

# ecoAIR 3-12 PRO

R290

- Modulating thermal power control within a wide range (17-100%) and modulating flow rate control of the production circuit (20-100%).
- Natural refrigerant R290 : GWP 3.
- Inverter technology and scroll compressor.
- Compact design including the production circulation pump in the outdoor unit. Hydraulic connection within the outdoor unit and the indoor unit.
- Integrated management of up to 3 different emission temperatures, 2 buffer tanks (heating and cooling), 1 DHW tank, 1 pool and hourly control of DHW recirculation.
- Integrated management of simultaneous heating/cooling emission, according to scheme.
- Integrated management of external On/Off or modulating auxiliary systems, such as electrical heaters, On/Off boilers or modulating boilers.
- Integrated active cooling.
- Selection of the indoor unit depending on the installation needs.
- Single-phase and Three-phase versions available.
- Compatible with ecoSMART e-manager and ecoSMART e-system.
- Integrated energy meters to measure the electrical consumption, the heating/cooling thermal power, the COP and the monthly and annual SPF.

SPECIFICATIONS ecoAIR 3-12 PRO		UNITS	
APPLICATION	Place of installation	-	Outdoors
	Type of brine system <sup>1</sup>	-	Air source
	DHW, Heating and Pool	-	✓
	Integrated Active cooling	-	✓
PERFORMANCE	Modulation range of the compressor	%	17 to 100
	Heating power output <sup>2, 10</sup> , A7W35	kW	3,0 to 11,0
	COP <sup>2, 10</sup> , A7W35	-	4,8
	Heating power output <sup>2, 10</sup> , A7W55	kW	3,0 to 10,0
	COP <sup>2, 10</sup> , A7W55	-	3,0
	Active cooling power output <sup>2, 10</sup> , A35W7	kW	1,8 to 9,0
	EER <sup>2, 10</sup> , A35W7	-	3,7
	Max. DHW temperature without / with support <sup>5</sup>	°C	70 / 80
	Noise power emission level <sup>6, 10</sup>	db	55
	Energy label / rjs / SCOP W35 average climate control	-	A+++ / 218% / 5,35
Energy label / rjs / SCOP W55 average climate control	-	A++ / -% / -	
OPERATION LIMITS	Distribution / Set heating outlet temperature range	°C	10 to 70 / 20 to 70
	Distribution / Set cooling outlet temperature range	°C	5 to 30 / 7 to 30
	Outdoor temperature range	°C	-22 to 50
	Minimum / Maximum refrigerant circuit pressure	bar	0,5 / 27,5
	Production circuit pressure	bar	0,5 to 3,0
WORKING FLUIDS	R290 Refrigerant load	kg	0,85
	Compressor oil type / load	kg	HXL4467 / 0,74
CONTROL ELECTRICAL DATA	1/N/PE 230 V / 50-60 Hz <sup>8</sup>	-	✓
	Maximum recommended external protection <sup>9</sup>	-	C5A
	Transformer primary circuit fuse	A	0,5
	Transformer secondary circuit fuse	A	2,5
ELECTRICAL DATA: SINGLE-PHASE	1/N/PE 230 V / 50-60 Hz <sup>8</sup>	-	✓
	Maximum recommended external protection <sup>9</sup>	-	C25A
	Maximum consumption <sup>2</sup> , B0W35	kW / A	2,8 / 13,8
	Consumo máximo <sup>2</sup> , B0W55	kW / A	3,5 / 17,7
	Maximum consumption <sup>2</sup> , B0W55	A	4,4 / 5,3
Correction of cosine Ø	-	0,93/1	
ELECTRICAL DATA: THREE-PHASE	3/N/PE 400 V / 50-60Hz <sup>8</sup>	-	✓
	Maximum recommended external protection <sup>9</sup>	-	C25A
	Maximum consumption <sup>2</sup> , B0W35	kW / A	2,8 / 4,6
	Consumo máximo <sup>2</sup> , B0W55	kW / A	3,5 / 5,9
	Maximum consumption <sup>2</sup> , B0W55	A	1,5 / 1,8
Correction of cosine Ø	-	0,93/1	
DIMENSIONS/WEIGHT	Height x width x depth	mm	970x1140x475
	Empty weight (without assembly)	kg	134

1. Outdoor air-to-water monoblock unit.  
 2. In compliance with EN 14511, this includes the consumption of the circulation pumps and the compressor driver.  
 3. Considering brine and production flow rates in compliance with EN 14511.

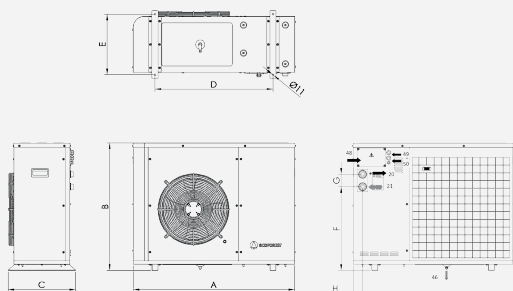
4. Considering a heat slope from 20°C to 50°C in absence of consumption.  
 5. Considering support provided by the emergency electrical heater or the HTR system. Maximum DHW temperature with the HTR system can be limited by the compressor discharge temperature.

6. In compliance with EN 12102, this includes the acoustic insulation kit of the compressor.  
 7. Starting current depends on the working conditions of the hydraulic circuits.  
 8. The admissible voltage range for proper operation of the heat pump is ±10%.

9. Maximum consumption can vary significantly according to working conditions, or if the compressor's operation range is restricted. Consult the technical service manual for more detailed information.  
 10. Certification in process.

## Dimensions and hydraulic connections

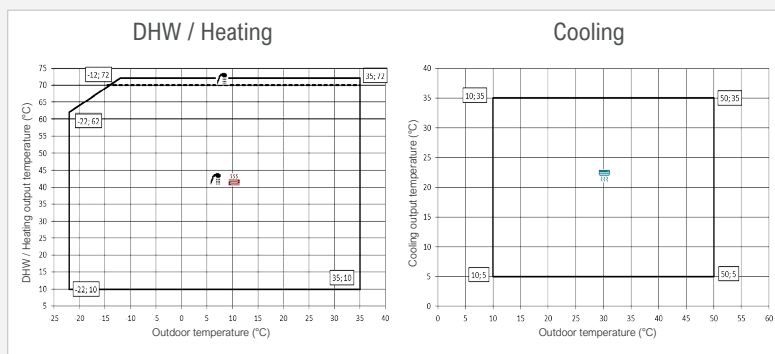
### Outdoor unit - ecoAIR



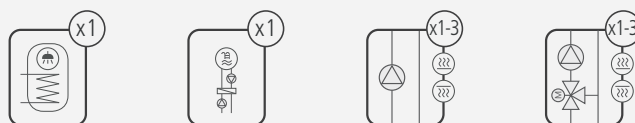
MODEL	DIMENSIONS (mm)							
	A	B	C	D	E	F	G	H
ecoAIR 3-12kW PRO	1140	971	475	800	430	684	80	53

- 20. Heating/Cooling Outlet - 1" M
- 21. Heating/Cooling Inlet - 1" M
- 46. Drain - 15 mm
- 48. Electrical connections box
- 49. Power supply wiring Inlet
- 50. Control wiring Inlet

## Operational chart



## Installation management



## Performance curves

