GROUND SOURCE HEAT PUMP NIBE[™] F1255 A new generation of heat pumps



Features of NIBE[™] F1255

Extraordinary high efficiency (SCOP).

Optimal annual heating factor thanks to the inverter controlled compressor.

Available in three sizes

- 1,5–6 kW
- 3–12 kW
- 4–16 kW

Speed controlled circulation pumps that supply the heat pump with optimized fluid flow.

Minimal operating costs, no expensive peaks when it is cold outside. The compressor adapts as necessary.

Integrated hot water heater with environmentally friendly insulation for minimal heat loss.

High temperature range

- Flow line temperature up to 65°C (70°C)
- Return line temperature up to 58°C

Scheduling (indoor climate, hot water, ventilation).

Control of up to four heating systems.

Accessories available for e.g. pool heating, passive and active cooling.

Compatible with NIBE Uplink

NIBE F1255

NIBE F1255 is an intelligent heat pump fitted with an invertercontrolled compressor and speed-controlled circulation pumps. Suitable for use in residential and commercial buildings. The heat pump adjusts itself automatically to the power demand of the house. This results in optimal savings as the heat pump always runs at the correct performance all year round without the addition of extra electrical peaks.

The integrated coil water heater is available in three different corrosion protections (stainless steel, enamel and copper).

It is prepared for connection to several different products and accessories, for example, hot water heater, ventilation recovery, wpool, free cooling, active cooling and heating systems with different temperatures.





Energy efficiency class package label for NIBE F1255.

Technical specifications NIBE[™] F1255

Туре		1,5–6 kW	3 - 12 kW	4–16 kW
EN 14511				
Supplied power at 0/35°C ¹⁾	(kW)	0.67	1.04	1.83
Delivered power at 0/35°C ¹⁾	(kW)	3.15	5.06	8.89
COP 0/35°C ¹⁾		4.72	4.87	4.85
EN 14825				
P _{designh} 35°C/55°C	(kW)	6/6	12/12	16/16
SCOP Cold/Average climate, 35°C		5.5/5.2	5.4/5.2	5.5/5.2
Efficiency class product label 35°C/55°C		A++/A++	A++/A++	A++/A++
Efficiency class package label 35°C/55°C*		A+++/A+++	A+++/A+++	A+++/A+++
Efficiency class hot water/Load profile		A/XL	A/XL	A/XL
Operational voltage			400V 3N~50Hz	
Min fusing (fuse type C) excl immersion heater	(A)	16	10	10
Volume water heater	(litres)		appr 180	
Immersion heater, max	(kW)	6.5	9	9
Max pressure in storage heater	(MPa)		1.0 (10 bar)	
Refrigerant type R 407C	(kg)	1.2	2.0	2.2
Max temperature heating medium (flow/return circuit) at 0°C brine	(°C)		70/58	
Sound power level (LwA) **	(dBA)	36–43	36-47	36–47
Sound pressure level (LpA)***	(dBA)	21–28	21-32	21–32
Net weight (without water)	(kg)	220	245	245
Height	(mm)		1800	
Width	(mm)		600	
Depth	(mm)		620	

¹⁾ At Nominal power

**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

Docking options

NIBE F1255 can be connected in several different ways e.g. to an extra electric hot water heater, ventilation recovery exhaust air module, free cooling, active cooling, underfloor heating, up to four heating systems, ground water system and pool.

Compressor module

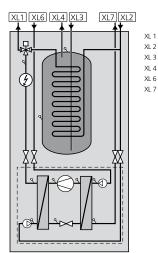
The compressor module can be pulled out very easily for transport, installation and service.

System description

NIBE F1255 consists of a heat pump, water heater, electric heater, circulation pumps and control computer with display. NIBE F1255 is connected to the brine and heating medium circuits.

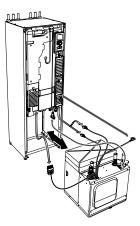
The heat from the heat source (rock, soil, lake) is taken up via a closed brine system in which a mixture of water and antifreeze circulates. Groundwater can also be used as a heat source, but this requires an intervening heat exchanger.

The brine emits its heat to the refrigerant in the heat pump's evaporator. It then vapourises and is compressed in the compressor. The refrigerant, the temperature of which has now been raised, is passed to the condenser where it gives off its energy to the heating medium circuit and, if necessary, to the water heater.



Connection, heating medium flow

- Connection, heating medium return
- XL 3 Connection, cold water
 - Connection, hot water
 - Connection, brine in Connection, brine out





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