



Aqua Master

- **80% Energy Saving While heating Water .**
- **Water Can Be Cooled up to 30c During Summer**
- **Built in Coil to heat water With Solar Water heating or cooling of water with chilled Water Cooling System provided**
- **Stand By built in Electric water Heater provided**
- **Compact unit can be placed in False ceiling of bath room**



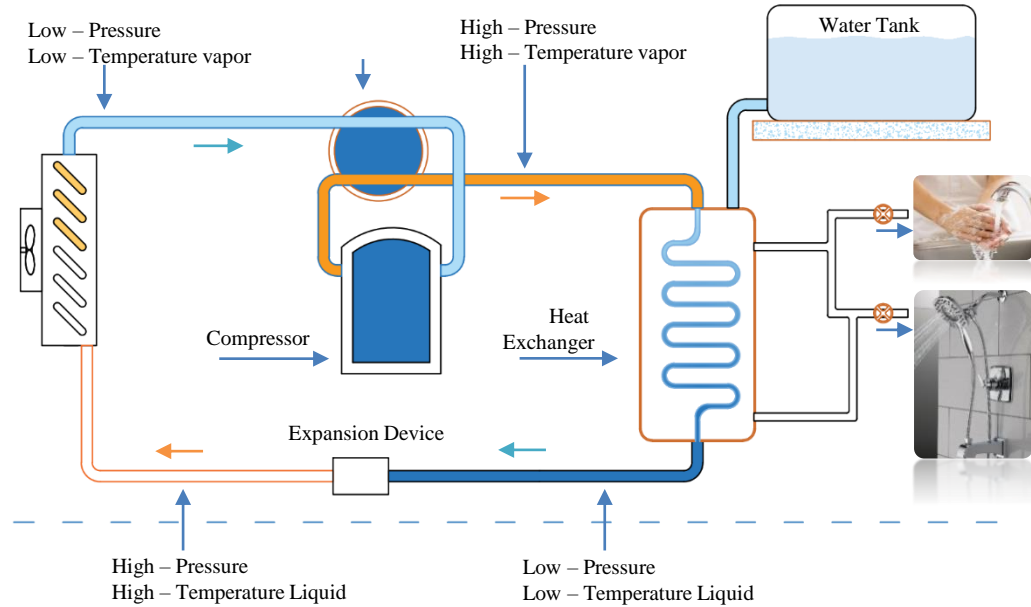
Energy efficient water heating, cooling for industrial, flat's and villa's

Aqua Master Heat Pump System Components



Heating Cycle

A heat pump heating system consists of 3 components: the heat source, the heat pump itself and a heat distribution and storage system. Heat pumps are able to produce more energy than they consume by using the conventional refrigeration cycle to absorb heat from the environment and raise it to a suitable level for heating.



1. 75% of the energy is taken from the environment i.e. the air, from the building transferred to the heat pump.

2. 25% of the energy is sourced from the national grid in the normal way of supplying your electricity. This is used to operate the heat pump but with very low consumption.

3. The energy from the air, is transferred to the refrigerant inside the heat pumps evaporator. This causes the temperature of the refrigerant to rise and change state from liquid to gas

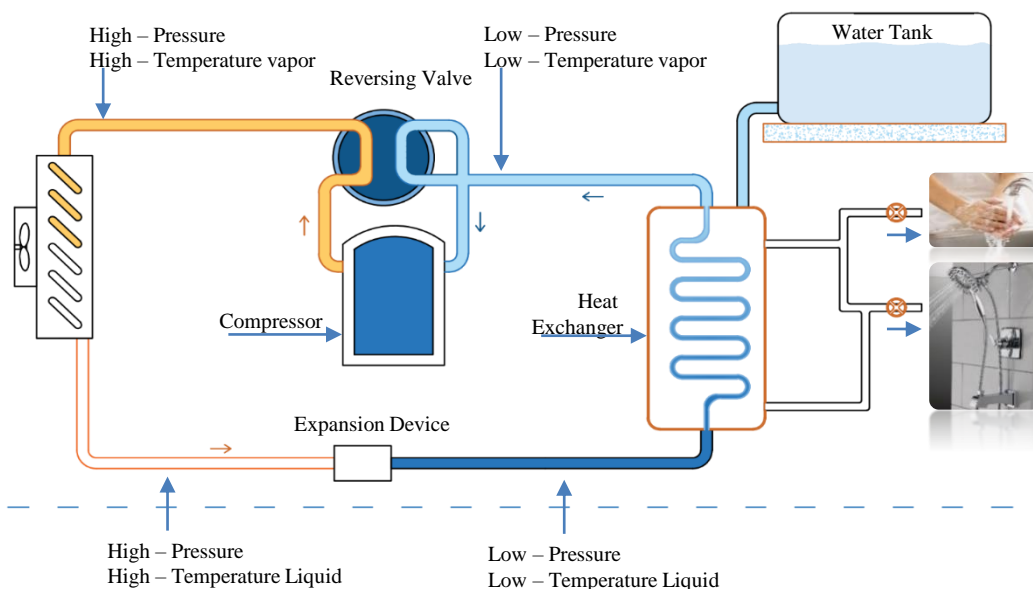
4. The refrigerant gas is then compressed, using an electrically driven compressor, reducing its volume but causing its temperature to rise significantly.

5. A heat exchanger (condenser) then extracts the heat energy from the hot refrigerant to heat water for central heating, underfloor heating or domestic hot water.

6 After giving up its heat energy the refrigerant turns back into a liquid and is able to absorb energy from the environment, allowing the cycle to begin again



Cooling cycle

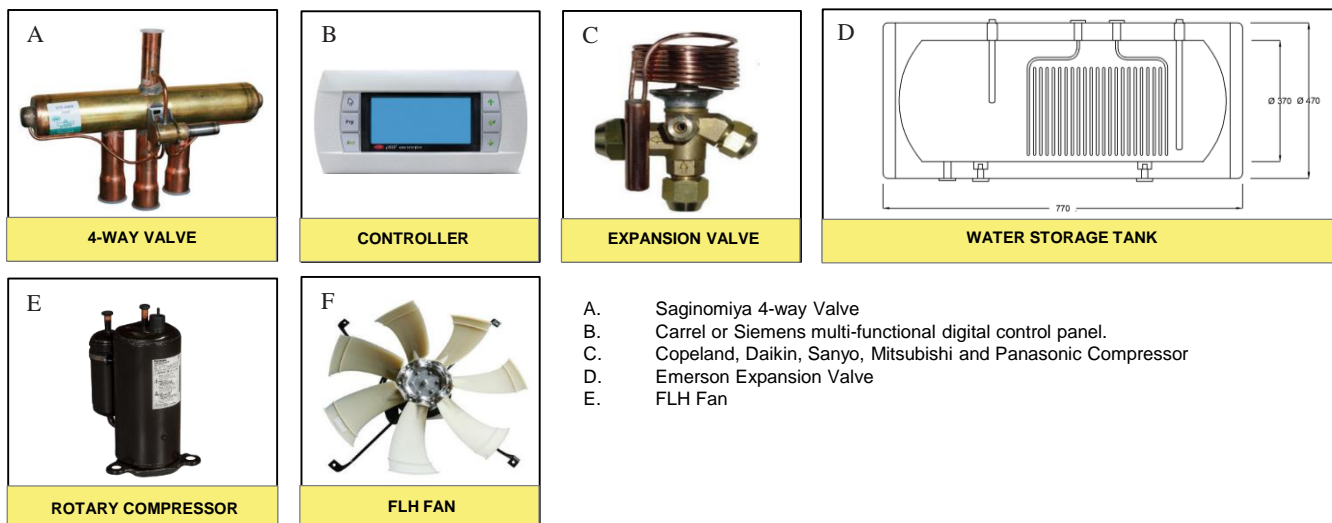


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Aqua Master Heat Pump System

- Aqua Master Heat pumps adapt most advanced technology for heating and cooling of Domestic water throughout the year without any restriction.
- Energy saving of 70 to 80 % compared to electrical heating
- Long operating life because of titanium double coil heat exchanger
- Compact casing manufactured out of powder coated steel

Aqua master energy efficient heat pump components



Model	HT-2.0C	HTLWH-3.6C	HTLWH-5.3C	HTLWH-8.0C	HTLWH-10.5C	HTLWH-11.4C
Heating capacity (KW)	2.0	3.6	5.3	8.0	10.5	11.4
(BTU/h)	6800	12200	18000	27300	35800	38900
Rated heated water output (L/h)	40	75	115	175	225	245
Rated outlet water temp. (°C)	55	55	55	55	55	55
Max outlet water temp. (°C)	60	60	60	60	60	60
Power	220V/1N~/50Hz	220V/1N~/50Hz	220V/1N~/50Hz	220V/1N~/50Hz	220V/1N~/50Hz	220V/1N~/50Hz
Rated input power (kW)	0.46	0.9	1.3	2.0	2.5	2.7
Rated Input current A	2.1	4.1	5.9	9	11.4	12.3
Compressor type	ROTARY X 1	ROTARY X 1	ROTARY X 1	ROTARY X 1	ROTARY X 1	ROTARY X 1
Compressor brand	Panasonic	Panasonic / GMCC	Panasonic / GMCC	Panasonic / GMCC	Panasonic / GMCC	COPELAND
Expansion valve (Throttle type) (Capillary/Electronic)	EEV	EEV	EEV	EEV	EEV	EEV
Fan type (Low noise high efficiency)	Axial Type	Axial Type	Axial Type	Axial Type	Axial Type	Axial Type
Fan direction	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal	Horizontal
Fan No.	1	1	1	1	1	1
Fan Input power (W)	28	28	28	28	40	90
Fan Speed (RPM)	850	850	850	850	850	850
Evaporator fin type	Hydraulic Aluminum	Hydraulic aluminum	Hydraulic aluminum	Hydraulic aluminum	Hydraulic aluminum	Hydraulic aluminum
Evaporator tube type	Inner Groove tube	Inner groove tube	Inner groove tube	Inner groove tube	Inner groove tube	Inner groove tube
Controller type	Intelligent & LCD	Intelligent & LCD	Intelligent & LCD	Intelligent & LCD	Intelligent & LCD	Intelligent & LCD
Ambient temperature (°C)	(-10 -c +45°C)	(-10 -c +45°C)	(-10 -c +45°C)	(-10 -c +45°C)	(-10 -c +45°C)	(-10 -c +45°C)
Refrigerant type	R134a	R410A/R134A/R407C	R410A/R134A/R407C	R410A/R134A/R407C	R410A/R134A/R407C	R410A/R134A/R407C
Low pressure protection	yes	Yes	Yes	Yes	Yes	Yes
High pressure protection	yes	Yes	Yes	Yes	Yes	Yes
Automatic defrosting System	yes	Yes	Yes	Yes	Yes	Yes
Overload protection	yes	Yes	Yes	Yes	Yes	Yes
Noise in 1 meter (dB(A))	≤ 52 dB (A)	≤ 54 dB(A)	≤ 54 dB(A)	≤ 54 dB(A)	≤ 56 dB(A)	≤ 56 dB(A)
Connect copper pipe (mm)	Ø 9.52/ Ø 6.35	Ø 6.35 / Ø 9.52	Ø 6.35/ Ø 12.7	Ø 6.35/ Ø 12.7	Ø 9.52 / Ø 12.7	Ø 9.52 / Ø 5.88
Suggested water tank (L)	80 – 200	100-260	260-400	400-600	600-800	800-1000
Cabinet	Powder coated steel	Powder coated steel	Powder coated steel	Powder coated steel	Powder coated steel	Powder coated steel
Unit size(L x W x H) (mm)	680 x 250 x 440	780 x 260 x 540	780 x 260 x 540	780 x 260 x 540	845 x 315 x 665	1010 x 315 x 715
Packing size(L x W x H) (mm)	820 x 380 x 620	930 x 360 x 630	930 x 360 x 630	930 x 360 x 630	1050 x 480 x 760	1200 x 480 x 800
N.W Kg (Kg)	25	32	36	43	50	55
20'/40'/40HQ (set)	120/260/340	111/231/308	111/231/308	111/231/308	66/144/144	26/54/81

Our other product Range

- Heat pump system for swimming pool water heating & cooling
- Solar water Heater
- Solar Air Conditioning System
- Garbage Chute System for multistory building

Our Product Photos



Recipient of Green Middle East
Award 2012 for
Alternative Energy Project



Recipient of Green Climate Control Award 2015
for Project of the Year Standalone DX, Including VRF

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