



Turn to the experts

AQUASNAP® 30AWH-P

For residential and light commercial applications

MONOBLOC AIR-TO-WATER HEAT PUMP

WITH R290 REFRIGERANT



MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

AQUASNAP 30AWH-P

THE NEW 30AWH-P MONOBLOC AIR-TO-WATER HEAT PUMPS WITH R290 NATURAL REFRIGERANT RESULT FROM A SUCCESSFUL COMBINATION OF INNOVATION AND SUSTAINABILITY FOR A HIGH COMFORT ALL YEAR ROUND.

Designed for heating and cooling applications, these heat pumps are suitable for both new housing and renovations, for residential and light commercial applications.

Delivering high performance, the 30AWH-P range is compatible with low to medium temperature emitters (underfloor heating, fan coil units, hydronic cassettes, radiators, mixed installations, etc.), and with high temperature emitters for renovation applications (boiler replacements).

The monobloc 30AWH-P heat pump is designed for outdoor installation in an open area. Each unit is produced and tested at our Carrier plants located in Europe and delivered ready for operation.



**ONE RANGE,
MANY APPLICATIONS**



Individual
Housing



Collective
Housing



Light
Commercial

MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

WHY CHOOSE AQUASNAP 30AWH-P?

BENEFITS FOR END USERS

**Environmentally sustainable**

R290 natural refrigerant helps protect the environment (GWP 3) and achieve phase-down requirements for greenhouse emissions, in residential and light commercial applications.

**Compact Design**

Compact footprint 0.41m² facilitates installation, even in small spaces (balconies for example).

**Silent operation**

With design optimization for low noise levels, the 30AWH-P is one of the quietest heat pumps available, with standard sound levels starting from 47dB(A), and a silent mode can be activated by the user.

**High LWT (Leaving Water Temperature)**

Reaching up to 75°C LWT, the 30AWH-P can supply more domestic hot water, that in addition can be stored at a higher temperature for anti-legionella protection.

**High energy efficiency**

SCOP up to 4,82
SEER up to 5,34
Energy class A+++ (35°C)
or A++ (55°C)

**Certified performance**

New 30AWH-P can satisfy local incentive requirements*.

BENEFITS FOR INSTALLERS

**Wide range**

The 30AWH-P range of reversible heat pumps comprises 6 single-phase models and 2 three-phase models, from 4 kW to 14 kW, to meet different requirements.

**Easy installation**

Optimized layout and structure for easy connection and easy access to components.

**Easy handling and transportation**

Due to compact dimensions and reduced weight, heat pump handling and transportation are easier.

**Safety**

Low refrigerant charge and the hermetically sealed coolant circuit help minimize the potential for leaks.

MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

INNOVATION AND SUSTAINABILITY

Carrier develops innovative products that help customers reduce greenhouse gas emissions and achieve their sustainability goals.

We understand the challenges of climate change and we are committed to providing customers with increasingly more holistic sustainability solutions. Our innovative products help customers meet their energy and carbon reduction goals, while we shift to [more renewable energy sources](#) through electrification and to [refrigerants with lower global warming potential](#).

By providing sustainable solutions, [we are advancing towards our goal of reducing our customers' carbon footprint by more than 1 gigaton by the year 2030](#). The deployment of Carrier heat pumps to reduce carbon emissions and energy consumption is just one example.



MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

R290 NATURAL REFRIGERANT

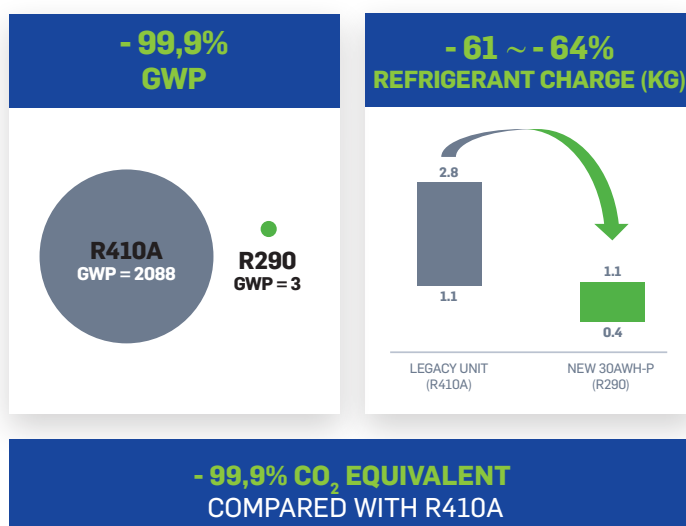


HELPING TO PROTECT THE ENVIRONMENT

For the innovative heat pump range AquaSnap 30AWH-P, Carrier has selected R290 natural refrigerant (Propane), featuring an extremely **low Global Warming Potential (GWP of 3)**.

With a **zero ozone depletion potential (ODP)** and a significantly lower refrigerant charge, compared with traditional refrigerants, R290 natural refrigerant represents an environmentally sustainable choice, reducing equivalent emissions of CO₂ by 99,9%.

All parts containing greenhouse gas are **hermetically sealed**, which helps to minimize the potential for leaks and does not require opening to make the system ready for operation.



ENERGY SAVINGS DUE TO INCREASED ENERGY EFFICIENCY

SCOP up to **4,82**

SEER up to **5,34**

AquaSnap 30AWH-P units **improve energy efficiency when compared with standard refrigerant** such as R410A. Due to this increased efficiency, the heat pump reduces the amount of energy needed for cooling and heating requirements.

DESIGNED AND MADE IN EUROPE



Each unit in the AquaSnap 30AWH-P range, **designed and manufactured in Europe** at our Carrier plants, is tested over several steps along the production line before packaging, for top level quality.

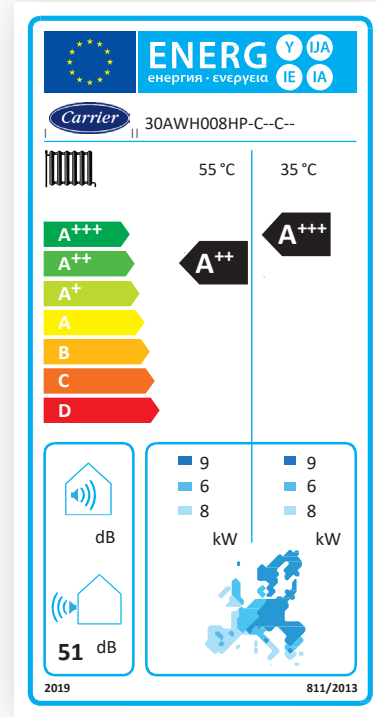
The proximity of our plants, where the new heat pumps are manufactured, to our primary markets also helps to further **reduce the carbon footprint**.



MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

AN ENERGY-VALUABLE SOLUTION

All sizes of the 30AWH-P range feature the **A+++ energy class for heating (OAT 7°C; LWT 35°C)** or **A++ (OAT 7°C; LWT 55°C)**, offering high heating power with low energy consumption.



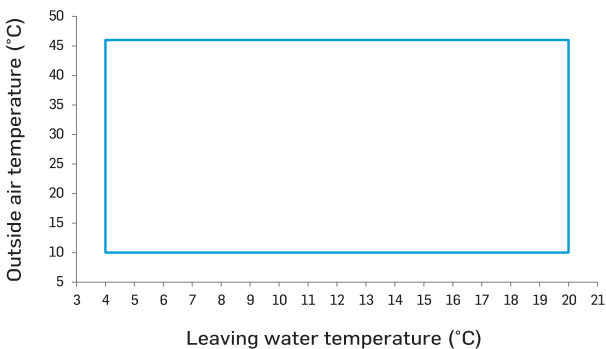
YEAR ROUND COMFORT

The AquaSnap 30AWH-P heat pump range can be used in a wide range of outdoor air temperatures, representing a sound solution for different climates.

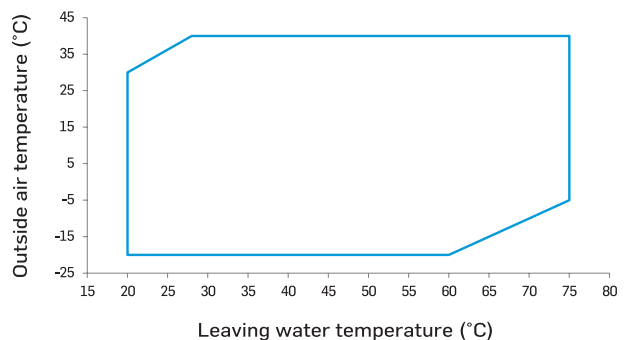
As the graphs below show, in heating mode it can operate at an **outdoor air temperature from -20°C**. In cooling mode, it operates at **up to +46°C**, whilst delivering water at a stable temperature for cooling, heating and domestic hot water (DHW) production.



COOLING MODE



HEATING AND DHW MODE



MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

EXTREMELY SILENT OPERATION

Carrier has carefully designed this innovative range to offer an extremely silent solution without compromising its high performance under all operational conditions.

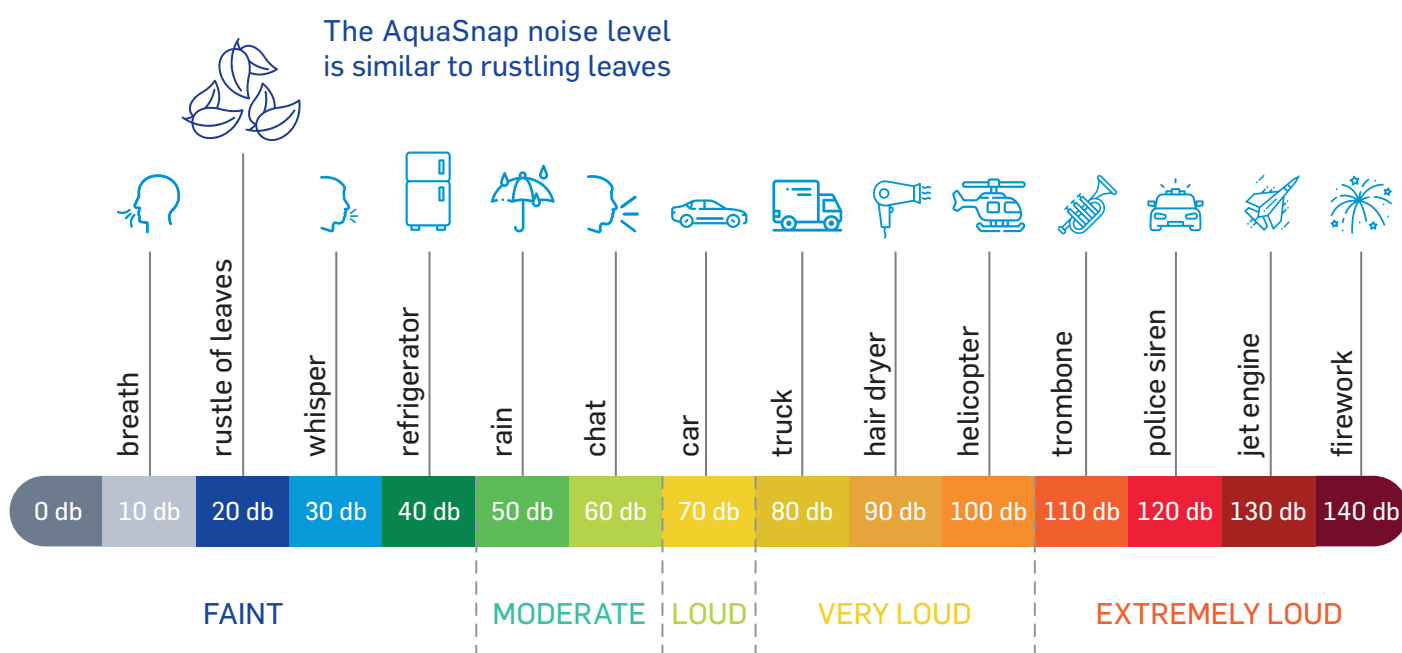
The 30AWH-P features **standard sound power level starting at 47 dB(A)**, and a silent mode that can be activated by user.



AS SILENT AS RUSTLING LEAVES

When running, from a distance of 5 m, the 30AWH-P is perceived as silent as leaves rustling. Thanks to the acoustic insulation on the metal panels around the hydraulic and refrigerant modules, the heat pump features a sound pressure level starting at just 24 dB(A)*.

*measured from a distance of 5 m (OAT +7° C, LWT +47/55° C), according to the EN 12102-1 European Standard.

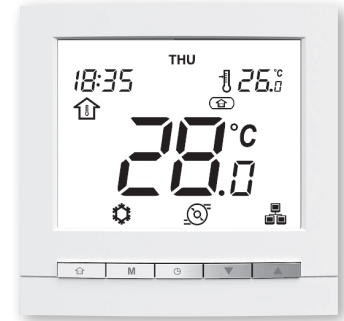


Noise level chart showing examples of sounds with dB levels ranging from 0 to 140 decibels.

MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

WUI MULTI-FUNCTION WIRED CONTROLLER

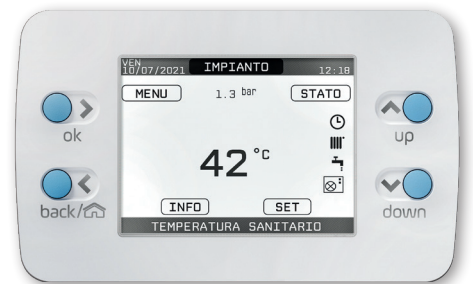
- Included inside the unit for immediate start-up and use of the unit
- Intuitive icons to help avoid language barriers
- Occupancy mode (Home, Sleep, Away)
- Easy temperature control to set either air temperature or water temperature depending on system configuration
- Weekly timer function
- Two levels of access: end-user and technician
- **Manages cascade system with up to 4 units**



REC10MHC SYSTEM MANAGER

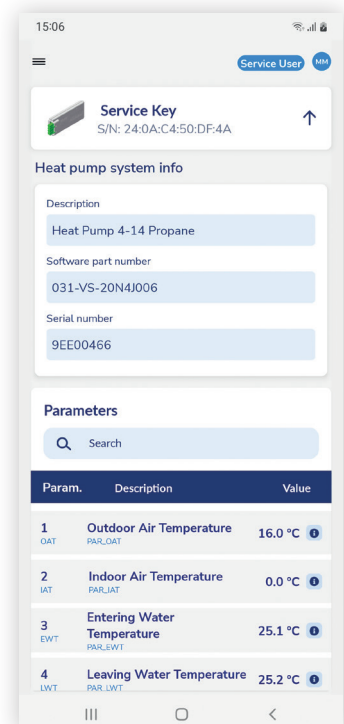
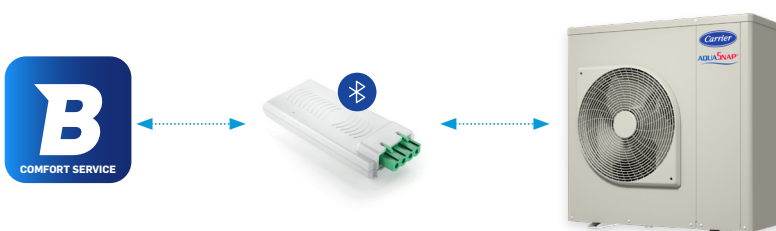
Designed for full-electric and hybrid applications, this module is installed inside the home and allows easy management of the whole system by the user.

For hybrid systems, the REC10MHC allows different energy sources to be managed intuitively and the operating temperature and time schedules to be set easily. When combined with a hybrid distribution module, the REC10MHC can control the operation of a multi-zone system.

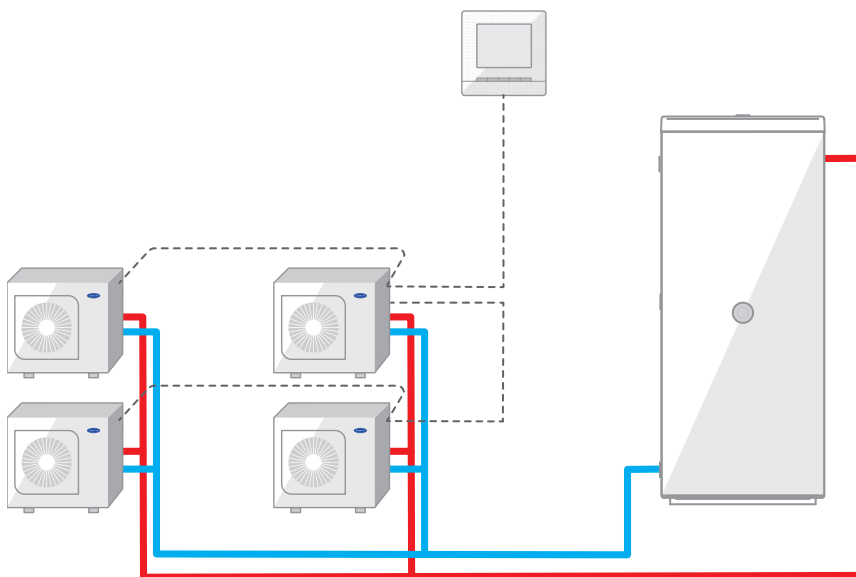


BluEdge™ COMFORT SERVICE APP

Service technicians can do commissioning, diagnostics and troubleshooting easily and intuitively using the BluEdge Comfort Service App, which is an additional benefit of the AquaSnap 30AWH-P.



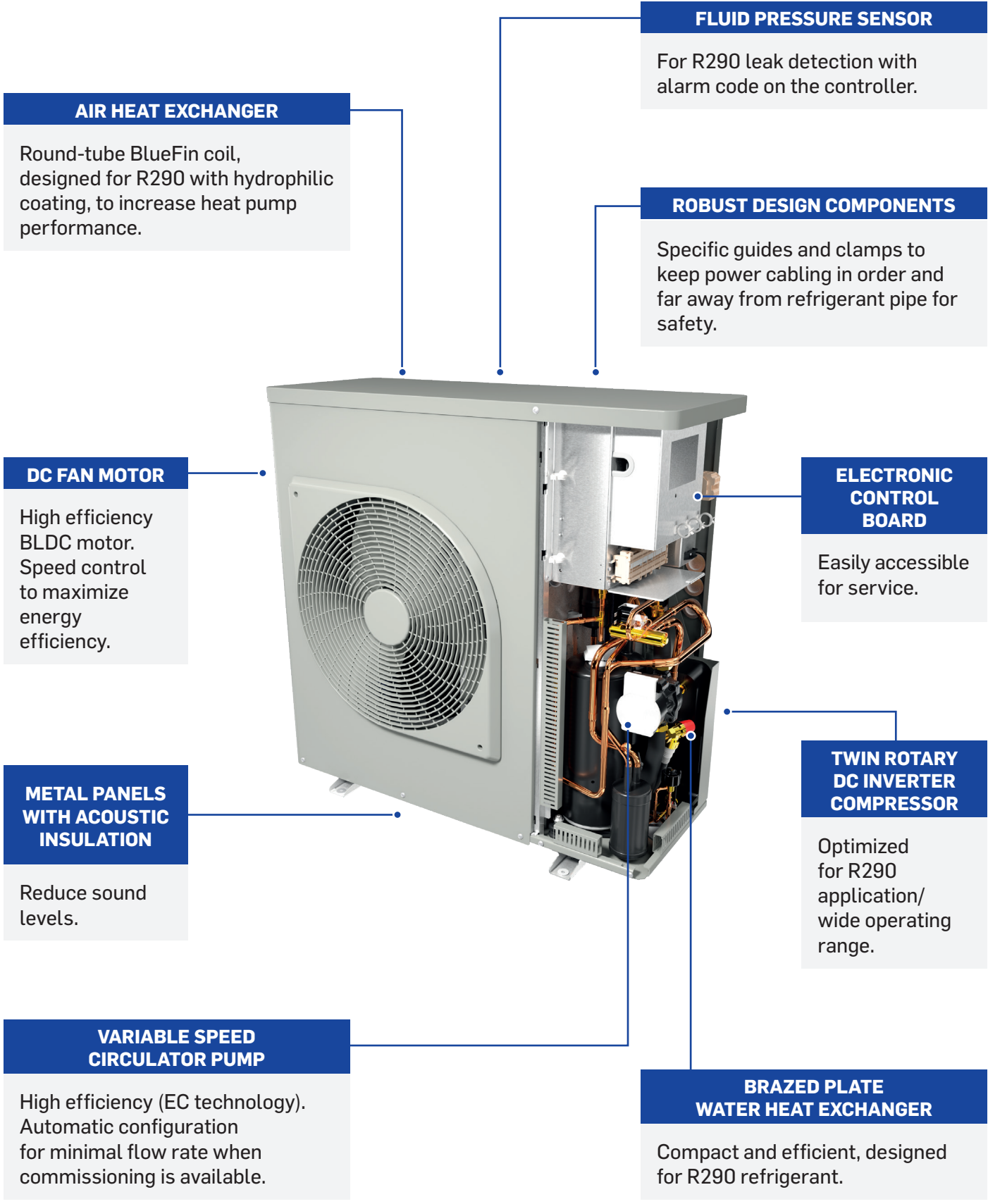
MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

**AQUASNAP 30AWH-P IN CASCADE**

AquaSnap 30AWH-P can be cascaded with up to 4 units for heating and cooling requirements in light commercial applications. Each of the units can individually meet the requirements of the space in which it is installed.

MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

KEY FEATURES



MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

IDEAL FOR RENOVATION AND NEW HOUSING

SPACE-SAVING AND LIGHTWEIGHT SOLUTION

Compact size and reduced weight are among the most distinguishing features of AquaSnap 30AWH-P on the market.

In particular, due to its **width of only 946 mm** and its **weight starting from just 78 kg**, AquaSnap 30AWH-P can also be installed in small spaces, even on a balcony!



COMPACT FOOTPRINT
OF ONLY 0,41 M²



LEAVING WATER TEMPERATURE UP TO 75°C

With a high leaving water temperature of up to 75°C, AquaSnap 30AWH-P is **suitable for the replacement of oil and gas boilers**.

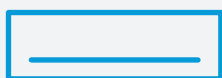
In addition, it can deliver more hot water and **helps to avoid the need for direct electric immersion to sterilize the water**, protecting from legionella.

DIFFERENT TERMINAL UNITS

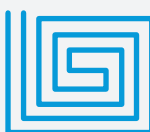
The range has been designed to deliver high performance, suitable for low to medium temperature emitters (floor heating, fan coil units, hydronic cassettes, radiators, mixed installations, etc.) up to high-temperature emitters for renovation applications (boiler replacement).

TERMINAL UNITS

Suitable for low, medium and high temperatures.



fan coils



floor heating

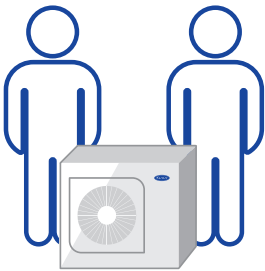



radiators

MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

EASY HANDLING AND TRANSPORTATION

Compact size and reduced weight, compared to most heat pumps in the same segment, translate into easier handling and transportation for the installer.



Weight starting from  78 kg

EASY INSTALLATION AND SERVICING

Optimized layout and structure for easy connection & easy access to components.

SAFETY

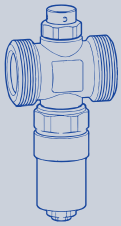
Low refrigerant charge and its hermetically sealed refrigerant circuit help minimize the potential for leaks. No need to open the refrigerant circuit to put the system into operation.

Robust component design helps to avoid any potential risks of refrigerant leaks.

Pressure sensor that detects any refrigerant leakage, whilst displaying the alarm code on the wired controller.



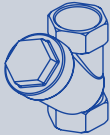
MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

ACCESSORIES TO MEET DIFFERENT NEEDS**ANTI-FREEZE VALVE**

Anti-freeze valve is designed to discharge the water preventing ice formation in the heat pump circuit due to unexpected electrical power outage

SENSOR

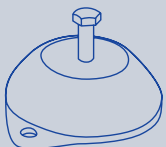
Outdoor ambient temperature sensor to better read the outdoor air temperature

Y SHAPE FILTER

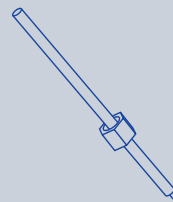
Y-water filter to trap any impurities in the water circuit which may damage the heat exchanger

CONNECTION CABLE FOR WIRED CONTROLLER

Standard cable enables the wired controller to be installed at different locations on the unit

ANTI-VIBRATION KIT

Anti-vibration kit installed under the unit to reduce transmission of vibrations

MANAGING/DEPENDENT SENSOR FOR CASCADE SYSTEM

Supplementary water outlet temperature sensor kit for managing/dependent operation of up to 4 units connected in cascade system

MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

TECHNICAL DATA

30AWH 04P-14P			004P (1Ph)	006P (1Ph)	008P (1Ph)	010P (1Ph)	012P (1Ph)	014P (1Ph)	012P (3Ph)	014P (3Ph)		
Heating												
Nominal performances ⁽¹⁾	HA1	Nominal capacity	kW	3,95	5,80	7,60	9,60	11,40	13,80	11,40	13,80	
		COP	kW/kW	4,90	4,80	4,80	4,35	4,55	4,30	4,65	4,40	
	HA2	Nominal capacity	kW	3,85	5,50	7,80	9,50	10,80	13,60	10,80	13,60	
		COP	kW/kW	3,65	3,65	3,75	3,55	3,65	3,40	3,75	3,50	
	HA3	Nominal capacity	kW	3,75	5,25	7,55	9,40	10,95	13,25	10,95	13,25	
		COP	kW/kW	2,95	2,95	3,15	2,95	3,10	2,90	3,15	2,95	
	Seasonal efficiency ⁽²⁾	HA1	SCOP	kWh/kWh	4,70	4,82	4,69	4,69	4,74	4,74	4,74	4,74
			η _σ heat	%	185	190	185	185	187	187	187	187
		HA1	P _{rated}	kW	4	5	6	6	9	9	9	9
Annual Energy consumption			KWh	1666	2092	2829	2829	4068	4068	4068	4068	
Energy class				A+++	A+++	A+++	A+++	A+++	A+++	A+++	A+++	
HA3		SCOP	kWh/kWh	3,34	3,34	3,34	3,34	3,35	3,35	3,35	3,35	
		η _σ heat	%	131	131	131	131	131	131	131	131	
		P _{rated}	kW	3	5	6	6	9	9	9	9	
HA3		Annual Energy consumption	KWh	2138	3010	3989	3989	5743	5743	5743	5743	
		Energy class		A++	A++	A++	A++	A++	A++	A++	A++	
Cooling												
Nominal performances ⁽¹⁾		CA1	Nominal capacity	kW	3,35	4,60	6,50	7,40	9,70	10,70	9,70	10,70
	EER		kW/kW	3,15	3,15	3,05	2,90	3,05	2,95	3,10	3,00	
	CA2	Nominal capacity	kW	4,00	6,15	8,00	8,90	12,00	14,50	12,00	14,50	
		EER	kW/kW	4,15	3,90	4,00	3,70	4,30	3,70	4,35	3,75	
Seasonal efficiency	SEER _{12/7 °C} Comfort low temp,		kWh/kWh	4,93	5,34	5,27	5,14	5,33	5,16	5,33	5,16	
	η _σ cool		%	194	211	208	203	210	203	210	203	
Sound levels												
Standard unit												
Sound power level, ErP C condition A7/W35 ⁽³⁾			dB(A)	47	48	49	49	52	52	52	52	
Sound pressure level, at 5 m ErP C condition A7/W35 ⁽⁴⁾			dB(A)	21,5	22,5	23,5	23,5	26	26	26	26	
Sound power level, ErP C condition A7/W55 ⁽³⁾			dB(A)	49	50	51	51	54	54	54	54	
Sound pressure level at 5 m, ErP C condition A7/W55 ⁽⁴⁾			dB(A)	23,5	24,5	25,5	25,5	28	28	28	28	
Dimensions												
Length			mm	946	946	946	946	946	946	946	946	
Width			mm	430	430	430	430	430	430	430	430	
Height			mm	927	927	927	927	1375	1375	1375	1375	
Operating weight ⁽⁵⁾												
Standard unit			kg	78	84	91	93	126	126	128	128	
Compressors			Rotary compressor	1	1	1	1	1	1	1	1	
Refrigerant							R290					
Charge ⁽⁵⁾			kg	0,39	0,58	0,76	0,76	1,07	1,07	1,07	1,07	

(1) In accordance with EN 14511-3:2022 standard

(2) In accordance with EN 14825:2022 standard. Average climate

C1 Cooling mode conditions : evaporator water entering/leaving temperature 12°C/7°C, outside air temperature 35°C, evaporator fouling factor 0m K/W

C2 Cooling mode conditions : evaporator water entering/leaving temperature 23°C/18°C, outside air temperature 35°C, evaporator fouling factor 0m K/W

H1 Heating mode conditions : Water heat exchanger water entering/leaving temperature 30°C/35°C, fouling factor 0m K/W. Outside air temperature 7°C db / 6°C wb

H2 Heating mode conditions : Water heat exchanger water entering/leaving temperature 40°C/45°C, fouling factor 0m K/W. Outside air temperature 7°C db / 6°C wb

H3 Heating mode conditions : Water heat exchanger water entering/leaving temperature 47°C/55°C, fouling factor 0m K/W. Outside air temperature 7°C db / 6°C wb

(3) In dB ref=10⁻¹² W, (A) weighting. Declared dualnumber noise emission values in accordance with EN 12102-1 (with an associated uncertainty of +/-2dB(A)).

as required by Ecodesign regulation and Eurovent certification. Measured in accordance with ISO 9614-1.

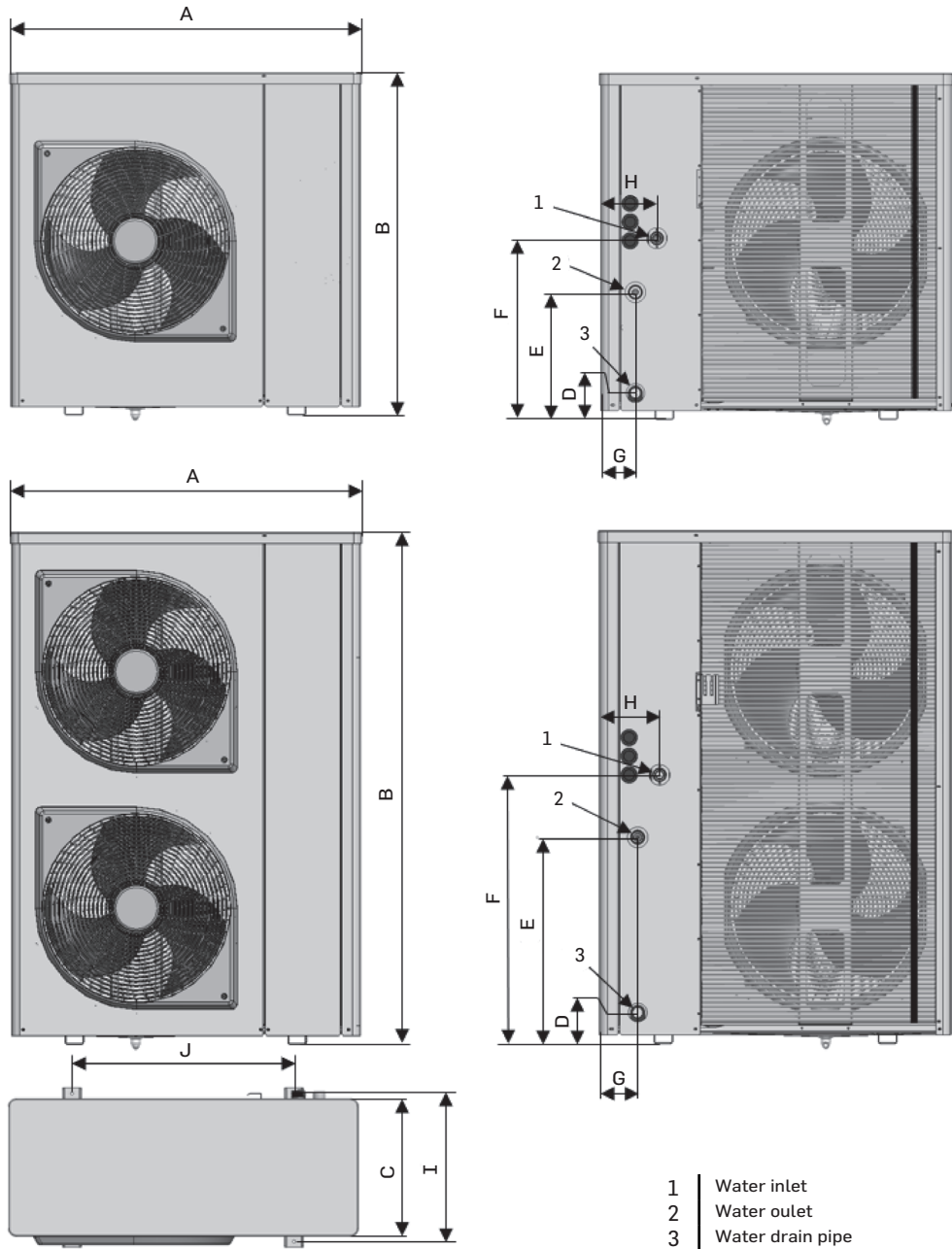
(4) In dB ref 20 μPa, (A) weighting. Declared dualnumber noise emission values in accordance with EN 12102-1 (with an associated uncertainty of +/-2dB(A)).

For information, calculated from the sound power level Lw(A).

(5) Values are guidelines only. Refer to the unit nameplate.

MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

DIMENSIONS



- 1 | Water inlet
- 2 | Water outlet
- 3 | Water drain pipe

30AWH-P	A	B	C	D	E	F	G	H	I	J
004	946	927	372	71	341	485	93	150	400	600
006	946	927	372	71	341	485	93	150	400	600
008	946	927	372	71	341	485	93	150	400	600
010	946	927	372	71	341	485	93	150	400	600
012	946	1375	372	83	553	720	102	160	400	600
014	946	1375	372	83	553	720	102	160	400	600

Note : Dimensions are given in mm



Turn to the experts

www.carrier.com

06/2023

B-RLC-026-BROCHURE 30AWHP R290

Carrier is committed to continuously improving its products to ensure the highest quality and reliability standards, and to meet local regulations and market requirements. All features and specifications are subject to change without prior notice.

©2023 Carrier. All Rights Reserved.

All trademarks and service marks referred herein are property of their respective owners.

Photo credit: Adobestock, Shutterstock, Freepik