

# AQUAREA

### Contributing to a decarbonised society.

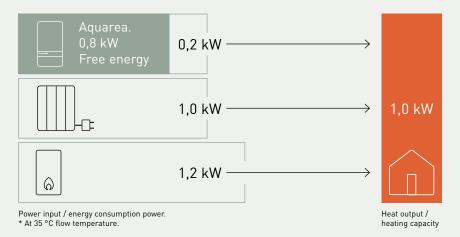
Aquarea air to water heat pumps with R290 refrigerant range is a groundbreaking low energy system for heating, cooling and domestic hot water production that delivers outstanding performance, aligning with our vision of a carbon-free society and our GREEN IMPACT plan.

With sustainability at the forefront of its innovations, Panasonic's newest series are engineered with industry leading natural refrigerant R290, which has a low Global Warming Potential (GWP) of just 0,02\*, helping reduce  ${\rm CO_2}$  emissions and environmental impact.

#### Global Warming Potential refrigerant comparison.



#### Up to 80%\* energy savings with Aquarea.



As much as 79% of the energy consumption of European homes comes from heating and producing DHW\*. That's why, compared to conventional boilers and electric heaters, highly efficient Panasonic air to water heat pump technology can make a significant difference. Moreover, by converting heat energy in the air into household warmth, this technology helps reduce  $CO_2$  emissions and environmental impact.



<sup>\*</sup> Based on the Sixth Assessment Report (AR6) adopted by the Intergovernmental Panel on Climate Change (IPCC).

<sup>\*</sup> https://ec.europa.eu/eurostat.



The Aquarea line meets the highest rank of energy efficiency criteria of European energy rating system.

Energy Labelling Regulation (EU) No. 811/2013.

# A low energy system for heating and hot water production.

Aquarea is a ground breaking low energy system for heating, cooling and domestic hot water production that delivers outstanding performance, even at extreme outdoor temperatures.

The peak of comfort, efficiency and low energy costs.

Leveraging heat pump technology and our unique expertise, Panasonic has been working for many years to help realise a sustainable society and enrich people's lives. The wide range of Aquarea products makes possible optimum solutions that are tailored to individual lifestyles while offering outstanding environmental performance.



Panasonic has more than 60 years of heat pump experience, having produced an exceptional amount of compressors. Quality is what Panasonic stands for and this is a key factor for succeeding in the European market.

The membership in the European Heat Pump Association, the production of Aquarea in Europe and high security protocols in European servers, make Panasonic a trusted heating partner.







Energy efficiency class up to A+. Scale from A+ to F.





ErP 35 °C.
Energy efficiency class up to A+++.
Scale from A+++ to D.

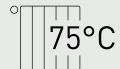
\* Rating conditions: Heating: Inside air temperature: 20 °C Dry Bulb / Outside air temperature: 7 °C Dry Bulb / 6 °C Wet Bulb.
Conditions: Water input temperature: 30 °C / Water output temperature: 35 °C. These energy efficiency might not apply to all models.



# Introducing the new Aquarea L Series of air to water heat pumps.

Aquarea L Series is engineered with industry leading R290 natural refrigerant. It is the perfect solution for renovations, where a high water outlet temperature is required or homes looking for avant-garde heat pump with natural refrigerant.





Output water

Up to 75 °C water outlet down to -10 °C outdoor.



Quiet operation

Only 27 dB(A) sound pressure at 5 m\*.

\* Sound pressure calculation for WH-WDG05LE5, free standing, A +7 °C, W 35 °C in Quiet mode 3.



Flexible hydraulic installation

Hydraulic connection between indoor and outdoor.



Made and designed by Panasonic

Reliable outdoor units with Panasonic compressor.



# Further flexibility

- · Less frequent maintenance with pre-installed magnet filter
- Operation without backup heating at -25 °C\*
- Can supply 55 °C hot water even at
   -25 °C outside temperature\*
- Bluefin treatment protection on outdoor heat exchanger for harsh ambient conditions

\* Tentative feature.



Smart control and maintenance included

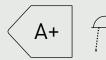
Panasonic Comfort Cloud App and Aquarea Service Cloud included.



High efficiency

ErP 35 °C. Energy efficiency class up to A+++\*.

\* Scale from A+++ to D.



High energy efficiency for domestic hot water

DHW COP up to 3,6<sup>2</sup>.



Further energy savings

Domestic hot water up to 65 °C without heater for tank sterilization.



## Harmony between technology and home.

In our daily lives, technology is attuned to you and the environment around you, without overstating the device or interface.

Just as the air is always around you even if you're not aware of it,

Panasonic's technology continues to be in tune with your environment and your life.

Harmony with the environment. Save livingspace.

A premium white, faithful to the Aquarea spirit underlined by the seamlessly integrated controller which provides a sleek black band across the unit.



All in One unit and Bi-bloc indoor unit are designed to blend into your interior space effortlessly.









Like indoor equipment, the outdoor unit is designed to harmonize with architecture and the environment while quietly supporting the precious time spent with the warm family.

The outdoor units, with an anthracite grey colour which will dress the entire range, have been completely redesigned with an innovative design that will find its place in all spaces.





# The new Aquarea All in One Compact, the ultimate space-saving solution.

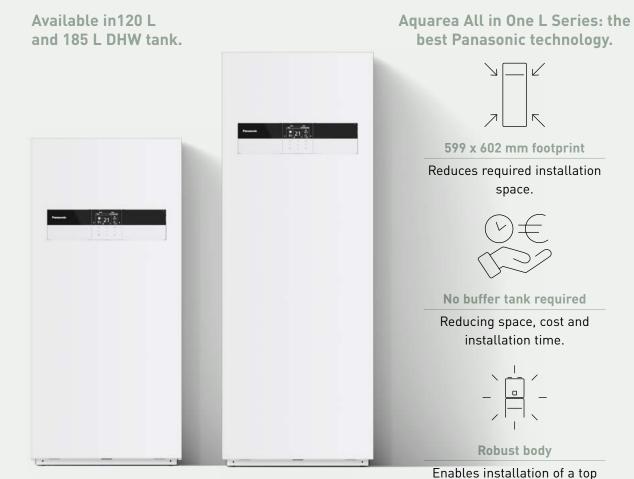
With its small 598 x 600 mm footprint, the new All in One Compact can be neatly lined up with other big appliances like a refrigerator and/or washing machine to reduce the space required for installation. And thanks to its low height, it can be installed with a ventilation unit on top.

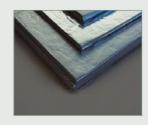


Fits beautifully in any space.

U-Vacua<sup>™</sup>; Vacuum insulation panel. Significant energy savings with world-leading insulation performance.

Because they leverage VIP technology, U-Vacua<sup>TM</sup> panels offer 19 times the insulation performance of polystyrene foam. Since the system retains heat longer, it needs to heat up fewer times each day, resulting in energy savings.

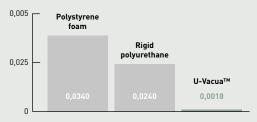




U-Vacua™ VIPs consist of a unique fiberglass core encased in a laminate film made up of several layers that include nylon, aluminium, and a protective layer. Interior pressure is reduced to a vacuum of 1-20 Pa, thereby minimizing thermal conductivity.

#### Comparison of thermal conductivity.

ventilation unit.



W / mKh (at 24 °C)



## Advanced control and connectivity features, enhanced interface.

#### Smart bivalency.

Cost effective bivalent mode with power tariff logic.

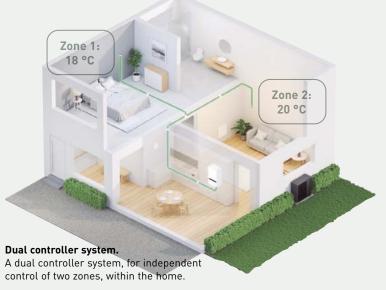
#### Smart Grid Ready.

The Aquarea L Series features the SG Ready function\* for seamless connection to smart grid controls.

#### Dual control system.

Allows for independent control of two zones in the home, enhancing comfort and efficiency.

\* Additional accessory required.



#### BMS integration.

Aguarea integrates seamlessly with Modbus or KNX projects\*, allowing bi-directional monitoring and control of all operating parameters.



## Panasonic Comfort Cloud App.

The IoT solution for your heating and cooling systems to help maximize comfort while managing energy consumption from anywhere, 24/7.

The Panasonic Comfort Cloud App enables you to conveniently manage and monitor the Aguarea range of heating, cooling and hot water functions from a mobile device. Energy monitoring is also possible, giving you the opportunity to reduce operating costs even further.

#### Aquarea Service Cloud.

The Aquarea Service Cloud allows professionals to take care of their customers' heating systems remotely, engaging in predictive maintenance and system finetuning and respond rapidly to any malfunctions.









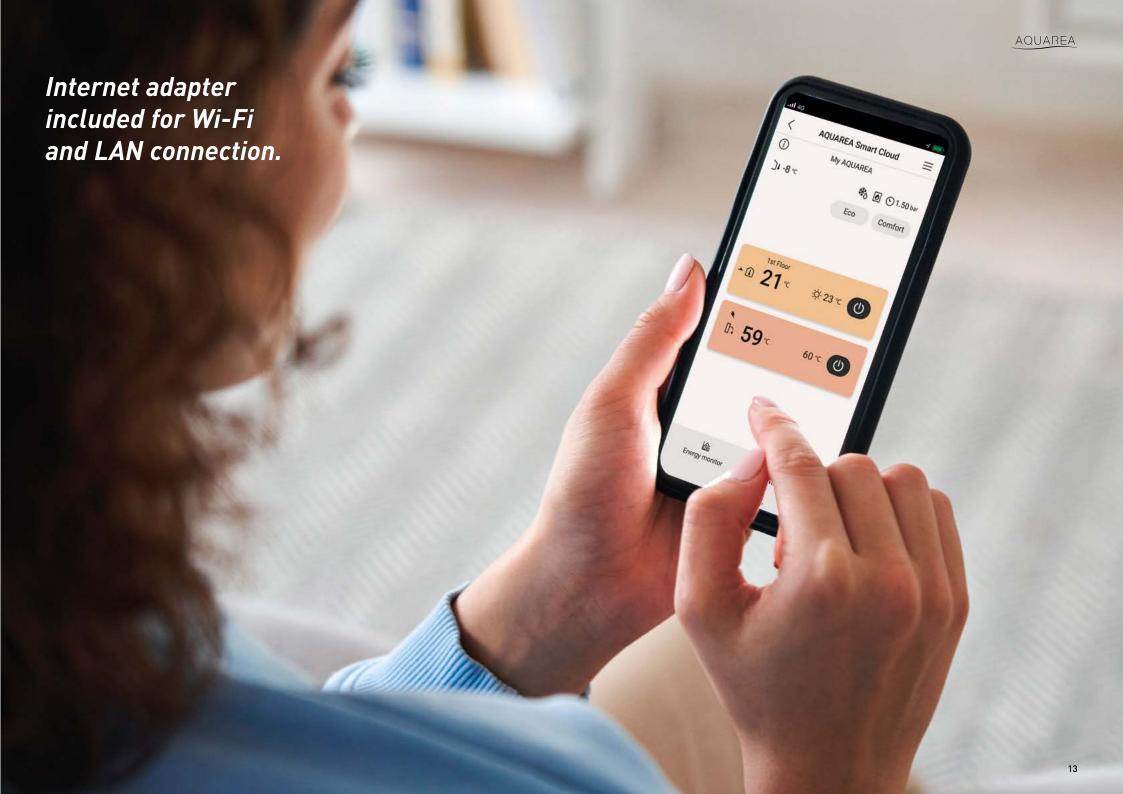








**Download Panasonic** Comfort Cloud App.



# Aquarea + tado°, the integrated solution for maximum energy savings and comfort.

tado° | Panasonic

Partnership for smart heat pump solutions

tado° X enables room control and smart energy management services.



Easy to unlock and operate

User-friendly app for seamless heating and energy management.



**Future-proof solution** 

Further efficiency gains via planned software updates.



Advanced energy savings

With the individual room temperature control.



Reliable and trustworthy

Guaranteed and optimised interoperability.

#### A smart solution for maintaining the perfect temperature in your home.





tado° app and Balance for Heat Pumps 1).

Multi-Room Control, scheduling and energy insights in one market leading app.

12-month free subscription to Balance for Heat Pumps <sup>2)</sup>.

1) Requires additional subscription. 2) With the purchase of PAW-THPOXE or PAW-THPOXUK. This promotion is subject to change without notice.



# Aquarea L Series gives you even more.

Highly efficient Panasonic solutions can help to significantly reduce the energy consumption of the building, at the same time a high level of comfort and good indoor air quality are kept.



Ventilation unit for a low-energy buildings.

Maximise building comfort by combining heat recovery ventilation units with Aquarea Heat Pumps for an efficient, space-saving solution for heating, cooling, ventilation and DHW.



Aquarea Air Smart fan coils.

Stylish, compact fan coil units for high comfort and energy savings.

Aquarea Heat Pumps can be integrated into a new or existing hydronic system.



Maximised efficiency with PV panels.

By integrating Aquarea Heat Pumps with PV panels\*, heating, cooling and hot water production is adapted to the solar energy output, reducing energy costs.

\* Additional accessory required.



Aquarea Home

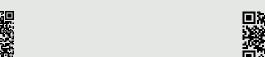
New Aquarea Home App, seamless control of all Aquarea room solutions.

The Aquarea Home App enables seamless control and monitoring of the Aquarea room solutions through an intuitive, user-friendly interface.









# AQUAREA+

#### Get the most out of your Aquarea Heat Pump.

Aquarea+ offers end user useful information to operate a Panasonic Aquarea Heat Pump to provide heating, cooling and hot water in the most efficient and cost effective way.



Visit Aquarea+

#### AQUAREA SERVICE<sup>+</sup>

#### A window to tranquility.

Let us take care of your heat pump so you can just relax and enjoy a cozy, warm home. Aquarea Service+ offers a choice of 3 different service packages for you to select the one that best fits your needs.



Visit Aquarea Service+





Combination table				Outdoor unit						
Indoor unit				Heating capacity						
							Single phase (power to indoor)			
			Backup heate	ar.	Electrical		5,0 kW	7,0 kW	9,0 kW	
		DHW tank	capacity	2 zones	anode		WH-WDG05LE5	WH-WDG07LE5	WH-WDG09LE5	
		120 L	3 kW	_	_	WH-ADC0509L3E51	V	V	<i>V</i>	
	1ph	120 L	3 kW	_	~	WH-ADC0509L3E5AN1	V	V	V	
		185 L	3 kW	_	_	WH-ADC0509L3E5	V	V	V	
Hydraulic All in One		185 L	3 kW	_	~	WH-ADC0509L3E5AN	V	V	V	
		185 L	6 kW	_	_	WH-ADC0509L6E5	V	V	V	
		185 L	6 kW	_	~	WH-ADC0509L6E5AN	V	V	V	
		185 L	3 kW	V	_	WH-ADC0509L3E5B	V	V	V	
Hydraulic Bi-bloc	1ph	_	3 kW	_	_	WH-SDC0509L3E5	V	V	V	
		_	6 kW	_	_	WH-SDC0509L6E5	<b>v</b>	<b>v</b>	V	

Outdoor unit			WH-WDG05LE5	WH-WDG07LE5	WH-WDG09LE5
Heating capacity / COP (A +7 °C, W 3	5 °C)	kW / COP	5,00/5,05	7,00/4,93	9,00/4,55
Heating capacity / COP (A +7 °C, W 5	5 °C)	kW / COP	5,00/3,07 7,00/2,98		8,90/3,03
Heating capacity / COP (A +2 °C, W 3	5 °C)	kW / COP	5,00/3,52	6,85/3,43	7,00/3,41
Heating capacity / COP (A +2 °C, W 5	5 °C)	kW / COP	5,00/2,34	6,25/2,34	7,00/2,41
Heating capacity / COP (A -7 °C, W 35	5 °C)	kW / COP	5,00/3,01	5,80/3,01 7,00/2	
Heating capacity / COP (A -7 °C, W 55	5 °C)	kW / COP	5,00/2,12	5,80/2,12 7,00/2,13	
Cooling capacity / EER (A 35 °C, W 7	°C)	kW / EER	5,00/3,23	7,00/3,03	8,20/2,82
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	5,00/5,00	7,00/4,73	9,00/4,19
Heating average climate (W 35 °C /	Seasonal energy efficiency	SCOP (n, %)	5,06/3,63(200/142)	4,96/3,62(195/142)	4,84/3,67(190/144)
W 55 °C)	Energy class 1)	A+++ to D	A+++/A++	A+++/A++	A+++/A++
Heating warm climate (W 35 °C /	Seasonal energy efficiency	SCOP (η, <sub>s</sub> %)	6,00/4,27(237/168)	6,31/4,52(249/178)	6,44/4,50 (255/177)
W 55 °C)	Energy class 1]	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C /	Seasonal energy efficiency	SCOP (ŋ,s %)	4,25/3,28(167/128)	4,25/3,29(167/129) 4,31/3,33(1	
W 55 °C)	Energy class 1]	A+++ to D	A++/A++ A++/A++		A++/A++
Sound power 2)	Heat	dB(A)	52	53	54
Dimension / Net weight HxWxD		mm / kg	996×980×430/98	996×980×430/98	996 x 980 x 430 / 97
Refrigerant (R290) / CO <sub>2</sub> Eq.		kg / T	0,96/0,00002	0,96/0,00002	1,00/0,00002
0	Heat	°C	-25~+35	-25~+35	-25~+35
Operating range - outdoor ambient	Cool	°C	+10~+43	+10~+43	+10~+43
Water outlet Heat / Cool		°C	20~75/5~20	20~75/5~20	20~75/5~20

<sup>1)</sup> Scale from A+++ to D. 2) Sound power level in accordance to EN 12102 under conditions of the EN14825 (part load). \* EER and COP calculation is based in accordance to EN 14511.

Indoor unit 2 zones Indoor unit 2 tectrical Anode			WH-ADC0509L3E51*	WH-ADC0509L3E5	WH-ADC0509L6E5 — WH-ADC0509L6E5AN	
			<del>-</del>	WH-ADC0509L3E5B		
			WH-ADC0509L3E5AN1*	WH-ADC0509L3E5AN		
Sound pressure	Heat / Cool	dB(A)	31/31	28/28	28/28	
Dimension HxWxD		mm	1293 x 599 x 602	1642 x 599 x 602	1642×599×602	
Net weight / 2 zones model		kg	79/—	93/101	94/—	
Water pipe connector	Room / Shower	Inch	11/4/3/4	11/4/3/4	11/4/3/4	
A -1	Number of speeds		Variable speed	Variable speed	Variable speed	
A class pump	Input power (Min/Max)	W	30/145	30/145	30/145	
Heating water flow (ΔT=5 K. 35 °C)		L/min	14,3	14,3	25,8	
Water volume		L	120 185		185	
Maximum DHW temperature		°C	65	65	65	
Material inside tank			Stainless steel	Stainless steel	Stainless steel	
Water pipe connector (indoor / outdoor units) Inch		Inch	1/1	1/1	1/1	
Pipe length range standard / maximum m		m	5/30	5/30	5/30	
Elevation difference (in / out) m		m	10	10	10	
Electric backup heater kW		kW	3,00	3,00	6,00	
Recommended fuse, supply 1 / 2 1) A		А	25/16	25/16	25/30	
Recommended minimum cable size, supply 1 / 2 1 mm²		mm²	3x2,5/3x1,5	3x2,5/3x1,5	3x2,5/3x4,0	

D		400.1	405.1	400.1	405.1	400.1	405.1
Domestic Hot Water energy efficiency		120 L	185 L	120 L	185 L	120 L	185 L
		WH-ADC0509L3E51	WH-ADC0509L3E5	WH-ADC0509L3E51	WH-ADC0509L3E5	WH-ADC0509L3E51	WH-ADC0509L3E5
		WH-ADC0509L3E5AN1	WH-ADC0509L3E5AN	WH-ADC0509L3E5AN1	WH-ADC0509L3E5AN	WH-ADC0509L3E5AN1	WH-ADC0509L3E5AN
Indoor unit			WH-ADC0509L3E5B		WH-ADC0509L3E5B		WH-ADC0509L3E5B
			WH-ADC0509L6E5		WH-ADC0509L6E5		WH-ADC0509L6E5
			WH-ADC0509L6E5AN		WH-ADC0509L6E5AN		WH-ADC0509L6E5AN
Outdoor unit		WH-WI	OG05LE5	WH-WI	OG07LE5	WH-WI	G09LE5
Tapping profile according EN16147		М	L	М	L	М	L
DHW tank ERP efficiency average / warm / cold <sup>2)</sup>	A+ to F	A+/A++/A	A+/A+/A	A+/A++/A	A+/A+/A	A+/A++/A	A+/A+/A
DHW tank ERP average climate η / COPdHW	Лwh %/COPdHW	115/2,88	148/3,61	115/2,88	148/3,61	115/2,88	148/3,61
DHW tank ERP warm climate η / COPdHW	ηwh %/COPdHW	134/3,35	160/4,00	134/3,35	160/4,00	134/3,35	160/4,00
DHW tank ERP cold climate η / COPdHW	Лwh %/COPdHW	90/2,26	112/2,80	90/2,26	112/2,80	90/2,26	112/2,80

1) Check local regulations. 2) Scale from A+ to F. \* Available in Spring 2025. \*\* This product is designed to comply with the European drinking water standard (EU) 2020/2184. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

Indoor unit			WH-SDC0509L3E5	WH-SDC0509L6E5
Sound pressure	Heat / Cool	dB(A)	28/28	28/28
Dimension / Net weight	HxWxD	mm	892 x 500 x 348 / 33	892 x 500 x 348 / 33
Water pipe connector	Room	Inch	R11/4	R11/4
A class pump	Number of speeds		Variable speed	Variable speed
	Input power (Min/Max)	W	30/145	30/145
Heating water flow (ΔT=5 K. 35 °C)		L/min	14,3	20,1
Water pipe connector (indoor / outdoor units)		Inch	1/1	1/1
Pipe length range standard / maximum		m	5/30	5/30
Elevation difference (in / out)		m	10	10
Electric backup heater		kW	3,00	6,00
Recommended fuse, supply 1 / 2 1)		A	25/16	25/30
Recommended minimum cable size, supply 1 / 2 1)		mm²	3x2,5/3x1,5	3x2,5/3x4,0

<sup>1)</sup> Check local regulations. \* This product is designed to comply with the European drinking water standard (EU) 2020/2184. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

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