

Commercial Electric Heat Pump Water Heaters  
Air-to-Water



**The Energy-Efficient, Environmentally Friendly Choice  
From The Commercial Water Heater Experts**



## Commercial Electric Heat Pump Water Heaters from A. O. Smith

Our impressive line of environmentally friendly offerings has now been expanded to include one of the most energy-efficient and innovative commercial products on the market.

The electric commercial heat pump water heater works great in applications where the need for hot water and space cooling occurs simultaneously. Both outputs are utilized efficiently and interchangeably to ensure maximum energy cost savings and the shortest payback periods. Applications requiring space cooling and significant hot water usage will maximize energy savings for the shortest payback periods. Best of all, heat pump heaters are three times more efficient than standard electric water heaters and up to five times more efficient than conventional gas water heaters.

### COMMON APPLICATIONS

**Commercial:** Restaurant/Kitchens

**Institutional:** Hospitals

**Military:** Barracks

**Municipal:** Fire Stations

**Industrial:** Commercial Laundry Facility



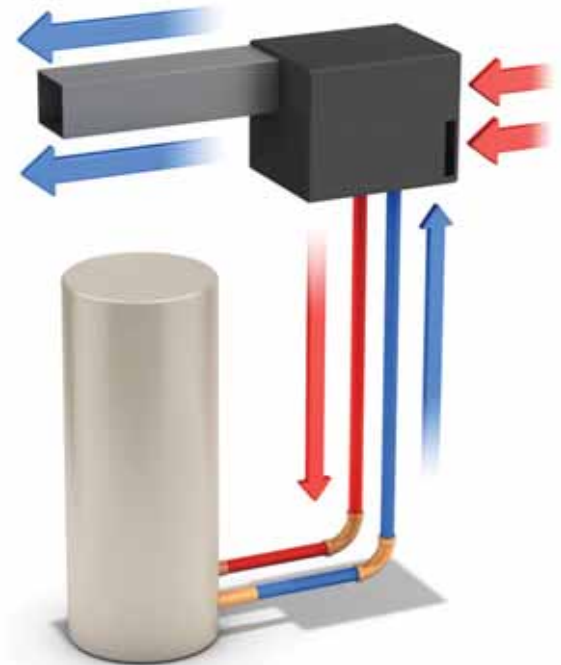
# COMMERCIAL ELECTRIC HEAT PUMP WATER HEATERS

## WHY ARE HEAT PUMP WATER HEATERS AN ENVIRONMENTALLY FRIENDLY CHOICE?

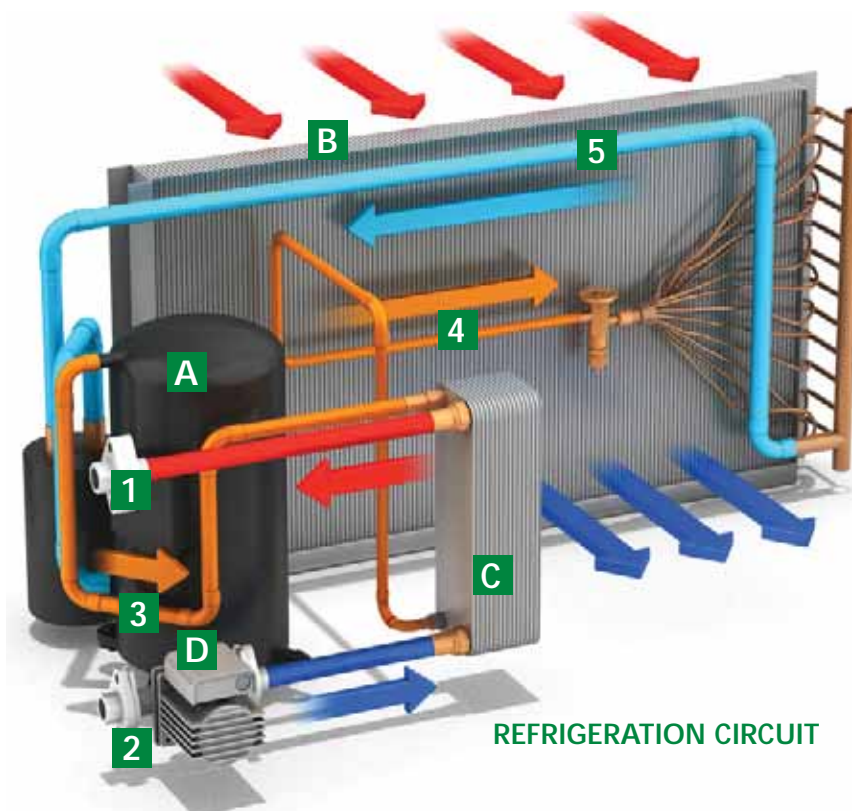
- High efficiency with coefficient of performance (COP) up to 4.2
- No fossil fuels are used or burned at the source
- Ozone layer-friendly, thanks to the R-134a refrigerant
- Uses less electricity than standard electric water heaters
- Contributes to room cooling at the same time
- Taps into heat sources typically discarded by other units for peak efficiency

## HOW DO ELECTRIC HEAT PUMP WATER HEATERS WORK?

Electric heat pump water heaters capture heat and humidity from the surrounding atmosphere through the cooling coil and utilize it for heating potable water. Simply put, they move heat from where it is not needed to where it is wanted. This innovative advanced technology provides low cost hot water and free cooling.



TYPICAL INSTALLATION



REFRIGERATION CIRCUIT

*Refrigeration Circuit Description:*

- A** Compressor
  - B** Cooling coil
  - C** Double-wall, refrigerant-to-water heat exchanger
  - D** Water pump
- 1** Hot water outlet back to tank
  - 2** Warm water inlet from tank
  - 3** Hot refrigerant
  - 4** Cooled liquid refrigerant
  - 5** Evaporated refrigerant vapor

## Specification Table: Air-to-Water Electric Heat Pump Water Heaters

Model	Water Heating btuh <sup>*</sup>	Cooling Capacity btuh <sup>*</sup>	Air Volume cfm <sup>**</sup>	C.O.P.	G.P.M.	Height (Inches)	Width (Inches)	Depth (Inches)	Approx Ship Weight (lbs)
AWH-35	35,200	27,300	1040	3.9	7	24.75	40	26	315
AWH-55	58,000	45,600	1650	4.1	11	28.5	47	32	405
AWH-75	76,400	59,300	2150	3.9	15	28.5	57	32	485
AWH-100	98,200	77,800	3200	4.2	20	42.5	63	38	660
AWH-115	112,700	89,300	3200	4.2	23	42.5	63	38	665
AWH-140	142,100	110,200	3800	3.9	28	42.5	63	38	725
AWH-170	171,100	132,600	4900	3.9	34	42.5	75	46	880

\* Performance rating at 75° 55% relative humidity and 100° incoming water temperature

\*\* Fan design at 0.3" external static pressure

### Optional Features:

- 460/480V, 3-phase 60 Hz
- 240V – 1ph 60 Hz (only available on AHW-35 and AWH-55)
- Optional Corrosive Duty Package includes 316 stainless steel cabinet as well as a polyurethane coating on the cooling coil and blower for superior corrosion protection. This package is recommended for installation within 5 miles of seacoast.

### Accessories:

- Digital temperature controller with tank probe
- Removable and washable metal mesh air filters



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