

# NIBE™ F1345 Ground Source heat pump for larger residential and commercial installations

## NEW



## Features of NIBE™ F1345

Perfect solution for buildings with large heat demands

Docking possibility - up to 540 kW in cascade

High COP - provides savings and shorter payback times

High flow temperature (up to 65°C) – means great installation flexibility

The heat pump consists of two units which contain less than 3 kg refrigerant per unit

Multi colour display with user instructions and multi language support

Scheduling (indoor comfort, hot water and ventilation)

Universal connection interface (1xUSB-port)

Remarkably low sound level

Elegant, timeless and international design

The control unit offers several docking options

## **NIBE F1345**

The NIBE F1345 is one of a new generation of heat pumps, designed to supply your heating and tap water needs in a cost efficient, environmentally friendly way.

With its two large scroll compressors, NIBE F1345 is the ideal ground source heat pump for multi-occupancy buildings, industrial premises, churches and other buildings with a large heat demand. The compressors collaborate and engage as necessary, give better power control, less wear and greater operational ability.

The new F1345 is more flexible than ever and with its advanced control system it can be adapted to several system solutions. In systems with up to 9 heat pumps and with a wide range of accessories e.g. for control of oil, gas, pellet fired or electric boilers, you find the full flexibility for your installation.

NIBE F1345 is equipped with a multicolour display, multi languages support and simply upgradable software via the built in USB port.

NIBE F1345 is manufactured in four sizes; these feature outputs of 24, 30, 40 and 60 kW.

## Technical specifications

## NIBE™ F1345

Туре		NIBE F1345-24	NIBE F1345-30	NIBE F1345-40	NIBE F1345-60
Power consumption* (B 0 /W 35)	(kW)	2 x 2.52	2 x 3.5	2 x 4.44	2 x 7.05
Heating capacity* (B 0 /W 35)	(kW)	22.5 (2 x 11.3)	30.7 (2 x 15.4)	40.0 (2 x 20.0)	57.7 (2 x 28.8)
COP* at B0/W35 14511		4.42	4.36	4.51	4.10
Voltage		400 V (3-phase+Zero)			
Refrigerant		R407C	R407C	R407C	R410A
Refrigerant quantity	(kg)	2 x 2.2	2 x 2.3	2 x 2.4	2 x 2.4
Max. temperature heating medium,					
flow/return	(°C)	65/58	65/58	65/58	65/58
Height (without adjustable feet 30-50mm)	(mm)	1800	1800	1800	1800
Width	(mm)	600	600	600	600
Depth	(mm)	620	620	620	620
Net weight	(kg)	325	335	352	353

<sup>\*</sup> According to EN 14511 for heat source entry at  $0^{\circ}$  C / hot water flow at 35° C. The electric input for the circulation pumps is included.

### **System description**

The NIBE F1345 consists of two heat pump modules and a CPU unit with a display to control the heat pump and any additional heating. The NIBE F1345 has built-in circulation pumps\*, making it easy to connect to the heating medium and brine circuits. The energy from the heat source is taken up via a closed collector system in which a mixture of water and antifreeze circulates. The heat source can be rock, soil, lake, exhaust air, outdoor air or e.g. process heating.

Ground water can also be used as a heat source. This requires an intermediate heat exchanger. The brine emits its heat to the refrigerant in the heat pump's evaporator. It then vaporises and is compressed in the compressor. The refrigerant, with its increased temperature, is led into the condenser where it emits its energy to the heating medium circuit.

\* 40 - 60 kW with 1 pcs external brine pump.



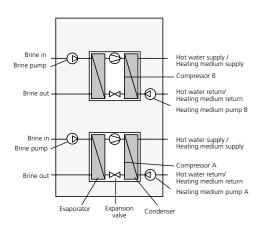
### **Multicolour TFT display**

NIBE F1345 is equipped with a multicolour display with a clear and simple menu and symbolic language. 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.

### **Docking**

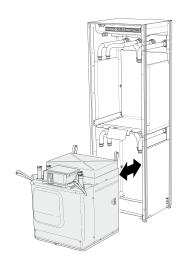
As many as nine NIBE F1345 can be connected together to achieve an output of up to 540 kW. It is also possible to cool via brine on hot summer days.

Several accessories are available for NIBE F1345, such as pool, modbus communication, GSM remote control and active cooling.



#### **Compressor module**

The compressor module can be pulled out very easily for transport, installation and service.



639243 NBD GB NIBE F1345 1212-4

NIBE makes reservations for any factual or printing errors in this brochure. @NIBE 2011.

