

This information was generated by the HP KEYMARK database on 16 May 2022

[Login](#)

Summary of	ecoAIR 3-12 PRO	Reg. No.	011-1W0428
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		
Subtype title	ecoAIR 3-12 PRO		
Heat Pump Type	Outdoor Air/Water		
Refrigerant	R290		
Mass of Refrigerant	0.85 kg		
Certification Date	17.11.2020		
Testing basis	HP KEYMARK certification scheme rules rev. 7		

## Model: ECOAIR T 3-12 PRO

Configure model	
Model name	ECOAIR T 3-12 PRO
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	3x400V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.30 kW	4.60 kW
El input	1.11 kW	1.60 kW
COP	4.80	2.90

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

### Warmer Climate

This information was generated by the HP KEYMARK database on 16 May 2022

### EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	57 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	175 %	150 %
Prated	6.30 kW	6.10 kW
SCOP	4.45	3.82
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.32 kW	6.13 kW
COP Tj = +2°C	2.62	1.90
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	5.34	3.80
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.57 kW	2.61 kW
COP Tj = 12°C	4.41	4.51
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.32 kW	6.13 kW

This information was generated by the HP KEYMARK database on 16 May 2022

COP $T_j = T_{biv}$	2.62	1.90
P <sub>dh</sub> $T_j = TOL$ or P <sub>dh</sub> $T_j = T_{designh}$ if $TOL < T_{designh}$	6.32 kW	6.13 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.62	1.90
WTOL	70 °C	70 °C
P <sub>off</sub>	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 Q <sub>he</sub>	1890 kWh	2133 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level outdoor	57 dB(A)	57 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	136 %	113 %
Prated	6.60 kW	6.60 kW

This information was generated by the HP KEYMARK database on 16 May 2022

SCOP	3.47	2.89
Tbiv	-12 °C	-12 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	4.06 kW	4.05 kW
COP Tj = -7°C	3.52	2.55
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.47 kW	2.41 kW
COP Tj = +2°C	4.48	3.70
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.32 kW	2.32 kW
COP Tj = +7°C	4.50	4.46
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.54 kW	2.57 kW
COP Tj = 12°C	4.28	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	4.86 kW	4.86 kW
COP Tj = Tbiv	2.74	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.04 kW	4.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	70 °C	70 °C

This information was generated by the HP KEYMARK database on 16 May 2022

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	6.60 kW	6.60 kW
Annual energy consumption Qhe	4692 kWh	5628 kWh
Pdh Tj = -15°C (if TOL<-20°C)	5.04	4.98
COP Tj = -15°C (if TOL<-20°C)	2.64	2.04
Cdh Tj = -15 °C	1.000	1.000

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level outdoor	57 dB(A)	57 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	154 %	125 %
Prated	6.50 kW	6.50 kW
SCOP	3.93	3.21

This information was generated by the HP KEYMARK database on 16 May 2022

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.76 kW	5.76 kW
COP Tj = -7°C	2.72	2.02
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.55 kW	3.56 kW
COP Tj = +2°C	4.25	3.20
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.31 kW	2.31 kW
COP Tj = +7°C	4.53	4.24
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.52 kW	2.56 kW
COP Tj = 12°C	4.26	4.50
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	5.76 kW	5.76 kW
COP Tj = Tbiv	2.72	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.68 kW	5.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.90
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	10 W	10 W

This information was generated by the HP KEYMARK database on 16 May 2022

PSB	8 W	8 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.82 kW	0.85 kW
Annual energy consumption Q <sub>he</sub>	3418 kWh	41900 kWh



## Model: ECOAIR 3-12 PRO

Configure model	
Model name	ECOAIR 3-12 PRO
Application	Heating (medium temp)
Units	Outdoor
Climate Zone	Colder Climate + Warmer Climate
Reversibility	Yes
Cooling mode application (optional)	n/a

General Data	
Power supply	1x230V 50Hz

### Heating

EN 14511-2		
	Low temperature	Medium temperature
Heat output	5.30 kW	4.60 kW
El input	1.11 kW	1.60 kW
COP	4.80	2.90

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

### Warmer Climate

This information was generated by the HP KEYMARK database on 16 May 2022

### EN 12102-1

	Low temperature	Medium temperature
Sound power level outdoor	57 dB(A)	57 dB(A)

### EN 14825

	Low temperature	Medium temperature
$\eta_s$	175 %	150 %
Prated	6.30 kW	6.10 kW
SCOP	4.45	3.82
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	6.32 kW	6.13 kW
COP Tj = +2°C	2.62	1.90
Cdh Tj = +2 °C	1.00	1.00
Pdh Tj = +7°C	4.37 kW	4.03 kW
COP Tj = +7°C	5.34	3.80
Cdh Tj = +7 °C	0.99	0.99
Pdh Tj = 12°C	2.57 kW	2.61 kW
COP Tj = 12°C	4.41	4.51
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	6.32 kW	6.13 kW

This information was generated by the HP KEYMARK database on 16 May 2022

COP $T_j = T_{biv}$	2.62	1.90
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.32 kW	6.13 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.62	1.90
WTOL	70 °C	70 °C
P <sub>off</sub>	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 Q <sub>he</sub>	1890 kWh	2133 kWh

## Colder Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level outdoor	57 dB(A)	57 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	136 %	113 %
Prated	6.60 kW	6.60 kW

This information was generated by the HP KEYMARK database on 16 May 2022

SCOP	3.47	2.89
Tbiv	-12 °C	-12 °C
TOL	-15 °C	-15 °C
Pdh Tj = -7°C	4.06 kW	4.05 kW
COP Tj = -7°C	3.52	2.55
Cdh Tj = -7 °C	0.990	0.990
Pdh Tj = +2°C	2.47 kW	2.41 kW
COP Tj = +2°C	4.48	3.70
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	2.32 kW	2.32 kW
COP Tj = +7°C	4.50	4.46
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.54 kW	2.57 kW
COP Tj = 12°C	4.28	4.48
Cdh Tj = +12 °C	0.980	0.980
Pdh Tj = Tbiv	4.86 kW	4.86 kW
COP Tj = Tbiv	2.74	2.09
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.04 kW	4.98 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.64	2.04
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	70 °C	70 °C

This information was generated by the HP KEYMARK database on 16 May 2022

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	6.60 kW	6.60 kW
Annual energy consumption Q <sub>he</sub>	4692 kWh	5628 kWh
P <sub>dh</sub> T <sub>j</sub> = -15°C (if TOL<-20°C)	5.04	4.98
COP T <sub>j</sub> = -15°C (if TOL<-20°C)	2.64	2.04
C <sub>dh</sub> T <sub>j</sub> = -15 °C	1.000	1.000

## Average Climate

<b>EN 12102-1</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
Sound power level outdoor	57 dB(A)	57 dB(A)

<b>EN 14825</b>		
	<b>Low temperature</b>	<b>Medium temperature</b>
$\eta_s$	154 %	125 %
Prated	6.50 kW	6.50 kW
SCOP	3.93	3.21

This information was generated by the HP KEYMARK database on 16 May 2022

Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.76 kW	5.76 kW
COP Tj = -7°C	2.72	2.02
Cdh Tj = -7 °C	1.00	1.00
Pdh Tj = +2°C	3.55 kW	3.56 kW
COP Tj = +2°C	4.25	3.20
Cdh Tj = +2 °C	0.99	0.99
Pdh Tj = +7°C	2.31 kW	2.31 kW
COP Tj = +7°C	4.53	4.24
Cdh Tj = +7 °C	0.98	0.98
Pdh Tj = 12°C	2.52 kW	2.31 kW
COP Tj = 12°C	4.26	4.24
Cdh Tj = +12 °C	0.98	0.98
Pdh Tj = Tbiv	5.76 kW	5.76 kW
COP Tj = Tbiv	2.72	2.02
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.68 kW	5.65 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.58	1.90
WTOL	70 °C	70 °C
Poff	0 W	0 W
PTO	10 W	10 W

This information was generated by the HP KEYMARK database on 16 May 2022

PSB	8 W	8 W
PCK	10 W	10 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.82 kW	0.85 kW
Annual energy consumption Qhe	3418 kWh	41900 kWh