

BMK SERIES TECHNICAL DATA SHEET



Benchmark 6000 Condensing Hydronic Boilers

The AERCO Benchmark 6000 Water Boiler is designed for condensing application in any closed loop hydronic system. It delivers 15:1 burner turndown to match energy input directly to fluctuating system loads to yield the highest possible seasonal efficiencies. And no other product packs as much capacity into such a small footprint.

To minimize emissions, the BMK6000 is fitted with a low NOx burner whose emissions will consistently measure <20 ppm of NOx corrected to 3% excess oxygen at all firing rates. The fully modulating burner also maintains AERCO standards for energy efficiency, longevity, reliability and construction quality.

The BMK6000 comes standard with AERCO's Patent Pending, Oxygen Level (O2) monitoring system. This monitoring system, designed to display the O2 level directly on the unit in real time, can also be remotely monitored via Modbus giving the customer the ability to measure the emissions level and fuel economy of the boiler without traditional combustion calibration devices.

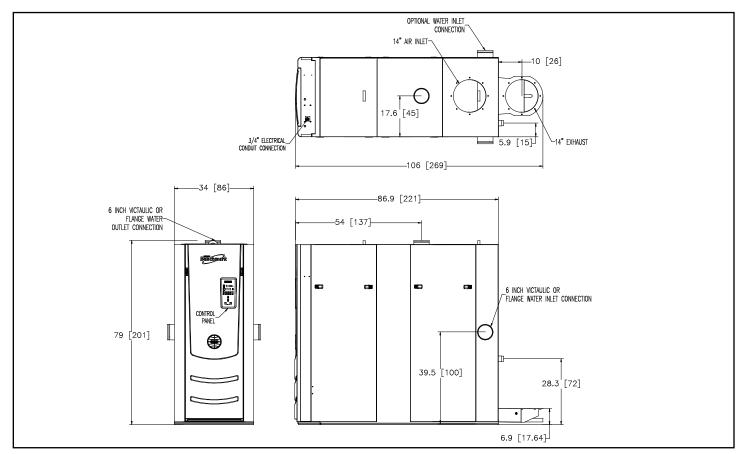
The BMK6000 can be used as an individual unit or in modular arrangements and offers selectable modes of operation. In addition to controlling the boiler according to a constant set point, indoor/outdoor reset schedule or 4-20mA signal, one or more units can be integrated via Modbus communications protocol to AERCO's multiple boiler management system (BMS) or a facility-wide Energy Management or Building Automation System.

FEATURES:

- Natural Gas
- 15:1 Turndown Ratio (7%)
- Oxygen Level (O₂) Monitoring Standard
- Stainless Steel Fire Tube heat exchanger
- Capable of variable primary flow Installations
- NOx Emissions 20 ppm or less @ all firing rates
- Compact Footprint (78"H x 34"W x 106"D)
- Precise Temperature Control

- Sealed Combustion Capable
- · Easy Open Access for Service
- Acceptable vent materials AL29-4C
- Reliable Quiet Operation
- · Controls Options
 - Constant Setpoint
 - Indoor/ Outdoor Reset
 - · Remote Setpoint
 - 4-20mA signal or ModBus

DIMENSIONS:



RATINGS AND DIMENSIONS:

	Model	MBH Input	MBH Output	AHRI Efficiency 80° to 180°F	Turndown	Width	Depth	Height	Weight (dry) lbs.	Weight (wet) lbs.
В	MK6000	6000	5610 mbh	92.5%	15:1	2'10"	8' 10"	6'6"	4,000 (est)	4,918 (est)

SPECIFICATIONS:

Electrical Options	. 208-230V/3/60 FLA 20A
	460V/3/60 FLA 15A
Gas Requirements:	
FM / DBB (IRI) Gas Train 20"	W.C. to 2psi @ Full Load
Water Connections 6" Victaulic	with 150lbs flange option
Vent/ Air Intake Connections	14 Inch
Communications Protocol	MODbus

ASME Working Pressure...... 80 PSIG

Gas Connection	2" NPT
Min./Max. Water Flow	75gpm / 600 gpm
Water Pressure Drop	4.0psig@ 570GPM
Control Range	50°F to 190°F
Ambient Temperature	0°F to 130°F
Standard Listings & Approvals	UL, CUL, CSD-1, ASME
Gas Train Options	FM Compliant or
	Factory Installed DBB (IRI)

^{*}Up to 2000' Altitude

Represented By:



^{**}Output is dependent upon return water temp. and firing rate.