


Supplier's name:	<b>NIBE</b>		
Model:	<b>NIBE F2120-20 + VVM500</b>		
Temperature application	<b>35</b>	<b>55</b>	°C
Declared load profile for water heating	<b>XXL</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:	11,0	12,3	kW
Annual energy consumption for space heating, average climate	4502	6524	kWh
Annual electricity consumption for water heating, average climate	2096		kWh
Seasonal space heating energy efficiency, average climate:	199	153	%
Water heating energy efficiency, average climate:	103		%
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	2284		kWh
Annual energy consumption for space heating, warm climate	3153	3867	kWh
Annual electricity consumption for water heating, warm climate	1873		kWh
Seasonal space heating energy efficiency, cold climate:	167	138	%
Water heating energy efficiency, cold climate:	94		%
Seasonal space heating energy efficiency, warm climate:	217	177	%
Water heating energy efficiency, warm climate:	115		%
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:	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	%

Model(s):		NIBE F2120-20 + VVM500							
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									
Rated heat output		Prated	12,3	kW	Seasonal space heating energy efficiency		ηs	153	%
Declared capacity for part load at outdoor temperature Tj				Declared coefficient of performance for part load at outdoor temperature Tj					
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	6,5	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	Tbiv	-7	°C	Operation limit temperature		TOL	-10	°C	
Cycling interval capacity for heating	Pcyh		kW	Cycling interval efficiency		COPcyc		-	
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit		WTOL	65	°C	
Power consumption in modes other than active mode				Supplementary heater					
Off mode	POFF	0,025	kW	Rated heat output		Psup	0,7	kW	
Thermostat-off mode	PTO	0,007	kW						
Standby mode	PSB	0,025	kW	Type of energy input		Electric			
Crankcase heater mode	PCK	0,037	kW						
Other items									
Capacity control	variable			Rated air flow rate, outdoors			4150	m³/h	
Sound power level, indoors/outdoors	LWA	35/53	dB	Rated water flow rate, indoor heat exchanger			variable	m³/h	
Annual energy consumption	QHE	6524	kWh	Rated brine or water flow rate, outdoor heat exchanger				m³/h	
For heat pump combination heater:									
Declared load profile		XXL		Water heating energy efficiency		ηwh	103	%	
Daily electricity consumption	Qelec	9,54	kWh	Daily fuel consumption		Qfuel		kWh	
Annual electricity consumption	AEC	2096	kWh	Annual fuel consumption		AFC		GJ	
Approved by:									
Contact details		© NIBE Energy Systems - Box 14 - Hannabadsvägen 5 - 28521 Markaryd - Sweden							