



**ENERG**  
енергия · ενεργεια



NIBE F2120-16



55 °C

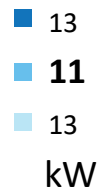
35 °C



dB



55 dB



2019

811/2013

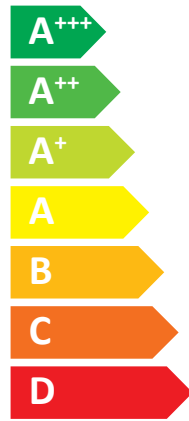
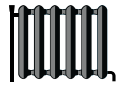


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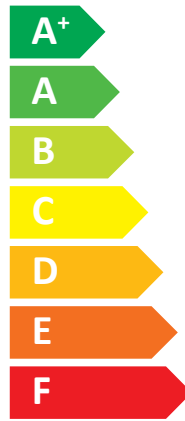
Y IJA  
IE IA



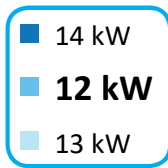
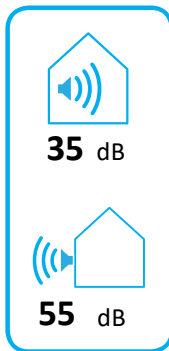
NIBE F2120-16 + VVM S320



A+++



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2019

811/2013



# ENERG

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Y

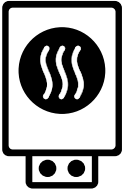




IJA

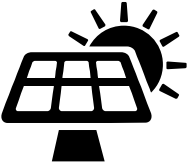
IE


IA


**NIBE**

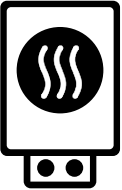
## NIBE F2120-16 + VVM S320













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Supplier's name:	<b>NIBE</b>		
Model:	<b>NIBE F2120-16 + VVM S320</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:	11	12,3	kW
Annual energy consumption for space heating, average climate	4502	6524	kWh
Annual electricity consumption for water heating, average climate	1616		kWh
Seasonal space heating energy efficiency, average climate:	199	153	%
Water heating energy efficiency, average climate:	104		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	13,0	14,0	kW
Rated heat output, warm climate:	13,0	13,0	kW
Annual energy consumption for space heating, cold climate	7543	9765	kWh
Annual electricity consumption for water heating, cold climate	1758		kWh
Annual energy consumption for space heating, warm climate	3153	3867	kWh
Annual electricity consumption for water heating, warm climate	1448		kWh
Seasonal space heating energy efficiency, cold climate:	167	138	%
Water heating energy efficiency, cold climate:	95		%
Seasonal space heating energy efficiency, warm climate:	217	177	%
Water heating energy efficiency, warm climate:	116		%
Sound power level LWA outdoors	55		dB

### Data for package fiche

Controller class	VI		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	203	157	%
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:	171	142	%
Seasonal space heating energy efficiency of package, warm climate:	221	181	%

<b>Model(s):</b>				<b>NIBE F2120-16 + VVM S320</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:				Medium temperature (55 °C)							
Applied standards: EN14825 and EN16147											
<b>Rated heat output</b>				Prated	12,3	kW	<b>Seasonal space heating energy efficiency</b>				
							$\eta_s$	153	%		
<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	10,9	kW	Tj = -7 °C	COPd	2,48	-				
Tj = +2 °C	Pdh	6,7	kW	Tj = +2 °C	COPd	3,96	-				
Tj = +7 °C	Pdh	5,9	kW	Tj = +7 °C	COPd	4,67	-				
Tj = +12 °C	Pdh	6,0	kW	Tj = +12 °C	COPd	5,67	-				
Tj = biv	Pdh	10,9	kW	Tj = biv	COPd	2,48	-				
Tj = TOL	Pdh	11,6	kW	Tj = TOL	COPd	2,40	-				
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>cyc</sub>		kW	Cycling interval efficiency				
Degradation co-efficient				Cdh	0,99	-	Heating water operating limit				
							TOL	-10	°C		
							COP <sub>cyc</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>	0,7	kW			
Thermostat-off mode	P <sub>TO</sub>	0,007	kW								
Standby mode	P <sub>SB</sub>	0,025	kW	Type of energy input		Electric					
Crankcase heater mode	P <sub>CK</sub>	0,037	kW								
<i>Other items</i>											
Capacity control	variable			Rated air flow rate, outdoors			4150	m <sup>3</sup> /h			
Sound power level, indoors/outdoors	L <sub>WA</sub>	35/55	dB	Rated water flow rate, indoor heat exchanger			variable	m <sup>3</sup> /h			
Annual energy consumption	Q <sub>HE</sub>	6524	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>				<b>XL</b>				<b>Water heating energy efficiency</b>			
								$\eta_{wh}$	104	%	
Daily electricity consumption	Q <sub>elec</sub>	7,36	kWh	Daily fuel consumption		Q <sub>fuel</sub>		kWh			
Annual electricity consumption	AEC	1616	kWh	Annual fuel consumption		AFC		GJ			
<b>Approved by:</b>											
<b>Contact details</b>				© NIBE Energy Systems - Box 14 - Hannabadvägen 5 - 28521 Markaryd - Sweden							