

## 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 compressor units which contain less than 3 kg refrigerant per unit**
- Multi colour display with easy user friendly instructions**
- Scheduling (heating, cooling, hot water, solar and ventilation)**
- Universal connection interface (1xUSB-port)**
- Remarkably low sound level**
- Elegant, timeless and international design**
- The control unit offers several docking options**
- Modbus compatible for integration with BMS controls**

### 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 large residential and commercial installations and other buildings with a large heat demand. The intelligent system controls both compressors as necessary to 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, user friendly controls 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

| Type   |      | 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 11.8)      | 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             |

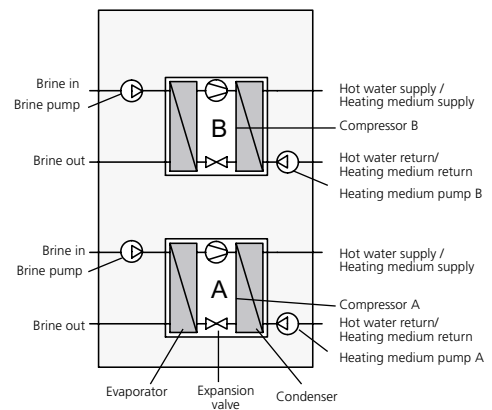
\* According to EN 14511 for heat source entry at 0° C / hot water flow at 35° C. The electric input for the circulation pumps is included.

### 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, mod-bus communication, GSM remote control, active cooling and solar.

### Compressor module

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

