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**NIBE**

NIBE F2120-12



55 °C

35 °C



**A++**

**A++**



dB



**53** dB



kW



kW



2015

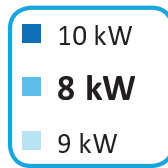
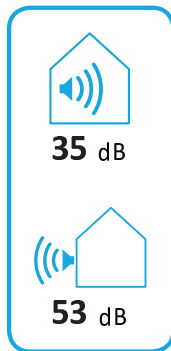
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NIBE F2120-12 + VVM320



2015

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**NIBE**

## NIBE F2120-12 + VVM320

 35 °C



**A<sup>++</sup>**

**A<sup>+++</sup>**

**A<sup>+++</sup>**

**A<sup>++</sup>**

**A<sup>+</sup>**

**A**

**B**

**C**

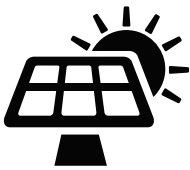
**D**

**E**

**F**

**G**

+



+



+



+





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Y

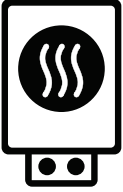




IJA

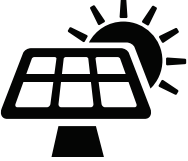
IE


IA


**NIBE**


## NIBE F2120-12 + VVM320

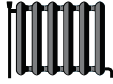






+ 






+ 

+ 

+ 




55 °C

Supplier's name:	<b>NIBE</b>		
Model:	<b>NIBE F2120-12 + VVM320</b>		
Temperature application	<b>35</b>	<b>55</b>	°C
Declared load profile for water heating	<b>XL</b>		
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:	8,0	8,3	kW
Annual energy consumption for space heating, average climate	3409	4529	kWh
Annual electricity consumption for water heating, average climate	1661		kWh
Seasonal space heating energy efficiency, average climate:	190	148	%
Water heating energy efficiency, average climate:	101		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	9,3	9,8	kW
Rated heat output, warm climate:	9,2	9,2	kW
Annual energy consumption for space heating, cold climate	5666	7239	kWh
Annual electricity consumption for water heating, cold climate	1895		kWh
Annual energy consumption for space heating, warm climate	2241	2741	kWh
Annual electricity consumption for water heating, warm climate	1473		kWh
Seasonal space heating energy efficiency, cold climate:	159	130	%
Water heating energy efficiency, cold climate:	88		%
Seasonal space heating energy efficiency, warm climate:	216	176	%
Water heating energy efficiency, warm climate:	114		%
Sound power level LWA outdoors	53		dB

### Data for package fiche

Controller class	<b>VI</b>		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	194	152	%
Seasonal space heating energy efficiency class for package, average climate:	<b>A+++</b>	<b>A+++</b>	%
Seasonal space heating energy efficiency of package, cold climate:	163	134	%
Seasonal space heating energy efficiency of package, warm climate:	220	180	%

<b>Model(s):</b>				<b>NIBE F2120-12 + VVM320</b>								
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:				High temperature (55 °C)								
Applied standards: EN14825, EN14511, EN16147 and EN12102												
<b>Rated heat output</b>				Prated	8,3	kW		<b>Seasonal space heating energy efficiency</b>				
								$\eta_s$	148	%		
<i>Declared capacity for part load at outdoor temperature Tj</i>								<i>Declared coefficient of performance for part load at outdoor temperature Tj</i>				
Tj = -7 °C	Pdh	7,3	kW		Tj = -7 °C	COPd	2,39	-				
Tj = +2 °C	Pdh	4,7	kW		Tj = +2 °C	COPd	3,85	-				
Tj = +7 °C	Pdh	2,9	kW		Tj = +7 °C	COPd	4,48	-				
Tj = +12 °C	Pdh	3,3	kW		Tj = +12 °C	COPd	5,30	-				
Tj = biv	Pdh	7,3	kW		Tj = biv	COPd	2,39	-				
Tj = TOL	Pdh	7,8	kW		Tj = TOL	COPd	2,28	-				
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW		Tj = -15 °C (if TOL < -20 °C)	COPd		-				
Bivalent temperature				T <sub>biv</sub>	-7	°C		Operation limit temperature				
Cycling interval capacity for heating				P <sub>cyh</sub>		kW		Cycling interval efficiency				
Degradation co-efficient				Cdh	0,99	-		Heating water operating limit				
								TOL	-10	°C		
								COP <sub>cyh</sub>		-		
								WTOL	65	°C		
<i>Power consumption in modes other than active mode</i>								<i>Supplementary heater</i>				
Off mode	P <sub>OFF</sub>	0,025	kW		Rated heat output				P <sub>sup</sub>	0,5	kW	
Thermostat-off mode	P <sub>TO</sub>	0,007	kW		Type of energy input				Electric			
Standby mode	P <sub>SB</sub>	0,025	kW									
Crankcase heater mode	P <sub>CK</sub>	0,037	kW									
<i>Other items</i>												
Capacity control	variable			Rated air flow rate, outdoors					3400	m <sup>3</sup> /h		
Sound power level, indoors/outdoors	L <sub>WA</sub>	35/53	dB		Rated water flow rate, indoor heat exchanger					variable	m <sup>3</sup> /h	
Annual energy consumption	Q <sub>HE</sub>	4529	kWh		Rated brine or water flow rate, outdoor heat exchanger						m <sup>3</sup> /h	
<i>For heat pump combination heater:</i>												
<b>Declared load profile</b>				XL				<b>Water heating energy efficiency</b>				
								$\eta_{wh}$				
								101				
								%				
Daily electricity consumption	Q <sub>elec</sub>	7,56	kWh		Daily fuel consumption				Q <sub>fuel</sub>		kWh	
Annual electricity consumption	AEC	1661	kWh		Annual fuel consumption				AFC		GJ	
<b>Approved by:</b>												
<b>Contact details</b>				© NIBE Energy Systems - Box 14 - Hannabadsvägen 5 - 28521 Markaryd - Sweden								