

## Air/water heat pump NIBE SPLIT HBS 20

NIBE AMS 20 / HBS 20 is an intelligent, compact and inverter-controlled air/water heat pump with climate-friendly refrigerant. NIBE AMS 20 / HBS 20 provides optimised 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. It also has a climate-friendly refrigerant to provide less impact on the environment. Available in two sizes AMS 20 / HBS 20-6 and AMS 20 / HBS 20-10.

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 high comfort, and you do nature a favour at the same time.







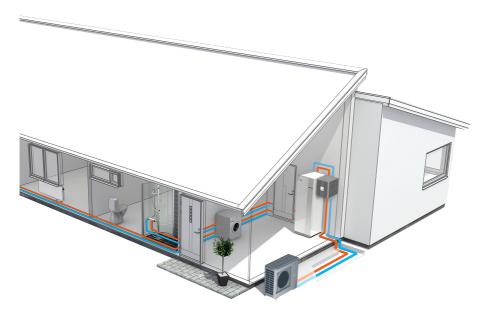




- Compact heat pump that adapts to your home's requirements.
- High capacity even down to -20°C and effective cooling function.
- Energy-saving smart technology with user-friendly control.

## This is how NIBE SPLIT HBS 20 works

#### Installation method



The outdoor unit NIBE AMS 20, together with SPLIT box NIBE HBS 20, forms a complete heat pump intended for use in combination with one of NIBE's indoor units or control modules.

The system solution is a "split system", where the outdoor module, NIBE AMS 20, is connected via refrigerant pipes to NIBE HBS 20, which is placed indoors. The exchange between the refrigerant and the heating system's liquid occurs in NIBE HBS 20.

Together with an indoor unit, a complete heating and hot water system is obtained. Our flexible indoor units provide efficient heating or cooling and high hot water performance. NIBE's indoor units are complete with a smart, user-friendly control system, hot water heater, additional heat, self-regulating circulation pump, etc.

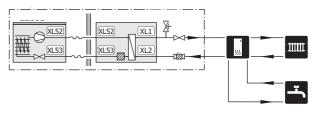
The control modules offer a flexible system solution that can be easily customised. For systems with a control module, components such as water heaters, additional heat and other accessories can be selected based on the installation's requirements.

There is a wide range of system solutions and accessories for NIBE's indoor modules and control modules.

#### PRINCIPLE OF OPERATION

Principle of operation with hot water and heating system.

#### AMS 20 and HBS 20



XL1 Heating medium connection, supply (from HBS 20)XL2 Heating medium connection, return (to HBS 20)

XL52 Gas line connectionXL53 Liquid line connection

#### **COMPATIBLE INDOOR MODULES AND CONTROL MODULES**

Air/water heat pump	Indoor	Control module	
NIBE SPLIT HBS 20	VVM S320	VVM S330	SM0 S40
AMS 20-6 / HBS 20-6	X	X	X
AMS 20-10 / HBS 20-10	X	X	X

Air/water heat pump	Indoor module			Control module		
NIBE SPLIT HBS 20	VVM 225	VVM 310 VVM 500		SM0 20	SM0 40	
AMS 20-6 / HBS 20-6	X	X	X	X	X	
AMS 20-10 / HBS 20-10	X	Χ	X	Χ	X	

#### **INDOOR MODULES**



**VVM S320** 

Stainless steel, 1x230 V Part no. 069 198

#### **VVM S320**

Enamel, 3x400 V Part no. 069 206

#### **VVM S320**

Stainless steel, 3x230 V Part no. 069 201

#### **VVM S320**

Stainless steel, 3x400 V Part no. 069 196



#### **VVM 225**

Stainless steel, 1x230 V Part no. 069 231

#### **VVM 225**

Stainless steel, 3x230 V Part no. 069 230

#### **VVM 225**

Stainless steel, 3x400 V Part no. 069 229

#### **VVM 310**

Stainless steel, 3x400 V With integrated EMK 310 Part no. 069 084

#### **VVM 225**

Enamel (DK), 3x400 V Part no. 069 228

#### **VVM 225**

Enamel, 3x400 V Part no. 069 227

#### **VVM 310**

Stainless steel, 3x400 V Part no. 069 430

#### **VVM 500**

Stainless steel, 3x400 V Part no. 069 400

#### **CONTROL MODULES**

#### **SM0 S40**

Control module Part no. 067 654

#### **SMO 20**

Control module Part no. 067 224

#### **SMO 40**

Control module Part no. 067 225







# Good to know about NIBE SPLIT HBS 20

#### **System solution**

NIBE SPLIT HBS 20 is intended for installation with indoor unit or control module for a complete system solution.

#### **Transport**

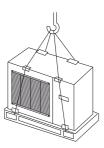
NIBE SPLIT HBS 20 should be transported and stored vertically in a dry place.

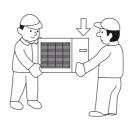
Ensure that the outdoor unit cannot fall over during transport.

Check that AMS 20 has not been damaged during transport.

## LIFT FROM THE STREET TO THE SET UP LOCATION

If the surface allows, the easiest method is to use a pallet truck to move the outdoor unit to the installation area.





If the outdoor unit needs to be transported across soft ground, such as a lawn, we recommend using a crane truck that can lift it to the installation location. When lifting the outdoor unit with a crane, the packaging must be intact.

If a crane truck cannot be used, the outdoor unit can be transported on an extended sack truck. The outdoor unit must be taken hold of from its heaviest side and lifting it needs two people.

#### LIFT FROM THE PALLET TO FINAL POSITIONING

Before lifting remove the packaging and the securing strap to the pallet.

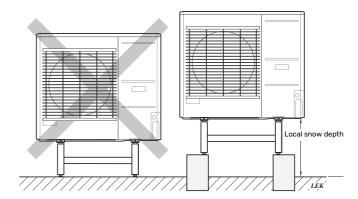
Place lifting straps around each foot. It is recommended that two people perform the lift from the pallet to the base.

## Installation and positioning

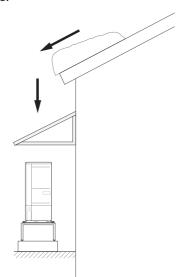
#### **INSTALLATION AMS 20**

- Place AMS 20 outdoors on a solid level base that can take the weight, preferably a concrete foundation. If concrete slabs are used they must rest on asphalt or shingle.
- The concrete foundation or slabs must be positioned so that the lower edge of the evaporator is at the level of the average local snow depth, however a minimum of 300 mm.
- AMS 20 should not be positioned next to noise sensitive walls, for example, next to a bedroom.
- Also ensure that the placement does not inconvenience the neighbours.

- AMS 20 must not be placed so that recirculation of the outdoor air can occur. This causes lower output and impaired efficiency.
- The evaporator should be sheltered from direct wind, which negatively affects the defrosting function. Place AMS 20 protected from wind against the evaporator.
- Large amounts of condensation, as well as melt water from defrosting, may be produced. Condensation must be led off to a drain or similar (see section "Condensation").
- Care must be exercised so that the heat pump is not scratched during installation.



Do not place AMS 20 directly on the lawn or other non solid surface.



If there is a risk of snow slip from roof, a protective roof or cover must be erected to protect the heat pump, pipes and wiring.

#### **ENCLOSED COMPONENTS FOR** AMS 20 / HBS 20

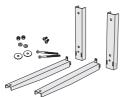
Local differences in the enclosed kit may occur. See relevant installer manual for more information.





1x condensation hose



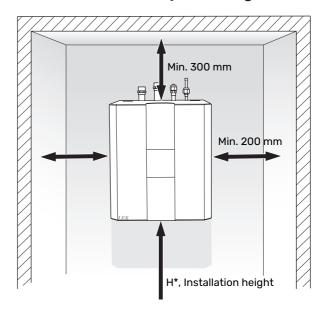


1x bracket kits

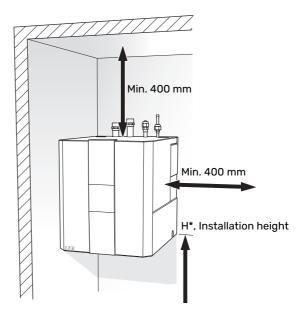
#### **INSTALLATION AREA**

There has to be free space on at least one side to allow any service to HBS 20 in the future. Ensure that there is also approx. 800 mm free space in front of HBS 20.

#### Recommendation for positioning on wall



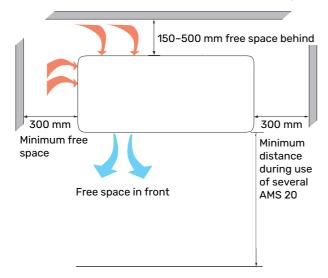
#### Recommendation for positioning on wall / in corner



\*For a total amount of refrigerant exceeding 1.84 kg R32, when the pipe length is longer than 15 m, requirements are set regarding installation height and the floor of the installation area, see section "Minimum floor area HBS 20-10" in the Installer Manual.

#### **AMS 20**

The recommended distance between AMS 20 and the house wall is at least 150 mm, but no more than 500 mm in locations that are exposed to the wind. The free space above AMS 20 must be at least 1,000 mm. The free space in front must be at least 1,000 mm for any future servicing.



## Installation

#### Inspection of the installation

Current regulations require the heating installation to be inspected before it is commissioned. The inspection must be carried out by a suitably qualified person and must be documented. The above applies to closed heating systems.

If the heat pump is replaced, the installation must be inspected again.

#### Condensation

Condensation runs out on to the ground below AMS 20. To avoid damage to the house and outdoor unit, the condensation must be collected and drained away.

It is important for the outdoor unit's function that the condensation water is led away and that the outlet for the condensation water pipe is positioned so as to prevent damage to the building.

Condensation run-off should be checked regularly, especially during the autumn. Clean if necessary.

Pipe, with heating cable, for draining the condensate drip tray is not included. To guarantee the function, the accessory KVR should be used.

- The condensation water (up to 50 litres / 24 hrs) must be routed away by a pipe to an appropriate drain, it is recommended that the shortest outdoor length possible is used.
- · The section of the pipe that can be affected by frost must be heated by the heating cable to prevent freezing.
- Pipe with heating cable for draining the condensation water trough is not included.

To ensure this function, the accessory KVR should be used.

- · Route the pipe downward from the outdoor unit.
- · The outlet of the condensation water pipe must be at frost free depth.
- · Use a water trap for installations where air circulation may occur in the condensation water pipe.
- · The insulation must seal against the bottom of the condensation water trough.

#### **DRAIN PAN HEATER, CONTROL**

The drain pan heater is supplied with power when one of the following conditions is met:

- The compressor has been in operation for at least 30 minutes after last start.
- 2. The ambient temperature is lower than 1 °C.

#### **DRAINAGE OF CONDENSATION**

If none of the following recommended alternatives is used, good drainage of condensation must be provided.

#### Stone caisson

If the house has a cellar, the stone caisson must be positioned to prevent the condensation water from affecting the house. Otherwise, the stone caisson can be positioned directly under the outdoor unit.

#### **Gutter drainage**

Route the pipe sloping down from the outdoor unit. The condensation water pipe must have a water seal to prevent air circulation in the pipe. The installation length can be adjusted by the size of the water seal.

#### **Pipe connections**

Connection of, and other work on, the refrigerant circuit may only be carried out by a qualified technician with the correct qualifications and requisite certificates.

#### **MINIMUM SYSTEM FLOWS**

An undersized climate system can result in damage to the product and lead to malfunctions.

Each climate system must be dimensioned individually to provide the recommended system flows.

The installation must be dimensioned to provide at least the minimum defrosting flow at 100 % circulation pump operation.

Air/water heat pump	Minimum flow during defrost- ing 100% circulation pump opera- tion (I/s)
AMS 20-6/HBS 20-6	0.19
AMS 20-10/HBS 20-10	0.19

NIBE SPLIT HBS 20 can only operate up to a return temperature of approx. 55 °C and an outgoing temperature of approx. 58 °C from the heat pump.

When docking with NIBE SPLIT HBS 20, free flow in the climate system is recommended for correct heat transfer. This can be achieved by using a bypass valve. If free flow cannot be ensured, it is recommended that a buffer vessel (NIBE UKV) be installed.

#### **WATER VOLUMES**

AMS 20 / HBS 20	-6	-10
Minimum volume, climate system during heating/cooling	20 I	50 I
Minimum volume, climate system during under floor cooling	50 I	801

Install the supplied filterball (QZ2) upstream of the inlet, i.e. the connection (XL2, HM return) on HBS 20.

Install the supplied filterball (QZ2) upstream of the inlet, i.e. the connection (XL2, HM return) on SVM S332.

For more information see nibe.eu.

#### **CONNECTING REFRIGERANT PIPE (NOT ENCLOSED)**

Install the refrigerant pipe between the outdoor module AMS 20 and SPLIT box HBS 20.

Installation must be carried out in accordance with current norms and directives.

#### **Parameters**

		AMS 20 / HBS 20		
		6	10	
Max. length, refrigerant pipe, one-way <sup>1</sup>	m	30	50	
Max height difference, when AMS 20 / HBS 20 is placed higher than AMS 20	m	20	15	
Max height difference, when AMS 20 / HBS 20 is placed lower than AMS 20	m	20	30	

<sup>1</sup> If the length of the refrigerant pipes exceeds 15 metres, extra refrigerant must be added at 0.02 kg/m. Use the enclosed label to re-mark the unit with the new amount of refrigerant.

#### Pipe dimensions and materials

#### **AMS 20-6**

	Gas pipe	Liquid pipe		
Pipe dimension	012.7 mm (1/2")	Ø6.35 mm (1/4")		
Connection	Flare - (1/2")	Flare - (1/4")		
Material	Copper quality SS-EN 12735-1 or C1220T, JIS H3300			
Minimum material thickness	1.0 mm	0.8 mm		

#### **AMS 20-10**

Pressure drop

	Gas pipe	Liquid pipe
Pipe dimension	Ø15.88 mm (5/8")	Ø6.35 mm (1/4")
Connection	Flare - (5/8")	Flare - (1/4")
Material	Copper quality SS-EI H3300	N 12735-1 or C1220T, JIS
Minimum material thickness	1.0 mm	0.8 mm

#### PRESSURE DROP, HEATING MEDIUM SIDE



10 0.4 0.8 Flow

#### **Electrical connections**

AMS 20 and SPLIT box HBS 20 does not include a circuit breaker on the incoming electricity supply. For this reason, each one of its supply cables must be connected to its own circuit breaker with a breaking gap of at least 3 mm.

- For fuse ratings, see technical data, "Fuse protection".
- · If the building is equipped with an earth-fault breaker, AMS 20 should be equipped with a separate one.
- · Connection must not be carried out without the permission of the electricity supplier and must be under the supervision of a qualified electrician.

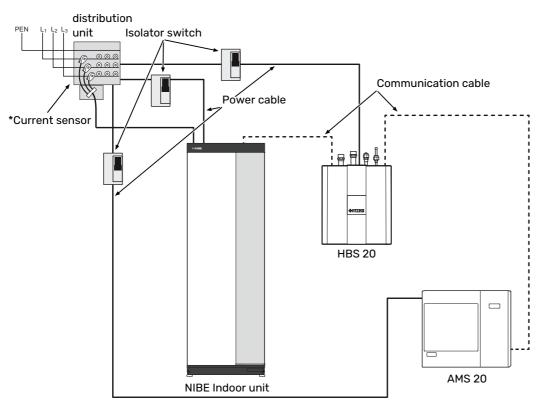
- · Cables must be routed so that they are not damaged by metal edges or trapped by panels.
- · AMS 20 is equipped with a single phase compressor. This means that one of the phases will be loaded with a number of amperes (A) during compressor operation. Check the maximum load in the table below.

Outdoor module	Maximum current (A)
AMS 20-6	15
AMS 20-10	16

· Maximum permitted phase loading can be restricted to a lower maximum current in the indoor module or control nodule.

#### PRINCIPLE DIAGRAM, ELECTRICAL INSTALLATION

#### AMS 20 and HBS 20



<sup>\*</sup> Only in a 3-phase installation.

## **Functions**

When connection to NIBE indoor module / control module (VVM / SMO) is ready, you can control your unit via the indoor module / control module.

#### Control, general

The indoor temperature depends on several different factors. Sunlight and heat emissions from people and household machines are normally sufficient to keep the house warm during the warm seasons. When it gets colder outside, the climate system needs to help heat the house. The colder it is outside, the warmer radiators and underfloor heating systems have to be.

Control of the heat production is performed based on the "floating condensing" principle, which means that the temperature level needed for heating at a specific outdoor temperature is produced based on collected values from the outdoor and supply temperature sensors. The room sensor can also be used to compensate the deviation in room temperature.

#### **Heat production**



The supply of heat to the house is regulated in accordance with the selected heating curve setting. After adjustment, the correct amount of heat for the current outdoor temperature is supplied. The

supply temperature will oscillate around the theoretically desired value.

#### **OWN CURVE**

The indoor module/control module have pre-programmed, non-linear heating curves. It is also possible to create your own defined curve. This is a partially linear curve with a number of break points. You select break points and the associated temperatures.

### Hot water production



Hot water charging starts when the temperature has fallen to the set start temperature. Hot water charging stops when the hot water temperature at the hot water sensor has been reached.

For temporary higher hot water demand, there is a function that allows the temperature to be raised temporarily for up to 12 hours or by a one time increase (can be selected in the menu system).

It is also possible to put the installation in holiday mode, which means that the lowest possible temperature is maintained without the risk of freezing.

#### Additional heat only

#### ADDITIONAL HEAT ONLY



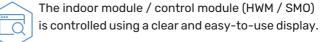
The indoor module, which is connected to NIBE SPLIT HBS 20, can be used with the additional heat alone (electric boiler) to produce heating and hot water, for example before the outdoor unit is installed.

#### Alarm indications



If there is an alarm, the status lamp lights up red on the indoor module's / control module's display. Detailed information, depending on the fault, is shown in the display. An alarm log is created for each alarm, containing a number of temperatures, times and operating status.

#### The display



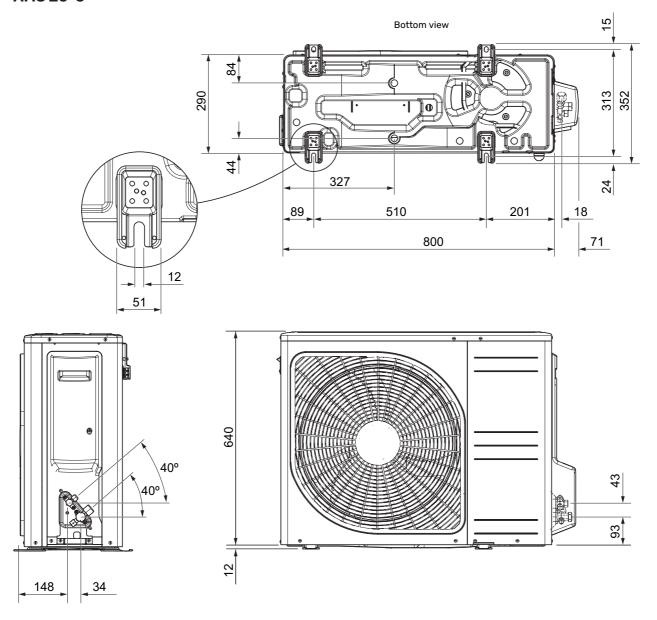
Instructions, settings and operational information are shown on the display. You can easily navigate between the different menus and options to set the comfort or obtain the information you require.

Visit myuplink.com and click the "Software" tab to download the latest software for your installation.

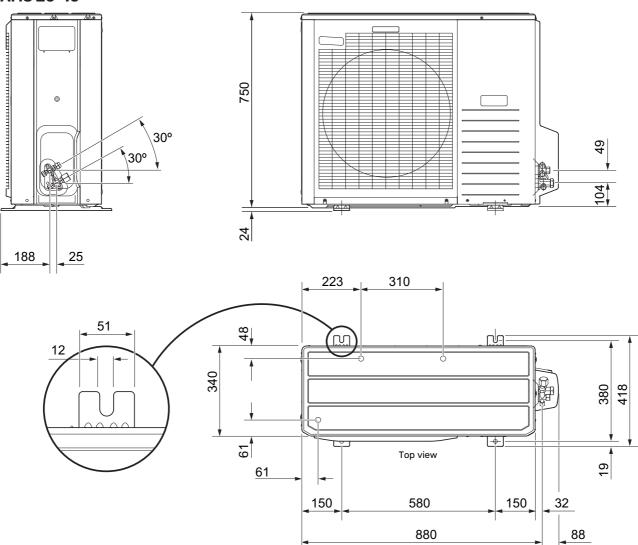
## **Technical data**

## **Dimensions**

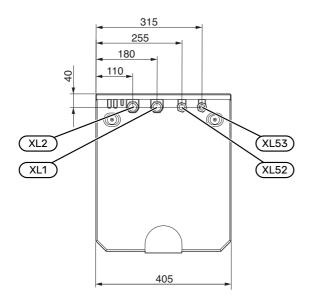
AMS 20-6



#### **AMS 20-10**



#### **SPLIT BOX HBS 20**

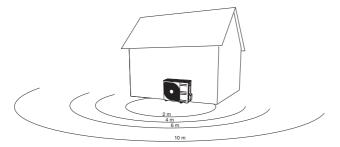


#### View from above.

XL1 XL2

Climate system, flow 0 28 mm Climate system, return 0 28 mm Gas line refrigerant, HBS 20-6: 1/2", HBS 20-10: flare 5/8" Liquid line refrigerant, HBS 20-6: 1/4", HBS 20-10: flare 1/4" XL52 XL53

## **Sound levels**



AMS 20 is usually placed next to a house wall, which gives a directed sound distribution that should be considered. Accordingly, you should always attempt to find a placement on the side that faces the least sound sensitive neighbouring

The sound pressure levels are further affected by walls, bricks, differences in ground level, etc and should therefore only be seen as guide values.

		Sound power <sup>1</sup>	Sound pressure at distance (m) <sup>2</sup>									
			1	2	3	4	5	6	7	8	9	10
AMS 20-6	Nominal sound value	54	49.0	43.0	39.5	37.0	35.0	33.5	32.1	31.0	29.9	29.0
	Max. sound value	62	57.0	51.0	47.5	45.0	43.0	41.5	40.1	39.0	37.9	37.0
	Max. sound value, silent mode	54	48.0	42.0	38.5	36.0	34.0	32.5	31.1	30.0	28.9	28.0
AMS 20-10	Nominal sound value	54	49.0	43.0	39.5	37.0	35.0	33.5	32.1	31.0	29.9	29.0
	Max. sound value	65	60.0	54.0	50.5	48.0	46.0	44.5	43.1	42.0	40.9	40.0
	Max. sound value, silent mode 60 Hz	54	49.0	43.0	39.5	37.0	35.0	33.5	32.1	31.0	29.9	29.0

 $<sup>^{\</sup>rm 1}~$  Sound power level,  $\rm L_W(A), \, according \, to \, EN12102$ 

<sup>&</sup>lt;sup>2</sup> Sound pressure calculated according to directivity factor Q=4

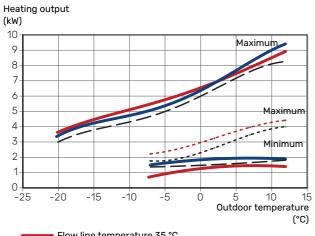
## **Capacity and COP**

Power and COP at different supply temperatures during continuous operation (excluding defrosting).

#### **POWER DURING HEATING OPERATION**

Maximum and minimum capacity during continuous operation.

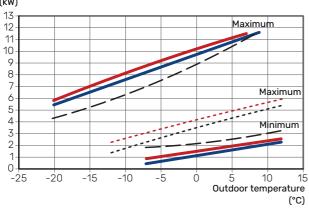
#### **AMS 20-6**



Flow line temperature 35 °C Flow line temperature 45 °C — — Flow line temperature 55 °C ---- Silent mode, supply temperature 35°C ---- Silent mode, supply temperature 55°C

#### **AMS 20-10**

#### Heating output (kW)

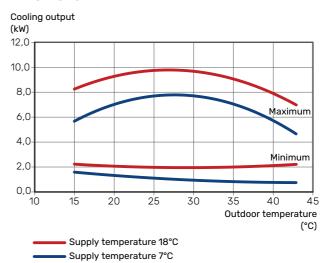


Flow line temperature 35 °C Flow line temperature 45 °C — — — Flow line temperature 55 °C ---- Silent mode, supply temperature 35°C ---- Silent mode, supply temperature 55°C

#### **POWER DURING COOLING OPERATION**

Maximum and minimum capacity during continuous opera-

#### **AMS 20-6**



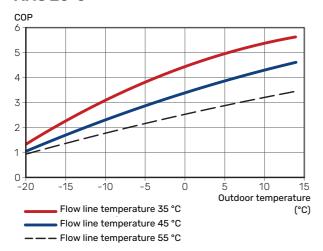
#### **AMS 20-10**



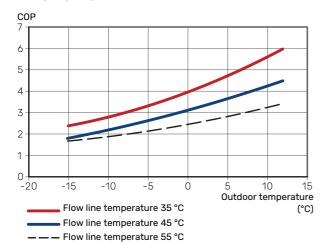
Supply temperature 18°C Supply temperature 7°C

#### **COP DURING HEATING OPERATION**

#### **AMS 20-6**



#### **AMS 20-10**



## **Technical specifications**

NIBE SPLIT HBS 20 (AMS 20 and HBS 20)		-6	-10
Working range during heating with compressor (ambient temperature)	°C	-20 -	+43
Working range during cooling (ambient temperature)	°C	+15 -	+43
Max temperature flow line, only compressor	°C	58	60
Max temperature return line	°C	55	
Min temperature flow line during heating with compressor and continuous operation	°C	25	
Maximum temperature supply during cooling and continuous operation	°C	25	
Min temperature flow line during cooling	°C	7	
Incoming voltage supply, maximum permitted deviation	%	-15 % - +10 %	
The water quality, domestic hot water and climate system		≤ EU directive no. 98/83/EF	

SPLIT box		HBS 20-6	HBS 20-10	
Energy rating, average climate <sup>1</sup>				
The product's room heating efficiency class 35 C / 55 C <sup>2</sup>		A++ / A++		
The system's room heating efficiency class 35 C / 55 C <sup>3</sup>		A+++	/ A++	
Electrical data				
Rated voltage		230 V	~ 50 Hz	
Fuse	A <sub>rms</sub>	1	6	
Enclosure class		IP	24	
Heating medium circuit				
Max pressure, climate system	MPa (bar)	0.6	(6)	
Max pressure, cooling system	MPa	4.5		
Min/Max system flow, heating operation	I/s	0.09 / 0.29	0.12 / 0.38	
Min/Max system flow, cooling operation	I/s	0.11 / 0.29	0.15 / 0.38	
Min flow, climate system, 100% circulation pump speed (defrosting flow)	l/s	0.19		
Volume, total	litre	1.2 +-5 %	3 +-5%	
Max operating temperature	°C	ć	5	
Ambient temperature, max relative humidity	°C	5 - 35	5, 95 %	
Dimensions and weight				
Width	mm	4	04	
Depth	mm	472		
Height, without pipe / with pipe	mm	463 / 565		
Weight	kg	13 15		
Miscellaneous				
Water quality, climate system		EU directive	no. 98/83/EF	
Part number HBS 20		067 668 067 819		

<sup>1</sup> Reported efficiency for the system also takes the temperature regulator into account. If the system is supplemented with an external auxiliary boiler or solar heating, the total efficiency of the system must be recalculated.

 $<sup>^2\,</sup>$  Scale for the product's room heating efficiency class A++ to G. Control module model SM0 S

 $<sup>^{3}</sup>$  Scale for the system's room heating efficiency class A+++ to  $\,$  G. Control module model SMO  $\,$  S

Outdoor module AMS 20		6	10		
Output data according to EN 14 511, partial load <sup>1</sup>					
Heating	-7 / 35 °C	5.55 / 2.05 / 2.71	7.18 / 2.93 / 2.45		
Capacity / power input / COP (kW/kW/-) at nominal flow	2/35 °C	2.31 / 0.56 / 4.13	3.46 / 0.83 / 4.17		
Outdoor temp. / Supply temp.	2 / 45 °C	2.02 / 0.67 / 3.01	3.24 / 1.12 / 3.24		
	7 / 35 °C	2.64 / 0.49 / 5.42	4.00 / 0.75 / 5.33		
	7 / 45 °C	2.43 / 0.65 / 3.74	5.00 / 1.28 / 3.91		
Cooling	35 / 7 °C	5.32 / 1.94 / 2.74	7.07 / 2.40 / 2.95		
Capacity / power input / EER (kW/kW/-) at maximum flow	35 / 18 °C	7.55 / 2.11 / 3.58	10.79 / 3.00 / 3.60		
Outdoor temp: / Supply temp.					
SCOP according to EN 14825					
Nominal heat output (P <sub>designh</sub> ) average climate 35 °C / 55 °C (Europe)	kW	5.20 / 5.60	6.3 / 6.5		
Nominal heat output (P <sub>designh</sub> ) cold climate 35 °C / 55 °C	kW	5.80 / 5.70	6.5 / 6.2		
Nominal heat output (P <sub>designh</sub> ) warm climate 35 °C / 55 °C	kW	5.57 / 5.48	6.9 / 6.6		
SCOP average climate, 35 °C / 55 °C (Europe)		5.08 / 3.58	4.6 / 3.4		
SCOP cold climate, 35 °C / 55 °C		4.10 / 3.05	3.9 / 2.9		
SCOP warm climate, 35 °C / 55 °C		6.76 / 4.55	6.4 / 4.4		
Energy rating, average climate <sup>2</sup>					
The product's room heating efficiency class 35 C / 55 C <sup>3</sup>		A+++	/ A++		
The system's room heating efficiency class 35 C / 55 C <sup>4</sup>		A+++	/ A++		
Electrical data					
Rated voltage		230 V	~ 50 Hz		
Max. power, fan	W	50	86		
Drain pan heating (integrated)	W	110	100		
Fuse	A <sub>rms</sub>	16			
Starting current	A <sub>rms</sub>		5		
Enclosure class		IP	24		
Refrigerant circuit					
Type of refrigerant		R	32		
GWP refrigerant		6	75		
Volume	kg	1.3	1.84		
Type of compressor		Twin	Rotary		
CO <sub>2</sub> -equivalent (The cooling circuit is hermetically sealed.)	t	0.88	1.24		
Max. length, refrigerant pipe, one way	m	30	50		
Max height difference, when AMS 20 is placed higher than SVM S332 or HBS 20	m	20	30		
Max height difference, when AMS 20 is placed lower than SVM S332 or HBS 20	m	20	15		
Dimensions, refrigerant pipes, Gas pipe/Liquid pipe (Cu) Ø <sup>5</sup>	mm	12.7 (1/2") /	15.88 (5/8") /		
		6.35 (1/4")	6.35 (1/4")		
Airflow	*	1			
Max airflow	m³/h	2,530	3,000		
Working area		'			
Min./max. air temperature, heating	°C	-20	/ 43		
Min./max. air temperature, cooling	°C		/ 43		
Pipe connections		'			
Pipe connection option		Right-h	and side		
Pipe connections		Flare			
Dimensions and weight		'			
Width	mm	800	880 (+67 ventilsky- dd)		
Depth	mm	290	340 (+ 110 med fotskena)		
Height with stand	mm	640	750		
Weight	kg	46	60		
Miscellaneous			•		
Part no.		064 235	064 319		

- $^{1}\ \ \text{Power statements including defrosting according to EN 14511 at heating medium supply corresponding to DT=5 K at 7 / 45.}$
- 2 Reported efficiency for the system also takes the temperature regulator into account. If the system is supplemented with external additional heat or solar heating, the total efficiency of the system must be recalculated.
- $^{\rm 3}$  Scale for the product's room heating efficiency class A++ to G. Control module model SMO
- $^4\,$  Scale for the system's room heating efficiency class A+++ to G. Control module model SMO
- <sup>5</sup> If the length of the refrigerant pipes exceeds 15 metres, extra refrigerant must be added at 0.02 kg/m. Use the enclosed label to re-mark the unit with the new amount of refrigerant.

#### **Accessories**

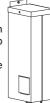
Detailed information about the accessories and complete accessories list available at nibe.eu.

Not all accessories are available on all markets.

#### **Automatic gas separator AGS 10**

Suitable for NIBE AMS 20-10 / HBS 20-10 or SVM S332

This automatic gas separator needs to be installed when the length of the pipe between the air/water heat pump NIBE AMS 20-10 and split box HBS 20-10 or the indoor unit SVM S332 is longer than 15 metres. In cases where additional filling with refrigerant was required.



Part no. 067 829

#### **Immersion heater IU**

This accessory generates heat in electric boilers and water heaters as well as additional heating in certain heat pumps.

#### **Condensation water pipe KVR**

Condensation water pipe, different lengths.

**KVR 10-10 KVR 10-30** 1 metres 3 metres Part no. 067 614 Part no. 067 616 **KVR 10-60** 



## Refrigerant pipe kit

6 metres Part no. 067 618

Refrigerant pipe, different lengths.

**RPK 10-120 RPK 12-120** 1/4" / 1/2", 12 metres, 1/4" / 5/8", 12 metres, insulated.

insulated, ins for AMS 20 / HBS 20-6 for

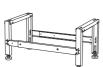
AMS 20 / HBS 20-10 Part no. 067 889

Part no. 067 830

## Stand and brackets

#### **Ground stand GSU 20**

For AMS 20-6, -10 Part no. 067 651



#### Wall bracket BAU 20

For AMS 20-6, -10 Part no. 067 600



#### **Domestic water exchanger PLEX**

This accessory can be used as an intermediate heat exchanger in ground water installations.

# Sustainable energy solutions since 1952

NIBE has been manufacturing energy-efficient and sustainable climate solutions for your home for 70 years. It all began in Markaryd, in the southern Swedish province of Småland, and we recognise our Nordic heritage by utilising the power of nature. We combine renewable energy with smart technology to offer efficient solutions, allowing us to work together to create a more sustainable future.

Regardless of whether it is a chilly winter's day or a warm afternoon in the summer sun, we need a balanced indoor climate that allows us to enjoy a comfortable life, whatever the weather. Our extensive range of products supply your home with cooling, heating, ventilation and hot water, making it possible for you to create a pleasant indoor climate with little impact on the environment.

NIBE Energy Systems Box 14, SE-285 21 Markaryd nibe.eu



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