

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	·	
Name of testing laboratory	AIT		
Subtype title	F1x45-8 3x400		
Heat Pump Type	Brine/Water		
Refrigerant	R407c	R407c	
Mass Of Refrigerant	1.8 kg		



Model: F1145-8 3x400

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
СОР	4.60	3.09
Indoor water flow rate	1.55 m³/h	0.86 m³/h

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

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Pdh Tj = TOL	7.70 kW	5.90 kW
COP Tj = TOL	4.67	3.07
Cdh	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

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





Tbiv -17 °C TOL -22 °C Pdh Tj = -7°C 8.00 kW COP Tj = -7°C 5.06 Pdh Tj = +2°C 8.20 kW COP Tj = +2°C 5.20 Pdh Tj = +7°C 8.30 kW COP Tj = +7°C 5.26 Pdh Tj = 12°C 8.30 kW COP Tj = 12°C 5.06 Pdh Tj = Tbiv 7.80 kW	-15 °C -22 °C 6.70 kW
Pdh Tj = -7° C 8.00 kW COP Tj = -7° C 5.06 Pdh Tj = $+2^{\circ}$ C 8.20 kW COP Tj = $+2^{\circ}$ C 5.20 Pdh Tj = $+7^{\circ}$ C 8.30 kW COP Tj = $+7^{\circ}$ C 5.26 Pdh Tj = 12° C 8.30 kW COP Tj = 12° C 5.06 Pdh Tj = Tbiv 7.80 kW	
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$Pdh Tj = 12^{\circ}C$ 8.30 kW $COP Tj = 12^{\circ}C$ 5.06 $Pdh Tj = Tbiv$ 7.80 kW	7.50 kW
COP Tj = 12°C 5.06 Pdh Tj = Tbiv 7.80 kW	4.36
Pdh Tj = Tbiv 7.80 kW	7.70 kW
	4.45
	6.40 kW
COP Tj = Tbiv 4.56	3.46
Pdh Tj = TOL 7.70 kW	5.90 kW
COP Tj = TOL 4.67	3.07
Cdh 0.99	0.99
WTOL 65 °C	65 °C
Poff 2 W	2 W
PTO 15 W	15 W
PSB 7 W	
PCK 14 W	7 W



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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

General Data	
Power supply	3x400V 50Hz

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.01 kW	6.36 kW
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Operating range outdoor exchanger/indoor exchanger lower limit/lower limit	passed
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	Low temperature	Medium temperature
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	Low temperature	Medium temperature
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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

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Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	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

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	Low temperature	Medium temperature
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η_{s}	194 %	145 %
Prated	9.00 kW	8.00 kW





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$Pdh Tj = 12^{\circ}C$ 8.30 kW $COP Tj = 12^{\circ}C$ 5.06 $Pdh Tj = Tbiv$ 7.80 kW	7.50 kW
COP Tj = 12°C 5.06 Pdh Tj = Tbiv 7.80 kW	4.36
Pdh Tj = Tbiv 7.80 kW	7.70 kW
	4.45
	6.40 kW
COP Tj = Tbiv 4.56	3.46
Pdh Tj = TOL 7.70 kW	5.90 kW
COP Tj = TOL 4.67	3.07
Cdh 0.99	0.99
WTOL 65 °C	65 °C
Poff 2 W	2 W
PTO 15 W	15 W
PSB 7 W	
PCK 14 W	7 W



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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: F1245-8 3x400

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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.01 kW	6.36 kW
El input	1.74 kW	2.06 kW
СОР	4.60	3.09
Indoor water flow rate	1.55 m³/h	0.86 m³/h

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

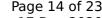
Average Climate



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

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 $$\operatorname{\textit{Page}}\ 14$ of 23$$ This information was generated by the HP KEYMARK database on 17 Dec 2020

	1	
Pdh Tj = TOL	7.70 kW	5.90 kW
COP Tj = TOL	4.67	3.07
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	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

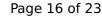
EN 12102-1		
	Low temperature	Medium temperature
Sound power level indoor	45 dB(A)	45 dB(A)

EN 14825		
Low temperature	Medium temperature	
194 %	145 %	
9.00 kW	8.00 kW	
	Low temperature 194 %	





Inis information was ge	nerated by the HP KEYM	ARK database on 17 Dec 2020
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 = $+7^{\circ}$ C	8.30 kW	7.50 kW
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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	7.70 kW	5.90 kW
COP Tj = TOL	4.67	3.07
Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	15 W	15 W
PSB	7 W	7 W
PCK	14 W	14 W
	1	



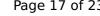


Supplementary Heater: Type of energy input	electricity	electricity
Supplementary Heater: PSUP	1.30 kW	2.10 kW
Annual energy consumption Qhe	4393 kWh	5142 kWh

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
СОР	2.51





 $$\operatorname{\textit{Page}}\ 17$$ of 23 This information was generated by the HP KEYMARK database on 17 Dec 2020

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
СОР	2.51



Model: F1245-8 PC 3x400

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

Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	8.01 kW	6.36 kW
El input	1.74 kW	2.06 kW
СОР	4.60	3.09
Indoor water flow rate	1.55 m³/h	0.86 m³/h

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	

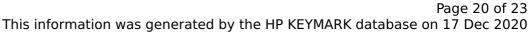
Average Climate



EN 12102-1		
	Low temperature	Medium temperature
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Cdh	0.99	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
РТО	15 W	15 W
PSB	7 W	7 W
РСК	14 W	14 W

electricity

1.30 kW

3797 kWh

electricity

2.10 kW

4433 kWh

Colder Climate

Supplementary Heater: PSUP

Annual energy consumption Qhe

Supplementary Heater: Type of energy input

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





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	'		



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Average Climate

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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 I	
СОР	2.51	



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	
СОР	2.51	