Ground Source Heat Pump NIBE™ F1245 PC

A new generation of heat pumps

Energy efficiency class package label for NIBE F1245PC

Features of NIBE™ F1245 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)

Integrated water heater 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

New improved generation:

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

NIBE F1245 PC

The NIBE F1245 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 hot water heater, passive cooling, immersion heater, 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 F1245 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™ F1245 PC

Type		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/ EN 14825 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		A/XL			
Operational voltage		400V 3N~50Hz			
Min fusing (fuse type C) excl immersion heater	(A)	16	16	16	16
Volume water heater	(litres)	appr 180			
Immersion heater, max	(kW)	9			
Max pressure in storage heater	(MPa)	1.0 (10 bar)			
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)	313	318	333	338
Height	(mm)	1800			
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
***According to EN 11203 at 0/35°C and 1 m distance

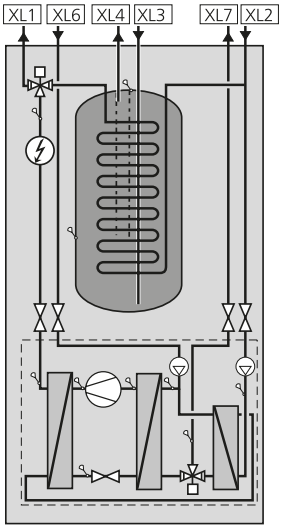
System description

The NIBE F1245 PC consists of a heat pump, water heater, electrical module, passive cooling module, circulation pumps and a control system.

It is connected to the brine and heating medium circuits. In the heat pump evaporator, the brine (water mixed with anti-freeze) gives off its energy to the refrigerant, which is vapourised in order to be compressed in the compressor. The refrigerant, its temperature now raised, is passed to the condenser where it releases its energy to the heating medium circuit and, if necessary, to the water heater.

If the need for heating/hot water is further than the compressor can provide an integrated immersion heater boosts the supply.

The collector system can also be circulated to the heat exchanger via a shunt valve, thus cooling the water in the heating system and giving a comfortable temperature even during hot weather.



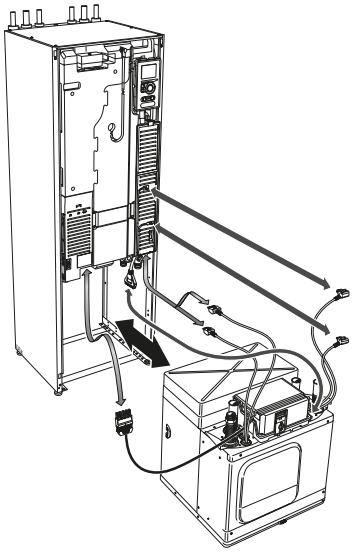
XL 1 Connection, heating medium flow
XL 2 Connection, heating medium return
XL 3 Connection, cold water
XL 4 Connection, hot water
XL 6 Connection, brine in
XL 7 Connection, brine out

Docking options

NIBE F1245 PC can be connected in several different ways e.g. to an extra 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.



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