Login

Summary of	F1x45-8 3x400	Reg. No.	012-039
Certificate Holder			
Name	Nibe AB		
Address	Box 14	Zip	S-28521
City	Markaryd	Country	Sweden
Certification Body	RISE CERT		
Subtype title	F1x45-8 3x400		
Heat Pump Type	Brine/Water		
Refrigerant	R407c		
Mass of Refrigerant	1.8 kg		

Model: F1145-8 3x400

Configure model	
Model name	F1145-8 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	8.01 kW	6.36 kW
El input	1.74 kW	2.06 kW
COP	4.60	3.09

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	188 %	141 %
Prated	9.00 kW	8.00 kW
SCOP	4.90	3.73
Tbiv	-7 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.80 kW	6.20 kW
COP Tj = -7°C	4.79	3.28
Pdh Tj = +2°C	8.00 kW	6.90 kW
COP Tj = +2°C	4.99	3.81
Pdh Tj = +7°C	8.20 kW	7.20 kW
COP Tj = +7°C	5.17	4.13
Pdh Tj = 12°C	8.30 kW	7.60 kW
COP Tj = 12°C	5.23	4.41
Pdh Tj = Tbiv	7.80 kW	6.40 kW
COP Tj = Tbiv	4.81	3.44

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.70 kW	5.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.67	3.07
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	15 W	15 W
PSB	7 W	7 W
PCK	14 W	14 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	2.10 kW
Annual energy consumption Qhe	3797 kWh	4433 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	194 %	145 %
Prated	9.00 kW	8.00 kW

SCOP	5.05	3.83
Tbiv	-17 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	8.00 kW	6.70 kW
COP Tj = -7°C	5.06	3.71
Pdh Tj = +2°C	8.20 kW	7.10 kW
COP Tj = +2°C	5.20	4.07
Pdh Tj = +7°C	8.30 kW	7.50 kW
COP Tj = +7°C	5.26	4.36
Pdh Tj = 12°C	8.30 kW	7.70 kW
COP Tj = 12°C	5.06	4.45
Pdh Tj = Tbiv	7.80 kW	6.40 kW
COP Tj = Tbiv	4.56	3.46
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.70 kW	5.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.67	3.07
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Poff	2 W	2 W
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PCK	14 W	14 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.30 kW	2.10 kW
Annual energy consumption Qhe	4393 kWh	5142 kWh

Model: F1145-8 PC 3x400

Configure model	
Model name	F1145-8 PC 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	8.01 kW	6.36 kW
El input	1.74 kW	2.06 kW
COP	4.60	3.09

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

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COP Tj = +2°C	4.99	3.81
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Annual energy consumption Qhe	4393 kWh	5142 kWh

Model: F1245-8 3x400

Configure model	
Model name	F1245-8 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**
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COP Tj = +2°C	4.99	3.81
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Supplementary Heater: PSUP	1.30 kW	2.10 kW
Annual energy consumption Qhe	4393 kWh	5142 kWh

Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	100 %
Heating up time	01:28 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240 l
COP	2.51

Colder Climate

EN 16147

Declared load profile	XL
Efficiency ηDHW	100 %
Heating up time	01:28 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240 l
COP	2.51

Model: F1245-8 PC 3x400

Configure model	
Model name	F1245-8 PC 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

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Domestic Hot Water (DHW)

Average Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	100 %
Heating up time	01:28 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240 l
COP	2.51

Colder Climate

EN 16147	
Declared load profile	XL
Efficiency ηDHW	100 %
Heating up time	01:28 h:min
Standby power input	55.0 W
Reference hot water temperature	50.0 °C
Mixed water at 40°C	240 l
COP	2.51