



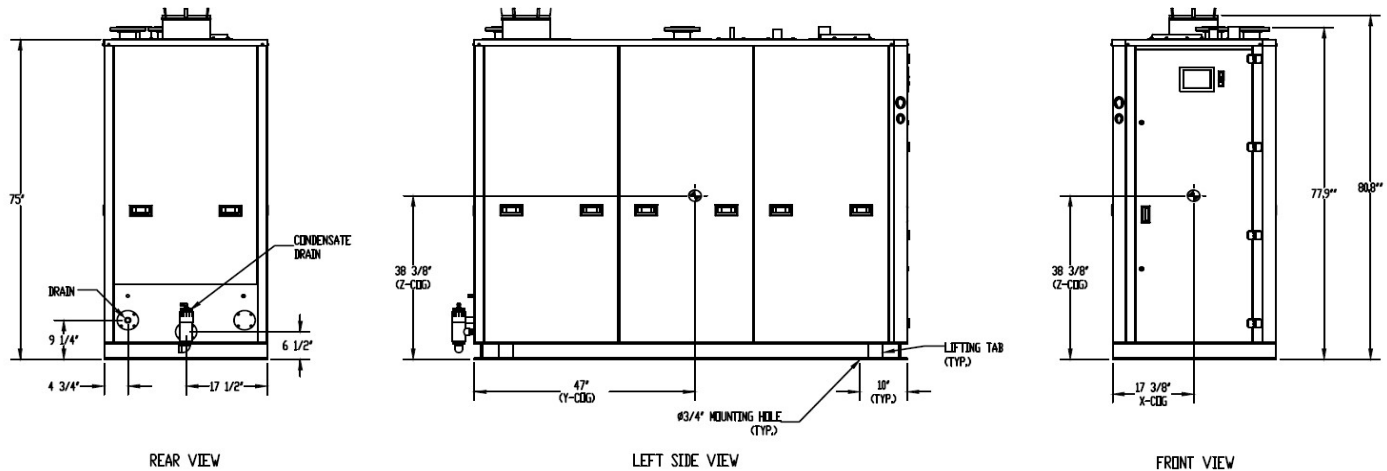
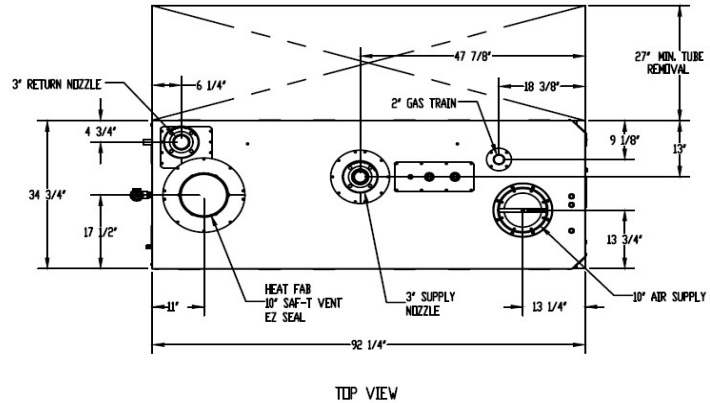
ARCTIC CONDENSING BOILERS, REVERSE CONSTRUCTION - SUBMITTAL DATA SHEET

RATINGS AND CAPACITIES		
Input - Low Fire	600,000	BTU/HR
Input - High Fire	3,000,000	BTU/HR
Output - High Fire	2,850,000	BTU/HR
Boiler Horsepower	85.1	BHP
AHRI Certified Thermal Efficiency	95.0%	
Low Fire Thermal Efficiency	Up to 99%	
Heating Surface	918	Sq.Ft.
Water Content	39.3	Gallons
Fuel Natural Gas		
Firing Rate Full Modulation		
Burner Turndown 5:1		
Low NOx Emissions Capable, Consult Factory		
Inlet Gas Pressure (NG)	4" wc	Min.
	14" wc	Max.
Shipping Weight, Approximate	3,060	lbs

ASME Section IV (Max 160 PSIG / 210°F)	
ETL Certified to UL 795 and CAN 3.1.1	

DIMENSIONS / CONNECTIONS	
- Height	75"
- Width	34-3/4"
- Length	92-1/4"
- Supply / Return Connections	3" Flange
- Vent / Air Intake Connections	10"
- Condensate / Boiler Drain Conn.	1"
- Gas Connection	2"

STANDARD EQUIPMENT	
- ASME Stainless Steel Heat Exchanger	
- Stainless Steel Mesh Pre-Mix Burner	
- Variable Speed Combustion Blower	
- Concert Boiler Control™ (24v) With 7" Color Touch Screen	
> Peer-To-Peer Boiler Communications (Up to 8 Units)	
> Energy Management System (EMS) Interface	
> USB Data Port Transfer	
> Self-Guiding Diagnostics	
> Unmatched Archives	
- High Limit Temperature Control, Manual Reset	
- Blower Motor (See HP below with voltage options)	
- Water Flow Switch	
- Low Water Cutoff, Manual Reset	
- Condensate Trap	
- Blocked Condensate Switch	
- Combustion Air Proving Switch	
- Blocked Vent Air Switch	
- Pressure Relief Valve	
- Pressure & Temperature Gauges	
- Supply & Return Temperature Sensors	
- Flue Gas Temperature Sensor	
- Modulating Gas Valve	
- Direct Spark Ignition / UV Scanner	
- High/Low Gas Pressure Switches, Manual Reset	
- 120/1/60 Line Voltage (15.6 Amps); 1.5 HP Blower	
- 208-240/1/60 Line Voltage (8.3 Amps); 1.5 HP Blower	
- 208-240/3/60 Line Voltage (9.5 Amps); 3 HP Blower	
- 480/3/60 Line Voltage (5.25 Amps); 3.2 HP Blower	
- Category IV Individual Venting	
- Category II Common Venting with Engineered Vent System	
- Polypropylene & Stainless Steel Acceptable Material	
- Ducted or Room Combustion Air Intake	



- NOTES:
1. Dimensions shown are for reference only
 2. See O&M for required installation clearances
 3. *Flue system material shall be capable of continuous operation at 230°F or higher, have the same corrosion resistance to flue gas condensation as AL29-4C and shall be certified to UL 1738 – venting system for gas-burning appliances cat II, III and IV.

FLOWS AND PRESSURE DROPS					
Delta T	Flow (GPM)	Δ P (Ft. Hd)	Delta T	Flow (GPM)	Δ P (Ft. Hd)
20°F Δ T (Max)	285	28.70	50°F Δ T	114	4.59
25°F Δ T	228	18.37	60°F Δ T	95	3.19
30°F Δ T	190	12.76	70°F Δ T	81	2.34
35°F Δ T	163	9.37	80°F Δ T	71	1.79
40°F Δ T	143	7.18	90°F Δ T	63	1.42
45°F Δ T	127	5.67	100°F Δ T (Min)	57	1.15

ARC-3000R

PROPERTY OF

THERMAL SOLUTIONS
Innovative Equipment for Hot Water Systems

PO BOX 3244 | LANCASTER, PA 17601

**INNOVATIVE EQUIPMENT FOR
HOT WATER SYSTEMS**

WWW.THERMALSOLUTIONS.COM