

# Air/water heat pump

## NIBE F2040

NIBE F2040 is an intelligent and compact inverter-controlled air/water heat pump. NIBE F2040 provides optimum savings since the heat pump automatically adapts to your home's output requirements all year round.

The heat pump works down to an outdoor temperature of  $-20^{\circ}\text{C}$  and at the same time supplies up to  $58^{\circ}\text{C}$  in supply line temperature. The effective cooling function allows the heat pump to deliver a comfortable indoor climate even at high outdoor temperatures.

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.

- Compact heat pump that adapts to your home's requirements.
- High capacity even down to  $-20^{\circ}\text{C}$  and effective cooling function.
- Energy-saving smart technology with user-friendly control.



# NIBE F2040 – designed to be a part of your system

*NIBE F2040 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 myUlink or NIBE Uplink also available as an app.
- Smart Energy Source for optimal integration of prioritized heating sources such as wood boilers.

## Choosing the right NIBE VVM for my house

F2040	VVM S320	VVM 225	VVM 310	VVM 500
				
Compatible with	F2040-6, -8, -12	F2040-6, -8	F2040-6, -8, -12, -16	F2040-6, -8, -12, -16
Required heating power, coldest day	Up to 10 kW	Up to 9 kW	Up to 14 kW	Up to 22 kW
Electrical heater built-in	9 kW	9 kW	12 kW	9 kW
Domestic hot water volume	240 l	210 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.	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	Bottom	Top	Top
Height / Width / Depth (mm)	1800/600/615	1500/600/600	1800/600/615	1900/760/900

Heating capacity & Heating system

NIBE F2040 are compatible with the VVM indoor modules according to the table. 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 temperature 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 F2040 can be connected to one NIBE SMO S40.

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

F2040	SMO S40	SMO 20	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. Allows prioritized heating sources.	3 step for electrical heater.	3 step for electrical heater or boiler with mixing valve. Allows 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 F2040

		NIBE F2040-6	NIBE F2040-8	NIBE F2040-12	NIBE F2040-16
Efficiency class 35/55°C Package Label <sup>1)</sup>		A+++/A++			
Efficiency class 35/55°C Product Label <sup>2)</sup>		A+++/A++	A++/A++		
Efficiency class and tap profile for hot water <sup>3)</sup>		A/XL – A/XXL			
SCOP <sub>EN14825</sub> Average climate 35/55°C		4.8/3.5	4.4/3.3	4.4/3.4	4.5/3.4
P <sub>design</sub> Average climate 35/55°C	kW	4.8/5.3	8.2 / 7.0	11.5 / 10.0	14.5 / 14.0
SCOP <sub>EN14825</sub> Cold climate 35/55°C		3.7/3.0	3.6/2.8	3.6/2.9	3.7/2.9
P <sub>design</sub> Cold climate 35/55°C	kW	4.0/5.6	9.0/10.0	11.5/13.0	15.0/16.0
7/35 Heat capacity / COP, EN14511, nominal		2.67/5.32	3.86/4.65	5.21/4.78	7.03/4.85
Sound power level (L <sub>WA</sub> ), EN12102 at 7/45, nominal		50	54	57	61
Rated voltage		230 V 50 Hz, 230 V 2AC 50 Hz			
CO <sub>2</sub> -equivalent (hermetically sealed refrigerant circuit) <sup>4)</sup>		3.13	5.32	6.06	8.35
Height / Width / Depth		791 / 993 / 364	895 / 1035 / 422	995 / 1145 / 452	1450 / 1145 / 452
Weight (excluding packaging)		66	90	105	135

<sup>1)</sup> Scale for the system's efficiency class room heating: A+++ to G. Reported efficiency for the system also takes the temperature regulator into account. If the system is supplemented with an external additional boiler or solar heating the total efficiency of the system must be recalculated. <sup>2)</sup> Scale for the product's efficiency class room heating: A+++ to D. <sup>3)</sup> Scale for efficiency class hot water: A+ to F. <sup>4)</sup> NIBE F2040 doesn't require annual inspection according to the F-gas directive.

## Comfort through connectivity

We always strive to maximize the outcome of every product carrying the NIBE name while focusing on the system as a whole through connectivity. This way, we can offer you a wide range of smart and highly efficient products that can cool, heat, ventilate and supply your home with hot water. By harvesting power from nature, you can create the perfect indoor climate and enjoy the comforts of your home with minimal impact on the environment. To us, that's what really matters.

It's in our nature.



Energy efficiency class for package label in 35°C space heating.



The product's efficiency class and tap profile for hot water with NIBE VVM 310/VVM S320.



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

