This information was generated by the HP KEYMARK database on 17 Dec 2020

Summary of	ecoAIR 1-7 PRO	Reg. No.	011-1W0427
Certificate Holder			
Name	Ecoforest Geotermia S.L.		
Address	Rúa das Pontes, 25	Zip	36350
City	Nigrán (Pontevedra)	Country	Spain
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH		
Name of testing laboratory	Danish Technological Institute (DTI)		
Subtype title	ecoAIR 1-7 PRO		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R290		
Mass Of Refrigerant	0.75 kg		
Certification Date	17.11.2020		
Testing basis	HP KEYMARK certification scheme rules rev. 7		

Model: ECOAIR 1-7 PRO

General Data	
Power supply	1x230V 50Hz

Average Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	175 %	135 %
Prated	4.10 kW	4.00 kW
SCOP	4.45	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	3.69 kW	3.47 kW
COP Tj = -7°C	2.96	2.21
Cdh	0.99	0.99
Pdh Tj = +2°C	2.26 kW	2.18 kW
COP Tj = +2°C	4.63	3.46
Cdh	0.98	0.99

Pdh Tj = +7°C	1.50 kW	1.37 kW
COP Tj = +7°C	5.61	4.46
Cdh	0.97	0.97
Pdh Tj = 12°C	1.34 kW	1.45 kW
COP Tj = 12°C	5.79	5.57
Cdh	0.96	0.96
Pdh Tj = Tbiv	3.69 kW	3.47 kW
COP Tj = Tbiv	2.96	2.21
Pdh Tj = TOL	3.63 kW	3.34 kW
COP Tj = TOL	2.83	2.07
WTOL	75 °C	75 °C
Poff	0 W	0 W
PTO	10 W	10 W
PSB	8 W	8 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.47 kW	0.66 kW
Annual energy consumption Qhe	1902 kWh	2396 kWh

Heating

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2		
	Low temperature	**Medium temperature**
Heat output	3.30 kW	2.80 kW
El input	0.64 kW	0.85 kW
COP	5.20	3.30
Indoor water flow rate	0.53 m³/h	0.27 m³/h

Warmer Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	202 %	159 %

Prated	4.00 kW	3.60 kW
SCOP	5.11	4.04
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	4.02 kW	3.63 kW
COP Tj = +2°C	3.00	2.11
Cdh	0.99	0.99
Pdh Tj = +7°C	2.54 kW	2.41 kW
COP Tj = +7°C	6.15	3.79
Cdh	0.98	0.99
Pdh Tj = 12°C	1.23 kW	1.51 kW
COP Tj = 12°C	5.26	5.26
Cdh	0.96	0.97
Pdh Tj = Tbiv	4.02 kW	3.63 kW
COP Tj = Tbiv	3.00	2.11
Pdh Tj = TOL	4.02 kW	3.63 kW
COP Tj = TOL	3.00	2.11
WTOL	75 °C	75 °C
Poff	0 W	0 W
PTO	10 W	10 W
PSB	8 W	8 W

PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	1045 kWh	1191 kWh

Colder Climate

EN 12102-1		
	Low temperature	**Medium temperature**
Sound power level outdoor	55 dB(A)	55 dB(A)

EN 14825		
	Low temperature	**Medium temperature**
η_s	146 %	120 %
Prated	4.50 kW	4.30 kW
SCOP	3.72	3.07
Tbiv	-12 °C	-12 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	2.73 kW	2.64 kW
COP Tj = -7°C	3.69	2.79
Cdh	0.99	0.99
Pdh Tj = +2°C	1.64 kW	1.57 kW

COP Tj = +2°C	4.95	3.87
Cdh	0.97	0.98
Pdh Tj = +7°C	1.10 kW	1.27 kW
COP Tj = +7°C	4.73	4.64
Cdh	0.96	0.96
Pdh Tj = 12°C	1.25 kW	1.20 kW
COP Tj = 12°C	5.47	5.02
Cdh	0.96	0.96
Pdh Tj = Tbiv	3.29 kW	3.07 kW
COP Tj = Tbiv	3.17	2.47
Pdh Tj = TOL	3.32 kW	3.09 kW
COP Tj = TOL	3.09	2.40
WTOL	75 °C	75 °C
Poff	0 W	0 W
PTO	10 W	10 W
PSB	8 W	8 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.32 kW	1.32 kW
Annual energy consumption Qhe	2983 kWh	3458 kWh
Pdh Tj = -15°C (if TOL<-20°C)	3.32	3.09

COP Tj = -15°C (if TOL<-20°C)	3.09	2.40
Cdh	1.00	0.99