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Summary of	ecoAIR 3-12 PRO	Reg. No.	011-1W0428	
Certificate Holder		<u> </u>		
Name	Ecoforest Geotermia S.L.	Ecoforest Geotermia S.L.		
Address	Rúa das Pontes, 25	Zip	36350	
City	Nigrán (Pontevedra)	Country	Spain	
Certification Body	DIN CERTCO Gesellschaft für	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		

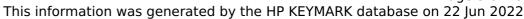
General Data		
Power supply	3x400V 50Hz	

Heating

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





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

EN 14825		
	Low temperature	Medium temperature
η_{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

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COP Tj = Tbiv	2.62	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.32 kW	6.13 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.62	1.90
WTOL	70 °C	70 °C
Poff	0 W	0 W
РТО	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	1890 kWh	2133 kWh

Colder Climate

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

EN 14825		
Low temperature	Medium temperature	
136 %	113 %	
6.60 kW	6.60 kW	
	Low temperature	





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
$COPTj = -7^{\circ}C$	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 = $+7^{\circ}$ C	2.32 kW	2.32 kW
$COPTj = +7^{\circ}C$	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





Poff	o 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

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

	EN 14825		
Low temperature	Medium temperature		
154 %	125 %		
6.50 kW	6.50 kW		
3.93	3.21		
	154 % 6.50 kW		





This information was gener	ated by the Hi KETMA	NK database on 22 Juli 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	1.000	1.000
Pdh Tj = +2°C	3.55 kW	3.56 kW
COP Tj = +2°C	4.25	3.20
Cdh Tj = +2 °C	0.990	0.990
Pdh Tj = $+7^{\circ}$ C	2.31 kW	2.31 kW
$COP Tj = +7^{\circ}C$	4.53	4.24
Cdh Tj = +7 °C	0.980	0.980
Pdh Tj = 12°C	2.52 kW	2.56 kW
COP Tj = 12°C	4.26	4.50
Cdh Tj = +12 °C	0.980	0.980
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
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh		
WTOL	70 °C	70 °C
Poff	0 W	o w
	-	



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РТО	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	0.82 kW	0.85 kW
Annual energy consumption Qhe	3418 kWh	4190 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

COP

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

2.90

EN 14511-4	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
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Warmer Climate

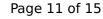
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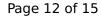


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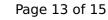
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