

Hot water for all seasons & energy savings for a lifetime.

V-Guard Commercial & Domestic Heat Pump Water Heaters





V-GUARD

Since its establishment in 1977, V-Guard lived up to the reputation of making reliable products that were designed to work efficiently and last a lifetime. With a strong emphasis on product quality and customer value, V-Guard earned a reputation for designing and manufacturing products that are built to last. Embracing new frontiers in technology, we are one of the leading consumer electrical brands in India.

V-Guard today has a diversified and comprehensive product portfolio that includes Voltage stabilizers, Inverter & Inverter Batteries, Solar Power Systems, Electric Water Heaters, Solar Water Heaters, Heat Pump Water Heaters, Pumps & Motors, Domestic Switchgears, Wires & Cables, Induction Cooktops, Mixer Grinders, Fans, Gas Stoves, Rice Cookers, Modular Switches, Air Coolers, Breakfast Appliances, Chimneys, Water Purifiers, etc.

With a quest for excellence, it will be our endeavour to understand human lives and their relationship with the tools and appliances that they use. Then, we create a seamless experience with thoughtfully engineered products in our quest to enrich consumer lives.



Heat Pump Water Heater

Welcome to the world of V-Guard Heat pump water Heater. Built with superior technology these heat pumps absorb heat energy from the outside air and use it efficiently to heat the water. This process requires comparatively very little energy and helps you save on fuel costs. V-Guard heat pumps require less maintenance compared to other heating combustion systems and also ensure a safe and trouble-free function. One of the major advantages of V-Guard Heat Pumps is that they reduce carbon emissions and have a higher conversion rate of energy to heat.

V-Guard Heat pumps can be a brilliant choice for your home. They are the efficient, economic, and environmentally friendly alternative to fuel, oil, and electrical systems when it comes to heating. Also, V-Guard Heat Pumps ensure a longer lifespan than others, as a result, they are very reliable and a steady source of heat.



Domestic

V-Guard Domestic Heat Pump Water Heaters are designed to give you and your family hot water anytime throughout the year in an energy-efficient and affordable way. They are very effective in function and save a significant amount on fuel costs while working.

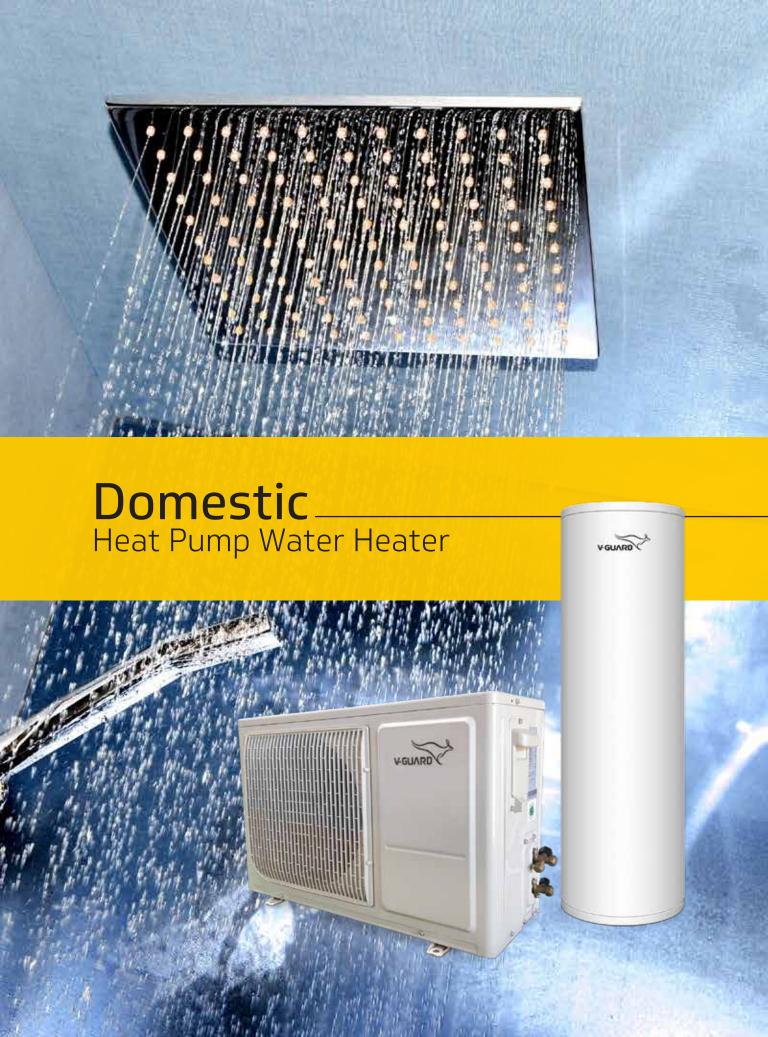
Commercial

V-Guard Commercial Heat Pump Water Heaters are built for commercial environments like Hospitals, Hostels, Hotels, etc. This series is both energy-efficient and innovative in function and design, it is truly a go-to solution for readily available hot water.

Swimming pool heating

V-Guard Heat Pump Water Heater is the ideal solution for heating water in a swimming pool. It is highly energy-efficient, they transfer the heat from the atmosphere which keeps the pool warm throughout the day with comparatively lower operational cost.





Running hot water, in recent times has become a necessity more than a luxury. An Air Source Heat Pump (ASHP) water heaters from V-Guard is the go-to solution for readily available hot water. Our Heat Pump Water Heaters work even when the outside temperature is way less than zero degrees Celsius. They are energy efficient and save on fuel cost as the heat is absorbed from the atmosphere. Like every other product from V-Guard, the smallest detail has been looked at to make sure that only the best product reaches our valuable customer.

V-Guard ASHP water heaters are usually said to be "fit and forget" units. If you have bought a V-Guard ASHP water heater, rest assured, you have bought arguably the best product in its category with best in class features in safety, efficiency, power saving and environment protection.



Lower operating cost



Environmental friendly refrigerant



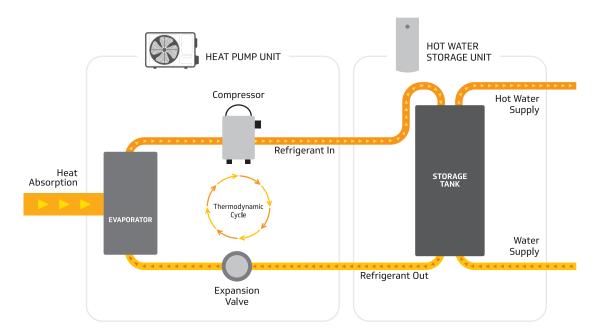
Maintenance



Silent Operation

Working Principle

The heat pump makes use of a refrigerant for its operation. The low temperature refrigerant absorbs free heat from the atmospheric air in the evaporator is compressed by a highly efficient electrical compressor to a high- temperature and high-pressure vapour refrigerant. This vapour is then passed through a heat exchanger (condenser) to transfer the heat to the water in the storage tank to produce hot water. The refrigerant then passes through an expansion valve and it goes back to the evaporator for absorbing the free heat from the atmospheric air again and the cycle is repeated.





Key Features

- A new technology Enamel coated inner tank ensures greater corrosion resistance against hard water.
- Environmental friendly refrigerant: our heat pumps use environment friendly R410A refrigerant.
- V-Guard ASHP water heaters provide constant temperature output ranging from 55-60 Degree Celsius
- V-Guard ASHP water heaters come integrated with high pressure protection systems that ensures safety.
- Automatic defrost ensures that maintenance and cleaning intervals do not come too often.
- V-Guard ASHP water heaters operates on vast range of temperature variation ranging from -15 to 43 Degree Celsius.
- V-Guard ASHP water heaters comes equipped with a water resistant body. They are coated with an anti-corrosive coating that ensures long lasting maintenance free operation.
- Our systems are easy to install and backed by hassle free service.
- 75% energy saving as compared to electric water heaters.
- An electric backup heater is provided for faster heating, enabling a temperature raise of up to 75°C.





Suits for Wide Range of Climatic Variations



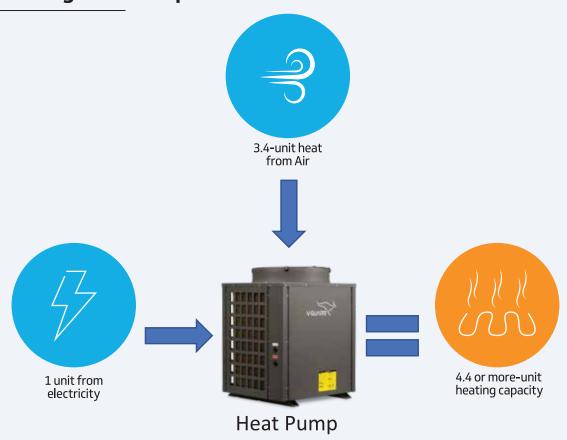
Enameled Glass Line Coated Tank

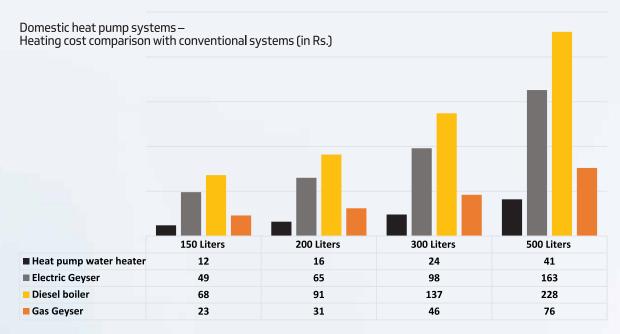
Applications





Heating Cost Comparison*





Following costs are considered for different fuels, as per Kerala state data.

- Electricity cost Rs. 8 per unit.
- Diesel Rs. 94/liter.
- ▶ LPG Rs. 39/Kg.



^{*}Conditions Apply

Specifications

Product range:

Parameter	V-HP 150	V-HP 200	V-HP 300	V-HP 500	
Tank volume (L)	160	210	320	500	
Heating capacity (W)	3500	3500	3500	5800	
Production capacity (LPH)	70	70	70	125	
Rated power input (W)	810	810	810	1320	
СОР	4.32	4.32	4.32	4.38	
Backup electric heater(W)	1500	1500	1500	2000	
Max power input (W)	2400	2400	2400	3400	
Rated current (A)	3.7	3.7	3.7	6	
Max current (A)	11	11	11	15.5	
Power supply	220~240V/1/50Hz	220~240V/1/50Hz	220~240V/1/50Hz	220~240V/1/50Hz	
Waterproof level	IPX4	IPX4	IPX4	IPX4	
Refrigerant	R410a	R410a	R410a	R410a	
Max water temperature (°C)	60	60	60	60	
Heat pump net dimension (mm)	682×252×448	682×252×448	682×252×448	838x300x545	
Heat pump net weight (Kg)	25	25	25	36	
Noise (db)	≤48	≤48	≤48	≤49	
Tank net dimension (mm)	Φ440×1696	Ф500*1716	Ф620*1641	.641 Φ750*1900	
Inner tank diameter (mm)	Ф350	Ф410	Φ520	Ф650	
Inner Tank Material	Enamel coated Steel with Mg Anode				
Water Inlet/outlet size	1.9cm (3/4")	1.9cm (3/4")	1.9cm (3/4")	2.54cm (1")	
Insulation thickness(mm)	50	50	50	50	
Tank net weight (Kg)	53	60	90	128	
Working temperature (°C)	-15~43	-15~43	-15~43	- 15∼43	

Condition: Heating Capacity at Air 20°C/15°C, Water Temperature from 15°C to 55°C | Due to continuous Improvement and Development of the product, specifications mentioned in this Brochure is subjected to change without notice.









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Lower operating cost



MODBUS Communication



Environmental friendly refrigerant



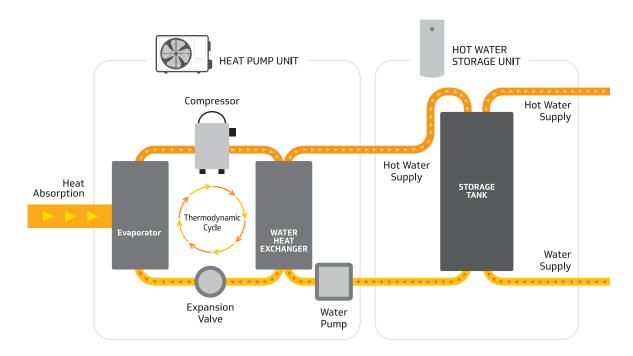
Less Maintenance



Silent Operation

Working Principle:

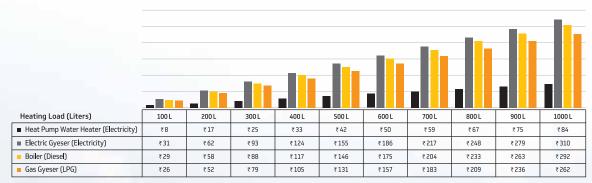
The heat pump makes use of a refrigerant for its operation. The low temperature refrigerant absorbs free heat from the atmospheric air in the evaporator is compressed by a highly efficient electrical compressor to a high- temperature and high-pressure vapour refrigerant. This vapour is then passed through a heat exchanger (condenser) to transfer the heat to the water in the storage tank to produce hot water. The refrigerant then passes through an expansion valve and it goes back to the evaporator for absorbing the free heat from the atmospheric air again and the cycle is repeated.



Key Features

- MODBUS Communication: V-Guard Heat Pump Water Heater use MODBUS communication protocol. It can be easily integrated into most existing building management systems without hassle.
- V-Guard Heat Pump Water Heater use High efficiency Tube in shell heat ex-changer that ensures high Coefficient of performance (COP) which equates to lower operating cost.
- Environmental friendly refrigerant: our heat pumps only use environment friendly R410A refrigerant.
- V-Guard Heat Pump Water Heater provide constant temperature output ranging from 55-60 Degree Celsius.
- V-Guard Heat Pump Water Heater come integrated with high pressure protection systems that ensures safety.
- · Automatic defrost ensures that maintenance and cleaning intervals do not come too often.
- V-Guard Heat Pump Water Heater operates on vast range of temperature variation ranging from -15 to 43 Degree Celsius.
- V-Guard Heat Pump Water Heatercomes equipped with a water resistant body. They are coated with an anti-corrosive coating that ensures long lasting maintenance free operation.
- Our systems are easy to install and backed by hassle free service.

Heating Cost Comparison*



*Conditions Apply





Applications











Specifications

Product range:

Parameter	V-HP1T	V-HP 1.5 T	V-HP 2T	V-HP 3 T	V-HP 5 T	V-HP 6T	V-HP 10 T	V-HP 15 T
Power Supply	220V/50Hz	220V/50Hz	220V/50Hz	220V/50Hz	380V/3/50Hz	380V/3/50Hz	380V/3/50Hz	380V/3/50Hz
Heating Capacity at Air 25°C/20°C, W	/ater Temperature f	rom 20°C to 55°C						
Heating Capacity (kW)	4.1	6.2	8.6	12.0	21	28	43	55
Power Input (kW)	0.97	1.46	2.03	2.82	4.9	6.5	9.9	12.3
СОР	4.21	4.26	4.24	4.25	4.29	4.28	4.34	4.47
Max Power Input (kW)	1.45	2.01	2.75	3.35	6.9	9.2	13.2	16.6
Max Current (A)	6.5	9.1	12.5	15.2	12.3	16.4	23.5	30.2
Rated Hot Water (L/h)	100	150	200	300	515	690	1050	1380
Refrigerant	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Expansion Valve	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic
Air Flow Direction	Horizontal	Horizontal	Horizontal	Horizontal	Vertical	Vertical	Vertical	Vertical
Wilo Water Pump	RS-15/6			RS-25/8	PUN-402EH		PUN-750EH	
Water Pressure Drop (kPa)	35	35	40	45	50	50	50	55
Net Dimensions(L*W*H) (mm)	936×385×550		1011×420×614	986×420×798	755×695×1000	755×695×1000	1417×755×1000	1417×755×1000
Working Temperature Range (°C)	- 15∼43	-15~43	-15~43	-15~43	-15~43	-15~43	-15~43	-15~43
Noise (dB)	47	49	52	53	≤60	≤60	≤65	≤65
Net Weight (Kg)	50	54	68	74	160	185	259	290
Water connection(mm)	20	20	20	20	25	25	32	40

Conditions: Due to continuous Improvement and Development of the product, specifications mentioned in this Brochure is subjected to change without notice.







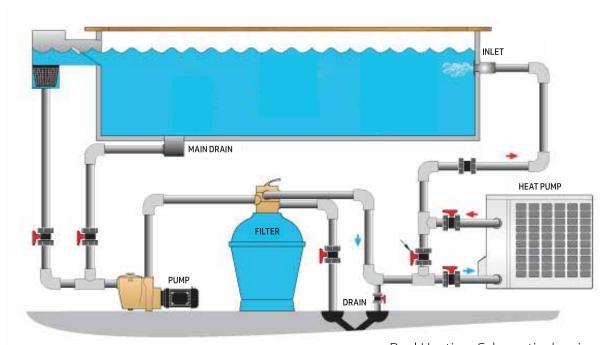
A Perfect Solution For Pool Heating.

V-Guard Heat Pump Water Heater is an ideal solution for heating water in swimming pools. They are highly energy-efficient and transfer heat from the atmosphere to the water, which means we keep your pool water warm throughout the day without giving you a headache about high energy bills. A V-Guard Swimming Pool ASHP Water Heaters provides significant operational cost savings because it not only uses a small amount of electricity, just enough to operate a compressor and a fan motor. V Guard Swimming Pool ASHP Water Heaters can produce up to 5-6 times (COP*) more heat energy when compared with conventional water heaters for the same amount of electricity consumed.

V-Guard Heat Pump Pool Heaters are mostly used in indoor & outdoor pool projects, such as domestic pools, bungalows, resorts, hotels, gymnasiums or leisure centres etc. Our HPWHs are the best choice for pool heating because of their efficient & economic performance, superior safety measures, and environment – friendly operation.

Working Principle:

The heat pump makes use of a refrigerant for its operation. The low temperature refrigerant absorbs free heat from the atmospheric air in the evaporator is compressed by a highly efficient electrical compressor to a high- temperature and high-pressure vapour refrigerant. This vapour is then passed through a heat exchanger (condenser) to transfer the heat to the water in the storage tank to produce hot water. The refrigerant then passes through an expansion valve and it goes back to the evaporator for absorbing the free heat from the atmospheric air again and the cycle is repeated.



Pool Heating Schematic drawing



Domestic Heat Pump Water Heater







Commercial Heat Pump Water Heater









Heat Pump Pool Heater











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