MGC Series
GAS-FIRED
HOT WATER BOILERS
With Hydrolevel Control
Submittal/Specifications

Engineer:_____

Project Name:_____

Project Location:_____

Contractor:_____

APPLICATION:
Gas Fired Water heating boiler for indoor installations. Available in 2 sizes 262 MBH and 299 MBH. For use with natural or propane gas.

CERTIFICATION AND APPROVALS:
The Cast Iron heat exchanger is manufactured and tested in accordance with American Society of Mechanical Engineers Standards (ASME) and certified by Canadian Standards Association (CSA) in the US. The cast iron heat exchanger is tested for a maximum allowable working pressure of 50 PSIG for water boilers in accordance with ASME boiler and pressure vessel code, section IV, rules for construction of heating boilers. A 30 PSIG safety relief valve is shipped standard on water boilers.

CAST IRON BOILER ASSEMBLY:
Long life cast iron heat exchanger with cast iron push nipple connections. The sections and push nipples expand at the same rate when heated. By using similar materials instead of gaskets, the boiler maintains a water tight seal.

BOILER CONTROL
Features a hydrolevel operating control with digital display and diagnostics. Control adjusts the water temperature based on system demand. Control has built-in low water cut-off functionality to protect the boiler.

WARRANTY
The cast iron boiler has a 20 year non-prorated limited warranty in residential applications. All other components have a limited 5 year limited warranty in residential applications. Commercial applications have a non-prorated limited warranty of 10 years. All other components have a limited warranty for one year in commercial applications.

ELECTRONIC IGNITION:
Automatic pilot with intermittent pilot control. Combination pilot burner, electrode and flame sensor with safety shutoff. Continuous pilot retry for ignition.

INTEGRAL DRAFT DIVERTER:
Integral draft diverter eliminates the need for external barometric draft hood and provides a low profile.

Manufactured by:
ECR International Inc.
2260 Dwyer Avenue, Utica, NY 13501
Tel. 800 253 7900
www.ecrinternational.com
PN 615000664 REV. A [02/03/2025]

AUTOMATIC GAS CONTROL
The compact 24 volt redundant combination gas control valve combines:

- Automatic electric valve (dual)
- Automatic safety pilot
- Manual shut off (On-Off
- Pressure regulator
- Pilot Adjustment

STANDARD WATER TRIM LIST:

- Hydrolevel operating control and high limit.
- Temperature & Pressure Gauge - The field installed T&P gauge provides a means to monitor the status of the boiler and heating system, required by regulatory agencies.
- Safety Relief Valve - The field installed valve provides pressure relief of the heating system in case of abnormal conditions. Valve opens at 30 psig (206.84 kPa) and is rated by ASME.

OPTIONS:

- Natural gas and Propane gas conversion kits
- High altitude conversion kits
- Circulator Pumps (Taco, Grundfos)
- Fill-Trol (Item #14624003) for water boilers over 150MBH.

RATINGS AND CAPACITIES

Ratings and Capacities									
BOILER MODEL NUMBER (1)	† NATURAL GAS				† PROPANE GAS				AFUE
	Input (3) Mbh	Heating Capacity (3) Mbh	(2) NET AHRI RATING Water, (3) Mbh	*HIGH ALTITUDE INPUT (3) Mbh	INPUT (3)Mbh	HEATING CAPACITY (3)Mbh	NET AHRI RATING	*HIGH ALTITUDE INPUT (3) Mbh	INTERMITTENT IGNITION WITH VENT DAMPER
MGC-8	262	221	192	236	245	207	181	220	84.0
MGC-9	299	252	219	269	280	237	206	252	84.0

† Input rating for sea level to 2,000 ft. (610m) above sea level.

- **United States**, over 2000 ft (610m) above sea level. Reduce input rate 4% for every 1000 ft (304m) above sea level.
- ***Canada**, 2000 ft (610m) to 4500 (1350m) above sea level, reduce input per table. Over 4500 ft (1350m) above sea level. Contact Provincial authority having jurisdiction.

+ Heating Capacity based on D.O.E. (Department of Energy) test procedure.

(1) Add model number suffix 'P' for Propane.

(2) Net AHRI Water rating shown based on piping and pickup allowance of 1.15. Consult manufacturer before selecting boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

(3) Mbh = 1,000 Btuh = British Thermal Unit Per Hour

- Ratings marked "Net AHRI Ratings" indicate amount of remaining heat input used to heat radiation or terminal units. Net AHRI Ratings shown are based on allowance of 1.15 in accordance with factors shown on AHRI Standard as published by The Hydronics Institute.
- Selection of boiler size should be based upon "Net AHRI Rating" being equal to or greater than calculated heat loss of the building.
- Consult manufacturer before selecting boiler for installations having unusual piping and pickup requirements.

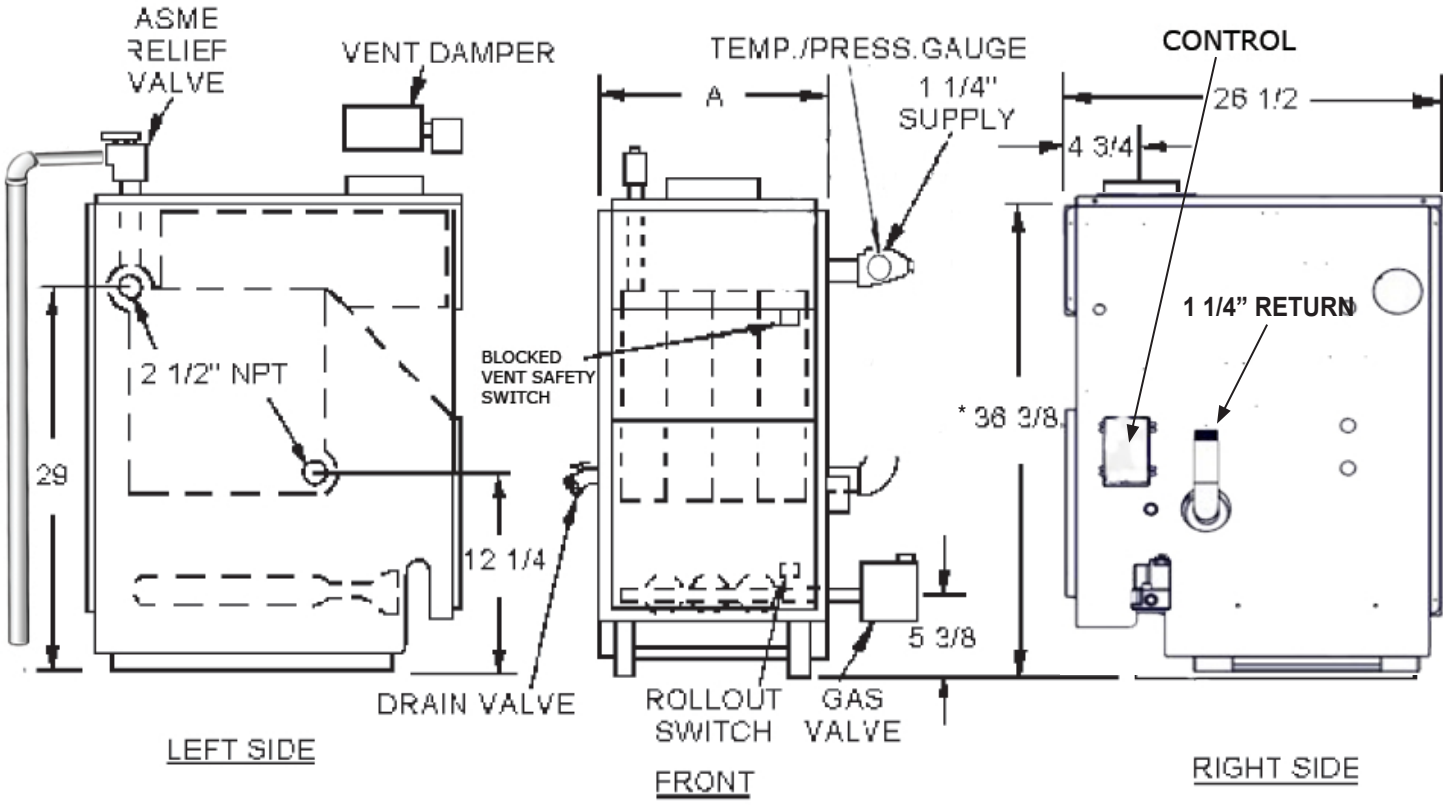
BOILERS FOR USE AT HIGH ALTITUDE

Boiler is factory equipped for use at altitudes of 0-2,000 feet above sea level.
For use at altitudes above 2,000 feet above sea level, input ratings are reduced by change in main burner orifice size.

For altitudes above 2,000 feet above sea level, input ratings should be reduced at rate of 4% for each 1,000 feet above sea level. Consult National Fuel Gas Code, ANSI Z223.1/NFPA 54, or manufacturer for correct orifice sizing information.

In Canada, a high altitude conversion kit is available to convert to altitudes of 2,000 to 4,500 feet above sea level. Please consult your dealer.

Table 1 - Dimensions			
BOILER MODEL NUMBER	DIMENSIONS (INCH.)		BOILER WATER VOLUME GALLONS
	FLUE DIAMETER	"A" WIDTH	
MGC-8	7	27½	10.10
MGC-9	7	30¾	11.60
Add 5½" to height for vent Damper.			



* Minimum acceptable height for Low Water Cutoff probe.

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