

# Revolution<sup>®</sup>

88% High Efficiency Gas-fired Water Boiler

**88%**

HIGH EFFICIENCY



- High Efficiency up to 88% AFUE
- 6 Sizes Available
  - 62 - 190 MBH
  - Natural or LP Gas
- Direct Vent or Induced Draft
- Cast Iron Sectional Design with Diamond Pin Heat Transfer Surface
- Water Boiler with Low Temperature Return Water Capabilities
- Lifetime Limited Warranty



**Limited  
Lifetime  
Warranty!**

**Burnham<sup>®</sup>**  
by  
**U.S. Boiler Company**

# Revolution®

## Burnham Revolution® High Efficiency Gas-fired Boiler



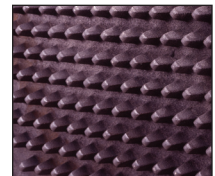
The Revolution Boiler is one of the most efficient cast iron, gas-fired boilers available. With an Annual Fuel Utilization Efficiency (AFUE) of up to 88%, the Revolution exceeds the minimum requirements for its ENERGY STAR® rating. The Revolution boiler is an advanced cast iron design concept that was developed from the ground up by U.S. Boiler Co. engineers.



### Unique Boiler Design

The heart of a heat exchanger is its ability to transfer heat as efficiently as possible. The Revolution boiler uses a unique design configuration to achieve its high efficiencies. First, the flue gases pass through the heat exchanger in the traditional way. Then, as the flue gases rise above the heat exchanger, they are pulled across a secondary surface to allow for an heat transfer process to take place.

This secondary heating surface is fitted with unique diamond shaped heat transfer pins that are specifically designed to extract the maximum amount of heat possible. This design concept is only available in Burnham Revolution boilers.



Diamond Pin  
Heat Transfer Surface

### Easy to Install, Maintain, and Service

U.S. Boiler Co. has designed the Revolution boiler to adapt to the needs of nearly any home heating application. Besides the flexibility of either horizontal or vertical venting capabilities, there is an option to use either indoor (induced draft) or outdoor (direct vent) air for the combustion process.

The Revolution boiler is also pre-piped with a primary/secondary loop installed in the boiler. This loop provides for easy hookup to a low temperature system, and with the addition of a few simple controls, the Revolution boiler will perform well with radiant floor heating installations or other low temperature heating applications.

Also, for further ease in installation, all piping and venting connections are conveniently located at the top of the boiler.

Ultimately, the flexibility of the Revolution boiler means less time is required for the installation, maintenance, and servicing of this advanced boiler system... all resulting in savings for the homeowner.



### Lifetime Limited Warranty

Revolution boilers are made with cast iron sections that are produced at Burnham Foundry, LLC in Zanesville, Ohio and are assembled and tested at U.S. Boiler Co. facilities in Lancaster, PA. The Revolution is protected with a limited lifetime warranty on the heat exchanger. Additional coverage is available by purchasing the U.S. Boiler Extended Warranty Plan which provides blanket protection on parts and labor for 5 or 10 years from the date of installation.





## Revolution® Boiler

Proven stainless steel vent system that works well with high flue gas temperatures

All piping and venting connections on top of boiler

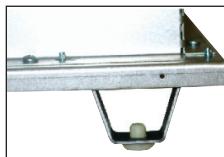
Built-in primary/secondary piping loop saves time and simplifies installation

Step opening gas valve and electronic ignition provides for smooth, quiet start-up

The VS300 injection control and pump helps eliminate condensate and thermal shock concerns while providing temperature control with system temperatures from 55° to 210°F

Stainless steel burners help ensure long-term reliability and high efficiency operation

High strength trapezoidal legs with nylon glides make moving boilers easy and protect against potential damage to floors



2-pass cast iron heat exchanger provides AFUE's up to 88%

Superior base and jacket design helps keep surface temperatures cooler



GAS BOILERS

## Burnham Alliance SL™ Indirect-fired Water Heaters

For an abundant supply of domestic hot water, be sure to use an Burnham Alliance SL indirect-fired water heater with every boiler application.



The Alliance SL water heaters are designed with an effective hydrastone lining that offers superior corrosion resistance and outstanding performance in a wide variety of water conditions.

Water heaters are available in five sizes and come with a unique 10/2/1 warranty – 10 years on the tank and coil, 2 years labor and 1 year on parts. An optional lifetime warranty is also available.




**Made in America**

# Ratings and Specifications

## Natural Gas or LP Gas



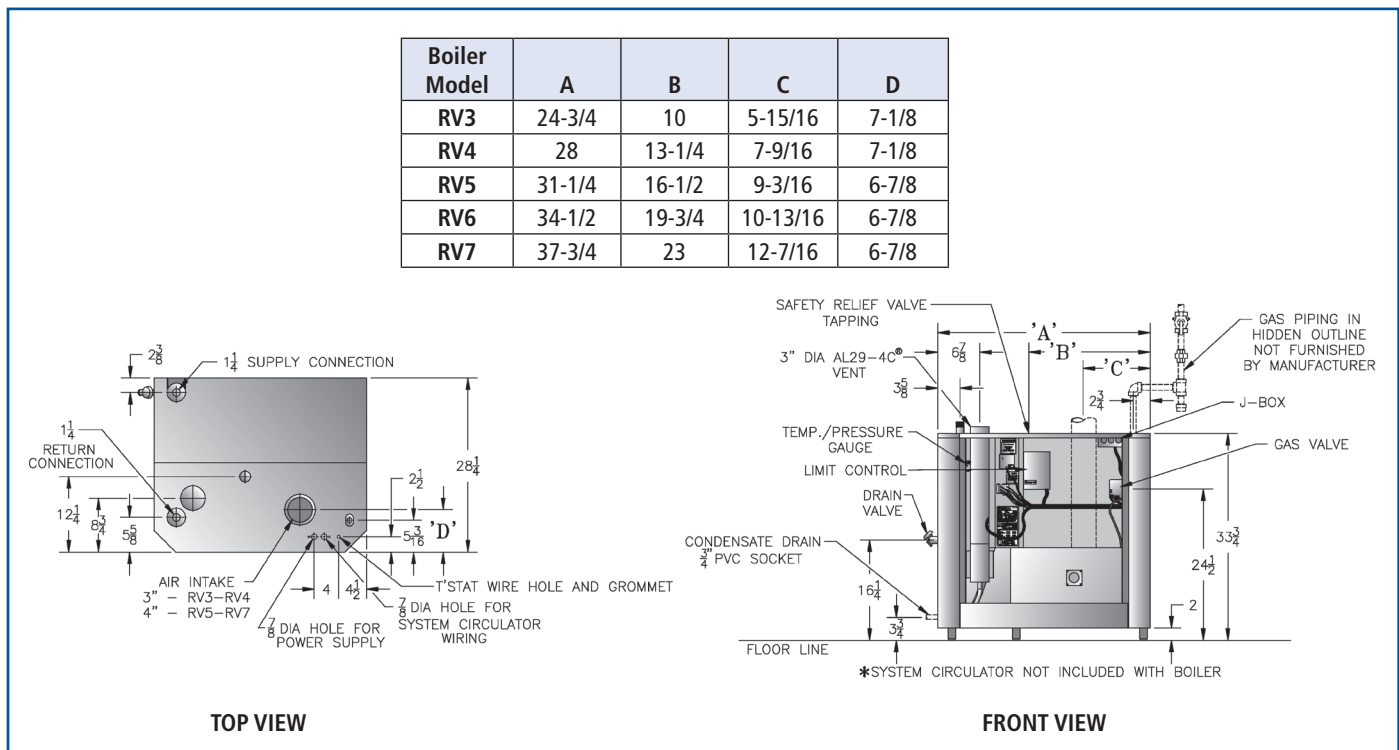
Boiler Model	Input (MBH)	DOE Heating Capacity (MBH)	I = B = R Net Rating (MBH)	 AFUE (%)	Maximum Vent Length (Equiv. Ft.)	Maximum Air Inlet Length	Water Capacity (Gal.)	Approximate Shipping Weight (Lbs.)
RV3	62	55	48	88.0	50	52	3.6	260
RV4	96	84	73	87.6	50	52	4.4	354
RV5	130	114	99	87.4	50	52	5.1	448
RV6	164	143	124	87.2	50	52	5.9	542
RV7	190	166	144	87.0	50	52	6.6	636

1. Ratings shown are for installations at sea level and elevations up to 2000 feet. Ratings reduce 4% for each 1000 ft. above sea level.
2. The Revolution is designed to vent directly through the wall or roof using Burnham's approved vent systems, and AL29-4C® stainless steel pipe. Inlet air can be supplied using single wall metal pipe or PVC pipe using Burnham's PVC air intake kit.

## Gas, Water and Vent Connections

Boiler Model	Gas Valve Inlet (NPT)	Water Supply & Return (NPT)	Air Inlet Diameter (In.)	Vent Diameter (In.)
RV3	1/2	1-1/4	3	3
RV4	1/2	1-1/4	3	3
RV5	1/2	1-1/4	4	3
RV6	3/4	1-1/4	4	3
RV7	3/4	1-1/4	4	3

## Dimensions



**U.S. Boiler Company**  
[www.usboiler.burnham.com](http://www.usboiler.burnham.com)

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