

MOST ENVIRONMENT FRIENDLY WAY TO HEAT UP WATER ...




KRISTHERM

| HEAT PUMPS SCREW & SCROLL

RANGE CATALOGUE

ABOUT KEHEMS TECHNOLOGIES

| Applied Engineering

Applied Cooling, Heating, Low Temperature Applications & Energy Efficient Solutions...

Kehems Technologies [formerly Cristopia Energy Systems (I) Pvt. Ltd.] is a privately owned & managed with profound proficiency of competencies; Solution driven approach and best applied technologies in Heating, Cooling & Energy Efficient Solutions in HVACR and allied industrial applications.

We are driven by enthusiasm, determination and trust gained from Credible Engineering, Reliable Products and trustworthy team of extraordinary professionals. We are nationally and internationally recognized brand, committed for leading the global requirements of HVACR with trustworthy and technically correct solutions, best in class service capabilities and recognition of customer needs to manage the demand and supply equilibrium.

Kehems has been designing & manufacturing leader in areas of our operations since last more than two and half decades. Kehems success story started in a small village Umrikheda near Indore (MP, India) with many inventions and evolutions in the field of Cooling, Heating and Energy Efficiency applications like Thermal Energy Storage & Solar Energy.

| Solution Oriented Approach

Kehems Technologies corporate culture & concept places customer at the heart of everything. Our senior team including Founder, Directors and Managing Director have more than 150 years of collaborative experience of achieving business excellence and delivering unparalleled customer satisfaction and comprehensive technical support. Our Customer Service, Sales, Projects, Engineering, Logistics and industry experts who have close working relationships with our customers enabling us to understand developments taking place in their individual markets and desired solutions for those markets.

Every customer, Consultant, Architect, Builder and Designer is assured of a unique approach to help them meet the needs of their challenges in Projects and we stand by them no matter the query is about. Our customers always speak to the solution oriented person who best understands their application challenges.

| Advanced Manufacturing Facility

KEHEMS's manufacturing plant at Village Umrikheda, Indore, strives to produce world class products. It is supported by a network of knowledge bases throughout the world and use of advanced technology and equipment. Our comprehensive quality control system features centrally computerised management of quality and production data to facilitate first-rate production within scheduled time.

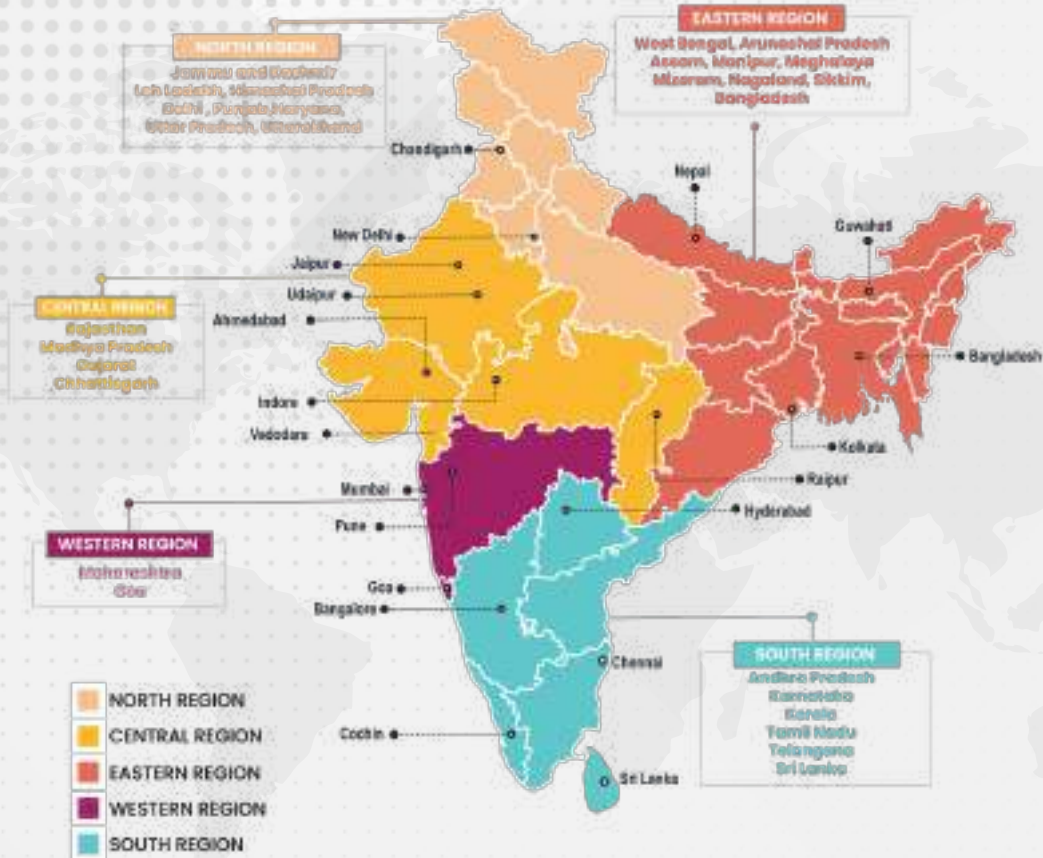
Our quality control system and corporate activities help to ensure compliance with international quality checks and environmental management standards.

Living our quality commitment we manufacture highly energy efficient products from high quality components, all the way imported from best sources world over. By reducing the supply lead-time and meeting market needs in terms of product specifications, we plan to strengthen our India leadership.

OUR NETWORKS

Regions

Asia, Europe, South East



Products

KRISCOOL

CHILLERS

- Air cooled Screw Chillers 30 TR - 650 TR
- Water cooled Screw Chillers 30 TR - 650 TR
- Air cooled MINI Scroll Chillers 3.5 TR - 16 TR
- Air cooled MINI Scroll with VFD Chillers 16.5 TR - 103 TR
- Low Temperature Chillers 13 TR - 250 TR; Temp. Range (-)5°C - (-)40°C

KRISTHERM

HEAT PUMPS

- Domestic Heat Pumps 4.1 kW - 10.8 kW
- Air to Water MINI Scroll Heat Pumps 10 kW - 290 kW
- Water to Water MINI Scroll Heat Pump 32 kW - 160 kW
- Screw Heat Pumps 100 kW - 2000 kW

KRISTESS

Thermal Energy Storage Systems



- Integrated Solar Street Lights
- Out door Sol

Employees	320
Regions	15
Reaches Through Kehems Representation	18
Units Installed	4500+
Business Associates	60+
On Board Service Professionals	160+
White Labelled Customers	10+

OUR HERITAGE

Starting as Energy Audit Consultant in the year 1987 the **KEHEMS** Group has maintained very high levels of design, manufacturing and execution standards for their equipment and projects in these years.

It has always been the speciality of **KEHEMS** Group to use their technological skills (In machines & systems produced by them) to meet the **VARIED** Application requirements of the Industries.

Few of such innovative application installations successfully carried out by **KEHEMS** Group are listed below:

- Development & Installation of Sea Water Cooling System At Saurashtra Chemicals.
- Design, Engineering, Manufacturing & Installation of Sea Water Desalination Plant for Tata Chemicals.
- Design, Engineering, Manufacturing & Installation of Sea Water Desalination Plant for Saurashtra Chemicals.
- Mobile Drinking Water Units.
- Cooling back up by Thermal Energy Storage Systems for Critical Application.
- **KEHEMS** Group has developed such Air Cooled Chillers which are especially designed for frequent & rough handling and transportation with especial SKIDS and other provisions.
- Water Cooled Containerized Chillers.

Sustaining the relevance Yesterday, Today & Tomorrow



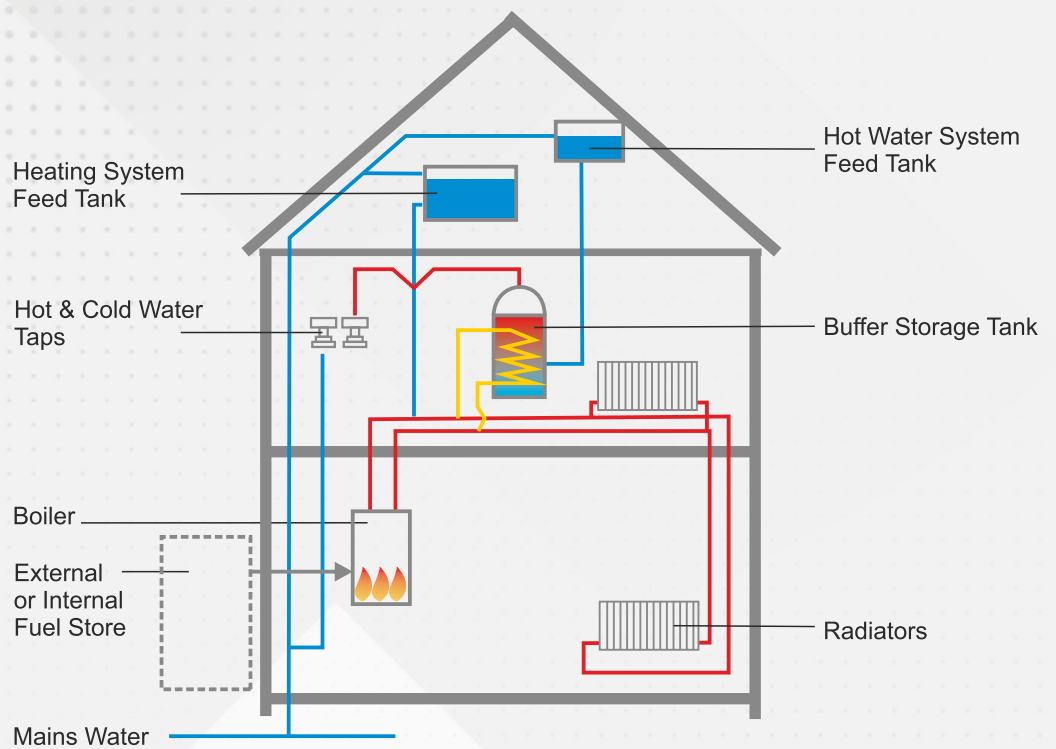
Most environment friendly way to heat up water ...

Conventional Systems

- Solid fuel fired
- Natural Gas/ Oil fired
- Boilers
- Electric Heaters

Typical Observations of Conventional System

- Energy Consumption
- Efficiency
- Heating with fossil fuel
- Combustion by products
- Challenges for Climate
- Economic viability
- Sustainability
- Connected Load
- Challenges for Fuel Handling
- Safety Norms
- Compliances



Unconventional System

- Solar - Geo Thermal

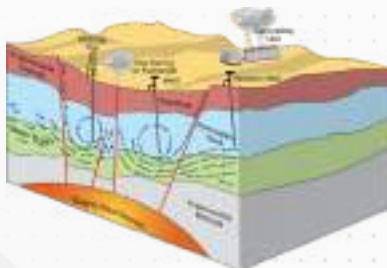
Geothermal Water Heating System

Advantages:

- Renewable Energy

Challenges:

- High CAPEX
- Weather dependent
- Maintenance
- Soil Characteristics
- Process



Solar Water Heating System

Advantages:

- Free and Renewable

Challenges:

- High CAPEX
- Serviceability
- Space
- Weather



What is the most energy efficient environment friendly way ????

- Energy utilization in the built environment
- Need of transition Kyoto Protocol
- Sustainable solution
- Techno-commercial Viability
- Heat recovery based system

Coming back to the all-important question

Solution is Heat Pump ...

What is a Heat Pump?



Types of Heat Pump

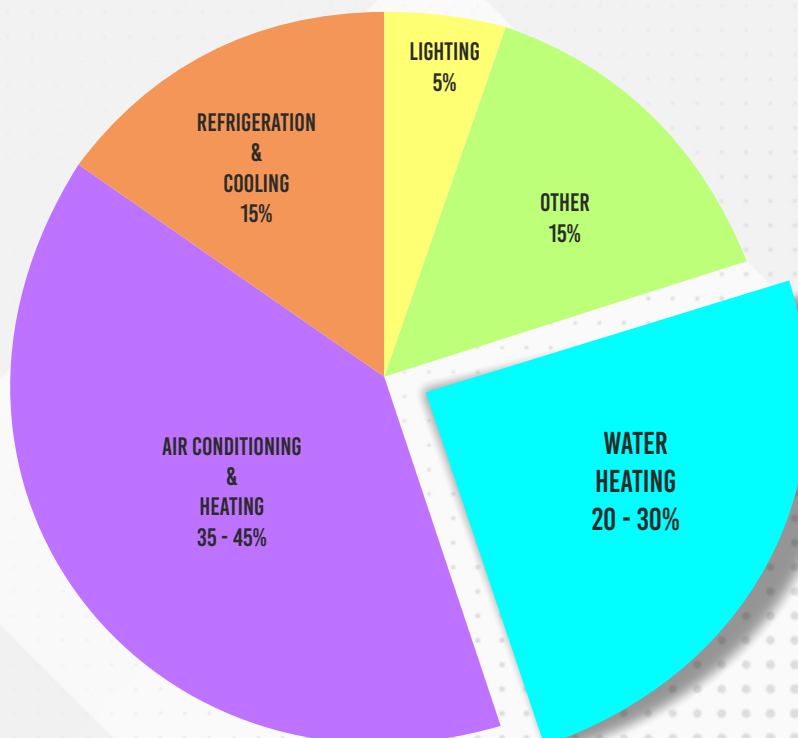
Based on Heat Source:

- AIR TO WATER
- WATER TO WATER
- AIR TO AIR
- GEOTHERMAL
- SOLAR HYBRID-SCROLL

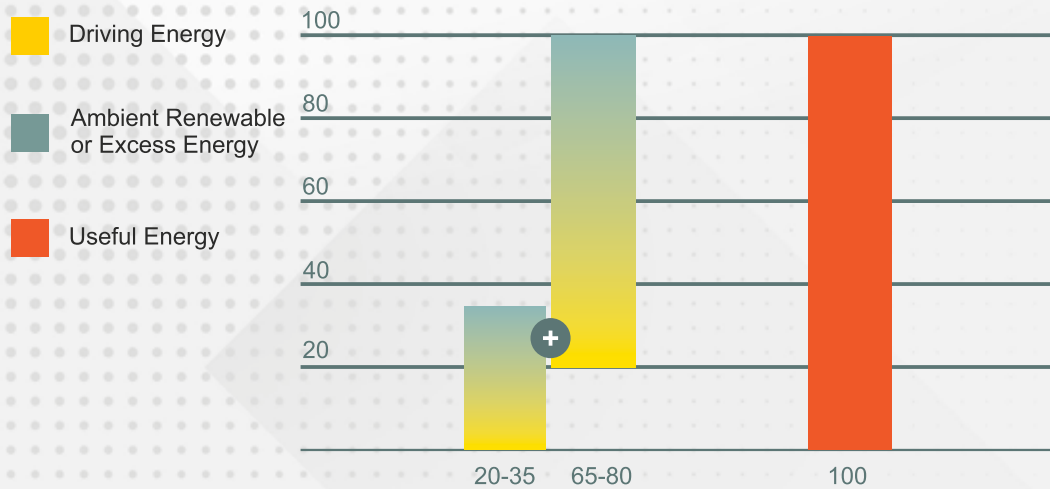
Based on Technology:

- SCROLL
- SCREW
- ABSORPTION

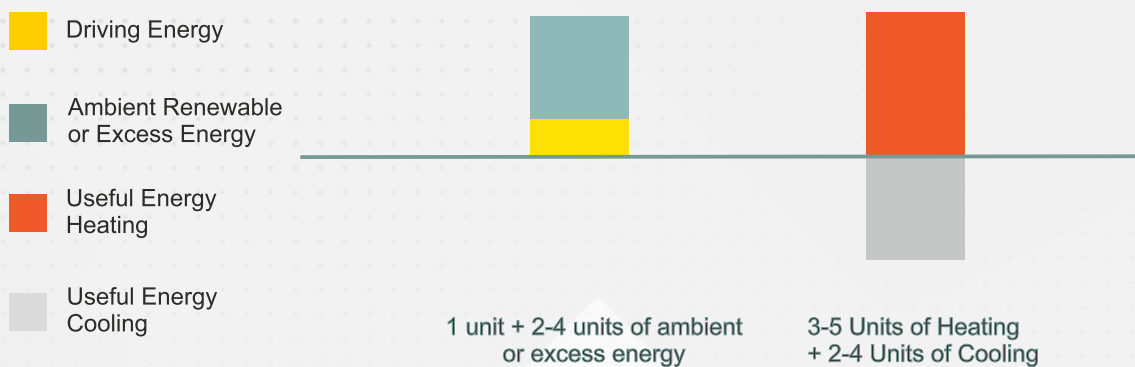
Why Energy Efficient Hot Water Generation?



Energy use in an Electric Compression Heat Pump in Heating Mode



Energy Balance for a heating & cooling Heat Pump



100% Renewable Energy with Heat Pumps is Feasible Today.

When the driving energy needed to drive the refrigerant cycle in heat pumps is renewable energy (from wind, PV, green gas, etc.), heat pumps are a 100% renewable, 100% emission free solution. Since the heat pump unit can also use electricity produced on site, it is reducing the stress that an

increased electricity demand may put on the grid. Heat pump systems can serve as thermal batteries providing demand response services and allow more renewable electricity in electricity generation.

Heat Pumps Working

Heat pump is a technologically advanced system adjusted to make use of renewable energy sources. Heat Pumps work on a similar principal of a refrigerator; absorb energy from the surrounding outdoor air and transfer into a refrigerant. The heat energy is upgraded using a refrigerant cycle and this renewable energy is transferred into the water.

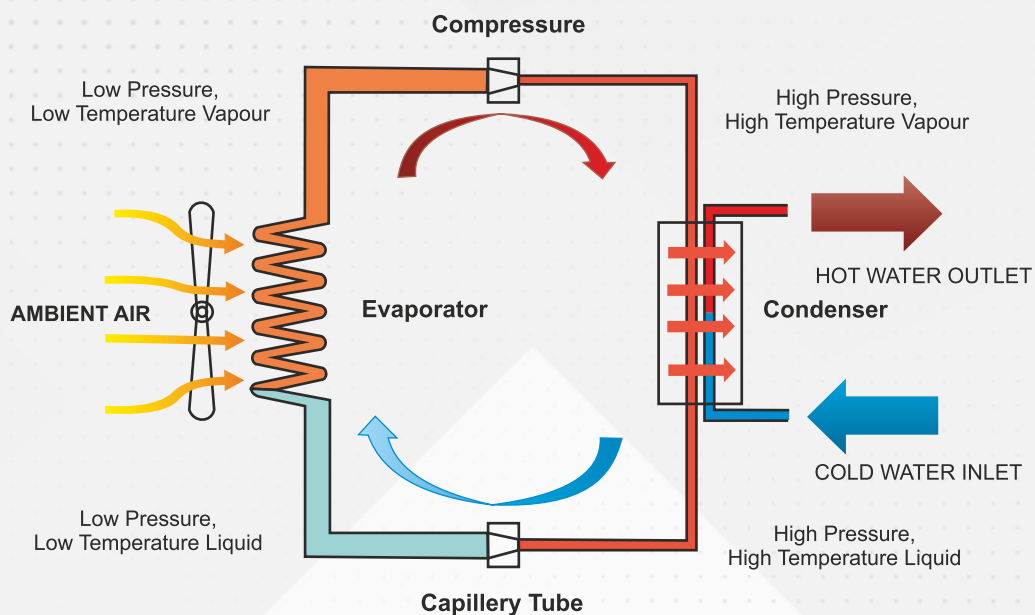
A heat pump consists of an evaporator that recovers heat from the environment. In the evaporator, a refrigerant passes from liquid to gaseous state and then travels to the compressor. There, the vapours are compressed to increase pressure and temperature. Hot vapours are liquefied in the condenser unit, emitting the

condensation heat to the heating medium. Then the refrigerant passes through an expansion valve where its pressure is again lowered, and continues back to the evaporator where the process is repeated. All heat acquired from the environment is free. Raising its temperature requires some energy. Hence, electric power is required for heat pump operation to power the aggregate/motor.

The R410A refrigerant used in KRISTHERM Heat Pump has zero ozone depletion potential. This refrigerant allows useful heat energy to be absorbed even when the outdoor conditions drop below freezing.

Coefficient of Performance - COP

The ratio between input power (electrical energy) and output heat (thermal energy) is called Coefficient of Performance (COP). The value of COP depends on the type of heat pump and source of thermal energy in the environment. On average, annual COP for heat pumps is between 3 and 5 or more.



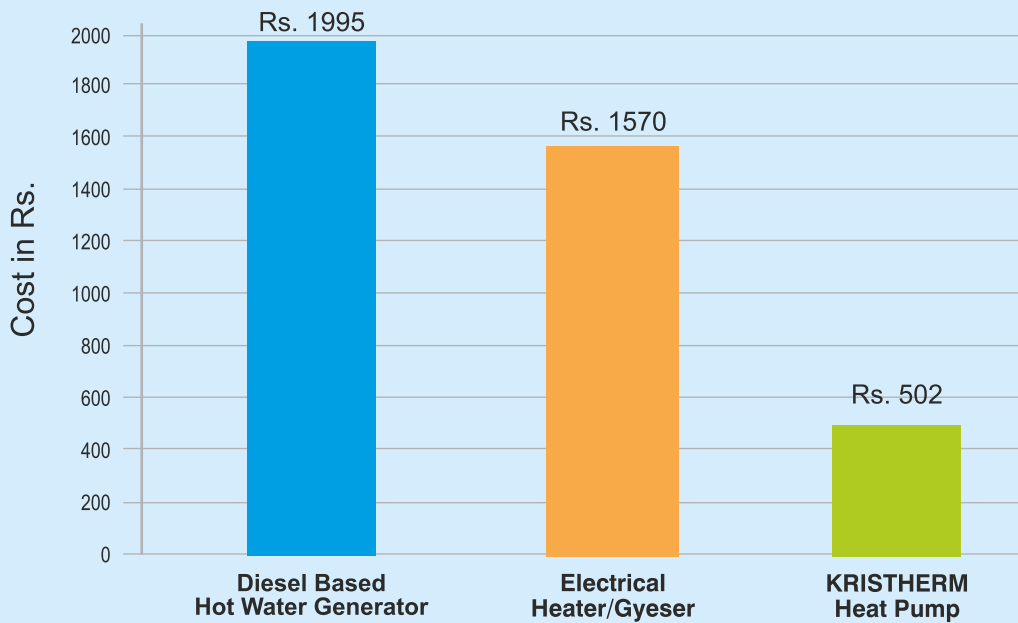
Major Components in an Air-Source Heat Pump and its working principle





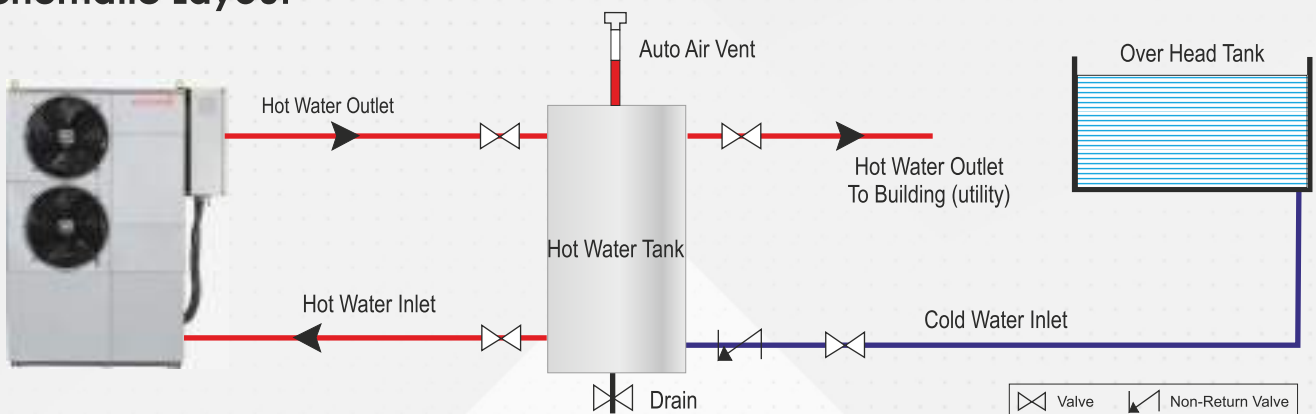
GUARANTEED SAVINGS

ESTIMATED OPERATING COST FOR 5000 LITER HOT WATER GENERATION



Average Diesel Price Considered Rs. 98/- per liter.
Average Electricity Rates considered Rs. 9/- per unit.

Schematic Layout



**HOT WATER SUPPLY
WHENEVER YOU REQUIRE
AS MUCH AS YOU REQUIRE**

75% POWER SAVING

Power Efficient

Hot Water Generation up to 60°C

Weather Independent Operation

Eco Friendly - Compact Design

For Jacuzzi, Rain Water Shower, Daily Bath & Kitchen requirements

**DOMESTIC
SCROLL HEAT PUMP
4.1kW to 10.8 kW**

**75%
POWER SAVING**

Technical Specifications 4.1 kW Heat Pump

<ul style="list-style-type: none"> • Heating Capacity • Power Consumption • COP • Refrigerant • Max. Hot Water Outlet Temp. • Water Temp. Range • Operating Ambient Temp. Range 	<p>3.55 KW 0.95 KW 3.74 R-134a 60°C 25 to 55°C 4°C to 40°C</p>	<ul style="list-style-type: none"> • Control Panel • Control Panel Display • Increase/ Decrease Button • Power ON/OFF Button • Temp. Display Button • Error Display 	<p>Microprocessor Yes Yes Yes Yes Yes</p>
<ul style="list-style-type: none"> • Compressor Type • Compressor Quantity • Condenser Type • Condenser Number • Cooling Rejection Heat Exchanger Type • Cooling Rejection Fan 	<p>Rotary Hermetic One Copper Tube Coil in Tank One Aluminum Fins with Copper Tubes Axial Fan</p>	<ul style="list-style-type: none"> • Water Tank • Tank Working Pressure/ Testing Pressure • Power Supply • Water Discharge • Water connection Type/ Size 	<p>Inbuilt, SS 316 Tank 3 Bar/ 4.5 Bar Single Phase 100 Ltrs. / hour Socket/ 1/2"</p>

Technical Specifications 7 kW Heat Pump

KRISTHERM MODELS	MINI 7 kW
Heating Capacity* kW	7.1
Compressor COP	3.381
Hot Water Quantity (Ltrs./Hr.)	204
Hot Water Outlet Temp.	55°C (Max 60°C)
Refrigerant	R134a
Compressor Type	Scroll Hermetic
Length (mm)	1190
Width (mm)	600
Height (mm)	645
Operating Weight (Kgs.)	125
Connection Size	DN 25

TECHNICAL SPECIFICATION (GLASS LINES TANK)			
Volume	200 Ltrs.	300 Ltrs.	500 Ltrs.
Water Tank Material (Inner Tank)	Mild Steel with Enamel Coating Thk = 2.0 mm	Mild Steel with Enamel Coating Thk = 2.5 mm	
Inner Tank Coating	0.2 ~ 0.35 mm Enamel Glaze		
Outer Tank	Color Painted Steel		
Insulation Layer Thickness	Foaming Polyurethane, p = 38 ~ 45 Kg/ Cu. M, K = 0.0198 w/m.k		
Heating Element	3 kW	4 kW	
Heating Element Material	Incoloy 840 with Enamel Coating		
Inlet / Outlet Size	3/4"		
Power Cable	2 Meters		
Accessories	1 No. Safety Valve & 1 No. PTR Valve		
Protection	With Circuit Breaker Protection		
	With Anode Rod		
	Package with Plywood Frame & Pallet		

Application

Hotel & Hospitality | Pharmaceutical & Processing Plant | Luxury Residential Complex & Villa | IT Park
Mall & Retail Outlet | Hospital | Commercial Complex & Office Building | Bank & Airport

BUYING A HEAT PUMP MAKES SENSE

Reliable and Economical Heating System

Upto 70% Energy Cost saving

Payback in Less than 1 year

Environment Friendly & Remarkably Silent

Easy Maintenance & Excellent sales Service

MINI SCROLL HEAT PUMP

AIR TO WATER 10 KW TO 290 KW
WATER TO WATER 32 KW TO 160 KW

KRISTHERM



MINI SCROLL HEAT PUMP
AIR TO WATER
10 kW TO 290 kW

MINI SCROLL HEAT PUMP
WATER TO WATER
32 kW TO 160 kW

Why KRISTHERM Heat Pump? (Scroll Range)

KRISTHERM Heat Pumps are extremely energy efficient and can achieve 3 to 4 COPs; means they produce 3-4kW of heat for every 1kW consumed. As no fossil fuels are directly burnt in the operation of a heat pump, CO2 emissions are also greatly reduced in comparison to gas or oil-fired boilers.

Energy Efficiency

Heat Pumps offer the highest levels of energy efficiency with the ability to provide 3-4kW of heat energy for every 1kW used.

Eco Friendly Refrigerant

KRISTHERM Heat Pumps are one of the most efficient ways to heat water all year round. A highly efficient system utilising an environment friendly refrigerant R410A refrigerant has zero ozone depletion potential. This refrigerant allows useful heat energy to be absorbed even in low outdoor temperature.

In-built CIP System (Clean in Place)

In high temperature operation of Heat Pumps, the cleaning of Plate Heat Exchanger is often required. KRISTHERM Heat Pump has integrated CIP system which through the effective circulation of non-toxic fluid cleans the surfaces. This cleaning process maintains efficiency and increase the life of PHEs.

In-built Pump

High quality pump circulates the water between the heat pump and hot water storage tank to make the installation simpler and faster.

Convenient Controls

Heat Pumps supply hot water which delivers radiant heat energy to potable water systems. Easy to use controls allow you to adjust temperature settings at the touch of a button.

Lowest Running Costs

The more energy efficient a heating system is, the cheaper it is to run. Hot water heat pumps offer the cheapest available kW/h rate for hot water heating.

Safety

Heat pumps are the safest option as there is no direct electrical water heating or hot surfaces; they are an extremely safe option.

Year Round Performance

Heat pumps provide energy efficient water heating year round, operating effectively in both high and low outdoor ambient temperatures.

Maintenance Free

Compared to traditional water boilers, KRISTHERM heat pumps are maintenance free: fuel deliveries, disposal of ashes, chimney cleaning are eliminated.

TECHNICAL SPECIFICATIONS (WWHP)

WATER to WATER SCROLL HEAT PUMP

KRISTHERM MODELS	MINI 30-1 WWHP	MINI 40-1 WWHP	MINI 50-1 WWHP	MINI 60-1 WWHP	MINI 80-1 WWHP	MINI 100-2 WWHP	MINI 120-2 WWHP	MINI 160-2 WWHP
Heating Capacity kW	33.5	41.4	49.7	63.9	81.8	99.6	124.5	166
Cooling Capacity kW	23.8	29.2	35.3	45	56.4	72	87.3	115.7
Compressor COP	3.454	3.393	3.451	3.381	3.220	3.609	3.347	3.300
Hot Water Quantity (Ltrs./Hr.)	960	1187	1425	1832	2345	2855	3569	4759
Cold Water Inlet Temp.	25 Deg C							
Hot Water Outlet Temp.	55°C (Max 60°C)							
Chiller Water Outlet Temp.	7 Deg C							
Refrigerant	R410 A							
Compressor Type	Scroll Hermetic							
Length (mm)	900	900	900	900	900	900	900	900
Width (mm)	500	500	500	500	900	900	900	1600
Height (mm)	1350	1350	1350	1350	1520	1350	1350	1520
Connection Size Condenser	DN 32	DN 40	DN 40	DN 40	DN 50	DN 50	DN 50	DN 65
Connection Size Evaporator	DN 32	DN 32	DN 40	DN 40	DN 50	DN 50	DN 50	DN 65
Empty Weight (Kgs.)	275	280	285	295	375	465	470	740
Operating Weight (Kgs.)	295	300	305	315	395	485	490	760

TECHNICAL SPECIFICATIONS (AWHP)

AIR to WATER SCROLL HEAT PUMP

KRISTHERM MODELS	MINI II 20HP	MINI II 35HP	MINI II 55HP	MINI II 80HP	MINI II 100HP	MINI II 120HP
Heating Capacity* kW	10.5	17.3	27.2	38.0	47.9	56.1
Compressor COP	3.500	3.604	3.831	3.838	3.863	3.869
Hot Water Quantity (Ltrs./Hr.)	301	496	780	1089	1373	1608
Hot Water Outlet Temp.	55°C (Max 60°C)					
Refrigerant	R134a	R410 A				
Compressor Type	Scroll Hermetic					
Length (mm)	1190	1240	1240	1240	1240	1240
Width (mm)	600	550	550	550	550	550
Height (mm)	645	725	1070	1070	1580	1580
Operating Weight (Kgs.)	135	180	210	260	275	310
Connection Size	DN 25	DN 32	DN 32	DN 32	DN 40	DN 40
KRISTHERM MODELS	MINI II 160HP	MINI II 8080HP	MINI II 100100HP	MINI II 120120HP	MINI II 120160HP	MINI II 160160HP
Heating Capacity* kW	71.7	73.7	99.2	111.3	134.4	147.1
Compressor COP	3.754	3.722	4.066	3.905	3.988	3.821
Hot Water Quantity (Ltrs./Hr.)	2055	2113	2844	3191	3853	4217
Hot Water Outlet Temp.	55°C (Max 60°C)					
Refrigerant	R410 A					
Compressor Type	Scroll Hermetic					
Length (mm)	1240	1580	1850	1850	1850	1850
Width (mm)	550	550	750	750	890	890
Height (mm)	1850	1850	1850	1850	1850	1850
Operating Weight (Kgs.)	380	400	480	480	565	565
Connection Size	DN 50	DN 50	DN 50	DN 50	DN 50	DN 50

KRISTHERM MODELS	AW 200200 HP	AW 200260 HP	AW 260260 HP	AW 260310 HP	AW 310310 HP
Heating Capacity* kW	196.4	220.7	253.3	273.5	292.7
Compressor COP	3.428	3.470	3.479	3.356	3.263
Hot Water Quantity (Ltrs./Hr.)	5630	6327	7261	7840	8391
Hot Water Outlet Temp.	55°C (Max 60°C)				
Refrigerant	R410 A				
Compressor Type	Scroll Hermetic				
Length (mm)	2330	2330	2330	2330	2330
Width (mm)	2200	2200	2200	2200	2200
Height (mm)	2050	2050	2050	2050	2050
Operating Weight (Kgs.)	1490	1570	1640	1710	1830
Connection Size	DN 65	DN 65	DN 65	DN 80	DN 80

Hot Water Generation Capacity mentioned at 30° C Delta T. Operation Ambient Temperature Range (HP Model): -5° C to 45° C.

Swimming Pool Heating applications Heat Pumps are also available on demand.

Application

Hotel & Hospitality | Pharmaceutical & Processing Plant | Luxury Residential Complex & Villa | IT Park
Mall & Retail Outlet | Hospital | Commercial Complex & Office Building | Bank & Airport

TECHNICAL SPECIFICATION (AWSTHP)

AIR to WATER SCROLL HEAT PUMP WITH SHELL & TUBE CONDENSER

KRISTHERM MODELS	MINI III 80 AWSTHP	MINI III 125 AWSTHP	MINI III 190 AWSTHP	MINI III 250 AWSTHP
Heating Capacity* kW	18.7	26.3	43.5	54.9
Compressor COP	4.156	3.985	4.143	4.007
Hot Water Quantity (Ltrs./Hr.)	536	754	1247	1574
Hot Water Outlet Temp.	55°C (Max 65°C)			
Refrigerant	R134 A			
Compressor Type	Scroll Hermetic			
Length (mm)	1250	1250	1250	1250
Width (mm)	600	600	600	600
Height (mm)	1150	1150	1150	1150
Operating Weight (Kgs.)	590	590	590	590
Connection Size	DN32	DN32	DN50	DN50

KRISTHERM MODELS	MINI III 380 AWSTHP	MINI III 250250 AWSTHP	MINI III 250380 AWSTHP	MINI III 380380 AWSTHP
Heating Capacity* kW	74.6	105.5	128.3	171.6
Compressor COP	3.693	3.879	3.774	4.175
Hot Water Quantity (Ltrs./Hr.)	2139	3024	3678	4919
Hot Water Outlet Temp.	55°C (Max 65°C)			
Refrigerant	R134 A			
Compressor Type	Scroll hermetic			
Length (mm)	1250	1250	1250	1250
Width (mm)	600	600	600	600
Height (mm)	1150	1150	1150	1150
Operating Weight (Kgs.)	590	590	590	590
Connection Size	DN50	DN65	DN65	DN65

Hot Water Generation Capacity mentioned at 30° C Delta T. Operation Ambient Temperature Range (HP Model): -5° C to 45° C.

Swimming Pool Heating applications Heat Pumps are also available on demand.

UNIQUE DUAL FUNCTION COST EFFECTIVE SOLUTION

Environment Friendly, Maintenance & Emission Free
For Hot Water up to 65°C

Water Heating: Throughout the Year

Process Heating: Efficient and cost saving

Domestic Hot Water: Up to 70% saving in energy bills

**WATER TO WATER
SCREW HEAT PUMP**

HEATING CAPACITY - 100 kW TO 2000 kW



**WATER TO WATER
SCREW HEAT PUMP
100 kW TO 2000 kW**

Kristherm Heat Pumps

The KRISTHERM Heat Pump is a microprocessor-controlled heating unit for hot water or space heating by transferring excess heat from one location to another. When combined with air-conditioning systems, it provides hot water without additional energy consumption. This unique dual functionality enables an extremely cost-effective solution.

The cost of generating hot water reduces by as much as 70% compared to traditional boilers. This makes the KRISTHERM Heat Pump perfectly suited for industries such as Hotels, Hospitals, Pharmaceuticals, Process industries, Residential and Commercial Complexes etc. ...where both air-conditioning and hot water are required.



Lowers Operational Costs

KRISTHERM Heat Pumps offer excellent overall COP and reduce the operational cost of generating hot water by up to 70%. These machines are equipped with single or multiple circuits. The multiple circuit systems with multiple evaporators, condensers and compressors are highly reliable and operate even at part loads. The intelligent microprocessor based control fully co-ordinate operation at all conditions. Simultaneous Free Cooling is produced which can be used for air conditioning.



Reduces Capital Costs

With its dual functionality, the KRISTHERM Heat Pump provides hot water or warm air; and can easily be integrated into cooling systems. This extremely efficient solution reduces or eliminates the need for having separate heating units (for water or air) which in turn translates into lower Capital Costs.



Reduces Pollution

By recovering heat rejection from its Condenser, this eco-friendly heating solution helps reduce Thermal Pollution.



Maintains Ecological Equilibrium

KRISTHERM Heat Pump significantly reduces CO2 emissions levels, which plays an important role in conserving the environment and maintaining the delicate ecological equilibrium.

No volatile energy sources such as gas and oil are used. No risk of maintaining flammable materials stock and No worry of unpredictable supply and fluctuating prices.

'Maintenance Free': No Fuel Deliveries, Disposal of Ashes, and Chimney Cleaning.
Emission Free' operation: Environment friendly solution.

KRISTHERM range is most environment friendly using minimised charge of HFC refrigerant, within the approved and accepted international standards.

NEW HIGH EFFICIENCY, NEXT GENERATION HEAT PUMP RANGE ..

WATER to WATER SCREW HEAT PUMP THR 60 WHP

KRISTHERM MODEL	THR60 6001 WHP	THR60 6931 WHP	THR60 7001 WHP	THR60 9001 WHP	THR60 12501 WHP	THR60 14001 WHP	THR60 16001 WHP	THR60 18001 WHP
Heating Capacity kW	115.4	150.1	176.3	243.1	340.1	387.4	443.8	514.2
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 21001 WHP	THR60 24001 WHP	THR60 28001 WHP	THR60 32001 WHP	THR60 12002 WHP	THR60 12932 WHP	THR60 14002 WHP	THR60 18002 WHP
Heating Capacity kW	595.4	677.9	744.4	808.1	237.7	306.0	361.2	487.1
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 21502 WHP	THR60 25002 WHP	THR60 26502 WHP	THR60 28002 WHP	THR60 30002 WHP	THR60 32002 WHP	THR60 34002 WHP	THR60 36002 WHP
Heating Capacity kW	581.2	676.1	720.0	766.8	824.1	893.3	956.6	1,018
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 39002 WHP	THR60 42002 WHP	THR60 45002 WHP	THR60 48002 WHP	THR60 52002 WHP	THR60 56002 WHP	THR60 60002 WHP	THR60 64002 WHP
Heating Capacity kW	1,111	1,191	1,279	1,353	1,404	1,486	1,554	1,621
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

WATER to WATER SCREW HEAT PUMP THR 60 WHP1

KRISTHERM MODEL	THR60 6001 WHP1	THR60 6931 WHP1	THR60 7001 WHP1	THR60 9001 WHP1	THR60 12501 WHP1	THR60 14001 WHP1	THR60 16001 WHP1	THR60 18001 WHP1
Heating Capacity kW	115.8	150.7	176.4	244.6	340.5	388.0	445.0	517.8
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 21001 WHP1	THR60 24001 WHP1	THR60 28001 WHP1	THR60 32001 WHP1	THR60 12002 WHP1	THR60 12932 WHP1	THR60 14002 WHP1	THR60 18002 WHP1
Heating Capacity kW	598.7	681.0	811.7	811.6	238.8	308.1	362.9	489.7
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 21502 WHP1	THR60 25002 WHP1	THR60 26502 WHP1	THR60 28002 WHP1	THR60 30002 WHP1	THR60 32002 WHP1	THR60 34002 WHP1	THR60 36002 WHP1
Heating Capacity kW	583.1	677.2	720.9	767.7	825.9	896.8	961.1	1,025
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 39002 WHP1	THR60 42002 WHP1	THR60 45002 WHP1	THR60 48002 WHP1	THR60 52002 WHP1	THR60 56002 WHP1	THR60 60002 WHP1	THR60 64002 WHP1
Heating Capacity kW	1,117	1,197	1,286	1,360	1,410	1,493	1,561	1,627
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

WATER to WATER SCREW HEAT PUMP THR 60 WHPHD

KRISTHERM MODEL	THR60 6001 WHPHD	THR60 6931 WHPHD	THR60 7001 WHPHD	THR60 9001 WHPHD	THR60 12501 WHPHD	THR60 14001 WHPHD	THR60 16001 WHPHD	THR60 18001 WHPHD
Heating Capacity kW	118.8	154.6	180.6	251.7	350.1	398.7	456.1	532.8
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60

KRISTHERM MODEL	THR60 21001 WHPHD	THR60 24001 WHPHD	THR60 28001 WHPHD	THR60 32001 WHPHD	THR60 12002 WHPHD	THR60 12932 WHPHD	THR60 14002 WHPHD	THR60 18002 WHPHD
Heating Capacity kW	614.7	701.7	769.5	836.0	245.6	317.3	373.7	504.7
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60

KRISTHERM MODEL	THR60 21502 WHPHD	THR60 25002 WHPHD	THR60 26502 WHPHD	THR60 28002 WHPHD	THR60 30002 WHPHD	THR60 32002 WHPHD	THR60 34002 WHPHD	THR60 36002 WHPHD
Heating Capacity kW	600.1	697.7	741.8	788.7	847.2	919.4	986.9	1,054
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60

KRISTHERM MODEL	THR60 39002 WHPHD	THR60 42002 WHPHD	THR60 45002 WHPHD	THR60 48002 WHPHD	THR60 52002 WHPHD	THR60 56002 WHPHD	THR60 60002 WHPHD	THR60 64002 WHPHD
Heating Capacity kW	1,148	1,229	1,323	1,400	1,450	1,536	1606	1,675
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60

WATER to WATER SCREW HEAT PUMP THR 60 WHPV

KRISTHERM MODEL	THR60 6001 WHPV	THR60 6931 WHPV	THR60 7001 WHPV	THR60 9001 WHPV	THR60 12501 WHPV	THR60 14001 WHPV	THR60 16001 WHPV	THR60 18001 WHPV
Heating Capacity kW	135.4	159.5	206.7	285.7	356.9	392.3	497.8	556.1
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 21001 WHPV	THR60 24001 WHPV	THR60 28001 WHPV	THR60 32001 WHPV	THR60 12002 WHPV	THR60 12932 WHPV	THR60 14002 WHPV	THR60 18002 WHPV
Heating Capacity kW	604.0	686.0	769.8	840.2	280	322.8	425	571.5
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 21502 WHPV	THR60 25002 WHPV	THR60 26502 WHPV	THR60 28002 WHPV	THR60 30002 WHPV	THR60 32002 WHPV	THR60 34002 WHPV	THR60 36002 WHPV
Heating Capacity kW	641.2	709.6	742.9	778.7	899.3	999.5	1,079	1,104
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 39002 WHPV	THR60 42002 WHPV	THR60 45002 WHPV	THR60 48002 WHPV	THR60 52002 WHPV	THR60 56002 WHPV	THR60 60002 WHPV	THR60 64002 WHPV
Heating Capacity kW	1,193	1,208	1,294	1,370	1440	1,537	1,613	1,684
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

WATER to WATER SCREW HEAT PUMP THR 60 WHP1V

KRISTHERM MODEL	THR60 6001 WHP1V	THR60 6931 WHP1V	THR60 7001 WHP1V	THR60 9001 WHP1V	THR60 12501 WHP1V	THR60 14001 WHP1V	THR60 16001 WHP1V	THR60 18001 WHP1V
Heating Capacity kW	135.6	162.4	207.5	288.7	372.5	408.8	516.7	583.5
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 21001 WHP1V	THR60 24001 WHP1V	THR60 28001 WHP1V	THR60 32001 WHP1V	THR60 12002 WHP1V	THR60 12932 WHP1V	THR60 14002 WHP1V	THR60 18002 WHP1V
Heating Capacity kW	633.6	717.6	804.8	876	282.1	339.3	427.9	578.0
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 21502 WHP1V	THR60 25002 WHP1V	THR60 26502 WHP1V	THR60 28002 WHP1V	THR60 30002 WHP1V	THR60 32002 WHP1V	THR60 34002 WHP1V	THR60 36002 WHP1V
Heating Capacity kW	673.3	740.8	773.3	809.7	932.7	1,041	1,125	1,158
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

KRISTHERM MODEL	THR60 39002 WHP1V	THR60 42002 WHP1V	THR60 45002 WHP1V	THR60 48002 WHP1V	THR60 52002 WHP1V	THR60 56002 WHP1V	THR60 60002 WHP1V	THR60 64002 WHP1V
Heating Capacity kW	1,250	1,267	1,356	1,432	1,503	1,606	1,682	1,755
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet Temp °C	60	60	60	60	60	60	60	60

WATER to WATER SCREW HEAT PUMP THR 60 WHPHDV

KRISTHERM MODEL	THR60 6001 WHPHDV	THR60 6931 WHPHDV	THR60 7001 WHPHDV	THR60 9001 WHPHDV	THR60 12501 WHPHDV	THR60 14001 WHPHDV	THR60 16001 WHPHDV	THR60 18001 WHPHDV
Heating Capacity kW	138.8	162.1	211.8	296.4	375.9	410.1	515.1	590.2
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60

KRISTHERM MODEL	THR60 21001 WHPHDV	THR60 24001 WHPHDV	THR60 28001 WHPHDV	THR60 32001 WHPHDV	THR60 12002 WHPHDV	THR60 12932 WHPHDV	THR60 14002 WHPHDV	THR60 18002 WHPHDV
Heating Capacity kW	635.4	728.6	810.9	889	288.8	343.3	439.1	594.8
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60

KRISTHERM MODEL	THR60 21502 WHPHDV	THR60 25002 WHPHDV	THR60 26502 WHPHDV	THR60 28002 WHPHDV	THR60 30002 WHPHDV	THR60 32002 WHPHDV	THR60 34002 WHPHDV	THR60 36002 WHPHDV
Heating Capacity kW	678.6	749.5	779.2	812.1	933.4	1,038	1,131	1,166
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60

KRISTHERM MODEL	THR60 39002 WHPHDV	THR60 42002 WHPHDV	THR60 45002 WHPHDV	THR60 48002 WHPHDV	THR60 52002 WHPHDV	THR60 56002 WHPHDV	THR60 60002 WHPHDV	THR60 64002 WHPHDV
Heating Capacity kW	1,256	1,271	1,368	1,454	1,522	1,621	1,701	1,783
Evaporator Outlet Temp °C	7	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	50-60	50-60	50-60	50-60	50-60	50-60	50-60	50-60

WATER to WATER SCREW HEAT PUMP **THR 65 WHP**

KRISTHERM MODEL	THR65 6001 WHP	THR65 9001 WHP	THR65 11001 WHP	THR65 12501 WHP	THR65 14001 WHP	THR65 16001 WHP	THR65 18001 WHP
Heating Capacity kW	139.4	210.5	288.7	323.5	361.9	408.8	465.1
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 21001 WHP	THR65 24001 WHP	THR65 28001 WHP	THR65 30001 WHP	THR65 12002 WHP	THR65 18002 WHP	THR65 22002 WHP
Heating Capacity kW	520.4	593.8	667.3	757.7	286.2	429.7	577.7
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 25002 WHP	THR65 28002 WHP	THR65 32002 WHP	THR65 34002 WHP	THR65 36002 WHP	THR65 39002 WHP	THR65 42002 WHP
Heating Capacity kW	644.7	721.6	813.6	866.1	921.0	977.0	1,047
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 45002 WHP	THR65 48002 WHP	THR65 52002 WHP	THR65 56002 WHP	THR65 58002 WHP	THR65 60002 WHP
Heating Capacity kW	1,112	1,177	1,263	1,336	1,432	1,514
Evaporator Outlet Temp °C	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65

WATER to WATER SCREW HEAT PUMP THR 65 WHP1

KRISTHERM MODEL	THR65 6001 WHP1	THR65 9001 WHP1	THR65 11001 WHP1	THR65 12501 WHP1	THR65 14001 WHP1	THR65 16001 WHP1	THR65 18001 WHP1
Heating Capacity kW	139.6	210.8	289.0	323.8	362.0	407.4	463.2
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 21001 WHP1	THR65 24001 WHP1	THR65 28001 WHP1	THR65 30001 WHP1	THR65 12002 WHP1	THR65 18002 WHP1	THR65 22002 WHP1
Heating Capacity kW	521.1	595.2	670.0	761.1	287.5	431.0	578.6
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 25002 WHP1	THR65 28002 WHP1	THR65 32002 WHP1	THR65 34002 WHP1	THR65 36002 WHP1	THR65 39002 WHP1	THR65 42002 WHP1
Heating Capacity kW	645.3	722.0	810.1	862.2	917.0	976.1	1,049
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 45002 WHP1	THR65 48002 WHP1	THR65 52002 WHP1	THR65 56002 WHP1	THR65 58002 WHP1	THR65 60002 WHP1
Heating Capacity kW	1,113	1,179	1,267	1,341	1,438	1,520
Evaporator Outlet Temp °C	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65

WATER to WATER SCREW HEAT PUMP THR 65 WHPHD

KRISTHERM MODEL	THR65 6001 WHPHD	THR65 9001 WHPHD	THR65 11001 WHPHD	THR65 12501 WHPHD	THR65 14001 WHPHD	THR65 16001 WHPHD	THR65 18001 WHPHD
Heating Capacity kW	140.6	213.1	292.9	326.9	365.6	413.4	471.1
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	55-65	55-65	55-65	55-65	55-65	55-65	55-65

KRISTHERM MODEL	THR65 21001 WHPHD	THR65 24001 WHPHD	THR65 28001 WHPHD	THR65 30001 WHPHD	THR65 12002 WHPHD	THR65 18002 WHPHD	THR65 22002 WHPHD
Heating Capacity kW	527.8	605.2	682.0	776.5	289.7	435.9	586.6
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	55-65	55-65	55-65	55-65	55-65	55-65	55-65

KRISTHERM MODEL	THR65 25002 WHPHD	THR65 28002 WHPHD	THR65 32002 WHPHD	THR65 34002 WHPHD	THR65 36002 WHPHD	THR65 39002 WHPHD	THR65 42002 WHPHD
Heating Capacity kW	651.2	729.2	822.6	875.9	932.8	990.4	1,063
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	55-65	55-65	55-65	55-65	55-65	55-65	55-65

KRISTHERM MODEL	THR65 45002 WHPHD	THR65 48002 WHPHD	THR65 52002 WHPHD	THR65 56002 WHPHD	THR65 58002 WHPHD	THR65 60002 WHPHD
Heating Capacity kW	1,131	1,198	1,288	1,364	1,465	1,550
Evaporator Outlet Temp °C	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	55-65	55-65	55-65	55-65	55-65	55-65

WATER to WATER SCREW HEAT PUMP THR 65 WHPV

KRISTHERM MODEL	THR65 6001 WHPV	THR65 9001 WHPV	THR65 11001 WHPV	THR65 12501 WHPV	THR65 14001 WHPV	THR65 16001 WHPV	THR65 18001 WHPV
Heating Capacity kW	164.2	248.6	302.3	345.9	411.1	437.5	504.1
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 21001 WHPV	THR65 24001 WHPV	THR65 28001 WHPV	THR65 30001 WHPV	THR65 12002 WHPV	THR65 18002 WHPV	THR65 22002 WHPV
Heating Capacity kW	615.3	702.8	750.3	802.7	338.3	508.5	605.3
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 25002 WHPV	THR65 28002 WHPV	THR65 32002 WHPV	THR65 34002 WHPV	THR65 36002 WHPV	THR65 39002 WHPV	THR65 42002 WHPV
Heating Capacity kW	690.5	819.5	870.4	962.5	1,002	1,113	1,237
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 45002 WHPV	THR65 48002 WHPV	THR65 52002 WHPV	THR65 56002 WHPV	THR65 58002 WHPV	THR65 60002 WHPV
Heating Capacity kW	1315.0	1,392	1,492	1,502	1,592	1,604
Evaporator Outlet Temp °C	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65

WATER to WATER SCREW HEAT PUMP THR 65 WHP1V

KRISTHERM MODEL	THR65 6001 WHP1V	THR65 9001 WHP1V	THR65 11001 WHP1V	THR65 12501 WHP1V	THR65 14001 WHP1V	THR65 16001 WHP1V	THR65 18001 WHP1V
Heating Capacity kW	164.5	249	319.6	367.7	428.6	459.3	530.1
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 21001 WHP1V	THR65 24001 WHP1V	THR65 28001 WHP1V	THR65 30001 WHP1V	THR65 12002 WHP1V	THR65 18002 WHP1V	THR65 22002 WHP1V
Heating Capacity kW	616.1	704.1	790.2	849.3	340	510	639.2
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 25002 WHP1V	THR65 28002 WHP1V	THR65 32002 WHP1V	THR65 34002 WHP1V	THR65 36002 WHP1V	THR65 39002 WHP1V	THR65 42002 WHP1V
Heating Capacity kW	733.2	854.5	913.4	1,012	1,053	1,154.0	1,241
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65	65

KRISTHERM MODEL	THR65 45002 WHP1V	THR65 48002 WHP1V	THR65 52002 WHP1V	THR65 56002 WHP1V	THR65 58002 WHP1V	THR65 60002 WHP1V
Heating Capacity kW	1,316	1,393	1,497	1,582	1,692	1,696
Evaporator Outlet Temp °C	7	7	7	7	7	7
Condenser Outlet Temp °C	65	65	65	65	65	65

WATER to WATER SCREW HEAT PUMP **THR 65 WHPHDV**

KRISTHERM MODEL	THR65 6001 WHPHDV	THR65 9001 WHPHDV	THR65 11001 WHPHDV	THR65 12501 WHPHDV	THR65 14001 WHPHDV	THR65 16001 WHPHDV	THR65 18001 WHPHDV
Heating Capacity kW	165.5	251.5	320	367	432.8	456.4	523.9
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	55-65	55-65	55-65	55-65	55-65	55-65	55-65

KRISTHERM MODEL	THR65 21001 WHPHDV	THR65 24001 WHPHDV	THR65 28001 WHPHDV	THR65 30001 WHPHDV	THR65 12002 WHPHDV	THR65 18002 WHPHDV	THR65 22002 WHPHDV
Heating Capacity kW	623.6	715.9	789.0	851.8	342.4	515.4	640.7
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	55-65	55-65	55-65	55-65	55-65	55-65	55-65

KRISTHERM MODEL	THR65 25002 WHPHDV	THR65 28002 WHPHDV	THR65 32002 WHPHDV	THR65 34002 WHPHDV	THR65 36002 WHPHDV	THR65 39002 WHPHDV	THR65 42002 WHPHDV
Heating Capacity kW	730.1	863.0	909.5	1,003	1,038	1,149	1,257
Evaporator Outlet Temp °C	7	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	55-65	55-65	55-65	55-65	55-65	55-65	55-65

KRISTHERM MODEL	THR65 45002 WHPHDV	THR65 48002 WHPHDV	THR65 52002 WHPHDV	THR65 56002 WHPHDV	THR65 58002 WHPHDV	THR65 60002 WHPHDV
Heating Capacity kW	1,337	1,416	1,521	1,580	1,684	1,701
Evaporator Outlet Temp °C	7	7	7	7	7	7
Condenser Outlet/ Inlet Temp	55-65	55-65	55-65	55-65	55-65	55-65

WATER to WATER SCREW HEAT PUMP **THR 75 WCW**

KRISTHERM MODEL	THR75 6001 WCW	THR75 9001 WCW	THR75 12501 WCW	THR75 14001 WCW	THR75 18001 WCW	THR75 21001 WCW	THR75 24001 WCW
Heating Capacity kW	169.2	256.6	391.7	444.5	602.7	647.6	769.3
Evaporator Outlet Temp °C	25	25	25	25	25	25	25
Condenser Outlet/ Inlet Temp	75	75	75	75	75	75	75

KRISTHERM MODEL	THR75 28001 WCW	THR75 12002 WCW	THR75 18002 WCW	THR75 25002 WCW	THR75 28002 WCW	THR75 36002 WCW
Heating Capacity kW	872.9	347.8	532.1	778.1	885.1	1,189
Evaporator Outlet Temp °C	25	25	25	25	25	25
Condenser Outlet/ Inlet Temp	75	75	75	75	75	75

KRISTHERM MODEL	THR75 39002 WCW	THR75 42002 WCW	THR75 45002 WCW	THR75 48002 WCW	THR75 52002 WCW	THR75 56002 WCW
Heating Capacity kW	1233.0	1310.0	1,417	1,523	1,637	1,745
Evaporator Outlet Temp °C	25	25	25	25	25	25
Condenser Outlet/ Inlet Temp	75	75	75	75	75	75

WATER to WATER SCREW HEAT PUMP **THR 75 WCW1**

KRISTHERM MODEL	THR75 6001 WCW1	THR75 9001 WCW1	THR75 12501 WCW1	THR75 14001 WCW1	THR75 18001 WCW1	THR75 21001 WCW1	THR75 24001 WCW1
Heating Capacity kW	169.2	256.6	395.0	448.1	602.8	651.4	773.0
Evaporator Outlet Temp °C	25	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75	75

KRISTHERM MODEL	THR75 28001 WCW1	THR75 12002 WCW1	THR75 18002 WCW1	THR75 25002 WCW1	THR75 28002 WCW1	THR75 36002 WCW1
Heating Capacity kW	878.0	351.5	534.4	784.3	902.4	1,190
Evaporator Outlet Temp °C	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75

KRISTHERM MODEL	THR75 39002 WCW1	THR75 42002 WCW1	THR75 45002 WCW1	THR75 48002 WCW1	THR75 52002 WCW1	THR75 56002 WCW1
Heating Capacity kW	1,238	1,321	1,426	1,530	1,648	1,756
Evaporator Outlet Temp °C	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75

WATER to WATER SCREW HEAT PUMP THR 75 WCWV

KRISTHERM MODEL	THR75 6001 WCWV	THR75 9001 WCWV	THR75 12501 WCWV	THR75 14001 WCWV	THR75 18001 WCWV	THR75 21001 WCWV	THR75 24001 WCWV
Heating Capacity kW	179.5	278.1	372.3	440.4	565.8	677.1	816.5
Evaporator Outlet Temp °C	25	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75	75

KRISTHERM MODEL	THR75 28001 WCWV	THR75 12002 WCWV	THR75 18002 WCWV	THR75 25002 WCWV	THR75 28002 WCWV	THR75 36002 WCWV
Heating Capacity kW	855.4	365.1	577.5	739.8	879.3	1,117
Evaporator Outlet Temp °C	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75

KRISTHERM MODEL	THR75 39002 WCWV	THR75 42002 WCWV	THR75 45002 WCWV	THR75 48002 WCWV	THR75 52002 WCWV	THR75 56002 WCWV
Heating Capacity kW	1,227	1,371	1,502	1,616	1,682	1,710
Evaporator Outlet Temp °C	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75

WATER to WATER SCREW HEAT PUMP THR 75 WCW1V

KRISTHERM MODEL	THR75 6001 WCW1V	THR75 9001 WCW1V	THR75 12501 WCW1V	THR75 14001 WCW1V	THR75 18001 WCW1V	THR75 21001 WCW1V	THR75 24001 WCW1V
Heating Capacity kW	179.5	278.1	391.4	463.4	586.9	710.1	851.6
Evaporator Outlet Temp °C	25	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75	75

KRISTHERM MODEL	THR75 28001 WCW1V	THR75 12002 WCW1V	THR75 18002 WCW1V	THR75 25002 WCW1V	THR75 28002 WCW1V	THR75 36002 WCW1V
Heating Capacity kW	889.3	383.2	597.5	777.6	932.5	1,162
Evaporator Outlet Temp °C	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75

KRISTHERM MODEL	THR75 39002 WCW1V	THR75 42002 WCW1V	THR75 45002 WCW1V	THR75 48002 WCW1V	THR75 52002 WCW1V	THR75 56002 WCW1V
Heating Capacity kW	1,281	1,441	1,577	1,685	1,754	1,778
Evaporator Outlet Temp °C	25	25	25	25	25	25
Condenser Outlet Temp °C	75	75	75	75	75	75

Application

Hotel & Hospitality | Pharmaceutical & Processing Plant | Luxury Residential Complex & Villa | IT Park
Mall & Retail Outlet | Hospital | Commercial Complex & Office Building | Bank & Airport

HIGH EFFICIENCY AIR TO AIR HEAT PUMP

Environment Friendly, Maintenance & Emission Free

For Hot Air 70 to 75°C

Reduced Energy Consumption

Reduced Energy Costs

Reduced Environmental Impact



Dehydrated Onions & Garlic



Dehydrated
Drugs & Chemicals



Dehydrated Chilli Powder



Dehydrated Seafood



Dehydrated Tomato Powder

Dehydrated Vegetables and Fruits

Dehydrated Dry Fruits



Dehydrated Vegetables Powder



Dehydrated Sweet corn



Dehydrated Spices

AIR TO AIR HEAT PUMP

CUSTOMIZED AS PER REQUIREMENT

Description

Air to Air Heat Pumps are designed for operation on Refrigeration principal. The system consist of Refrigeration Screw Compressors, Condenser and Evaporator with necessary control system. The equipment provide Hot Air **70 to 75°C** from the Heat Exchanger which is taken to Drying Equipment.

The air from the atmosphere is used as Heat source to produce Hot Air.

Air-to-air heat (A2A) pumps extract heat energy from the outside or exhaust air and transfer it to Air to be heated. Air-to-air heat pumps have heat exchanger coil for extracting heat and transfer of heat to the air. The Hot Air is supplied in the Dryer through duct where the same is used for drying the product.

Salient Features

Reduced Energy Consumption

Extracts more energy from the air (in the form of heat) than it consumes (in the form of electricity). High efficiency models can operate cost-effectively and result into reduced energy consumption.

Reduced Energy Costs:

- Reduces energy cost as it produces 4 to 5 KW Heating Output per KW of Electricity consumed Replaces or augments existing space heating and cooling systems.

Reduced Environmental Impact:

- For electric heating systems, can lower pollutant emissions associated with Fossil fuel based Heat generating plant

Installation Requirements:

-Works with existing Dryers using Boiler Heating system and New requirements.

-For temperature requirement higher than 75 Degree C, combination of Boiler/ Electrical Heating system and Air to Air Heat Pump system can be offered.

-An air-to-air heat pump can be added on to an existing gas, electric or oil furnace, or used as a stand-alone replacement for a furnace with its own built-in auxiliary heat source.

-For higher temperature application combination of Heat Pump and Boiler/ Electrical Heating system can be designed.



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INSTALLATION - COMMISSIONING - TROUBLE SHOOTING - MAINTENANCE - OPERATIONS



Select Indian Reference List (HOSPITALS & HOTELS)



Shayadri Hospital, Pune

Water to Water Screw Hot Water System
245 KW x 2 Nos.
Year of Installation : 2012



Bombay Hospital, Indore

Water to Water Screw Hot Water System
230 KW x 1 No.
Year of Installation : 2003



Bombay Hospital, Mumbai

Water to Water Screw Hot Water System
175 KW x 1 No.
Year of Installation : 2007



The Leela Palace, Bangalore

Water to Water Screw Hot Water System
400 KW x 1 No.
Year of Installation : 2014



Ritz Carlton Hotel, Bangalore

Water to Water Screw Hot Water System
400 KW x 1 Nos.
Year of Installation : 2016



RAAS Devigarh Palace, Udaipur

Water to Water Screw Hot Water System
400 KW x 1 Nos.
Year of Installation : 2016

Select Indian Reference List (HOTELS)



Marriot Hotel, Hyderabad

Water to Water Screw Hot Water System
408 KW x 1 No.
Year of Installation : 2012



Marriot Hotel, Bangalore

Water to Water Screw Hot Water System
240 KW x 2 Nos.
Year of Installation : 2011



Marriot International, Pune

Water to Water Screw Hot Water System
611 KW x 3 Nos.
Year of Installation : 2009



Marriott Courtyard, Pune

Water to Water Screw Hot Water System
480 KW x 2 Nos.
Year of Installation :



Fariyas Hotels & Resort, Lonavala

Water to Water Screw Hot Water System
182 KW x 1 No.
Year of Installation : 2012



Hotel Panchshil, Pune

Water to Water Screw Hot Water System
114 KW x 1 No.
Year of Installation : 2011

Select Indian Reference List (HOTELS)



Hotel Atria, Bangalore

Water to Water Screw Hot Water System
116 KW x 1 No.
Year of Installation : 2011



Hotel Sayaji, Indore

Water to Water Screw Hot Water System
144 KW x 1 No.
Year of Installation : 2011



Hotel Renaissance, Mumbai

Water to Water Screw Hot Water System
755 KW x 1 No.
Year of Installation : 2010



The Dukes Retreat Ltd, Khandala

Water to Water Screw Hot Water System
263 KW x 1 No.
Year of Installation : 2007



Aksa Beach Resort, Mumbai

Water to Water Screw Hot Water System
210 KW x 1 No.
Year of Installation : 2010



Hotel Taj Holiday Village, Goa

Water to Water Screw Hot Water System
95 KW x 1 No.
Year of Installation : 2003

Select Indian Reference List (Industries)



Dr. Reddy Laboratory, Hyderabad

Water to Water Screw Hot Water System
402 KW x 3 Nos.
Year of Installation : 2011



Macleods Pharma, Daman

Water to Water Screw Hot Water System
514 KW x 1 No.
Year of Installation : 2010



Intas Pharma, SEZ (Ahmedabad)

Water to Water Screw Hot Water System
510 KW x 2 Nos.
Year of Installation : 2009



Kilitch Drugs, Mumbai

Water to Water Screw Hot Water System
439 KW x 1 No.
Year of Installation : 2006



Cipla Ltd., Baddi

Water to Water Screw Hot Water System
650 KW x 1 No.
Year of Installation : 2005

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