

A-Vintage High Efficiency Water Source Heat Pumps



Conserve Energy With High Efficiency Ratings

Water source heat pump systems are among the most efficient, economical and environmentally friendly methods to heat and cool buildings. Mammoth has taken these benefits to a new level with A-Vintage horizontal and vertical water source heat pumps. With an **EER up to 21.0 and a COP up to 5.6**, A-Vintage units offer you the ability to achieve industry-leading energy efficiency in boiler/tower and geothermal applications. You can benefit from lower energy bills, higher energy rebates (where applicable) and A-Vintage units can help you earn points toward LEED® certification.

Products Backed By Experience

Mammoth is among the original suppliers of water source heat pump systems and has remained at the forefront in expertise and the breadth of our product offering. Known for their compact size, quiet operation and quality construction, Mammoth offers horizontal, vertical, water-to-water and make-up air units from 1/2 to 70 tons for offices, schools, hospitals, nursing homes and other commercial buildings, as well as high-rise condominium buildings.

The reliability, efficiency and comfort provided by Mammoth water source heat pumps is evidenced by the owners, designers, and contractors that have placed their trust in our units in thousands of installations worldwide.

A-vintage horizontal units are ceiling-hung, usually in hallways and corridors. Vertical floor-mounted water source heat pumps are typically installed in closets or small mechanical rooms near the occupied space. Mammoth offers some of the quietest water source heat pump units in the industry, allowing units to be located near the occupied space with minimal acoustic impact.

Basic Features and Benefits

- Twelve horizontal units from 1/2 to 6 tons and 10 vertical units from 1 to 6 tons
- Standard or geothermal operation
- R-410A refrigerant
- EER up to 21.0 and COP up to 5.6
- ETL listed and ARHI/ISO 13256-1 certified for capacity and efficiency
- Fully run-tested with water in both heating and cooling modes
- Three speed PSC motor, sizes 012 and under, and electronically commutated motor (ECM), sizes 015 and larger, optimize efficiency throughout the unit operating range
- Two-stage scroll compressor (sizes 024 to 072) optimizes efficiency throughout the operating range of the unit
- HP-5 microprocessor-based control system including condensate overflow protection
- Optional EPiC™ DDC controls provide for optimum performance using the control scheme or building management system and protocol of your choice
- Heavy gauge steel cabinet maximizes durability and unit integrity while minimizing sound and vibration.
- Cabinet insulation provides superior thermal performance and reduces sound
- Optional sound package for sensitive acoustic applications
- Available with left or right hand water connections to match application requirements
- Ample service access through removable panels simplifies and encourages regular maintenance and service
- Manufactured in the U.S.A. at our Holland, Michigan facility

 **Mammoth**®

Custom Packaged HVAC Systems

A-Vintage High Efficiency Water Source Heat Pumps

ISO 13256-1 Performance - Water Loop (Boiler/Tower)¹

Horizontal Unit Size	CFM	GPM	Cooling				Heating		
			Q _t	Q _s	kW	EER	Q _t	kW	COP
006HHA	250	1.8	8,000	5,600	0.5	14.6	9,100	0.6	4.8
009HHA	340	2.6	10,100	7,300	0.7	15.1	11,200	0.7	4.7
012HHA	400	3.5	13,100	9,500	0.9	15.0	13,600	0.9	4.5
015HHA	520	4.5	16,700	12,400	0.9	18.9	16,700	0.9	5.6
018HHA	600	5.0	21,200	15,100	1.2	17.7	20,800	1.2	5.1
024HHA	800	6.5	27,800	20,700	1.6	17.2	28,700	1.7	4.9
030HHA	1,000	9.0	33,200	24,300	1.9	17.1	37,600	2.2	4.9
036HHA	1,200	10.5	41,400	30,300	2.4	17.2	40,600	2.5	4.7
042HHA	1,400	12.0	47,100	35,100	2.8	16.6	47,100	3.1	4.5
048HHA	1,600	14.0	50,900	39,600	2.9	17.4	58,900	3.5	5.0
060HHA	1,900	17.0	66,600	48,500	3.7	17.8	72,100	4.4	4.8
072HHA	2,100	20.0	75,800	56,300	4.7	16.0	81,800	5.6	4.3

Vertical Unit Size	CFM	GPM	Cooling				Heating		
			Q _t	Q _s	kW	EER	Q _t	kW	COP
012VHA	400	3.5	13,100	8,900	0.8	15.7	14,300	0.9	4.5
015VHA	520	4.5	16,500	12,200	0.9	18.5	17,000	0.9	5.5
018VHA	600	5.0	21,500	15,600	1.2	18.1	21,800	1.2	5.3
024VHA	800	6.5	28,400	21,000	1.6	18.0	29,200	1.7	5.2
030VHA	1,000	9.0	34,400	25,200	2.0	17.1	38,500	2.2	5.2
036VHA	1,200	10.5	40,000	30,000	2.4	17.0	40,800	2.4	5.0
042VHA	1,400	12.0	44,600	37,400	2.9	15.0	49,000	3.1	4.6
048VHA	1,600	14.0	55,500	41,600	2.9	19.0	58,500	3.4	5.1
060VHA	1,900	17.0	67,800	49,800	4.1	16.7	71,300	4.5	4.7
072VHA	2,100	20.0	76,700	55,800	4.8	16.0	80,500	5.3	4.5

¹Rated in accordance with ISO 13256-1 – Boiler/Tower. Cooling capacity is based on 80.6°F db, 66.2°F wb (27/19°C) entering air temperature and 86°F (30°C) entering water temperature. Heating capacity is based on 68°F (20°C) entering air temperature and 68°F (20°C) entering water temperature.

ISO 13256-1 Performance - Ground Loop (Geothermal)²

Horizontal Unit Size	CFM	GPM	Cooling				Heating		
			Q _t	Q _s	kW	EER	Q _t	kW	COP
006HHA	250	1.8	8,400	6,000	0.5	16.1	5,200	0.5	3.0
009HHA	340	2.6	10,600	7,800	0.6	16.8	6,400	0.6	3.0
012HHA	400	3.5	13,800	9,700	0.8	16.7	7,900	0.8	2.9
015HHA	520	4.5	17,500	12,500	0.8	21.0	9,700	0.8	3.6
018HHA	600	5.0	22,300	15,300	1.1	19.8	12,000	1.1	3.2
024HHA	800	6.5	29,300	20,200	1.5	19.2	16,600	1.6	3.1
030HHA	1,000	9.0	34,900	24,600	1.8	19.0	21,800	2.0	3.1
036HHA	1,200	10.5	43,500	30,200	2.3	19.2	23,500	2.3	3.0
042HHA	1,400	12.0	49,500	34,700	2.7	18.5	27,300	2.8	2.9
048HHA	1,600	14.0	53,500	38,400	2.8	19.3	34,100	3.1	3.2
060HHA	1,900	17.0	70,000	48,300	3.5	19.9	41,800	4.0	3.1
072HHA	2,100	20.0	79,700	54,400	4.4	18.1	47,400	5.1	2.7

Vertical Unit Size	CFM	GPM	Cooling				Heating		
			Q _t	Q _s	kW	EER	Q _t	kW	COP
012VLA	400	3.5	13,700	9,300	0.8	17.4	8,200	0.9	2.8
015VLA	520	4.5	17,300	12,800	0.8	20.6	9,800	0.9	3.4
018VLA	600	5.0	22,500	16,300	1.1	20.2	12,600	1.1	3.4
024VLA	800	6.5	29,800	22,000	1.5	20.0	16,800	1.5	3.2
030VLA	1,000	9.0	36,400	26,600	2.0	18.2	20,700	1.9	3.2
036VLA	1,200	10.5	42,200	31,500	2.2	19.1	23,600	2.2	3.1
042VLA	1,400	12.0	46,300	35,500	2.7	17.0	28,400	2.8	3.0
048VLA	1,600	14.0	58,400	43,800	2.9	20.1	31,300	3.1	3.0
060VLA	1,900	17.0	71,200	52,300	3.8	18.5	41,300	4.2	2.9
072VLA	2,100	20.0	79,000	57,500	4.6	17.0	46,900	5.1	2.7

²Rated in accordance with ISO 13256-1 – Ground Loop. Cooling capacity is based on 80.6°F db, 66.2°F wb (27/19°C) entering air temperature and 77°F (25°C) entering water temperature. Heating capacity is based on 68°F (20°C) entering air temperature and 32°F (0°C) entering water temperature.



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