



smart energy systems

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NDX® - GROUND AS A HEAT SOURCE

The "D" stands for "direct" and is the revolutionary way to use geothermal energy efficiently. While conventional systems detours via saline solutions and additional heat exchangers, NDX Technology® routes the valuable geothermal energy directly to the heat pump.

With vour NEURA heat pump relax you can price of oil, gas and solid fuels increases because you are using economical environmentally friendly heating free energy provided by nature.







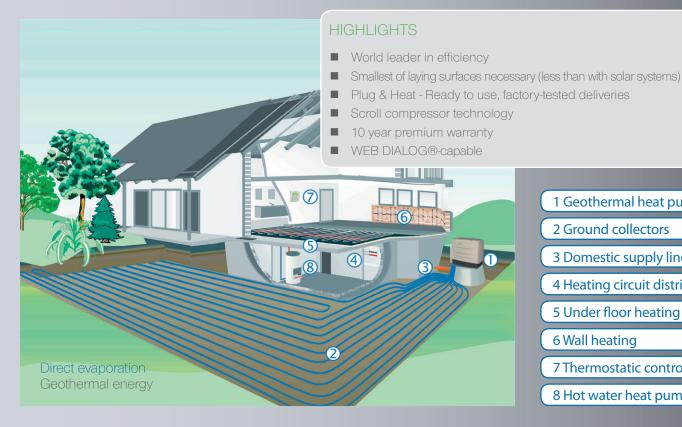
Your own private heat store

Your plot of land you possesses a heat store of hundreds of m³ of soil, a real energy bank, which will be recharged again and again by the sun, rain and geothermal energy. Even with cold outside temperatures you have a constant source of heat.

Our optimal heat conducting copper absorbers, which are laid in the garden at a depth of 1.2 m to 1.5 m, guarantee the highest degree of operational reliability. The working medium circulates within these absorbers and these in turn are directly connected to the NEURA heat pump.

Depending on the make-up of the ground, around 250 m² of garden are required to heat a single-family detached house. There are almost no restrictions on the design of your garden - everything is possible, with the exception of deep-rooted plants.





- 1 Geothermal heat pump
- 2 Ground collectors
- 3 Domestic supply line
- 4 Heating circuit distributor
- 5 Under floor heating
- 6 Wall heating
- 7 Thermostatic controller
- 8 Hot water heat pump

Reliable high level performance with scroll compressor technology

By using advanced European-manufactured scroll compressors, NEURA ensures the quality of its heat pumps remains consistently high. Maximum efficiency and reliable operation are guaranteed thanks to the number of moving parts within the system being reduced to a minimum. Their optimised operation makes NEURA heat pumps exceptionally quiet.

Technology proven over decades combined with NEURA Know-how

NEURA heat pumps achieve higher performance with lower expenditure. With a NEURA heat pump the coolant circulates directly in the surface collectors and absorbs the energy (direct evaporation).

By doing so additional components such as a heat exchanger and brine recirculation pump are unecessary. This means increased operational reliability through fewer parts and an **improvement in efficiency of approx. 20%.**

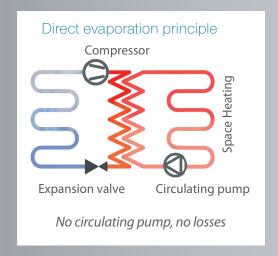
NEURA has further increased efficiency levels through the use of a large internal heat exchanger (exploitation of residual heat) and by optimising heating system control.

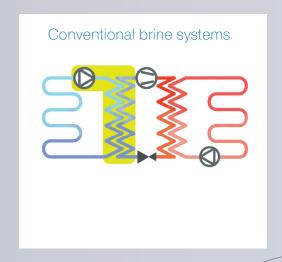


Fig.: Scroll compressor



Fig.: Internal view of heat pump







Perfect guidance - from the planning through to the implementation

Even with the lowest outside temperatures NEURA heat pumps extract energy from the ground. So that this works reliably, NEURA heat pump specialists take care of the precise planning of your heat requirements with a comprehensive consultation which means your heat pump works efficiently for many years.

Everything under control - all of the time and in every location

With WEB DIALOG® from NEURA you are holding an exclusive tool in your hand with which you can control and monitor your NEURA heat pump regardless of location or time. With the motto: forewarned is forearmed, you are constantly aware of the operational condition of your heat pump. You can even carry out adjustments when you are on holiday simply by connecting to the internet.

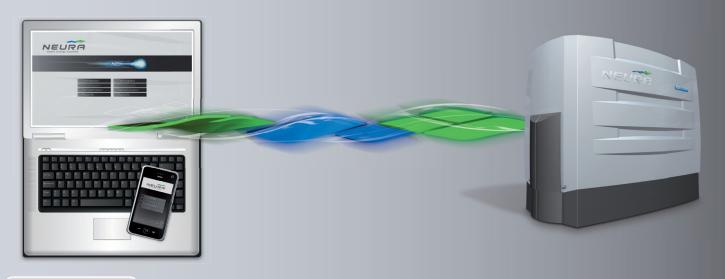
An overview of your heating costs - at the push of a button

Month after month you can savour how low your heating costs have become with your NEURA heat pump - at the push of a button WEB DIALOG® will provide you with all details. Furthermore overview figures enable a comparison of heating periods over years.



Well supported online WEBDIALOG

Modern technology makes heating so convenient that you could almost forget your NEURA heat pump. And you can: If the heat pump should deviate from its optimum operation then NEURA technicians are informed immediately. They are then able to diagnose possible causes and in most instances are even able to directly rectify the issue remotely.



TECHNICAL DATA

400 V models 230 V models		D6EuC D6EuC-230	D8EuC D8EuC-230	D10EuC- D10EuC-230	D14EuC D14EuC-230	D18EuC	D20EuC
E4/W35	Heating output [kW]	6,56	8,42	10,83	15,85	18,87	21,27
	Coefficient of performance [COP]	5,02	5,05	5	5,04	5,03	5,01
E4/W55	Heating output [kW]	5,49	7,41	9,37	13,73	16,92	18,76
	Coefficient of performance [COP]	2,93	2,92	2,93	2,95	2,96	2,94
R410A refrigerant; charge [kg]		5,1	5,7	6,5	7,2	7,9	8,9
Geothermal collector area [m2]		180	225	270	360	450	540
Maximum flow temperature		55 °					