

Air/water heat pump NIBE SPLIT HBS 05

The NIBE SPLIT HBS 05 is a compact heat pump with a high rated output.

The AMS 10 outdoor unit is connected via a refrigerant pipe to the HBS 05 split box, which is positioned on the inside. This forms a complete, speed-controlled heat pump. The NIBE SPLIT HBS 05 operates at outdoor temperatures down to -20°C, delivering up to 58°C supply.

The well-developed cooling function means that the heat pump can supply a comfortable indoor climate, even at high outdoor temperatures.

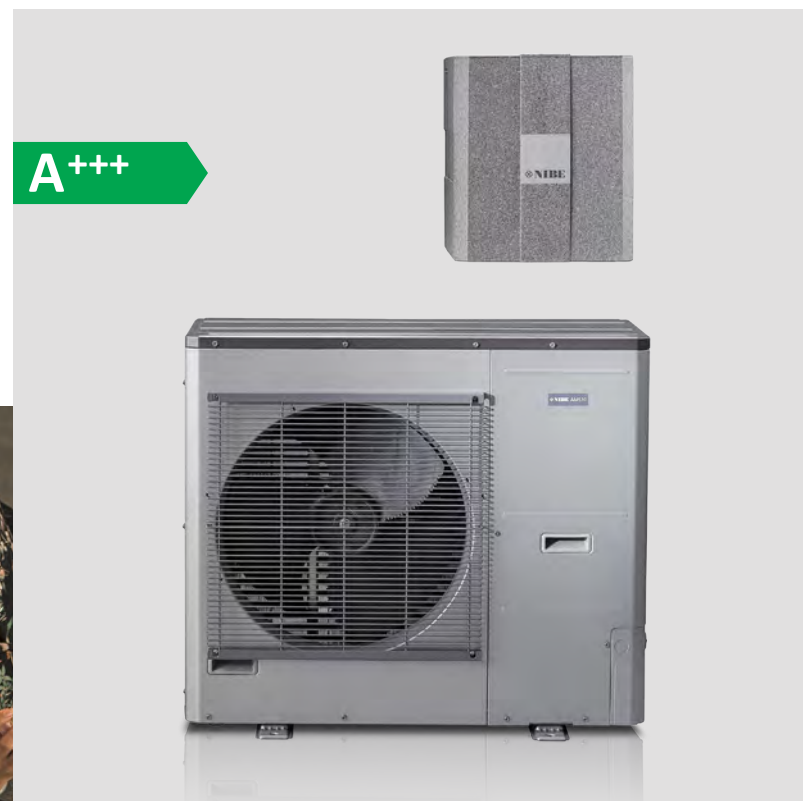
With its smart technological features, this product will play an essential part of your connected home. It will provide you with a self-adjusting control system that regulates your indoor climate in an efficient way. You will do the environment a favor while maintaining all the comfort in your home.

FEATURES OF NIBE SPLIT HBS 05

Speed-controlled split heat pump that adapts according to the needs of the house.

Active cooling with a cooling supply down to 7°C.

Compact heat pump – high rated output.



NIBE SPLIT HBS 05 – designed to be a part of your system

NIBE SPLIT HBS 05 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 320 and VVM 325 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 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

AMS 10/HBS 05	VVM 310	VVM 320 / VVM 325	VVM 500
			
Compatible with	AMS 10 / HBS 05 (all sizes)	AMS 10-6, -8, -12 / HBS 05-6, 12	AMS 10 / HBS 05 (all sizes)
Required heating power, coldest day	Up to 14 kW	Up to 10 kW	Up to 22 kW
Electrical heater built-in	12 kW	9 kW	9 kW
Domestic hot water volume	250 l @ 12 l/min	240 l	350 l @ 12 l/min
Docking	Smaller external heat sources without accumulator. Built-in accumulator volume, 270 l.	High power external heat sources with external accumulators. No built-in accumulator volume.	Smaller external heat sources without accumulator. Built-in accumulator volume, 500 l.
Connection	Top	Top: VVM 320 Bottom: VVM 325	Top
Height / Width / Depth (mm)	1800/600/615	1800/600/615	1900/760/900

Heating capacity & Heating system

NIBE SPLIT HBS 05 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 310 and VVM 500 offers a two circuits solution where the heating system flow is independent of the flow over the heat pump.

The VVM 320 and VVM 325 has a single circuit system, which requires the heating system flow to be maintained not below a minimum level.

Domestic hot water

In VVM 310 and VVM 500, domestic hot water is prepared on demand in a tap coil, hence the dependence of the flow rate. The VVM 320 has a built in DHW storage tank of 185 liters.

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 320 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 SPLIT HBS 05 can be connected to one NIBE SMO 40.

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

AMS 10/HBS 05	SMO 20	SMO 40
		
Controls up to	1 heat pump.	8 heat pumps.
External heatsource	3 step for electrical heater.	3 step for electrical heater or boiler with mixing valve. Allows prioritized heating sources.
Self-regulating circulator pump	Available in 2 sizes, CPD11.	Available in 2 sizes, CPD11.
Accessories	Room sensor.	Wide range including extra heating circuit, pool, solar, ventilation heat recovery unit, room display etc.

Specifications NIBE SPLIT HBS 05

		AMS 10-6/ HBS 05-6	AMS 10-8, HBS 05-12	AMS 10-12/ HBS 05-12	AMS 10-16/ HBS 05-16
Efficiency class 35/55°C Package Label*		A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Efficiency class 35/55°C Product Label		A++ / A++	A++ / A++	A++ / A++	A++ / A++
SCOP _{EN14825} Average climate 35/55°C		4.78/3.44	4.3	4.4	4.4
P _{design} Average climate 35/55°C	kW	4.83/5.3	8.2 / 7.0	11.5 / 10.0	14.5 / 14.0
SCOP _{EN14825} Cold climate 35/55°C		/ 2.48	4.3	4.4	4.4
P _{design} Cold climate 35/55°C	kW	/ 5.6	9.0 / 10.0	11.5 / 13.0	15.0 / 16.0
7/35 Heat capacity / COP, EN14511, nominal	kW		3.86/4.65	5.21/4.78	7.03/4.85
Sound power level (L _{WA}), EN12102 at 7/45, nominal	dB(A)		55	58	58
Rated voltage		230V ~50Hz			
CO ₂ -equivalent	ton	3.13	5.32	6.06	8.35
Height / Width / Depth – AMS 10	mm	640/800/290	750/880/340	845/970/370	1300/970/370
Height (with pipe) / Width / Depth – HBS 05	mm	565/404/472	565/404/472	565/404/472	565/404/472
Weight (excluding packaging) AMS 10 / HBS 05	kg	46/13	60/15	74 / 15	105/19.5

* 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.

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.



The system's efficiency class for heating.



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



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

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