

# Ground Source Heat Pump NIBE™ F1255

A new generation of heat pumps

NEW



## Features of NIBE™ F1255

**Delivered power 4 - 16 kW**

**Extraordinary high efficiency (SCOP).**

**Optimal annual heating factor thanks to the inverter controlled compressor.**

**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 (70C)

– 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 inverter-controlled 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, pool, free cooling, active cooling and heating systems with different temperatures.

# Technical specifications

## NIBE™ F1255

Delivered power		4 – 16 kW
EN 255 (excl. circulation pumps) at 10k		
Supplied power at 0/35°C <sup>1)</sup> 50 Hz	(kW)	1.81
Delivered power at 0/35°C <sup>1)</sup> 50 Hz	(kW)	9.27
COP 0/35°C <sup>1)</sup>		5.12
EN 14511:2011		
Supplied power at 0/35°C <sup>1)</sup> 50 Hz	(kW)	1.83
Delivered power at 0/35°C <sup>1)</sup> 50 Hz	(kW)	8.89
COP 0/35°C <sup>1)</sup>		4.85
EN 14825		
P <sub>design</sub>	(kW)	16
SCOP <sup>2)</sup> <sub>on</sub>		5.4
Operational voltage 400 V 3NAC 50 Hz		
Min fusing (fuse type C) excl immersion heater	(A)	10
Volume water heater	(litres)	appr 180
Immersion heater, max	(kW)	9
Max pressure in storage heater	(MPa)	1.0 (10 bar)
Refrigerant type R 407C	(kg)	2.2
Max temperature heating medium (flow/return circuit) at 0°C brine	(°C)	70/58
Sound power level (L <sub>wA</sub> ) *	(dBA)	36-47
Sound pressure level (L <sub>pA</sub> )**	(dBA)	21-32
Net weight (without water)	(kg)	245
Height	(mm)	1800
Width	(mm)	600
Depth	(mm)	620

<sup>1)</sup> At Nominal power

<sup>2)</sup> Cold climate, low temperature

\*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.

