

# Sustainability is in our nature

# **NIBE** GROUND SOURCE HEAT PUMPS





Nature can be warm and comforting, but it can also be powerful and determined. It is our greatest source of energy and we depend on it to give life to everything around us.

The harsh Nordic environment, with its fluctuating climate, has shaped us and taught us how to adapt. Whether it's a cold winter's day or a warm summer afternoon, the temperature inside your home must be adjusted to ensure comfort at all times, whatever the weather.

Our wide product range provides cooling, heating, ventilation and hot water to your home, all with little impact on the environment, so that we can create a more sustainable future together.

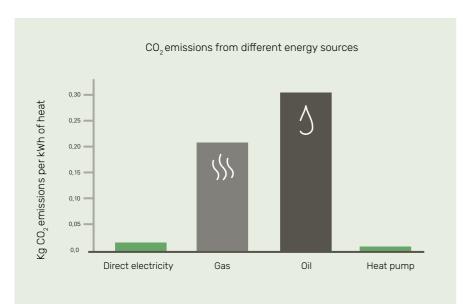


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# Help us to build a sustainable future

A large proportion of the carbon dioxide in the atmosphere originates from fossil energy sources for heating and hot water installations. Oil, coal and gas must be replaced by renewable energy sources to reduce the lasting damage to nature.

We value our Nordic heritage and, with nearly 70 years' experience of manufacturing climate solutions, we're inviting you to help us build a more sustainable future. By harnessing the renewable energy of nature and combining it with smart, innovative technology, we can offer efficient solutions that benefit everyone.





You reap multiple benefits when you replace fossil fuels with renewable energy. You get a more sustainable heating solution that helps you to reduce your carbon footprint. In addition, you can choose a more energy-efficient solution that can reduce your energy consumption and energy costs. You do both yourself and the environment a favour.

With a heat pump from NIBE, you can use the renewable energy from your surroundings to create a comfortable indoor climate. The heat pump offers immediate environmental returns in the form of reduced energy consumption and reduced emissions. The amount of electricity required is relatively low, as electricity is not the main source of power for the heat pump. Electricity

is only required to operate the heat pump, which utilises the renewable energy allowing you to save up to 75% of your energy costs for heating and hot water. With energy prices rising all the time, you will be very happy with your decision.



# Welcome to our world of indoor comfort

With the power of nature and smart technology, we help you to create a pleasant indoor climate



# The advantages of choosing a ground source heat pump from NIBE



### **Sustainable**

Our ground source heat pumps use energy from nature to reduce the environmental impact. They are designed to give you an energy-efficient daily life without compromising on comfort. This is done, for example, by automatically adjusting the heating according to your habits and the weather forecast. All to give you cheaper, greener, and more reliable heating, both now and in the future.

### Peace of mind

Having NIBE as your supplier ensures you great peace of mind. We're a Swedish company that's been manufacturing sustainable climate solutions for 70 years. This means our products have been adapted to the challenges of the Nordic climate.



### Easy

We have expert NIBE Pro installers all over the country who can help you to make a quick and smooth decision regarding purchasing a NIBE heat pump. If you would like to know more and get in touch with an installer near you, please visit find an installer on our website **nibe.co.uk** Our experts will answer your questions and give you all the help you need.



## Say hello to the S series

# Upgrade to sustainable and weather-adapted heating

When it's time for a new heat pump, choose real comfort. With the S series at the heart of your home, you get a pleasant indoor climate all year round, sustainable energy consumption, and full control from your mobile.

#### Suits all houses

Our intelligent and energy-efficient heat pumps in the S series adapt to the conditions of your house and your needs. This makes them suitable for all houses and easy to switch to. They always have the latest software and adjust the heating according to your habits and the weather fore-cast. All to give you cheaper, greener, and more pleasant heating, both now and in the future.

#### An investment you can feel confident in

The S series contains our most advanced products to date, and is the result of Swedish engineering skill. They are designed to meet tomorrow's challenges in technology and innovative design. Elegant and timeless, to blend in with the heart of your home. Made in Sweden for the challenges of the Nordic climate and to give you great comfort and low energy consumption – while you do nature a favour.

Advantages of the S series Regardless of which S series heat pump

you choose, you get:

- Wi-Fi connection with the possibility of connecting the heat pump to your smart home
- User-friendly touchscreen with colour display
- Temperature control according to weather forecasts
- Automatic software updates
- Voice assistant control support
- The option of adding smart wireless accessories for increased comfort



## The key to your smart home

# **T** myUplink

### With a heat pump in the S series connected you can easily control your heating, hot water, and ventilation system via the myUplink app. You get a quick overview of the heat pump's status and the heating in your home.

You can always take the heat pump with you on your mobile phone and feel safe in the knowledge that it will let you know if something happens. For example, it will alert you to any malfunctions via push messages from the app and by email.

Through myUplink, you will receive information about software updates, as well as access to the Weather Forecast Control function free of charge. A Premium subscription gives you the option of adjusting settings to your heat pump in the app, regardless of where you are. This allows you to adjust the comfort and energy consumption further according to your needs. You also gain access to historical data and a number of intelligent services, such as voice control and IFTTT\*, allowing you to connect several smart products to each other. If you want to control your heat pump remotely, your installer can help you get started with the myUplink app.







#### Always updated

myUplink makes it possible to update the software wirelessly, giving you optimised operation with the latest functions. All you need to do is confirm the update in the heat pump's display.

#### Weather forecast control

With weather forecast control, you can allow your heat pump to adapt according to the weather forecast, which is particularly good in the event of rapid changes in the weather. Your intelligent heat pump is more proactive and knows when a change in the weather is coming, and can manage shifts in temperature even more effectively.

#### Smart home accessories for extra comfort

Wireless accessories help you to benefit from the full potential of the S series. They make it even easier to adapt the indoor climate and energy consumption entirely to your needs. The accessories are small units that communicate with the connected heat pump. They adjust the indoor climate automatically to optimise the comfort using low energy consumption. You can sit back and relax or change the settings manually as needed. All so that the house and those who live in it feel good.

myUplink









## **Ground source heat pumps**

By harvesting power from nature, you can create a pleasant indoor climate in your home with a low impact on the environment.

Ground source heat is pure solar energy stored in the ground and the bottom of lakes. It starts at the surface, when the sun shines more strongly during the spring, and is then stored deeper in the ground as the weather gets warmer. With a ground source heating system from NIBE, you can create a pleasant indoor climate and supply your home with both heating and hot water, as well as cooling on hot summer days.

By using renewable energy, you can reduce your energy costs while doing the environment a favour.

The ground source heat pump extracts heat from the solar energy stored in the ground, using either buried collectors or holes drilled deep into the ground. Using a mix of water and eco-friendly antifreeze which circulates in a sealed loop, the heat energy is extracted from the ground and transferred to the heat pump.

NIBE is a leading player in the field of inverter technology, with many years' experience of output-regulating ground source heat pumps and one of the widest product ranges on the market.



at the same time.

- customisation.
- · User-friendly touchscreen and integrated wireless connection with energysaving smart technology for a high level of comfort.

The system's efficiency class for heating.
A 👗 XL
Product efficiency class and tap profile for hot water

BE S1255	
oduct's offic	ionev class

NIBE S1255		1.5-6 kW	3-12 kW
Product's efficiency class 35/55°C <sup>2)</sup>	Product's efficiency class 35/55°C <sup>2)</sup>		/A+++
System efficiency class, room heating 35/55°C $^{\rm 1\!j}$		A+++,	/A+++
Efficiency class, hot water/charging profile <sup>3)</sup>		A/	XL
Nominal heating output (P <sub>designh</sub> )		6	12
SCOP <sub>EN14825</sub> cold climate, 35 °C / 55 °C		5.5 / 4.1	5.4 / 4.3
SCOP <sub>EN14825</sub> average climate, 35 °C / 55 °C		5.2 / 4.0	5.2 / 4.1
Output data according to EN 14511 nominal 0 / 35 – Rated output	kW	3.15	5.06
Output data according to EN 14511 nominal 0/35 - COP	n	4.72	4.87
Sound power level (L <sub>WA</sub> ) according to EN 12102 at 0/35	dB(A)	36 - 43	36 – 47
Rated voltage		1x2	30V
Quantity of refrigerant in $\rm CO_2$ -equivalent	tonnes	2.06	3.55
Height/width/depth mm		1800/6	00 / 620
Intergrated hot water heater I		18	30
Weight of complete heat pump	kg	183	213

1) Scale for product's efficiency class, room heating A+++ to D. 2) Scale for system's efficiency class for room heating: A+++ - G. Reported system efficiency takes the product's temperature regulator into account, <sup>3)</sup>Scale for efficiency class, hot water; A+ - F.

## Ground source heat pump **NIBE S1255**

The NIBE S1255 is an intelligent, inverter-controlled ground source heat pump with an integrated copper water heater as standard but, depending on the water quality, stainless steel or enamel are also available as alternatives. NIBE S1255 provides optimised savings as the heat pump always automatically adapts to your home's heating demands.

The NIBE S1255 has a high seasonal performance factor, which results in low operating costs. The heat pump is available in three different output sizes: 1.5-6 kW and 3-12 kW and is suitable for both small and large properties.

With integrated wifi connection, the NIBE S Series becomes a natural part of your connected home. Smart technology adjusts the indoor climate automatically while you exercise complete control from your phone or tablet. High comfort level and low energy consumption - and you're doing nature a favour

• Two output sizes and leading inverter technology for optimised

· Optimised seasonal performance factor and operating cost.



## Ground source heat pump **NIBE S1155**

NIBE S1155 is an intelligent, inverter-controlled ground source heat pump without an integrated hot water tank, which makes it easy to install in places with lower ceilings. A separate hot water tank is selected according to hot water requirements. NIBE S1155 provides optimised savings, as the heat pump automatically adapts to your home's heating demands.

The NIBE S1155 has a high seasonal performance factor, which results in low operating costs. The heat pump is available in four different output sizes; 1.5-6 kW, 3-12 kW, 4-16 kW and 6-25 kW, and is suitable for both small and large properties.

- · Combine with a NIBE air source heat pump for an integrated climate system.
- Smart, user-friendly control system.
- · User-friendly touchscreen and integrated wireless connection with energysaving smart technology for a high level of comfort.

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Exhaust air module **NIBE FLM S45** 

The NIBE FLM S45 is an exhaust air module with a built-in fan, specially designed to combine the recycling of mechanical exhaust air with a NIBE ground source heat pump, providing an integrated solution for ventilation, hot water and heating.

The NIBE FLM S45 has a high fan capacity and low noise level. Energy is recovered from the ventilation air; even when the heat pump is not in operation, energy is stored in the ground or soil collector and exhaust air energy is thus used efficiently.

NIBE \$1155		1.5 - 6 kW	3-12 kW	4-16 kW	6-25 kW
Product's efficiency class 35/55°C 1)			A+++,	/A+++	
System efficiency class, room heating 35/55°C 2)			A+++,	/A+++	
Efficiency class, hot water/charging profile 3)		A / XL	A / XL A /XXL		
Nominal heating output (Pdesignh)		6	12	16	25
SCOPEN14825 cold climate, 35°C / 55°C		5.5 / 4.1	5.4 / 4.3	5.5 / 4.2	5.5 / 4.1
SCOPEN14825 average climate, 35°C / 55°C		5.2 / 4.0	5.2 / 4.1	5.2 / 4.1	5.2 / 4.0
Output data according to EN 14511 nominal 0 / 35 – Rated output	kW	3.15	5.06	8.89	12.68
Output data according to EN 14511 nominal 0/35 – COPEN1	14511	4.72	4.87	4.85	4.68
Sound power level (LWA) according to EN 12102 at 0/35	dB(A)	36-43		36-47	
Rated voltage		1x2	30V	400 V 3N	N ~ 50 Hz
Refrigerant quantity in CO2-equivalent	tonnes	2.06	3.55	3.90	4.39
Height/width/depth	mm		1500 / 6	00 / 620	
Weight of complete heat pump	kg	139	167	172	205

<sup>1</sup>Scale for product's efficiency class, room heating A+++ to D. <sup>2</sup>Scale for system's efficiency class for room heating: A+++ – G. Reported system efficiency takes the product's temperature regulator into account. <sup>3</sup>Scale for efficiency class, hot water: A+ - F.

NIBE FLM \$45		
Supply voltage	V	230 V NAC 50 Hz
Max. drive power in circulation pump	W	70
Fan drive power	W	175
Enclosure class		IP 21
Max. airflow	m³/h	350
Lowest temperature, incoming brine	°C	-8
Recommended maximum temperature, incoming brine	°C	15
Highest temperature, outgoing secondary brine	°C	30
Lowest pressure, brine	MPa/bar	0.02/0.2
Highest pressure, brine	MPa/bar	0.3/3
Noise level (LwA)	dB	36-46
Height/width/depth	mm	396/600/556
Weight	kg	35

• Provides an integrated solution for ventilation, hot water and heating.

• Efficient even when the heat pump is not in operation.

• Part of your smart home - control your ventilation online using myUplink.

## Heat recovery ventilation unit **NIBE ERS S10**

The NIBE ERS S10 is a heat recovery ventilation unit with high temperature efficiency up to 90% and low energy consumption. The heat recovery ventilation unit is used in houses with areas up to approx. 300 m<sup>2</sup>.

The NIBE ERS S10 is designed for installation with a NIBE ground source heat pump or a NIBE air source heat pump for a complete heating and ventilation system. The heat recovery ventilation unit is easily controlled by the heat pump.

- Heat recovery ventilation unit with high temperature efficiency and low energy consumption.
- · Together with an S-Series ground or air source heat pump it provides a solution in houses with balanced ventilation.
- In combination with a NIBE S series heat pump or indoor module a part of your energy-saving smart home.

R	oom	uni
Ν	IBE	RML

VÄRME

19.8°

••••

20°

The NIBE RMU S40 is a wireless\*/wired room unit with a 2.8" touch screen and built -in temperature and humidity sensors. You use it for remote control and monitoring of your NIBE S series heat pump, as a supplement to the myUplink app in your smartphone or tablet. The room unit is easy to position and simple to use with an intuitive interface. The room unit also enhances the signal between your smart home products when these are located at a distance from each other.

- Room unit with a 2.8" touchscreen.
- series heat pump.

**A**+ Product efficiency class and tap profile for hot water.

NIBE ERS \$10-400		
Efficiency class 1		A
Supply voltage		230 V – 50 Hz
Fuse	A	10
Fan drive power	W	85 x 2
Enclosure class		IPX1
Filter type, exhaust air filter		Coarse
Filter type, supply air filter		ePM1-55%
Noise level ( $L_{WA}$ ) <sup>2)</sup>	dB (A)	47
Ventilation connection	mm	<b>160</b>
Connection for condensation water drain	mm	G32
Length of supply cable	m	2.4
Length of control cable	m	2.0
Height/width/depth	mm	900/600/612
Weight of complete heat exchanger	kg	40
Scale for product's efficiency class, room beating $\Lambda + - G$		

<sup>1)</sup>Scale for product's efficiency class, room heating A+ – G.

<sup>2)</sup> 295 m<sup>3</sup>/h (82 l/s) at 50 Pa

NIBE RMU S40				
Connection		Wireless or connected to heat pump		
Power supply		Wired to heat pump or via 5V USB supply		
Rear dimensions (Width x Height x Depth)	mm	88x88x8		
Display dimensions (Width x Height x Depth)	mm	64x85x16		
Rated voltage (from main product		12VDC 40mA		
Rated voltage (external USB)		5VDC 250mA		

## **US40**

• Control and monitor your NIBE smart heat pump from another room. • A part of your energy-saving smart home, in combination with a NIBE S

\*Requires external power source, micro USB, purchased separately.



## **Roof mounted Solar Energy NIBE PV Photovoltaic package**

NIBE PV is an integrated solution which is based on a fully modular system with the following basic sizes: 3.6 and 7.2, kW. Each size consists of a number of base packages with 10 panels and a nominal power of 3.6 kW, mounting parts and a suitable inverter with communication module, all of which are ready for installation. The solar package can easily be expanded with additional solar panels for optimum use of roof space.

NIBE PV comprises of monocrystalline silicon cell panels which use PERC half-cell technology, with an output of 360 Wp. The solar panels are elegant, all-black panels. NIBE PV harnesses sunlight all year round and converts it into electricity. NIBE PV can be connected to your NIBE heat pump\* for high energy efficiency.

## Heat pump panel **NIBE PVT**



NIBE PVT is a combined silent air collector and PV panel for NIBE ground source heat pumps. With this panel and a NIBE ground source heat pump you get an all-in-one solution and can get ground source energy in situations where you can't use traditional ground source collectors or a noisy air/water solution.

Our new technology allows double production of energy, thermal energy and electricity by using a unique solar panel. Still, it looks like our standard PV panels. Optimizing production of photovoltaic electricity on the front using photovoltaic cells and produces energy to the heat pump with an efficient air to water heat exchanger on the back. Basically, the panel converts the solar energy into electricity and heat.

- Flexible modular system which can be expanded easily.
- · Elegant, all-black panels which use PERC technology for maximum efficiency.
- · Connect to a NIBE heat pump for maximum energy efficiency.

- and electricity.
- efficiency.

#### \* applies to systems which can be connected to NIBE Uplink/myUplink.

Solar panel	olar panel		7.2 kW
Numbers of panels	bers of panels		20
Area	m²	18	36
Rated output at STC (Pmpp)	Wp	30	50
Rated voltage (Umpp)	V	34,3	
Rated current (Impp)	А	10,5	
External dimensions (Width x Height x Depth)	mm	1755×1038×35	
Weight	kg	21	
Suitable for roof types.		tiled roof, sheet metal roof, bitumen roof, standing seam sheet metal roof	

Inverter		PVI10-3	PVI20-4
Max. power out- put <sup>1)</sup>	kW	3	4
External dimensions (Width x Height x Depth)	mm	347x432x145	354x433x147
Weight	kg	14	15
Voltage		1x230	3x400
Max number of strings			2
Number of trackers		2	
Enclosure class	Enclosure class		65

**PVT-Panel** M3 450 2131x1055 Overall dimesions mm 32 Weight kg m² 2.21 Aperture surface Nominal PV power Wp 450 Kj/(m²K) Heat capacity Heat exchange capacity air to liquid, U value W/(m²K) °C Stagnation temperature

 $^{\ensuremath{^{1}}\ensuremath{)}}$  Has to be fused according to the max. power output or the max. DC power, if that is lower.

 Totally silent air collector for NIBE ground source heat pumps. • Unique, elegant, all-black panels with double production of energy, thermal

· Connect to a NIBE heat pump for maximum energy

XL	M3 375 L	M3 375 P
La	ndscape	Portrait
5x65	1791x1055x65	1057x1755x65
	27	27
	1.85	1.87
	375	375
	177	
	62	
	62 at 1000W/m	



### Wireless accessories for the S series

#### CDS 10 Wireless CO<sub>2</sub>, temperature and humidity sensor

This wireless sensor allows you to read the CO2, temperature and humidity level in a room or climate zone using the myUplink app. For NIBE S-series heating installations with ventilation the indoor comfort level can automatically be adjusted to give you a comfortable indoor climate. For example, you can increase ventilation and lower the CO2 level when there are a lot of people present or lower the ventilation to further reduce your energy costs. Because it is battery powered, it is easy to install, but it can also operate with an external power source using a micro USB.

Mount the thermostat in your room and connect it to your NIBE S-series heat and ventilation installation.

#### THS 10 Wireless temperature and humidity sensor

This wireless sensor allows you to read the temperature and humidity in a room or climate zone using the myUplink app. On the heat pump you can see the current room temperature or change it in °C.

THS 10 replaces the fixed indoor sensor. Because it is battery powered, it is easy to install.

Mount the thermostat in your room and connect it to your NIBE S-series heating installation.

#### **ROT 10 Wireless room thermostat**



The wireless room thermostat allows you to read and control the temperature of a room or a climate zone from the display of the room thermostat or via the myUplink app in your smartphone. For instance by increasing the ventilation when you have many guests or lower the ventilation for better savings when you are not at home. Because it is powered by a rechargeable battery, it is easy to install.

Mount the thermostat in your room and connect it to your NIBE S-series heat pump.



#### **RPP 10 Repeater**

Enhances the signal, improving communication between your smart home products when they are placed at a distance from each other. For NIBE S-series heating installations, the repeater functions as a switch, giving you the opportunity to control it remotely, schedule On and Off times and measure energy consumption.

Plug in the repeater and connect it to your NIBE S-series heating installation.

## **The NIBE F series**

# **Ground source heat pumps**



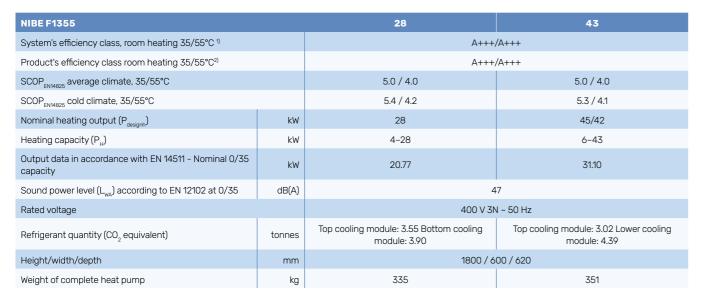


## Ground source heat pump **NIBE F1355**

NIBE F1355 is an intelligent and powerful inverter-controlled ground source heat pump, available in two sizes. NIBE F1355 provides optimised savings, as the heat pump always performs efficiently and automatically adapts to the property's output requirements all year round.

NIBE F1355 has a high seasonal performance factor and an operating range of 4-28 kW or 6-43 kW. With less than 5 tonnes of CO2 equivalent refrigerant per cooling module. The dual compressors provide efficient output regulation and high reliability, making NIBE F1355 perfect for properties with larger heating requirements.

- · Powerful and flexible heat pump in two sizes that can be combined in systems with up to 9 F1345 or F1355
- Inverter technology for low operating costs and optimised seasonal performance factor.
- Smart technology with user-friendly control for easy remote control.



<sup>1)</sup>Scale for system's efficiency class, room heating: A+++ - G. Reported system efficiency takes the product's temperature regulator into account.<sup>2)</sup>Scale for product's efficiency class, room heating A+++ - D.

## Ground source heat pump **NIBE F1345**

NIBE F1345 is a powerful and flexible ground source heat pump that is available in output sizes 24, 30, 40 and 60 kW. Up to 9 NIBE F1345s can be combined in a single system to cover output requirements of up to 540 kW.

NIBE F1345 has a high seasonal performance factor and, with less than 5 tonnes of CO, equivalent refrigerant quantity per cooling module. Two large compressors make NIBE F1345 perfect for properties with larger heating requirements. The compressors switch on and off automatically for better output regulation, a longer operating range, less wear and tear, and improved operational reliability.

- to 540 kW.
- annual inspection.





System's efficiency class for room heating, 55°C

NIBE F1345	24 kW	30 kW	40 kW	60 kW	
System's efficiency class, room heating 35/55°C $^{\mbox{\tiny 1}}$	A+++/A++				
Product's efficiency class room heating $35/55^{\circ}C^{2)}$		A+++/A++			
SCOP <sub>EN14825</sub> average climate, 35/55°C		4.8/3.8	4.7/3.6	4.8/3.8	4.6/3.7
SCOP <sub>EN14825</sub> cold climate, 35/55°C		5.0/4.0	4.9/3.8	5.0/3.9	4.7/3.8
Nominal heating output (P <sub>designh</sub> )	kW	28	35	46	67
Output data in accordance with EN 14511 - Nominal 0/35 capacity	kW	23.00	30.72	39.94	59.22
Output data in accordance with EN 14511 nominal 0/35 – C	4.65	4.44	4.49	4.32	
Sound power level (L <sub>wA</sub> ) according to EN 12102 at 0/35 dB(A)		47			
Rated voltage		400 V 31	N ~ 50 Hz		
Refrigerant quantity (CO <sub>2</sub> equivalent) tonnes		2 x 3.55	2 x 3.55	2 x 3.02	2 x 3.55
Height/width/depth mm		1800/600/620			
Weight of complete heat pump kg		320	330	345	346

<sup>1)</sup> Scale for product's efficiency class, room heating A+++ to D.<sup>2)</sup> Scale for system's efficiency class for room heating: A+++ - G. Reported system efficiency takes the product's temperature regulator into account.





System's efficiency class for room heating, 55°C

-	_

• A powerful and flexible system that covers output requirements of up

Reliable system with efficient output regulation and no requirement for

· Smart technology with user-friendly control for optimised remote control.



The products efficiency class

## Storage tank NIBE VPB S300 VPBS S300

The NIBE VPB S300 and VPBS S300 are efficient hot water tanks which is designed for connection to a NIBE heat pump. The NIBE VPBS S300 can also be docked to solar panels.

The NIBE VPB S300 and the ground source heat pump NIBE S1155 have a customised design, providing a stylish system solution with the option of concealed piping between the products. The storage tank has insulation made of polyurethane, which provides very good heat insulation.

- · Efficient hot water tank designed for connection to a heat pump or other energy source.
- Stylish design for customisation with NIBE S Series heat pump with minimal heat loss.
- · A part of your energy-saving smart home in combination with a NIBE S series heat pump.

Product's efficiency class

Туре		NIBE VPB S300	NIBE VPBS S300	
Efficiency class1)		C		
Corrosion		Stainless		
Volume	I.	282	277	
Volume, solar coil	I	-	0.8	
Volume, charge coil	I.	8.8	2	
Net weight kg		101	137	
Equivalent amount of hot water (40°C)	I.	376	354	
Max pressure, primary sidebar/MPaMax pressure, water heaterbar/MPa		3 / 0.3		
		10 / 1.0		
Max recommended heat pump size	kW	1:	2	
Height / Width / Depth mm		1800 / 600 / 600		

VPB 500 VPB Corrosion Volume Litre 486 Litre Volume, coil 6 158 Net weight kg Equivalent amount of hot water (40°C) Litre 590 Max pressure, primary side bar/MPa Max pressure, water heater bar/MPa Efficiency class\* Height/Diameter mm 1757/852 <sup>1)</sup>Scale for efficiency class: A+ to G.

<sup>1)</sup> Scale for the product's efficiency class room heating: A+ till F.

VPB is a range of efficient water heaters, with a wide range of applications, which are suitable for connections to heat pumps. All models are intended for properties with large hot water requirements. They can also be suitable for connection in parallel for use in larger properties.

- Efficient, detachable insulation.

## Hot Water Cylinders & Buffer Vessels **NIBE VPB 500-1000**

Designed for connection to a heat pump

- All models are designed for buildings with large hot water requirements.

VPB 750	VPB 1000
Copper	
747	992
7	2x6
220	270
890	1180
10/1,0	
10/1,0	
С	
1976/947	2051/1052



## Hot water cylinders & buffer vessels **NIBE UKV**

NIBE UKV 40,100,200,300,500,750 and 1000 are buffer tanks used together with heat pumps to increase the volume of water in the system for more stable operation.



**NIBE ERS 20-250** 

The heat recovery ventilation units ERS 10 and ERS 20 are both easy to install together with a NIBE heat pump or indoor module. They can be controlled from the display of the heat pump.

The unit is intended for both new installations and replacement in houses or similar. ERS is suitable for ventilation systems where high temperature efficiency and low energy consumption are required. ERS 10 is normally used in homes with an area of up to approx. 300  $m^2,\,\text{ERS}$  20 to approx. 200  $m^2.$ 

- Volume expansion for the heating system
- For a highly efficient and safe climate system without heat spikes.
- Chilled water options for NIBE UKV 200 and NIBE UKV 300 for systems with active cooling.



Product's efficiency class for NIBE UKV 40

		40	100	200	300	500	750	1000	
Efficiency class <sup>1)</sup>		В			(	C			
Max. temperature in the tank	°C	95			85				
Max. working pressure in the tank	(bar)	6			10		3		
Weight	kg	16	31	61	83	110	170	200	
Volume	litre	39	98	218	296	496	741	992	

<sup>1)</sup>Scale for efficiency class: A+ to G.

NIBE ERS 20-250					
Supply voltage		230 V ~ 50 Hz			
Fuse		A			
Driving power fan	W	100 × 2			
Enclosure class		IP21			
Filter type, exhaust air filter Filter type, supply air filter		G4			
		F7			
Sound pressure label $L_{\!\scriptscriptstyle W\!(A)}$	dB(A)	47.4/50 <sup>(2</sup>			
Ventilation connection	mm	0125			
Connection, condensation water drain	mm	015			
Length, supply cable	m	2.4			
Length, control cable	m	2.0			
Height / Width / Depth mm		241/1202/673			
Weight	kg	25			
<sup>1</sup> 287 m <sup>3</sup> /h (801/s) at 50 Pa					

<sup>2)</sup>105 m<sup>3</sup>/h at 50 Pa / 250 m3/h at 140 Pa (at 1 m)

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# Heat recovery ventilation unit

• Provides a complete exhaust and supply air solution for NIBE ground source or air/water heat pump.

• ERS is controlled via the ground source heat pump / indoor module, which means that all measurement values are visible in the main product's display. • Up to 92% recovery.



# Scottish Rural Farmhouse benefits from a NIBE Ground Source Heat Pump

When Tom Foote renovated his five-bedroom farmhouse four years ago, he certainly had a task on his hands. At over 100 years old, the property's considerable age meant that it was in poor condition, but Tom had plans to give it a second – more sustainable – life.

While the renovations initially led to an oil-fired central heating system being fitted, high quality insulation measures, glazing and underfloor heating were also installed to prepare the farmhouse for low temperature heating. Fast-forward to December 2020 and Tom decided to revisit his green ambitions and switch out the oil-fired central heating system with a renewable appliance.

As luck would have it, Tom is a member of 1314 Renewables Limited, a new renewable energy installer based in Scotland. Knowing the renewables market inside out, it was not hard for Tom to reach a decision that a heat pump would be the most suitable technology to install, specifically the latest NIBE S1155-12 ground source heat pump. Heat pumps operate on low temperatures and therefore, increase energy efficiency in a home. With underfloor heating already in place Tom was already well on his way to his sustainable dreams.

The installation process only took 12 days and alongside this other low carbon products were also installed - the NIBE Megacoil solar 3001 DHW cylinder, NIBE UKV100 buffer vessel and NIBE solar thermal hot water system. This meant that Tom could enter the New Year with a sustainably heated home.



Conveniently, there is a small stream on the property grounds and a bespoke heat exchanger was made and installed within the stream as the heat source for the NIBE heat pump. This was a cost-effective measure and has further enhanced the pump's efficiency.

By utilising the natural water source, a brine temperature of approximately 8-9 degrees C is being achieved in the winter months meaning the heat pump is achieving a Seasonal Coefficient of Performance (SCOP) of over 5 and system seasonal efficiency (SPF) or 4. Coupled with this Tom will save £1237/annum over his previous heating costs and is claiming £4915 on the Renewable Heat Incentive.

Given the short time period for the installation process it is no surprise to hear that NIBE ground source heat pump was easy to install. An installer in Tom's 1314 Renewables team commented that the heat pump was 'extremely easy to navigate and the intuitive controller, modulating brine and circulating pumps were very easy to commission'.

Tom commented – 'I would very much recommend the heat pump and have already done so to friends and family! It is very simple to use and the touchscreen controller is very intuitive meaning our house stays at a constant temperature. Our bills have reduced, and we are happy to say that we are no longer burning oil.'

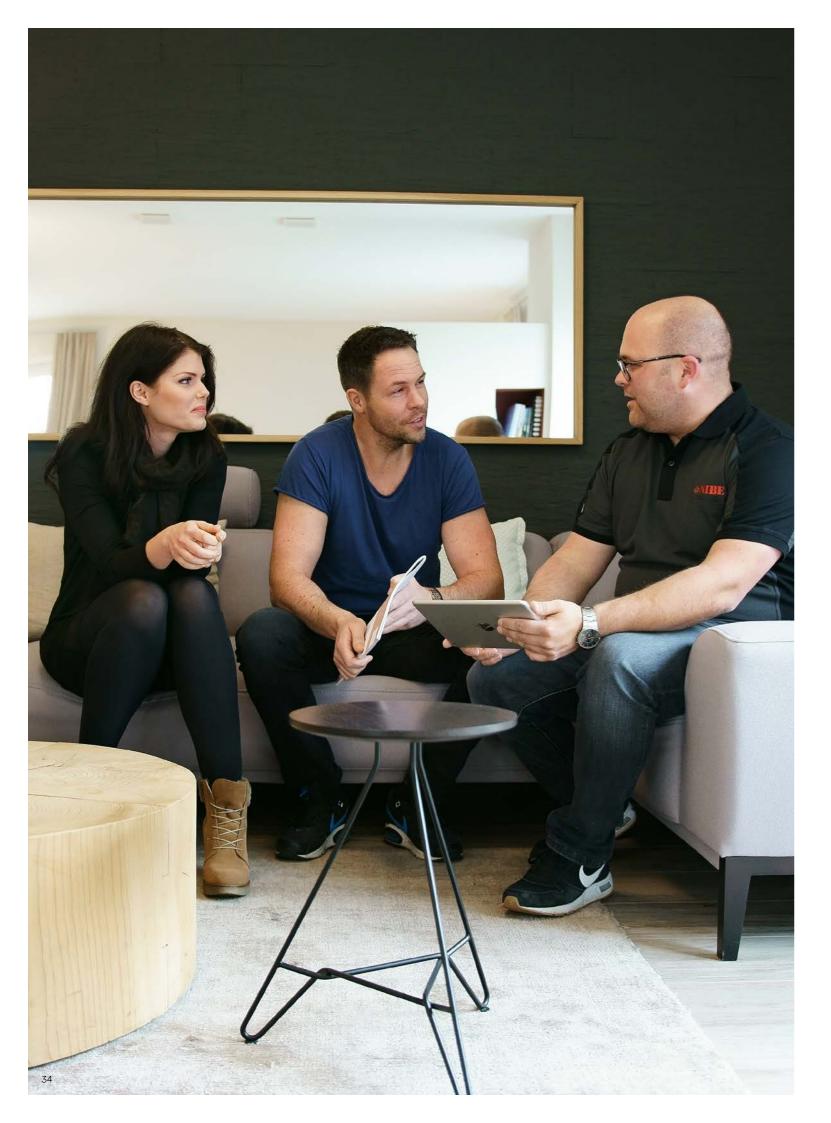
Given the ease of this installation and subsequent carbon and monetary savings for Tom it is hoped that others will be encouraged to follow his lead.

For more details about energy efficient heating from NIBE, visit our website nibe.co.uk

mage: 1314 Renewables Ltd



Image: 1314 Renewables Ltd





# Why use a NIBE Pro Installer?

Once you've chosen the right NIBE system to meet your heating/ventilating needs, the next step is to ensure it is installed correctly so it can perform to its full potential. As a leading renewables manufacturer, NIBE understands the vital importance of quality installations, which is why we have built an extensive network of highly skilled, trusted installers across the country. Our NIBE Pro installers are fully trained and accredited to fit our products to the highest possible standards, so you can benefit from optimum results and full peace of mind. They are also MCS certified – currently an essential requirement to qualify for government renewable heating funding.

#### **NIBE PRO installers:**

- Have completed NIBE product training
- Can offer you an extended warranty
- Have experience fitting NIBE technology
- Are MCS certified
- Are signed up to NIBE's code of practice

## Under NIBE's code of practice installers must:

- Perform professionally, competently and responsibly
- Comply with all relevant UK regulations, standards and codes of practice
- Install and commission all NIBE equipment in accordance with all NIBE's procedures and installation manuals
- Complete benchmark check lists for NIBE products
- Fully demonstrate correct system operation and controls to customers
- Register installations on NIBE's website
- Liaise directly with customers and respond to NIBE product enquiries in a quick and proficient manner
- Keep fully up to date with NIBE's product range as well as developments in the UK's plumbing and heating industry





# Every day, we work to make the world better

Right from the start, we have been committed and focused on developing new methods for better energy efficiency. In this way, NIBE plays an important role in the global transition to a more sustainable society. And we're proud of that.

We also know how complex the issue of sustainability is, and how important it is to act responsibly as a company when it comes to our own employees and suppliers, as well as the impact our products have on the climate and society around us throughout their life cycle - a task we take very seriously.

#### Sustainability in different areas

We work with business responsibility throughout our entire value chain, and ethics is an important part of our business. As a customer, you should be able to trust us. Environmental responsibility is also an important part of our entire processing chain, which begins with our suppliers and ends with you, the customer. This means that we strive to reduce the environmental and climate impact of our products throughout their entire life cycle.

The key to achieving our goals today and in the future is also to be able to retain and attract new, competent, committed employees. As part of society, we must also act responsibly as a company, for example by engaging in social projects, both locally and globally.

## We support the UNGC and the goals adopted by the UN as part of the 2030 **Agenda for Sustainable Development**

Since 2014, NIBE has been committed to following the 10 principles of the United Nations Global Compact (UNGC). The UNGC is a voluntary initiative based on commitments from company management to implement sustainability principles and actively enter into a partnership to support the UN's long-term goals.

In September 2015, the member states of the UN adopted the Sustainable Development Goals (SDGs). The 17 sustainability goals guide every member's commitment in establishing a clear plan and, by 2030, taking the necessary measures to create long-term sustainable development, end extreme poverty, combat the climate crisis and reduce inequalities and injustices in the world. We have chosen to work primarily with 6 of the 17 global goals set out in Agenda 2030.

#### NIBE's commitment to Agenda 2030

	7	Increase the proportion of products based energy-efficient and clean energy solution:
	8	Promote a safe and secure working enviror conditions in both their own activities and
	9	Make production more sustainable by using technologies, and providing resources for r
	11	Provide resource-efficient and climate-ada to sustainable cities and secure infrastruct
00	12	Apply sustainable methods of chemical ma to air, water and soil. Economise resources sustainability information transparently in
	16	Respect and maintain national and cross-b corruption. Create systems for internal cor principles.

on renewable energy and meet the market's need for ٦S.

nment, protect workers' rights and ensure decent working l in the supply chain, along with protecting jobs and growth.

ig resources efficiently, using clean and eco-friendly research and development.

apted components, products and solutions that contribute cture.

anagement and reduce emissions s, minimise waste, recycle and reuse more. Report our reporting cycle.

border legislation, and actively work against all forms of ntrol of compliance with legislation and ethical business



## Read more about our sustainable energy solutions at www.nibe.co.uk

#### Ground source heat pumps

Ground source heat is stored solar energy harvested from deep within the ground, the bottom of lakes or just a few metres below your lawn. With a ground source heat system, you can create a pleasant indoor climate, and not only supply your home with heating and hot water but also cool it down on warm summer days. This kind of renewable energy means that you can lower your energy bills AND help the planet at the same time.

#### Air source heat pumps

With the help of an air source heat pump, you can keep your home warm in winter and cool in summer, while lowering your energy bills at the same time. By harnessing one of nature's free and renewable energy sources, you can create a pleasant indoor climate with a low environmental impact.

#### Exhaust air heat pumps

By installing an exhaust air heat pump, you can easily and effectively supply your home with heating, hot water and ventilation. Create a pleasant indoor climate by reusing the energy from the warm air as it passes through your ventilation system.

#### Solar panels

Start generating your own energy with solar products from NIBE. Plus, connecting the system to your intelligent heat pump will multiply the energy you harvest. By integrating the products in one system, you can reduce your energy bills and use renewable energy effectively.

#### Water heater

NIBE has been creating water solutions for over 60 years. Our complete range of hot water solutions complements our selection of heat pumps.



# Sustainable energy solutions since 1952

For 70 years, NIBE has been manufacturing energy-efficient and sustainable climate solutions for your home. It all started in Markaryd in Sweden and we value our Nordic heritage by harnessing the power of nature. We combine renewable energy with smart technology in order to offer effective solutions so that together we can build a more sustainable future.

Whether it's a chilly winter's day or a hot summer's afternoon, we need a well-balanced indoor climate for a comfortable everyday life, whatever the weather. Our wide range of products supplies your home with cooling, heating, ventilation and hot water, so that you can create a pleasant indoor climate with a low impact on nature.

**NIBE Energy Systems Ltd** 

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