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Login

Summary of	F1x45-17	Reg. No.	012-046
Certificate Holder			
Name	Nibe AB		
Address	Box 14	Zip	S-28521
City	Markaryd	Country	Sweden
Certification Body	RISE CERT		
Subtype title	F1x45-17		
Heat Pump Type	Brine/Water		
Refrigerant	R407c		
Mass of Refrigerant	2 kg		

Model: F1145-17

Configure model	
Model name	F1145-17
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	16.89 kW	16.10 kW
El input	4.10 kW	5.38 kW
COP	4.12	2.99

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	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	166 %	137 %
Prated	20.00 kW	20.00 kW
SCOP	4.35	3.62
Tbiv	-6 °C	-5 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	17.00 kW	16.00 kW
COP Tj = -7°C	4.39	3.25
Pdh Tj = +2°C	17.10 kW	16.20 kW
COP Tj = +2°C	4.50	3.70
Pdh Tj = +7°C	17.30 kW	16.60 kW
COP Tj = +7°C	4.55	3.95
Pdh Tj = 12°C	17.40 kW	16.90 kW
COP Tj = 12°C	4.34	4.16
Pdh Tj = Tbiv	17.00 kW	16.10 kW
COP Tj = Tbiv	4.41	3.35

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.90 kW	16.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.29	3.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	100 W	100 W
PSB	7 W	7 W
PCK	35 W	35 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.10 kW	4.00 kW
Annual energy consumption Qhe	9474 kWh	11407 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level indoor	43 dB(A)	43 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	171 %	140 %
Prated	20.00 kW	20.00 kW

SCOP	4.47	3.70
Tbiv	-16 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	17.20 kW	16.10 kW
COP Tj = -7°C	4.56	3.62
Pdh Tj = +2°C	17.30 kW	16.50 kW
COP Tj = +2°C	4.58	3.89
Pdh Tj = +7°C	17.40 kW	16.80 kW
COP Tj = +7°C	4.52	4.12
Pdh Tj = 12°C	17.40 kW	17.00 kW
COP Tj = 12°C	4.06	4.22
Pdh Tj = Tbiv	17.00 kW	16.10 kW
COP Tj = Tbiv	4.45	3.37
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.90 kW	16.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.29	3.08
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.97	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	100 W	100 W
PSB	7 W	7 W
PCK	35 W	35 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.10 kW	4.00 kW
Annual energy consumption Qhe	11047 kWh	13300 kWh