

### BUILDING PERFORMANCE

Energy need for heating	19170 kWh/year
- of which is hotwater	4258 kWh/year
Heat demand	6.5 kW

### AFTER HEATPUMP INSTALLED

Energy to purchase -Electricity	5038 kWh/year
---------------------------------	---------------

### SAVINGS

<b>Energy Savings</b>	<b>14132 kWh/year</b>
CO2 Savings	1298 kg/year

### CLIMATE CONDITIONS

Annual mean outdoor temperature	5.6 °C
Design outdoor temperature	-21.0 °C

### BUILDING CONDITIONS

Room temperature	23.0 °C
Space heating turns off	16.0 °C
Flow temperature at DOT	55 °C
Return temperature at DOT	45 °C

### ENERGY PERFORMANCE WITH

#### -NIBE F1245-6 Cu

Energy delivered hp	19161 kWh/year
Energy supplied hp	4734 kWh/year
Supplementary energy, total (<50kWh)	9 kWh/year
Energy for heating circulation pump	296 kWh/year
Energy coverage	100 %
Annual heating factor, net	4.0
Annual heating factor, total	3.8
Fixed or floating condensing	Floating
Heat capacity hp at DOT	6.1 kW
Power input hp at DOT	1.7 kW
Recommended supplementary power	0.4 kW
Power coverage	93 %



### Installer

First name Last name  
The Company  
Box 14  
285 21 Hometown  
+461012312345  
nn@thecompany.com

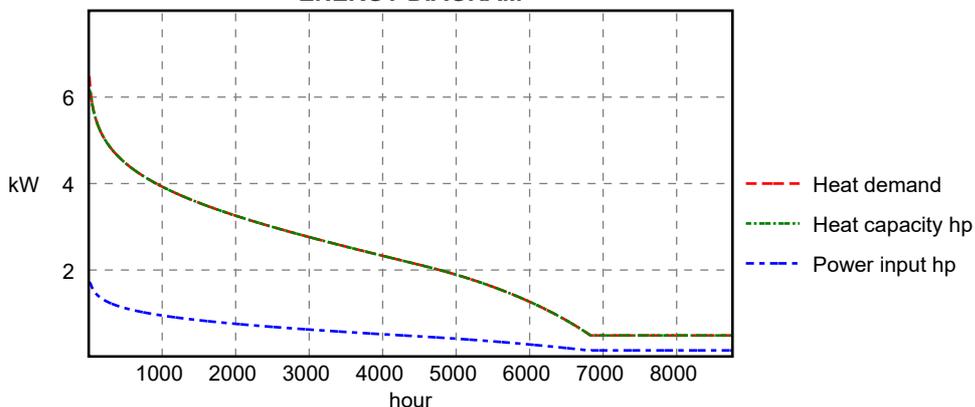
### SUMMARY

*Together, we have gone through the building conditions in order to select and size the most efficient heat pump solution based on your circumstances. The calculations are based on both facts and assumptions which means that small deviations from the final installation can occur.*

*Please give me a call if you have further questions or visit our website to find out more about the heat pump solutions.*

*Best regards  
The Installer*

### ENERGY DIAGRAM



### CUSTOMER

MIERCUREA CIUC  
Romania

### GROUND WATER

Annual water demand	4195 m <sup>3</sup>
Average flow during operation time	0.4 kg/s
Brine flow	0.5 kg/s
Incoming mean brine temperature	6.0 °C



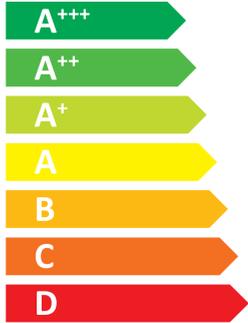
**ENERG** Y IJA  
енергия · ενεργεια IE IA

**NIBE** NIBE F1245-6 M0011-A-008



55 °C

35 °C



**A++**

**A+++**

  
**42 db**

  
- dB

■ 7	■ 7
■ <b>7</b>	■ <b>7</b>
■ 7	■ 7
kW	kW



2019

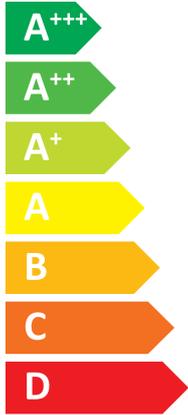
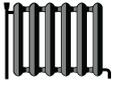
811/2013



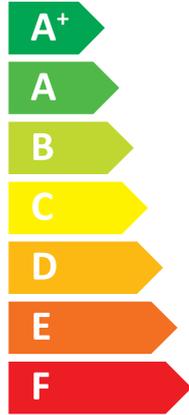
**ENERG** Y IJA  
 енергия · ενεργεια IE IA



NIBE F1245-6 M0011-A-008



A<sup>++</sup>



A

42 db

- dB



- 7 kW
- 7 kW
- 7 kW

2019

811/2013



# ENERG

енергия · ενεργεια

Y

IJA

IE

IA

## NIBE

NIBE F1245-6 M0011-A-008

Icons representing a boiler, a radiator, a tap with 'XL' (water saving), and energy efficiency classes A++ and A.

Energy scale bar showing classes A+++ to G. A black arrow points to the A++ class.

Feature icons: a plus sign, a solar panel, a water tank, a plus sign, a keypad with a hand icon, a plus sign, a boiler, and checkboxes (one checked).

Energy scale bar showing classes A+++ to G. A black arrow points to the A class.

Supplier's name:	NIBE		
Model:	NIBE F1245-6 M0011-A-008		
Temperature application:	Low (35 °C)	Medium (55 °C)	
Declared load profile for water heating:	XL		
Seasonal space heating energy efficiency class, average climate:	<b>A+++</b>	<b>A++</b>	
Water heating energy efficiency class, average climate:	<b>A</b>		
Rated heat output, average climate:	7	7	kW
Annual energy consumption for space heating, average climate:	3,110	3,909	kWh
Annual energy consumption for water heating, average climate:	1,709		kWh
Seasonal space heating energy efficiency, average climate:	178	140	%
Water heating energy efficiency, average climate:	98		%
Sound power level indoors:	42		dB
Rated heat output, cold climate:	7	7	kW
Rated heat output, warm climate:	7	7	kW
Annual energy consumption for space heating, cold climate:	3,576	4,511	kWh
Annual energy consumption for water heating, cold climate:	1,709		kWh
Annual energy consumption for space heating, average climate:	2,022	2,562	kWh
Annual energy consumption for water heating, average climate:	1,709		kWh
Seasonal space heating energy efficiency, cold climate:	185	145	%
Water heating energy efficiency, cold climate:	98		%
Seasonal space heating energy efficiency, warm climate:	177	138	%
Water heating energy efficiency, warm climate:	98		%
Sound power level outdoors:	-		dB

#### Information for package fiche

Class of the controller:	VII	
Contribution to the energy efficiency:	3.5	%

### Space heating

System temperature:					Low (35 °C)	Medium (55 °C)	
Prated:					7	7	kW
Seasonal space heating energy efficiency of heat pumps:					178	140	%
Temperature control:			Class VII		3.5	3.5	%
Supplementary boiler:	Efficiency, %	Prated / (Prated + Psup)	Storage tank	II			
	-	-		-	-	-	%
Solar contribution:	Collector area, m2	Tank volume, m3	Collector efficiency, %	Tank rating			
	-	-	-	-	-	-	%
<b>Seasonal space heating energy efficiency of package under average climate:</b>					<b>182</b>	<b>144</b>	<b>%</b>
<b>Seasonal space heating energy efficiency class of package under average climate:</b>					<b>A+++</b>	<b>A++</b>	
<b>Seasonal space heating energy efficiency of package under colder climate:</b>					<b>189</b>	<b>149</b>	<b>%</b>
<b>Seasonal space heating energy efficiency of package under warmer climate:</b>					<b>181</b>	<b>142</b>	<b>%</b>

### Water heating

Water heating energy efficiency of combination heater:					98	%
Declared load profile:		<b>XL</b>				
Solar contribution:	Qnonsol	Qaux				
	-	-			-	%
<b>Water heating energy efficiency of package under average climate:</b>					<b>98</b>	<b>%</b>
<b>Water heating energy efficiency class of package under average climate:</b>					<b>A</b>	