

CAHP

Air to Water Heat Pump

Storage Capacity - 300 & 450 litres



ACSmith[®]
Innovation has a name.

REGISTERED OFFICE:

A. O. Smith India Water Products Private Limited

(formerly known as A. O. Smith India Water Heating Private Limited)

Plot No. 300, Phase - II, KIADB Industrial Area, Harohalli, Kanakapura Taluk, Ramanaagara District, Karnataka – 562 112, India.

REGIONAL OFFICES:

CHENNAI:

No: 267, Second Floor,
Kilpauk Garden Road,
Kilpauk,
Chennai – 600010, India.

DELHI:

105 & 106, Plot No.19, Sagar Plaza,
Laxmi Nagar District Centre,
Vikas Marg, Laxmi Nagar,
New Delhi – 110 092, India.

KOLKATA:

224 A, Office No. 811,
8th Floor, Krishna Building,
AJC Bose Road,
Kolkata – 700 017, India.

MUMBAI:

Sanjar Enclave,
No. 509, CTS No. 428, S.V. Road,
Opp. Milap Cinema, Kandivali (West),
Mumbai – 400 067, India.

PUNE:

401 & 402, Citi Mall,
Ganeshkhind Road
Near Pune University,
Pune – 411 007, India.

CAHP

The CAHP heat pump water heater is an integrated system that utilises the heat pump technology to provide more efficient way to heat water with electricity. CAHP pulls heat from surrounding air and deposits the heat into the tank. The end result is very efficient production of hot water with cooler and dehumidified air as a welcome by-product.

Suitable for villas and light commercial applications

FEATURES:

ENERGY SAVING & ENVIRONMENT FRIENDLY

- Absorbs Environment heat and transfers it to the water, at the same time cooling and dehumidifying the ambient air.
- "Environmental-friendly" R-134a refrigerant.
- Multiple operating modes maximise efficiency & meet increasing hot water needs.
- High capacity storage tank enables heat pump to operate more frequently than the heating elements. This provides higher efficiency & cover operating costs, saving money for the home owner.



ALL ROUND SAFETY

- Triple protection - Thermostat, High temperature limit and T&P relief valve.
- Refrigerant and water are completely separated, condenser uses rectangular steel tubes.
- Water can be heated upto 65°C with heat pump mode, which prevents breeding of Legionella bacteria.



SMART & CONVENIENT

- Large LCD touch pad display
- Intuitive icons clearly indicate the current operating mode
- Three line display communicates current status and displays error messages in plain English when applicable.
- Safety lock
- Individual back lit buttons for mode selection



LCD remote

Efficiency: One of the most energy-efficient settings work extracting warmth from the surrounding air, concentrating the heat and transferring it to the water.

Hybrid / Rapid mode: This mode uses the heat pump for efficiency, but will use the electrical element for quick recovery following increased hot water usage.

Electric mode: In electric mode, the unit operates as a conventional electric water heater, utilizing the elements only for conditions when limited ambient heat is available.

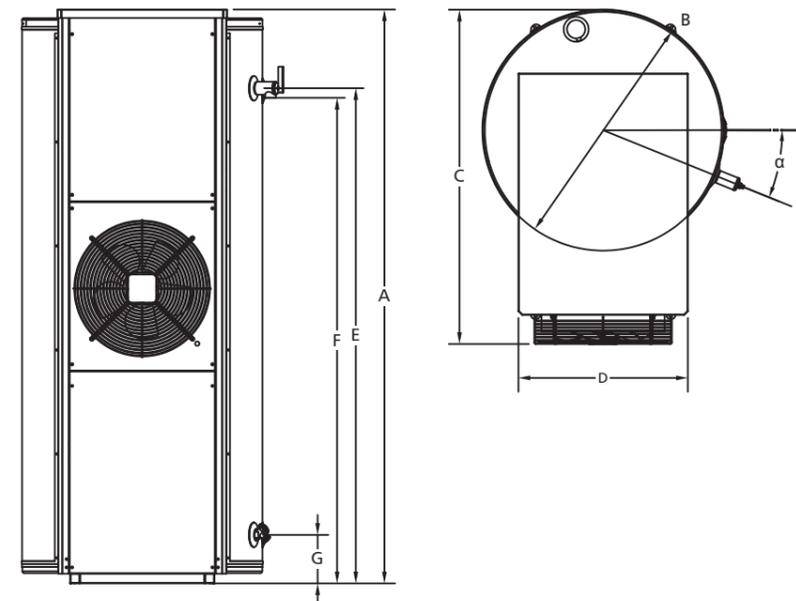
Standard mode: Allows to select different modes by time setting. For example, you can set your heater to work under rapid heating mode in the day and efficiency mode in the night.

CAHP

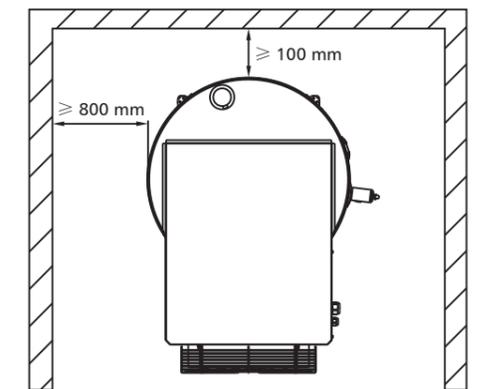
TECHNICAL SPECIFICATIONS - CAHP - 80/120

Model		CAHP-80/120-6	CAHP-80/120-8	CAHP-80/120-10	CAHP-80/120-12	
Rated power of heat pump	kW	0.98				
Rated heating capacity of heat pump	kW	3.5				
Electric heating power	kW	6	8	10	12	
Maximum input power	kW	7.3	9.3	11.3	13.5	
Maximum heat	kW	9.5	11.5	13.5	15.5	
Maximum current	A	15.8	21	26.3	31.5	
Maximum outlet water	°C	65				
Temperature control	°C	35 ~ 82				
water tank capacity	CAHP-80	L	300			
	CAHP-120	L	445			
Inlet/outlet water pipe	mm	Dn20				
Dry/operating weight	CAHP-80	Kg	165/465			
	CAHP-120	Kg	220/676			
Flow rate	Energy saving mode	L/h	73	73	73	73
	Electric mode	L/h	123	164	205	246
	Hybrid/Rapid heat mode	L/h	196	237	278	319
Refrigerant/charge amount	g	R134a/1000				
Unit operation conditions	°C	-15-50				
Unit operation noise	dB(A)	52				
Power specifications	/	220V/single phase/50Hz				

External dimensions



Installation diagram



- During installation, the minimum distance between the air outlet and the barrier should be 800mm
- The heat pump electric water heater should be placed on a refractory base that is over 100mm of height
- If installed in a confined space, the indoor space should not be less than 26m³

EXTERNAL DIMENSIONS

Model	Total height A (mm)	Tank diameter B (mm)	Maximum depth C (mm)	Width from the gate D (mm)	safety valve Interface height E (mm)	Water outlet height F (mm)	Water inlet height G (mm)	Interface sandwich angle of safety valve and drain valve α (°)
CAHP-80	1670	610	910	503	1457	1427	135	22
CAHP-120	1700	711	991	503	1459	1459	135	22