

STEPLESS MODULATING

HELIO THERM Stepless Modulating Technology PREMIUM LINE

Heliotherm invented technology

Since 1994 Heliotherm has diligently researched and developed the modulating heat pump technology, having set a milestone in leadership in this field through many years of experience, it has now become proven technology.

Stepless meaning more 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 performance desired. Additionally, through the soft-starter phase the heat pump is preserved giving it a longer lifespan.

Intelligent cost saving

Tomorrow's technology – here TODAY

Intelligent regulating technology regulates the energy consumption. Both the energy source pump and the efficient heating pump are integrated into this concept.

Stepless modulation means the heat pump 100 % automatically adjusts to the building's heating demand.



Modulation Autumn



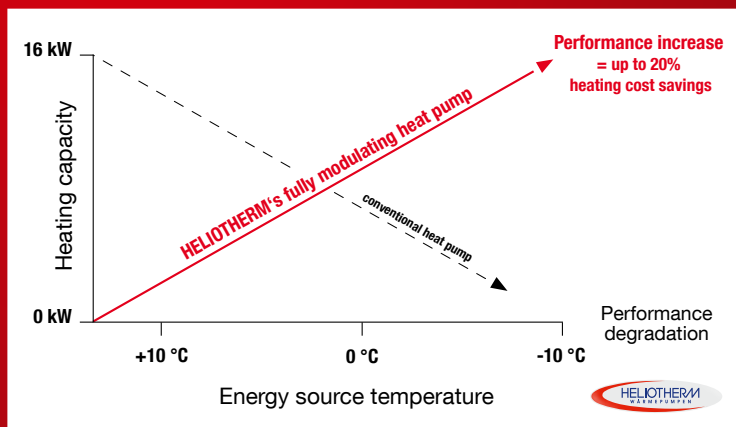
Modulation Winter



Modulation Spring



Modulation Summer



Advantages at a glance

- ✓ Higher heat output with decreasing outdoor temperatures.
- ✓ Higher efficiency and **up to 20 % less energy costs** compared to conventional heat pumps.
- ✓ **Longer life** and reduced starting current with 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).
- ✓ **Flexible use of living space** through intelligent control technology: unused rooms can be excluded from the heating system.
- ✓ Regulating control detects an external heat source (e.g. stove) and automatically reduces the heat pump capacity > **lesser operating costs.**



HELIO THERM - Inventor of stepless modulation with years of experience



Development of the world's first "thinking" full modulating heat pump (smart heat pump).

2010

Research and Development of modulating air / water heat pumps to 30 kW (for buildings with greater heating load).

2009

Nominated for the Austrian State Prize for Environmental Technology, with a full modulating high efficiency CO₂ heat pump
- **Seasonal performance factor 6,48 SPF.**

2008

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 air / water split heat pump with a frequency range of 25-65 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 2010!

Flexible use of building:



Stepless modulation.

Adjusts to the building's heating demand. Changing outside 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 need 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.** Tested and approved heat pumps and granting Heliotherm with required energy efficiency labels. In addition 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. **Lowest operating costs with maximum environmental awareness** you can count on.

Maximum use of subsidies.

High annual coefficient performance results allow for application to **maximum state and federal grants.** Your Heliotherm expert partner can inform you about the individual grant development opportunities in your area.

Heliotherm expert partners, your guarantee for excellence.

Our customers can rely on a specialist business that offers **one-stop services!** Certified heat pump specialists that provide: **consulting, planning, assembly installation and service!** From the floor heating to the heat pump system - from the regulating control to the refrigeration technology - from planning through to the complete installation and service – top products and a **competent partner you can rely on!**



Hybrid modulation:

Modulating unit integrated heat recovery into heating water = **Higher efficiency!**

Stepless modulation:

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

Presented by your Heliotherm expert partner.