

Subtype F1345-30

Certificate Holder	Nibe AB
Address	Box 14
ZIP	S-28521
City	Markaryd
Country	SE
Certification Body	RISE CERT
Subtype title	F1345-30
Registration number	012-051
Heat Pump Type	Brine/Water
Refrigerant	R407c
Mass of Refrigerant	4 kg
Certification Date	15.06.2017
Testing laboratory	Austrian Institute of Technology (AIT)

Model F1345-30

Model name	F1345-30
Application	Heating (medium temp)
Units	Indoor
Climate zone (for heating)	Colder Climate
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	No

Brine/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
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EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	30.72 kW	29.40 kW
El input	6.92 kW	10.20 kW
COP	4.44	2.90

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	178 %	137 %
Prated	35.00 kW	35.00 kW
SCOP	4.65	3.63
Tbiv	-7 °C	-6 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	30.80 kW	29.50 kW
COP Tj = -7°C	4.51	3.15
Pdh Tj = +2°C	30.90 kW	30.20 kW
COP Tj = +2°C	4.69	3.64
Pdh Tj = +7°C	15.60 kW	15.30 kW
COP Tj = +7°C	5.02	4.09
Pdh Tj = 12°C	15.60 kW	15.40 kW
COP Tj = 12°C	5.01	4.40
Pdh Tj = Tbiv	30.80 kW	29.60 kW
COP Tj = Tbiv	4.51	3.23

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	30.80 kW	29.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	80 W	80 W
PSB	7 W	7 W
PCK	70 W	70 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.20 kW	5.70 kW
Annual energy consumption Qhe	15539 kWh	19880 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	186 %	144 %
Prated	35.00 kW	35.00 kW
SCOP	4.85	3.80
Tbiv	-18 °C	-16 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	31.00 kW	30.10 kW
COP Tj = -7°C	4.75	3.55
Cdh Tj = -7 °C		
Pdh Tj = +2°C	15.60 kW	15.30 kW
COP Tj = +2°C	5.06	4.04
Cdh Tj = +2 °C		
Pdh Tj = +7°C	15.60 kW	15.40 kW
COP Tj = +7°C	5.14	4.39
Cdh Tj = +7 °C		
Pdh Tj = 12°C	15.60 kW	15.50 kW
COP Tj = 12°C	4.86	4.55
Cdh Tj = +12 °C		
Pdh Tj = Tbiv	30.80 kW	29.60 kW
COP Tj = Tbiv	4.55	3.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	30.80 kW	29.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.38	2.99
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	0.990

WTOL	65 °C	65 °C
Poff	2 W	2 W
PTO	60 W	60 W
PSB	7 W	7 W
PCK	70 W	70 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.20 kW	5.70 kW
Annual energy consumption Qhe	17817 kWh	22770 kWh