Subtype ecoAIR 1-9 PRO	
Certificate Holder	Ecoforest Geotermia S.L.
Address	Rúa das Pontes, 25
ZIP	36350
City	Nigrán (Pontevedra)
Country	ES
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	ecoAIR 1-9 PRO
Registration number	011-1W0469
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	0.85 kg
Certification Date	03.06.2021
Testing basis	HP KEYMARK certification scheme rules rev. 8

Model ecoAIR 1-9 PRO	
Model name	ecoAIR 1-9 PRO
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/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 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.20 kW	4.10 kW
El input	0.84 kW	1.30 kW
COP	4.98	3.15

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	179 %	142 %
Prated	5.00 kW	5.00 kW
SCOP	4.56	3.63
Tbiv	-10 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.32 kW	4.40 kW
COP Tj = -7°C	3.27	2.35
Cdh Tj = -7 °C	0.990	1.000
Pdh Tj = +2°C	3.18 kW	3.41 kW
COP Tj = +2°C	4.49	3.58
Cdh Tj = +2 °C	0.990	0.990

Pdh Tj = +7°C	4.07 kW	3.85 kW
COP Tj = +7°C	5.87	4.81
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	5.11 kW	4.79 kW
COP Tj = 12°C	6.96	6.11
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	5.03 kW	4.40 kW
COP Tj = Tbiv	2.50	2.35
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.03 kW	4.52 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.50	2.19
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	9 W	9 W
PSB	8 W	8 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.48 kW
Annual energy consumption Qhe	2265 kWh	2844 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	146 %	125 %
Prated	4.50 kW	4.50 kW
SCOP	3.73	3.20
Tbiv	-15 °C	-15 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	2.75 kW	2.48 kW
COP Tj = -7°C	3.80	2.88
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	3.12 kW	3.42 kW
COP Tj = +2°C	4.80	4.07
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = +7°C	4.18 kW	4.06 kW
COP Tj = +7°C	6.13	5.26
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	2.26 kW	4.81 kW
COP Tj = 12°C	5.29	6.38

Cdh Tj = +12 °C	0.980	0.990
Pdh Tj = Tbiv	3.64 kW	3.71 kW
COP Tj = Tbiv	2.40	2.24
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.64 kW	3.71 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.40	2.24
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.990	0.990
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	9 W	9 W
PSB	8 W	8 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	4.50 kW	4.50 kW
Annual energy consumption Qhe	2975 kWh	3472 kWh
Pdh Tj = -15°C (if TOL	3.64	3.71
COP Tj = -15°C (if TOL	2.92	2.24
Cdh Tj = -15 °C	0.990	0.990

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	0 dB(A)	0 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	215 %	171 %
Prated	6.50 kW	6.00 kW
SCOP	5.46	4.35
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.47 kW	5.96 kW
COP Tj = +2°C	2.82	2.49
Cdh Tj = +2 °C	1.000	1.000
Pdh Tj = +7°C	4.12 kW	3.92 kW
COP Tj = +7°C	5.38	3.88
Cdh Tj = +7 °C	0.990	0.990
Pdh Tj = 12°C	4.92 kW	4.59 kW
COP Tj = 12°C	6.66	5.67
Cdh Tj = +12 °C	0.990	0.990
Pdh Tj = Tbiv	6.47 kW	5.96 kW
COP Tj = Tbiv	2.82	2.49
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.47 kW	5.96 kW

COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.82	2.49
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	1.000	1.000
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	9 W	9 W
PSB	8 W	8 W
PCK	9 W	9 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1591 kWh	1844 kWh