

# 95% Efficient!

**Burnham®**

# Alpine™



## Gas Fired, Stainless Steel, Condensing Water Boiler

- 95% AFUE
- Equipped with Sage2.1™ Control System, includes built-in sequencer for internal staging of up to eight Alpine boilers
- 80 – 399 MBH (6 sizes)
- Stainless steel heat exchanger
- For use with natural or LP gas
- Modern, appliance-like design with gas, water, & electric connections on left side
- Unique, patented polypropylene condensate trap with internal cutoff switch prevents damage to heat exchanger from condensate backup
- Wall hung (80-210 sizes) or floor mounted
- FREE 5-year parts & labor warranty included\*

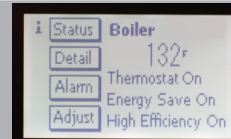
\*For residential boilers under 300 MBH, **registration required**



**Burnham®**  
by  
**U.S. Boiler Company**



**Sage2.1™**  
boiler control system



- Backlit LCD touchscreen display provides diagnostic and troubleshooting information via intuitive text and menus, without cryptic codes or scrolling
- Energy saving “thermal purge”, which works by circulating residual warm water (140° or above) in the heating system before firing the boiler
- Full modulation with 5-to-1 turndown and adaptable firing rate output
- Outdoor reset included, plus warm weather shutdown, and off season pump exercising
- DHW priority, control data logging, multiple & adjustable pump outputs
- 4-20mA and modbus inputs



# Alpine: Technical Information



## Standard Equipment

- Direct vent appliance
- Slide-out control panel
- Slide-out line voltage terminal strip
- Sage2.1 Control System
  - LCD touch screen display
  - Self-guided control menus
  - 100+ help screens
  - Built-in self diagnostics
  - (3) separate circulator outputs
  - Built-in sequencer, stages up to (8) boilers
  - 4-20 MV inputs for external control
  - Outdoor reset including outside sensor
  - DHW priority
  - Warm weather shutdown
- Variable speed combustion blower
- Negative pressure gas valve
- Stainless steel heat exchanger
- Polypropylene condensate trap w/overflow protection
- Supply, return, and auto reset high limit water sensors
- Flue gas temperature sensor and differential pressure switch
- All connections on left side of boiler
- CPVC to PVC vent kit
  - Includes 30" CPVC, 90° elbow, 2-vent terminals, screens, and combination cement & primer
- Five year parts & labor warranty – sizes up to 285 MBH, residential only, **product registration required**

## Alpine Ratings & Specifications

Model	AFUE%	Input (MBH) min-max	DOE Heating Capacity (MBH)	Net AHRI (MBH)	Vent Size (Inches)	Approx. Shipping Weight. (lbs.)
*80-210 MODELS ARE AVAILABLE FOR WALL ("W" suffix) OR FLOOR ("F" suffix) MOUNTING						
ALP080B*	95	16-80	72	63	3	137
ALP105B*	95	21-105	96	83	3	155
ALP150B*	95	30-150	136	118	3	182
ALP210B*	95	42-210	194	169	3	206
FLOOR MOUNTED MODELS						
ALP285B	95	57-285	262	228	4	256
ALP399	94 <sup>1</sup>	80-399	377 <sup>2</sup>	328 <sup>3</sup>	4	304

<sup>1</sup>Thermal efficiency

<sup>2</sup>Gross output

<sup>3</sup>Net rating

### NOTES:

DOE Heating Capacity (ALP080 through ALP285); Gross Output (ALP399)

Safety Relief Valve Pressure, Water (ALP080B thru ALP285B) – 30 PSI std.; 50 PSI, 80 PSI, and 100 PSI optional

Safety Relief Valve Pressure, Water (ALP399 only) - 50 PSI std.; 80 PSI and 100 PSI optional

ASME certified 160 PSI Maximum Allowable Working Pressure at 210°F.

Max allowable temperature setting 210°F

Target setpoint is 190°F, automatic reset high limit setpoint is 200°F and manual reset high limit setpoint is 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

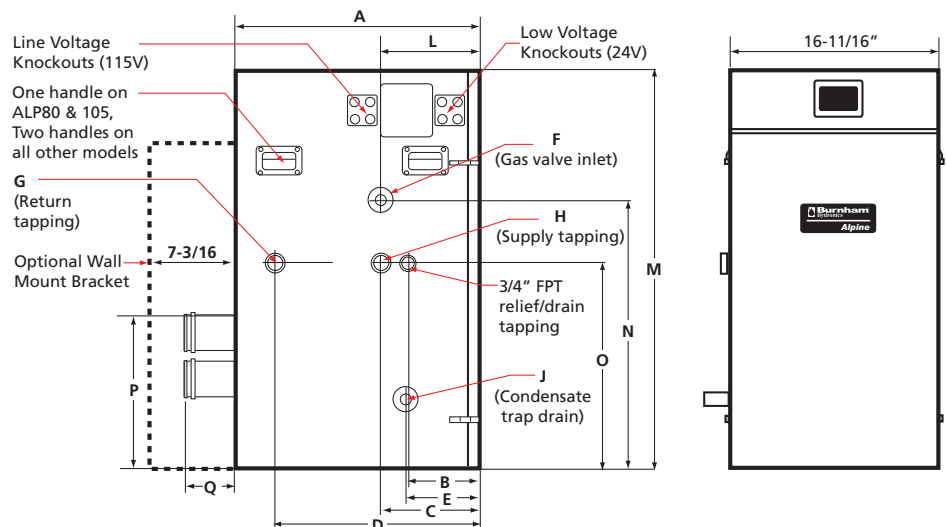


## Alpine Dimensions (Inches)

Model	A	B	C	D	E	F	G	H	J	L	M	N	O	P	Q
ALP080B	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
ALP105B	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
ALP150B	19-11/16	5-13/16	7-5/16	16-7/16	5-15/16	1/2	1	1	*	8	32-3/16	21-3/4	16-11/16	12-1/2	4-3/4
ALP210B	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
ALP285B	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	32-7/16	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	32-7/16	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 CPVC to PVC Vent & Intake Sizes			
Model	Intake Size	Vent Size	Max Length Intake/Vent
ALP080B	3"	3"	135'/135'
ALP105B	3"	3"	135'/135'
ALP150B	4"	3"	135'/135'
ALP210B	4"	3"	135'/135'
ALP285B	4"	4"	100'/100'
ALP399	4"	4"	100'/100'



**FIELD ADAPTABLE KIT AVAILABLE FOR WALL HUNG CONFIGURATION:**  
(for ALP080 through ALP210 only)  
Part # 102991-01

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