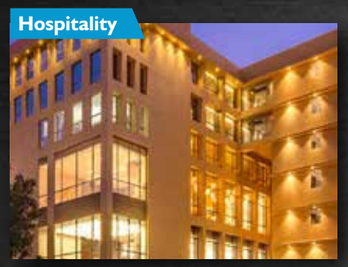
# Applications



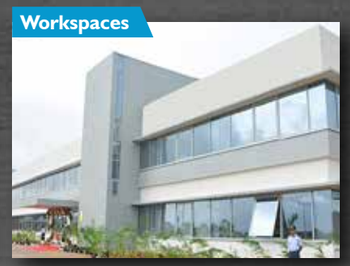
















India’s widest range of Heat Pumps.



**Registered Office**

**A. O. Smith India Water Products Private Limited**

Plot No. 300, Phase-2, KIADB Industrial Area, Harohalli, Kanakapura Taluk, Ramanagara District - 562 112, Karnataka, India.

Customer Care No. 1860-500-2468 ■ Website: www.aosmithindia.com

CIN: U31909KA2006PTC040282

A. O. Smith

Innovation has a name.

# High Efficiency Heat Pumps

Greener World. Better Tomorrow.



## CAHP-HC 42 & 84

# CAHP-HC 42/84

Presenting CAHP-HC 42/84 series - Smartly designed high capacity units to give premium hot water bathing experience with the new age heat pump technology. It is designed to be suitable for Hotels, Resorts, Hospitals, Educational Institutions and commercial buildings. With the pathbreaking technology, that extracts heat from the environment, it is no surprise that our heat pumps reduce the water heating costs significantly, reducing greenhouse emissions, thus contributing to a greener world.

## Smarter way to heat water

Our Heat Pumps come with a smart controller and smart modes to customise your heating needs.

- **Central Controller** – Smarter way to control heating
- **Smart Modes** – Enables you to customize as per your need



## Sensitive to the environment

- **Heating that saves energy** – Reduced energy consumption Up to 70% by extracting heat from the atmosphere to heat up the water
- **COP – High Coefficient of performance is up to 4.4 enabling efficient heating**
- **R410A Green Refrigerant** – Controls the greenhouse gas emission, thus contributing to a greener world

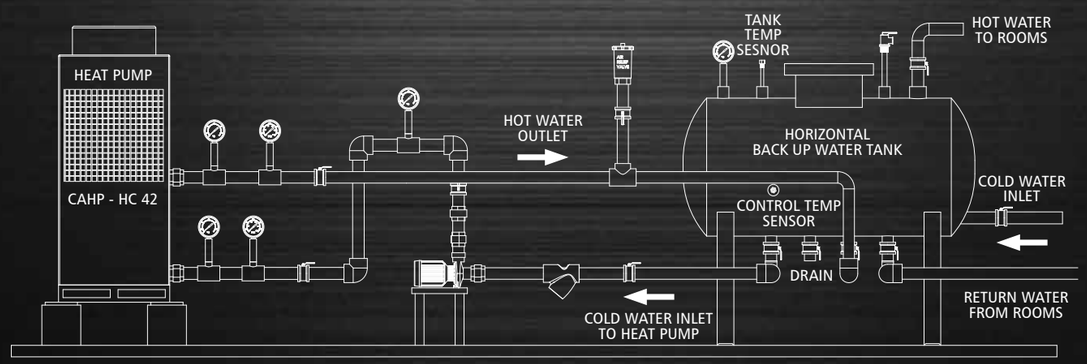


## Absolutely safe for you

- **6 Safety Protection**
  - High and Low voltage protection
  - High temperature limit protection switch
  - High water temperature protection (Temperature sensor)
  - Refrigerant leakage protection
  - Compressor overheating discharge protection
  - Abnormal operation Protection (Relay and Electronic expansion valve)



## Schematic Drawing




# CAHP-HC 42/84

## Technical Specification

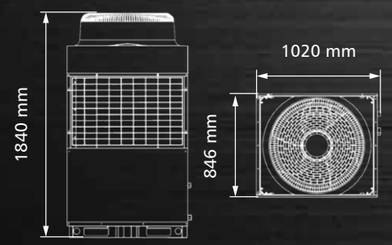
| MODEL | CAHP-HC-42 | CAHP-HC-84 |
|---|---|---|
| Power supply | 380V 3N ~50Hz | |
| Voltage range | 380V±10% | |
| Nominal heating capacity (kW) | 42 | 84 |
| Rated input power (kW) | 9.56 | 19.12 |
| Rated current (A) | 24.5 | 49 |
| Coefficient of performance COP (W/W) | 4.39 | 4.39 |
| Max. input power (kW) | 15 | 30 |
| Max. operating current (A) | 30 | 60 |
| Operation Noise (dB(A)) at 1 meter from the unit | 65 | 68 |
| Temperature control range (°C) | 20~55 | |
| Waterproof level | IPX5 | |
| Protection category | Type I | |
| Control method | LCD display, wire control | |
| Max. Operation Pressure - High side (MPa) | 4.4 | |
| Max. working pressure suction / discharge (MPa) | 3.1 / 4.4 | |
| Max. water pressure (MPa) | 1.1 | |
| Inlet pipe diameter (external thread) | DN40 (R1 1/2) | DN50 (R2) |
| Outlet pipe diameter (external thread) | DN40 (R1 1/2) | DN50 (R2) |
| Water side pressure loss (kPa) | 100 | |
| Refrigerant / Charge | R410A / 6.8kg | R410A / 13.6kg |
| Product dimensions (mm) | 1020 x 846 x 1840 | 2060 x 846 x 1850 |
| Net weight (kg) | 313 | 603 |
| Packaging weight (kg) | 326 | 648 |

Note:

1. The nominal hot water volume of the heat pump is tested under the nominal operating conditions of the ambient dry/wet bulb temperature of 20°C/15°C, the initial water temperature of the water tank being 15°C and the final water temperature is 55°C.
2. Test water-side pressure loss of CAHP-HC-42 when water flow is 7.2m3/h and test water-side pressure loss of CAHP-HC-84 when water flow is 14.4m3/h.

## Dimensions

**CAHP-HC-42**




**CAHP-HC-84**

