Air / water heat pump
NIBE F2120

NIBE F2120 is an inverter-controlled air/water heat pump which represents a real breakthrough when it comes to efficiency. With a seasonal performance factor in excess of 5.0*, the heat pump provides more than five times as much heat per year as an electric heater with the same energy consumption. NIBE F2120 provides optimum savings since the heat pump automatically adapts to your home's output requirements all year round.

NIBE F2120 has a class leading working range and deliver a supply temperature of up to 65°C. Even at outdoor temperatures of as low as –25°C, it still provides a supply temperature of up to 63°C, while keeping the noise level to a minimum. NIBE F2120 has three-phase connection, which simplifies electrical installation.

Thanks to smart technology, the product gives you control over your energy consumption and will be a key part of your connected home. The efficient control system automatically adjusts the indoor climate for maximum comfort, and you do nature a favour at the same time.

**NIBE F2120 has a rating of SCOP > 5.0 (Average climate, Low temperature) and SCOP 4.3 (Cold climate, Low temperature) in accordance with European standard EN 14825:2013, i.e. the standard for determining the reference seasonal performance factor, SCOP.*

- **Breakthrough in efficiency with a seasonal performance factor of over 5.0***
- **Class leading working range, supply temperature of up to 65°C, and 63°C at an outdoor temperature of –25°C.**
- **Minimal noise level, even at full output.**

NIBE F2120 – designed to be a part of your system

NIBE F2120 is designed to be combined with a NIBE indoor module, VVM, or NIBE control unit, SMO, to create a high efficient indoor climate system.

NIBE flexible indoor module

NIBE flexible indoor modules provides efficient heating / cooling and hot water at a high performance. The VVM indoor modules are all-in-one units and includes a smart and user-friendly control system, water heater, electrical addition, self-regulating circulating pump. VVM S320 also includes the filling loop, pressure gages, safety valves and expansion vessel, everything needed for the normal installation

- **Intelligent integrated controller, advanced technology, easy to understand, simple to use.**
- **Control your comfort online and stay in touch with your system wherever you are via myUplink or NIBE Uplink also available as an app.**
- **Smart Energy Source for optimal integration of prioritzed heating sources such as wood boilers.**

Choosing the right NIBE VVM for my house

NIBE F2120	VVM S320	VVM 310	VVM 500
			
Required heating power, coldest day	Up to 10 kW	Up to 14 kW	Up to 22 kW
Electrical heater built-in	9 kW	12 kW	9 kW
Domestic hot water volume	240 l	250 l @ 12 l/min	350 l @ 12 l/min
Docking	High power external heat sources with external accumulators. No built-in accumulator volume.	Smaller external heat sources without accumulator. Built-in accumulator volume, 270 l.	Smaller external heat sources without accumulator. Built-in accumulator volume, 500 l.
Connection	Top	Top	Top
Height / Width / Depth (mm)	1800/600/615	1800/600/615	1900/760/900

Heating capacity & Heating system

All F2120 are compatible with all VVM indoor modules. Each VVM indoor unit has a maximum recommended heating output to your climate system. Combining a larger heat pump will increase the energy coverage by the heat pump i.e. lower the temerature of bivalence.

The VVM S320 has a single circuit system, which requires the heating system flow to be maintained not below a minimum level.

The VVM 310 and VVM 500 offers a two circuits solution where the heating system flow is independent of the flow over the heat pump.

Domestic hot water

The VVM S320 has a built in DHW storage tank of 185 liters. In VVM 310 and VVM 500, domestic hot water is prepared on demand in a tap coil, hence the dependence of the flow rate.

Docking

VVM 310 and VVM 500 offers an easy and efficient way of docking an external heat source using the built in water volume as an accumulator. The VVM 500 also offers a built-in solar coil for easy connection of thermal solar panels.

If the external heat source is of higher power and / or includes buffer volume larger than the volume of the VVM, a solution with VVM S320 is more suitable.

NIBE SMO Controller

The control modules, NIBE SMO, provides a flexible solution that easily can be customized. For solutions with NIBE SMO, system components such as water heaters, additional heat sources and other accessories are chosen specifically for the actual set-up. Up to 8 NIBE F2120 can be connected to NIBE SMO S40 or NIBE SMO 40.

Choosing the right NIBE SMO for the climate system in my house

NIBE F2120	NIBE SMO S40	NIBE SMO 20	NIBE SMO 40
			
Controls up to	8 heat pumps.	1 heat pump.	8 heat pumps.
External heatsource	3 step for electrical heater or boiler with mixing valve. Allowes prioritized heating sources.	3 step for electrical heater.	3 step for electrical heater or boiler with mixing valve. Allowes prioritized heating sources.
Self-regulating circulator pump	CPD11, available in 2 sizes.	CPD11, available in 2 sizes.	CPD11, available in 2 sizes.
Accessories	Wide range including extra heating circuit, pool, solar, ventilation heat recovery unit, room display etc.	Room sensor.	Wide range including extra heating circuit, pool, solar, ventilation heat recovery unit, room display etc.

Specifications NIBE F2120

		NIBE F2120-16	NIBE F2120-20
Efficiency class 35/55°C Product Label[1]		A+++ / A+++	
Efficiency class 35/55°C Package Label[2]		A+++ / A+++	
The product's efficiency class/tap profile for hot water[3]			
$SCOP_{EN14825}$ Average climate 35/55 °C		5,1 / 3,9	5,1 / 3,9
$P_{designh}$ Average climate 35/55 °C	kW	11,0 / 12,3	11,0 / 12,3
$SCOP_{EN14825}$ Cold climate 35/55 °C		4,3 / 3,6	4,3 / 3,6
$P_{designh}$ Cold climate 35/55 °C	kW	13,0 / 14,0	13,0 / 14,0
7 / 35 Heat capacity/COP, EN14511, nominal	kW	5,17 / 5,11	5,17 / 5,11
Sound power level (L_{WA}), EN12102 at 7/45, nominal	dB(A)	55	
Märkspänning		400 V 3N – 50Hz	
CO_2-equivalent (hermetically sealed refrigerant circuit)[4]	ton	6,26	
Height / Width / Depth	mm	1165 / 1280 / 612	
Weight (excluding packaging)	kg	185	

[1] Skala för systemets effektivitetsklass rumsuppvärmning: A+++ – G. Redovisad effektivitet för systemet tar hänsyn till produktens temperaturregulator.
[2] Skala för produktens effektivitetsklass rumsuppvärmning A++ – G. [3] Skala för effektivitetsklass varmvatten: A – G.
[4] F2120 kräver ingen årlig kontroll enligt F-gasförordningen.

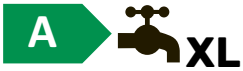
CIL SV NIBE F2120 2201-4

Sustainable energy solutions

Since 1952, NIBE has been manufacturing energy-efficient and sustainable climate solutions for your home. It all started in Markaryd in Sweden and we value our Nordic heritage by harnessing the power of nature. We combine renewable energy with smart technology in order to offer effective solutions so that together we can build a more sustainable future.

Whether it's a chilly winter's day or a hot summer's afternoon, we need a well-balanced indoor climate for a comfortable everyday life, whatever the weather. Our wide range of products supplies your home with cooling, heating, ventilation and hot water, so that you can create a pleasant indoor climate with a low impact on nature.

Energy efficiency class for package label in space heating.



The product's efficiency class and tap profile for hot water with NIBE VVM 310/VVM 320/VVM 325.

The product's efficiency class and tap profile for hot water with VVM 500.

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