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Login

Summary of	F1x45-12 3x400	Reg. No.	012-043
Certificate Holder			
Name	Nibe AB		
Address	Box 14	Zip	S-28521
City	Markaryd	Country	Sweden
Certification Body	RISE CERT		
Subtype title	F1x45-12 3x400		
Heat Pump Type	Brine/Water		
Refrigerant	R407c		
Mass of Refrigerant	2 kg		

Model: F1145-12 3x400

Configure model	
Model name	F1145-12 3x400
Application	Heating (medium temp)
Units	Indoor
Climate Zone	Colder Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	11.89 kW	10.84 kW
El input	2.70 kW	3.78 kW
COP	4.40	2.91

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	183 %	141 %
Prated	14.00 kW	14.00 kW
SCOP	4.78	3.73
Tbiv	-5 °C	-4 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.50 kW	10.80 kW
COP Tj = -7°C	4.70	3.30
Pdh Tj = +2°C	11.60 kW	11.10 kW
COP Tj = +2°C	4.94	3.80
Pdh Tj = +7°C	11.70 kW	11.30 kW
COP Tj = +7°C	5.10	4.10
Pdh Tj = 12°C	11.80 kW	11.50 kW
COP Tj = 12°C	5.14	4.40
Pdh Tj = Tbiv	11.50 kW	10.90 kW
COP Tj = Tbiv	4.75	3.46

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	10.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.56	3.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	7 W	7 W
PCK	30 W	30 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.50 kW	3.30 kW
Annual energy consumption Qhe	6042 kWh	7785 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	189 %	145 %
Prated	14.00 kW	14.00 kW

SCOP	4.93	3.83
Tbiv	-15 °C	-14 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	11.70 kW	11.00 kW
COP Tj = -7°C	4.98	3.70
Pdh Tj = +2°C	11.70 kW	11.20 kW
COP Tj = +2°C	5.12	4.06
Pdh Tj = +7°C	11.80 kW	11.40 kW
COP Tj = +7°C	5.22	4.37
Pdh Tj = 12°C	11.80 kW	11.50 kW
COP Tj = 12°C	4.94	4.50
Pdh Tj = Tbiv	11.60 kW	10.90 kW
COP Tj = Tbiv	4.81	3.49
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	11.50 kW	10.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.56	3.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	7 W	7 W
PCK	30 W	30 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.50 kW	3.30 kW
Annual energy consumption Qhe	6993 kWh	9049 kWh

Model: F1245-12 3x400

Configure model	
Model name	F1245-12 3x400
Application	Heating + DHW + low temp
Units	Indoor
Climate Zone	Colder Climate
Reversibility	No
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz
Off-peak product	No

Heating

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	11.89 kW	10.84 kW
El input	2.70 kW	3.78 kW
COP	4.40	2.91

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

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	45 dB(A)	45 dB(A)

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	Low temperature	**Medium temperature**
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Supplementary Heater: Type of energy input	Electricity	Electricity
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Annual energy consumption Qhe	6042 kWh	7785 kWh

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WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	30 W	30 W
PSB	7 W	7 W
PCK	30 W	30 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.50 kW	3.30 kW
Annual energy consumption Qhe	6993 kWh	9049 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	96 %
COP	2.40
Heating up time	00:58 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	230 l

Colder Climate

EN 16147

Declared load profile	XL
Efficiency ηDHW	96 %
COP	2.40
Heating up time	00:58 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	230 l