

# ALSETRIA

## Heat Pump Water Heater





# The Advantage of HPWH

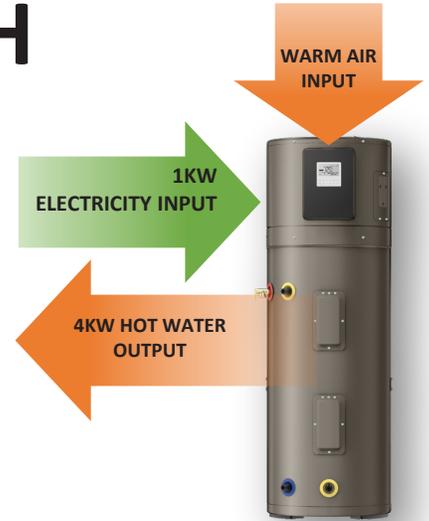


## High COP

Compressor (1kW power input) pumps 3kW heat from ambient air, and the final output is 4kW to hot water.



can save up to **75%** of electricity



## Key Components



# Specification Sheet

This specification sheet is based on the unducted version of the appliance.

Description	Model Number		HPWH-50G	HPWH-80G
	Nominal Gallon Capacity		50	80
	Rated Gallon Capacity		46	74
	Voltage		208V/240V, 60Hz, 1Ph	208V/240V, 60Hz, 1Ph
	Water Outlet Temperature Range		109F~149F	109F~149F
Energy Info	Uniform Energy Factor (UEF)		3.75	4.00
	First Hour Rating (FHR)		68	88
	Element Wattage	Upper	4500W(240V)	4500W(240V)
		Lower	4500W(240V)	4500W(240V)
	Compressor capacity		1500W	1500W
	Total Unit Wattage (input)		5500W	5500W
	Cold Climate Efficiency(CCE)		3	3
	Recovery In G.P.H. 90 Rise		27.5	27.5
	Heat pump ambient operating range		37F~109F	37F~109F
	Heating element ambient operating range		5F~115F	5F~115F
Features	LED Screen		√	√
	WiFi-Ready		X	X
	Built-in CTA-2045 Port		√	√
	Leak Detection		Optional	Optional
	8" inlet&outlet air duct connection		Optional	Optional
	Operation Modes		5	5
	TP Valve installed		√	√
	Min. Circuit Amps		23.6A(208V)/26.8A(240V)	23.6A(208V)/26.8A(240V)
	Electric Breaker Size		25A(208V)/30A(240V)	25A(208V)/30A(240V)
	Replaceable Filter		√	√
	Installation Clearance (Back)		0"	0"
	Installation Clearance (side)		6"	6"
	Installation Clearance (top)		20"	20"
Dry Fire Protection		√	√	
Dimensions	Body Height		66 4/5 inch	74 3/5 inch
	Body Diameter		17 9/10 inch	25 7/10 inch
	Body Weight		218.26 lb	293.22 lb
	Ship Length		28 7/10 inch × 27 3/5 inch	30 1/10 inch × 28 9/10 inch
	Ship Height		70 3/10 inch	78 1/5 inch
	Ship Weight		264.56 lb	359.35 lb
	Water Connection Size	Inlet	3/4inch	3/4inch
		Outlet	3/4inch	3/4inch
Drainage Hose		3/4inch	3/4inch	
Certifications	UL 60335-1 & UL 60335-2-40		√	√
	UL 174		√	√
	AHRI		√	√
	NEEA		Tier 4	Tier 4
	NSF/ANSI 372		√	√
	Energy Star		√	√
Sound	NEEA test protocol		49.5dB(A)	49.5dB(A)

# Easy Installation

Plumbers can install the Combo heat pump water heaters. Connect the water inlet and water outlet pipe and power wires, then the machine can work.



# Installation Scenarios

Usually HPWHs are installed in a semi-heated space like garage or basement.



Garage



Basement



Closet / washroom

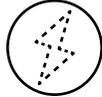
# Multifunction

- Control Panel
- Weekly Timer
- Five modes
- Auto-run Disinfection
- Maintenance reminder
- Self Diagnosis



# Five Modes

suitable for various usage scenarios

Operation Modes	Efficiency	Recovery
 <b>Vacation</b>	N/A	N/A
 <b>Hybrid</b>	LOW	VERY HIGH
 <b>E-Heater</b>	VERY LOW	HIGH
 <b>Economy</b>	HIGH	LOW
 <b>Heat-Pump</b>	VERY HIGH	VERY LOW

# Self Diagnosis

## System protection

Combo unit adopts a variety of protections to ensure the safety of water users, and adds multiple protections on the system to ensure the safe and stable operation of the unit.

1. High water temperature protection Water tank temperature  $>78^{\circ}\text{C}$ , the power will be automatically cut off
2. System high pressure protection break value 3.0MPa; closing value: 2.4MPa
3. Excessive discharge temperature protection
4. Compressor overcurrent protection
5. Heat pump out of ambient temperature range protection

## Engineering Mode

Query function is available in Combo heat pump water heater for the convenience of maintenance and debug. It helps easily check the running parameters of the unit.

Items	Explanation
Temp.	T5U:Water temp. of upper water tank
Temp.	T5L:Water temp. of lower water tank
Temp.	T3:evaporator inlet temp
Temp.	T4:ambient temp
Temp.	Tp: discharge temp
Temp.	Th:suction temp
Current	Operation current
Fanspeed	0 off, 1 low, 2 mid, 3 high
Version	Main board software version
Version	Display panel software version
Errorcode	Last failure
Errorcode	2nd to last failure
Errorcode	3rd to last failure
Model code	01 EU 190L; 02 EU 300L 03 AU 190L; 04 AU 300L



# ALESTRIA R134a COMBO

## Integrated Heat Pump Water Heater

- ▶ Energy Saving: UEF up to 4.0, saving about 75% electricity than traditional electrical water heater, government subsidy ready
- ▶ Easy to use, WIFI App control(optional), vacation mode, auto restart with power-off memory, child lock, timer
- ▶ Energy Star certified, NEEA(Tier4), UL, CSA
- ▶ Wireless Demand Response ready(CTA-2045)
- ▶ PV connection, Smart grid and Modbus
- ▶ Quiet operation, noise level as low as 49dBa(NEEA test protocol)
- ▶ Easy and flexible installation (plumbers can install directly)
- ▶ “E+ Blue Diamond” Enamel water tank with 15 years lifespan design
- ▶ Safe design, water and electricity completely isolated, PT valve, TCO, etc., highly anti-corrosive design, Mg+ rod, Shut off Valve(optional), Leakage detector(optional) to protect wooden floor or interior furniture or decorations from water leakage damage
- ▶ Outlet water temperature 110~149°F (43~65°C) , automatic high temperature sanitization to keep healthy hot water in the long run
- ▶ High efficiency R134a GMCC customized heat pump compressor
- ▶ High efficiency aluminum microchannel heat exchanger
- ▶ Operation ambient temperature 5~115°F (-15~46°C)(heat pump only 37~109°F)
- ▶ Both upper and lower part with 4.5kW electrical auxiliary heater to provide instant hot water
- ▶ 50mm ultra-thick, high-density insulation material
- ▶ Bottom inward convex design to reduce lime scale
- ▶ Easy maintenance, easily access of E-box from front control panel, filter reminder and water tank clean reminder
- ▶ Two models 50 Gallon (3-4 people), 80 Gallon(5-6 people)





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