

Burnham Alpine M



Gas Fired, Stainless Steel, Condensing Water Boiler

- 95% AFUE
- 80 399 MBH (6 sizes) 80-210 sizes are floor mount or wall hung –SAME BOILER DOES BOTH!
- · Field-proven stainless steel heat exchanger
- Natural or LP gas
- Circulator included (80-285 models)
- 5-year part replacement warranty
 For residential boilers under 300 MBH



 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
- Compatible with optional Sage Zone Control Circulator Panel, which matches the boiler firing rates to actual zone load, saving money, energy, and preventing excessive boiler cycling

Alpine: Technical Information







Standard Equipment

- Direct vent appliance
- · Nylon floor guides
- · Pre-installed hanging bracket and wall mount kit included
- · Gas, water, electrical connections on left side of boiler
- · Slide-out control panel
- Slide-out line voltage terminal strip
- · Sage2.2 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 wired outside sensor
 - DHW priority
 - Warm weather shutdown
- · Variable speed combustion blower
- · Natural or LP gas
- Negative pressure gas valve
- · Stainless steel heat exchanger
- Boiler loop circulator
- Polypropylene condensate trap w/overflow protection
- · Supply, return, and auto reset high limit water sensors
- 30 PSI safety relief valve
- Temperature and pressure gauge
- · Flue gas temperature sensor and differential pressure switch
- · CPVC to PVC vent kit
- Includes 30" CPVC, 90° elbow, 2-vent terminals, screens,
- · Five year parts replacement warranty

Alpine Ratings & Specifications (sea level to 2000 feet)								
Model	ENERGY STAR AFUE%	Input (MBH) min-max	DOE Heating Capacity (MBH)	Net AHRI (MBH)	Vent Size (Inches)	Approx. Shipping Weight. (lbs.)		
MODELS FOR WALL OR FLOOR 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	941	80-399	3772	328 ³	4	304		
Thermal efficiency 2Gross output 3Not rating								

¹Thermal efficiency ²Gross output ³Net rating

Optional Equipment:

- LWCO kit (P/N: 100592-01)
- Sage Zone Control (P/N: 104590-01)
- Wireless outdoor reset adapter (PN: 105121-01)
- Service parts repair kit (P/N: 105319-03)

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 150 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

16-11/16"

Alpine Vent & Intake Sizes								
Model	Intake Size	Vent Size	Max Length Intake/Vent					
ALP080B	2"	2"	60'/60'					
ALPUOUD	3"	3"	135'/135'					
ALP105B	2"	2"	60'/60'					
ALFIUUD	3"	3"	135'/135'					
ALP150B	3"	3"	135'/135'					
ALP210B	3"	3"	135'/135'					
ALP285B	3"	3"	60'/60'					
ALFZ00D	4"	4"	135'/135'					
ALP399	4"	4"	135'/135'					

Additional approved options

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

Alpine Dimensions (inches)								
Model	Α	F	G	Н	M			
ALP080B	12-9/16	1/2	1	1	32-3/16			
ALP105B	14	1/2	1	1	32-3/16			
ALP150B	19-11/16	1/2	1	1	32-3/16			
ALP210B	23-15/16	1/2	1	1	32-3/16			
ALP285B	21-13/16	3/4	1-1/4	1-1/4	43-7/16			
ALP399	28-7/8	1	1-1/2	1-1/2	43-7/16			



