



Air / water heat pump
Everest

Hoval

Economical and ecological energy extraction from ambient air.

Hoval Everest air to water heat pump. Advantages at a glance.

Each hotel, hospital, sport center, etc. requires a large volume of domestic hot water. With the Hoval air to water heat pump you can produce domestic hot water without harmful emissions, because no boilers are required.

Everest air to water heat pumps are using energy from the free ambient air for room and water heating. In this way, they are highly efficient and offer an attractive price/performance ratio. By cooling down the ambient air a few degrees, and with the help of electricity as a complementary energy, pleasant hot water for the entire building is generated.

Economical



Top marks in cost effectiveness

- **Cost-efficient solution** for refurbishments and new buildings
- **Best effectiveness** due to high efficiency (COP)
- **High economic viability** can be seen in up to 50 % lower heating costs

Ecological



Reduced carbon footprint

- **Environment friendly energy** acquired from ambient air
- **CO₂-neutral and particularly environmentally friendly** in conjunction with green electricity
- **100 % independent of oil and gas**
- **Completely free of emissions**

Sophisticated



Compact and complete

- **Tailored solutions** for refurbishments and new buildings
- **Fast installation** due to ready-to-fit systems
- **Space-saving** due to compact design
- **Simple installation** due to high flexibility in positioning

Easy to use



Extremely quiet operation

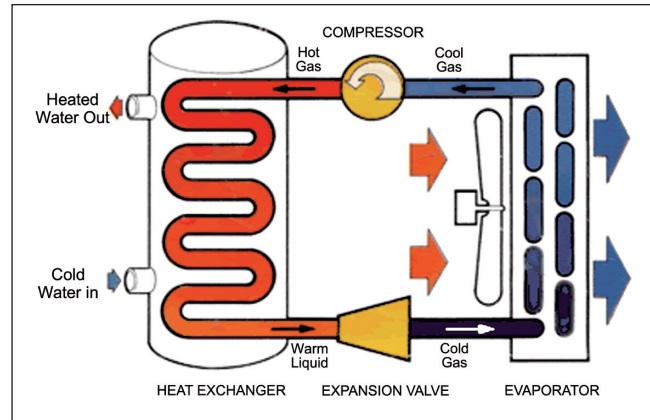
- **Low-noise** due to excellent low noise fans
- **Easily combined with solar plants** for even greater eco-balance
- **Fully automatic operation** due to intelligent control

Hoval Everest air to water heat pump. Heating up Domestic Hot Water by use of Tropical Air.



The cost-free heat of the ambient air

The Everest HT heat pump uses the heat energy of the ambient air. A ventilator ensures a continuous air flow through the evaporator. The air leaves the evaporator at lower temperatures, due to the fact that energy is given to the refrigerant. This causes the evaporation of the refrigerant. The compressor then pumps the cool gas to a higher pressure level which also means a higher temperature. In the condenser the hot gas turns into liquid by transferring heat to the water. In the expansion valve, pressure and temperature are reduced. The refrigerant flows back into the evaporator and the cycle starts again.



Air to Water heat pump cycle



Large temperature range

The ambient air contains heat energy. With the heat pump Hoval Everest, this energy can be used at a temperature as low as 7°C. The Hoval Everest lifts this energy to a higher level, up to 60°C. This is economical and ecological hot water production.



Ecological awareness

In our heat pumps we use refrigerants that have no negative effect to the ozone layer.



Proven efficiency

The heat pumps from Hoval are characterized by their profitability of first order. They guarantee high COP values which do indicate the relationship between the heating power provided by the heat pump and the electrical power it consumes. The higher this value, the more efficient the heat pump works.



Recognized quality

Heat pumps from Hoval exist since more than 30 years. More than 6'000 pieces are currently sold per year.



Smart Control

The regulation, simple to use, with its intelligent monitoring systems, permanently controls the state of operation and immediately indicates the variations compared to the ideal values, and consequently ensures high safety and low operating costs.



Quiet operation

The compressor is fixed to the frame with anti-vibration-damping. This avoids transmission of vibrations to the foundation.

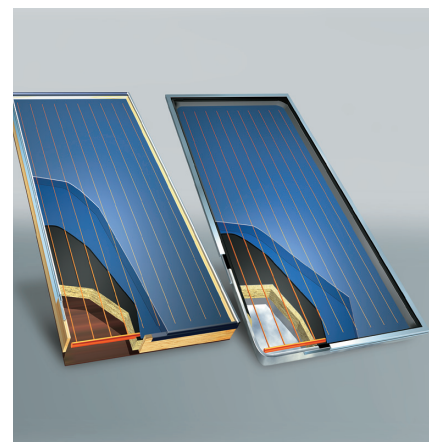
Hoval heat pumps and solar plants – a perfect couple



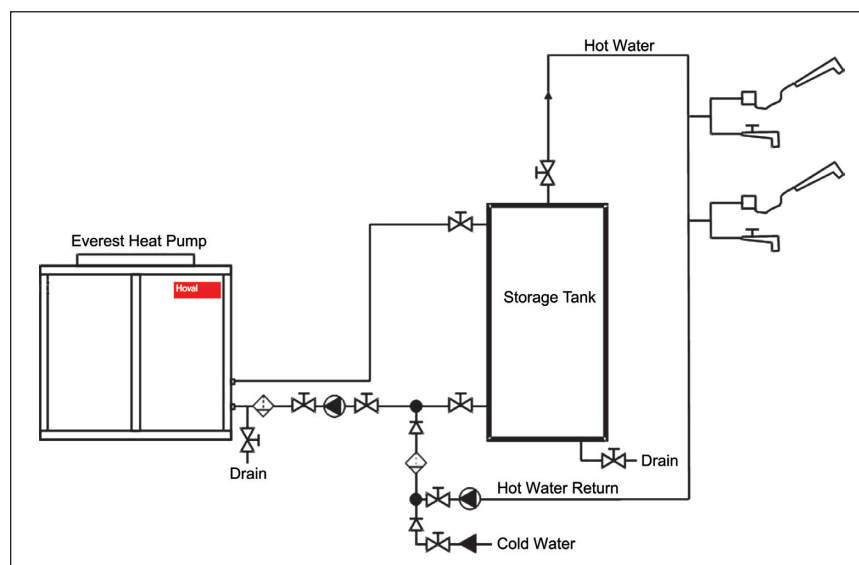
Using nature as a cost-effective energy supplier

With a Hoval heat pump in conjunction with a Hoval solar plant, you can transform your house into a small power station that will cover the bulk of energy requirements using sustainable, ecological and clean energy sources. Using the air, earth and sun as energy suppliers is intelligent and worthwhile.

If supplementary heating is needed, not just for hot water but also for space heating, Hoval solar plants are an ideal option. By expanding the collector surface area, enough solar power can be collected to provide supplementary building heat. Energy savings are between 20 and 35%, depending on the insulation. In low energy houses, savings can actually reach 50%.



Hoval Everest air to water heat pump. Perfectly adapted to your individual needs.



In a typical installation scheme, it is common that the domestic hot water flows directly through the heat pump. For highest efficiency, it is advisable to feed the heat pump with the coldest water available, i.e. from the bottom of the hot water storage tank.

Technical data Everest		(37)	(62)	(72)	(108)
Heating Capacity *	kW	37	62	72	108
Power Input *	kW	9.2	15	18	27
COP (-) *		4.0	4.1	4.0	4.0
Refrigerant		R417a			
Refrigerant filling	kg	2 x 2.3	3 x 2.3	4 x 2.3	4 x 3.45
Number of Compressors		2	3	4	4
Voltage	V	3x400			
Max. Current	A	25	40.5	49	73.5
Frequency	Hz	50			
Ambient Temperature	°C	5...45			
Max. Water Temperatur	°C	60			
Required Water Flowrate	m3/h	8	12	16	24
Noise Level	dB (A)	65	68	68	68
Weight	kg	275	495	622	893
Dimensions (Width/Depth/Height)	mm	1200/920/1255	2046/1180/1750	2400/1180/2300	2400/1400/2300

* All figures at Air 20°C and Water 55°C (A20W55)

Maximum operating water temperature 60°C

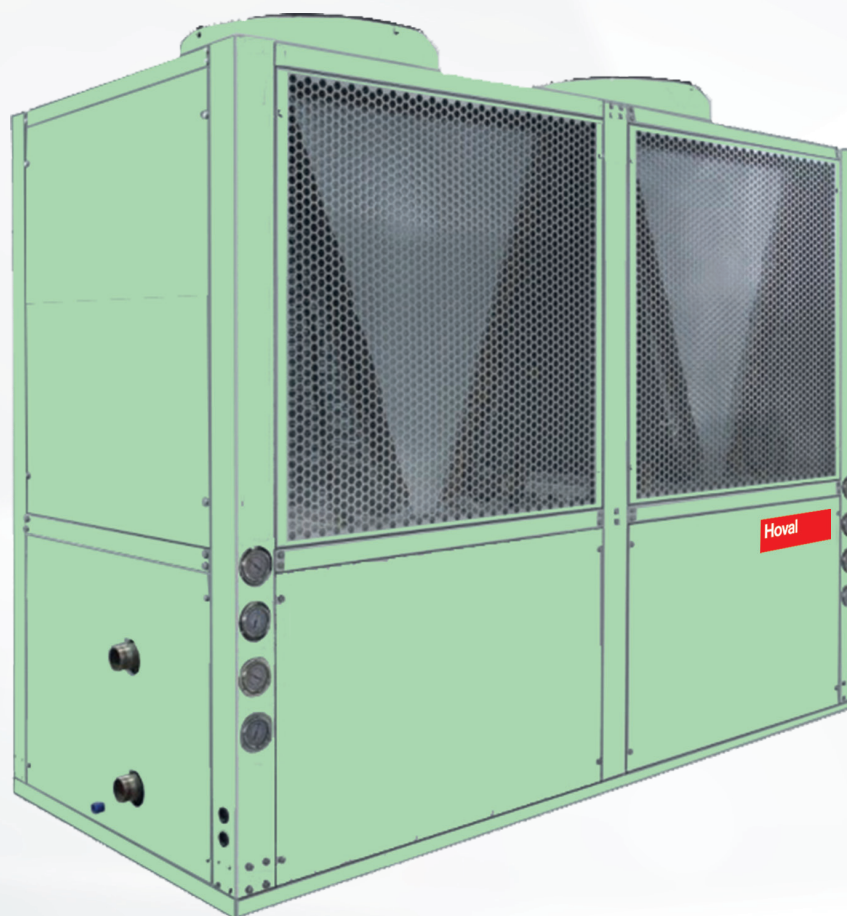
Minimum operating air temperature 7°C

Maximum operating air temperature 45°C

Hoval

Range of models: The heat pump Hoval Everest is available in different sizes from 37 to 108 kW heating capacity. Units with different capacities allow you to find the solution which is perfectly adapted to your individual needs.

In consequence, low investment costs and high economical benefit are obtained.



Everest (62-108)



Everest (37)

What you can count on.

Hoval



Sophisticated and complete solutions from a single source

Consistent Hoval system technology simplifies the links between different technologies and establishes a reliable platform for efficient and dependable solutions. With us, you can easily incorporate solar or biomass energy solutions into your heating system. Hoval – everything you need from one source.



Planning support from experts

Hoval are happy to assist you and your planning partners in developing progressive systems, allowing you to take advantage of our expertise, and to draw on the experience of our specialists.

Ask about Hoval system solutions and learn more about the many ways to combine highly efficient condensing boilers with our range of renewable products.



Hoval Service.

For specialist commissioning and maintenance of your Hoval appliances contact our service and spare parts department or your local Hoval partner. This is your guarantee for economical operation, reliability and added value.

Conservation of energy – protection of the environment.

The Hoval brand is internationally known as one of the leading suppliers of indoor climate control solutions. More than 65 years of experience have given us the necessary capabilities and motivation to continuously develop exceptional solutions and technically superior equipment. Maximising energy efficiency and thus protecting the environment are both our commitment and our incentive. Hoval has established itself as an expert provider of intelligent heating and ventilation systems that are exported to over 50 countries worldwide.

Your heating planner / installation engineer

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