

Natural sustainability Grounded in our technology

Heating, cooling and hot water with geothermal energy



“We harvest an impressive amount from our garden already: wholesome herbs, fresh vegetables, and beautiful flowers. The most amazing thing is that we can keep on reaping richly all through the winter. This is because our ground source heat pump draws thermal energy from the ground for heating and hot water throughout the year.”



Giving the future a green light

Renewables help to determine where our energy will come from in the future. More and more people are recognising the benefits of green electricity for their homes. We too see electricity as the energy source of the future.

Good reasons to enjoy your home comforts

- › Pleasant room temperatures all year round
- › Easier to relax and feel good
- › Greater vitality and alertness
- › Efficient heating and cooling in one appliance

Sustainable comfort

Electricity is the future. With the development of green technologies, we advocate innovative, environmentally responsible and futureproof building services – so that you can enjoy sustainable comfort at home. As a family business, we act for the future – yours and ours.

Since 1924, STIEBEL ELTRON has been synonymous with reliable solutions for domestic hot water, heating, ventilation and cooling. We maintain a clear focus in the energy debate: electricity, preferably harnessed from renewables, is the energy of the future. That is why we rely on approximately 4000 employees around the world for efficient heating solutions with green technologies.

From the design and manufacture of your appliance through to its maintenance, we systematically apply our expertise, strength of innovation and experience – gained from working with customers with high standards, such as yourself, and from the sale of more than two million appliances each year. We have the right solutions to meet every requirement. Solutions designed to raise the level of convenience in your home today and still be up to date tomorrow.

You can see first hand our commitment to green technology by visiting the Energy Campus at our head office in Holzminden, Germany. This training and communication centre is our flagship project for sustainable and resource-efficient construction. It combines the highest standards of architectural and communication quality. As a PlusEnergy building, it generates more energy than it consumes. Come and experience what our name stands for – in theory and practice.



www.stiebel-eltron.com/about-stiebel-eltron



Feel the warm glow of a sustainable future

HPG-I DS Premium 4-15 kW ground source heat pump

This heat pump allows you to combine comfort and function in one solution. It uses energy from the ground to heat your central heating water and domestic hot water, plus it contains a DHW cylinder. The inverter technology is so efficient at all times of the year that you save energy and reduce your heating bill. Choosing the passive cooling option gives you an economical alternative that lets you enjoy perfect living comfort even on hot days.

Doing well for the environment

The eco-friendly and safe refrigerant also contributes to a good domestic energy balance. Furthermore, you're all set for a good night's sleep thanks to the appliance's especially low sound levels.

The main features

- › Energy class A+++
- › Very high energy efficiency - COP up to 5,01
- › Ground source heat pump installed indoors for heating, with cooling as an optional extra
- › Compact design saves space
- › Optimum output and maximum efficiency thanks to inverter technology
- › Futureproof and eco-friendly refrigerant
- › Optional integration into the home network and control via smartphone
- › First class hot water convenience and high mixed water volumes thanks to flow temperatures of up to 75 °C

This product is available in various designs.



Indoor installation



New build



Modernisation



Cooling

Open your door to comfortable living

HPG-I S Premium 4-15 kW ground source heat pump



Boost your home comforts with this ground source heat pump. The appliance with inverter technology draws heat from the ground for your central heating and domestic hot water. We also offer a version that provides passive cooling for your house as and when required. In both summer and winter, this ingenious piece of engineering elevates your living comfort to new levels, thanks to its consistent heating output with high flow temperatures.

Make the most of this all-rounder

One of our five output sizes will be just right for you, whether it's for a new building or a modernisation project. The inverter technology guarantees you the exact heating output you want at any given time. This reduces your energy consumption to a minimum, saves you money and even optimises your room climate – all at the same time.

The main features

- › Energy class A+++
- › Very high energy efficiency – COP up to 5,01
- › Ground source heat pump installed indoors for heating, with cooling as an optional extra
- › Optimum output and maximum efficiency thanks to inverter technology
- › Futureproof and eco-friendly refrigerant
- › Optional integration into the home network and control via smartphone
- › Flow temperatures of up to 75 °C for energy efficient heating and high mixed water volumes

This product is available in various designs.



Indoor installation



New build



Modernisation



Cooling

Opt for flexibility

WPE-I H 400 Plus 5-17 kW ground source heat pump



This powerhouse works highly efficiently to supply your home with heat and hot water. You have complete freedom of choice when it comes to the cylinder – combine it with any of the DHW cylinders in our range. Since the key components come ready integrated, it will be a quick and simple matter for your installer to get this heat pump up and running for you.

Convenient touch control

Convenient control via the innovative heat pump manager to ensure a pleasant room climate that suits your requirements at all times. Simple and intuitive operation via touchscreen with easy-to-read colour display.

The main features

- › Energy class A++
- › Very high energy efficiency – COP up to 4,76
- › Ground source heat pump installed indoors for room heating and DHW heating
- › Suitable for new build and modernisation projects
- › Also suitable for larger buildings
- › Low energy costs due to exemplary efficiency
- › High efficiency through optimally matched components and high grade technology
- › Very high hot water convenience thanks to flow temperature of up to 62 °C
- › Cooling function possible thanks to integrated control technology (additional components necessary)

This product is available in various designs.



Indoor installation



New build



Modernisation



Cooling

Watch this space

WPE-I HW 400 Plus 5-10 kW ground source heat pump

Thanks to its extremely compact design, this heat pump will bring you convenience and allow you to free up valuable space. All the important components are already integrated, such as a cylinder for up to 240 litres of hot water. With a SCOP (seasonal coefficient of performance) of up to five, this multi-talented appliance also shows you what efficiency means. This attractively priced heat pump not only helps you save money, but also installation space.

Functional design

You control the heat pump manager conveniently and intuitively via a colour touchscreen. This feature is just as unobtrusive as the timeless product design.

The main features

- › Energy class A++
- › Very high energy efficiency - COP up to 4,76
- › Ground source heat pump installed indoors for room heating and DHW heating
- › Suitable for new build and modernisation projects
- › Compact solution with key components integrated to save space
- › Low energy costs due to exemplary efficiency
- › High efficiency through optimally matched components and high grade technology
- › Very high hot water convenience thanks to flow temperature of up to 62 °C
- › Cooling function possible thanks to integrated control technology (additional components necessary)

This product is available in various designs.



Indoor installation



New build



Modernisation



Cooling

Ground source heat pump technical details

Model	WPE-I 05 H 400 Plus	WPE-I 07 H 400 Plus	WPE-I 10 H 400 Plus	WPE-I 13 H 400 Plus	WPE-I 17 H 400 Plus
	On-off				
Energy class W35/W55	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Heating capacity B0/W35 (EN 14511)	5,56	7,35	9,81	12,42	16,69
COP B0/W35 (EN 1451 ¹)	4,40	4,62	4,76	4,52	4,43
SCOP 35 °C (EN 1482 ²)	4,74	4,96	5,09	4,94	4,79
Noise level (EN12102)	44 dB(A)	44 dB(A)	44 dB(A)	46 dB(A)	46 dB(A)
Cold medium	R452B				
Electric heater	8.8 kW				
Maximum flow temperature	60 °C				
Dimensions HxWxD	1430x600x707 mm				
Weight	113 kg	125 kg	130 kg	135 kg	148 kg
Power supply and fuse size	3 ph 3 X C 20	3 ph 3 X C 20	3 ph 3 X C 20	3 ph 3 X C 25	3 ph 3 X C 32

Model	WPE-I 05 HW 400 Plus	WPE-I 07 HW 400 Plus	WPE-I 10 HW 400 Plus
	On-off integrated		
Energy class W35/W55	A+++ / A++	A+++ / A++	A+++ / A++
Heating capacity B0/W35 (EN 14511)	5,56	7,35	9,81
COP B0/W35 (EN 1451 ¹)	4,40	4,62	4,76
SCOP 35 °C (EN 1482 ²)	4,74	4,96	5,09
Noise level (EN12102)	42 dB(A)	42 dB(A)	42 dB(A)
Cold medium	R452B		
Electric heater	8.8 kW		
Maximum flow temperature	60 °C		
Dimensions HxWxD	1860x600x707 mm		
Weight	148 kg	165 kg	170 kg
Power supply and fuse size	3 X C 20	3 X C 20	3 X C 20
Domestic water heater	184 L	184 L	184 L
Heat exchanger area	1.83 m ²	1.83 m ²	1.83 m ²

Model	HPG-I 04 S Premium	HPG-I 06 S Premium	HPG-I 08 S Premium	HPG-I 12 S Premium	HPG-I 15 S Premium
	Inverter				
Energy class W35/W55	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating capacity B0/W35 (min./max.)	1,0 - 4,2	1,0 - 6,6	1,0 - 7,6	2,1 - 12,7	2,1 - 14,8
COP B0/W35 (EN 1451 ¹)	4,60	4,60	4,67	5,01	4,86
SCOP 35 °C (EN 1482 ²)	5,07	5,20	5,12	5,59	5,44
Noise level (EN12102)	38-40 dB(A)	38-43 dB(A)	38-45 dB(A)	39-46 dB(A)	39-47 dB(A)
Cold medium	R452B				
Electric heater	6 kW				
Maximum flow temperature	75 °C				
Dimensions HxWxD	1369x598x658 mm				
Weight	180 kg	180 kg	180 kg	190 kg	190 kg
Power supply and fuse size	1 ph 3 x B 16	1 ph 3 x B 16	1 ph 3 x B 16	1 ph 3 x B 25	1 ph 3 x B 25

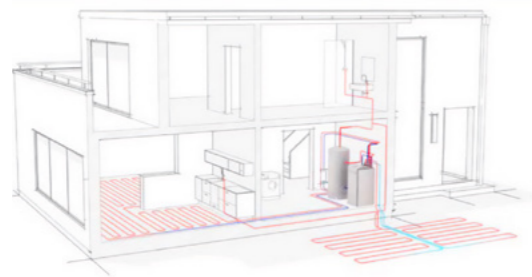
Ground source heat pump technical details

Model	HPG-I 04 DS Premium	HPG-I 06 DS Premium	HPG-I 08 DS Premium	HPG-I 12 DS Premium	HPG-I 15 DS Premium
	Inverter				
Energy class W35/W55	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating capacity B0/W35 (min./max.)	1,0 - 4,2	1,0 - 6,6	1,0 - 7,6	2,1 - 12,7	2,1 - 14,8
COP B0/W35 (EN 1451 ¹)	4,60	4,60	4,67	5,01	4,86
SCOP 35 °C (EN 1482 ²)	5,07	5,20	5,12	5,59	5,44
Noise level (EN12102)	43-46 dB(A)	43-48 dB(A)	43-48 dB(A)	43-49 dB(A)	43-49 dB(A)
Cold medium	R454C				
Electric heater	6 kW				
Maximum flow temperature	75 °C				
Dimensions HxWxD	1937x600x703 mm				
Weight	265 kg	265 kg	265 kg	275 kg	275 kg
Power supply and fuse size	1 ph 3 x B 16	1 ph 3 x B 16	1 ph 3 x B 16	1 ph 3 x B 25	1 ph 3 x B 25
Domestic water heater	175 L	175 L	175 L	162 L	162 L
Heat exchanger area	2.10 m ²	2.10 m ²	2.10 m ²	3.50 m ²	3.50 m ²



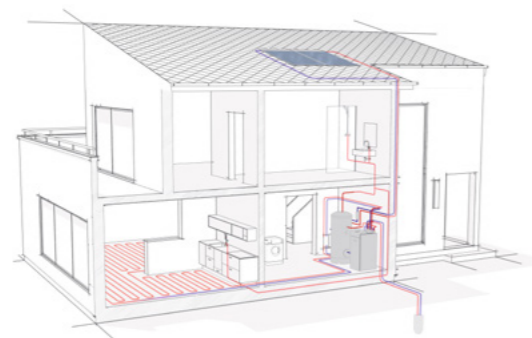
Heat from nature, technology from us

The geothermal heat pumps included in the STIEBEL ELTRON product nomenclature are suitable for the heating solution of both renovated and new buildings: from 4 kW models to 1400 kW combined industrial heat pump solutions. Thus, STIEBEL ELTRON ensures a suitable heating solution even for buildings with very different heating needs.



Horizontal collector

The horizontal ground collector consists of polyethylene pipes in which a non-freezing and environmentally safe liquid flows. The collector is installed in the ground at a depth of about 1 m, and its length depends on the properties of the soil and the required heat transfer capacity, i.e. the amount of energy needed to heat the premises and produce domestic hot water.



Vertical collectors

By building vertical collectors, the earth's surface is saved and a somewhat higher efficiency of geothermal energy is achieved with them. However, the construction of energy boreholes is associated with higher costs, and the prerequisite for the construction of the solution is the consent of both the local government and the Environmental Board. As special solutions, e.g. the installation of a collector in a water body is also common today - these solutions require a special calculation for each specific project according to the circumstances and goals.

Your energy efficiency on solid ground

It is constantly warm below the surface of the ground, even when it is bitterly cold outside. You can benefit from this fact with a ground source heat pump. Using liquid brine, the heat pump collects heat from the ground and converts it into energy for heating and hot water.

The ratio of heating output to the required electricity input is measured in heat pumps by the "coefficient of performance" (COP). Your ground source heat pump from STIEBEL ELTRON achieves a COP of up to five. This means that even at temperatures below freezing, it generates up to five parts heat from one part electricity. Since your geothermal probe is installed 40 to 100 metres deep in the ground, the surface area required is comparatively small.

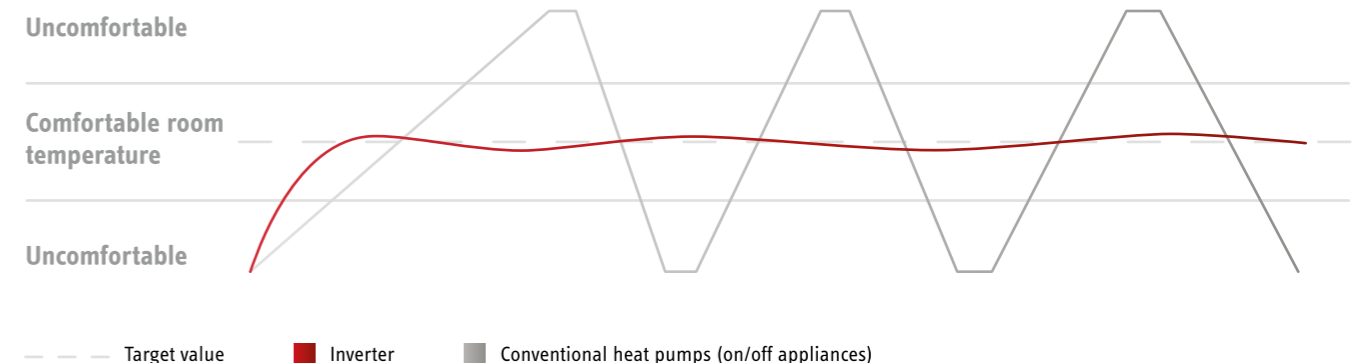
Inverter technology – keeping a good balance

Conventional heat pumps are either on or off. By contrast, our heat pumps with inverter technology are much more sophisticated. They expertly deliver precisely the output needed throughout your home for a comfortable indoor environment. This is not only more energy efficient, but also much less noisy. This is because the fan and compressor operate, on average, with a lower output and are consequently much quieter.

Green technology with impressive properties

- › Output is continuously matched to your requirements
- › Higher efficiency in the partial load range
- › Very quiet
- › Top technology developed from many years of experience
- › Improved heating output and efficient energy consumption

Inverter technology compared to conventional heat pumps



Accessories for even greater benefits

Heat pump control system WPM – comprehensive, user-friendly control automation with a touch screen – allows you to easily set up the heat pump and control up to four heating zones. In addition, it is possible to add room sensors FE7 or FET, which can be used to control the heat pump according to the internal temperature of the room; pool heating controller MSMW; FEK controller with cooling function.



WPM control automatics



FE7 room sensor



FET touch screen room sensor



MSMW pool heating controller



Control via Internet and with a smartphone
ISG WEB allows you to monitor the STIEBEL ELTRON geothermal heat pump and control it with a smart device over the Internet.

Heating and cooling function
In addition to the production of heating water and domestic hot water, STIEBEL ELTRON geothermal heat pumps also enable cooling through water fancoils or fancoil radiators - for this, you need to choose a suitable geothermal heat pump with a cooling module and complete the installation with a cooling unit.



Your local trade partner:

Bestair OÜ

Every year, more than 40,000 people in Estonia and Scandinavia get a energy and money saving heat pump from Bestair.

Contacts

info@bestair.eu
+372 606 4350
www.bestair.eu

For new and interesting information on our products, visit www.stiebel-eltron.com or consult your local trade partner.

STIEBEL ELTRON International GmbH | Dr.-Stiebel-Straße 33 | 37603 Holzminden | Germany
info@stiebel-eltron.com | www.stiebel-eltron.com
VAT ID number DE811150571 | HRB 119307

Legal notice | Although we have tried to make this brochure as accurate as possible, we are not liable for any inaccuracies in its content. Information concerning equipment levels and specifications are subject to modification. The equipment characteristics described in this brochure are non-binding regarding the specification of the final product. Due to our policy of ongoing improvement, some features may have subsequently been changed or even removed. Please consult your local trade partner for information about the very latest equipment features. The images in this brochure are for reference only. The illustrations also contain installation components, accessories and special equipment, which do not form part of the standard delivery. Reprinting of all or part of this brochure only with the publisher's express permission.