

NIBE air/water programme for  
commercial and residential use  
Air/Water heat pump NIBE™ F2300

## Features of NIBE™ F2300

COP optimized throughout the envelope

Supply temperature up to 65 °C

3-phase connection for all sizes

Lowest maximum noise level

Extended working range down to -25 °C ambient with 63 °C supply temperature

Superior for radiator systems

Built-in condensate water tray



### NIBE F2300

The F2300-14 and -20 are two high-performance air/water outdoor units that are suitable both for commercial and residential use. The F2300 is built on the same vapour injection, EVI, compressor concept as the F2030 units. Great efforts have been made to create attractive system combinations.

Special attention has been given to minimising the noise level. F2300 is one of the quietest units available on the market.

These NIBE products have been developed with special attention of making installation as smooth as possible. For example, we always include anti-vibration water connections with the outdoor unit. The widest accessory programme on the market and numerous recommended possible combinations.

Please visit [www.nibe.eu](http://www.nibe.eu) for further information.

# NIBE air/water programme for residential use

## Air/Water heat pump NIBE™ F2300

### Optimized for heating and hot water down to -25°C

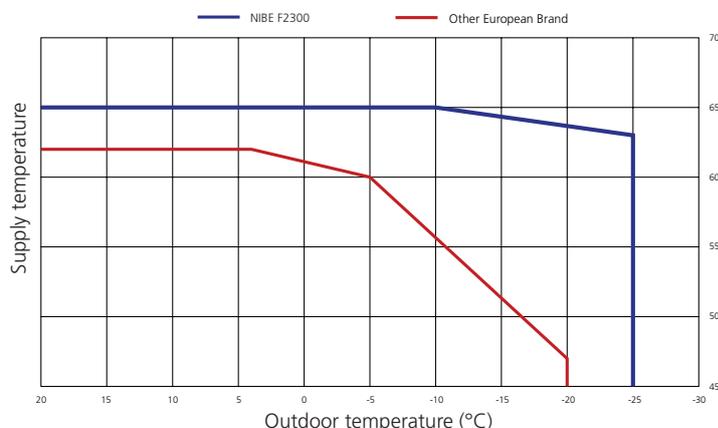
The F2300 has an extended working range down to -25°C ambient. It can deliver 63°C supply temperature at -25°C ambient temperature and 65°C at -10°C ambient. This qualifies the F2300 to be able to heat up the house and make hot water throughout the whole year. This makes the F2300 very versatile.

F2300 in combination with e.g. a VVM 500 makes up a system possible to be sized for 100% power coverage the coldest day.

The very high supply temperature available in the whole envelope makes it possible to produce 60°C hot water, the whole year, with only the heat pump running. This is a unique feature that is normal for us.

The F2300 works splendid in radiator systems as well as with underfloor heating. It maintains a high heating capacity even at low ambient temperatures.

### Superior Operating Envelope

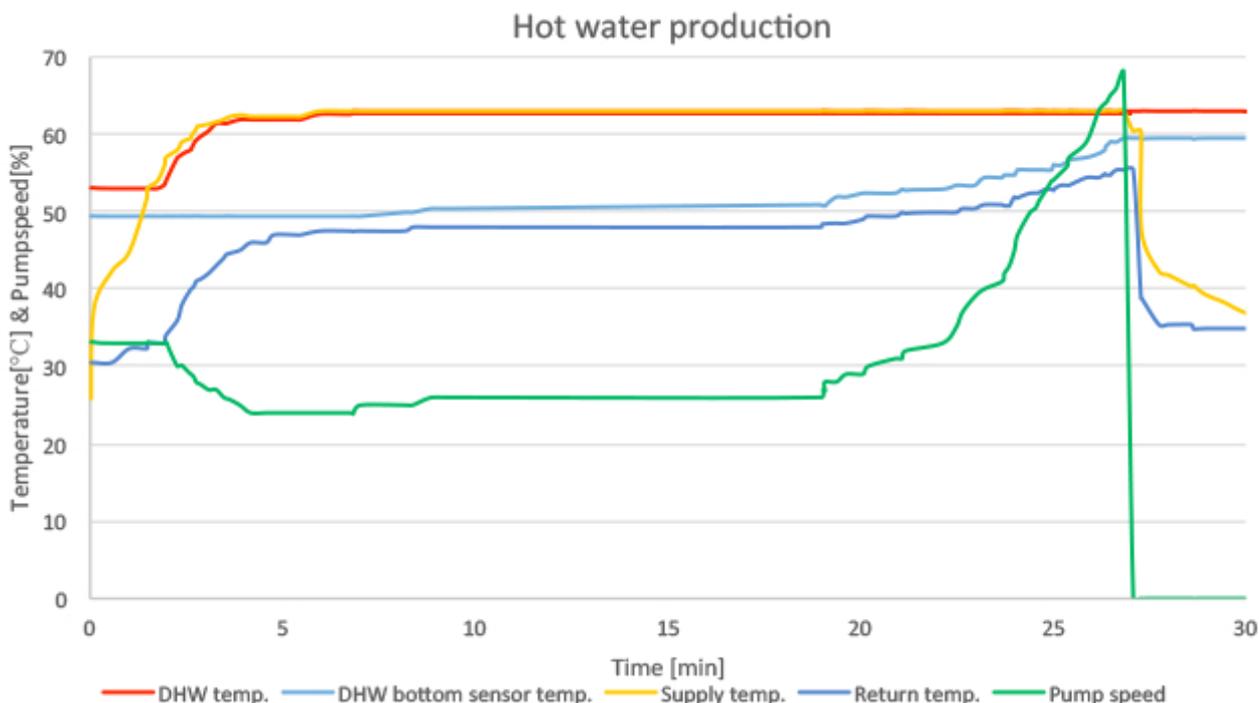


### Great hot water performance with F2300

The high supply temperature available on both F2030 and F2300 makes it possible to produce 60°C hot water, throughout the whole year, with no addition.

The chart below shows an actual hot water charging cycle. The example shows a F2030-9 together with a VVM500 under compressor operation.

The optimized hot water charging of the VVM500 makes a flat uniform temperature profile (at 63°C), throughout more or less the whole hot water tank. The customer in this case has a large amount of hot water available, corresponding to more than 500 litres 40°C hot water.



Actual data extracted from NIBE Uplink

## Flexible system solutions

With the new NIBE F2300 range we can provide installations for both commercial and residential use.

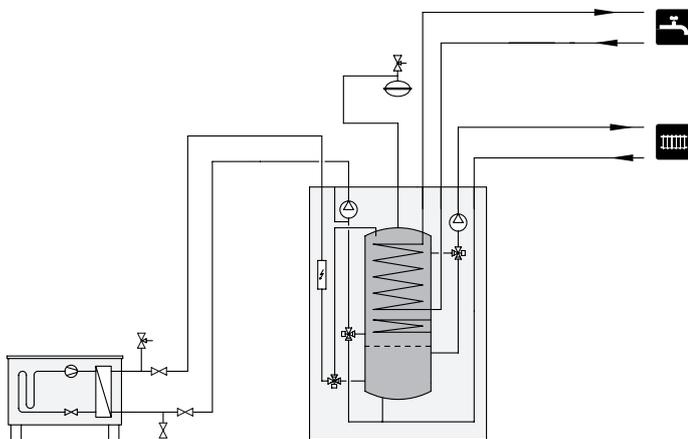
NIBE offers a broad selection of accessories and complete indoor modules. These have been developed with our air/water heat pumps to optimize their efficiency and give you the highest possible savings.

Factors such as the size of your house, where you live and your domestic hot water demand will decide which system solution is most appropriate for you.

For the best combination, please consult your installer or NIBE partner.

## Docking options

NIBE F2300 can be installed in several different ways. For more information about docking options, please see [www.nibe.eu](http://www.nibe.eu)



	F2300-14	F2300-20
VVM 500	X	X
SMO 20	X	X
SMO 40	X	X

## Flexible indoor module NIBE VVM 500

NIBE VVM 500 indoor unit takes care of your hot water demand and delivers heating to your heating system in the most efficient way. The concept is a thermal store with integrated hot water coil, circulations pumps, solar coil, control system and immersion heater. This makes it easy to connect solar and other energy sources, direct to the VVM 500.

## Advanced controller NIBE SMO 20/40

NIBE SMO 20/40 is an advanced controller module that supports a broad range of different hydraulic schemes. NIBE SMO 20/40 enables you to combine a NIBE F2030 air/water heat pump with other equipment and create your own customized heating system.

# Technical specifications

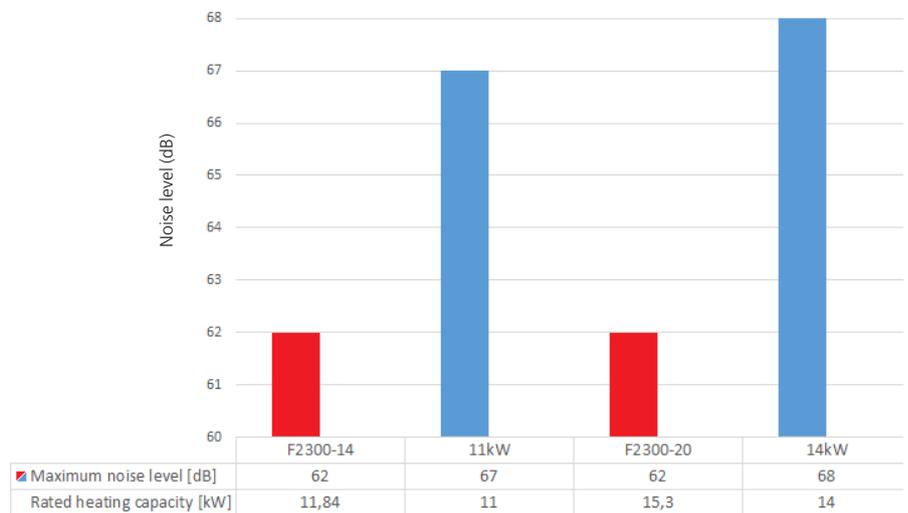
## NIBE™ F2300 outdoor module

Type	F2300-14	F2300-20
<b>Heating</b>		
COP at 2/35 °C *	3.84	3.53
COP at 2/45 °C *	3.28	3.02
COP at 7/35 °C *	4.39	4.04
COP at 7/45 °C *	3.69	3.41
COP at -15/45 °C *	2.20	2.16
<b>Package label F2300 + SMO20/40</b>		
Efficiency class / P <sub>design</sub> (35°C)	A++/12,1kW	A++/16,5kW
<b>Package label F2300 + VVM5000</b>		
Efficiency class / P <sub>design</sub> (55°C)	A++/12,9kW	A++/17,0kW
Efficiency class / Load profile (Hot water)	A/XXL	A/XXL
Operating voltage	3 x 400 V + N + PE 50 Hz	
Compressor	Scroll EVI compressor	
Fuse	A	16
Enclosure class	IP24	
Max outgoing heating medium temperature	°C 65	
Refrigerant quantity (R407C)	kg 2.2	2.8
Connection heating medium ext thread	mm G 1 ¼ (Ø35mm)	
Height with stand	mm 1324	
Width	mm 1455	
Depth	mm 620	
Weight	kg 224	230
Lowest operational point. Outdoor air supply	°C -25/63 °C (-10/65 °C)	

\*In accordance with EN 14511.

### Low maximum noise level

The F2300 has a low maximum noise level compared to other heat pumps on the market. The chart below compares the F2300 with a standard European Air/Water heat pump.



■ NIBE F2300

■ Other European brand, new model

Source: Schallrechner at Bundesverband Wärmepump e.V

Maximal and nominal noise level		F2300-14	F2300-20
Sound power level, EN 12102 at 7/45. Low/high fan speed	L <sub>w</sub> (A)	50/62	53/62
Sound pressure level at 2m. Low/high fan speed	dB(A)	36/48	39/48
Sound pressure level at 2m. Low/high fan speed	dB(A)	26,5/38,5	29,5/38,5
Sound pressure level at 2m. Low/high fan speed	dB(A)	22/34	25/34

