

A new generation of heat pumps  
DESIGNED FOR EARTH



## NIBE Energy systems

Advanced heat pumps  
for people who like to keep things simple.



# Ground source heat pumps

NIBE™ F1145, NIBE™ F1245

for single and multi-family houses and industrial buildings

Our new generation of ground source heat pumps is packed with sophisticated technology, but at the same time incredibly simple to install and operate. Designed for connection to a heat distribution system such as radiators, convectors or underfloor heating, these new heat pumps offer astonishing savings and big environmental benefits.

A NIBE ground source heat pump is ready to be connected to a number of different products and accessories, e.g. solar panels, extra hot water heater, ventilation recovery and heating systems with different temperatures. With our broad range of accessories, you can also control your heat pump remotely, heat the pool and cool the house with free/active cooling. For more information see page 4.

- Extraordinarily high efficiency (SPF)
- Extremely installer-friendly
- Modular system for service friendliness
- Multicolour display with user instructions and multi-language support
- Remote control via GSM (accessories)
- Scheduling (indoor comfort, hot water and ventilation)
- Universal connection interface (1xUSB-port)
- Integrated water heater (not NIBE F1145) with environmentally friendly cellular plastic insulation for minimal heat loss
- Remarkably low sound level
- Low energy DC circulation pumps (A)
- Elegant, timeless and international design
- Available in seven sizes up to 17 kW (NIBE F1145) and five sizes up to 12kW (NIBE F1245)

## User and installer friendliness

With the arrival of the new generation of heat pumps, the concept of user-friendliness has reached a whole new level. A large, easy-to-read multicolour display features clear information about status, operation time and all temperatures in the heat pump; an easily navigated control unit enables users to get the best performance out of the heat pump and maintain a comfortable indoor temperature at all times.



NIBE F1145

NIBE F1245

NIBE F1245 with NIBE FLM

## NIBE™ F1330

for larger residential and commercial installations

With its two large scroll compressors, NIBE F1330 is the ideal ground source heat pump for multi-occupancy buildings, industrial premises, churches and other large heat consuming buildings. NIBE F1330 is a flexible product with advanced control equipment and can be adapted to several system solutions. NIBE F1330 is also prepared for control of oil, gas, pellet fired or electric boilers. As many as nine NIBE F1330 can be connected together to achieve an output of up to 540 kW. It is also possible to cool via brine on hot summer days.

- Perfect solution for larger and heat consuming buildings.
- Docking possibility – up to 540 kW achievable
- High COP – provides savings and shorter payback times
- High flow temperature (65°C) – means great installation flexibility
- The heat pump consists of two units which contain less than 3 kg refrigerant per unit
- LCD display – clear information on conditions, operation and temperature
- Programmable for climate control – cost efficient solution all year, heating and cooling
- The control unit offers several docking options



NIBE™ F1127

NIBE F1127 for heating and cooling where active cooling function is built in. Available in two sizes, for cooling up to 15 kW.



NIBE™ F1250

NIBE F1250 ground source heat pump, with integrated tank, adjusts itself to the power demand of the house. With speed controlled compressor and circulation pumps power is delivered from 4 – 16 kW



NIBE™ F1145 PC

With its integrated passive cooling function and user-friendly display NIBE F1145 PC fulfill several demands. Available in three sizes up to 8 kW.



NIBE™ F1245 PC

With its integrated passive cooling function, user friendly display and integrated tank NIBE F1245 PC fulfill several demands. Available in three sizes up to 8 kW.

# Ground source heat pumps

## Further uses for your NIBE ground source heat pump

A NIBE ground source heat pump is not just for heating your home and hot water. With our broad range of accessories, you can, for example, control your heat pump remotely, heat the pool and cool the house.



### Enjoy extra hot water NIBE™ VPB, VPA/VPAS, UKV

If your heat pump does not have a built-in water heater, or if your household consumes a particularly large quantity of hot water, a separate storage tank can be connected to the system. It provides the hot water you need, or boosts the capacity of an existing system.

NIBE VPB is the new generation of accumulator tank. It can be docked in several different ways, e.g. to another heat pump such as the NIBE F1145.

NIBE VPA is intended for F1150 but also suitable for use with other heat sources. VPAS has a 2.3 m<sup>2</sup> solar coil.

NIBE UKV is a surge vessel that is used together with heat pumps to increase the volume of water in the system for more even operation

## Accessories



### Recycle heat from "used" air NIBE™ FLM

The addition of this exhaust air module further reduces your heating bills.

Developed to work in conjunction with NIBE ground source heat pumps the FLM module recycles old, stale air from the house, extracts the energy from it and re-uses it to heat new, clean air from outside. Air quality is improved while warmth is maintained – all at no extra cost!

NIBE FLM also has an integrated DC fan, so you can adjust the fan's speed and thus vary the degree of ventilation required. It can be fitted directly to the heat pump or hung up on the wall.



### Distribute heat to more than one system NIBE™ ECS 40, NIBE™ ESV 21

Using the ECS 40 or ESV 21 accessory, you can choose to share out the heat from your heat pump to up to four different heating systems. This is the ideal solution if you have, for example, underfloor heating on the ground floor and radiators upstairs.



### Collect the sun's heat NIBE™ SOLAR 40

NIBE SOLAR 40 enables solar heating with your heat pump. With additional solar panels and VPAS you get a complete system.



### Heat your swimming pool NIBE™ Pool 40, NIBE™ POOL 11

Using ground source heating to heat the water in your pool saves money and makes those breathtaking icy cold dips a thing of the past! The NIBE Pool 40 / POOL 11 is an accessory that we have developed to make it easy to control the heating of your pool.

Whether you already have a pool or are planning to build one, it's a good idea to tell your heat pump installer about this from the start. That way you can be sure to get the right sized heat pump and bore hole depth that's adequate for the pool's heating requirements.



### Cool your home NIBE™ HPAC, NIBE™ PCM, NIBE™ PCS 44

A ground source heat pump is not just for heating up your home and hot water. You can also use it to cool your house. There are various ways of doing this.

Passive cooling is enabled with NIBE PCM and NIBE PCS 44 and should the cooling demand be higher, NIBE HPAC makes active cooling possible.



### Steer the heat pump from your mobile phone NIBE™ SMS 40, NIBE™ RCU 11

GSM remote control lets you steer the heat pump remotely via mobile phone so you can e.g. raise the indoor temperature on the way home from vacation.

# Exhaust air heat pumps

NIBE™ F370, NIBE™ F470

For heating, hot water, ventilation and heat recovery

An exhaust air pump is an absolute must for newly built, well-insulated houses or appartments. For a very reasonable investment, it gives you correct ventilation and the lowest possible energy consumption per square metre.

The heat pump should be connected to an optional low temperature heat distribution system such as radiators or underfloor heating. In other words, the product is suitable for homes with both hydronic heating and exhaust/extract air ventilation systems. It is also ready to be connected to several different products and accessories, such as an extra water heater and under floor heating or radiators.

- Extremely installer-friendly
- Multicolour TFT display with user instructions
- Elegant, timeless and international design
- GSM remote control
- Scheduling (indoor comfort, hot water and ventilation)
- USB-port (quick software updates)
- Integrated water heater with environmentally friendly plastic insulation for minimal heat loss
- Simple filter cleaning, equipped with filter monitor
- Remarkably low sound level
- Low energy DC circulation pumps (A)



NIBE™ F100P

A complete heat pump that supplies hot water, ventilation and recycling. A popular option for houses with electric radiators.



NIBE™ F120

A heat pump divided in two, so you can choose between two sizes of water heater.

NIBE F120 supplies hot water, ventilation and recycling, and is designed for houses heated by electric radiators



NIBE™ F200P

A complete heat pump for hot water, ventilation, heat recycling to part of the heating system. Suitable for houses where heating is supplied partly by small floor coil or individual water radiators and partly by electric radiators.



NIBE™ F640P

A combined exhaust air/outdoor air heat pump with integrated low energy fan, electric boiler and water heater that gives you heating, hot water and ventilation.

# Air/water heat pumps

Heating when you need it; cooling when you don't. NIBE SPLIT is the complete, modern heat pump system that offers effective technical energy saving at the same time as it reduces carbon dioxide emissions.

## NIBE™ SPLIT

NIBE SPLIT is as close to plug & play as you will ever get. NIBE SPLIT is also one of the most advanced, efficient heating systems available today. NIBE SPLIT can deliver 58°C hot water from the compressor across a full outdoor temperature range from -20°C to +43 °C. With the built in immersion heater additional energy can be made up to 65°C.

NIBE SPLIT is a complete, all-in-one energy-efficient heating and cooling system that gives you a comfortable indoor climate – safely and economically.

Heat is retrieved from the outdoor air by an outdoor module (AMS 10), where the refrigerant, which circulates in a closed system, transfers heat from the heat source (outdoor air) to the indoor module (ACVM 270). There is no need for bore holes or coils in the ground.

NIBE SPLIT is the first ever plug and play, all inclusive heating and cooling system from NIBE. It combines a well-designed, high quality outdoor unit with an indoor unit using NIBE's cutting edge technology to produce a unique efficient and environmentally-friendly system for heating, cooling and domestic hot water. It's easy to install, easy to manage and has a discreet, timeless design.



*"Plug & play"*

Outdoor unit NIBE AMS 10

Indoor unit NIBE ACVM 270

*"Tailor your heating system"*



NIBE F2025 outdoor module works well in most homes. It can be configured to work in numerous different ways, with complementary heating systems, water heaters and accumulators of various sizes.

## NIBE™ F2025

NIBE F2025 is an air/water heat pump, specially designed to withstand the north europe outdoor conditions. NIBE F2025 utilises the outside air so there is no need for bore holes or coils in the ground. NIBE F2025 can both heat hot water effectively at high outdoor temperatures and give a high output to the heating system at low outdoor temperatures.



- NIBE SPLIT is a system for heating, cooling and producing hot water for a variety of house sizes.
- Optimal annual heating factor thanks to the inverter controlled compressor
  - Heating 3 - 12 kW
  - Cooling 3 - 12 kW
- Instant docking with exiting gas boiler with built in 270 litre accumulator tank
- Indoor and outdoor unit connected with refrigerant piping
- Heating with floating condensation

NIBE F2025 is designed for water based heating systems and can be used together with most electric boilers, oil-fired boilers or equivalent. The heat pump includes an advanced control system for optimal control. NIBE F2025 is started by a start signal from another controller or thermostat. NIBE F2025 can be controlled from a specially designed control unit, SMO 10. This connects and disconnects additional heat and controls the changeover from room heating to domestic hot water heating. Accessories such as extra shunt group and pool control can be connected if SMO is present. Using accessory KVT 10, the condensation water that is created can be collected and routed to a suitable drain.

- Tailor your heating /dkw system
- F2025-6, 8, 10, 14 out door units
  - All in one indoor units VVM 300/EVP 500
  - Control up to nine outdoor units and choose between water tanks from 200 – 1000 litres.
  - Available in sizes 6, 8, 10 and 14 kW at A7/W45

# Three kinds of heat pumps from NIBE designed for earth

## Exhaust air heat pumps

Ideal for heating domestic premises and tap water. An exhaust air heat pump ventilates the building and recovers the energy in the warm air, reusing it to warm up your sanitary water and fuel a central heating system.

## Ground source heat pumps

Drawing heat from surface soil, bedrock or the water in a nearby lake, this is 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. In contrast to simpler types of air-to-air heat pumps, they are connected to the building's heating system and are able to produce both heat and hot water.

**Heating your house with a heat pump is the proven best option for the environment.**

## NIBE Energy Systems

NIBE is one of Europe's leading manufacturers in the domestic heating sector. NIBE supply homes with products that provide domestic hot water and ensure a comfortable indoor climate. NIBE offer high-tech heat pump solutions for heating, ventilation, cooling and heat recovery that reflect today's demand for sustainable construction.

### Product range:

Air/water heat pumps, Ground-source/geothermal heat pumps, Exhaust-air heat pumps, Solar panels, Water heaters, Accumulators, Domestic boilers and pellet burner, District heating products

## 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 ground source 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.