



KALYAN
ENGINEERING

TIME
TO MAKE
THE RIGHT
DECISION

www.kalyanengineering.in

WELCOME TO KALYAN ENGINEERING

Kalyan Engineering is an emerging name that wishes to be a prominent one in the production industry in the coming time. We aspire to become a name synonymous to trust, quality and integrity.



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About us

An emerging young company, Kalyan Engineering's annotation for excellence is to percolate the energy generated to deliver to the logical end at its best. Keeping multifarious ways and means in mind to reduce left over carbon hoofmarks in finished products, Kalyan Engineering wishes to leverage a leading edge technology to arrive at a more energy-efficient and eco-friendly product from time to time. Foraying into manufacturing various water related products, Kalyan Engineering possesses proficiency to develop special tools paving way to establish an ineradicable market.

Mission

Tantamount of integrity, quality and trust, Kalyan Engineering redoubtably promises to be one of the brightest and burgeoning production industries in ensuing years that follow.

Vision

To harness effectively along the lines of spirited 'Make in India' catchphrase, Kalyan Engineering vociferously propels 'Nation First' principle, with an aim to ascertain an ascending employment, entrepreneurial opportunities and workforce aided by scrupulous investments, thus making certain of a blooming market.

Our Core Values

Most significant feature of Kalyan Engineering is the obdurate core values to set a point of reference for futuristic endeavours and the likes.

01

Service

Besides manufacture, service post sales hold the key to survival in most competitive market. Unethical approach looms large albeit having technical expertise causing inconvenience and loss of time. Kalyan Engineering reassuringly joins hands with customers to gain trust, to lay emphasis on the importance of service post installation, to build an everlasting rapport with the valued patron.

02

Availability

Kalyan Engineering is all geared up to timely meet up soaring market demands in present scenario, making every need-based demand available in a nutshell – Quality product & service after sales .

03

Innovation

To assuage doubts in the minds of valued customers, to focus on Research and Development always holds key to constant growth and market sustenance to be successful in business. In principle, Kalyan Engineering is committed to invariable product range development & improvisation for better experience of valued customer at large.

04

Integrity

Integral part @ Kalyan Engineering is, we not only sell exclusive products, but also coast along very honestly with sheer commitment to ensure everything delivered that has been promised.

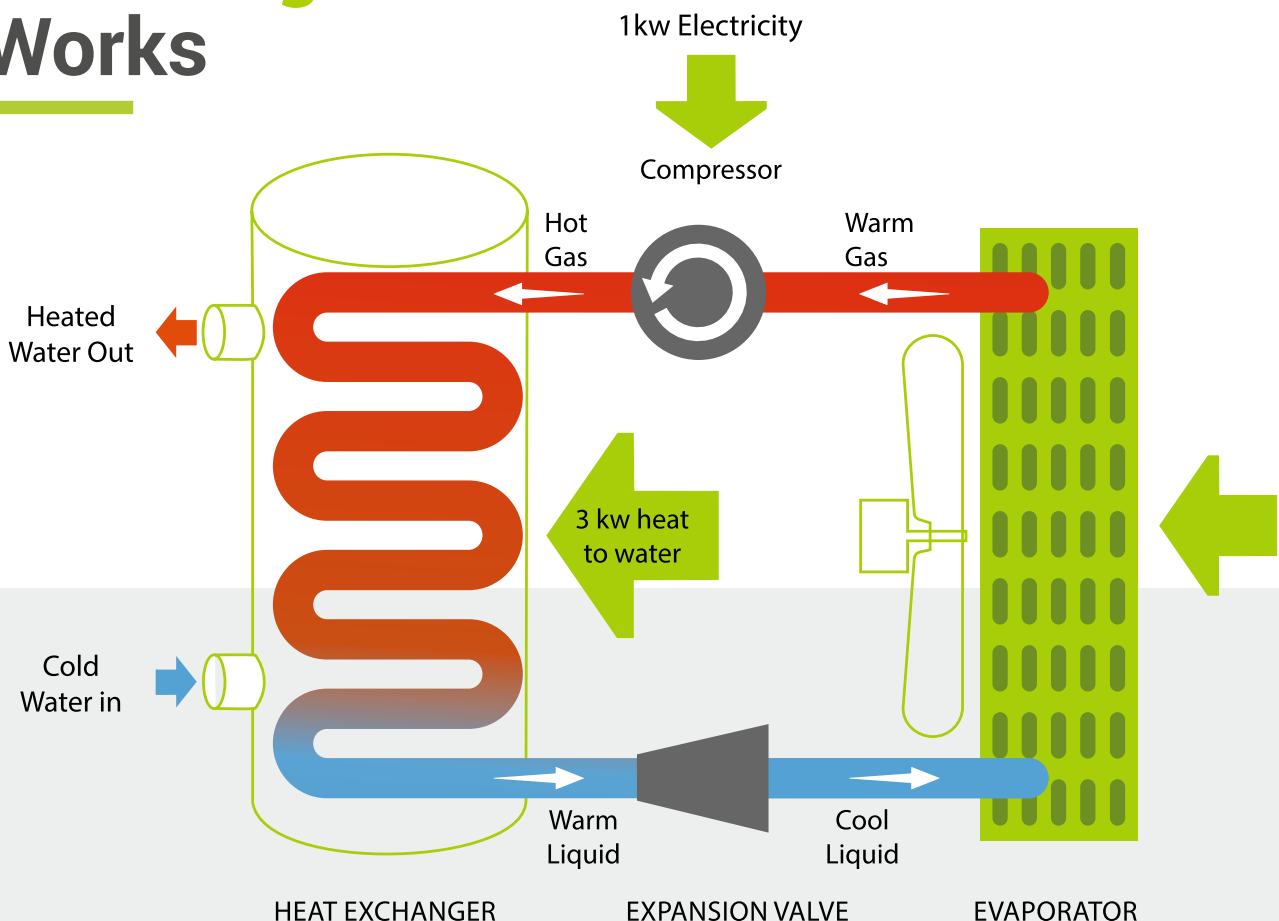
Heat Pump











Introduction

- Heat pumps use a refrigerant as an intermediate fluid to absorb heat where it vaporizes, in the evaporator, and then to release heat where the refrigerant condenses, in the condenser. The refrigerant flows through insulated pipes between the evaporator and the condenser, allowing efficient thermal energy transfer at relatively long distances.
- In electrically powered heat pumps, the heat transferred can be three or four times larger than the electrical power consumed, giving the system a coefficient of performance (COP) of 3 or 4, as opposed to a COP of 1 for a conventional electrical resistance heater, in which all heat is produced from input electrical energy.
- The main components of an air-source heat pump are:
 - An outdoor heat exchanger, which extracts heat from ambient air.
 - An indoor heat exchanger, which transfers the heat into a domestic hot water tank.

How Magma Works



Benefits of Magma Heat Pump

-  Electricity saving up to 70%
-  Easy installation
-  Hot water 24 x 7
-  Silent in operation
-  Works at low atmospheric temperature
-  Complete isolation between water & electricity
-  Long life span
-  It can be powered by various renewable energies instead of electricity

-  Low carbon footprint
-  On site rectification and solution
-  An eco-friendly product
-  Service oriented
-  No fuel storage required
-  No discharge of poisonous gas and no pollution to atmosphere
-  Indigenous and compact design

Applications

01 Bungalows and Villas

02 Residential Buildings

03 Hotels and Resorts

04 Spa and Swimming Pools

05 Salon

06 Hospitals

07 Commercial buildings
and IT Parks

08 Hostels

09 Malls

10 Airports

11 Laundry

12 Dairy and Poultry

13 Automobile Industries

14 Food, Process and
Pharmaceutical Industries

All in One

The All in One Heat Pump contains the heat pump and the storage water tank in a single structural unit. One portion is the heat pump and the other is storage tank. The system is ready to install and comes with plug and play power cable with in/out water connections. It can be installed on the terrace or balcony area. It also has inbuilt overload protection, high pressure protection, dry run protection. This highly compact design can be used for domestic hot water requirements such as in bungalows, villas, small size hotels or residential buildings.



Features

- Input Power: 1 & 1.5KW
- Output Heating KW: 4 & 6 KW
- Storage Tank Options: 100, 150 and 200 L
- Refrigerant high pressure protection
- Only plumbing connections required
- In Built circulation pump (Optional)
- High quality powder coated body
- Thermostatic expansion valve
- Blazed plate heat exchanger (Optional)
- Settable Digital Temperature Controller

Monobloc Heat Pump

Monobloc Heat Pump looks like a split heat pump the only difference is the Monobloc heat pump contains the high efficiency brazed type heat exchanger along with circulation pump. Here heat exchange takes place in the heat pump itself. The circulating pump suck the water from storage tank and pass it through heat exchanger and hot water transfer to the storage tank. This system can be used in Villas, Bungalows, small size hotels and Hospitals. This system is available for R22, R407 and R410 Refrigerant.

This system is available with input of 1 KW, 1.5 KW & 2 KW along with 200 L, 300 L, 500 L, 750 L, 1000 L storage tank.



Features

- Rotary compressor
- Brazed type heat exchanger
- No copper piping work at site
- Only plumbing connections required
- Overload protection
- Digital Temperature controller for automatic operation
- High pressure protection
- Less chances of Gas leakage
- Gas charged from factory
- Circulation pump built in
- Easy installation and maintenance

Semi Commercial and Commercial Heat Pump

The Semi Commercial and Commercial Heat Pump functions just as the Monobloc Heat Pump but the only difference being the higher level of protection and capacity. This system can be connected with the existing water system. It can give better performance in low temperature as well this system can generate high quantities of hot water in less time. It is designed specifically for better reliability. This can be used in Hotels, Hostels, Hospitals, Resorts and Industrial applications. It is available for R22, R407 and R410 refrigerant.

This system is available with input 3KW to 25 KW along with 500L to 7000L storage tank.



Features

- Heating capacity from 12KW to 200 KW
- High efficiency brazed plate heat exchanger
- Overload and under load protection
- High pressure and low pressure protection
- Easy installation and maintenance
- Scroll compressor
- 100% copper piping
- User friendly operation
- High quality powder coated body

Swimming Pool Heat Pump

As the pool pump circulates the swimming pool's water, the water drawn from the pool passes through a filter and the swimming pool heat pump. The Swimming Pool Heat Pump has titanium heat exchanger which can transfer heat from surrounding atmosphere to swimming pool water. The titanium heat exchanger makes longer life because of the corrosion resistance capacity. This system can be used in hotel, resorts, villas and spa. This system is available for R22, R407 and R410 refrigerant.



Features

- Heating capacity from 15KW to 250 KW
- High efficiency titanium based heat exchanger
- Overload and under load protection
- High pressure and low pressure protection
- Easy installation and maintenance
- Scroll compressor
- 100% copper piping
- User friendly operation
- High quality powder coated body

Reversible Heat Pump

Reversible Heat Pump works in either direction to provide heating or cooling to the internal space. It has a reversing valve to reverse the flow of refrigerant from the compressor through the condenser and evaporation coils.

In **heating mode**, the outdoor coil is an evaporator, while the heat exchanger is a condenser. The refrigerant flowing from the evaporator carries the thermal energy from outside air. The heat exchanger then transfers thermal energy to water, which is then moved around the inside of the water tank by circulation pump.

In **cooling mode**, the cycle is similar, but the evaporator coil is now the condenser and the exchanger is the evaporator. In this mode heat exchanger cools the water which will be transferred to the storage tank. This system can be used in resorts, bungalows, villas and spa. This system is available for R22, R407 and R410 refrigerant.

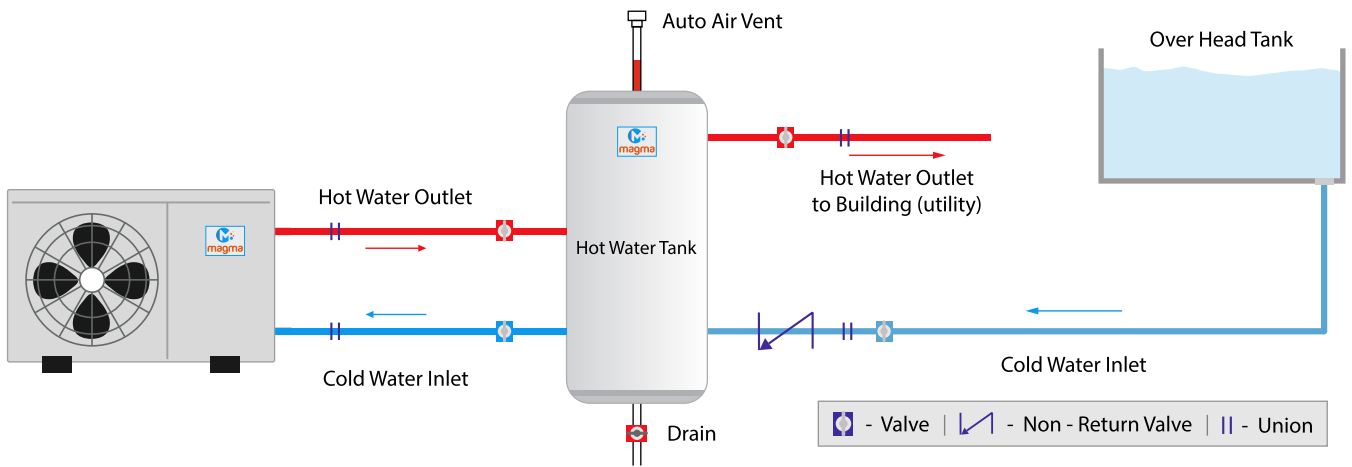
This system is available with input of 1 KW, 1.5 KW & 2 KW along with 200 L, 300 L, 500 L, 750 L, 1000 L storage tank.



Features

- Rotary compressor
- Brazed type heat exchanger
- No copper piping work at site
- Only plumbing connections required
- Overload protection
- Easy installation and maintenance
- High pressure protection
- Less chances of Gas leakage
- Gas charged from factory
- Circulation pump built in
- 4 way solenoid valve for change over
- Individual digital Temperature controller for automatic operation

Schematic Layout



Associated Brands:

Danfoss

EMERSON

Panasonic

wilo

GRUNDFOS

ESPA

LEO

**Schneider
Electric**

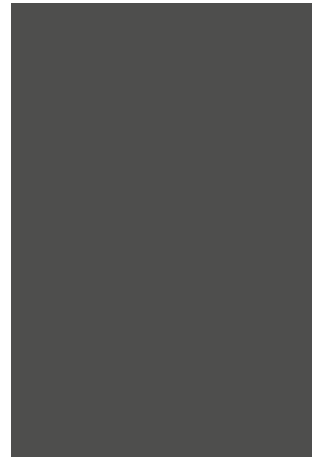
**ESSAR
STEEL**

**KAORI
K**

HITACHI
Inspire the Next

Godrej

Applications







KALYAN
ENGINEERING

PEOPLE
THINK
IT'S
MAGIC
WE CALL IT
ENGINEERING



We Support:



एक कदम स्वच्छता की ओर

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