

Ground Source Heat Pump NIBE™ F1145 PC

A new generation of heat pumps

NEW
Improved
generation



Features of NIBE™ F1145 PC

- Integrated passive cooling**
- 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 a 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.

The NIBE F1145 PC is equipped with a control unit which cost effectively and safely maintains a comfortable temperature in the home. Clear information about status, operation time and all temperatures in the heat pump are shown on the large and easy-to-read display. This eliminates the need for external unit thermometers.

Technical specifications

NIBE™ F1145 PC

Type		F1145 PC-5	F1145 PC-6	F1145 PC-8	F1145PC-10
EN 255 (excl circulation pumps) at 10 K					
Supplied power at 0/35°C	(kW)	1.06	1.31	1.62	1.95
Delivered power at 0/35°C	(kW)	4.89	6.48	8.19	10.06
COP 0/35°C		4.62	4.94	5.05	5.15
EN 14511 at 5 K					
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
Operational voltage			400V 3NAC 50 Hz		
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			

*According to EN 12102 at 0/35°C

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

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.

System description

F1145PC consists of heat pump, immersion heater, circulation pumps and control system. F1145PC 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.

