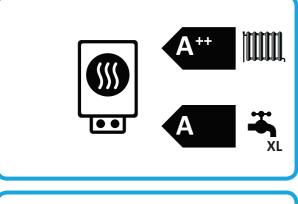


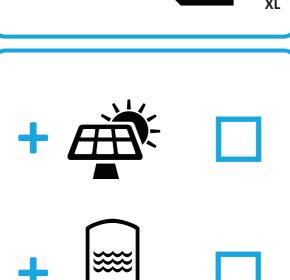


ENERG Y UA enepγua · ενεργεια IE IA

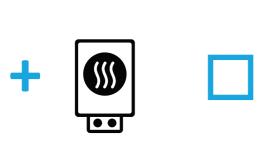


NIBE F2120-12 + VVM320

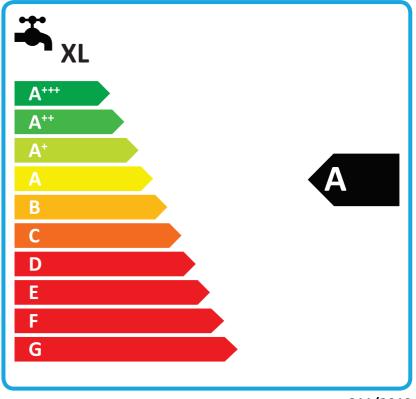












Model: Temperature application
Declared load profile for water heating Seasonal space heating energy efficiency class, average climate: Water heating energy efficiency class, average climate: Rated heat output, average climate: Annual energy consumption for space heating, average climate Seasonal space heating energy efficiency, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Sand power level LWA indoors Rated heat output, warm climate: 9,3 9,8 kWh Rated heat output, warm climate: 9,2 Annual energy consumption for space heating, cold climate Annual electricity consumption for space heating, cold climate Annual electricity consumption for space heating, cold climate
Seasonal space heating energy efficiency class, average climate: Water heating energy efficiency class, average climate: Rated heat output, average climate: Annual energy consumption for space heating, average climate Seasonal space heating energy efficiency, average climate: Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, warm climate: Annual energy consumption for space heating, cold climate 9,2 9,2 kWh Note the energy efficiency average elimate: Sound power level LWA indoors Rated heat output, warm climate: 9,2 9,2 8,0 8,3 8,W 8,Wh 8,0 8,3 8,W 8,0 8,3 8,W 8,0 8,3 8,W 8,0 8,3 8,W 8,0 8,0 8,3 8,W 8,0 8,0 8,0 8,0 8,0 8,0 8,0
Seasonal space heating energy efficiency class, average climate: Water heating energy efficiency class, average climate: Rated heat output, average climate: Annual energy consumption for space heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Sound least output, warm climate: 9,3 9,8 kWh Rated heat output, warm climate: 9,2 Annual energy consumption for space heating, cold climate Annual electricity consumption for space heating, cold climate Annual electricity consumption for space heating, cold climate
efficiency class, average climate: Water heating energy efficiency class, average climate: Rated heat output, average climate: Annual energy consumption for space heating, average climate Annual electricity consumption for water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Part A A B,0 B,3 KW A529 KWh 1661 KWh 1661 KWh 1661 KWh 1661 KWh 6 7 8 8 8 8 8 8 8 8 8 8 8 8
Water heating energy efficiency class, average climate: Rated heat output, average climate: Annual energy consumption for space heating, average climate Annual electricity consumption for water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: 9,3 9,8 kW Rated heat output, warm climate: 9,2 Annual energy consumption for space heating, cold climate Annual electricity consumption for space heating, cold climate Annual electricity consumption for space heating, cold climate
Class, average climate: Rated heat output, average climate: Annual energy consumption for space heating, average climate Annual electricity consumption for water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for space heating, cold climate Annual electricity consumption for space heating, cold climate Base Annual electricity consumption for space heating, cold climate Base Annual electricity consumption for space heating, cold climate Base Annual electricity consumption for space heating, cold climate Base Annual electricity consumption for space heating, cold climate Base Annual electricity consumption for space heating, cold climate Base Annual electricity consumption for space heating, cold climate
Rated heat output, average climate: Rated heat output, average climate: Annual energy consumption for space heating, average climate Annual electricity consumption for water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Page 190 148 % 101 % 808 808 808 808 808 808 808 809 809 809
Annual energy consumption for space heating, average climate Annual electricity consumption for water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Page 190 148 % 101 % 80 80 80 80 80 80 80 80 80 80 80 80 80 8
Annual energy consumption for space heating, average climate Annual electricity consumption for water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for
Annual electricity consumption for water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for Sound power level LWA indoors Rated heat output, warm climate: 9,3 9,8 kW Rated heat output, warm climate: 9,2 Annual energy consumption for space heating, cold climate Annual electricity consumption for
water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for 190 148 % 101 % 8 WB WB WB WB WB ### Base ### B
water heating, average climate Seasonal space heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for 1895
efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for 1895
Water heating energy efficiency, average climate: Water heating energy efficiency, average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for Sound power level LWA indoors 35 BRATED HOPE STATE
average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: 9,3 9,8 kW Rated heat output, warm climate: 9,2 9,2 kW Annual energy consumption for space heating, cold climate Annual electricity consumption for 1895
average climate: Sound power level LWA indoors Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for Annual electricity consumption for the space heating in the space heat
Rated heat output, cold climate: Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for Annual electricity consumption for the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating in the space heating in the space heating is a space heating in the space hea
Rated heat output, warm climate: Annual energy consumption for space heating, cold climate Annual electricity consumption for the space heating is a space heating in the space heating is a space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating in the space heating is a space heating in the space heating
Annual energy consumption for space heating, cold climate 5666 7239 kWh Annual electricity consumption for 1895
space heating, cold climate Annual electricity consumption for
Annual electricity consumption for
1805
water heating cold climate
Annual energy consumption for 2241 2741 kWh
space neating, warm climate
Annual electricity consumption for 1473 kWh
water heating, warm climate
Seasonal space heating energy 159 130 %
efficiency, cold climate:
Water heating energy efficiency,
cold climate: Seasonal space heating energy
efficiency, warm climate: 216 176 %
Water heating energy efficiency
warm climate:
Sound power level LWA outdoors 53 dB

Data for package fiche

Controller class	V		
Controler contribution to efficiency	4,	%	
Seasonal space heating energy efficiency of package, average climate:	194	152	%
Seasonal space heating energy efficiency class for package, average climate:	A+++	A+++	%
Seasonal space heating energy efficiency of package, cold climate:	163	134	%
Seasonal space heating energy efficiency of package, warm climate:	220	180	%

Model(s):	NIBE F2120-12 + 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:	High temperature (55 °C)		



Climate condition: Temperature application:		Average High temperature (55 °C)		verage			•
				erature (55 °C)			
Applied standards: EN14825, EN14511, El	N16147 and	EN12102					
Rated heat output	Prated	8,3	kW	Seasonal space heating energy efficiency	$\eta_{\rm s}$	148	%
Declared capacity for part load at outdoor tem	perature Tj			Declared coefficient of performance for par	t load at outdo	or temperati	ure Tj
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	1
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 _{biv}	-7	°C	Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcych		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	P _{OFF}	0,025	kW	Rated heat output	Psup	0,5	kW
Thermostat-off mode	P _{TO}	0,007	kW				
Standby mode	P _{SB}	0,025	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,037	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors		3400	m³/h
•				Rated water flow rate, indoor heat			
Sound power level, indoors/outdoors	L_WA	35/53	dB	exchanger		variable	m³/h
				Rated brine or water flow rate,			
Annual energy consumption	Q_{HE}	4529	kWh	outdoor heat exchanger			m³/h
For heat pump combination heater:							
Declared load profile		XL		Water heating energy efficiency	η_{wh}	101	%
	*				•	•	
Daily electricity consumption	Q _{elec}	7,56	kWh	Daily fuel consumption	Q_{fuel}		kWh
Annual electricity consumption	AEC	1661	kWh	Annual fuel consumption	AFC		GJ
Approved by:							
Contact details	© NIBE E	nergy Sys	tems -	Box 14 - Hannabadsvägen 5 - 28521 M	arkaryd - S	weden	