GROUND SOURCE HEAT PUMP NIBE™ F1145 PC With integrated passive cooling







Features of NIBE™ F1145 PC

Extraordinarily high efficiency (COP)

Extremely installer-friendly

Modular system for service friendliness

Multicolour display with user instructions and multilanguage support

Remote control via GSM (accessories)

Scheduling (indoor comfort and hot water as well as cooling and ventilation)

Universal connection interface (1xUSB-port)

Remarkably low sound level

Low energy DC circulation pumps (A)

Elegant, timeless and international design

New improved generation:

- Higher efficiency
- Speed controlled circulation pumps for optimized heating and hot water charging
- Improved installer friendliness
- NIBE Uplink compatible

NIBE F1145 PC

The NIBE F1145 PC is one of a new generation of heat pumps, designed to supply your heating needs in an cost efficient, environmentally friendly way. Thanks to an integrated immersion heater, passive cooling, circulation pumps and a control system, the heat is produced safely and economically.

The heat pump can be connected to an optional low temperature heat distribution system such as radiators, convectors or underfloor heating. It is also prepared for connection to several different products and accessories e.g. extra hot water heater, ventilation recovery, pool and other heating systems.





Technical specifications NIBE™ F1145 PC

| Туре | | 5 | 6 | 8 | 10 |
|--|-------|--------------|----------|----------|-----------|
| EN 14511 | | | | | |
| Supplied power at 0/35 °C | (kW) | 1.08 | 1.32 | 1.64 | 2.01 |
| Delivered power at 0/35 °C | (kW) | 4.65 | 6.07 | 7.67 | 9.66 |
| COP 0/35°C | | 4.30 | 4.59 | 4.68 | 4.81 |
| EN 14825 | | | | | |
| P _{designh} 35°C/55°C | | 6/5 | 7/6 | 9/8 | 12/10 |
| SCOP Cold/Average climate, 35 °C | | 4.6/4.5 | 5.0/4.8 | 5.1/4.9 | 5.2/5.1 |
| Efficiency class product label 35 °C/55 °C | | A++/A++ | A++/A++ | A++/A++ | A++/A++ |
| Efficiency class package label 35 °C/55 °C** | | A+++/A++ | A+++/A++ | A+++/A++ | A+++/A+++ |
| Efficiency class hot water/Load profile with VPB 300/VPBS300 | | A/XXL | | | |
| Operational voltage | | 400V 3N~50Hz | | | |
| Min fusing (fuse type C) excl immersion heater | (A) | 16 | 16 | 16 | 16 |
| Immersion heater, max | (kW) | 9 | | | |
| Refrigerant type R407C | (kg) | 1.2 | 1.5 | 2.1 | 2.0 |
| Max temperature heating medium(flow/return circuit) | (°C) | 70/58 | | | |
| Sound power level (LwA)** | (dBA) | 37 | 42 | 43 | 43 |
| Sound pressure level (LpA)*** | (dBA) | 21,5 | 27 | 28 | 28 |
| Net weight (without water) | (kg) | 148 | 153 | 173 | 178 |
| Height | (mm) | 1500 | | | |
| Width | (mm) | 600 | | | |
| Depth | (mm) | 620 | | | |

^{*} The reported efficiency of the package also takes the controller into account.

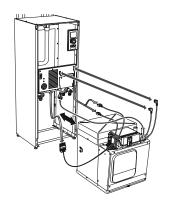
** According to EN 12102 at 0/35°C

Docking options

NIBE F1145 PC can be connected in several different ways e.g. to an electric hot water heater, ventilation recovery exhaust air module, a buffer vessel, underfloor heating, two or more heating systems, ground water system, two pools and /or solar panels.

Compressor module

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



Display with user instruction

NIBE F1145 PC has an innovative colour display with simple menus and clear symbols that make it easy for you to control consumption and monitor, for instance, run time, or create your own personal settings. The heat pump is equipped with an attractive, stylish aluminium cover. It also has a USB port that makes it easy to update software and download operating data.

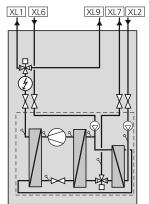
System description

NIBE F1145 PC consists of heat pump, immersion heater, circulation pumps and control system.

NIBE F1145 PC is connected to the brine and heating medium circuits.

In the heat pump evaporator, the brine (water mixed with anti-freeze, glycol or ethanol) releases its energy to the refrigerant, which is vaporised in order to be compressed in the compressor. The refrigerant, of which the temperature has now been raised, is passed to the condenser where it gives off its energy to the heating medium circuit and, if necessary, to any docked water heater. If there is a greater need for heating/hot water than the compressor can provide there is an integrated immersion heater.

The brine can also be circulated via a mixing valve to a heat exchanger. There the brine cools the heating system's water so that comfort cooling can be maintained during the hotter periods of the year.



- XL 1 Connection, heating medium flow XL 2 Connection, heating medium return
- XL 2 Connection, heating medium return
 XL 3 Connection, cold water
- XL 3 Connection, cold wate XL 6 Connection, brine in
- XL 6 Connection, brine in XL 7 Connection, brine out
- XL 9 Connection, hot water



^{***} According to EN 11203 at 0/35°C and 1 m distance