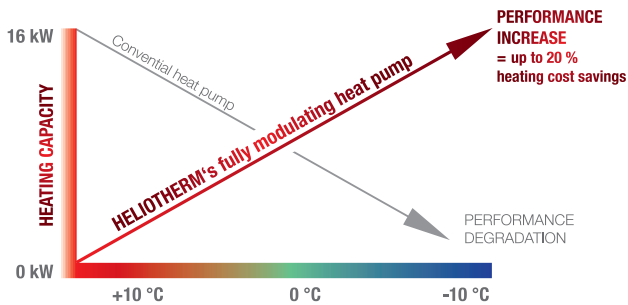


Stepless Modulation

Heliotherm Stepless Modulating Technology
Premium Line



Advantages of a Heliotherm heat pump

- ✓ Heating output 100% adapted to the buildings heating load through stepless modulation.
- ✓ Higher heat output with decreasing outdoor temperatures.
- ✓ Higher efficiency and **up to 20 % less energy costs** compared to conventional heat pumps.
- ✓ **Longer lifespan** and **reduced noise emission** through soft starter process.
- ✓ **Less power consumption** due to modulating peripherals > **less operating costs.**
- ✓ Quieter compressor and outdoor evaporator (air heat pumps) through speed control (rpm).
- ✓ Regulating control detects an external heat source (e.g. stove) and automatically reduces the heat pump capacity > **lesser operating costs.**



Heliotherm invented technology

Heliotherm has since 1994 diligently researched and developed the modulating heat pump technology and hence its role as technology leader in this field. This technology has now proven its reliability and efficiency for many years.

Stepless way to efficiency

Heliotherm's stepless modulation technology opens up new possibilities for high efficient heat pumps. Depending on the building's performance demand, the modulating heat pump adjusts to the desired performance. The soft starter process additionally preserves the heat pump a longer lifespan.

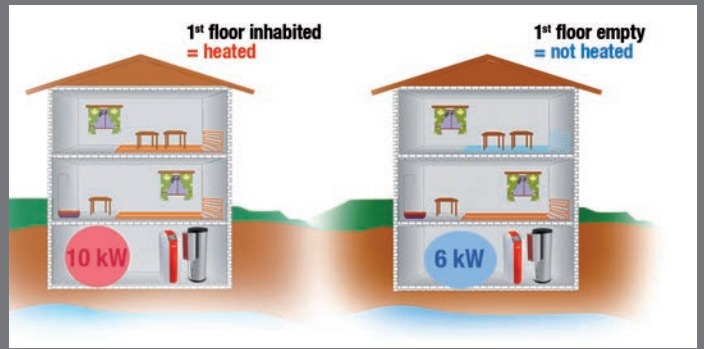
Intelligent cost saving - **Tomorrow's technology – here TODAY**

Intelligent control technology regulates the energy consumption steplessly according to the buildings energy demand. The energy source pump as well as the high efficiency pump are both integrated into this concept.



Heliotherm - Inventor of stepless modulation with years of experience

- 2010 - Development of the **world's first „thinking“ full modulating heat pump** (smart heat pump).
- 2009 - Research and Development of **modulating air / water heat pumps to 30 kW** (for buildings with greater heating load).
- 2008 - Nominated for the Austrian State Prize for Environmental Technology, with a full modulating high efficiency CO₂ heat pump - **Seasonal performance factor (SPF) 6,48.**
- **First full modulating heat pump with COP > 7 at W10W35.**
- 2007 - Unique Market Launch of the **full modulating** product line. (Full modulating ground, brine, ground water and air heat pumps)
- 2005 - Construction of the **world's first CO₂ heat pipe technology** - full modulating high efficiency heat pump.
- 2004 - Development and production of modulating air / water pumps with the latest BLDC technology.
- 1998 - 1st **modulating technology** air / water split heat pump with a **frequency range of 25 to 65 Hz.**
- 1994 - Development first modulating ground water heat pump with a **DAM frequency of 35-60 Hz.**
The modulating ground water heat pump has been operating and performing at its best until now in 2014!



Stepless modulation.

Adjusts to the building's heating demand. Changing outdoor temperatures require an individual smart heating system. Through the intelligent regulating control technology and the modulating compressor, the system will only use as much power as needed to produce the heat required. Thus, your heating costs will be automatically optimized all year round.

Exemplary efficiency.

Heliotherm heat pumps have been awarded with the **best possible classification by independent testing institutes.** The Tyrolean heat pump manufacturer fulfills its leadership role in terms of efficiency with the international seal of approval for tested quality and numerous patents. You can rely on **the lowest operating costs with maximum environmental awareness.**

Maximum use of subsidies.

High SPF results allow the application for a **maximum amount of federal grants.** Your Heliotherm competence partner can inform you about the individual grant development opportunities in your area.

Excellence guaranteed with you Heliotherm competence partner.

Our customers can rely on a specialist business that offers **one-stop services.** Trained heat pump specialists provide **consulting, planning, assembly installation and service- top products and a competent partner you can rely on!**



Stepless modulation:

Customized and improved energy supply
= **Highest efficiency!**

Presented by your Heliotherm competence partner.