Panasonic

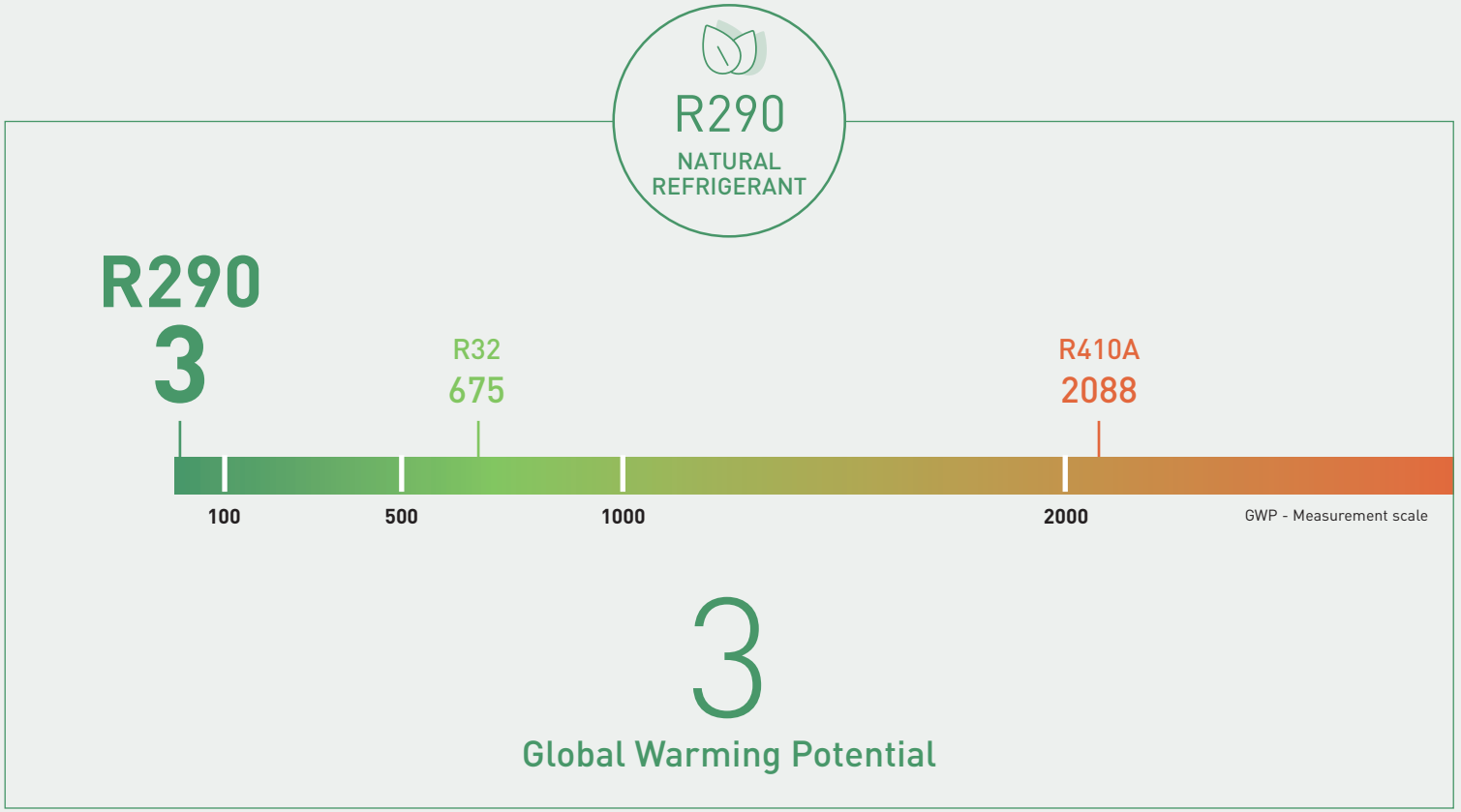
ECOi-W AQUA-G BLUE

AIR TO WATER REVERSIBLE HEAT PUMPS

Panasonic

Contributing to a decarbonised society.

ECOi-W AQUA-G BLUE range is industry leading commercial air to water heat pumps with R290 natural refrigerant. R290 has a GWP of 3, it is a green alternative solution for any commercial projects.
It delivers outstanding performance, aligning with Panasonic vision of a carbon-free society and our GREEN IMPACT plan.



Panasonic

A revolutionary solution.

Introducing a revolutionary solution for sustainable cooling and heating needs, ECOi-W AQUA-G BLUE powered by R290, a natural refrigerant. It delivers both sustainability and efficiency in one innovative package.

ECOi-W AQUA-G BLUE H 50 - 80

R290
NATURAL REFRIGERANT

50 kW	60 kW	70 - 80 kW

Natural refrigerant R290 with GWP 3.

Reliable quality.

Scroll compressors.

HIGH SEER Max. 4,4[1] HIGH SCOP Max. 3,9[2]

High seasonal efficiency.

A++[3]

High energy efficiency class.

DHW managements.

70°C

Max. 70 °C leaving water temperature.

Quiet operation.

640 kW

Boost the capacity up to 640 kW.

1) Size 50. According to EN14825 and Following COMMISSION REGULATION (EU) 2016/2281.2) Size 70. According to EN14825 and Following COMMISSION REGULATION (EU) No 813/2013. 3) (Scale A+++ to D). According to EN14825 and Following COMMISSION REGULATION (EU) No 813/2013.

The future of efficient commercial air to water heat pumps.

Outstanding efficiency.

Efficiency is the key to unlocking a more sustainable and cost-effective future. ECOi-W AQUA-G BLUE is designed to deliver exceptional performance that maximises energy savings and minimises environmental impact.

1) Size 50. According EN14825 and Following COMMISSION REGULATION (EU) 2016/2281.2) Size 70. According EN14825 and Following COMMISSION REGULATION (EU) No 813/2013. 3) Scale A+++ to D. According EN14825 and Following COMMISSION REGULATION (EU) No 813/2013.

Variable speed pump.

ECOi-W AQUA-G BLUE can also be equipped with a variable speed pump that automatically adjusts its speed according to the project design.
There are three different ways to manage the pumps: variable frequency drive adjustment, constant differential temperature and constant differential pressure.

Energy efficiency.
Adjusting pump speed according to actual demand, resulting in energy savings during periods of lower demand.

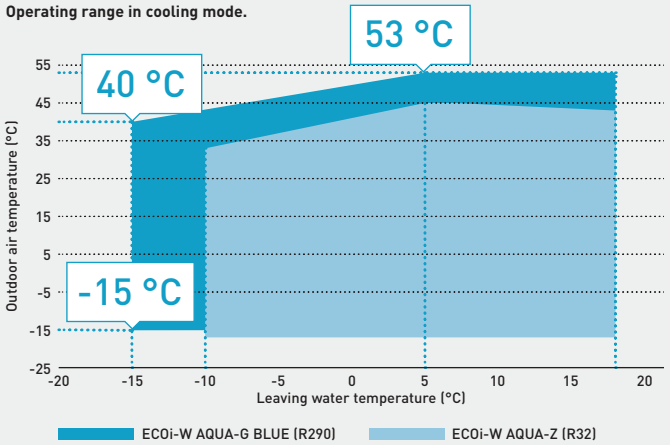
Precise control.
More precise control of water flow rates, which can be beneficial in applications where variable flow rates are required.

Soft start.
Gradual start and stop that reduces wear and tear on the pump and the related components.

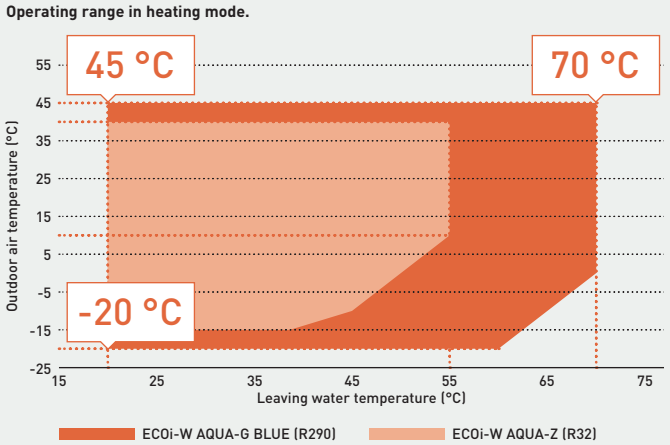
Adaptability.
Ideal for systems with variable demand or processes where water flow requirements change frequently.

Extended operating limits.

Operating range in cooling mode.



Operating range in heating mode.



Cooling mode.

A water outlet temperature of -15 °C ensures optimal operation temperature for process equipment in factories.

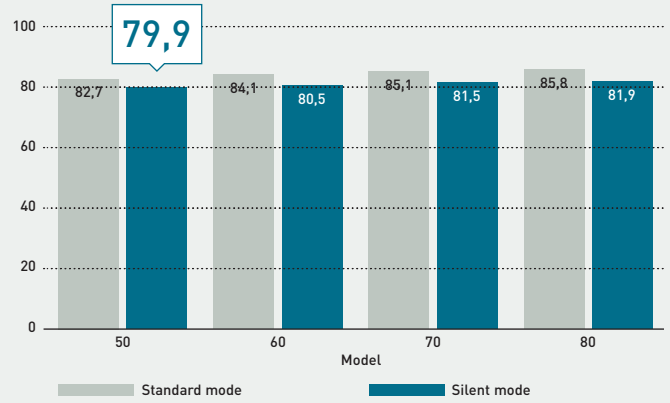
Heating mode.

Ideal solution for Heating and Domestic Hot Water production. Reaching 70 °C from 0 °C outside air temperature.

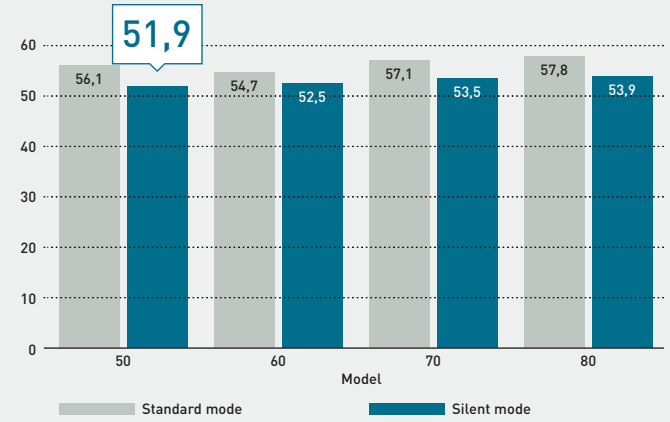
Quiet operation.

Discover a unique feature of ECOi-W AQUA-G BLUE.

Sound power level (dB(A)).



Sound pressure level (dB(A)).



Silent mode.

Silent mode with an impressively low sound power level of only 79,9 dB(A), pressure level of only 51,9 dB(A). ECOi-W AQUA-G BLUE provides the perfect balance of efficiency and silent operation.

Optional compressor jackets for size 50 and optional compressor box for sizes 60-70-80 are available to provide an additional level of noise reduction.

Invest in quality. Prioritize safety. Choose Panasonic.

Panasonic does not compromise on product quality, safety, durability in order to provide the ultimate comfort when you need it most. Special safety measurements are equipped for R290 refrigerant. Experience the difference of ECOi-W AQUA-G BLUE with R290 refrigerant and discover the true meaning of comfort without compromise.

100%
QUALITY
QUALITY CERTIFIED BY PANASONIC

Fan speed control.
All units are equipped with EC fan technology.

Variable speed pump - option.
A variable speed pump can be added to the unit for even greater energy savings.

Controller.
This new high standard control system provides excellent pressure control, as well as global and optimised unit management.

Removable panels.
Great accessibility to internal components for service operations.

Condenser.
Highly optimised heat exchanger design enables a refrigerant charge reduction. Lower than 5,0 kg of R290 for the sizes 50 and 60.

Electrical box.
The electrical parts are protected by water-resistant metallic box.

Electronic expansion valve.
This reliable and high-performant valve minimises overheating of the evaporator. It is directly managed by the control system.

Safety optimisation.

- **Ventilation system**
- **Molecular leakage detector**

Ventilation system.
If R290 is detected by the leak detector, the unit stops running immediately.
In addition, a self-contained ventilation system (for size 50) or the unit fans (for sizes 60/70/80) ensure safe dispersion of refrigerant to the atmosphere.

Molecular leakage detector.
This molecular leakage detector is a highly reliable and long-life refrigerant gas detector. It doesn't need field calibration or special maintenance

ECOi-W AQUA-G BLUE 50-80 H · R290

With EC fan			50	60	70	80
			P-AQAG0050HA	P-AQAG0060HA	P-AQAG0070HA	P-AQAG0080HA
Cooling capacity [1]		kW	48,2	56,1	64,9	74,1
Input power [1]		kW	15,0	19,0	21,6	25,0
EER [1]			3,20	3,00	3,00	3,00
SEER [2]			**4,37**	**4,30**	**4,31**	**4,21**
$\eta_{s,c}$ [2]		**%**	**171,9**	**168,9**	**169,4**	**165,4**
Heating capacity [3]		kW	49,2	61,1	73,5	83,6
Input power [3]		kW	15,6	18,6	21,7	24,9
COP [3]			3,2	3,3	3,4	3,4
SCOP [4]			**3,67**	**3,75**	**3,87**	**3,84**
$\eta_{s,h}$ [4]			**143,7**	**146,8**	**151,8**	**150,5**
Energy efficiency class (SCOP) [4]		**A+++ to D**	**A+**	**A+**	**A++**	**A++**
$SCOP_{MT}$ [4]			**3,11**	**3,14**	**3,26**	**3,22**
$\eta_{s,hMT}$ [4]			**121,4**	**122,7**	**127,3**	**126,0**
Energy efficiency class ($SCOP_{MT}$) [4]		**A+++ to D**	**A+**	**A+**	**A++**	**A++**
Sound power	Standard	dB(A)	82,7	84,1	85,1	85,8
Sound pressure at 10 m [5]	Standard	dB(A)	56,1	54,7	57,1	57,8
Dimension	Height	mm	1730	2011	2030	2030
	Length w/o / w water tank		2215 / 2215 [6]	2180 / 2680	2180 / 2680	2180 / 2680
	Width		1032	1160	1160	1160
Operating weight		kg	538	603	628	669
Refrigerant and compressors						
Number of refrigerant circuits			1	1	1	1
Refrigerant (R290)		kg	4,50	4,80	5,30	6,80
GWP		CO_2 eq.	3 (100 years)	3 (100 years)	3 (100 years)	3 (100 years)
Compressors	Number / type		2 / Scroll	2 / Scroll	2 / Scroll	2 / Scroll
Capacity steps		%	50 / 100	40 / 60 / 100	40 / 60 / 100	50 / 100
Water connections						
Type of water connections			Male gas threaded	Male gas threaded	Male gas threaded	Male gas threaded
Water inlet/outlet diameter		Inch	1 ¼	2	2	2 ½
Buffer tank (option)						
Volume		l	200	300	300	300

1) According EN14511-2013: chilled water inlet/outlet temperature: 12/7 °C, outdoor ambient temperature 35 °C DB. 2) According EN14825 and following COMMISSION REGULATION (EU) 2016/2281. 3) According EN14511-2013: warm water inlet/outlet temperature: 40/45 °C, outdoor ambient temperature 7 °C DB/6 °C WB. 4) According to EN14825 and following COMMISSION REGULATION (EU) No 813/2013. 5) Sound pressures refer to ISO 3744 standard, parallelepiped shape. 6) Tank is external to the unit chassis. Its width must be added. * w/o: without, w: with.

Boost the capacity up to 640 kW.

- Up to 8 units can be connected
- Plug & Play cascade controller available

AC SELECT.

The selection of a model from our hydronic range is made with the AC SELECT software.

Panasonic's online selection software provides a simple and fast tool to match commercial chillers and heat pumps to the exact requirements of the application.

https://acselect.panasonic.eu/

Get it on
Panasonic AC SELECT

Panasonic®

To find out how Panasonic cares for you, log on to: www.aircon.panasonic.eu

Panasonic Marketing Europe GmbH
Panasonic Heating & Ventilation Air-Conditioning Europe
Hagenauer Strasse 43, 65203 Wiesbaden, Germany

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