

NIBE air/water split programme for residential use Air/Water Heat Pump NIBE™ SPLIT





Features of NIBE™ SPLIT

NIBE SPLIT is a system for heating, cooling and hot water production for a variety of house sizes

Now choose from six packs to meet your individual needs

Easy installation, especially for the all-in-one indoor unit

Best-in-class energy savings

Full accessory programme, for example pre-defined solar packs

Full Split programme for residential use

We have developed a new range of six different split combinations suitable for both new build and refurbishment installations. Factors such as the size of your house, where you live and your domestic hot water needs will determine which pack is most appropriate for you.

Alongside the indoor units, three different sizes of outdoor units are available. Each combination pack, containing a fixed indoor unit and an outdoor unit, has been carefully developed to achieve the optimal performance (COP) for heating and hot water production. The indoor units consist of either an all-in-one cabinet with hot water cylinder included or a control cabinet (hydro box) with a choice of separate cylinders.

Development has been based on our long experience of heat pumps and water-borne domestic heating in the demanding Scandinavian climate.

Full Split programme for residential use NIBE™ SPLIT air/water heat pump

- Easy installation. Just connect the outdoor unit to the indoor unit(s) and your heating system and start up. The outdoor unit is electrically connected to the indoor unit. The controller display is in your language.
- Hot water production can account for as much as 50% of the energy consumed, especially for new build. We have tested the COP for hot water in accordance with EN 255-3 for our combinations, and guarantee a COP of 3. This means that compared with an electric boiler you get 3 times the energy out for the same input.
- Best-in-class energy savings due to the large working envelope and speed-controlled compressor. For example, the supply temperature from the compressor is 58 °C at -20 °C outdoor temperature.
- Straightforward installation, especially with the all-in-one cabinet
- To guarantee that the heat pump does not exceed your house fuse rating, a load limiter will control the power needed by the heat pump.

- Equipped as standard to support two individual heating systems with different heating demands, for example radiators and underfloor heating.
- Underfloor cooling available for the largest outdoor unit. Fan coil cooling is also possible for the all-in-one indoor unit and the two smaller outdoor units.
- If you would like to combine the system with a gas boiler or existing oil boiler instead of the built-in immersion heater, just plug your external unit into the water cylinder. No extra cylinder is needed. The controller is configured to handle your external unit.
- Standardised solar packs available for each combination.
- A full accessory programme and hydraulic schemes are available to make your installation even more complete. Please see our website www.nibe.eu or the relevant site for your country.
- Energy savings and dimensioning software takes account of your building and climate to ensure the correct setup. Ask your NIBE dealer for details.







Plug and play heating system suitable for small sized homes and normal hot water demand

NIBE Split air/water heap pump indoor unit ACVM 270 and outdoor unit AMS 10-8

House heating demand 3 - 7 kW

Pack 2

Plug and play heating system suitable for average sized homes and normal hot water demand

NIBE Split air/water heap pump indoor unit ACVM 270 and outdoor unit AMS 10-12

House heating demand 5 – 10 kW



Pack 3



Plug and play heating system suitable for average sized homes and high hot water demand

Separate controller (hydro box) and separate tank HBS 12 + HEV 500 and outdoor unit AMS 10-12

House heating demand 5 - 10 kW



Pack 4



Plug and play heating system suitable for large sized homes and normal hot water demand

Separate controller (hydro box) and separate tank HBS 16 + HEV 300 and outdoor unit AMS 10-16

House heating demand 7 – 13 kW



Pack 5



Plug and play heating system suitable for large sized homes and high hot water demand

Separate controller (hydro box) and separate tank HBS 16 + HEV 500 and outdoor unit AMS 10-16

House heating demand 7 - 13 kW



Pack 6



Plug and play heating system suitable for large sized buildings and no hot water demand

Separate controller (hydro box) and separate tank HBS 16 + HE 30 and outdoor unit AMS 10-16

House heating demand 7 – 13 kW

Technical specifications NIBE™ SPLIT programme

Indoor units	NIBE ACVM 270 (all in one)		NIBE HBS 12 (hydrobox)		NIBE HBS 16 (hydrobox)	
Operating voltage	1 x 230 V	3 x 400 V	1 x 230 V	3 x 400 V	1 x 230 V	3 x 400 V
Max current	44A	16A	44A	16A	50A	25A
Immersion heater	0 – 9 kW (0, 1, 2, 4, 6, 9)		Included in HEV 500, 9 kW		Included in HEV 300/500/HE 30	
Volume, total	270		See HEV500		See HEV 500/300/HE30	
Max supply temperture compressor	58 °C		58 °C		58 ℃	
Max supply temperature	65 °C		65 °C		65 °C	
Height	1850 mm		1150 mm		1150 mm	
Width	600 mm		600 mm		600 mm	
Depth	660 mm		380 mm		380 mm	
Weight	140 kg		65 kg		65 kg	
Other	floor mounted		wall mounted		wall mounted	

xternal water cylinder NIBE HEV 500		NIBE HEV 300	NIBE HE 30	
Immersion heater	0 – 9 kW (0, 2, 4, 6, 9)	0 – 9 kW (0, 2, 4, 6, 9)	0 – 9 kW (0, 2, 4, 6, 9)	
Volume, total	500 l	300 l	(heating only)	
Height	1685 mm	1900 mm	360 mm	
Width	760 mm	600 mm	590 mm	
Depth	880 mm	600 mm	360 mm	
Weight	160 kg	119 kg	24 kg	

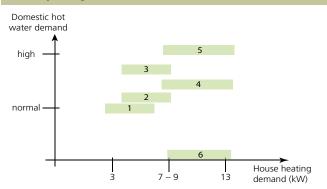
Outdoor unit NIBE AMS 10	10-8	10-12	10-16	
Compressor, variable speed	Twin Rotary	Twin Rotary	Twin Rotary	
Refrigerant R410A	2.55 kg	2.9 kg	4 kg	
Max refrigerant piping (single way)	30 m	12 m	30 m	
Delivered compressor output 7/45 heating	3 – 8 kW	3.5 – 12.0 kW	4 – 16 kW	
Delivered compressor output 35/18 cooling	2.7 – 10.7 kW	3.3 – 12.0 kW	5 – 16 kW	
COP at 7/45 °C*	3.16	3.28	3.28	
COP at 2/35 °C*	3.11	3.35	3.38	
COP at -7/45 °C*	2.20	2.35	2.37	
Working range, heating with compressor (ambient temperature)	-20 – +43 °C	-20 − +43 °C	-20 − +43 °C	
Working range, cooling (ambient temperature)	+15 − +43 °C	+15 − +43 °C	+15 – +43 °C	
Max temperature heating only compressor	58 °C across whole range	58 °C across whole range	58 °C across whole range	
Height x Width x Depth	595 x 780 x 340 mm	845 x 970 x 370 mm	1300 x 970 x 370 mm	
Weight	60 kg	74 kg	105 kg	

 $[\]ensuremath{^{\star}}$ In accordance with EN 14511 max compressor speed

NIBE Split system combinations

Pack	Ir	Outdoor unit		
number	All-in-one cabinet	Separate controller and separate tank		
1	ACVM 270		AMS 10-8 kW	
2	AVCM 270		AMS 10-12 kW	
3		HBS 12 + HEV500	AMS 10-12kW	
4		HBS 16 + HEV300	AMS 10-16 kW	
5		HBS 16 + HEV500	AMS 10-16 kW	
6		HBS 16 + HE30	AMS 10-16 kW	

Quick system guide



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NIBE makes reservations for any factual or printing errors in this brochure. @NIBE 2011

