



Burnham Boilers

Series 2

Gas-Fired, Natural Draft, Cast Iron Water Boiler

The Industry Standard from the Industry Leader!



The Industry Standard from the Industry Leader!

- AFUE Up to 84%
- Natural Draft
- Natural or LP Gas, 38 – 299 MBH (14 sizes)
- Cast Iron Heat Exchanger, 2–10 Sections
- Direct Replacement for Thousands of Existing Boiler Installations
- Solid, Reliable, Time-Tested Design
- Standing Pilot
- Lifetime Limited Warranty

Since its introduction, the Series 2 has earned a reputation for safety, reliability and durability. With a robust cast iron heat exchanger, long lasting stainless steel burners, quality manufacturing, and over two million installed in North America, the Series 2 is one of the most popular choices for those seeking a reliable, long-lasting gas boiler.

Ratings and Specifications

Roberts-Hamilton Code	Input MBH	DOE Heating Capacity (MBH)	I=B=R Net Rating MBH	AFUE % (1) Standing Pilot	Approx. Shipping Wt. (lbs.)	Min. Rec. Chimney Size - Round Dia. (In.) x Ht. (Ft.)	Burnham
402-0300	62	52	45	80	272	4 x 15	203*
402-0302	96	80	70	80.1	316	5 x 15	204*
402-0304	130	108	94	80.2	364	6 x 15	205*

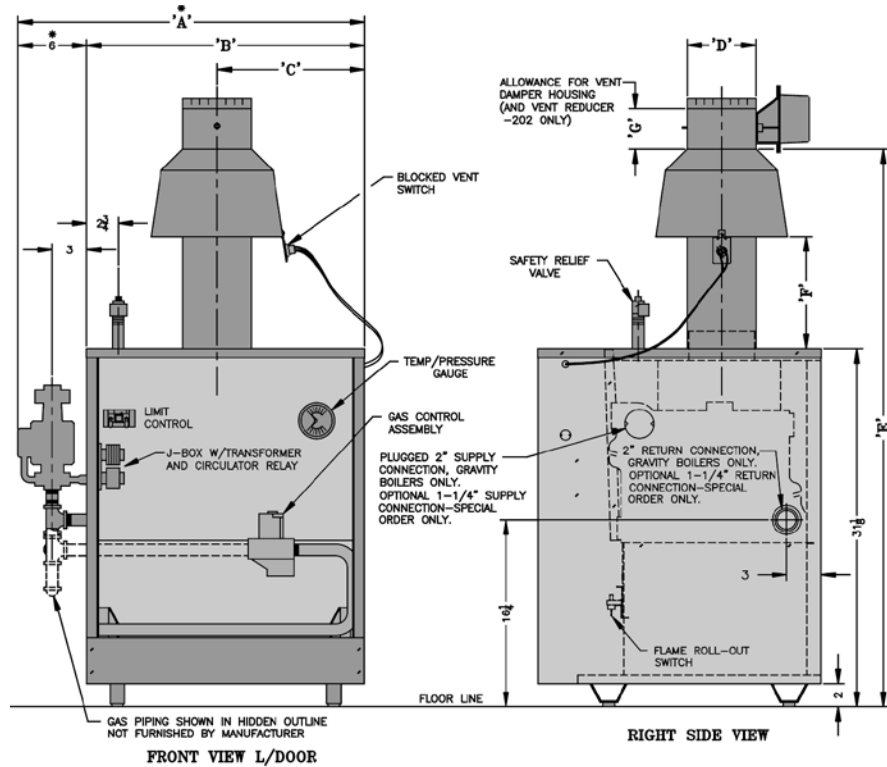
Conversion Kits

Roberts-Hamilton Code	Fits Boiler Model #	Burnham Model #
402-1001	203	6231720302
402-1003	204	6231720402
402-1005	205	6231720502



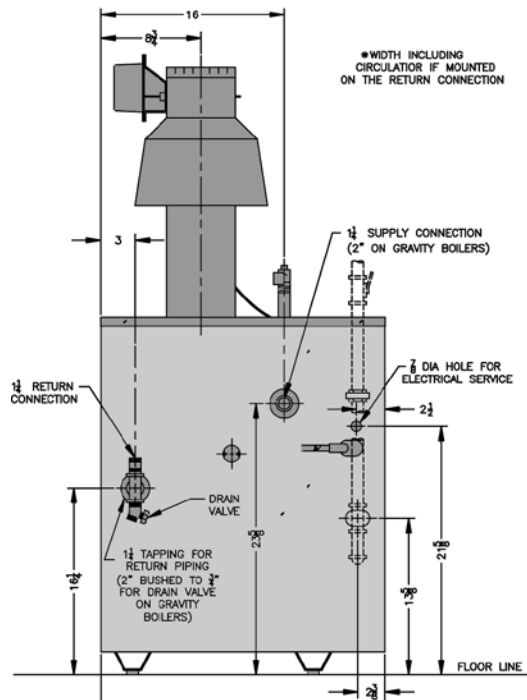
Series 2 Continued

Gas-Fired, Natural Draft, Cast Iron Water Boiler



Dimensions (in inches)

Model	A	B	C	D	E	F	G
203	20	12	6	4	45-1/2	8-1/2	4-3/4
204	23-1/4	15-1/4	7-5/8	5	47-1/8	9-1/8	4-3/4
205	26-1/2	18-1/2	9-1/4	6	48-1/2	9-3/4	5-1/4





Series 3

Gas-Fired, Natural Draft, Cast Iron Water Boiler



- 84% AFUE
- Natural or LP gas
- Reliable Cast Iron Heat Exchanger
- Modern Design for Stylish Appearance and Efficient Operation
- Simple to Install and Service
- Ideal Replacement for Millions of Existing Boiler Installations
- 7 sizes, 70-280 MBH input

The Burnham Series 3 boiler features a proven, long-lasting, American-made cast iron heat engine, the ease & simplicity of atmospheric venting, an exclusive control system that provides features unrivaled by any boiler in the market, an 84% efficiency rating, and an attractive exterior which is equivalent or superior to the design of the most sophisticated condensing boilers.

- Features Burnham IQ Control System™
- True Plug & Play Controls Utilizing Burnham IQ Option Cards;
 - Outdoor Reset (with Domestic Hot Water Priority)
 - Auxiliary High Limit
 - Low Water Cut-off
 - Optional LCD Touch Screen Display
- Improved Boiler Operation

Ratings

Roberts-Hamilton Code	Input (MBH)	DOE Heating Capacity (MBH)	I=B=R Net Rating (MBH)	AFUE %	Electrical Requirements	Burnham Model #
402-0320	70	59	51	84	<2 Amps	303
402-0322	105	88	77	84	<2 Amps	304
402-0324	140	118	102	84	<2 Amps	305

Conversion Kit

Roberts-Hamilton Code	Fits Boiler	Burnham Model #
402-1050	All Series 3 Models	6231720302



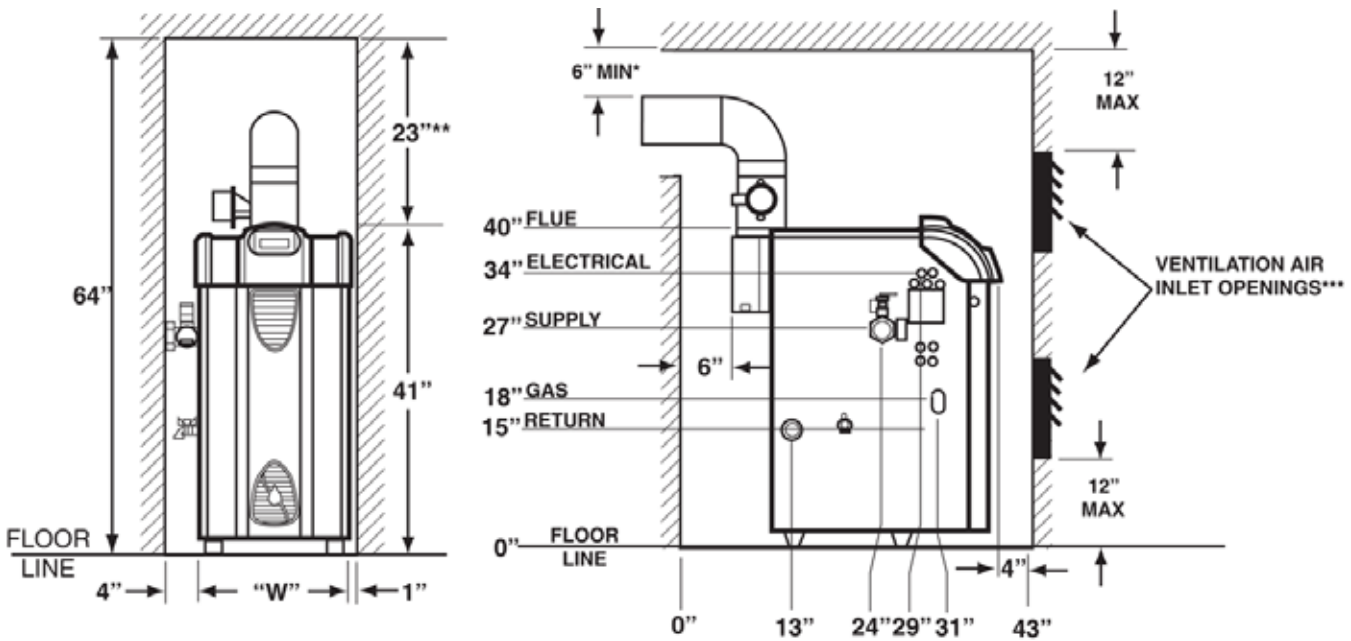
Series 3 Continued

Gas-Fired, Natural Draft, Cast Iron Water Boiler

Dimensions (in inches)

Model Number	Dimensions (inches)			Connections (inches)					Water Content (gal.)	Approx. Shipping Wt. (lbs.)
	Width	Height	Depth	Vent	Supply	Return	Gas Valve	Relief Valve		
303	12-3/4"	41"	33"	4"	1-1/4"	1-1/4"	1/2"	3/4"	2	250
304	15-1/2"	41"	33"	5"	1-1/4"	1-1/4"	1/2"	3/4"	3	300
305	18-1/2"	41"	33"	6"	1-1/4"	1-1/4"	1/2"	3/4"	4	350

**When ordering, add suffix 'N' for natural gas, or 'P' for propane. Add 'C' for 24V standing pilot, or 'I' for electronic ignition. Electronic ignition is standard on 2H models. Water only, 30 PSI maximum working pressure. For elevations above 2000 feet, reduce ratings four percent (4%) per 1000 feet above sea level. 15' chimney height is from bottom of draft hood opening to top of chimney. Refer to the National Fuel Gas Code, appendix G for equivalent areas of circular and rectangular flue linings.*





ESC Boiler

Gas Fired, High Efficiency, Sealed Combustion or Power Vented Cast Iron Water Boiler



The Perfect Balance Between Efficiency and Practicality

- Direct vent (horizontal or vertical) or Power Vent
- Natural or LP gas
- Limited Lifetime Manufacturer's Warranty
- Exclusive IQ control system
- Time proven cast iron design for durability and reliability

The ESC boiler is a modern, versatile boiler designed to maximize the comfort and efficiency of nearly any heating system. It delivers the perfect balance of energy-saving performance, durability, and features for homes where a chimney-vented boiler is not an option. The ESC features an advanced cast iron heat exchanger, and a well-insulated heavy-duty steel base. It also features the IQ Control System which not only monitors boiler operation, but also gives the ability to add additional energy saving features to the boiler. By striking a balance between the types of advanced energy saving features typically seen on high-end condensing boilers and the tried-and-true durability of cast iron boilers, the ESC is uniquely able to offer homeowners the best of both worlds!

- Features Burnham IQ Control System™
- True Plug & Play Controls Utilizing Burnham IQ Option Cards;
 - Outdoor Reset (with Domestic Hot Water Priority)
 - Auxiliary High Limit
 - Low Water Cut-off
 - Optional LCD Touch Screen Display
- Improved Boiler & Heating System Operation

Ratings

Roberts-Hamilton Code	Input (MBH)	DOE Heating Capacity (MBH)	I=B=R Net Rating (MBH)	AFUE %	Electrical Requirements	Burnham Model #
402-0350	70	60	52	85.5	<2 Amps	ESC3
402-0354	105	90	78	85.4	<2 Amps	ESC4
402-0358	140	120	104	85.3	<2 Amps	ESC5

Adapters

Roberts-Hamilton Code	Fits Boiler All ESC Models	Metal-Fab Model #
466-5040	3" Metal-Fab Stainless Steel Starter	3CGBMA

Conversion Kit

Roberts-Hamilton Code	Fits Boiler	Burnham Model #
402-1050	All ESC Models	6231720302

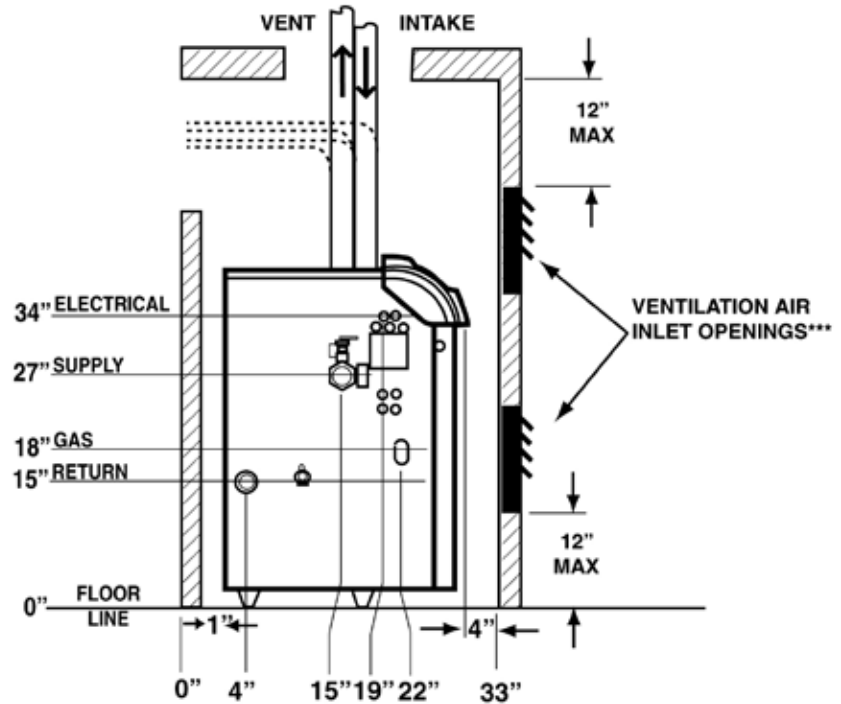
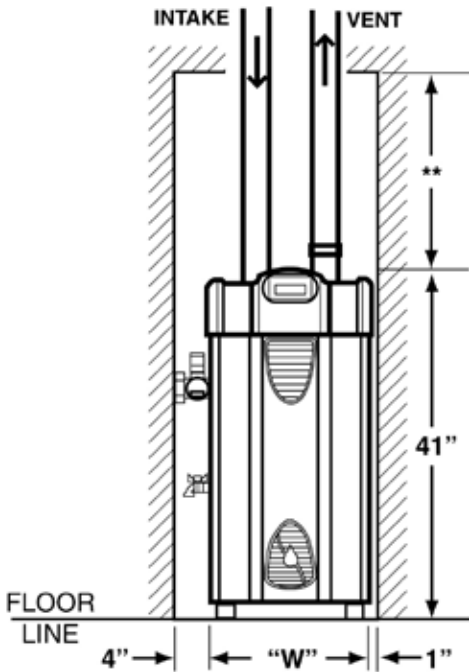


ESC Continued

Gas Fired, High Efficiency, Sealed Combustion or Power Vented Cast Iron Water Boiler

Dimensions (in inches)

Model Number *	Dimensions (inches)			Connections (inches)		Water Content (gal.)	Approx. Shipping Wt. (lbs.)
	Width	Height	Depth	Vent	Intake		
ESC3	14"	41"	33"	3	3	2	250
ESC4	15-1/2"	41"	33"	3	3	3	300
ESC5	18-1/2"	41"	33"	3	3	4	350





ES2 Boiler

Gas Fired, High Efficiency, Natural Draft, Cast Iron Water Boiler



Award Winning High Efficiency Gas Boiler Loaded with Energy Saving Features

- Natural or LP gas
- Limited Lifetime Manufacturer's Warranty
- Exclusive IQ Control System platform
- Time proven cast iron design for durability and reliability
- Energy Star Certified – efficiency tax credits/rebates may apply
- Designed for homes with existing chimneys

The ES2 blends unmatched performance with long lasting durability and exclusive energy saving features. Designed as an optimal replacement boiler for millions of homes with existing chimneys, the ES2 is one of the only Energy Star certified boilers in its class. Achieving the 85% AFUE Energy Star rating qualifies the ES2 for applicable tax credits and rebates from federal, state and local programs from your local utility company. (Check for availability). At the heart of the ES2 is one of the most advanced cast iron heat exchangers in the industry, and a well-insulated heavy-duty steel base for longevity. Even the ES2's control system is class leading. The IQ Boiler Control System allows the ES2 to be easily equipped with an optional energy saving control package that can achieve up to a 15% reduction in fuel consumption according to most studies. Ask your contractor for an ES2 today... an unmatched combination of advanced features and proven durability.

- Features Burnham IQ Control System™
- True Plug & Play Controls Utilizing Burnham IQ Option Cards;
 - Outdoor Reset (with Domestic Hot Water Priority)
 - Auxiliary High Limit
 - Low Water Cut-off
 - Optional LCD Touch Screen Display
- Improved Boiler & Heating System Operation

Ratings

Roberts-Hamilton Code	Input (MBH)	DOE Heating Capacity (MBH)	I=B=R Net Rating (MBH)	AFUE %	Electrical Requirements	Burnham Model #
402-0200	70	59	51	85.0	<2 Amps	ES23
402-0210	105	88	77	85.0	<2 Amps	ES24

Conversion Kit

Roberts-Hamilton Code	Fits Boiler	Burnham Model #
402-1050	All ES2 Models	6231720302

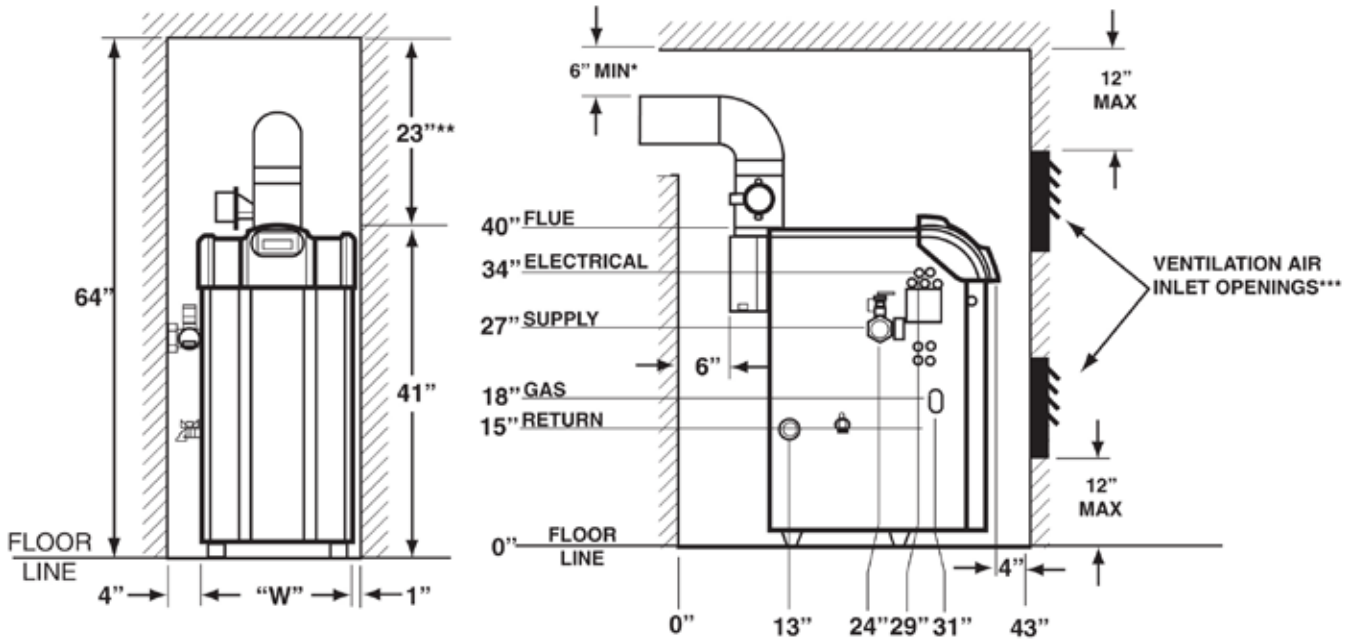


ES2 Continued

*Gas Fired, High Efficiency, Natural Draft,
Cast Iron Water Boiler*

Dimensions (in inches)

Model Number	Dimensions (inches)			Connections (inches)					Water Content (gal.)	Approx. Shipping Wt. (lbs.)
	Width	Height	Depth	Vent	Supply	Return	Gas Valve	Relief Valve		
ES23	12-3/4"	41"	33"	4"	1-1/4"	1-1/4"	1/2"	3/4"	2	250
ES24	15-1/2"	41"	33"	5"	1-1/4"	1-1/4"	1/2"	3/4"	3	300





RSA Series

Efficient & Economical Oil-fired Home Heating



- Optional high efficiency kit
- 8 different sizes to choose from
- Brand new design and base

The RSA series boiler offers great performance and reliability in an economical package. This oil-fired boiler comes in 8 different sizes offering consumers the ability to find the right boiler for their home heating needs. The RSA also has an optional kit that boosts the boiler's efficiency while being environmentally friendly. The unique and rugged jacket allows for increased efficiency and easy service.

- 8 Models from .85 - 2 .85 GPH
- Up to 84% AFUE
- Heavy Duty 1-1/2" Steel Boiler Tubes
- Front Flange-Mounted Tankless Coil
- Service Friendly Design with "Quick Release" Canopy Design
- Equipped with Electric-Ignited Burner
- Water Only

Ratings

Roberts-Hamilton Code	Burner Capacity GPH ⁽¹⁾	DOE Heating Capacity MBH ⁽²⁾	I=B=R Net Rating Water MBH ⁽³⁾	Tankless Heater GPM ⁽⁴⁾		Minimum Chimney Size In x In x Ft	AFUE % ⁽²⁾	Model Number
				Standard Coil #S350	Optional Coil #S375			
402-0702	0.85	100	87	3	3-1/2	8 x 8 x 20	82.5	RSA85

Maximum design working pressure: 30 psi water only

1. Firing rate in GPH based on oil having a heat value of 140,000 BTU/GAL.
2. DOE Heating Capacity and AFUE are based on U.S. Government tests at 13.0% CO₂ with a No. 1 maximum smoke.
3. Net ratings shown are based on piping and pick-up allowance of 1.15.
4. Tankless heater ratings based on GAL/MIN of 100°F rise and with 200°F boiler water temperature and a 40°F heater inlet temperature. (Intermittent Draw)

Conversion Kit

Roberts-Hamilton Code	Fits Boiler	Burnham Model #
402-1050	All RSA Models	6231720302

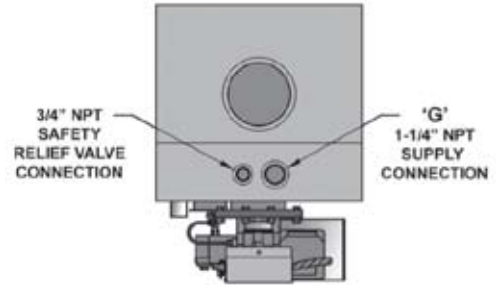


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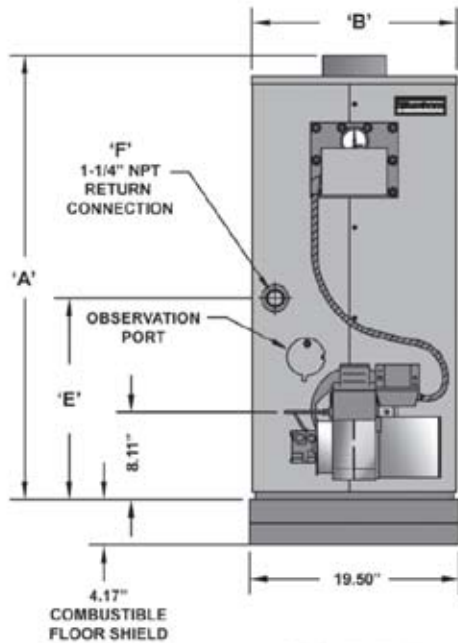
Efficient & Economical Oil-fired Home Heating

Dimensions (in inches)

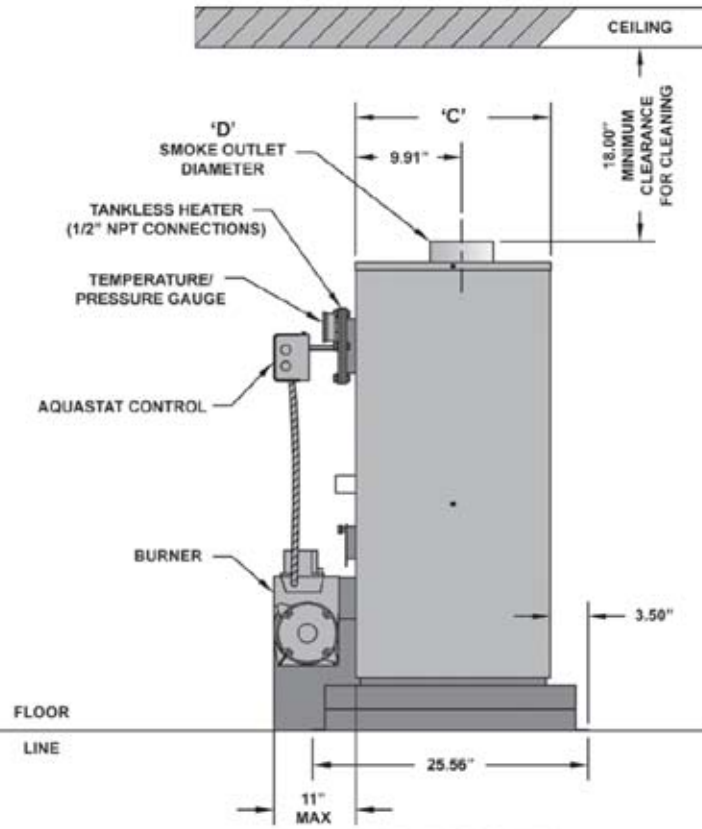
Model	A	B	C	D	E	F	G
RSA85	34-3/4	19-1/16	18-3/16	6	18-11/16	1-1/4	1-1/4



TOP VIEW



FRONT VIEW



RIGHT SIDE VIEW



Alpine

Gas-Fired, Condensing Stainless Steel Boiler

- **95% AFUE – High Efficiency**
- Sage2.1 Boiler Control
 - Includes built-in sequencer for internal staging of up to eight Alpine Sage2.1-equipped boilers
- Seven Sizes: 80 – 500 MBH for Residential & Commercial Applications
- Stainless Steel Heat Exchanger for use with Natural or Propane Gas (up to 10,000 ft.)
- No LP Kit Required - Field Convertable
- Multiple Sealed Combustion Venting Options
 - CPVC/PVC venting (standard)
 - Polypropylene concentric (optional)
 - Stainless steel 2-pipe (optional)
- Modern, appliance-like design with gas, water, & electric connections on left side
- Polypropylene Condensate Trap with Integral Float Switch (patent pending)
- Stackable for Modular Applications

Peak Performance for Hydronic and Radiant Heating

The Burnham Alpine boiler is a condensing boiler with efficiency ratings of 95%. The Alpine utilizes a stainless steel heat exchanger, designed to extract maximum heat from the combustion process, along with a control system that is designed to enhance boiler efficiency as well as system efficiency. With 7 different models ranging in size from 80,000 BTUs – 500,000 BTUs, there's a model for nearly every job from small residential to light commercial installations. Intelligent features are wrapped in a sleek, modern appliance-like jacket, making the Alpine both attractive and smart.

Specifications

Roberts-Hamilton Code	Input (MBH)			Output (MBH)	Net I=B=R (MBH)	AFUE (%)	Boiler Water Volume (gallons)	Heat Trans. Area (sq ft.)	Shipping Weight (pounds)	Model No.
	Minimum		Maximum							
	to 2k ft.	2-7k ft	0-7k ft							
402-0400	16	27	80	73	63	95	0.6	7.3	137	ALP080
402-0402	21	35	105	96	83	95	0.7	9.1	155	ALP105
402-0406	42	70	210	193	168	95	1.7	21.8	206	ALP210



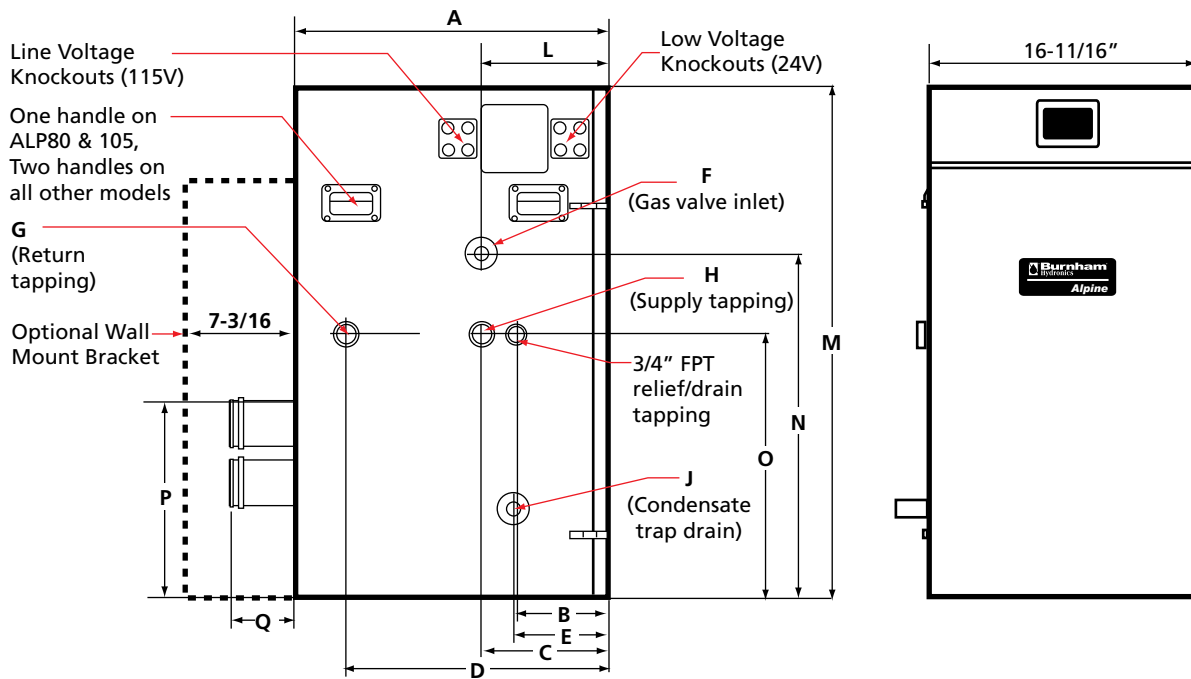
Alpine Continued

Gas-Fired, Condensing Stainless Steel Boiler



Alpine CPVC to PVC Vent & Intake Sizes

Model No.	Intake Size	Vent Size	Max Length Intake/Vent
ALP080	3"	3"	100'/100'
ALP105	3"	3"	100'/100'



Dimensions (in inches)

Model No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	L (in.)	M (in.)	N (in.)	O (in.)	P (in.)	Q (in.)
ALP080	12-9/16	5-5/8	7-5/16	9-5/16	5-15/16	1/2	1	1	*	8	32-3/16	21-3/4	16-11/16	12-1/2	4-3/4
ALP105	14	5-13/16	7-5/16	10-3/4	5-15/16	1/2	1	1	*	8	32-3/16	21-3/4	16-11/16	12-1/2	4-3/4
ALP210	23-15/16	5-13/16	7-5/16	17-1/8	5-15/16	1/2	1	1	*	8	32-3/16	21-3/4	16-11/16	12-1/2	4-3/4

*Factory provided socket end compression pipe joining clamp for 3/4" schedule 40 PVC pipe