Login

Summary of	F2120-12	Reg. No.	012-030
Certificate Holder			
Name	Nibe AB		
Address	Box 14	Zip	S-28521
City	Markaryd	Country	Sweden
Certification Body	RISE CERT		
Subtype title	F2120-12		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R410A		
Mass of Refrigerant	2.6 kg		

Model: F2120-12 1x230

Configure model	
Model name	F2120-12 1x230
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.54 kW	3.64 kW
El input	0.69 kW	1.18 kW
COP	5.12	3.08

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	159 %	130 %
Prated	9.30 kW	9.80 kW
SCOP	4.05	3.32
Tbiv	-12 °C	-12 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.70 kW	5.90 kW
COP Tj = -7°C	3.33	2.74
Pdh Tj = +2°C	3.40 kW	3.60 kW
COP Tj = +2°C	5.18	4.14
Pdh Tj = +7°C	2.90 kW	2.90 kW
COP Tj = +7°C	5.73	4.70
Pdh Tj = 12°C	3.30 kW	3.30 kW
COP Tj = 12°C	6.44	5.41
Pdh Tj = Tbiv	6.90 kW	7.30 kW
COP Tj = Tbiv	2.99	2.47

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.20 kW	6.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.31	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	7 W	7 W
PSB	25 W	25 W
PCK	37 W	37 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.10 kW	3.80 kW
Annual energy consumption Qhe	5666 kWh	7239 kWh

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	190 %	148 %
Prated	8.00 kW	8.30 kW

SCOP	4.82	3.27
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.10 kW	7.30 kW
COP Tj = -7°C	3.05	2.39
Pdh Tj = +2°C	4.70 kW	4.70 kW
COP Tj = +2°C	4.57	3.85
Pdh Tj = +7°C	3.10 kW	2.90 kW
COP Tj = +7°C	5.86	4.48
Pdh Tj = 12°C	3.60 kW	3.30 kW
COP Tj = 12°C	7.22	5.30
Pdh Tj = Tbiv	7.10 kW	7.30 kW
COP Tj = Tbiv	2.95	2.28
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.30 kW	7.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.05	2.39
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	25 W	25 W
PTO	7 W	7 W
PSB	25 W	25 W
PCK	37 W	37 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.70 kW	0.50 kW
Annual energy consumption Qhe	3409 kWh	4529 kWh

Model: F2120-12 3x400

Configure model	
Model name	F2120-12 3x400
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-4	
Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
Operating range outdoor exchanger/indoor exchanger upper limit/upper limit	passed
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.54 kW	3.64 kW
El input	0.69 kW	1.18 kW
COP	5.12	3.08

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
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Supplementary Heater: Type of energy input	Electricity	Electricity
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Annual energy consumption Qhe	5666 kWh	7239 kWh

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WTOL	65 °C	65 °C
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PTO	7 W	7 W
PSB	25 W	25 W
PCK	37 W	37 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.70 kW	0.50 kW
Annual energy consumption Qhe	3409 kWh	4529 kWh