Subtype ecoAIR+ 6-24 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+ 6-24 PRO
Registration number	011-1W0921
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.75 kg
Certification Date	21.10.2024
Testing basis	European KEYMARK Scheme for Heat Pumps V.14 (2024-04)

Model ecoAIR+ 400 6-24 PRO	
Model name	ecoAIR+ 400 6-24 PRO
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 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	26.50 kW	19.00 kW
El input	6.50 kW	6.20 kW
COP	4.01	3.01

EN 12102-1 | Average Climate		
	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Average Climate		
	Low temperature	Medium temperature
ηs	180 %	136 %
Prated	20.00 kW	22.50 kW
SCOP	4.58	3.47
Tbiv	-5 °C	-3 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	16.24 kW	15.87 kW
COP Tj = -7°C	2.87	2.18
Cdh Tj = -7 °C	0.998	0.999
Pdh Tj = +2°C	10.83 kW	11.92 kW
COP Tj = +2°C	4.66	3.58
Cdh Tj = +2 °C	0.996	0.997
Pdh Tj = +7°C	12.28 kW	11.55 kW

COP Tj = +7°C	6.05	4.97
Cdh Tj = +7 °C	0.995	0.997
Pdh Tj = 12°C	12.80 kW	12.08 kW
COP Tj = 12°C	8.00	6.79
Cdh Tj = +12 °C	0.994	0.995
Pdh Tj = Tbiv	16.46 kW	16.32 kW
COP Tj = Tbiv	2.95	2.38
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	16.60 kW	16.15 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.74	2.06
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.998	0.999
WTOL	78 °C	78 °C
Poff	9 W	9 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.40 kW	6.35 kW
Annual energy consumption Qhe	9029 kWh	13401 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
ηs	155 %	128 %
Prated	20.00 kW	15.50 kW
SCOP	3.94	3.28
Tbiv	-13 °C	-17 °C
TOL	-17 °C	-17 °C
Pdh Tj = -7°C	11.82 kW	10.11 kW
COP Tj = -7°C	3.47	2.78
Cdh Tj = -7 °C	0.997	0.997
Pdh Tj = +2°C	10.46 kW	8.32 kW
COP Tj = +2°C	4.99	4.00
Cdh Tj = +2 °C	0.996	0.995
Pdh Tj = +7°C	11.67 kW	12.37 kW
COP Tj = +7°C	6.44	5.37
Cdh Tj = +7 °C	0.995	0.994
Pdh Tj = 12°C	12.80 kW	12.98 kW
COP Tj = 12°C	8.00	7.11
Cdh Tj = +12 °C	0.994	0.992
Pdh Tj = Tbiv	15.25 kW	13.21 kW

COP Tj = Tbiv	2.72	1.84
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	13.08 kW	13.21 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.47	1.84
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.998	0.999
WTOL	78 °C	78 °C
Poff	9 W	9 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	20.00 kW	15.50 kW
Annual energy consumption Qhe	12517 kWh	11660 kWh
Pdh Tj = -15°C (if TOL		
COP Tj = -15°C (if TOL		
Cdh Tj = -15 °C		

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
ηs	216 %	172 %
Prated	26.00 kW	24.00 kW
SCOP	5.47	4.38
Tbiv	7 °C	4 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	20.00 kW	19.00 kW
COP Tj = +2°C	3.13	2.42
Cdh Tj = +2 °C	0.999	0.999
Pdh Tj = +7°C	16.55 kW	15.48 kW
COP Tj = +7°C	5.25	3.82
Cdh Tj = +7 °C	0.997	0.998
Pdh Tj = 12°C	12.69 kW	14.70 kW
COP Tj = 12°C	7.55	5.80
Cdh Tj = +12 °C	0.995	0.996
Pdh Tj = Tbiv	16.55 kW	20.64 kW
COP Tj = Tbiv	5.25	2.62
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	20.00 kW	19.00 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.13	2.42

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.999	0.999
WTOL	78 °C	78 °C
Poff	9 W	9 W
PTO	8 W	8 W
PSB	8 W	8 W
PCK	W	W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	5.00 kW
Annual energy consumption Qhe	6352 kWh	7318 kWh

Model ecoAIR+ 400 6-24 PRO HTR	
Model name	ecoAIR+ 400 6-24 PRO HTR
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Colder, Warmer, Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	n/a
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

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	Low temperature	Medium temperature
Heat output	26.50 kW	19.00 kW
El input	6.50 kW	6.20 kW
COP	4.01	3.01

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COP Tj = +2°C	4.66	3.58
Cdh Tj = +2 °C	0.996	0.997
Pdh Tj = +7°C	12.28 kW	11.55 kW

COP Tj = +7°C	6.05	4.97
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Pdh Tj = 12°C	12.80 kW	12.08 kW
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COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.13	2.42

Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.999	0.999
WTOL	78 °C	78 °C
Poff	9 W	9 W
PTO	8 W	8 W
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Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	6.00 kW	5.00 kW
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