainless Steel with knitted metal fiber outer covering to provide modulating firing rates. 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 Exchangers:

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 multi-pass stainless steel all welded construction heat exchanger with maximum working pressure of 160 PSI (1100 kPa). A pressure relief valve of _____ lb/hr shall be furnished with the heater.

A plate type heat exchanger shall be deployed with the boiler and be utilized to provide domestic hot water service.

Integrated Combustion and Operating Controls:

The CSA certified control module shall incorporate at least the following features:

- A high resolution LCD display.
- Three levels of access (user, installer, and lab).
- Real time data collection and diagnostics of selected parameters with PC interface.
- Support for up to eight (8) boilers in a sequencing application.
- MODBUS ready.
- Boiler modulation to shut down on high temperature flue gas detection.
- DHW priority with combination boiler using factory supplied pump, three way diverter valve and plate heat exchanger.

The controller shall employ a direct spark ignition with three (3) trials for ignition followed by a lock-out condition.

Venting and Air Intake Options

The boiler shall be vented as a through-wall (vertical or horizontal) Category IV condensing appliance for up to 100 equivalent ft using CPVC material approved for use on condensing application under standard ULC S636 or equivalent, or as permitted by the local jurisdiction. The following air intake options shall be utilized:

- Outside air sealed direct (vertical or horizontal);
- Outside air ducted to jacket flange;
- Indoor air.

Gas Train:

The gas train shall consist of a gas/air servo regulated gas valve to provide slow opening, fast closing, safety shutoff and air/gas ratio control.

External Jacket and Fasteners:

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

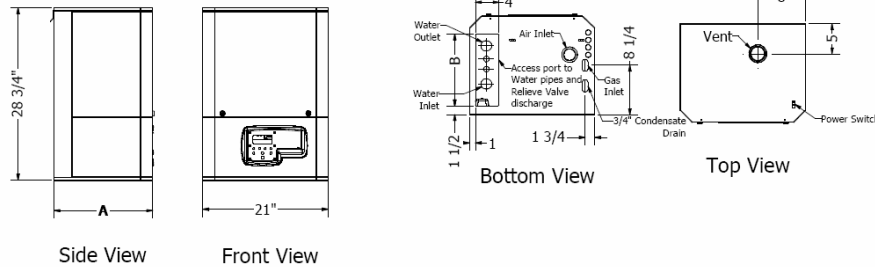
SUBMITTAL DATA SHEET – DYNAMAX - COMBINATION

Engineer: _____ Job Location: _____ Date: _____
 Prepared by: _____ Buyer's Name: _____ Quote #: _____
 Job Name: _____ Buyer's Address: _____

Wall Mount Models

Input & Output

Model	Input Mbtuh Range	Max Output Mbtuh
0083	16-80	78
0103	20-100	97
0153	30-150	146
0203	40-200	194
0253	50-250	243



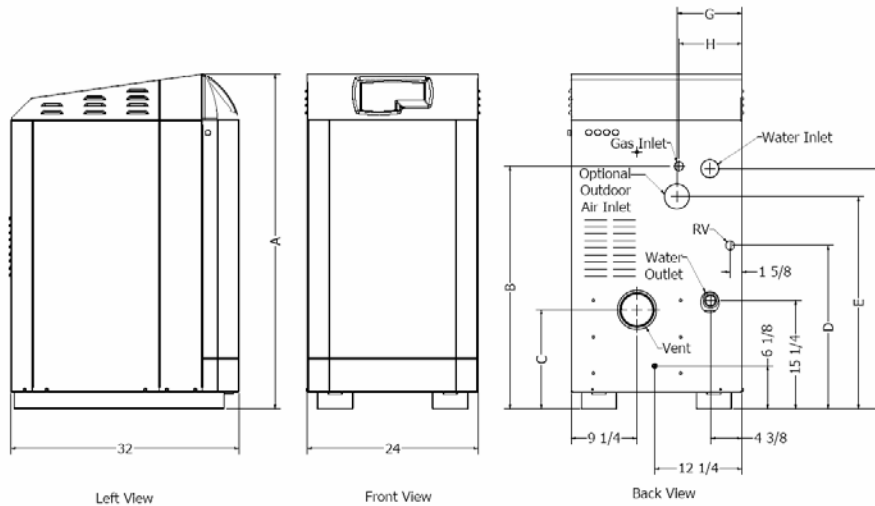
Approximately Shipping Weight (lbs.)

Model	Weight
0083	126
0103	130
0153	164
0203	198
0253	202

Floor Mount Models

Input & Output

Model	Input Mbtuh Range	Max Output Mbtuh
0213	40-200	194
0263	50-250	243
0293	60-299	291
0393	80-399	387
0503	100-500	485



Approximately Shipping Weight (lbs.)

Model	Weight
0213	229
0263	229
0293	245
0393	293
0503	304

Heat Exchanger Head Loss & Flow

Model	Temperature Rise Across Heat Exchanger			
	30°F		35°F	
	USGPM	ΔP - Ft.	USGPM	ΔP - Ft.
0083	5.0	8.2	4.3	6.2
0103	6.3	12.3	5.4	9.4
0153	9.5	10.4	8.1	7.8
0203	12.6	7.2	10.8	5.8
0213	12.6	7.2	10.8	5.8
0253	15.8	11.5	13.5	8.7
0263	15.8	11.5	13.5	8.7
0293	18.9	9.3	16.2	7.0
0393	25.2	8.4	21.6	6.3
0503	31.5	9.2	27.0	6.9

Recovery Capacity

Model	100°F Rise	56°C Rise	80°F Rise	44°C Rise	60°F Rise	33°C Rise
	GPH	LPH	GPH	LPH	GPH	LPH
0083	93	352	116	440	155	587
0103	116	439	145	549	193	732
0153	174	659	218	823	290	1098
0203	232	878	290	1098	387	1464
0213	232	878	290	1098	387	1464
0253	290	1098	363	1372	483	1829
0263	290	1098	363	1372	483	1829
0293	349	1321	436	1651	582	2202
0393	465	1760	581	2200	775	2933
0503	581	2199	726	2749	968	3665

Dimensions and Specifications

Model	Dim. "A" (in.)	Dim. "B" (in.)	Dim. "C" (in.)	Dim. "D" (in.)	Dim. "E" (in.)	Dim. "F" (in.)	Dim. "G" (in.)	Dim. "H" (in.)	Length of Vent and Air Intake Pipes at Recommended Diameter (in.)			Water Conn (in.) NPT	Gas Conn. At Boiler (in.) NPT
									over 25' and up to 100'	over 15' and up to 25'	up to 15'		
0083	16 1/2	12	N/A	N/A	N/A	N/A	N/A	N/A	3	3	2	1	1/2
0103	16 1/2	12	N/A	N/A	N/A	N/A	N/A	N/A	3	3	2	1	1/2
0153	16 1/2	12	N/A	N/A	N/A	N/A	N/A	N/A	3	3	2	1	1/2
0203	23 1/2	19	N/A	N/A	N/A	N/A	N/A	N/A	3	3	2	1	1/2
0213	42 1/2	25 3/4	14 1/4	23	24 1/4	34 1/4	14 3/4	14 1/4	3	3	2	1	1/2
0253	23 1/2	19	N/A	N/A	N/A	N/A	N/A	N/A	3	3	2	1 1/4	1/2
0263	42 1/2	25 3/4	14 1/4	23	24 1/4	34 1/4	14 3/4	14 1/4	3	3	2	1 1/4	1/2
0293	47 1/8	34 1/8	14	23	29 7/8	33 7/8	9 1/8	8 7/8	4	3	3	1 1/4	3/4
0393	47 1/8	34 1/8	14	23	29 7/8	33 7/8	9 1/8	8 7/8	4	3	3	1 1/2	1
0503	47 1/8	34 1/8	14	23	29 7/8	33 7/8	9 1/8	8 7/8	4	3	3	1 1/2	1

Model # _____ # Of Units _____ Type of Gas _____

Total Input _____ BTU/hr Flow _____ USGPM @ Allowable Pressure Drop _____ ft.
 Total Output _____ BTU/hr Recovery Rate _____ USGPH @ _____ °F

Optional Accessories _____