

Reborn Everyday With Hot Water



SOLAR AND HEAT PUMP WATER HEATER CATALOGUE



Reborn Everyday With Hot Water



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India's Largest Provider of Water Heating Solutions

# INDEX RACOLD - COMPANY PROFILE COMMERCIAL SOLAR WATER HEATERS ARISTON THERMO GROUP COMMERCIAL HEAT PUMP RENEWABLE? WHAT? WHY? HYBRID SOLUTIONS ELECTRIC WATER HEATERS DOMESTIC SOLAR WATER HEATERS SUCCESSFUL PROJECTS OMEGA MAX 8

## ON TOP OF THINGS. ALWAYS.



Racold is India's most trusted brand of water heaters from the house of Ariston, with a portfolio of premium quality products that cover the entire spectrum of water heating solutions.

At Racold, our products are a testimony of our commitment towards understanding our consumer's needs.

Racold is a brand synonymous with breakthrough innovation, quality water heating solutions and complete customer satisfaction.

Quality hot water from Racold enables physical and emotional transformation.















# WHAT MAKES US DIFFERENT



With a complete range of electrical, gas, solar water heaters and heat pumps, we have been providing complete water heating solutions to all sectors, ranging from domestic to commercial and industrial.

Comprehensive With variations in capacity, features, size, colours and source, Heating Solutions we offer a range of water heating solutions to fit your bathing space.



Energy Efficiency

Racold has placed energy efficiency at the heart of its sustainable growth strategy and is deeply committed to energy conservation.

We are the only water heater company to be awarded seven times in a row by the Bureau of Energy Efficiency (BEE), which further testifies our commitment to energy efficiency.

Most of our products are 5-star rated which help in cutting down the electricity bills of the consumer and energy preservation as well.



Ariston Thermo applies the WCM method at its plants to constantly improve manufacturing productivity as well as ensure product quality and maximum flexibility in meeting customers' demands.



A global leader with over 85 years of experience in providing innovative thermic comfort solutions for domestic, commercial and industrial spaces.

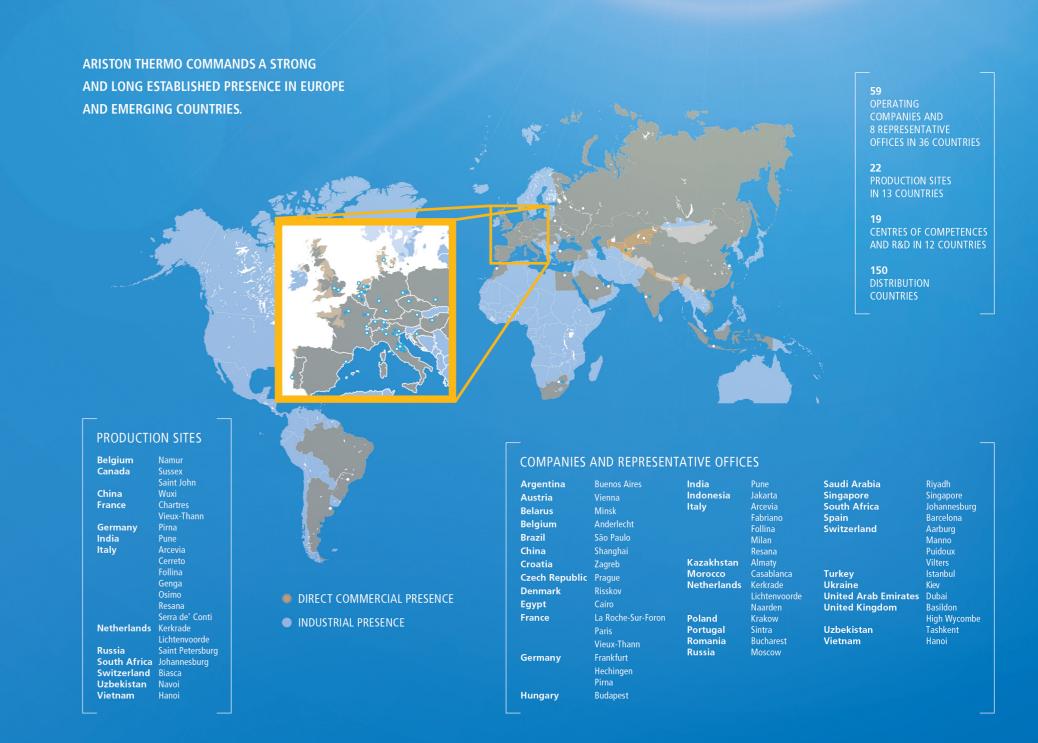
Globally, Ariston Thermo is synonymous with energy efficiency, comfort and respect for the environment. What makes this possible for us, are high efficiency products, factories compliant with the most advanced production standards and excellent pre and post sales customer support services.



Today, our products touch people's lives in over 150 countries.

Our production capabilities span across Belgium, China, France, Germany, India, Italy, Netherlands, Russia, South Africa, Switzerland, Uzbekistan and Vietnam.

**Ariston Thermo India Private Limited** is a wholly owned subsidiary of Ariston Thermo Group, Italy, responsible for marketing, sales and service of Racold products in South Asia.



# RENEWABLE?

At Racold, we create the future today – a greener world for our children.

Clean energy is everywhere around us. Solar water heaters and heat pumps utilize this clean energy helping us embrace a new way of water heating.



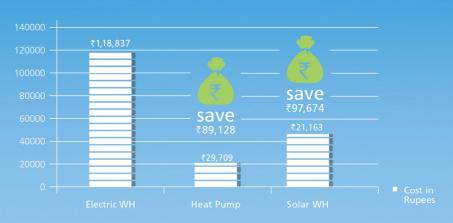
## **SOLAR WATER HEATING SOLUTIONS**

Converts solar energy into heat energy for water heating. They use solar thermal collecting panels.

## **HEAT PUMP WATER HEATING SOLUTIONS**

Consumes only 30% of electricity to move hot air from one place to anothe resulting in up to 70% savings of fuel cost.

Annual Cost Incurred (Rupees) for 1000 liters per day



ave upto 82% by using our solar water heaters and upto 75% by using our heat pump water heaters.



## A GREENER WORLD. IT ALL STARTS FROM HOME.

## What Makes Us Different?

We have redefined industry standards in water heating solutions for domestic use by driving technological innovations and enhancing quality, durability, safety and performance.

We have developed state-of-the-art products that cater to the customer's dynamically evolving needs. This has led us to develop innovative technological features like Smart Float, Max 8 and suitability for hard water applications.







(up to 8 bar) makes it suitable for

EVACUATED TUBE COLLECTOR

ALPHA\_

SOLAR WATER HEATERS

HEAT PUMP

\_WATER HEATER

FLAT PLATE COLLECTOR

OMEGA MAX 8

EVACUATED TUBE COLLECTOR ALPHA PRO \_\_\_

AND HEAT PUMPS

DOMESTIC C

**3)** Racold

# ALPHA PRO

Radiation from the sun passes through the transparent outer glass tube and hits the absorber coating on the tube, converting the solar radiation into thermal energy.

## **ALPHA PRO**

Alpha Pro solar water heaters use a high-energy absorption vacuum tube of over 1800 mm length, which ensures optimum energy absorption and high efficiency.



#### APPLICATION:

☐ INDIVIDUAL HOUSES/FLATS











## **FEATURES**



A unique float valve only offered by Racold, that eliminates long air vents to ensure safe usage, particularly in high wind velocity areas.



Suitable for hard water applications upto 1000 PPM, 500 Chloride and 7.5 pH.



Racold's unique design ensures durability, low maintenance and blends seamlessly with building aesthetics.



The tank comes with a 5-year warranty assuring a dependable service.



Specially treated Duronox SS 304 L tank ensures durability and resistance against corrosion.



rable and strong outer body.



Racold Vacuum Tubes are designed keeping with international standards ensuring optimum energy absorption and higher efficiency.

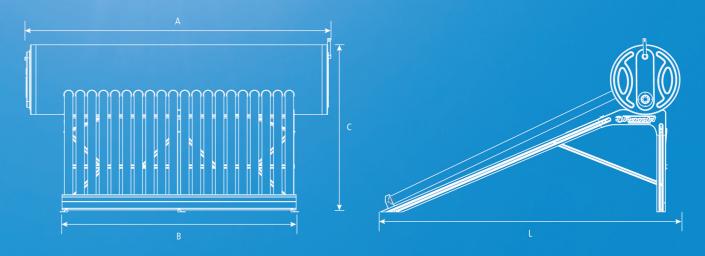
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## ETC ALPHA PRO COMPARISON TABLE

CHARACTERISTICS	RACOLD	OTHERS	RACOLD ADVANTAGE
OUTER BODY	Zinc Alume Sheet	MS / FRP / AL	Non-corrosive, durable and long life
INNER CONTAINER	Food Grade SS 304L	SS / MS	Low-carbon steel, corrosion resistant durable and long life
INNER CONTAINER WELDING	Plasma welding by automated machines	TIG welded by manual welding machines	Uniform welding, strong and corrosion resistant
SPECIAL PROTECTION FOR INNER CONTAINER	Passivated with special chemicals	Not available	Non-corrosive, protects from chlorides in the water
CONTAINER INSULATION	High density PUF injected with automatic machines	Rockwool / PUF Manual filling machines	Superior heat retention
ANODE	Special Magnesium anode	Not available	Additional safety against corrosion ensuring longer life
TUBE LENGTH	1800 mm / 2100 mm	1500 mm	Optimised length for better performance
ELECTRICAL BACKUP	99.9% pure copper tubular	Not specified	Higher efficiency, longer life
THERMOSTAT FOR ELECTRICAL BACKUP	Italian thermostat cum cut-out	Unbranded thermostat of unknown make	Double safety and more reliability
INNER CONTAINER GUARANTEE	5 years	1 year / 5 years warranty performance warranty	Dependable

## ETC ALPHA PRO TECHNICAL SPECIFICATIONS



Sr. No.	Model	Capacity	No. of	Tube	Dimensions		Ideal for	
		(LPD)	Tubes	Specification	Α	В	С	Family Size
1	100 LPD	100	10	Ø58 X 1800	1965	1175	1150	4
2	150 LPD	150	15	Ø58 X 1800	1965	1575	1150	6
3	200 LPD	200	20	Ø58 X 1800	1965	2075	1150	8
4	250 LPD	250	25	Ø58 X 1800	1965	2625	1150	10
5	300 LPD	300	30	Ø58 X 1800	1965	3025	1150	12

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## ALPHA

Alpha solar water heaters use a high-energy absorption vacuum tube of over 1800 mm length, which ensures optimum energy absorption and high efficiency.



#### APPLICATION:

☐ INDIVIDUAL HOUSES/FLATS







A HIGH END VILLAS



## **FEATURES**



The tank comes with a 5 year warranty assuring a dependable service.



Specially treated Duronox SS 304 L tank ensures durability and resistance against corrosion.



Durable and strong outer body



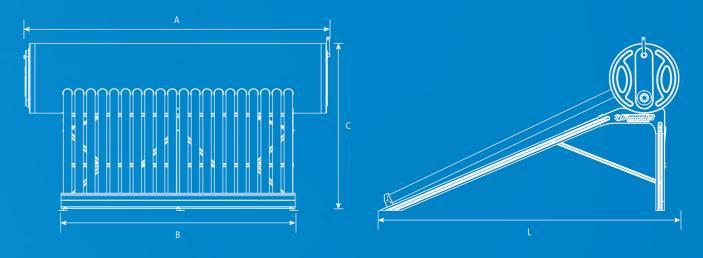
Racold Vacuum Tubes are designed keeping with international standards ensuring optimum energy absorption and higher efficiency.

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## ETC ALPHA COMPARISON TABLE

CHARACTERISTICS	RACOLD	OTHERS	RACOLD ADVANTAGE
OUTER BODY	Zinc Alume Sheet	MS/FRP/AL	Non-corrosive, durable and long life
INNER CONTAINER	Food Grade SS 304L	SS/MS	Low-carbon steel, corrosion resistant durable and long life
INNER CONTAINER WELDING	Plasma welding by automated machines	TIG welded by manual welding machines	Uniform welding, strong and corrosion resistant
SPECIAL PROTECTION FOR INNER CONTAINER	Passivated with special chemicals	Not available	Non-corrosive, protects from chlorides in the water
CONTAINER INSULATION	High density PUF injected with automatic machines	Rockwool / PUF Manual filling machines	Superior heat retention
ANODE	Special Magnesium anode	Not available	Additional safety against corrosion ensuring longer life
TUBE LENGTH	1800 mm / 2100 mm	1500 mm	Optimised length for better performance
ELECTRICAL BACKUP	99.9% pure copper tubular	Not specified	Higher efficiency, longer life
THERMOSTAT FOR ELECTRICAL BACKUP	Italian thermostat cum cut-out	Unbranded thermostat of unknown make	Double safety and more reliability
INNER CONTAINER GUARANTEE	5 years	1 year / 5 years warranty performance warranty	Dependable

## ETC ALPHA TECHNICAL SPECIFICATIONS



Sr. No.	Model	Capacity	No. of	Tube	Dimensions		Ideal for	
		(LPD)	Tubes	Specification	A	В	С	Family Size
1	100 LPD	100	10	Ø58 X 1800	1965	1175	1150	4
2	150 LPD	150	15	Ø58 X 1800	1965	1575	1150	6
3	200 LPD	200	20	Ø58 X 1800	1965	2075	1150	8
4	250 LPD	250	25	Ø58 X 1800	1965	2625	1150	10
5	300 LPD	300	30	Ø58 X 1800	1965	3025	1150	12
6	500 LPD	500	50	Ø58 X 1800	1965	4145	1150	20

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## **OMEGA MAX 8**

Omega MAX 8 solar water heater has a special Air Release Valve with Vacuum Release Function that releases air and avoids vacuum buildup, thus protecting the life of the water tank.



#### APPLICATION:

INDIVIDUAL HOUSES/FLATS









A HIGH END VILLAS

## **FEATURES**



High pressure withstanding capacity (up to 8 bar) makes it suitable for all pressurized applications.



Specially treated Duronox SS 316 L tank ensures durability and resistance against corrosion



High-density injected PUF insulation ensures maximum heat retention. PUF with insulation properties is twice as effective as any other insulation material.



Italian design screwless collector with textured glass and water proof collector body with high structural strength for dependable performance and high durability.



Magnesium sacrificial anode protects tank from corrosion by forming a layer of magnesium on the inner tank.



nc Allu sheet is used to increase rability and for stronger outer body.



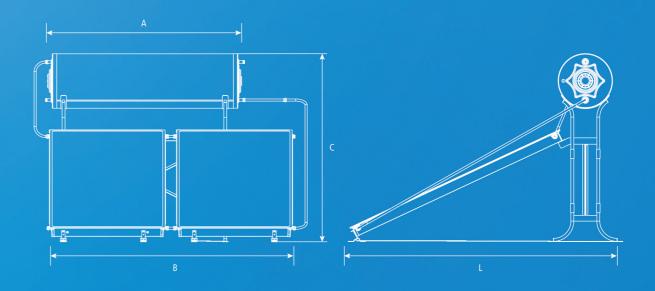
Multi-function Safety Valve makes solar water heater the safest with pressure relief, non-return, anti-vacuum and drainage function.



## OMEGA MAX 8 COMPARISON TABLE

CHARACTERISTICS	RACOLD	OTHERS	RACOLD ADVANTAGE
OUTER BODY	Zinc Alume Sheet	MS / FRP / AL	Non-corrosive, durable, UV resistant and long life
INNER CONTAINER MATERIAL	Food Grade SS 316L, plasma welding by	SS / MS TIG welded by manual welding machines	Low-Carbon steel, corrosion resistant, durable and long life
SPECIAL PROTECTION FOR INNER CONTAINER	Passivated with special chemicals	Manual coating of epoxy/enamel	Corrosion resistant, durable and long inner life, coatings on MS don't last for long causing corrossion
PRESSURE WITHSTANDING CAPACITY	8 Bar	3/5 Bar	Capable of withstanding high operating pressure
SAFETY VALVE	Italian – 4 in 1 Multifunctional Safety Valve	Not available	Makes your solar the safest with pressure relief, non-return, anti-drainage function and drainage function
ADDITIONAL SAFETY	Special imported Air Release & Vacuum Release Valve	Not available	Releases air and avoids vacuum
CONTAINER INSULATION	High density injected with automatic machines	Rockwool / PUF Manual filling machines	Superior heat retention
ANODE	Special Magnesium anode	Not available	Additional safety against corrosion ensuring longer life
COLLECTOR FRAME FOR GLASS RETENTION	Italian design, frameless construction-glass bonded	Aluminium strips joined with 30 – 40 screws	Consistent performance, complete protection against water leakage
COLLECTOR GLASS	High performance textured toughened glass	Clear tempered/ toughened glass	Maximizes solar performance
BOX CONSTRUCTION NO.	Single box structure is Zinc Alume Sheet	Four aluminium frames riveted with back sheet	Sturdy, durable, UV resistant and long life
ELECTRICAL BACKUP WITH THERMOSTAT	Tubular, 99.9% pure copper with Italian thermostat cum cut-out	Unbranded	Long life, higher efficiency and double safety
INNER CONTAINER GUARANTEE	5 years	Not specified	Dependable
COLLECTOR GUARANTEE	7 years	1 year warranty	Dependable

## OMEGA MAX 8 TECHNICAL SPECIFICATIONS



Sr. No.	Model	Capacity	No. of Collectors	Dimensions			Ideal for Family Size
				Α	В	C	4
1	100 LPD	100	1	2428	1278	1633	6
2	200 LPD	200	2	2428	2391	1633	8
3	250 LPD	250	2	2428	2391	1633	10
4	300 LPD	300	3	2426	3526	1781	12
5	500 LPD	500	4	2424	4665	1762	20







## | HEAT PUMP |

WATER HEATER

The Racold heat pump water heater is a new generation water heater that uses the principle of reverse carnot cycle to absorb heat from the air to heat water inside the tank.

#### **HEAT PUMP WATER HEATER**

It uses 70% less electricity compared to conventional water heating solutions. It uses electricity only to move heat from one place to another instead of using it to generate heat.



## **FEATURES**



Isolated Safe
Condenser
Designed according
to European
standards to ensure
safety and superior
conduction of
heat.



New titanium enameling technology for the inner container to ensure greater corrosion resistance against hard water. Suitable for high-rise buildings and pressure pumps due to its pressure withstanding capacity.



Magnesium coating for protection and long life.



Works in both Heat Pump and Heating element mode, giving instant hot water.



Microprocessor-based controller displays the hot water temperature and quantity and helps you choose between Standard Timing, Night, and Sleep modes. Fully functioning remote and LCD screen for quick and easy access.



Ensures faster heat exchange, more hot water and increased savings.



2-year warranty on product and inner tank assuring a dependable service.

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## **HEAT PUMP WATER HEATER**

## How does it work?

## Thermodynamic cycle:

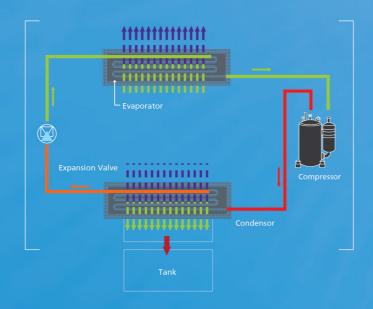
External air is sucked inside the heat pump with the help of a fan.

Since the refrigerant in the evaporator is kept at a lower temperature than the surrounding atmosphere, it absorbs heat from the surrounding and evaporates.

The compressor compresses the gaseous refrigate and raises the pressure and temperature of the refrigerant.

The heated refrigerant runs through the condenser coil wrapped around the storage tank, transferring the heat to the water stored there and it cools and forms a condensate.

The refrigerant then passes through an expansion valve where the pressure and temperature is reduced further for the whole process to start again.



## **HEAT PUMP WATER HEATER COMPARISON TABLE**

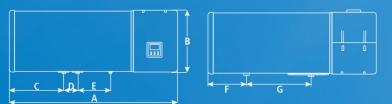
PARAMETERS	Heat Pump Water Heaters	Electric Water Heater
Operating Cost (%)	28	100
Place of Installation	Any place	Any place
Source of Energy	2/3 from atmosphere (renewable energy) + 1/3 from electrical power	Electrical Power
Heating Time*	2 hours (multiple heating cycles)	2-3 hours (multiple heating cycles)
Temperature of Hot Water	55° C	60 to 70°C
Climatic Constraints	None (works throughout the year)	None (works throughout the year)

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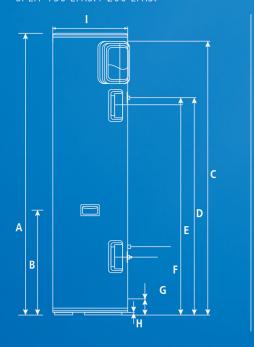


## HEAT PUMP WATER HEATER PRODUCT DIMENSIONS

## MONOBLOCK 65 LTRS. / 80 LTRS.

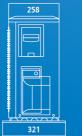


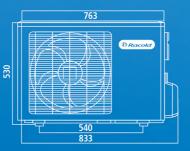
Model	Α	В	С	D	E	F	G
65	1129	476	349	100	195	275	384
80	1212	476	391	100	236	275	467



Model	Α	В	С	D	Е	F	G	Н	1
150	1486	670	1429	1024	1004	414	364	17	495
200	1894	705	1841	1462	1409	460	390	17	510

## Split Unit:





## HEAT PUMP WATER HEATER TECH-SPEC CHART

Sr. No.	Model	150 Ltrs.	200 Ltrs.	
1	Capacity (Ltrs)	150 200		
2	Product Configuration	Sį	olit	
3	COP	3	.6	
4	Noise level in dB (1 meter as per standard)	4	.2	
5	Operating pressure (bar)		8	
6	Heating element (kW)		.8	
7	Refrigerant	R1	34a	
8	Tank net weight - without water (kgs)	50	75	
9	Product dimensions	495 x 1486 510 x 189		
10	Mains Electrical Connection (V/Hz)	(198 -26	4) V/50Hz	
11	Anode	Λ	1g	
12	Maximum temperature setting - HP Mode (°C)	5	5	
13	Maximum temperature setting with electrical heating element (°C)	7	'5	
14	Heating time (h:min) HP	2:20	3:20	
15	Heating time (h:min) HP+HE	1:20	2:00	
16	Power output (W)	2600		
17	Power input (W)	7.	20	
18	Volume @ 40°C (Ltrs)	209 282		





## What is a Commercial Solar Water Heater?

Our expertise is to provide complete end to end water heating solutions for commercial applications. We have done successful projects for residential, hospitality, medical and health care, educational and industrial sectors etc. Racold renewable water heating solutions are available in Evacuated tube collectors and Flat Plate Collectors.

## What makes us different?

We have redefined industry standards in the world of water heating. Starting with a dedicated team of engineers propelling each project from start to finish, to innovations such as customized tanks to suit specific requirements, we leave no stone unturned. We have made considerable efforts towards maximizing potential through thorough site surveys, feasibility studies and layout planning simulations while simultaneously setting a gold standard in expertly executing turnkey projects providing water heating solutions across categories.



#### DEDICATED TEAM

Dedicated team of Racold engineers right from need identification to project completion



#### CUSTOMIZED SOLUTIONS

Racold offers customized tanks to suit tailor made requirements. Capacity can be availed starting from 100 Liters Per Day to 20,000 Liters Per Day



#### SITE SURVEY

A site visit to thoroughly conduct a technical feasibility study to ascertain the precise requirement is mandatory for ensuring the proper design as well as smooth execution of the project



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# EVACUATED TUBE COLLECTOR

Consists of a number of rows of parallel transparent glass tubes connected in a series. These tubes are connected to a tank and are cylindrical in shape making it more efficient to extract heat even in low sunlight conditions.



# FLAT PLATE COLLECTOR

Sunlight passes through the outer glass plate covering and strikes the absorber plate, which heats up converting solar energy into heat energy.

transfer. Flat plate collectors are long lasting and cheaper in the long run.





## **COMMERCIAL SOLAR WATER HEATER**

## How does it work?

#### Natural circulation:

Suitable for domestic applications where hot water requirements are limited and maintaining exact temperature is not imperitive. Due to this natural phenomenon water circulates from the solar collector to the inner container by natural convection.

#### Forced circulation:

This system has greater control on water and temperature output and is thus ideal for commercial and industrial establishments where hot water consumption is high. Here water is pumped from the collector to the inner container once it achieves the set temperature.

## Indirect heating type:

Solar radiation heats the thermal fluid in the collector and once it achieves the set temperature, it is pumped from the collector to the heat exchanger. This heat is transferred to the utility water through this heat exchanger.

#### THE RACOLD ADVANTAGE



Dedicated team of Racold engineers right from need identification to project completion.



Because of this unique design, Flat plate collector is: a) Durable b) Consistent in Performance c) High in Efficiency throughout the life span of the product.



Racold's Evacuated Tube Collector offers high energy efficient tubes inline with international standards and norms.



Racold offers customized tanks to suit tailor made requirements. Capacity can be availed starting from 100 Liters Per Day to 20,000 Liters Per Day.



Racold's Flat Plate Collector comes with unique Italian design. This includes:

a) Screwless Construction b) Box Type
Structure c) Textured toughened glass.

#### THE RACOLD VALUE-ADDS



**Site survey** - A site visit to thoroughly conduct a technical feasibility study to ascertain the precise requirement is mandatory for ensuring the proper design as well as smooth execution of the project



**Consultancy -** We provide expert consultancy with regard to any type of renewable water heating solutions for hot water for existing or new clients or projects.



**System design and Engineering** - Based on findings of our technical feasibility study, we then fully customize the renewable hot water solution which will result in optimal performance.



**Turnkey projects -** We hold expertise in executing turnkey projects for Solar Water Heating Solutions with a combination of both heat pumps and solar water heating solutions as per the demand of the situation.



**Layout planning -** Next, the design of the detailed process is presented to our client in 2D / 3D layouts, shadow simulation and instrumentation plan.



**AMC** - Our Annual Maintenance Contract assures you of our best service for the maintenance and upkeep of your renewable hot water solution, always.

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HEAT PUMP

Uses 70% less electricity as compared to conventional water heater solutions.



## How does it work?

The Racold commercial heat pump water heater is a new generation high efficiency, energy saving, environment friendly, water heating solution. It is a combination of the highest quality and latest eco-friendly technology. It uses 70% less electricity compared to conventional water heating solutions. It uses it only to move heat from one place to another instead of using it to generate heat. This results in 70% less electricity consumption.

## ANNUAL COST INCURRED (RUPEES) FOR 1000 LITERS PER DAY



APPLICATION:

INDIVIDUAL HOUSES/FLATS

PAP BUNGALOWS

HOTELS

HOSPITALS

HIGH END VILLAS

APARTMENTS

INDUSTRIAL

CORPORATE CANTEENS

FAST FOOD CHAINS

**⊕** GYM

SPA

Save upto 75% by using our heat pump water heaters.

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## COMMERCIAL HEAT PUMP

## How does it work?

## **Thermodynamic Cycle:**

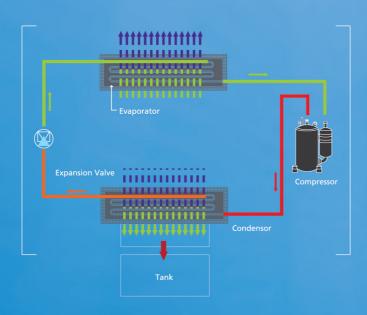
External air is sucked inside the heat pump with the help of a fan.

Since the refrigerant in the evaporator is kept at a lower temperature than the surrounding atmosphere, it absorbs heat from the surrounding and evaporates.

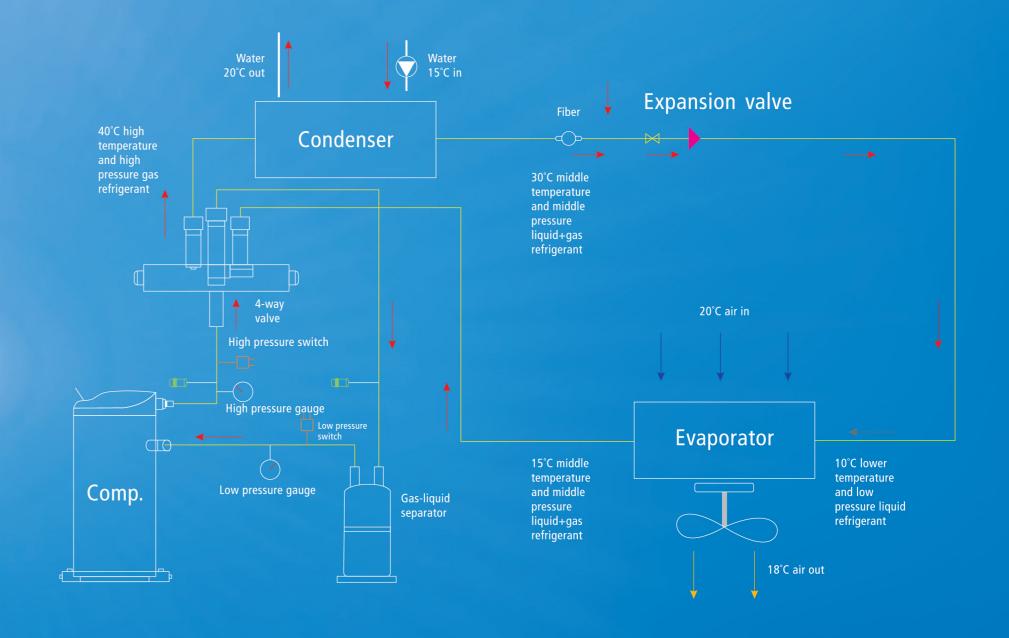
The compressor compresses the gaseous refrigate and raises the pressure and temperature of the refrigerant.

The heated refrigerant runs through the condenser coil wrapped around the storage tank, transferring the heat to the water stored there and it cools and forms a condensate.

The refrigerant then passes through an expansion valve where the pressure and temperature is reduced further for the whole process to start again.



## COMMERCIAL HEAT PUMP WATER HEATING CYCLE





## COMMERCIAL HEAT PUMP ADVANTAGES



Save More Energy - Save up to 70% energy compared to conventional water heating solutions



SMART Digital Control - Temperature and the time when hot water is required can be easily set via smart digital controller



Save More Space - Compact design saves more space as compared to other conventional water heating solutions



Get 24x7 @ 365 Days Hot Water -Hot water is available 24x7. It is unaffected by climatic changes



**Payback Period -** Investment on water heater can be recovered within 2 to 3 years through accrued savings on energy bills



Safe and Reliable - It is 100% shock free as electricity and water flow is separated in



**Environment Friendly -** We use the environment friendly refrigerant R417A



Racold Service - Log in on our website to register a service request or just call us on our helpline numbers, WhatsApp us or Email us

## COMMERCIAL HEAT PUMP TECH-SPEC CHART

Model / Model		R HPWH 6SP	R HPWH 11SP
Power Supply	(V/ph)	220/1	220/1
Frequency	Hz	50	50
Rated Heating Power Output	kW	5.57	10.7
Rated Heating Power Input	kW	1.36	2.74
COP	kW	4.1	3.9
Water Production	L/h	119	229
Refrigerant / Weight	gram	R417A/1200	R417A/2100
Required Water Flow Rate	(m3/h)	1.6	2
Pressure Loss	KPa	40	45
Max. Operation Current	Amp	9	20
Max. Suction / Discharge Pressure	MPa	1.2/2.8	1.2/2.8
Max. Heat Exchanger Pressure	Мра	2.8	2.8
Water Connection Size		G3/4"	G1
Level Against Electric Shock		The state of the s	1
Water-proof Grade		IPX4	IPX4
Noise	Db(A)	≤56	≤58
Net Weight	kg	65	84
Net Size	Mm	835x320x870	1200x440x870
Operation Temperature Range	°C	-10~ 45	-10~ 45

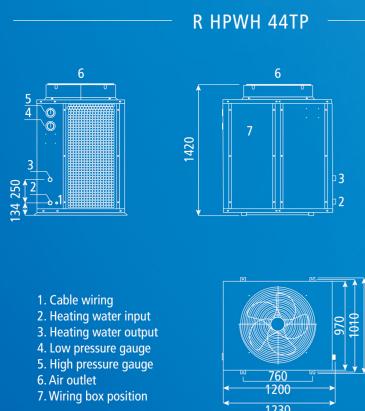
<sup>\*</sup>COP and Heating capacity @ Ambient Temperature: 30° C - Humidity: 50%H - inlet & out let temperature: 25° CIN - 55° C OUT

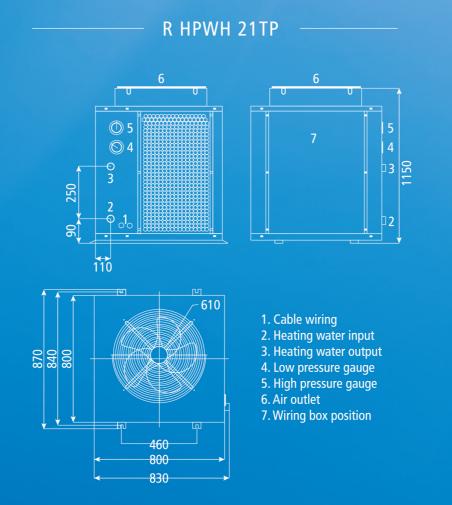
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<sup>\*</sup>Due to continuous improvement of products, specifications mentioned here are subject to change without prior notice



## COMMERCIAL HEAT PUMP TECHNICAL DATA

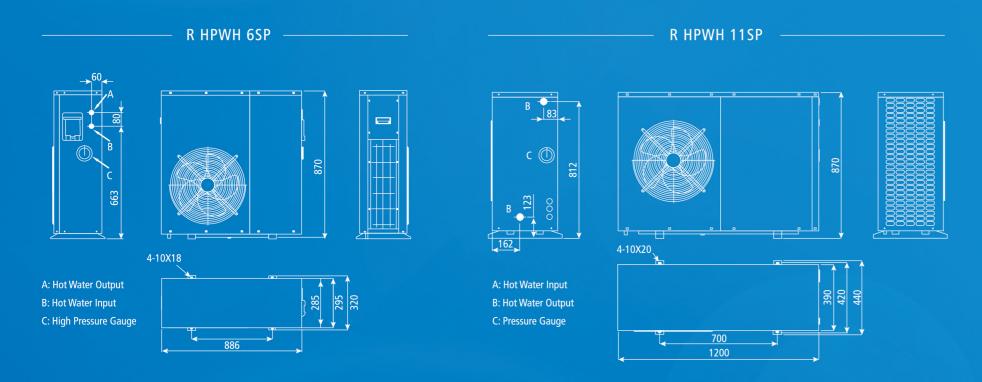




## COMMERCIAL HEAT PUMP TECH-SPEC CHART

PARAMETERS		SPECIFICATIONS			
Model / Model		R HPWH 21TP	R HPWH 44TP		
Power Supply	(V/ph)	380/3	380/3		
Frequency	Hz	50	50		
Rated Heating Power Output	kW	21.1	43.8		
Rated Heating Power Input	kW	5.36	11.15		
COP	kW	4.01	3.93		
Water Production	L/h	452	938		
Refrigerant / Weight	gram	R417A/3900	R417A/3700*2		
Required Water Flow Rate	(m3/h)	4	8		
Pressure Loss	KPa	60	75		
Max. Operation Current	Amp	14	29		
Max. Suction / Discharge Pressure	MPa	1.2/2.8	1.2/2.8		
Max. Heat Exchanger Pressure	Мра	2.8	2.8		
Water Connection Size		2.8	G1- ¼"		
evel Against Electric Shock		T T	1		
Water-proof Grade		IPX4	IPX4		
Voise	Db(A)	≤60	≤62		
Net Weight	kg	160	290		
Vet Size	Mm	835x850x1120	1200×1040×1420		
Operation Temperature Range	°C	-10~45	-10~45		

## COMMERCIAL HEAT PUMP TECHNICAL DATA



## COMMERCIAL HEAT PUMP TECH-SPEC CHART

PARAMETERS	PARAMETERS		CATIONS
Model / Mode		R HPWH 65TP	R HPWH 11SP
Power Supply	(V/ph)	380/3	380/3
Frequency	Hz	50	50
Rated Heating Power Output	kW	21.1	10.7
Rated Heating Power Input	kW	5.26	2.74
СОР	kW	4.01	3.9
Water Production	L/h	452	229
Refrigerant / Weight	gram	R417A/3900	R417A/2100
Required water flow rate	(m3/h)	4	2
Pressure Loss	KPa	60	45
Max. Operation Current	Amp	14	20
Max. Suction / Discharge Pressure	MPa	1.2/2.8	1.2/2.8
Max. Heat Exchanger Pressure	Мра	2.8	2.8
Water Connection Size		2.8	G1
Level Against Electric Shock		1	1
Water-proof grade		IPX4	IPX4
Noise	Db(A)	≤60	≤58
Net Weight	kg	160	84
Net Size	Mm	830x850x1120	1200x440x870
Operation Temperature Range	°C	-10~45	-10~45

 $\left[41\right]$ 







#### Hybrid Solution: Heat Pump Water Heater + Solar Water Heater

A combination of solar water heater and heat pump water heater is a new age energy efficient and sustainable water heating solution that promises saving up to 85% energy consumption cost as compared to conventional water heating solutions.

If only Solar Water heater is used, then out of 365 days, for 65 days of rains/cloudy weather, electric water heating solution is needed as back up. Whereas if a combination of Heat Pump and SWH is used this can be further reduced.









# COMPLETE RANGE OF ELECTRICAL WATER HEATING SOLUTIONS

Racold offers the widest range of Electric and Gas Water Heaters for every special requirement and bathing need. Whether it's instant or storage water heaters from 1 liter to 300 liters, Racold has emerged as a leader in water heating solutions.

Over the years, we have redefined industry standards and set new benchmarks by driving innovations and enhancing aesthetics, quality, durability, safety and performance. Some industry-first features include being the first water heater with rust proof polypropylene body, offering stainless steel inner container with multi-function safety valve and PUF insulation for maximum energy saving. Additionally, we are qualified for quality and performance as per IEC/EN and Indian Standards (ISI mark).

Electric and Gas Water Heating Solutions

# WHAT MAKES US DIFFERENT

technological innovations and enhancing quality, durability, safety and performance.

## Innovating for our customers:

At Racold, customers always come first, and we never stop listening to our products world class.

We have developed state-of-the-art products that cater to the customer's dynamically evolving needs. This has led us to innovative technological features like Smart Bath Logic, EcoSense and many more.



SMART BATH LOGIC
An intelligent function that empowers you to customize your bathing, saving precious electricity.



#### **ECOSENSE**

India's first intelligent power saver feature that sounds an alert when the water heater is on but not in use.











Its high pressure withstanding capacity makes it suitable for high-rise buildings and high pressure



ITALY

Elegant Italian design with a rare combination of technology and style.



Stem-type thermostat and cutout ensures automatic temperature control and extra safety.



The high-power heating element ensures you get hot water in no time.



The anti-syphoning system prevents the back flow of water from the container, thus avoiding dry heating.



The high density and thick PUF ensures retention of internal heat and temperature, resulting in better energy efficiency and reduced electricity bills.



Provides three levels of safety against high temperature and pressure with cutout, thermostat and safety valve.

Range	Power and	Warranty	
Capacity	3 kW	4.5 kW	
1 Liter	Available	Available	Product - 2 Years Heating Element - 2 Years
3 Liters	Available	Available	Tank - 5 Years
6 Liters	5 Stars	Range Not Available	

Voltage: Power Supply - 230V AC. 50Hz Single Phase. Max. Pressure Rating: 6.5 Bar.







| ETERNO 2

The intelligent 'Smart Bath you to customise your bathing needs by adjusting the regulator to your preferred mode of bathing, and what's more, you can save electricity up to 40%\*



Inique polymer protective coating echnology for inner container esists corrosion from hard water.



Its high pressure withstanding capacity makes it suitable for high-rise



element gives better protection and



A special anode used with the heating hat protects the heating element from corrosion, thus greatly enhancing its life.



A 5-star rated product. It has high-density and thick PUF that nsures energy efficiency and reduced electricity bills.



A special deflector ensures slow mixing of cold and hot water in the inner ontainer, keeping the water hot for onger time thus ensuring less frequent up to 10% more hot water.

Range	Availability	Availability / Star Rating		Power
Capacity	Vertical	Horizontal		
10 Liters	5 Stars	Range Not Available	Product - 2 Years	
15 Liters	5 Stars	4 Stars	Heating Element - 3 Years Tank - 7 Years	2 kW
25 Liters	5 Stars	3 Stars	Tank - 7 Years	
35 Liters	5 Stars	3 Stars		

Voltage: Power Supply - 230V AC. 50Hz Single Phase. Max. Pressure Rating: 8 Bar.









ntroducing India's first intelligent power saver feature that sounds an alert when water heater is ON but not in use.



Its high pressure withstanding capacity makes it suitable for high-rise buildings and high pressure pump applications



The intelligent 'Smart Bath Logic' function empowers you to customise your bathing requirement, thus



It has high-density and thick PUF that ensures energy efficiency and reduced electricity bills.



nique polymer protective coating chnology for inner container resists rosion from hard water.



Special Titanium enamelled heating element gives better protection and

Range	Availability .	/ Star Rating	Warranty	Power
Capacity	Vertical	Horizontal		
10 Liters	5 Stars	Range Not Available	Product - 2 Years Heating Element - 3 Years	2 kW
15 Liters	5 Stars	Range Not Available	Tank - 7 Years	
25 Liters	5 Stars	Range Not Available		

Voltage: Power Supply - 230V AC. 50Hz Single Phase. Max Pressure Rating: 8 Bar.

[51]







| PLATINUM |

coating technology for Heating element lasts longer with coating of



The high density and thick PUF ensures retention of internal heat and temperature, resulting in better energy efficiency and reduced electricity bills.



element ensures you get hot



Its high pressure withstanding capacity makes it suitable for high-rise buildings and high pressure pump applications.



ITALY Elegant Italian design with a rare



Imported thermostat and cut-out conforms to international standards, nsuring enhanced safety.



Larger capacities come in compact designs with smaller heights

Range	Availability / Star Rating		Warranty	Power
Capacity	Vertical	Horizontal		50 Liters
50 Liters	3 Stars	Range Not Available	Product - 2 Years Heating Element - 3 Years	is 2kW.
70 Liters	3 Stars	Range Not Available	Tank - 7 Years	70 & 100 liters are 3kW.
100 Liters	3 Stars	Range Not Available		

Voltage: Power Supply - 230V AC. 50Hz Single Phase. Max Pressure Rating: 8 Bar.





ANDRIS LUX





Specially designed Titanium steel with Titanium enamel coating gives the tank extreme intensity and durability.



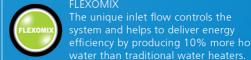
STAR RATING high-density & thick PUF that ensures energy efficiency and reduced electricity bills.



TITANIUM ENAMELED HEATING
ELEMENT Titanium enamel heating
element for efficiency, strength, low
energy consumption and longer life.



TEMPERATURE REGULATION KNOB Helps regulate heating of water as



ystem and helps to deliver energy



THERMAL STABILITY DEVICE to the thermostat enables energy

Range	Availability .	Availability / Star Rating		Power
Capacity	Vertical	Horizontal		
10 Liters	5 Stars	Range Not Available	Product - 2 Years Heating Element - 3 Years	2 kW
15 Liters	5 Stars	Range Not Available	Tank - 5 Years	
25 Liters	5 Stars	Range Not Available	1	

Voltage: Power Supply - 230V AC. 50Hz Single Phase. Max Pressure Rating: 8 Bar.







Unique polymer protective coating technology for inner container resists corrosion from hard water. Heating element lasts longer with coating of magnesium anode.



CDR

Its high pressure withstanding capacity makes it suitable for high-rise buildings and high pressure pump applications



igh-density and thick PUF that reduced electricity bills.



A special anode used with the heat element employs an electrolytic process that protects the heating element from corrosion, thus greatly enhancing its life.



Rust proof outer body prevents corrosion leaving no room for rust. Ensures long life for the water heaters.



emperature and pressure, provided by a high-tech adjustable thermostat, cut-out and multi function saftey valve conforming to international standards.



The super polymer coating ensures oviding hygienic water supply

Range	Availability / Star Rating		Warranty	Power
Capacity	Vertical	Horizontal		
10 Liters	5 Stars	4 Stars		
15 Liters	5 Stars 4 Stars		Product - 2 Years	
15 Liters - Small	5 Stars	Range Not Available	Heating Element - 2 Years	2 kW
25 Liters	5 Stars	4 Stars	Tank - 5 Years	
35 Liters	5 Stars	4 Stars		
50 Liters	5 Stars	4 Stars		

Voltage: Power Supply - 230V AC. 50Hz Single Phase. Max Pressure Rating: 8 Bar. \*Select horizontal range available in RHS, LHS, VO and center pipe variants.



provides extreme durability, compression and pressure resistance.



Its high pressure withstanding capacity makes it suitable for high-rise buildings and high pressure pump applications



A 5-star rated product. It has a high-density & thick PUF that ensures energy efficiency and reduced electricity bills.



heating element employs an heating element from corrosion, thus greatly enhancing its life.



Rust proof outer body prevents corrosion leaving no room for rust which ensures long life for the water heaters



high temperature and pressure, provided by a high-tech adjustable thermostat, cut-out and multi-function safety valve conforming to international standards.



The super polymer coating ensures no contamination whatsoever, providing bygianis oviding hygienic water supply

Range	Availability / Star Rating		Warranty	Power
Capacity	Vertical	Horizontal		
10 Liters	5 Stars	Range Not Available		
15 Liters	5 Stars	Range Not Available	Product - 2 Years Heating Element - 2 Years	2 kW
15 Liters - Small	5 Stars	Range Not Available	Tank - 3 Years	
25 Liters	5 Stars	Range Not Available		
35 Liters	5 Stars	Range Not Available		

Voltage: Power Supply - 230V AC. 50Hz Single Phase. Max Pressure Rating: 8 Bar.







Advanced safety feature with two solenoid valves.



Added feature for protecting children against accidents.



Auto protection against gas leak–built-in safety against gas leak.





85% heating efficiency—greater economy through maximum heating efficiency.



Suitable for low pressure—helpful or areas having low water pressure.

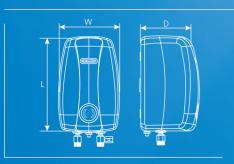


Digital display – sleek, hi-tech display panel for temperature reading.

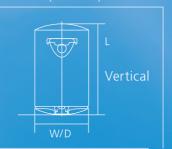
Range	Availability		Warranty	
Capacity	LPG	Natural Gas		
5 Liters per Minute	Available	Range Not Available	Product - 2 Years	
5 Liters per Minute - LED range	Available	Available	Product - 2 Years	
6 Liters per Minute - LED range	Available	Range Not Available	1	

Voltage: Power Supply - 230V AC. 50Hz Single Phase. Max Pressure Rating: 8 Bar.

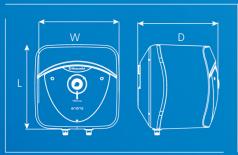




Capacity Dimensions	1 Ltr.	3 Ltr.	6 Ltr.
L	281	335	428
W	175	209	270
D	172	205	253



Andris I	$\Delta / \Delta$	ndris L	ux Plus	/ Andi	ris R



Capacity Dimensions	10 Ltr.	15 Ltr.	25 Ltr.
L	360	360	447
W	360	360	447
D*	298	346	410

for Andris R is 20mm	lesser than the above mentioned	dimensions.
	resser than the above mentiones	

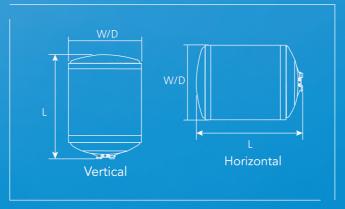
#### CDR (Vertical)

CDN (Vertical)				
Capacity Dimensions	10 Ltr.	15 Ltr.	15 Ltr. (S)	25 Lt
L	442	562	388	513
W	290	290	367	367

## CDR (Horizontal)

Capacity Dimensions	10 Ltr.	15 Ltr.	25 Ltr.	35 Ltr.	50 Ltr.
L	450	570	831	702	907
W	320	320	320	399	399
D	320	320	320	399	399

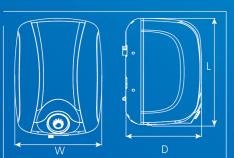
#### CDR



Capacity Dimensions	10 Ltr.	15 Ltr.	15 Ltr. (S)	25 Ltr.	35 Ltr.	50 Ltr.
L	442	562	388	513	655	907
W	290	290	367	367	367	399
D	290	290	367	367	367	399

Capacity Dimensions	5 LPG LED	5 LPG	5 NG	6 LPG LED
L	440	440	440	440
W	300	300	300	300
D	125	125	125	125

#### Eterno Intello / Eterno 2 / Eterno Swift (Vertical)



Capacity Dimensions	10 Ltr.	15 Ltr.	25 Ltr.	35 Ltr.
L	435	565	517	663
W	310	310	386	386
D	295	295	368	368

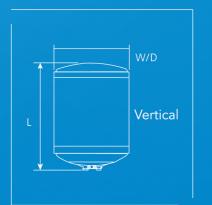
#### Eterno 2 (Horizontal)

Capacity Dimensions	15 Ltr.	25 Ltr.	35 Ltr.	
L	565	517	663	
W	310	386	386	
D	295	368	368	

Classico

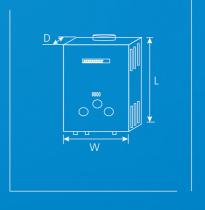
Classico

Gas Water Heater



#### Gas Water Heater

15 Ltr. | 15 Ltr. (S) | 25 Ltr. | 35 Ltr.



All dimensions are in mm and exclude inlet/outlet valve and safety valve.
All product specifications in this catalogue are subject to change without prior notice.

## SUCCESSFUL

## REAL ESTATE



#### LIFE REPUBLIC

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 2,19,400 LPD

ELECTRICITY SAVED – 26,78,720 KWH

CARBON EMISSION REDUCED – 2,300 TONS



## ARMY WELFARE HOUSING ORGANIZATION

LOCATION – BANGALORE

TOTAL INSTALLED CAPACITY – 2,32,000 LPD

ELECTRICITY SAVED – 28,32,558 KWH

CARBON EMISSION REDUCED – 2,432 TONS



#### **BRAMHA SUNCITY**

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 20,400 LPD

ELECTRICITY SAVED – 1,77,700 KWH

CARBON EMISSION REDUCED – 152 TONS

## HOSPITALITY



#### HOTEL DREAMLAND

LOCATION – MAHABALESHWAR

TOTAL INSTALLED CAPACITY – 6,000 LPD

ELECTRICITY SAVED – 66,000 KWH

CARBON EMISSION REDUCED – 57 TONS



#### HYATT

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 125 KW

ELECTRICITY SAVED – 55,000 KWH

CARBON EMISSION REDUCED – 204 TONS



#### **ANANDA IN HIMALAYAS**

LOCATION – UTTARAKHAND

TOTAL INSTALLED CAPACITY – 250 KW

DIESEL SAVED – 152,448 LITER

CARBON EMISSION REDUCED – 408 TONS

## HOSPITALS



#### ADITYA BIRLA HOSPITAL

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 9,000

ELECTRICITY SAVED – 1,09,883 KWH

CARBON EMISSION REDUCED – 94 TONS



#### LAKESHORE HOSPITAL

LOCATION – COCHIN

TOTAL INSTALLED CAPACITY – 352 KW

ELECTRICITY SAVED – 2154022

CARBON EMISSION REDUCED – 1960 TONS



#### ZYDUS HOSPITAL

LOCATION – AHMEDABAD

TOTAL INSTALLED CAPACITY – 15,000 LPD

ELECTRICITY SAVED – 1,09,883 KWH

CARBON EMISSION REDUCED – 94 TONS

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## **EDUCATIONAL INSTITUTES**



#### SINHGAD TECHNICAL INSTITUTE

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 1,00,000 LPD

ELECTRICITY SAVED – 12,20,930 KWH

CARBON EMISSION REDUCED – 1,480 TONS



#### IIT

LOCATION – MUMBAI

TOTAL INSTALLED CAPACITY – 21 KWH + 33,000 LPD

ELECTRICITY SAVED – 1,33,000 KWH

CARBON EMISSION REDUCED – 134 TONS



#### **SYMBIOSIS**

LOCATION – HYDERABAD

TOTAL INSTALLED CAPACITY – 20,000 LPD

ELECTRICITY SAVED – 2,20,000 KWH

CARBON EMISSION REDUCED – 209 TONS

## MANUFACTURING



#### CRODA CHEMICALS

LOCATION – NAVI MUMBAI

TOTAL INSTALLED CAPACITY – 25,000 LPD

ELECTRICITY SAVED – 3,05,232 KWH

CARBON EMISSION REDUCED – 262 TONS



## BEKAERT MUKAND WIRE INDUSTRIES

LOCATION – MIDC LONAND, TAL KHANDALA TOTAL INSTALLED CAPACITY – 10,000 LPD ELECTRICITY SAVED – 1,22,092 KWH CARBON EMISSION REDUCED – 104 TONS



#### **MAHINDRA & MAHINDRA**

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 20,000 LPD

ELECTRICITY SAVED – 1,74,216 KWH

CARBON EMISSION REDUCED – 149 TONS

## MANUFACTURING



#### TATA MOTORS

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 10,000 LPD

ELECTRICITY SAVED – 1,20,000 KWH

CARBON EMISSION REDUCED – 109 TONS



#### SKODA

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 22,000 LPD

ELECTRICITY SAVED – 21,90,697 KWH

CARBON EMISSION REDUCED– 235 TONS



#### L'OREAL

LOCATION – PUNE

TOTAL INSTALLED CAPACITY – 32,000 LPD

ELECTRICITY SAVED – 3,90,697 KWH

CARBON EMISSION REDUCED – 335 TONS

[63]

## LTESTIMONIALS

"We are very pleased to partner with Ariston Thermo India because of three main reasons:

Belief in the brand: Globally and locally both Ariston and Racold are the biggest water heating solutions brands and we at Max India were confident of partnering with the most trusted water heater brand.

Customization: We are very happy with the tailor-made solutions that Racold provided us.

Team Work and Service: Despite a long turnkey project, the 24x7 support extended by Racold's sales and service team for installation, usage and maintenance is much appreciated."

GYANENDRA PRATAP SINGH,
HEAD PROCUREMENTS AND CONTRACTS, MAX INDIA

"I would give the Racold team a 10 on 10 for their service and maintenance after I bought the product."

**AVTAR SINGH** 

"Wanted to drop few words of appreciation for the Racold team who installed the water heater at my place today. They have been very courteous and called up right in time when I purchased the product and asked for my convenient time to visit. They followed all the norms specified by the company including footwear standards and had excellent clarity of presentation while giving the demo. While on duty they took time to ensure everything is in place and that we understood the product and manual at the most. If I were to rate them, I'll give a 10 out of 10 (exceeds expectation). Kudos to the Racold team!"

**RAVI TAWADE, MUMBAI** 

"This is a real moment of truth for me and thank you once again to the entire team for restoring my faith on this product, company and their amazing customer service. I will definitely share my pleasant after-sales experience with my colleagues and friends. It's a great gesture by the Racold team in providing reliable after-sales service which makes me a happy customer of Racold."

SANJEEV KUMAR SAHA, CONSULTANT,
CAPGEMINI TECHNOLOGY SERVICES LIMITED

"I am very satisfied with the excellent after-sales service by Racold. They followed up on maintenance and made sure I don't face any issues after purchase. Very happy!"

**ABHAY AGARWAL** 

# BEYOND CUSTOMER TILE EXPECTATIONS



## **Quality solutions**

Our goal at Ariston Thermo India has always been to ensure customer satisfaction. Understanding their needs, our high quality solutions are designed to be functional, reliable and durable and have limited installation and maintenance costs. With this we pursue to exceed expectations, making our customers our no.1 promoters.

Customer support details:

- Call us on 1860-425-2288
- Whatsapp on 9243700100
- Email to customer.care@racold.com



# Quality in sales and after-sales services

Our constant strive to achieve customer satisfaction does not end with the sale and installation of the product.

We have standardised customer management processes to provide our consumers with immediate and precise support.

We have over 500 authorized and trained service technicians ready to provide installation support, repairs and AMC for all; Electric, Solar and Heat Pump Water Heater projects.

We also offer annual maintenance contracts which cover all servicing needs of the projects, so consumers can use our solutions minus the hassle of maintenance.

With over 176 service franchisee pan India and an efficient call centre in Pune which equips the customer with various touch points; from Email to Whatsapp to online registration. Our service network is well equipped with the knowledge of our installation configuration, thus providing the customer with 360° solutions.

#### Our Service Guidelines:

- Always use Racold Genuine spare parts and accessories.
- Always get professional help from installer / electrician / plumber for dry heating issues and pre-selection checks.
- We recommend annual maintenance contract for your water heater ranging from 1yr 3 yrs.
- For AMC and Warranty details on range, contact your nearest service center.