



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 ENVIRONMENTAL STEWARDSHIP FOR A HIGH LEVEL OF 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



Natural refrigerant

R290 natural refrigerant helps to minimize environmental impact (GWP100 = 0,02*), in residential and light commercial applications.



Compact Design

Compact footprint facilitates installation, even in small spaces.



Low-noise operation

With design optimization for low noise levels, the 30AWH-P features quiet operation, with ErP rated sound power levels starting from 49dB(A), and a night 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.



Safety

Low refrigerant charge and the hermetically sealed coolant circuit help minimize the potential for leaks. In addition, an external gas separator installed on the leaving water pipe further prevents any potential gas leakage from being released into the house.



Easy handling and transportation

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



Easy installation

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

* According to Regulation (EU) 2024/573

** The energy efficiency class range of this product category is from A+++ and D

*** Depends on local market regulation

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

INNOVATION AND ENVIRONMENTAL STEWARDSHIP

Carrier develops innovative products with the goal to help our customers avoid more than 1 gigaton of greenhouse gas emissions by 2030.

We understand the challenges of climate change and we are committed to providing customers with increasingly more holistic energy and climate 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](#).

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

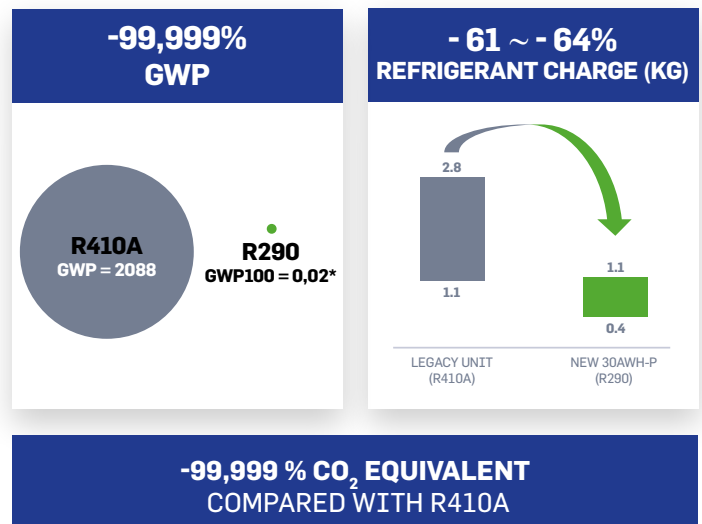


MINIMIZING ENVIRONMENTAL IMPACT

For the innovative heat pump range AquaSnap 30AWH-P, Carrier has selected R290 natural refrigerant (Propane), featuring an extremely **low Global Warming Potential** (GWP100 = 0,02).

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 99,999 %.

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



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.



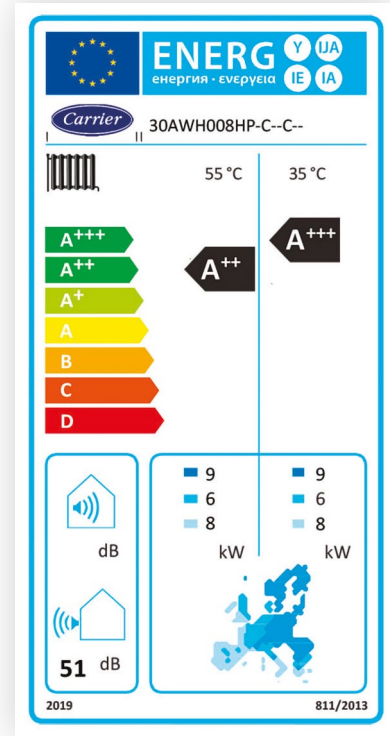
* According to Regulation (EU) 2024/573

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.

*The energy efficiency class range of this product category is from D up to A+++



LOW-NOISE OPERATION

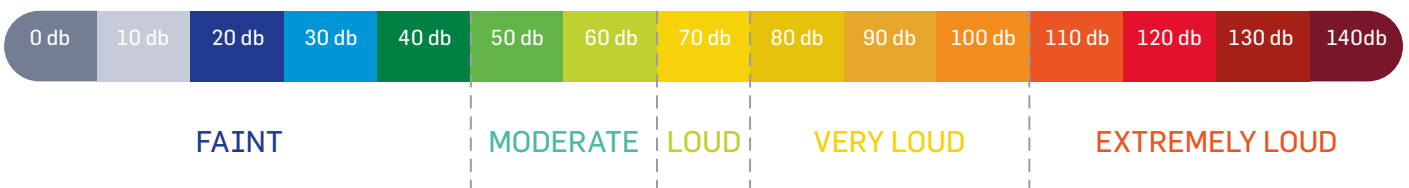
Carrier has carefully designed this innovative range to offer a low-noise solution without compromising its high performance under standard operational conditions.

The 30AWH-P features **ErP rated sound power level starting at 49dB(A)**, and a night mode that can be activated by user.



From a distance of 5m, the 30AWH-P features a low sound pressure level starting at just 24dB(A)* on the smallest size thanks to the acoustic insulation on the metal panels around the hydraulic and refrigerant modules.

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



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

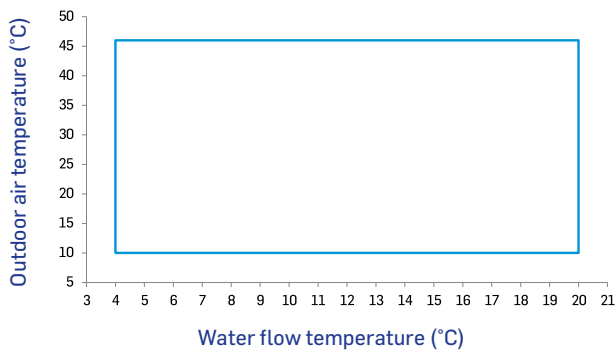
MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

YEAR ROUND COMFORT

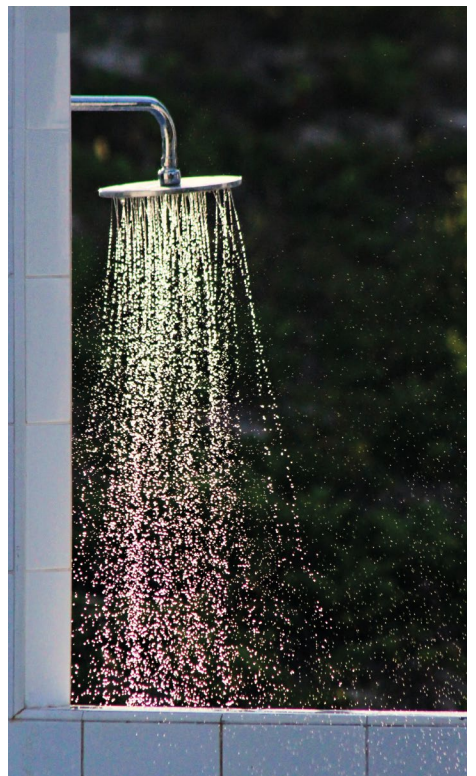
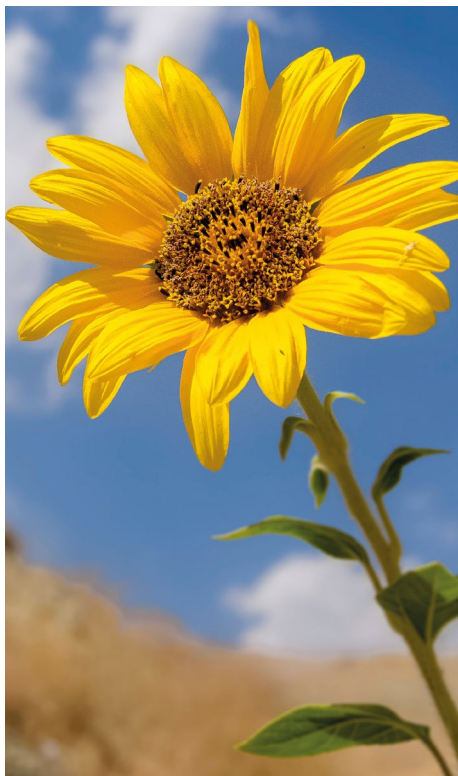
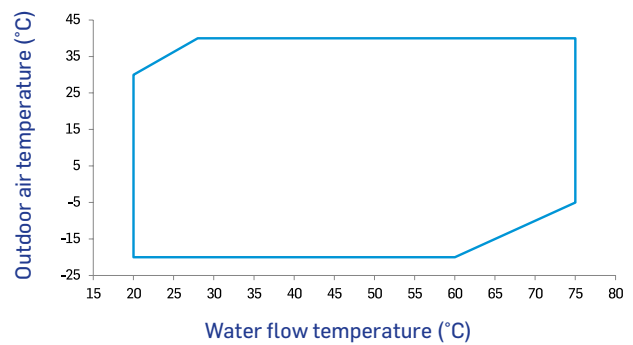
The AquaSnap 30AWH-P heat pump range can be used in a wide range of outdoor air temperatures, representing a sound solution for different climates.

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

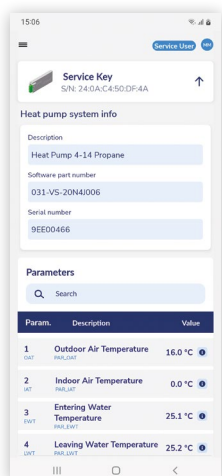
WUI MULTI-FUNCTION WIRED CONTROLLER



- 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**

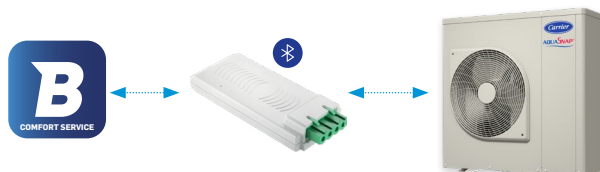
CARRIER COMFORT MANAGEMENT T300

Carrier Comfort Management T300 is an advanced room control, featuring a stylish and modern design, that thanks to the built-in Gateway allows the remote management of home comfort via Carrier Comfort Management App. Besides managing up to 3 zones via expansion PCB, the T300 advanced control can operate as a true System Manager for the heating and cooling generation system (intuitive management of the heat pump and full-electric system operation, as well as hybrid distribution). The screen graphics of Carrier Comfort Management T300 are easy to read and contain self-explanatory icons allowing an intuitive use.

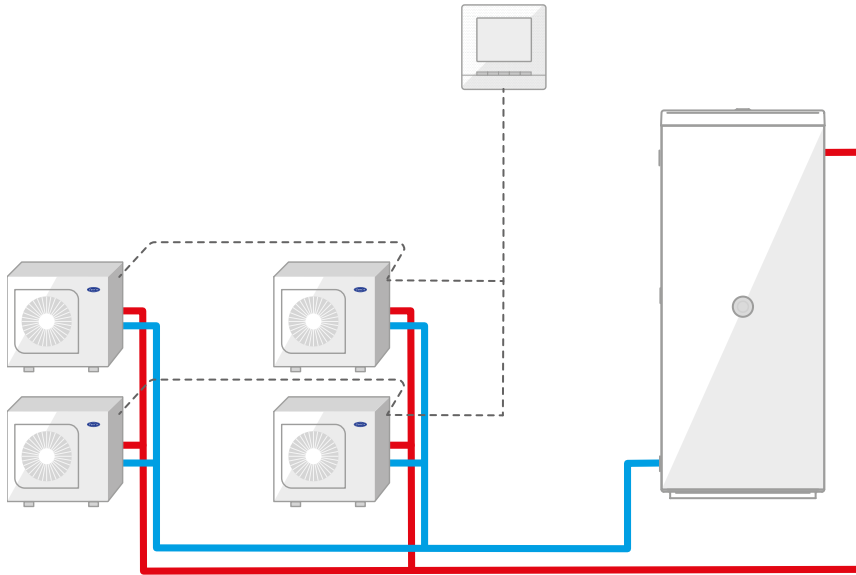


BluEdge™ COMFORT SERVICE APP

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.



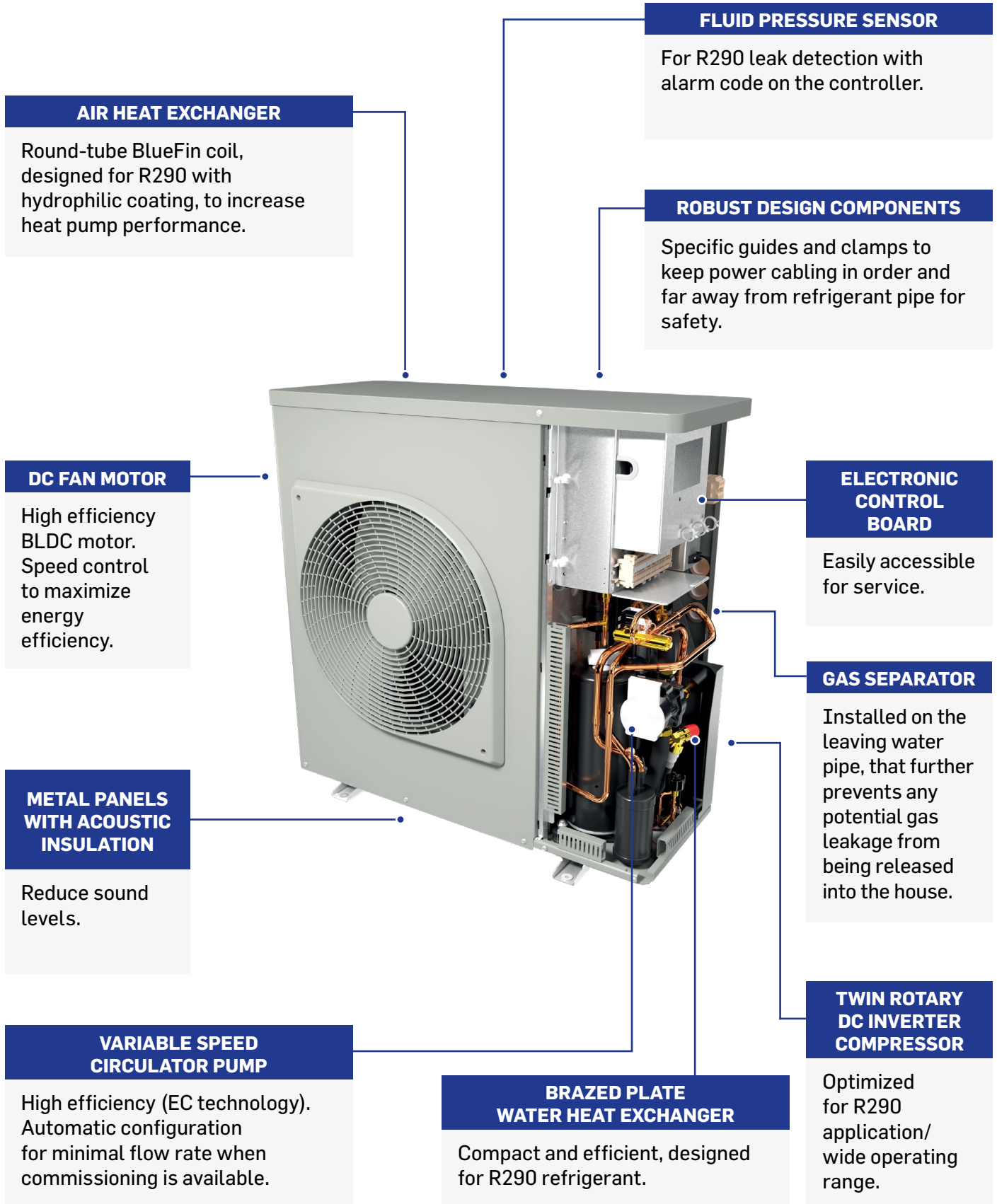
MONOBLOC AIR-TO-WATER HEAT PUMP - R290 - 30AWH-P

AquaSnap 30AWH-P IN CASCADE

AquaSnap 30AWH-P can be cascaded with up to 4 units for heating, cooling and domestic hot water 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 79,3 kg**, AquaSnap 30AWH-P can also be installed in small spaces.

COMPACT FOOTPRINT



WATER FLOW TEMPERATURE UP TO 75°C

With a high water flow 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

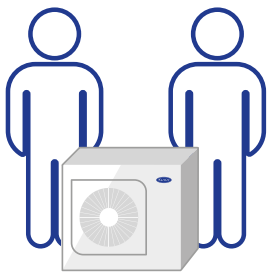



radiators

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

EASY HANDLING AND TRANSPORTATION

Compact size and reduced weight * translate into easier handling and transportation for the installer.



Weight starting from  79,3kg

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.

Gas separator installed on the leaving water pipe that further prevents any potential gas leakage from being released into the house.

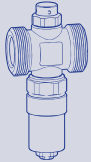


* compared to Carrier portfolio of A2W monobloc heat pumps in R32

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

ACCESSORIES TO MEET DIFFERENT NEEDS

ANTI-FREEZE VALVE



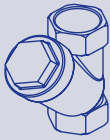
Anti-freeze valve is designed to discharge the water preventing ice formation in the heat pump circuit due to unexpected electrical power outage

SENSOR



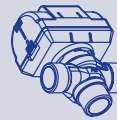
Outdoor ambient temperature sensor to better read the outdoor air temperature

Y SHAPE FILTER



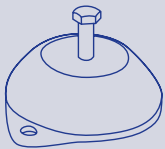
Y-water filter to trap any impurities in the water circuit which may damage the heat exchanger

1" AND 1" 1/4 DIVERTER VALVE



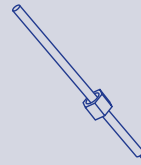
Available with or without temperature sensor for DHW tank

ANTI-VIBRATION KIT



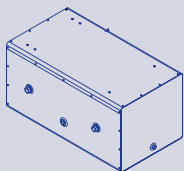
Anti-vibration kit installed under the unit to reduce transmission of vibrations

PRIMARY/SECONDARY SENSOR FOR CASCADE SYSTEM



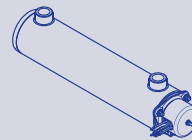
Supplementary water outlet temperature sensor kit for primary/secondary operation of up to 4 units connected in cascade system

INERTIAL BUFFER TANK



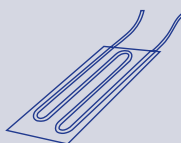
50 litres and 100 litres buffer tanks suitable for horizontal installation underneath the heat pump.

BACK-UP ELECTRICAL RESISTANCE



External back-up electrical resistance (configurable for 2, 4 or 6 kW) to provide supplementary heating capacity for cold climate.

DRAIN PAN ELECTRICAL RESISTANCE



Electrical resistance to prevent condensate freezing (base panel and drain duct) for cold climate.

EXPANSION VESSEL



External expansion vessel to maintain the right level of pressure in the heating system.

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

TECHNICAL DATA

| 30AWH-P | | 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 | 4,90 | 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_s heat | % | 185 | 190 | 185 | 185 | 187 | 187 | 187 | 187 |
| | | 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 | D → A+++ ^(*) | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ | A+++ |
| | | SCOP | kWh/kWh | 3,34 | 3,34 | 3,34 | 3,34 | 3,35 | 3,35 | 3,35 | 3,35 |
| | HA3 | η_s heat | % | 131 | 131 | 131 | 131 | 131 | 131 | 131 | 131 |
| | | P_{rated} | kW | 3 | 5 | 6 | 6 | 9 | 9 | 9 | 9 |
| | | Annual Energy consumption | KWh | 2138 | 3010 | 3989 | 3989 | 5743 | 5743 | 5743 | 5743 |
| | | Energy class | D → A+++ ^(*) | 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 |
| 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 temperature | kWh/kWh | 4,93 | 5,34 | 5,27 | 5,14 | 5,33 | 5,16 | 5,33 | 5,16 | |
| | η_s cool | % | 194 | 211 | 208 | 203 | 210 | 203 | 210 | 203 | |
| Sound levels | | | | | | | | | | | |
| Standard unit | | | | | | | | | | | |
| | Sound power level, ErP condition A7/W55 ⁽³⁾ | dB(A) | 49 | 50 | 51 | 51 | 54 | 54 | 54 | 54 | |
| | Sound pressure level at 5 m, ErP 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 without gas separator | mm | 430 | 430 | 430 | 430 | 430 | 430 | 430 | 430 | |
| | Width including gas separator | mm | 560 | 560 | 560 | 560 | 560 | 560 | 560 | 560 | |
| | Height | mm | 927 | 927 | 927 | 927 | 1375 | 1375 | 1375 | 1375 | |
| Net weight | | | | | | | | | | | |
| | Standard unit without gas separator ⁽⁵⁾ | kg | 78 | 84 | 91 | 93 | 126 | 126 | 128 | 128 | |
| | Standard unit with gas separator | kg | 79,3 | 85,3 | 92,3 | 94,3 | 127,3 | 127,3 | 129,3 | 129,3 | |
| | Compressors | Rotary compressor | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Refrigerant | | | | | | | | | | | |
| | Charge ⁽⁵⁾ | kg | 0,39 | 0,58 | 0,76 | 0,76 | 1,07 | 1,07 | 1,07 | 1,07 | |

(*) Available from 2025

(**) The energy efficiency class range of this product category is from D up to A+++

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

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

CA1 Cooling mode conditions: evaporator water entering/leaving temperature 12°C/7°C, outside air temperature 35°C, evaporator fouling factor 0m² K/W

CA2 Cooling mode conditions: evaporator water entering/leaving temperature 23°C/18°C, outside air temperature 35°C, evaporator fouling factor 0m² K/W

HA1 Heating mode conditions: Water heat exchanger water entering/leaving temperature 30°C/35°C, fouling factor 0m² K/W. Outside air temperature 7°C db / 6°C wb

HA2 Heating mode conditions: Water heat exchanger water entering/leaving temperature 40°C/45°C, fouling factor 0m² K/W. Outside air temperature 7°C db / 6°C wb

HA3 Heating mode conditions: Water heat exchanger water entering/leaving temperature 47°C/55°C, fouling factor 0m² K/W. Outside air temperature 7°C db / 6°C wb

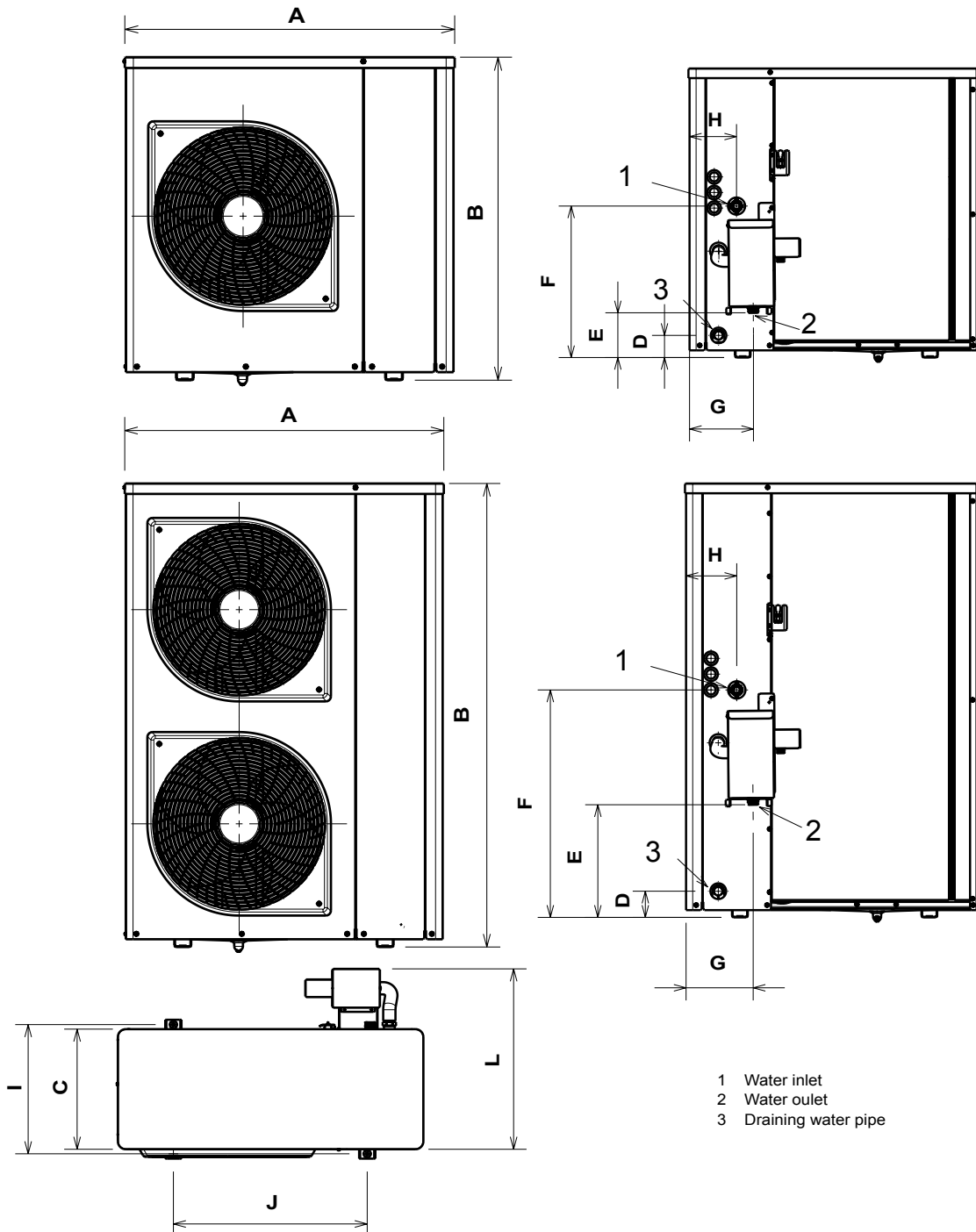
 (3) In dB ref=10⁻¹² W, (A) weighting. Declared dualnumber noise emission values in accordance with EN 12102-1 at ErP conditions (with an associated uncertainty of +/-2dB(A)), as required by Ecodesign regulation. Measured in accordance with ISO 9614-1.

(4) In dB ref 20 µPa, (A) weighting. Declared dualnumber noise emission values in accordance with EN 12102-1 at ErP conditions (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



| 30AWH-P | A | B | C | D | E | F | G | H | I | J | L |
|---------|-----|------|-----|----|-----|-----|-----|-----|-----|-----|-----|
| 004 | 946 | 927 | 372 | 71 | 143 | 485 | 201 | 150 | 400 | 600 | 560 |
| 006 | 946 | 927 | 372 | 71 | 143 | 485 | 201 | 150 | 400 | 600 | 560 |
| 008 | 946 | 927 | 372 | 71 | 143 | 485 | 201 | 150 | 400 | 600 | 560 |
| 010 | 946 | 927 | 372 | 71 | 143 | 485 | 201 | 150 | 400 | 600 | 560 |
| 012 | 946 | 1375 | 372 | 83 | 357 | 720 | 210 | 160 | 400 | 600 | 560 |
| 014 | 946 | 1375 | 372 | 83 | 357 | 720 | 210 | 160 | 400 | 600 | 560 |

Note : Dimensions are given in mm



www.carrier.com

11/2024

B-RLC-030B_30AWHP-EN

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.



©2024 Carrier. All Rights Reserved.

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

Photo credit: Adobestock, Shutterstock, Freepik