Subtype F1355-43

Certificate Holder	Nibe AB
Address	Box 14
ZIP	S-28521
City	Markaryd
Country	SE
Certification Body	RISE CERT
Subtype title	F1355-43
Registration number	012-C700002
Heat Pump Type	Brine/Water and Water/Water
Refrigerant	Other
Mass of Refrigerant	3.8 kg
Certification Date	12.02.2020
Testing basis	HP Keymark Scheme Rules rev 7

Model F1355-43

Model name	F1355-43
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
Defrost test	passed
Starting and operating test	passed

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	0 dB(A)	0 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	192 %	152 %
Prated	45.00 kW	42.00 kW
SCOP	5.00	4.00
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	39.50 kW	36.50 kW
COP Tj = -7°C	4.24	3.13
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	26.43 kW	26.59 kW
COP Tj = +2°C	4.82	3.87
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	15.39 kW	13.32 kW
COP Tj = +7°C	5.61	4.66
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	7.81 kW	7.78 kW
COP Tj = 12°C	6.51	5.41
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	42.90 kW	40.11 kW
COP Tj = Tbiv	4.02	2.83

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	42.90 kW	40.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.02	2.83
WTOL	65 °C	65 °C
Poff	8 W	8 W
PTO	0 W	0 W
PSB	18 W	18 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	18588 kWh	21700 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	0 dB(A)	0 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	203 %	158 %
Prated	45.00 kW	42.00 kW
SCOP	5.30	4.10
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	27.15 kW	25.15 kW
COP Tj = -7°C	4.93	3.68
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	16.45 kW	15.47 kW
COP Tj = +2°C	5.54	4.50
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	10.89 kW	9.95 kW
COP Tj = +7°C	6.28	5.36
Cdh Tj = +7 °C	1.00	1.00
Pdh Tj = 12°C	7.77 kW	7.74 kW
COP Tj = 12°C	6.22	5.40
Cdh Tj = +12 °C	1.00	1.00
Pdh Tj = Tbiv	42.87 kW	40.11 kW
COP Tj = Tbiv	4.02	2.83
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	42.87 kW	40.11 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.02	2.83
WTOL	65 °C	65 °C
Poff	8 W	8 W
PTO	0 W	0 W

PSB	18 W	18 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	21023 kWh	24990 kWh

Water/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	0 dB(A)	0 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	244 %	194 %
Prated	58.00 kW	52.00 kW
SCOP	6.30	5.05
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	51.30 kW	46.00 kW
COP Tj = -7°C	5.20	3.65
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	33.97 kW	27.75 kW
COP Tj = +2°C	6.13	4.90
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	20.10 kW	18.00 kW
COP Tj = +7°C	7.30	6.34
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	9.00 kW	8.00 kW
COP Tj = 12°C	7.50	6.34
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	57.80 kW	51.93 kW
COP Tj = Tbiv	5.04	3.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	57.80 kW	51.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.04	3.53
WTOL	65 °C	65 °C
Poff	8 W	8 W

PTO	30 W	20 W
PSB	18 W	18 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	19008 kWh	21282 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	47 dB(A)	47 dB(A)
Sound power level outdoor	0 dB(A)	0 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	252 %	204 %
Prated	58.00 kW	52.00 kW
SCOP	6.50	5.29
Tbiv	-22 °C	-22 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	35.10 kW	31.50 kW
COP Tj = -7°C	6.13	4.50
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	21.50 kW	19.20 kW
COP Tj = +2°C	7.00	6.20
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	13.80 kW	12.50 kW
COP Tj = +7°C	7.00	6.20
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	9.00 kW	8.00 kW
COP Tj = 12°C	7.00	6.20
Cdh Tj = +12 °C	0.98	0.99
Pdh Tj = Tbiv	57.79 kW	51.90 kW
COP Tj = Tbiv	5.04	3.53
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	57.79 kW	51.90 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	5.04	3.53
WTOL	65 °C	65 °C
Poff	8 W	8 W
PTO	30 W	20 W
PSB	18 W	18 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	21986 kWh	24241 kWh