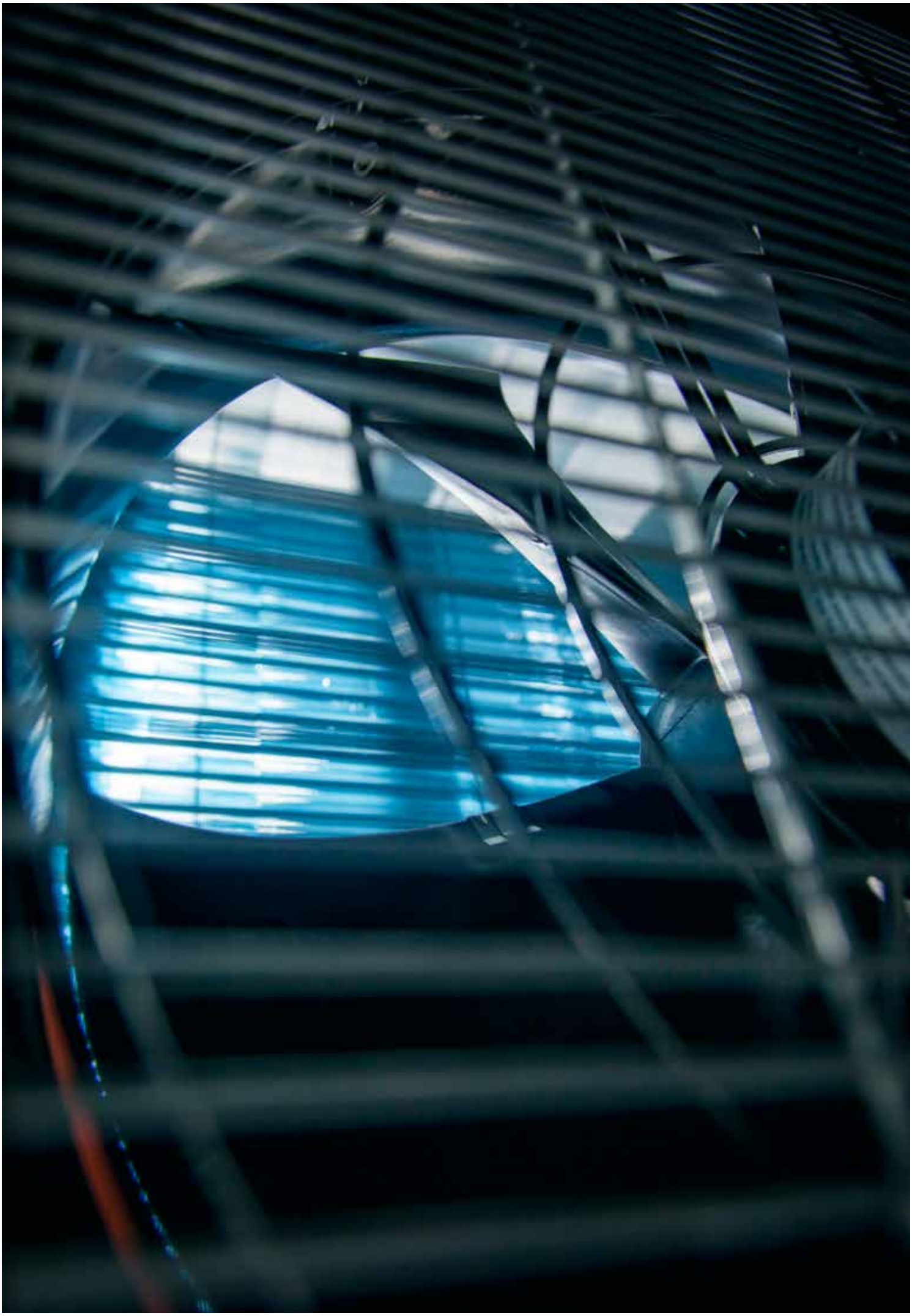
NIBE

NIBE Air/water heat pumps

CAPTURE FREE ENERGY FROM THE OUTSIDE AIR



FREE ENERGY, ANYONE?

Look out of your window and what do you see?
The street, the house opposite, the trees and fields?
What we at NIBE see is a free source of energy – the air.

Believe it or not, you can actually use the outside air, one of nature's totally free gifts, to heat and cool your home. Even at sub-zero temperatures, ambient air contains heat. And when you concentrate that heat using a NIBE air/water heat pump, you can get enough out of it to heat up your home's water-based radiators (or underfloor heating) and domestic hot water. Certain air/water heat pumps can also be used as an air-conditioning unit to cool your house during the summer.

It's amazing, but true. We know, because we've already been using heat pump technology in Sweden for over 30 years.

WHY CHOOSE A NIBE AIR/WATER HEAT PUMP?

You save money

An air/water heat pump makes it much cheaper to heat your home and hot water. You can reduce your heating costs by up to 70%, although the exact figure depends on several factors such as where you live, the size of your house and whether or not you use the system for cooling too.

The initial investment is relatively low since an air/water heat pump, unlike a ground source heat pump, does not require any ground drilling.

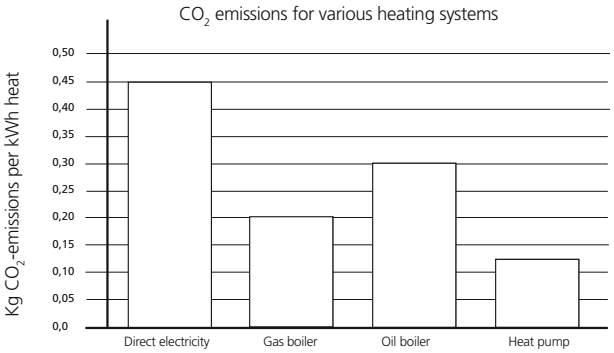
The efficiency of NIBE's heat pumps positively impacts the speed with which you recover your investment. With energy prices continually rising, you're unlikely to regret your decision. In fact, you'll start enjoying savings from the first month.

You reduce CO_2 emissions

Another very good reason for choosing a NIBE air/water heat pump is that it has a very low environmental impact. In fact, installing a NIBE air/water heat pump can cut your home's CO_2 emissions in half. This is mainly because there is no combustion process involved. The heat pump merely upgrades naturally occurring energy from the air outside to heat your home and hot water.

This leads to much lower CO_2 emissions than any traditional fossil fuel-based heating system and explains why NIBE air/water heat pumps are classified as a renewable energy source.

Wherever you live, you can install an air/water heat pump and enjoy efficient, safe, problem-free heating and domestic hot water at a fraction of the alternative cost and a fraction of the environmental impact.

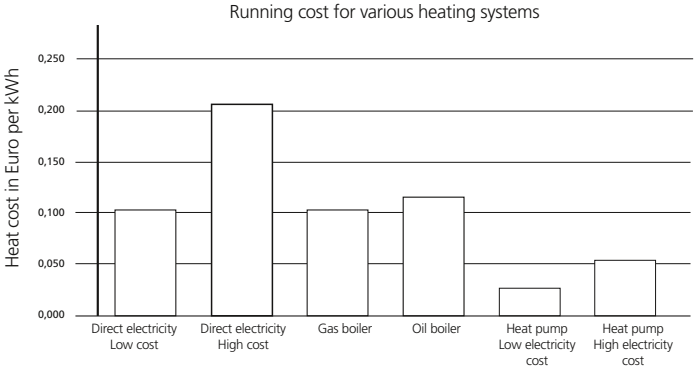


Consider this

If heat pumps were installed in the one million or so new houses built annually in Europe, we would cut CO_2 emissions by over 3,600,000 tonnes per year. That's the equivalent of taking about a million cars off the road!

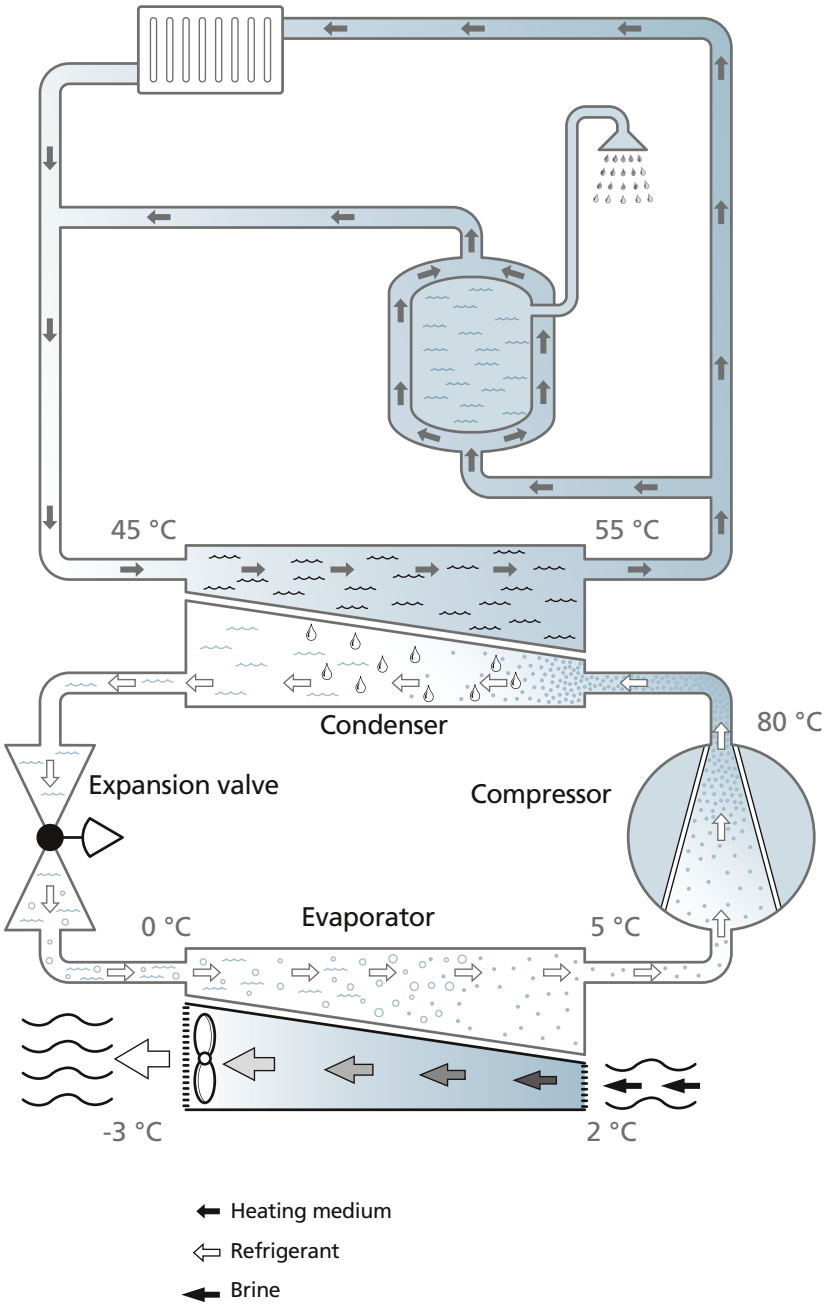
How do NIBE air/water heat pumps compare with traditional boilers?

To put it simply, they're three times more efficient! With conventional oil and gas boilers, 1 kWh of input energy provides less than 1 kWh of output energy. Using a NIBE air/water heat pump every 1 kWh of input electrical energy is converted into an average of 3 kWh of heating energy. There is no escaping the obvious conclusion – a heat pump is the absolute best way to get low cost heating and hot water.



HOW DO YOU GET HEAT FROM COLD AIR?

Heat pump technology is actually based on a very simple, well-known principle. It works in a similar way to any domestic refrigerator, using a vapour compression cycle.



The main components in the heat pump are the compressor, the expansion valve and two heat exchangers (an evaporator and a condenser).

A fan draws the outdoor air into the heat pump where it meets the evaporator. When the outdoor air hits the evaporator the refrigerant will turn into gas.

Then, using a compressor, the gas reaches a high enough temperature to be transferred in the condenser to the house's heating system. At the same time the refrigerant reverts to liquid form, ready to turn into gas once more and to collect new heat.

The electrical energy to drive this process compared to the heating energy that is given to the house has a seasonal factor of about 3. This means that if you use 15,000 kWh for heating and domestic hot water after installation you only need about 5000 kWh. The exact saving depends on the climate and whether you have a low, medium or high temperature heating system. Let us make a calculation based on your house and needs.

MORE GOOD REASONS TO INSTALL A NIBE AIR/WATER HEAT PUMP

– NIBE air/water heat pumps are easy to install, operate and maintain.

– They can be installed on almost any kind of terrain.

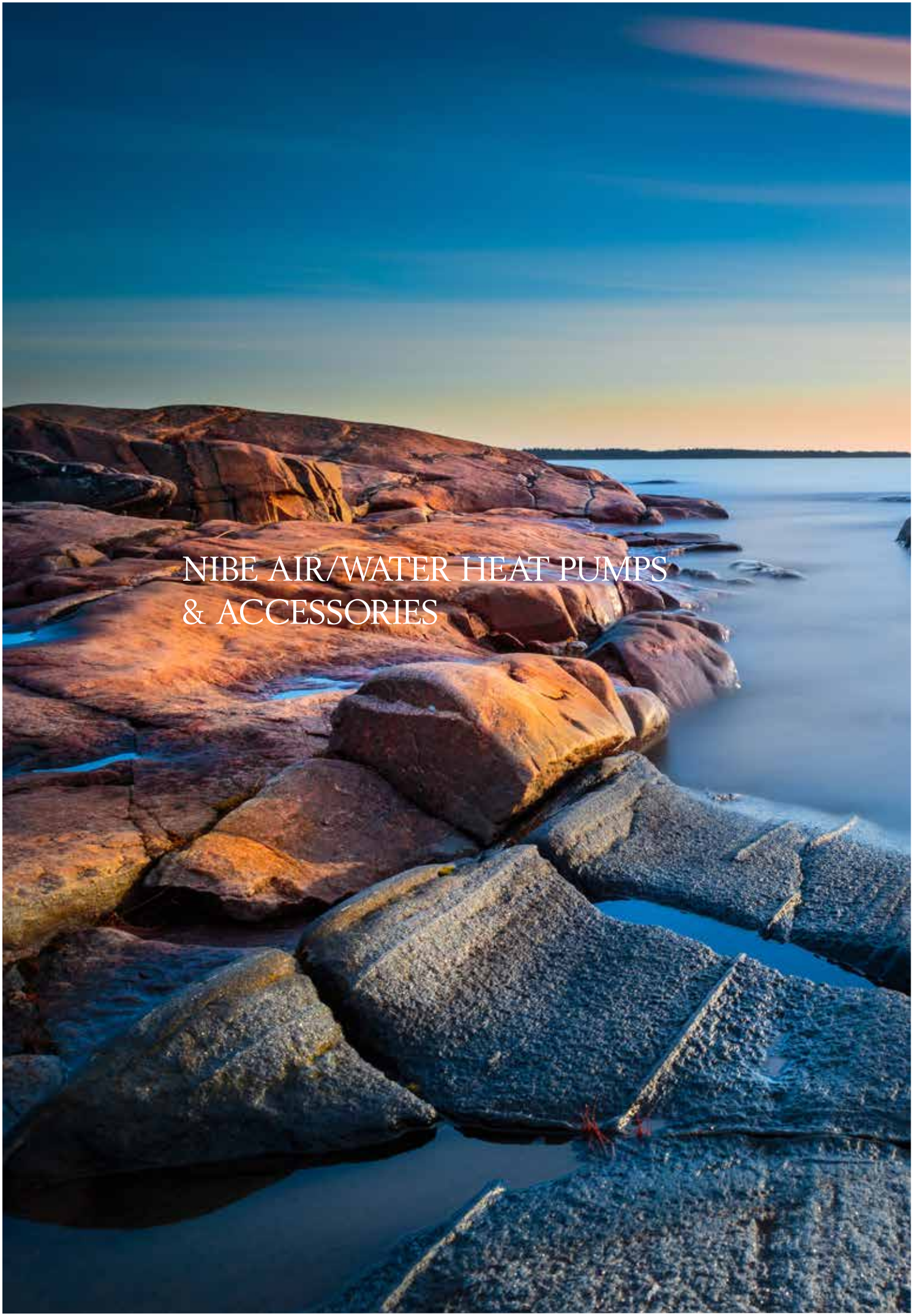
– They can be combined with a variety of energy sources, depending on availability and price.

– Ideal for underfloor heating and water-filled radiators, and some models also include a cooling function.

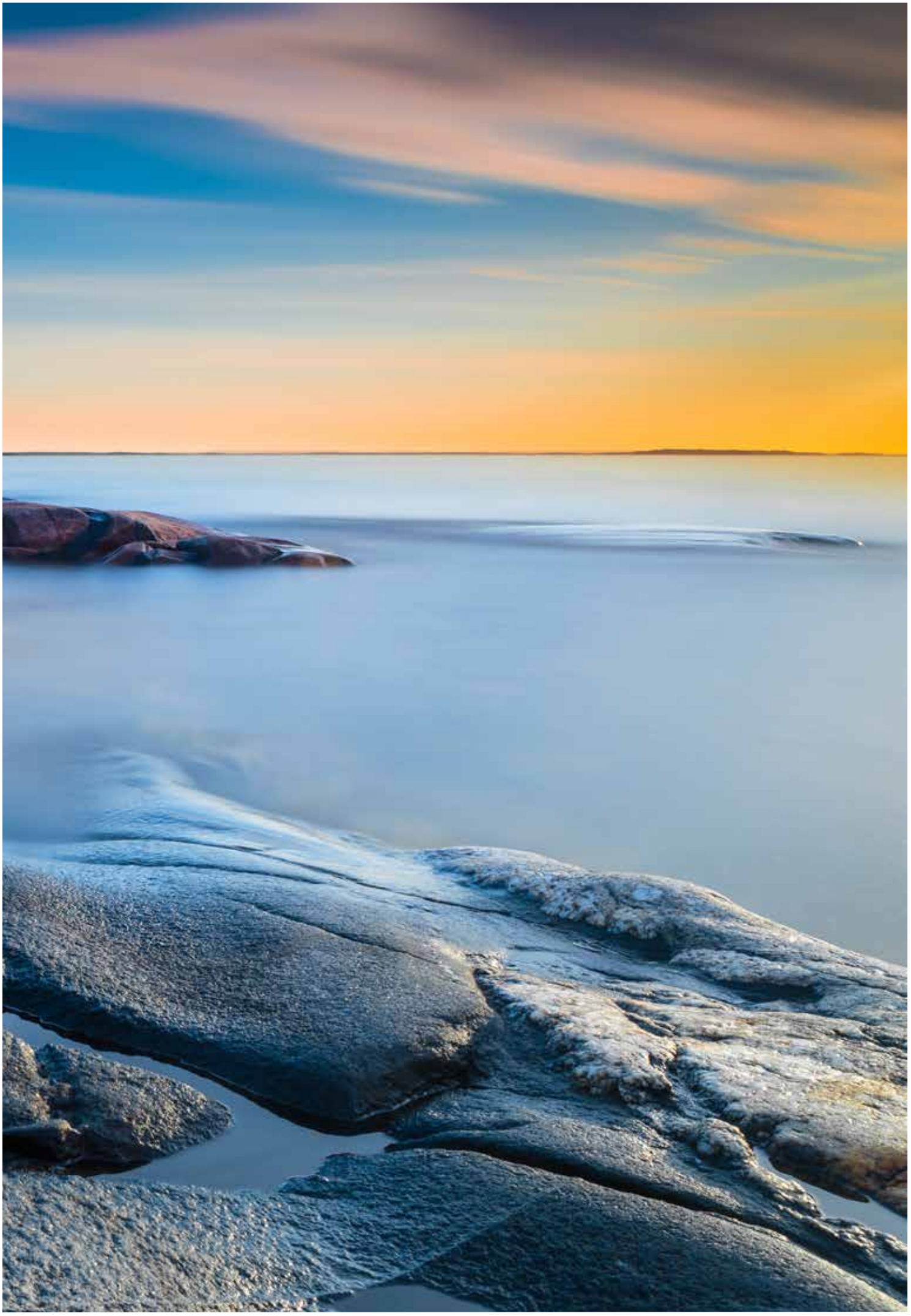
– No natural gas supply, flues, ventilation or chimney are needed.

– NIBE air/water heat pumps give you clean and discreet heating.

– They are built to last so you can relax and enjoy cost-effective, hassle-free heating for years to come!



NIBE AIR/WATER HEAT PUMPS & ACCESSORIES



FREEDOM - ANYWHERE, ANY TIME

NIBE UPLINK™

Using the Internet and NIBE Uplink you can get a quick overview and the present status of your heat pump and the heating in your property. You get a good overall view where you can follow and control your heating and hot water production. If your system is affected by an operational disturbance you receive an alert via e-mail that allows you to react quickly.

NIBE Uplink also gives you the opportunity to control comfort in your property no matter where you are. **We call it NIBE freedom.**

- NIBE introducing a new, efficient tool that gives you quick and easy control over your property's heat pump - wherever you are.
- A web interface over the Internet offers you an instant view of e.g the temperature and current status of the heat pump in your property.
- Provides the benefit of external monitoring for several properties at the same time.
- Clear, easy way of monitoring and controlling heating and water temperatures for maximum comfort.
- In the unlikely event of a system malfunction you receive an alarm directly in your mail, allowing you to respond in the fastest possible time.
- Simple installation with a "click" of an ethernet cable.
- Provides logging of heat pump parametres presented in a user-friendly history chart.

New

- **API functionality for external integration of e.g home management systems and BMS**
- **NIBE Uplink app for compatible smart phones**

WHAT MAKES THE NIBE™ F2300 SUCH AN EFFICIENT AND VERSATILE HEAT PUMP?

1 Silent operation
Components have been chosen to reduce the sound level, resulting in a very low sound level.

2 High efficiency
NIBE F2300 uses the vapour injection, EVI, compressor concept, which increases the system performance and making it possible achieve the superior operating envelope of NIBE F2300.

3 Good domestic hot water performance
The high supply temperature enables good domestic hot water performance.

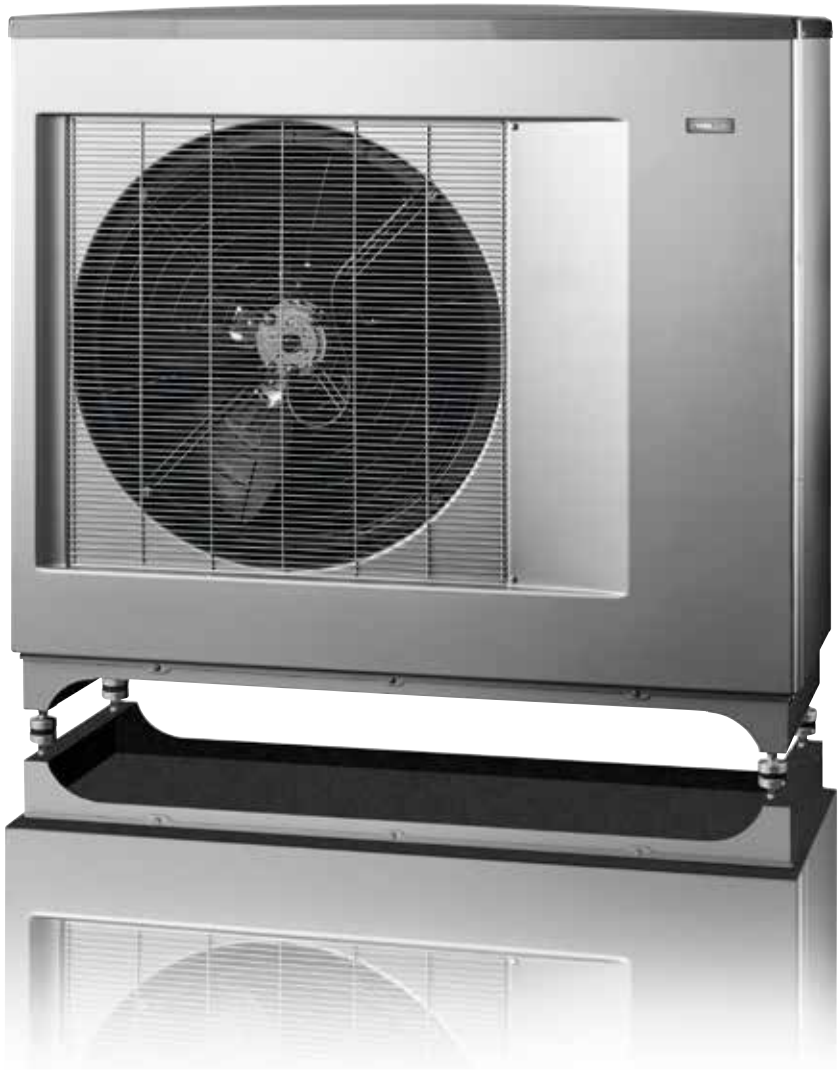
4 Hard wearing materials
The materials used to build the NIBE F2300 heat pump are especially hard wearing, so your heat pump will give a long service life even in harsh outdoor conditions. For example, two layers of anti-corrosion treatment prevent the evaporator from rusting.

5 Discreet design
The neutral appearance of NIBE F2300 means that it will not attract undue attention when installed in your garden, but blends discreetly with the surroundings.

6 Robust condensation water soution
Condensation water from the defrost operation is gathered in a built-in tray. With the accesoory KVR 10 it can be transferred to a collection point at 1- 6m.

7 Stable winter operation
NIBE F2300 has been developed to cope with winter conditions.
NIBE F2300 produces high temperature heating, even when the temperature drops to –25°C.

8 Prepared for a range of system solutions
To complete your heating system, NIBE offers a number of ready-made combinations with indoor modules that are designed to work optimally together with the NIBE F2300.



NIBE AIR/WATER HEAT PUMP MONOBLOC PROGRAMME

NIBE™ F2030
NIBE™ F2040
NIBE™ F2300

The NIBE monobloc air/water programme consists of NIBE F2030 and F2040 for residential use and NIBE F2300 mainly for commercial use. Much effort has been made to create attractive system combinations.

The NIBE products have been developed with special attention to make the installation as smooth as possible. For example together with the outdoor unit we always include anti-vibration water connections. A broad accessory programme is available and a large number of recommended possible combinations.

NIBE™ F2030

Name	Building heating power demand
NIBE F2030-7	5 – 9 kW
NIBE F2030-9	8 – 12 kW

NIBE F2030-7 and -9 are two monobloc air/water outdoor units that covers building heating power demand in the 5 – 12 kW range and are therefore particularly suitable for residential buildings.

NIBE F2030 uses the vapour injection, EVI, compressor concept, which increases the system performance and making it possible achieve the superior operating envelope of NIBE F2030.

Special attention has been given to minimizing the noise level. F2030 is one of the most quiet units available on the market.

- COP optimized throughout the envelope
- Supply temperature up to 65 °C
- 3-phase connection for all sizes
- Lowest maximum noise level
- Extended working range down to -25 °C ambient with 63 °C supply temperature
- Superior for radiator systems
- Built-in condensate water tray

NIBE F2030

Max outgoing heating medium temperature	65 °C
Lowest operational point. Outdoor air/supply	-25/63 °C (-10/65 °C)
Height (incl. feet)	1134 mm
Width	1260 mm
Depth	570 mm
Weight	160/165 kg

Models

Voltage 400 V~ 3-phase
NIBE F2030-7
NIBE F2030-9

NIBE™ F2040

Name	Building heating power demand
NIBE F2040-8	5 – 9 kW
NIBE F2040-12	8 – 12 kW
NIBE F2040-16	12 – 16 kW

NIBE F2040-8, -12 and -16 are a series of monobloc air/water outdoor units that covers building heating power demand in the 5 – 16 kW range and are therefore particularly suitable for residential buildings.

- Inverter controlled compressor
- Cooling function
- Outdoor unit with compact dimensions
- Built-in condensate water tray

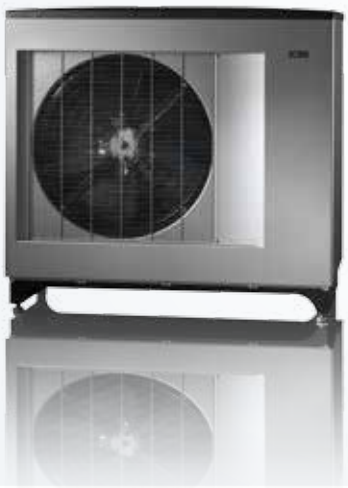
NIBE F2040

Max outgoing heating medium temperature	58 °C
Refrigerant quantity (R410A)	2.55/2.9/4.0 kg
Height (incl. feet)	900/995/1450 mm
Width	1025/1145/1145 mm
Depth	420/450/450 mm
Weight	90/105/135 kg

Models

Voltage 230 V~ 1-phase
NIBE F2040-8
NIBE F2040-12
NIBE F2040-16

NIBE™ F2300



Name	Building heating power demand
NIBE F2300-14	12 – 18 kW
NIBE F2300-20	16 – 22 kW

NIBE F2300-14 and -20 are two monobloc air/water outdoor units that covers building heating power demand in the 12 – 22 kW range and are therefore particularly suitable for commercial and large residential buildings.

NIBE F2300 uses the vapour injection, EVI, compressor concept, which increases the system performance and making it possible achieve the superior operating envelope of NIBE F2300.

Special attention has been given to minimizing the noise level. F2300-20 kW is one of the quietest units available on the market.

- COP optimized throughout the envelope
- Supply temperature up to 65 °C
- 3-phase connection for all sizes
- Lowest maximum noise level
- Extended working range down to -25 °C ambient with 63 °C supply temperature
- Superior for radiator systems
- Built-in condensate water tray

NIBE F2300

Heating systems up to	65 °C
Heating working range, outdoor temperature	-25 °C – +40 °C
Height (incl. feet)	1385 mm
Width	1455 mm
Depth	620 mm
Weight	225/230 kg

Models

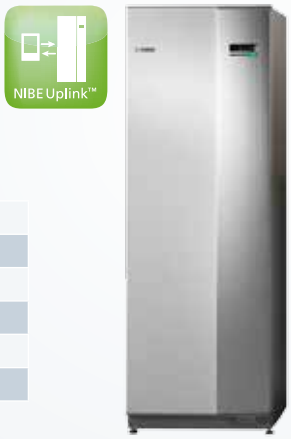
Voltage 400 V~ 3-phase
NIBE F2300-14
NIBE F2300-20

SYSTEMS USING THE NIBE™ F2030/F2040/F2300 AIR/WATER HEAT PUMP

NIBE offers a broad selection of accessories and complete indoor modules. These have been developed along with our air/water heat pumps to optimise their efficiency and achieve maximum savings. You will need to know the approximate annual energy requirements of your home before deciding which system to choose. Ask your local NIBE expert to check out your current heating system and calculate your energy requirements.

NIBE AIR/WATER HEAT PUMP MONOBLOC – INDOOR MODULES

NIBE™ VVM 310



NIBE VVM 310 system

Outdoor unit	Indoor unit
NIBE F2030-7	NIBE VVM 310
NIBE F2030-9	NIBE VVM 310
NIBE F2040-8	NIBE VVM 310
NIBE F2040-12	NIBE VVM 310
NIBE F2040-16	NIBE VVM 310

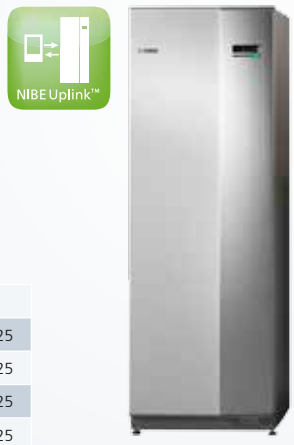
Flexible all-in-one indoor module for heating and hot water

NIBE VVM 310 is a flexible indoor module and together with the NIBE's air/water outdoor modules creates a complete system to meet the building's heating and hot water demand.

NIBE VVM 310 can receive energy from several different sources, for example from the NIBE F2030 and F2040 outdoor heat pumps.

Prepared for connection of all types of external heat sources. The connected external energy sources can be used both as normal supplementary heating source and as prioritized heating source i.e. using the energy from wood fired boiler when available.

NIBE™ VVM 320/325



NIBE VVM 320 system

Outdoor unit	Indoor unit
NIBE F2030-7	NIBE VVM 320/VVM 325
NIBE F2030-9	NIBE VVM 320/VVM 325
NIBE F2040-8	NIBE VVM 320/VVM 325
NIBE F2040-12	NIBE VVM 320/VVM 325

Complete indoor module for heating and hot water

NIBE VVM 320/325 is a complete indoor module and together with the NIBE's air/water outdoor modules creates a complete system to supply the building's heating and hot water requirements.

NIBE VVM 320/325 can receive energy from several different sources, for example from the NIBE F2030 and F2040 outdoor heat pumps.

NIBE VVM 320 is connected in the top of the product. It is available in different kinds of anticorrosion protection, copper, enamel and stainless steel.

NIBE VVM 325 is connected in the bottom of the product. It is available in one anticorrosion protection, copper.

NIBE™ VVM 500

NIBE VVM 500 system

Outdoor unit	Indoor unit
NIBE F2030-7	NIBE VVM 500
NIBE F2030-9	NIBE VVM 500
NIBE F2040-8	NIBE VVM 500
NIBE F2040-12	NIBE VVM 500
NIBE F2040-16	NIBE VVM 500
NIBE F2300-14	NIBE VVM 500
NIBE F2300-20	NIBE VVM 500

Flexible all-in-one indoor module for heating and hot water

NIBE VVM 500 is a flexible indoor module and together with the NIBE's air/water outdoor modules creates a complete system to meet the building's heating and hot water demand.

NIBE VVM 500 can receive energy from several different sources, for example from the NIBE F2300, F2030 and F2040 outdoor heat pumps.

Prepared for connection of all types of external heat sources. The connected external energy sources can be used both as normal supplementary heating source and as prioritized heating source i.e. using the energy from wood fired boiler when available.

A solar coil for easy connection of thermal solar panels is also included in NIBE VVM 500.

NIBE™ SMO 20/40

NIBE SMO 20/40 system

Outdoor unit	Indoor unit
NIBE F2030-7	NIBE SMO 20/40
NIBE F2030-9	NIBE SMO 20/40
NIBE F2040-8	NIBE SMO 20/40
NIBE F2040-12	NIBE SMO 20/40
NIBE F2040-16	NIBE SMO 20/40
NIBE F2300-14	NIBE SMO 20/40
NIBE F2300-20	NIBE SMO 20/40

Control Module

NIBE SMO 20/40 is an advanced controller module that supports a broad range of different hydraulic schemes. NIBE SMO 20/40 enables you to combine a NIBE air/water heat pump with other equipment and create your own customised heating system. Start with one NIBE air/water heat pump; if you need more power, with a SMO 40 you can you can install as many as eight NIBE air/water heat pumps together in the same system. The addition of NIBE SMO 20/40 intelligent control module allows your NIBE air/water heat pump to work smoothly in a variety of ways. For example:

– Connected to another heating system such as gas, oil, electricity or district heating.

– Connected to a NIBE water heater of the size required to meet your domestic hot water needs.

– If you have a swimming pool, NIBE SMO 40 can connect your heat pump to your pool and heat that too.

– Systems controlled by NIBE SMO 40 can also incorporate solar panels, enabling you to use solar energy as a complementary heat source when available.

WHAT MAKES THE NIBE™ SPLIT SUCH AN EFFICIENT AND VERSATILE HEAT PUMP?

It functions efficiently in the coldest...

While many heat pumps cease to work just when you need them most, NIBE SPLIT gives you an unusually wide operating range. It can generate hot water up to 58°C (or 65°C with an immersion heater) and continue to operate smoothly even if outside temperatures drop to -20°C. We recommend heating systems up to 55°C for optimal savings. On the occasions when the heat pump cannot generate sufficient energy to meet household needs, its control unit activates a built-in immersion heater or a complementary source such as solar power, gas or wood.

.. and even the hottest weather

Owners of a NIBE SPLIT heat pump also have the option of setting it up to provide cooling during especially hot weather. Homes with water-filled radiators or underfloor heating can be enhanced with this function by adding fan coils. In contrast to a traditional cooling system, which stops and starts in response to thermostat signals, a NIBE SPLIT supplies cooling according to household requirements, distributing the air evenly and maintaining a comfortable temperature throughout your home.

Inverter controlled twin-rotary compressor
LOW WASTE - HEAT SUPPLY ACCORDING TO NEED
The compressor can run between 30% and 100% capacity. Thanks to inverter controls, the speed varies automatically to meet household energy requirements. It is designed to perform efficiently even at low outside temperatures when home heating needs are greatest.

Compressor control
HIGH EFFICIENCY AT LOW AMBIENT TEMPERATURES
The compressor is operated and controlled in such a way as to be efficient even at low ambient temperatures.

Expansion valve
GREATER PRECISION IN THE REFRIGERANT CIRCUIT
The expansion valve used in NIBE SPLIT was chosen for the precision it allows. The result is high efficiency and capacity control for both cooling and heating.

Cabinet coating
ATTRACTIVE, DURABLE FINISH
The outdoor unit is coated with two layers of epoxy paint to ensure lasting looks and long life.

Finned coil design (evaporator)
HIGH PERFORMANCE AND DURABILITY
The finned coil absorbs or rejects energy from the ambient air for heating and cooling. A polymer coating gives high durability and the coil's enhanced surface improves heat transfer from the air.

Low start-up current
PREVENTS INTERFERENCE WITH OTHER ELECTRONIC DEVICES
NIBE SPLIT has an inverter-driven compressor for low start-up current. The slow start-up and gradual move up to required capacity prevents interference with other electronic devices in the building.

Fan (motor and blade)
CONSERVES ENERGY
Driven by an energy-saving motor, the fan's speed varies so only the required amount of air is utilised. The blades are specially designed to move as much air as possible at the lowest noise level.

Control display panel
EASY TO OPERATE
This user-friendly interface is designed to manage both the indoor and outdoor unit, allowing everyone to enjoy all the benefits of the NIBE SPLIT system. A uniquely efficient installation that adapts to the household's fluctuating needs.

Circulation water pump
SIMPLE SYSTEM FOR ON-DEMAND HEATING
Driven by a low energy DC motor, the pump's speed varies so only the required amount of water is moved.

Insulation material and thickness
RETAINS HEAT AND PREVENTS DRIPPING
Energy losses are limited by an integrated, hermetically sealed insulating layer on the components. This also prevents condensation on pipes and dripping in cooling mode. Insulation of the water tank minimises heat loss and saves money

Integrated heat exchanger
DOMESTIC HOT WATER WHEN YOU NEED IT
Domestic hot water is produced within an internal stainless coil. Cold water enters at the bottom and is gradually heated.

Control system
MANAGES ENERGY USE IN YOUR HOME
The control system senses the characteristics of the building and accommodates its many variables. It monitors and manages the outdoor unit, its compressor speed, fan speed and defrosting needs. The result is a dynamic, variable supply of heating/cooling and temperature levels.

Outdoor unit NIBE AMS 10-12

Indoor unit NIBEACM 270

NIBE AIR/WATER HEAT PUMP SPLIT PROGRAMME

NIBE™ SPLIT

NIBE SPLIT is a plug and play, all-inclusive heating, hot water and cooling system. It's easy to install and operate and has a discreet, timeless design.

NIBE™ SPLIT

NIBE SPLIT is a plug and play heating and cooling system for new builds and refurbished properties. It combines a well-designed, high-quality outdoor unit with an indoor unit using NIBE's technology to produce a unique, efficient and environmentally-friendly system for heating, cooling and domestic hot water. It's easy to install and operate and has a discreet, timeless design.

NIBE SPLIT is engineered to deliver optimum performance throughout the year and is one of the most efficient heating systems available today.

Cooling on hot days

Homes with water-filled radiators or underfloor heating can be enhanced with the cooling function by adding fan coils. In contrast to a traditional cooling system, which stops and starts in response to thermostat signals, NIBE SPLIT supplies cooling according to household requirements, distributing the air evenly and maintaining a comfortable temperature throughout your home.

Technical specifications NIBE Split

NIBE SPLIT system	
Heating system up to	55 °C
Cooling system min. supply temperature (packs 1 – 2)	7 °C
Cooling system min. supply temperature (packs 3 – 6)	18 °C
Heating working range, outdoor temperature	-20°C – +43 °C
Cooling working range, outdoor temperature	+15°C – +43 °C
Operating voltage	1 x 230 V or 3 x 400 V

Indoor unit NIBE	**ACVM 270**	**HBS 12**	**HBS 16**
Volume, total, litres	270	–	–
Height, mm	1850	1040	1150
Required ceiling height, mm	2000	1300	1300
Width, mm	600	600	600
Depth, mm	660	375	375
Weight, kg	140	64.5	68.5
Mounting	floor	wall	wall
Immersion heater, kW	Max 9	–	–
Voltage		230 V~ 1-phase 400 V~ 3-phase	

External water cylinder NIBE	**HEV 500**	**HEV 300**	**HE 30**
Volume, total, litres	500	300	–
Height, mm	1740	1900	385
Required ceiling height, mm	1900	2080	–
Width, mm	760	600	596
Depth, mm	876	600	365
Weight, kg	130	95	24
Immersion heater, kW	Max 9	Max 9	Max 9

Outdoor unit NIBE AMS	**10-8**	**10-12**	**10-16**
House heating demand, kW*	3 – 9	5 – 11	7 – 13
Compressor		Twin Rotary	
Height, mm	595	845	1300
Width, mm	780	970	970
Depth, mm	340	370	370
Weight, kg	60	74	105
Delivered compressor output EN14511 7/45 heating, kW	3 – 8	3.5 – 12.0	4 – 16
Delivered compressor output EN14511 35/18 cooling, kW	2.7 – 10.7	3.3 – 12.0	5 – 16
Maximum distance between indoor and outdoor units, refrigerant pipes, m	*30*	*30*	*30*

** Coldest day above –20°C*

FULL SPLIT PROGRAMME FOR RESIDENTIAL USE
NIBE™ SPLIT AIR/WATER HEAT PUMP

We have developed a new range of 11 different NIBE SPLIT combinations suitable for both new build and refurbishment installations. Factors such as the size of your house, where you live and your domestic hot water needs will determine which pack is most appropriate for you.

Alongside the indoor units, three different sizes of outdoor units are available. Each combination pack, containing a fixed indoor unit and an outdoor unit, has been carefully developed to achieve the optimal performance (COP) for heating and hot water production. The indoor units consist of either an all-in-one cabinet with hot water cylinder included or a control cabinet (hydro box) with a choice of separate cylinders.

Development has been based on our long experience of heat pumps and water-borne domestic heating in the demanding Scandinavian climate.

- Easy installation. Just connect the outdoor unit to the indoor unit(s) and your heating system and start it up. The outdoor unit is electrically connected to the indoor unit. The controller display is in your language.
- Hot water production can account for as much as 50% of the energy consumed, especially in new build properties. We have tested the COP for hot water in accordance with EN 255-3 for all our combinations, and guarantee a COP >3. This means that compared with an electric boiler you get three times the energy for the same input.
- Best-in-class energy savings due to the wide operating range and speed-controlled compressor. For example, the supply temperature from the compressor is 58°C at an outdoor temperature of -20°C.
- Straightforward installation, especially with the all-in-one cabinet.
- A load limiter controls the power needed by the heat pump (3x400 V) to guarantee the pump does not exceed your house fuse rating.
- Ready to support two individual heating systems with different heating demands, for example radiators and underfloor heating.
- Under floor cooling available for the largest outdoor unit. Fan coil cooling is also possible for the all-in-one indoor unit and the two smaller outdoor units.
- If you would like to combine the system with a gas boiler or existing oil boiler instead of the built-in immersion heater, just plug your external unit into the water cylinder. No extra cylinder is needed. The controller is configured to handle your external unit.
- NIBE solar packs available.
- A full accessory programme and hydraulic schemes are available to make your installation even more complete. Please see our website www.nibe.eu or the relevant site for your country.
- Energy saving and controlling software ensures the correct set-up for your building and climate. Ask your NIBE dealer for details.

Pack 1

Plug-and-play heating system suitable for small sized homes and normal hot water demand

House heating demand 3 – 7 kW

Pack 2

Plug-and-play heating system suitable for average sized homes and normal hot water demand

House heating demand 5 – 10 kW

Pack 3

Plug-and-play heating system suitable for average sized homes and high hot water demand

House heating demand 5 – 10 kW

Pack 4

Plug-and-play heating system suitable for large sized homes and normal hot water demand

House heating demand 7 – 13 kW

Pack 5

Plug-and-play heating system suitable for large sized homes and high hot water demand

House heating demand 7 – 13 kW

Pack 6

Plug-and-play heating system suitable for large sized buildings and no hot water demand

House heating demand 7 – 13 kW

Pack 7

Plug-and-play heating system suitable for average sized homes and normal hot water demand

House heating demand 5-10 kW

Pack 8

Plug-and-play heating system suitable for average sized homes and no hot water demand

House heating demand 5– 10 kW

Pack 9

Plug-and-play heating system suitable for small sized homes and normal hot water demand

House heating demand 3 – 7 kW

Pack 10

Plug-and-play heating system suitable for small sized homes and high hot water demand

House heating demand 3 – 7 kW

Pack 11

Plug-and-play heating system suitable for small sized homes and no hot water demand

House heating demand 3 – 7 kW

	Indoor unit	Outdoor unit			Separate controller		Separate tank		
	ACVM 270	AMS 10-8	AMS 10-12	AMS 10-16	HBS 12	HBS 16	HE 30	HEV 300	HEV 500
Pack 1	X	X							
Pack 2	X		X						
Pack 3			X		X				X
Pack 4				X		X		X	
Pack 5				X		X			X
Pack 6				X		X	X		
Pack 7			X		X			X	
Pack 8			X		X		X		
Pack 9		X			X			X	
Pack 10		X			X				X
Pack 11		X			X		X		

NIBE™ SPLIT INSTALLED IN YOUR HOME

Triple function:
HEATING/COOLING/DOMESTIC HOT WATER
NIBE SPLIT – a single system to meet all your heating, cooling and domestic hot water needs.

Indoor unit:
SINGLE, NEATLY PACKAGED MODULE
NIBE has used cutting-edge technology to create an integral system design. The neat indoor module fits into a standard 60 x 66 x 180 cm space.

Electrical installation:
CONTRIBUTES TO EASE OF INSTALLATION
The outdoor unit does not need a separate electrical connection. It is linked by cable to the indoor unit, which is connected to the power supply.

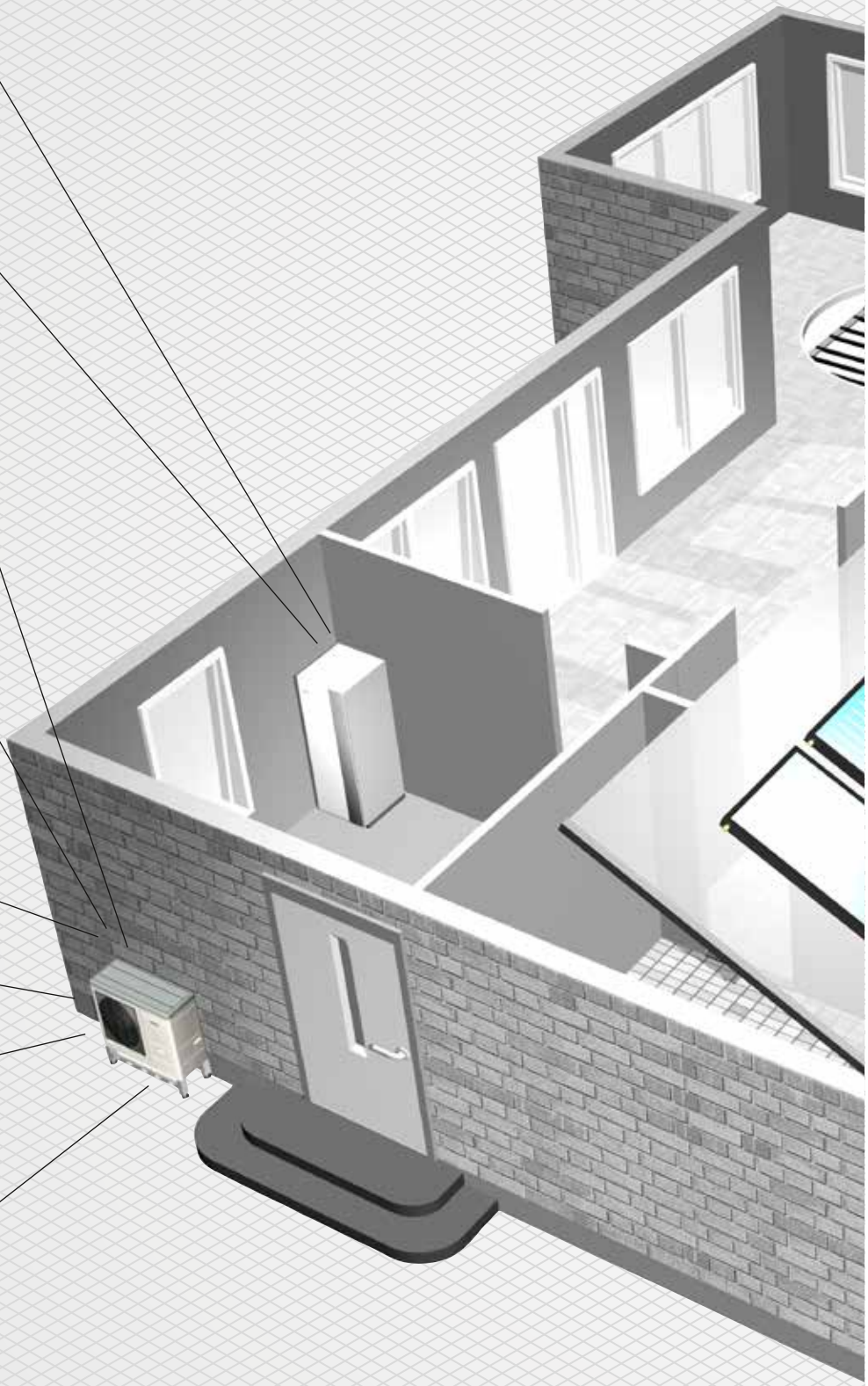
Outdoor unit:
COMPACT SMALL FOOTPRINT
The outdoor unit is small and has an appealing, timeless design.

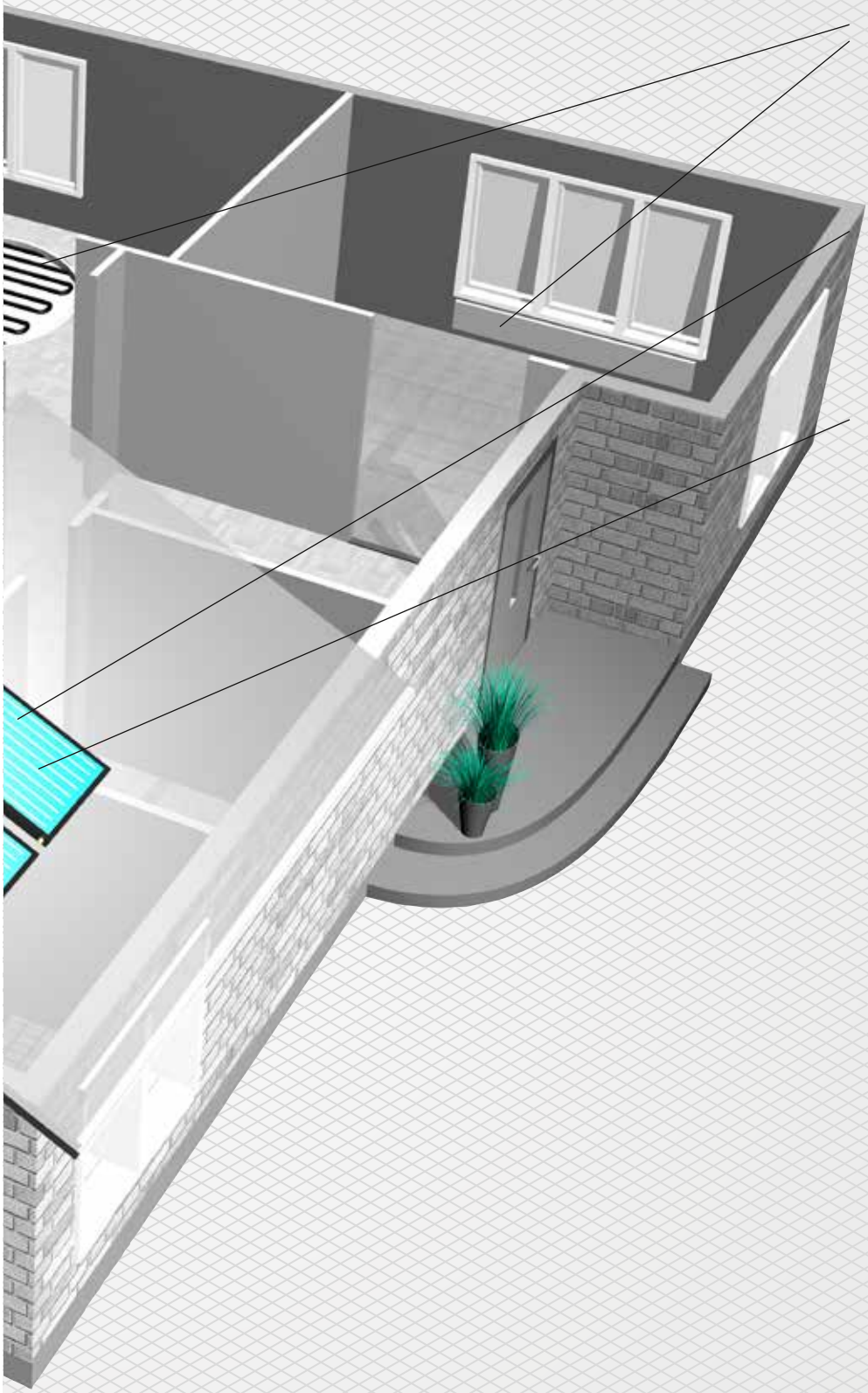
Refrigerant in pipes:
NO RISK OF FREEZING
The outdoor pipes are filled with refrigerant instead of water which means they will not freeze even at low ambient temperatures and during long periods without electrical power.

Flexible positioning:
CHOOSE A DISCREET LOCATION
The outdoor unit can be placed up to 30 metres (AMS 10-8) from the indoor unit, which makes it easier to position the unit outside your house.

Outdoor unit pre-charged with refrigerant:
EASY INSTALLATION AND ENVIRONMENTALLY-FRIENDLY
The outdoor unit is pre-charged with a refrigerant which has a low environmental impact and does not harm the ozone layer.

Position of heat pump:
CHOICE OF TWO MOUNTINGS
Either wall-mounted or floor standing (using NIBE's stand accessory)





Flexible indoor installation:

SWITCH THE FUNCTION TO SUIT THE SEASON

NIBE SPLIT can be used for heating and cooling. Heat is distributed by water moving through radiators or underfloor systems and cooling via fan coils or underfloor systems.

Compatibility:

CONNECTS EASILY WITH OTHER ENERGY SOURCES

NIBE SPLIT can be hooked up to solar heating panels or an existing boiler to provide an additional source of energy.

Green energy connection

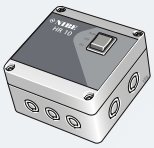
EMISSION-FREE HEATING AND COOLING

The energy supply from your NIBE SPLIT heat pump can be complemented with an alternative source, such as solar power, to create an almost emission-free system.

FURTHER USES FOR YOUR HEAT PUMP

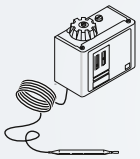
Discover how a NIBE air/water heat pump can do more than just heat your home and hot water. Our broad range of accessories makes it possible for you to heat the pool, add solar panels and install a complete system solution in your home.
Ask your NIBE installer for more information.

NIBE™ F2030/F2300



NIBE HR 10

Auxiliary relay HR 10 is a connection box housing a contactor and a rotary selector switch. It is used to control external 1 to 3-phase loads such as oil burners, immersion heaters and pumps.



NIBE VT 10

Heating thermostat for NIBE F2030/F2300.

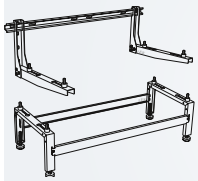
NIBE KVR 10

The KVR 10 accessory is used to safely lead away most of the condensation water from the air/water heat pump to a frost-free collection point.

NIBE™ F2040

NIBE KVR 10

The KVR 10 accessory is used to safely lead away most of the condensation water from the air/water heat pump to a frost-free collection point.



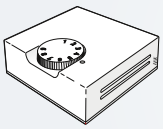
NIBE BRACKET

Choose between two alternative mountings. Either wall-mounted or standing on the ground.

NIBE™ SPLIT

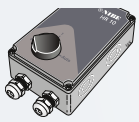
NIBE™ UKV 40 & 102

Buffer vessel 40 or 102 l. If extra circulating water system volume is needed.



NIBE™ RG 10

The room sensor can correct the temperature to radiators or floor loops depending on the increased indoor temperature in connection with solar incident radiation, heating from another heat source or increased indoor activity.



NIBE™ HR 10

Auxiliary relay NIBE HR 10 is a connection box housing a contactor and a rotary selector switch. It is used to control external 1 to 3-phase loads such as oil burners, immersion heaters and pumps.

NIBE™ Bracket

Choice of two mountings. Wall-mounted or standing on the ground. (AMS 10-8/12)

NIBE™ VCC 22/28

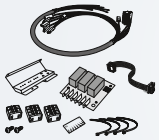
This accessory is used when the indoor module in NIBE SPLIT is installed in houses with cooling and heating systems, for example, in cases where the house has a radiator system and fan convectors.

NIBE™ RE 10

If controller display is required in a separate room.

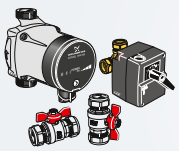
NIBE™ KVR 10

The KVR 10 accessory is used to safely lead away most of the condensation water from the air/water heat pump to a frost-free collection point.



NIBE™ ACK 22/28

Cable kit for NIBE ESV 22 or VCC 22. Needed for either NIBE ESV 22 or VCC 22. Only one ACK 22 if both are used.



NIBE™ ESV 22/28

This accessory is used when the indoor module is installed in houses with two different heating systems that require different flow line temperatures, e.g. in cases where the house has both a radiator system and an under floor heating system.

ACCESSORIES NIBE™ INDOOR MODULES

Even more options to choose from

A NIBE heat pump is not just for heating and hot water. With the addition of various accessories, our new heat pumps can do much more than merely heat your home and hot water. For example, they can be used to cool your home in summer, ventilate it cost-effectively, or even heat your swimming pool. The relevant accessories are dimensioned to fit neatly together, giving the appearance of a single streamlined system. And since all accessories are controlled via the heat pump, you only have to learn to use one operating system.

NIBE™ HA-WH 5

NIBE HA-WH5 is a range of stainless steel cylinders specifically designed for the NIBE F2040 air/water heat pump range. The cylinders incorporate a large heating coil providing maximum heat transfer into the stored water. The cylinders are available in three single coil versions for use with NIBE F2040 air source heat pumps or traditional gas, oil or biomass boilers, ranging from 160 - 300 litres.

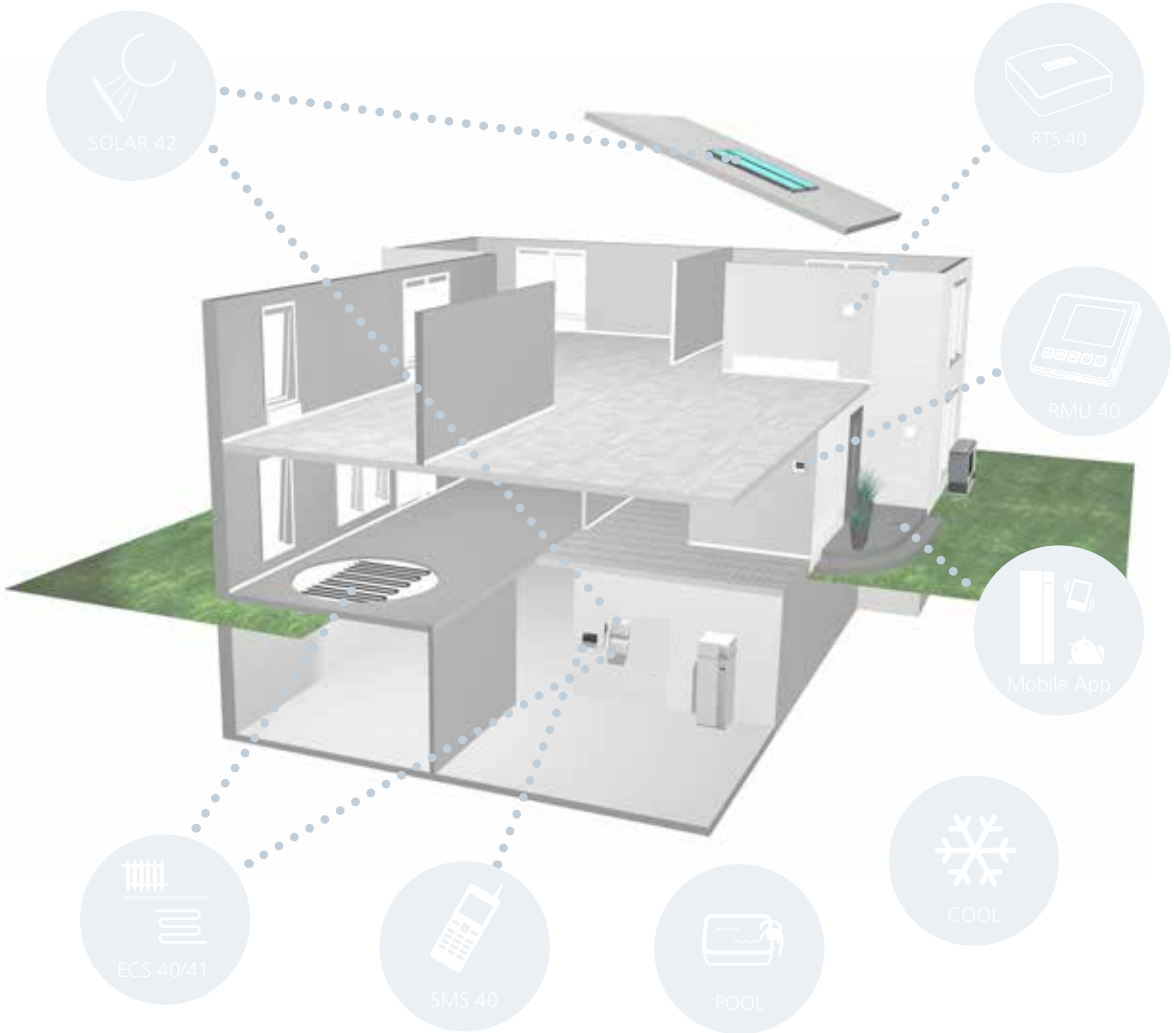
The NIBE HA-WH5 cylinders are manufactured from high grade stainless steel. Two twin coil solar versions are available in 200 and 300 litres versions providing up to 70% of the domestic hot water requirements by utilising the free energy provided by the sun.

NIBE™ F135

NIBE F135 is a complete exhaust air solution designed for use with NIBE air/water heat pump systems.

The exhaust air module recycles mechanical exhaust air and improves the indoor climate, at the same time as reducing heating/hot water costs.

All of your heating, hot water and ventilation demands is controlled in the same controller of if preferred, in Uplink.



For more information, visit www.nibe.eu.

NEW TIMES CALL FOR A NEW APPROACH

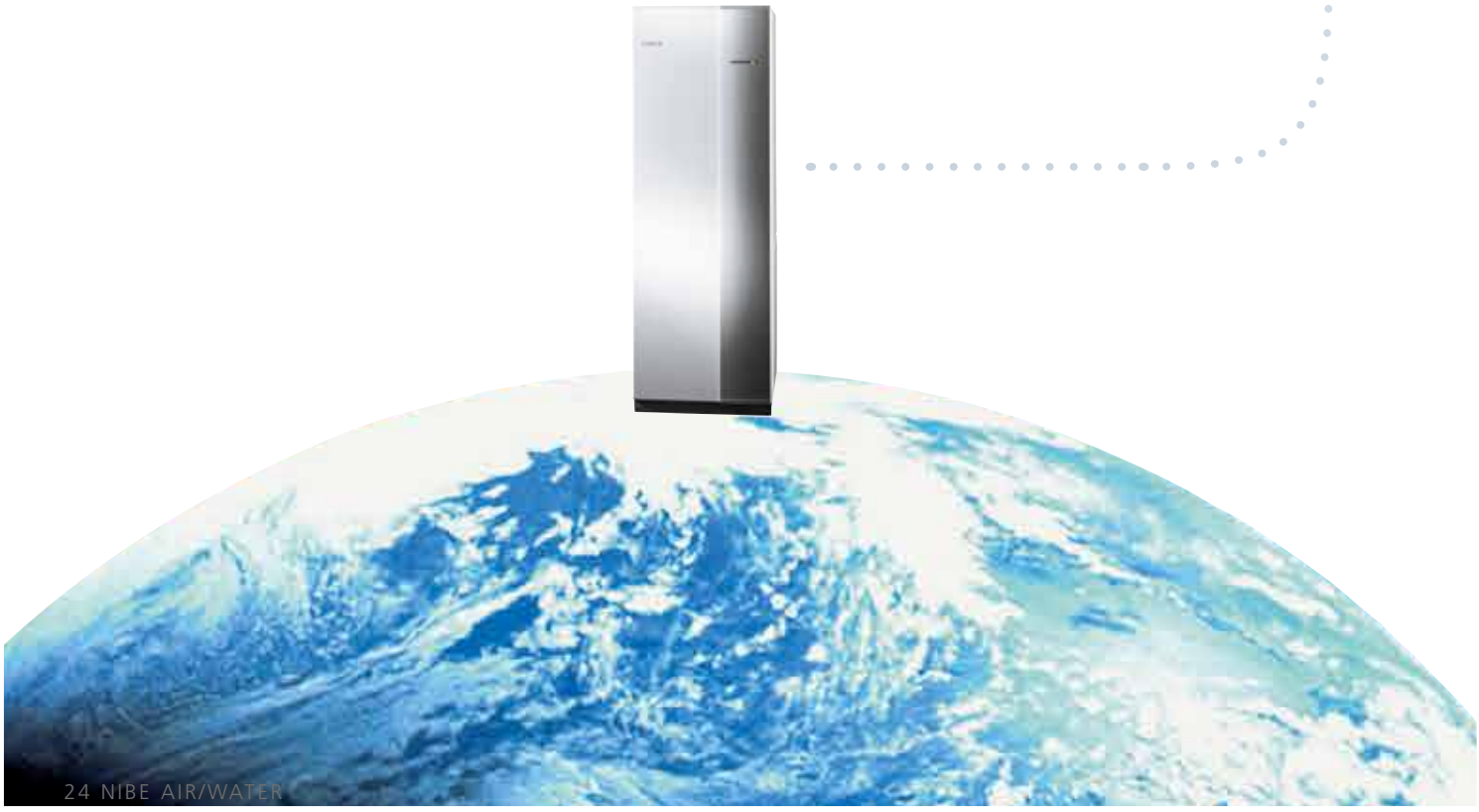
We all know we've got to reduce emissions. The question is how.

'Green' thinking might once have been a luxury but nowadays it is a necessity that none of us can afford to ignore. Increasingly, the reduction of CO_2 emissions is becoming a legal obligation and environmental requirement.

Over 70% of the CO_2 emissions from an average home are caused by its heating and hot water systems. If we are to reduce this figure, we need to start implementing greener, more sustainable technologies across the board. Only then, will we see a significant reduction in CO_2 emissions.

Meanwhile the prices of traditional energy sources are rising steadily, with the result that more and more people are considering alternative, more efficient power sources.

Now that customers have started demanding a solution, builders, architects and property developers can no longer ignore the need to employ alternative technologies that make better use of our planet's energy resources.



START WITH A HEAT PUMP!

It is a proven fact that heating your house with a heat pump is the best environmental option.

One obvious reason is that a heat pump does not use a combustion process to generate heat. It simply extracts the heat that already exists in the outside air and puts it to use to heat your home. This greatly reduces emissions in comparison to traditional fossil fuel-based systems.

Secondly, the amount of electricity needed is relatively low. That's because electricity is not the main energy source. It is only needed to drive the pump and enable the heat extraction process.

Actual energy savings vary depending on the benchmark, but generally measure between 60% and 75%.

A third point to consider is that heat pumps, like every manufactured item, contain what we call 'embedded energy'. That's the energy required to make and transport the product from the factory to where it will be used. NIBE is continually improving its processes to minimise the amount of embedded energy in its products and seeking more environmentally-friendly ways to build and transport them.

Once installed in your home, a NIBE heat pump immediately starts to deliver an environmental payback in the form of reduced energy consumption and emissions.

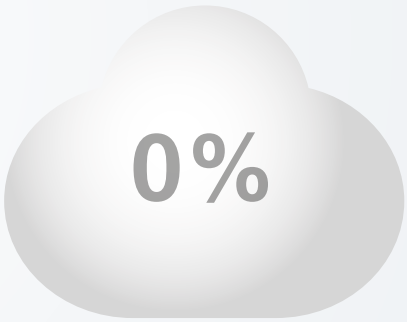
Towards a zero carbon future

The drive to reduce the consumption of energy and its impact on the environment is crucial and increasingly important to us all. If you switched to a renewable energy source, such as wind, solar or tidal, you would be taking a step closer towards a zero carbon future.

Classified as renewable energy

Some governments and regional authorities offer subsidies to home owners to switch from fossil fuel-based heating to renewable sources of energy. Since heat pumps are now officially classified as renewable energy, there couldn't be a better time to change!

For more information, please visit the NIBE website in your country.



CASE STUDY: NIBE AIR/WATER HEAT PUMP AND SOLAR PANELS

AN ENVIRONMENTALLY SUSTAINABLE HEATING SYSTEM WHICH MAKES YOU FEEL GOOD, INSIDE AND OUT!

The background

When Jonas Fröberg bought his family home near Karlskrona in southern Sweden, it had a floor area of only 80 square metres and needed extensive renovation. The original wooden building from 1938 was only intended as a summer house, so it had an antiquated electric boiler for hot water and an inefficient heating system running on direct electricity.

Over two years, the Fröbergs converted the summer house into a permanent home, extending the living space to 200 square metres over two levels and installing proper insulation and energy-saving windows. During the renovation, they had to make the important decision about which energy source to use for heating and hot water. Their main concern was to install a system with the lowest possible energy consumption and environmental impact. Fröberg felt sure that an investment in a complete, efficient and environmentally sustainable system was the right way to go.

Solution

The Fröbergs opted for the NIBE air/water heat pump and solar panels. This combination means they can benefit from solar energy when it's available without being totally dependent on it.

Results

The NIBE air/water heat pump can reduce energy costs by as much as 65%. In the Fröbergs' home, this means an annual consumption of less than 10,000 kW per year compared to 25,000 kW with traditional electric heating for a house of this size. The solar panels cover all hot water requirements for half the year and radiators aren't needed.

On grey winter days when the solar panels can't provide enough heat, the compressor starts up. During even colder periods, when the heat pump can't provide enough energy, electricity is still available as back-up. The sun replaces some of the energy that would have been pumped by the compressor, so for every kilowatt of energy used to run the heating system, 4 or 5 are produced.

The Fröbergs' commitment to the environment goes even further. *"I buy the electricity needed to drive the heat pump from a nearby wind turbine, which makes my home into a carbon neutral system," says Jonas.*

Find out more about our air/water heat pumps on www.nibe.eu

CASE STUDY: NIBE SPLIT

BIGGER HOME? BIGGER SAVINGS, NOT BIGGER BILLS.

The background

A family of four is living in a spacious 170 sq. m. house in a sparsely populated area. The house is currently equipped with electric radiators and an electrical water heater. The water heater needs changing and some of the radiators are so old that they will soon also need replacing. On average, this family's annual electricity consumption is 33,000 kWh, of which 27,000 kWh is for heating alone.

The cost of energy at this level places a great strain on the family's finances. It wants to reduce its energy bills while maintaining a good level of comfort in the home. The family also wishes to make a long-term, environmentally-friendly choice.

Solution

They first consider an air/air heating system, but decide to go for an air/water heat pump in order to meet their need for hot sanitary water. The air/water heat pump is able to reduce overall energy consumption while spreading warmth more evenly throughout the house and providing hot water as well.

The water heater is removed. A NIBE SPLIT is installed and a new fan coil is mounted on each floor to spread the warmth throughout the home. Some of the old electric heaters are left as comfort boosters to be used in case of exceptionally cold conditions, but these are generally switched off.

Results

The family's energy consumption drops from 27,000 kWh to 9,000 kWh.

The family saves 18,000 kWh with a NIBE SPLIT air/water heat pump.

The new air/water heat pump was installed with a minimum of disruption and the family is now saving on energy bills as well as helping to meet the EU's 2020 energy objectives.

They haven't tried the cooling function yet, as they wanted to find out just how much the installation can save on energy costs. But once the summer arrives, they will be able to cool the house without any additional investment.

Find out more about our air/water heat pumps on www.nibe.eu

‘Do what you can
with what you’ve got’.

Taking heat from the ambient air outside your home, NIBE’s air/water heat pumps appear to defy nature.

In fact, the opposite is true;
they enable us to live in harmony with nature.

NIBE OF SWEDEN

Living in harmony with nature

The Swedes have a long and impressive track record of clever, money-saving innovations that use resources sparingly. The simple reason for this is that Sweden was historically a poor agrarian country. A harsh winter climate made food scarce for many months, necessitating careful, forward planning.

Today, Sweden is a technologically advanced country with a successful economy, so this is no longer necessary. However, the mindset continues to be manifested in the form of fabulous, cost-saving innovations.

NIBE is a perfect example of the economical Swedish mind at work!

The company was founded by Nils Bernerup in 1952, after a particularly cold winter. Over the past 60 years, it has become Sweden's leading supplier of domestic heating products, continually driving the development of ever-more efficient heating methods.

Early products included water heaters and pressure vessels. Electric boilers joined the range in the 1970s. Heat pumps and a wide selection of other heating products that meet the needs of European markets have been added successively to the company's portfolio.

Nowadays, NIBE has a leading position in the market for heating and cooling solutions around Europe. We are committed to offering innovative solutions that not only save energy but which also reduce CO_2 emissions.

Together with our customers, we're working towards a more sustainable future, one home at a time.

SMART, ECONOMICAL ENERGY SOLUTIONS FROM NIBE

Complete range of products and systems

NIBE Energy Systems offers a complete range of energy-efficient solutions for heating, ventilation, cooling and heat recovery that reflect today's demand for sustainable construction. Our products and services make it easy for private and commercial property owners to choose a system that best suits their needs for indoor climate comfort and hot water. Visit www.nibe.eu. for more information.

Exhaust air heat pumps

Ideal for heating domestic premises and tap water, an exhaust air heat pump ventilates your building and recovers energy in warm air, reusing it to heat your household water or fuel your central heating system.

Ground source heat pumps

Drawing heat from surface soil, bedrock or the water in a nearby lake, ground source heat pumps are a great option for heating houses, multiple-unit properties and other larger buildings. Available with or without an integrated water heater.

Air/water heat pumps

These pumps extract heat from the ambient outside air. Connected to your building's heating system they produce both heating and hot water, a big improvement on simpler types of air-to-air heat pumps.

Water heaters

For over fifty years, NIBE has been manufacturing products to supply hot water. During that time, we've kept pace with advances in heating efficiency and continually developed new models. We're pursuing the same mission today - to develop even better, even more efficient water heaters, for those chilly mornings in millions of bathrooms all over the world.

Domestic boilers

With a NIBE domestic boiler you have the flexibility to use almost any other kind of additional energy source as and when it's needed. Examples of docking options include air/water heat pumps, solar panels and, of course, electricity.

Solar panels

Our solar thermal collectors absorb the sun's rays, delivering free, clean energy to your heating system. They become an integral part of your total energy supply supported by our heat pumps which supply this extra free energy in a smart, controlled way. You can also use our solar collectors in combination with a NIBE bio mass boiler (logs or pellets) or a NIBE water heater powered by electricity or gas.

GROUND SOURCE HEAT PUMP

EXHAUST AIR HEAT PUMP

SOLAR PANEL

WATER HEATER

AIR/WATER HEAT PUMP

DOMESTIC BOILER

YOUR NEXT STEP?

Find your local NIBE office at www.nibe.eu. They'll help you locate your nearest NIBE installer and select the best kind of heat pump for your needs.

20/20/20

European Directive 20/20/20

The 20/20/20 European directive imposes compulsory targets on the EU's 27 member states, specifying that 20% of energy consumption must be met by renewable sources by 2020. Since NIBEs heat pumps are now classified as a renewable energy source, their installation will help member states reach this ambitious target. And in many cases, local or regional authorities are offering home owners subsidies to switch their existing heating systems to a renewable source such as a heat pump.

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ENERGY FOR LIFE

NIBE

NIBE ENERGY SYSTEMS
BOX 14
285 21 MARKARYD
SWEDEN
Tel. +46 433-73 000
www.nibe.eu