



# Alpine

Gas-fired, Condensing Stainless Steel Boiler

**95%**  
HIGH EFFICIENCY



- **95% AFUE – High Efficiency**
- **Seven Sizes: 80 – 500 MBH for Residential & Commercial Applications**
- **Stainless Steel Heat Exchanger for use with Natural or Propane Gas (up to 10,200 ft.)**
- **Multiple Venting Options**
  - CPVC/PVC venting (standard)
  - Polypropylene concentric (optional)
  - Stainless steel 2-pipe (optional)
- **Fully Modulating Boiler Operating Controls (5-to-1 turndown and includes outdoor reset)**
- **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**



**FREE\* 5-Year Winter Warmth Assurance Parts & Labor Plan**

\* For residential boilers under 300 MBH. Registration is required.

**Burnham**  
Hydronics



## Peak Performance for Hydronic and Radiant Heating

Introducing the Alpine from Burnham, 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.

### Stainless steel heat exchanger

The heart of the Alpine boiler is the ASME-certified stainless steel heat exchanger. Each heat exchanger is factory hydrotested to insure quality and reliability.



### Alpine Controls

The control system on the Alpine has several features that maximize efficiency and comfort of the heating system:

- **Full Modulation** with 5-to-1 turndown
- **Outdoor Reset**
- **Plug & Play Connections**
- **Domestic Hot Water Priority**
- **Stackable, with Built-in Provisions for External Staging Controls.** Built-in terminals can receive a 0-10V DC signal from an external modulating control.

### Natural or LP Gas

The Alpine is designed for easy field conversion from natural gas to LP gas with no kits or special tools required. The turn of a screw is all it takes!

### FREE 5-Year Parts & Labor Warranty

The unmatched protection of a FREE 5-year parts & labor warranty is available with every Alpine boiler under 300 MBH and used in a residential application. This plan covers all Burnham-provided parts and the associated labor costs on eligible Alpine boilers for five years from the date of installation at no additional cost! Alpine boiler registration is required

within 90 days from the installation date. Registration is fast and simple, either by completing and mailing the registration card provided with the Alpine boiler or via the web at [www.burnham.com/productregister](http://www.burnham.com/productregister).



Stackable cabinets allow two Alpine boilers to fit the footprint of one. This feature is standard on every Alpine. When stacked, 1000 MBH requires approximately six square feet!





**Single Point Power**  
Boiler pump and DHW pump are powered directly from the Alpine

**Negative Cabinet Pressure**  
Lower portion of the boiler cabinet operates under a negative pressure, creating an additional layer of safety

**Easy To Move and Install**  
Jacket sides are equipped with flush mounted carry handles. Jacket bottom features nylon glides

**Simple Connections**  
All gas, water, and electrical connections are made from the left side of the boiler

**Condensate Protection**  
Unique polypropylene condensate trap (patent pending) stands up to acidic condensate, and features an integral float switch which protects the heat exchanger from back-up

**Sealed Top Panel**  
The sealed top panel protects boiler controls from spills or leaks; the components are also isolated from the lower jacket to protect them from cold or moist combustion air

**Smart Controls**  
Display panel shows control status, settings can be adjusted with soft-touch buttons  
Control panel slides out for easy servicing



**Efficient Combustion**  
Air and fuel are pre-mixed in the blower assembly for clean, balanced combustion

**Design Simplicity**  
Separate spark rod and flame sensor are used for longevity and reliability

**Long Lasting Comfort**  
Durable, efficient stainless steel heat exchanger maximizes heat transfer

**American-Made Quality**

Alpine boilers are designed and assembled in Lancaster, PA. Each Alpine is hydro-tested and fire-tested in order to deliver safety, efficiency, durability and low emissions.

**Venting**



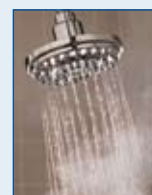
**Alpine comes standard with a CPVC/PVC vent kit.** This ETL-approved material consists of a 30" CPVC starter pipe and one 90° CPVC elbow.

**ALSO AVAILABLE**



An optional European-standard **Polypropylene Concentric Vent System** is also available. The Alpine can also be vented with an optional two pipe system using stainless steel (AL29-4C) vent material.

**Burnham Alliance SL™ Indirect-fired Water Heaters**



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.

## Alpine Specifications

Model No.	Input (MBH)			Output (MBH)	Net I=B=R (MBH)	AFUE (%)	Boiler Water Volume (gallons)	Heat Trans. Area (sq. ft.)	Shipping Weight (pounds)
	Minimum		Maximum						
	to 2k ft.	2-7k ft.	0-7k ft.						
ALP080	16	27	80	73	63	95	0.6	0.6	137
ALP105	21	35	105	96	83	95	0.7	0.7	155
ALP150	30	50	150	137	119	95	1.3	1.3	182
ALP210	42	70	210	193	168	95	1.7	1.7	206
ALP285	57	57	285	263	229	95	2.4	2.4	256
ALP399	80	80	399	377*	328	94.1/94.5**	3.4	3.4	304
ALP500	– Call for product availability and additional information –								

NOTES: DOE Heating Capacity (ALP080 through ALP285); Gross Output (ALP399) \*Gross output  
 Maximum Working Pressure - Water: ALP080-285=30PSI; ALP399=50PSI; 80PSI optional on all models  
 Maximum Allowable Temperature = 210° F  
 Boilers shipped set for natural gas; field adjustment for LP (see instruction manual)  
 For elevations above 2000 feet, reduce ratings four percent (4%) per 1000 feet above sea level

\*\* Thermal/combustion efficiency



## Alpine Dimensions

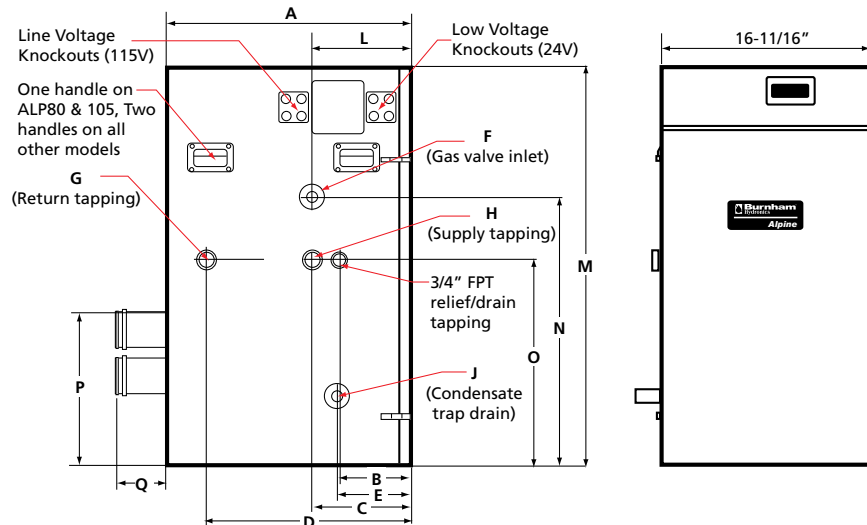
Model No.	A (in.)	B (in.)	C (in.)	D (in.)	E (in.)	F (in.)	G (in.)	H (in.)	J (in.)	L (in.)	M (in.)	O (in.)	P (in.)	Q (in.)
ALP080	12-9/16	5-5/8	7-5/16	9-5/16	5-15/16	1/2	1	1	*	8	32-3/16	16-11/16	12-1/2	4-3/4
ALP105	14	5-13/16	7-5/16	10-3/4	5-15/16	1/2	1	1	*	8	32-3/16	16-11/16	12-1/2	4-3/4
ALP150	19-11/16	5-13/16	7-5/16	16-7/16	5-15/16	1/2	1	1	*	8	32-3/16	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	16-11/16	12-1/2	4-3/4
ALP285	21-13/16	7-5/16	14-1/8	18	12-1/4	3/4	1-1/4	1-1/4	*	8-5/16	43-7/16	17-5/16	12-3/16	4-3/4
ALP399	28-7/8	6-3/16	13-1/16	23-3/4	15-13/16	1	1-1/2	1-1/2	*	8-5/16	43-7/16	17-5/16	12-3/16	4-3/4

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

## Alpine Intake / Vent Sizes

Model No.	Intake Size	Vent Size	Max Length
ALP080	3"	3"	60'
ALP105	3"	3"	60'
ALP150	4"	3"	60'
ALP210	4"	3"	60'
ALP285	4"	4"	60'
ALP399	4"	4"	60'

Max length in equivalent feet for each run is 60 equivalent feet of intake & 60 equivalent feet vent length



## Maximum Vent Lengths

# of 90° Elbows	2	4	6	8	10	12
Combined Intake/Vent - Feet of Pipe	110'	100'	90'	80'	70'	60'

NOTE: Snorkels are approved for use with PVC venting. Intake & vent lengths combined. 90° = 5 equivalent feet. Terminals do not count towards vent feet length



www.burnham.com