



## Typical Specifications For DynaMax Hydronic Heating Boilers Models DM(N,P)H 0081-DM(N,P)H 0501

The heating boiler shall be a CAMUS DYNAMAX model \_\_\_\_\_ having a modulating input rating of \_\_\_\_\_ Btu (kW) /hr. and an output of \_\_\_\_\_ Btu (kW)/hr 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 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 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.

### **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.

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 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.

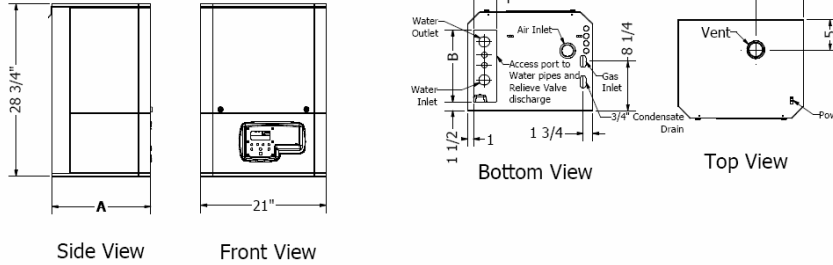
# SUBMITTAL DATA SHEET – DYNAMAX – HYDRONIC HEATING

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 |
|-------|-------------------|------------------|
| 0081  | 16-80             | 78               |
| 0101  | 20-100            | 97               |
| 0151  | 30-150            | 146              |
| 0201  | 40-200            | 194              |
| 0251  | 50-250            | 243              |



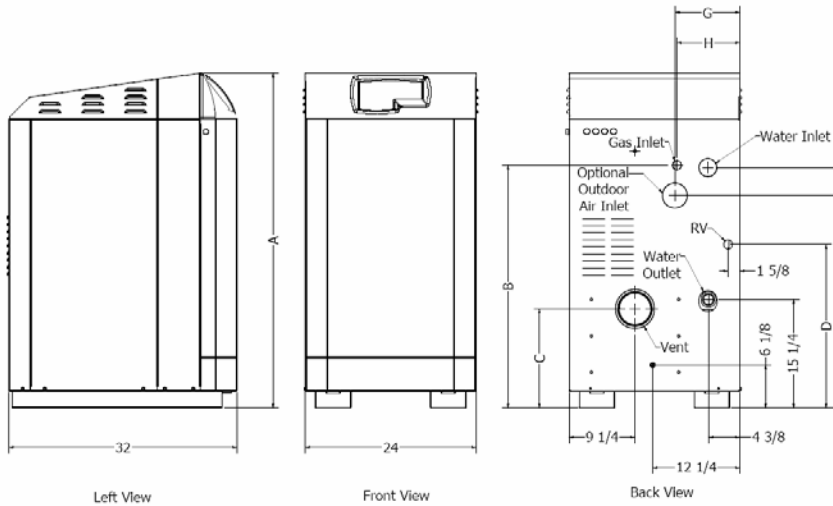
## Approximately Shipping Weight (lbs.)

| Model | Weight |
|-------|--------|
| 0081  | 121    |
| 0101  | 125    |
| 0151  | 158    |
| 0201  | 189    |
| 0251  | 195    |

## Floor Mount Models

### Input & Output

| Model | Input Mbtuh Range | Max Output Mbtuh |
|-------|-------------------|------------------|
| 0211  | 40-200            | 194              |
| 0261  | 50-250            | 243              |
| 0291  | 60-299            | 291              |
| 0391  | 80-399            | 387              |
| 0501  | 100-500           | 485              |



## Approximately Shipping Weight (lbs.)

| Model | Weight |
|-------|--------|
| 0211  | 221    |
| 0261  | 221    |
| 0291  | 237    |
| 0391  | 283    |
| 0501  | 302    |

### Heat Exchanger Head Loss & Flow

| Model | Temperature Rise Across Heat Exchanger |          |       |          |
|-------|--|----------|-------|----------|
|       | 30°F                                   |          | 35°F  |          |
|       | USGPM                                  | ΔP - Ft. | USGPM | ΔP - Ft. |
| 0081  | 5.0                                    | 8.2      | 4.3   | 6.2      |
| 0101  | 6.3                                    | 12.3     | 5.4   | 9.4      |
| 0151  | 9.5                                    | 10.4     | 8.1   | 7.8      |
| 0201  | 12.6                                   | 7.2      | 10.8  | 5.8      |
| 0211  | 12.6                                   | 7.2      | 10.8  | 5.8      |
| 0251  | 15.8                                   | 11.5     | 13.5  | 8.7      |
| 0261  | 15.8                                   | 11.5     | 13.5  | 8.7      |
| 0291  | 18.9                                   | 9.3      | 16.2  | 7.0      |
| 0391  | 25.2                                   | 8.4      | 21.6  | 6.3      |
| 0501  | 31.5                                   | 9.2      | 27.0  | 6.9      |

### 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' |                       |                               |
|       |                |                |                |                |                |                |                |                | 0081  | 16 1/2                 | 12        |                       |                               |
| 0101  | 16 1/2         | 12             | N/A            | N/A            | N/A            | N/A            | N/A            | N/A            | 3   | 3                      | 2         | 1                     | 1/2                           |
| 0151  | 16 1/2         | 12             | N/A            | N/A            | N/A            | N/A            | N/A            | N/A            | 3   | 3                      | 2         | 1                     | 1/2                           |
| 0201  | 23 1/2         | 19             | N/A            | N/A            | N/A            | N/A            | N/A            | N/A            | 3   | 3                      | 2         | 1                     | 1/2                           |
| 0211  | 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                           |
| 0251  | 23 1/2         | 19             | N/A            | N/A            | N/A            | N/A            | N/A            | N/A            | 3   | 3                      | 2         | 1 1/4                 | 1/2                           |
| 0261  | 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                           |
| 0291  | 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                           |
| 0391  | 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                             |
| 0501  | 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 \_\_\_\_\_