



# ENERG

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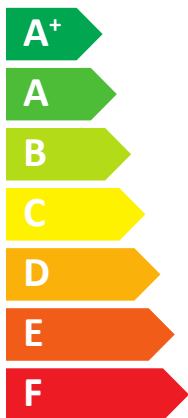


NIBE

F2040-6 + SHK 200M



A<sup>++</sup>



A

Two icons showing sound power levels. The top icon shows a speaker inside a house with the text "35 dB". The bottom icon shows a speaker outside a house with the text "50 dB".



- 06 kW
- 05 kW**
- 05 kW



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Y

IJA

IE

IA

NIBE

F2040-6 + SHK 200M

Energy label icons: space heater, A<sup>++</sup> rating, radiator, A rating, tap with XL label.

Feature icons: solar panel, water tank, keypad, space heater.


Energy efficiency scale for space heater with A<sup>++</sup> label.

Energy efficiency scale for tap with A label.

Supplier's name:	<b>NIBE</b>		
Model:	<b>F2040-6 + SHK 200M</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:	5	5	kW
Annual energy consumption for space heating, average climate	2089	3248	kWh
Annual electricity consumption for water heating, average climate	1833		kWh
Seasonal space heating energy efficiency, average climate:	188	131	%
Water heating energy efficiency, average climate:	91		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	4	6	kW
Rated heat output, warm climate:	4	5	kW
Annual energy consumption for space heating, cold climate	2694	4610	kWh
Annual electricity consumption for water heating, cold climate	2332		kWh
Annual energy consumption for space heating, warm climate	872	1398	kWh
Annual electricity consumption for water heating, warm climate	1485		kWh
Seasonal space heating energy efficiency, cold climate:	143	116	%
Water heating energy efficiency, cold climate:	72		%
Seasonal space heating energy efficiency, warm climate:	252	179	%
Water heating energy efficiency, warm climate:	113		%
Sound power level LWA outdoors	50		dB

### Data for package fiche

Controller class	VI		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	192	135	%
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:	147	120	%
Seasonal space heating energy efficiency of package, warm climate:	256	183	%

<b>Model(s):</b>				<b>F2040-6 + SHK 200M</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: EN14511, EN14825, EN16147 and EN12102												
<b>Rated heat output</b>				Prated	5,3	kW		<b>Seasonal space heating energy efficiency</b>				
								$\eta_s$	131	%		
<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	4,7	kW		Tj = -7 °C	COPd	1,88	-				
Tj = +2 °C	Pdh	2,8	kW		Tj = +2 °C	COPd	3,26	-				
Tj = +7 °C	Pdh	1,8	kW		Tj = +7 °C	COPd	4,72	-				
Tj = +12 °C	Pdh	2,7	kW		Tj = +12 °C	COPd	6,47	-				
Tj = biv	Pdh	4,7	kW		Tj = biv	COPd	1,88	-				
Tj = TOL	Pdh	4,1	kW		Tj = TOL	COPd	1,77	-				
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	58	°C		
<i>Power consumption in modes other than active mode</i>								<i>Supplementary heater</i>				
Off mode	P <sub>OFF</sub>	0,007	kW		Rated heat output				P <sub>sup</sub>	1,2	kW	
Thermostat-off mode	P <sub>TO</sub>	0,012	kW		Type of energy input				Electric			
Standby mode	P <sub>SB</sub>	0,012	kW									
Crankcase heater mode	P <sub>CK</sub>	0	kW									
<i>Other items</i>												
Capacity control	variable			Rated air flow rate, outdoors					2526	m <sup>3</sup> /h		
Sound power level, indoors/outdoors	L <sub>WA</sub>	35/50	dB		Rated water flow rate, indoor heat exchanger						m <sup>3</sup> /h	
Annual energy consumption	Q <sub>HE</sub>	3248	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>				
								$\eta_{wh}$				
								91				
								%				
Daily electricity consumption	Q <sub>elec</sub>	8,59	kWh		Daily fuel consumption				Q <sub>fuel</sub>		kWh	
Annual electricity consumption	AEC	1833	kWh		Annual fuel consumption				AFC		GJ	
<b>Approved by:</b>												
<b>Contact details</b>				© NIBE Energy Systems - Box 14 - Hannabadsvägen 5 - 28521 Markaryd - Sweden								



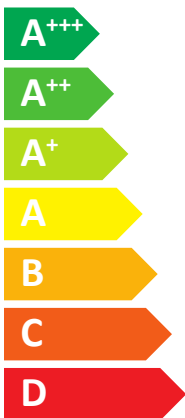
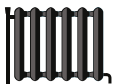
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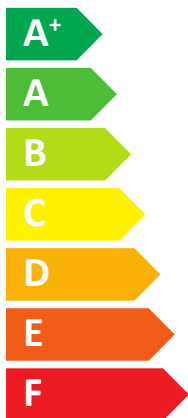


NIBE

F2040-8 + SHK 200M



A<sup>++</sup>



A



35 dB



54 dB

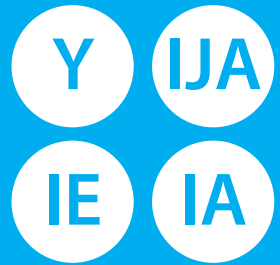


- 10 kW
- 07 kW**
- 08 kW



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NIBE

F2040-8 + SHK 200M

Energy label for heating system showing a radiator icon, an A++ energy class arrow, a radiator icon, an A energy class arrow, and a tap icon with XL.

Feature icons for the heating system: a plus sign, a solar panel icon, a square checkbox, a plus sign, a water tank icon, a square checkbox, a plus sign, a remote control icon, a square checkbox with an X, and a plus sign, a radiator icon, a square checkbox.


Energy efficiency scale for heating system showing a radiator icon, a scale from A+++ to G, and an A++ energy class arrow.

Energy efficiency scale for tap showing a tap icon with XL, a scale from A+++ to G, and an A energy class arrow.

Supplier's name:	<b>NIBE</b>		
Model:	<b>F2040-8 + SHK 200M</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:	8,2	7,0	kW
Annual energy consumption for space heating, average climate	3882	4447	kWh
Annual electricity consumption for water heating, average climate	1689		kWh
Seasonal space heating energy efficiency, average climate:	172	127	%
Water heating energy efficiency, average climate:	99		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	9	10,0	kW
Rated heat output, warm climate:	8,0	8,0	kW
Annual energy consumption for space heating, cold climate	6264	8844	kWh
Annual electricity consumption for water heating, cold climate	1886		kWh
Annual energy consumption for space heating, warm climate	1879	2333	kWh
Annual electricity consumption for water heating, warm climate	1540		kWh
Seasonal space heating energy efficiency, cold climate:	139	108	%
Water heating energy efficiency, cold climate:	89		%
Seasonal space heating energy efficiency, warm climate:	225	180	%
Water heating energy efficiency, warm climate:	109		%
Sound power level LWA outdoors	54		dB

### Data for package fiche

Controller class	VI		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	176	131	%
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:	143	112	%
Seasonal space heating energy efficiency of package, warm climate:	229	184	%

<b>Model(s):</b>				<b>F2040-8 + SHK 200M</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, EN16147												
<b>Rated heat output</b>				Prated	7,0	kW		<b>Seasonal space heating energy efficiency</b>				
								$\eta_s$	127	%		
<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	6,3	kW		Tj = -7 °C	COPd	1,94	-				
Tj = +2 °C	Pdh	3,9	kW		Tj = +2 °C	COPd	3,11	-				
Tj = +7 °C	Pdh	2,6	kW		Tj = +7 °C	COPd	4,42	-				
Tj = +12 °C	Pdh	3,7	kW		Tj = +12 °C	COPd	5,93	-				
Tj = biv	Pdh	6,6	kW		Tj = biv	COPd	1,83	-				
Tj = TOL	Pdh	5,9	kW		Tj = TOL	COPd	1,86	-				
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW		Tj = -15 °C (if TOL < -20 °C)	COPd		-				
Bivalent temperature				T <sub>biv</sub>	-8,6	°C		Operation limit temperature				
Cycling interval capacity for heating				P <sub>cyh</sub>		kW		Cycling interval efficiency				
Degradation co-efficient				Cdh	0,97	-		Heating water operating limit				
								WTOL	58	°C		
<i>Power consumption in modes other than active mode</i>								<i>Supplementary heater</i>				
Off mode	P <sub>OFF</sub>	0,002	kW		Rated heat output				P <sub>sup</sub>	1,1	kW	
Thermostat-off mode	P <sub>TO</sub>	0,01	kW		Type of energy input				Electric			
Standby mode	P <sub>SB</sub>	0,015	kW									
Crankcase heater mode	P <sub>CK</sub>	0,03	kW									
<i>Other items</i>												
Capacity control	variable			Rated air flow rate, outdoors					3000	m <sup>3</sup> /h		
Sound power level, indoors/outdoors	L <sub>WA</sub>	35/54	dB		Rated water flow rate, indoor heat exchanger					0,60	m <sup>3</sup> /h	
Annual energy consumption	Q <sub>HE</sub>	4447	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>				
								$\eta_{wh}$				
								99				
								%				
Daily electricity consumption	Q <sub>elec</sub>	7,69	kWh		Daily fuel consumption				Q <sub>fuel</sub>		kWh	
Annual electricity consumption	AEC	1689	kWh		Annual fuel consumption				AFC		GJ	
<b>Approved by:</b>												
<b>Contact details</b>				© NIBE Energy Systems - Box 14 - Hannabadsvägen 5 - 28521 Markaryd - Sweden								





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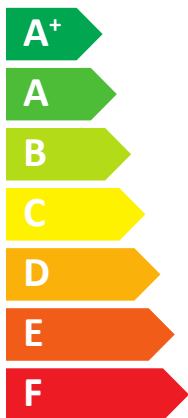


NIBE

F2040-12 + SHK 200M



A<sup>++</sup>



A



35 dB



57 dB



13 kW

10 kW

12 kW



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Y

IJA

IE

IA

NIBE

F2040-12 + SHK 200M

+

+


+

+

Supplier's name:	<b>NIBE</b>		
Model:	<b>F2040-12 + SHK 200M</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:	11,5	10,0	kW
Annual energy consumption for space heating, average climate	5382	6136	kWh
Annual electricity consumption for water heating, average climate	1702		kWh
Seasonal space heating energy efficiency, average climate:	174	132	%
Water heating energy efficiency, average climate:	98		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	11,5	13,0	kW
Rated heat output, warm climate:	12,0	12,0	kW
Annual energy consumption for space heating, cold climate	7798	11197	kWh
Annual electricity consumption for water heating, cold climate	1904		kWh
Annual energy consumption for space heating, warm climate	2759	3419	kWh
Annual electricity consumption for water heating, warm climate	1551		kWh
Seasonal space heating energy efficiency, cold climate:	142	111	%
Water heating energy efficiency, cold climate:	88		%
Seasonal space heating energy efficiency, warm climate:	229	185	%
Water heating energy efficiency, warm climate:	108		%
Sound power level LWA outdoors	57		dB

### Data for package fiche

Controller class	VI		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	178	136	%
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:	146	115	%
Seasonal space heating energy efficiency of package, warm climate:	233	189	%

<b>Model(s):</b>				<b>F2040-12 + SHK 200M</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, EN16147											
<b>Rated heat output</b>				Prated	10,0	kW		<b>Seasonal space heating energy efficiency</b>			
								$\eta_s$	132	%	
<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	8,9	kW		Tj = -7 °C	COPd	1,99	-			
Tj = +2 °C	Pdh	5,5	kW		Tj = +2 °C	COPd	3,22	-			
Tj = +7 °C	Pdh	3,5	kW		Tj = +7 °C	COPd	4,61	-			
Tj = +12 °C	Pdh	5,0	kW		Tj = +12 °C	COPd	6,25	-			
Tj = biv	Pdh	9,2	kW		Tj = biv	COPd	1,90	-			
Tj = TOL	Pdh	8,1	kW		Tj = TOL	COPd	1,92	-			
Tj = -15 °C (if TOL < -20 °C)	Pdh		kW		Tj = -15 °C (if TOL < -20 °C)	COPd		-			
Bivalent temperature				T <sub>biv</sub>	-7,9	°C		Operation limit temperature			
Cycling interval capacity for heating				P <sub>cyh</sub>		kW		Cycling interval efficiency			
Degradation co-efficient				Cdh	0,98	-		Heating water operating limit			
								TOL	-10	°C	
								COP <sub>cyh</sub>		-	
								WTOL	58	°C	
<i>Power consumption in modes other than active mode</i>								<i>Supplementary heater</i>			
Off mode				P <sub>OFF</sub>	0,002	kW		Rated heat output			
Thermostat-off mode				P <sub>TO</sub>	0,014	kW		P <sub>sup</sub>			
Standby mode				P <sub>SB</sub>	0,015	kW		1,9			
Crankcase heater mode				P <sub>CK</sub>	0,035	kW		Type of energy input			
								Electric			
<i>Other items</i>											
Capacity control				variable				Rated air flow rate, outdoors			
Sound power level, indoors/outdoors				L <sub>WA</sub>	35/57	dB		4380			
Annual energy consumption				Q <sub>HE</sub>	6136	kWh		Rated water flow rate, indoor heat exchanger			
								0,86			
								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>			
								$\eta_{wh}$	98	%	
Daily electricity consumption				Q <sub>elec</sub>	7,75	kWh		Daily fuel consumption			
Annual electricity consumption				AEC	1702	kWh		Q <sub>fuel</sub>			
								AFC			
								kJ			
<b>Approved by:</b>											
<b>Contact details</b>				© NIBE Energy Systems - Box 14 - Hannabadsvägen 5 - 28521 Markaryd - Sweden							



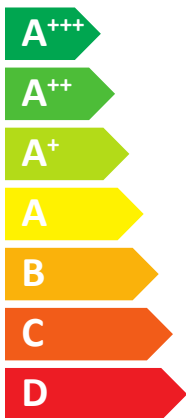
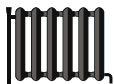
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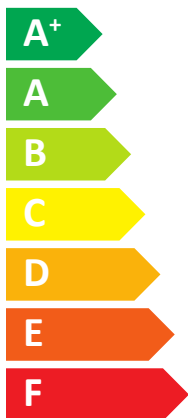


NIBE

F2120-8 + SHK 200M



A<sup>++</sup>



A



35 dB



53 dB



07 kW

06 kW

06 kW



# ENERG

енергия · ενέργεια

Y

IJA

IE

IA

NIBE

F2120-8 + SHK 200M

A++

A

XL

+

+

+

+

X

A+++


XL

A

Supplier's name:	<b>NIBE</b>		
Model:	<b>F2120-8 + SHK 200M</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:	5,9	6,3	kW
Annual energy consumption for space heating, average climate	2544	3472	kWh
Annual electricity consumption for water heating, average climate	1661		kWh
Seasonal space heating energy efficiency, average climate:	189	147	%
Water heating energy efficiency, average climate:	101		%
Sound power level LWA indoors	35		dB
Rated heat output, cold climate:	6,8	7,4	kW
Rated heat output, warm climate:	5,9	6,3	kW
Annual energy consumption for space heating, cold climate	4182	5524	kWh
Annual electricity consumption for water heating, cold climate	1895		kWh
Annual energy consumption for space heating, warm climate	1452	1939	kWh
Annual electricity consumption for water heating, warm climate	1473		kWh
Seasonal space heating energy efficiency, cold climate:	158	130	%
Water heating energy efficiency, cold climate:	88		%
Seasonal space heating energy efficiency, warm climate:	214	171	%
Water heating energy efficiency, warm climate:	114		%
Sound power level LWA outdoors	53		dB

### Data for package fiche

Controller class	VI		
Controller contribution to efficiency	4,0		%
Seasonal space heating energy efficiency of package, average climate:	193	151	%
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:	162	134	%
Seasonal space heating energy efficiency of package, warm climate:	218	175	%

<b>Model(s):</b>				<b>F2120-8 + SHK 200M</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: EN14511, EN14825, EN16147 and EN12102												
<b>Rated heat output</b>				Prated	6,3	kW		<b>Seasonal space heating energy efficiency</b>				
								$\eta_s$	147	%		
<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	5,5	kW		Tj = -7 °C	COPd	2,48	-				
Tj = +2 °C	Pdh	4,1	kW		Tj = +2 °C	COPd	3,80	-				
Tj = +7 °C	Pdh	2,9	kW		Tj = +7 °C	COPd	4,45	-				
Tj = +12 °C	Pdh	3,3	kW		Tj = +12 °C	COPd	5,26	-				
Tj = biv	Pdh	5,5	kW		Tj = biv	COPd	2,48	-				
Tj = TOL	Pdh	5,7	kW		Tj = TOL	COPd	2,34	-				
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				
								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>	0,6	kW	
Thermostat-off mode	P <sub>TO</sub>	0,01	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					2300	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>	3472	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								





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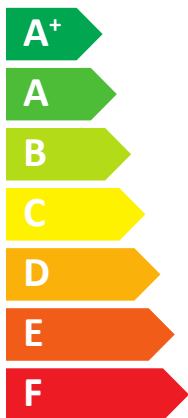


NIBE

F2120-12 + SHK 200M



A<sup>++</sup>



A



35 dB



53 dB



10 kW

08 kW

09 kW



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Y

IJA

IE

IA

NIBE

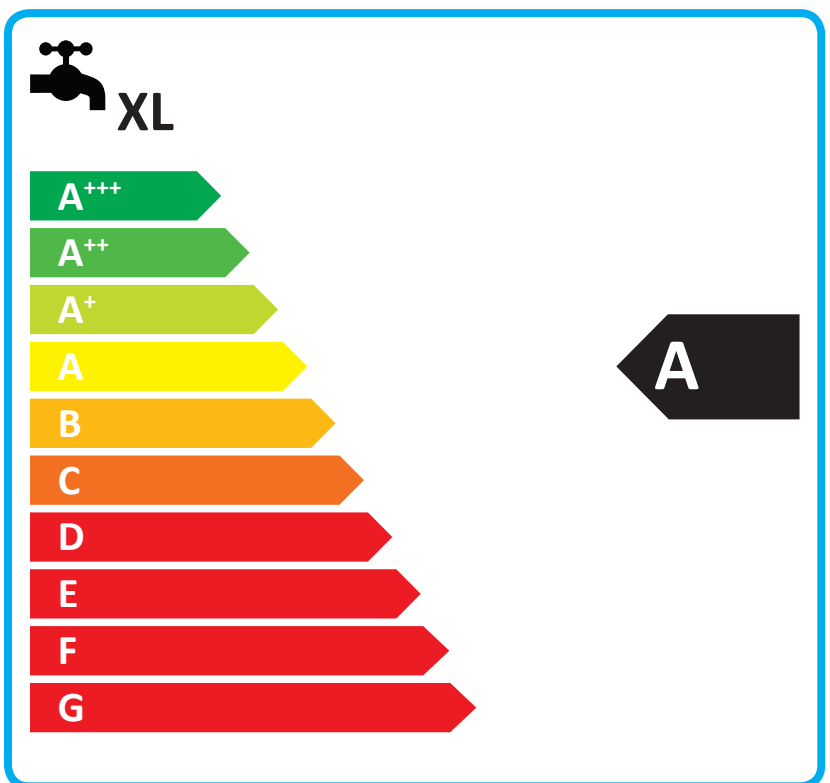
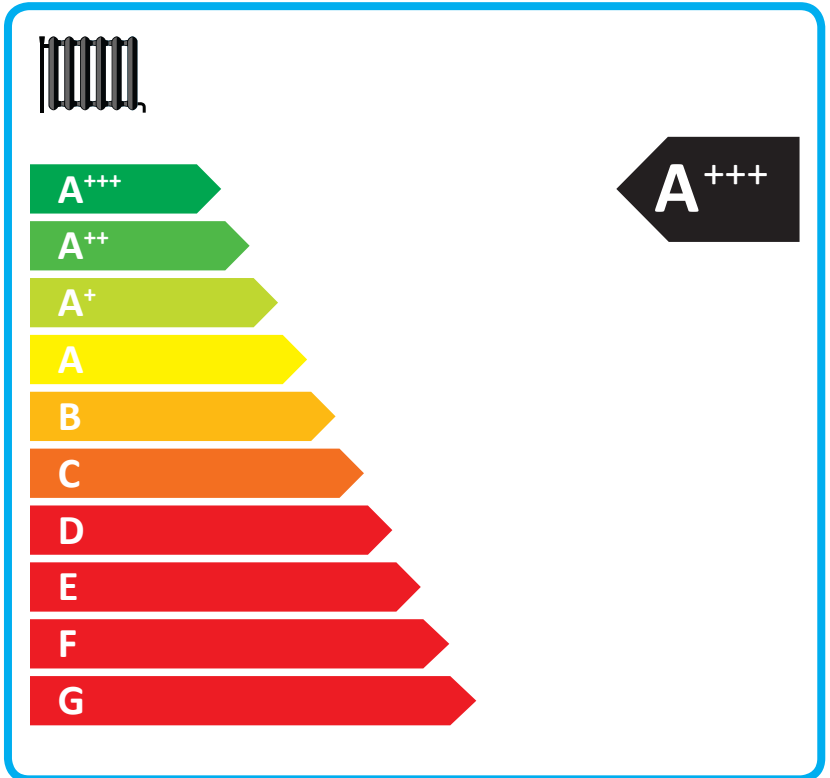
F2120-12 + SHK 200M

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Supplier's name:	<b>NIBE</b>		
Model:	<b>F2120-12 + SHK 200M</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	VI		
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>F2120-12 + SHK 200M</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: EN14511, EN14825, 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			TOL	-10	°C
Cycling interval capacity for heating				P <sub>cyh</sub>		kW	Cycling interval efficiency			COP <sub>cyh</sub>		-
Degradation co-efficient				C <sub>dh</sub>	0,99	-	Heating water operating limit			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								
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			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										



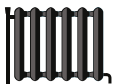
# ENERG

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NIBE

F2120-16 + SHK 200M



A+++

A+++

A+

A++

A

A

A+

B

A

C

B

D

C

E

D

F



35 dB



55 dB



14 kW

12 kW

13 kW



# ENERG

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Y

IJA

IE

IA

NIBE

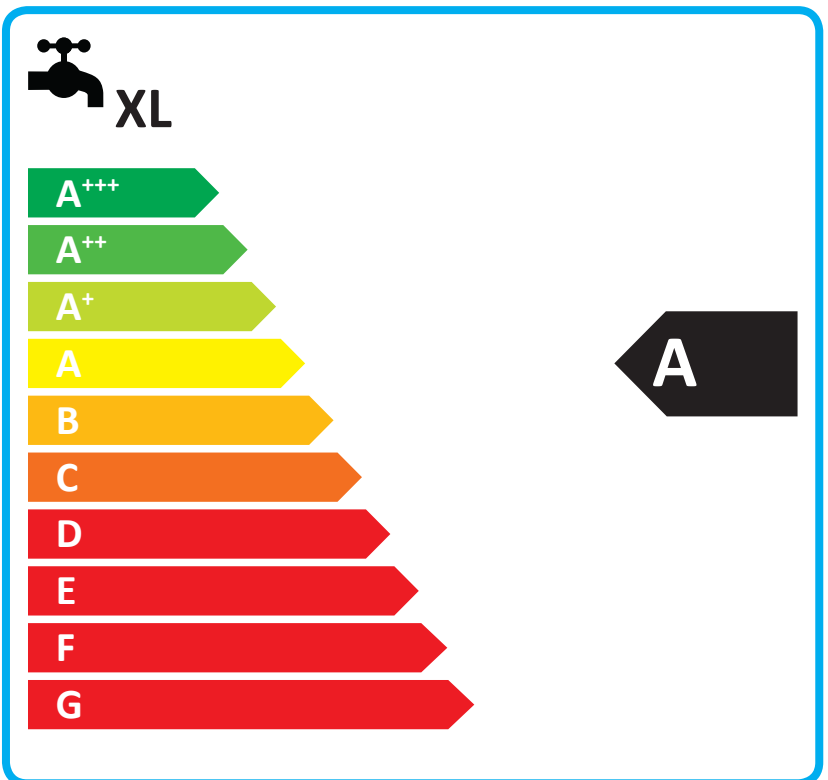
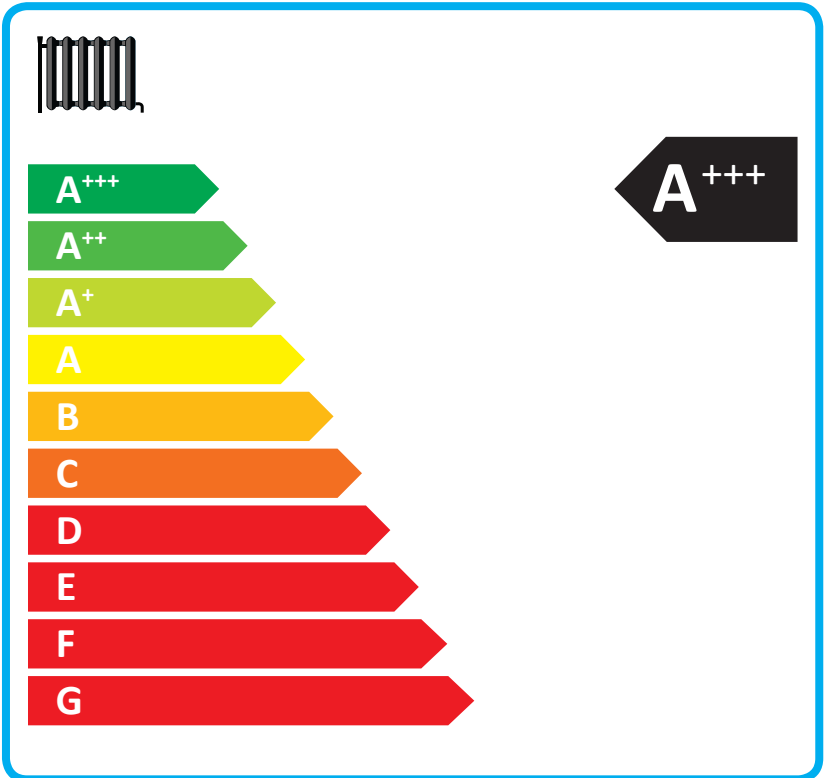
F2120-16 + SHK 200M

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Supplier's name:	<b>NIBE</b>		
Model:	<b>F2120-16 + SHK 200M</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	1661		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	1895		kWh
Annual energy consumption for space heating, warm climate	3153	3867	kWh
Annual electricity consumption for water heating, warm climate	1473		kWh
Seasonal space heating energy efficiency, cold climate:	167	138	%
Water heating energy efficiency, cold climate:	88		%
Seasonal space heating energy efficiency, warm climate:	217	177	%
Water heating energy efficiency, warm climate:	114		%
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>F2120-16 + SHK 200M</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: EN14511, EN14825, EN16147 and EN12102												
<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			TOL	-10	°C
Cycling interval capacity for heating				P <sub>cyh</sub>		kW	Cycling interval efficiency			COP <sub>cyh</sub>		-
Degradation co-efficient				C <sub>dh</sub>	0,99	-	Heating water operating limit			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>		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										