



**<b>NIBE** 

AMS10-12 + HBS05 + VVM320



**55°C** 

A++

A<sup>++</sup>

Δ+

Δ

В

C

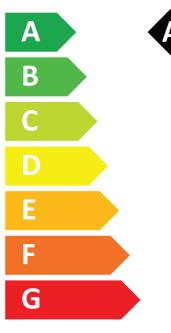
D

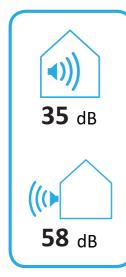
Ε

F

G









13 kW10 kW12 kW

2015 811/2013



## ENERG Y UA EHEPΓИЯ · ενεργεια II IA



AMS10-8+HBS05





















2015











B

C

D

Ε

F

G

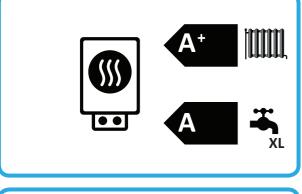


## IJA ENERG ΙE енергия · ενεργεια

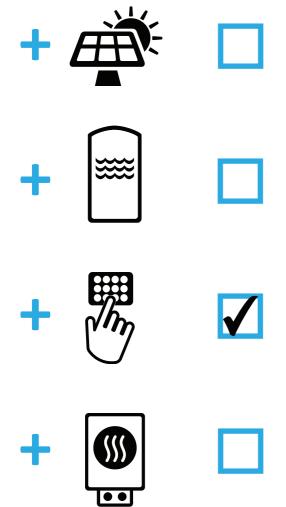


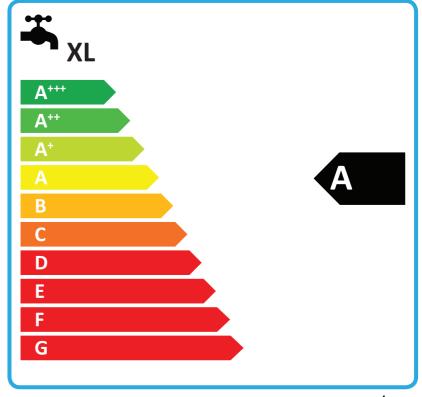
AMS10-12 + HBS05 + VVM320

∭∭ 55 °C









Supplier's name:	N			
Model:	NIBE AMS10-12+HBS05+VVM320			
Temperature application	35	55	°C	
Declared load profile for water	XL			
heating		AL		
Seasonal space heating energy	A++	A++		
efficiency class, average climate:	A11	All		
Water heating energy efficiency	Α			
class, average climate:		A		
Rated heat output, average climate:	11,5	10,0	kW	
Annual energy consumption for			1,,,,,,	
space heating, average climate	5382	6136	kWh	
Annual electricity consumption for		700	kWh	
water heating, average climate	1,	1702		
Seasonal space heating energy				
efficiency, average climate:	174	132	%	
Water heating energy efficiency,			0/	
average climate:	98		%	
Sound power level LWA indoors	35		dB	
Rated heat output, cold climate:	11,5	13,0	kW	
Rated heat output, warm climate:	12,0	12,0	kW	
Annual energy consumption for	7798	11197	kWh	
space heating, cold climate	1190	11197	KVVN	
Annual electricity consumption for	10	1904		
water heating, cold climate	1904		kWh	
Annual energy consumption for	2759	3419	kWh	
space heating, warm climate	2700	0+10	KVVII	
Annual electricity consumption for	1551		kWh	
water heating, warm climate		1001		
Seasonal space heating energy	142	111	%	
efficiency, cold climate: Water heating energy efficiency,				
cold climate:	88		%	
Seasonal space heating energy				
efficiency, warm climate:	229	185	%	
Water heating energy efficiency,			1 0/	
warm climate:	108		%	
Sound power level LWA outdoors	57		dB	

## Data for package fiche

Controller class	VI		
Controler contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	178	136	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A++	%
Seasonal space heating energy efficiency of package, cold climate:	146	115	%
Seasonal space heating energy efficiency of package, warm climate:	233	189	%

Model(s):	NIBE AMS10-12+HBS05+VVM320	
Type of heat source/sink:	Air-to-water	
Low-temperature heat pump:	No	
Equipped with supplementary heater:	Yes	
Heat pump combination heater:	Yes	
Climate condition:	Average	
Temperature application:	Medium temperature (55 °C)	
A = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 = 1 =	•	



Rated heat output  Prate  Declared capacity for part load at outdoor temperature?  Tj = -7 °C Pdh  Tj = +2 °C Pdh  Tj = +7 °C Pdh  Tj = +12 °C Pdh  Tj = biv Pdh  Tj = TOL Pdh  Tj = -15 °C (if TOL < -20 °C) Pdh  Bivalent temperature Tbiv  Cycling interval capacity for heating Pcycl  Degradation co-efficient Cdh	8,9	kW	Seasonal space heating energy efficiency	$\eta_{s}$	132	%
$\begin{array}{lll} Tj = -7 \text{ °C} & \text{Pdh} \\ Tj = +2 \text{ °C} & \text{Pdh} \\ Tj = +2 \text{ °C} & \text{Pdh} \\ Tj = +7 \text{ °C} & \text{Pdh} \\ Tj = +12 \text{ °C} & \text{Pdh} \\ Tj = \text{biv} & \text{Pdh} \\ Tj = TOL & \text{Pdh} \\ Tj = -15 \text{ °C (if TOL < -20 °C)} & \text{Pdh} \\ \\ \hline \\ Bivalent temperature} & T_{biv} \\ \hline \\ Cycling interval capacity for heating} & \text{Pcycl} \\ \end{array}$	8,9					
$Tj = +2  ^{\circ}C \qquad \qquad Pdh$ $Tj = +7  ^{\circ}C \qquad \qquad Pdh$ $Tj = +12  ^{\circ}C \qquad \qquad Pdh$ $Tj = biv \qquad \qquad Pdh$ $Tj = TOL \qquad \qquad Pdh$ $Tj = -15  ^{\circ}C (if TOL < -20  ^{\circ}C) \qquad \qquad Pdh$ $Bivalent temperature \qquad \qquad T_{biv}$ $Cycling interval capacity for heating \qquad Pcycling$			Declared coefficient of performance for part	load at outdoo	or temperat	ture Tj
$\begin{array}{cccc} Tj = +7 \text{ °C} & Pdh \\ Tj = +12 \text{ °C} & Pdh \\ Tj = biv & Pdh \\ Tj = TOL & Pdh \\ Tj = -15 \text{ °C (if TOL < -20 °C)} & Pdh \\ \\ \hline Bivalent temperature & T_{biv} \\ \hline Cycling interval capacity for heating & Pcycling \\ \end{array}$		kW	Tj = -7 °C	COPd	1,99	-
Tj = +12 °C   Pdh $Tj = biv  Pdh$ $Tj = TOL  Pdh$ $Tj = -15 °C (if TOL < -20 °C)  Pdh$ $Bivalent temperature  Tbiv$ $Cycling interval capacity for heating  Pcycl$	5,5	kW	Tj = +2 °C	COPd	3,22	-
Tj = biv Pdh Tj = TOL Pdh Tj = -15 °C (if TOL < -20 °C) Pdh  Bivalent temperature T <sub>biv</sub> Cycling interval capacity for heating Pcycl	3,5	kW	Tj = +7 °C	COPd	4,61	-
$Tj = TOL & Pdh \\ Tj = -15 °C (if TOL < -20 °C) & Pdh \\ \\ Bivalent temperature & T_{biv} \\ Cycling interval capacity for heating & Pcycling   $	5,0	kW	Tj = +12 °C	COPd	6,25	-
$Tj = -15$ °C (if TOL < -20 °C) Pdh  Bivalent temperature $T_{biv}$ Cycling interval capacity for heating Pcycl	9,2	kW	Tj = biv	COPd	1,90	-
Bivalent temperature T <sub>biv</sub> Cycling interval capacity for heating Pcycl	8,1	kW	Tj = TOL	COPd	1,92	-
Cycling interval capacity for heating Pcycl		kW	Tj = -15 °C (if TOL < -20 °C)	COPd		-
	-7,9	°C	Operation limit temperature	TOL	-10	°C
Degradation co-efficient Cdh	ı	kW	Cycling interval efficiency	COPcyc		-
	0,98	-	Heating water operating limit	WTOL	58	°C
Power consumption in modes other than active mode			Supplementary heater			
Off mode P <sub>OFF</sub>	0,002	kW	Rated heat output	Psup	1,9	kW
Thermostat-off mode P <sub>TO</sub>	0,014	kW				
Standby mode P <sub>SB</sub>	0,015	kW	Type of energy input	Electric		
Crankcase heater mode P <sub>CK</sub>	0,035	kW				
Other items						
Capacity control	variable		Rated air flow rate, outdoors		4380	m³/h
			Rated water flow rate, indoor heat			
Sound power level, indoors/outdoors L <sub>WA</sub>	35/58	dB	exchanger		0,86	m³/h
			Rated brine or water flow rate,			
Annual energy consumption Q <sub>HE</sub>	6136	kWh	outdoor heat exchanger			m³/h
For heat pump combination heater:						
Declared load profile	XL		Water heating energy efficiency	$\eta_{\text{wh}}$	98	%
Daily electricity consumption Q <sub>elec</sub>	7,75	kWh	Daily fuel consumption	$Q_{fuel}$		kWh
Annual electricity consumption AEC		kWh	Annual fuel consumption	AFC		GJ
Approved by:						
Contact details © NIB						