

Save up to 70% Energy cost

### What is heat pump?

Heat pump is a heat recovery system that generates both hot and chilled water at one energy cost saving over 70% of energy and energy cost compared to conventional systems. It simply transfers heat energy rather than converting it by burning fuel and hence is more efficient and greener than conventional heating solution like gas burning furnace.

### Key Advantages

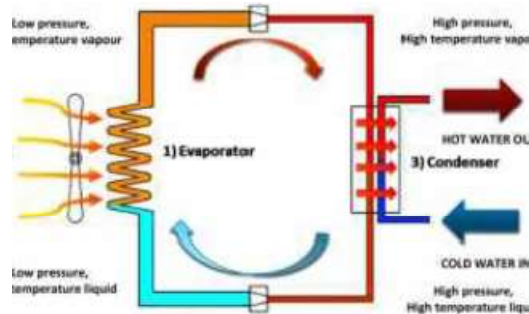
- ▶ An energy saving device that saves energy and energy cost by over 70%
- ▶ Highest level of Energy Efficiency, i.e provides 3 – 4 KW of heat energy for every 1KW of energy used
- ▶ Easy to install and occupies less space
- ▶ Allows 80% ACCELERATED DEPRECIATION under Income Tax Act, 1961
- ▶ Environment friendly as there is no carbon emission
- ▶ Maintenance free

## Types of Heat Pumps

### 1) Air to Water Heat Pump(10 KW to 75KW)

#### Working Principle

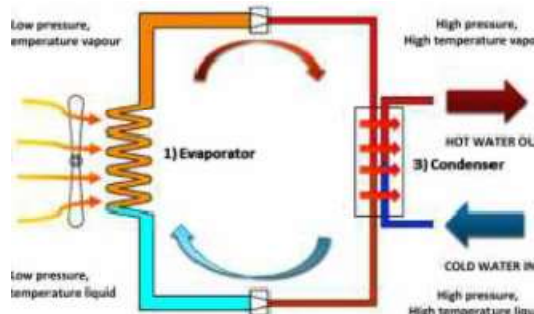
Our heat pump applies the principle of thermodynamics to recover the heat from the environment and transfer the same to water. The heat energy is used to increase the temperature of water. Most of the energy for heating comes from the external environment and only a fraction from electricity. Thus for 1 KW of electricity consumed the heat transferred will be 4 KW. The amount of electrical energy needed to heat water is greatly reduced compared to conventional electric water heater in which for 1 KW of electricity consumed the heat transferred is only 1 KW.



### 2) Water to Water Heat Pump. (100KW to 1000KW)

#### Working Principle

In this system, heat is picked-up from water from one side and transferred to water on other side, at one energy cost. A water to water heat pump generates both, hot water at 60°C and chilled water at 7°C. This system can be used where there is requirement of both hot and chilled water, like central Air conditioning or chilled water used for process or drinking & hot water for domestic uses like in bathrooms or in Industrial applications like washing machine etc. Also, hot water can be used for certain applications where products have to be maintained at certain high temperature constantly.



This entire operation consumes very little energy, as energy is required for only up-gradation of the heat by compressor.

### Applications

Essentially any situation where conditioning of air or water at a specific temperature is required for long durations.

- ▶ Hotels
- ▶ Hospitals
- ▶ Pharma and Chemical Industries
- ▶ Residential bungalows and Towers
- ▶ Swimming Pools
- ▶ Dairies
- ▶ Automobile companies

Manufactured By,

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