Panasonic

New Aquarea T-CAP M Series
Air to water heat pumps

AQUAREA

Panasonic

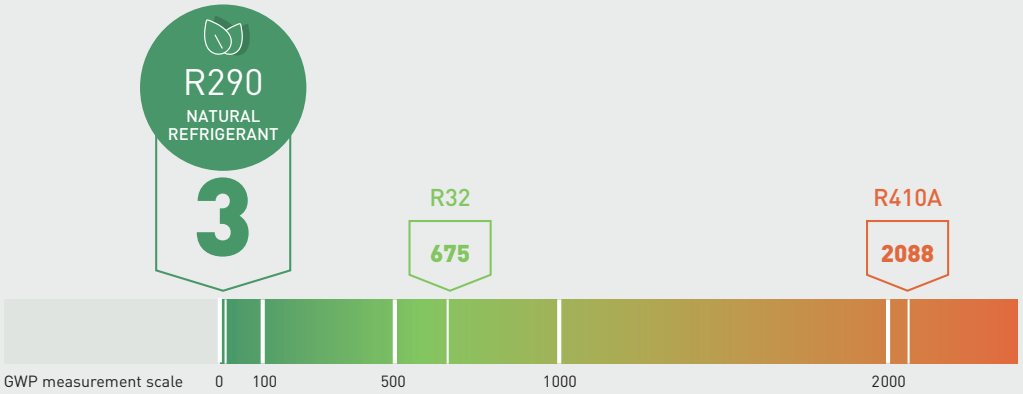
AQUAREA

Contributing to the decarbonisation of society.

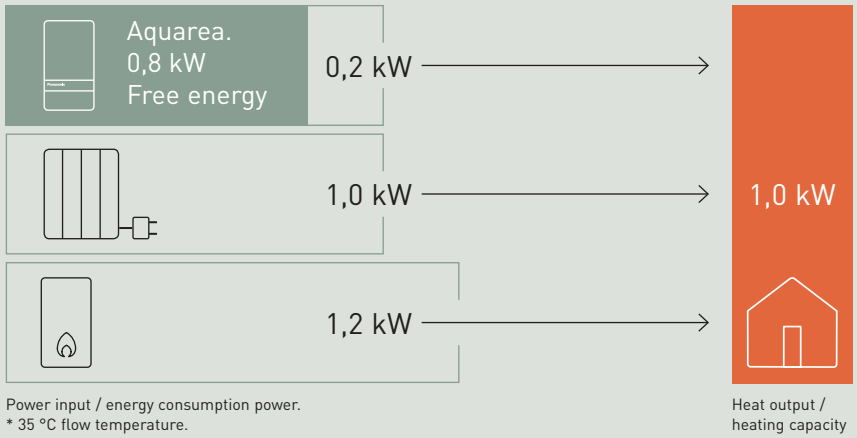
Aquarea air to water heat pumps with R290 refrigerant range is a groundbreaking low energy system for heating, cooling and domestic hot water production that delivers outstanding performance, aligning with our vision of a carbon-free society and our GREEN IMPACT plan.

Panasonic's newest series are engineered with industry leading natural refrigerant R290, which has a low Global Warming Potential (GWP) of just 3, helping reduce CO_2 emissions and environmental impact.

Global Warming Potential refrigerant comparison.



Up to 80%* energy savings with Aquarea.



Power input / energy consumption power.
* 35 °C flow temperature.

Heat output / heating capacity

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.

* https://ec.europa.eu/eurostat.

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

For low temperature application. Energy Labelling Regulation (EU) No. 811/2013.

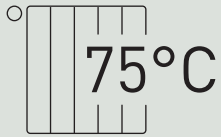
Panasonic

Introducing T-CAP, M Series the latest generation of Aquarea air to water heat pumps with R290.

Flexible installation, suitable for retrofit and new buildings.

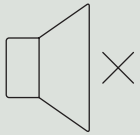
Thanks to its new, modular concept, the outdoor unit can function independently with just an indoor remote control, for those seeking basic functionalities. Homeowners can opt for enhanced functionality by incorporating the more advanced control module or selecting between the range of indoor units.

Wi-Fi adapter included



Output water

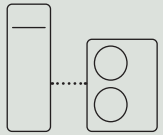
Up to 75 °C water outlet down to -15 °C outdoor.



Quiet operation

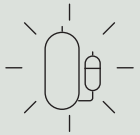
Only 29 dB(A) sound pressure at 5 m*.

* Sound pressure calculation for WH-WXG12ME5, free standing, A +7 °C, W 35 °C in Quite mode 3.



Flexible hydraulic installation

Hydraulic connection between indoor and outdoor.

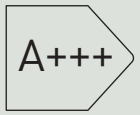


Made and designed by Panasonic

Reliable outdoor units with Panasonic compressor.

Smart control and maintenance included

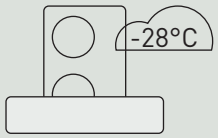
Panasonic Comfort Cloud App and Aquarea Service Cloud included.



High efficiency

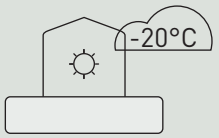
ErP 35 °C.
Energy efficiency class up to A+++*.

* Scale from A+++ to D.



Extreme conditions

Compressor operating down to -28 °C outdoor temperatures.



T-CAP technology

Keeping heating capacity down to -20 °C.

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.
As a member of the European Heat Pump Association, the production of Aquarea in Europe and maintaining high security protocols in European servers for the Aquarea Smart Cloud, makes Panasonic a trusted heating partner.

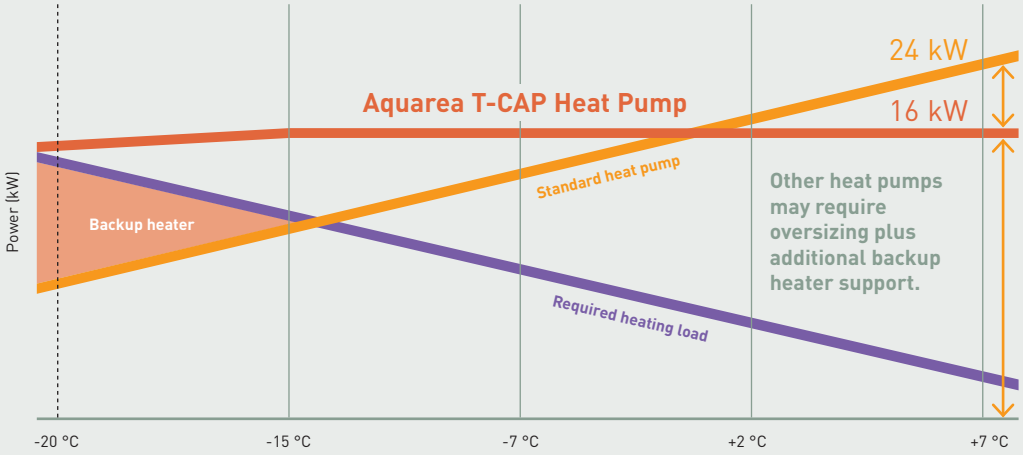
A revolution in design, efficiency and connectivity.

Aquarea T-CAP, high performance whatever the climate.

Aquarea T-CAP outdoor units are highly reliable thanks to the quality of all components, including the new compressor with injection technology, developed and manufactured by Panasonic, that can work in outdoor temperatures as low as -28 °C.

Specially designed to work under severe outdoor conditions, Aquarea T-CAP can work in outdoor temperatures as low as -28 °C and maintain the rated heating capacity even at -20 °C [1] outdoor temperature, without requiring an electrical heater.

1) At 35 °C flow temperature.

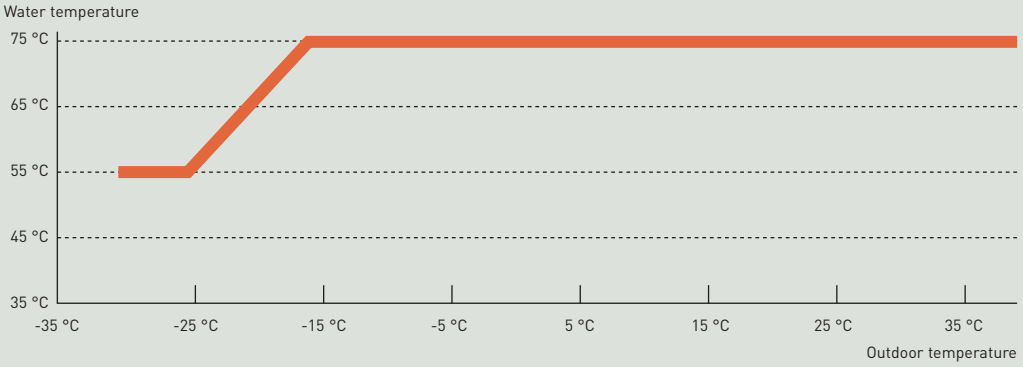


For retrofit and new buildings.

The wide Aquarea T-CAP range ensures the most appropriate choice for your home - whatever the size.

Aquarea T-CAP easily replaces old boilers or manages bivalent installations and is ideal for supplying radiators, fan coils or underfloor heating up to 75 °C, even at -15 °C outside.

It can even supply hot water at 55 °C when the outside temperature is -28 °C.



Reliable technology.

Aquarea T-CAP M Series outdoor units are equipped with a Panasonic R290 scroll compressor with injection technology, manufactured in-house, that can work in outdoor temperatures as low as -28 °C.

The outdoor heat exchanger is protected with a Bluefin treatment for harsh ambient conditions.

Aquarea T-CAP is an innovative heat pump, designed to provide ideal temperatures and hot water in the home, even with extreme outdoor temperatures.

Big Aquarea T-CAP M Series, the ideal solution for centralised heating and DHW installations.

The new Big Aquarea M Series offers a flexible, compact and energy-efficient solution for central heating and/or domestic hot water installations in multi-family or commercial buildings.

- Scalable solution, up to 300 kW in cascade
- Suitable for new build and retrofit
- Up to 75 °C water outlet down to -15 °C
- Easy replacement of other heating sources and integration into existing water systems
- Quiet operation
- Maintains output at 55 °C down to -15 °C
- Hot water production at 65 °C with compressor only
- Flexible control options and seamless Modbus integration

Conventional cascade system.

2 x **20 kW** Heat pump

Panasonic New T-CAP.

1 x **30 kW** Big Aquarea T-CAP

For 30 kW demand at 55 °C water outlet and -7 °C outdoor temperature.

Maintained capacity

Time-saving installation

Cost-saving

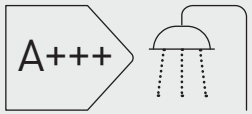
Space-saving

The new Big Aquarea M Series offers a solution for central heating and/or domestic hot water installations in multi-family or commercial buildings.

The peak of comfort, efficiency and low energy costs.

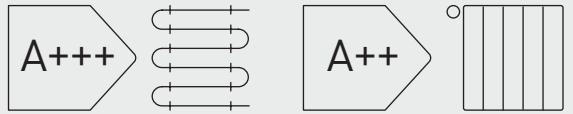
Leveraging heat pump technology and our unique expertise, Panasonic has been working for many years to help realise a sustainable society and enrich people's lives.

Aquarea M Series can reach a domestic hot water temperature of up to 65 °C without the use of the electric heater, so the tank sterilization can be performed with the heat pump operation for further energy savings.



Energy efficiency class up to A+

Scale from A+ to F.



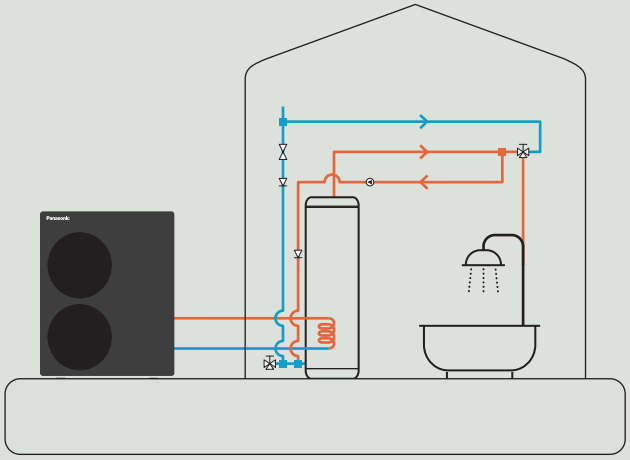
ErP 35 °C / 55 °C.
Energy efficiency class up to A+++/A++.

Scale from A+++ to D.

Maximising hot water comfort.

- Up to 40% more tap water with a higher tank temperature setting to save space
- New domestic hot water circulation mode for instant availability of hot tap water
- During sterilisation, the domestic hot water circulation mode is activated to ensure sterilisation of the water pipes

The hot water in the pipes recirculates back to the tank at set intervals during the set time period, ensuring instant hot water for the end user.

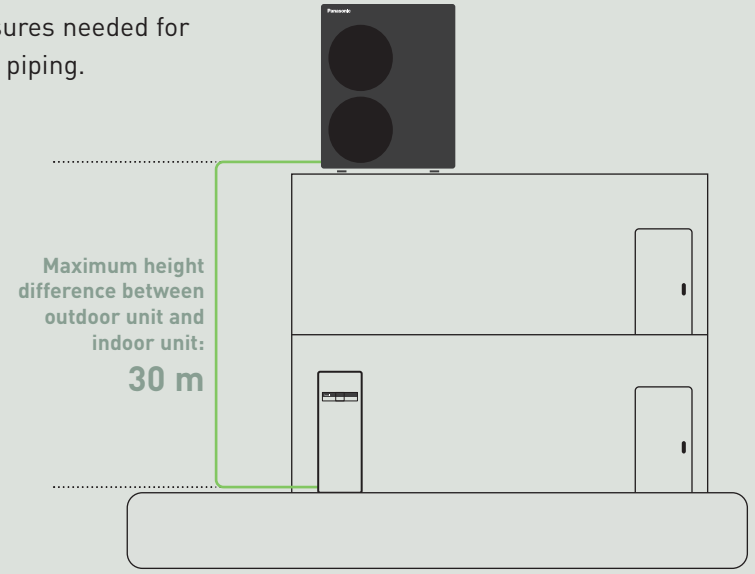


Flexible hydraulic installation.

The installation of the system is 100% hydraulic, with only water pipes between the outdoor unit and the interior of the home.

More living space at home.
No indoor safety measures needed for refrigerant or fuel gas piping.

No F-gas certification required



Panasonic has been working for many years to help realise a sustainable society and enrich people's lives.

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.

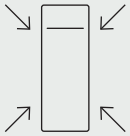
DESIGN AWARD 2023

reddot winner 2023

* For 9, 12 and 16 kW Models (Single and Three phase)

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.

Aquarea All-in-One M series: the best Panasonic technology.



599 x 602 mm footprint

Reduces required installation space.

No buffer tank required

Reducing space, cost and installation time.

Up to 40% more tap water

With a higher tank temperature setting.

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

Because they leverage VIP technology, U-Vacua™ 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.

Panasonic's unique low noise architecture.

The compressor, which is a major source of noise, is equipped with a double-bottomed structure to provide a safe, quiet structure that does not disturb neighbors in crowded residential areas.

* Sound pressure calculation for WH-WXG12ME5, free standing, A +7 °C, W 35 °C in Quite mode 3.

The outdoor unit is designed to harmonize with architecture and the environment with a quiet operation.

Quiet operation
Only 29 dB(A) sound pressure at 5 m*.

Aquarea M Series gives you even more.

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

Ventilation unit for a low-energy house.

Heat recovery ventilation units are ideal for homes, for these owners who are looking for high performance and maximum comfort.
Combine the Residential ventilation unit with Panasonic Aquarea for an space saving and highly efficient solution for heating, cooling, ventilation and DHW.

Aquarea + PV panels.

Aquarea heat pumps can synchronise with PV panels, using the optional PCB. Thanks to this feature, demand of heating, cooling and domestic hot water production is adapted to the PV panel production.

Smart Grid Ready.

Aquarea M Series heat pumps in combination with the optional PCB hold the SG Ready function, allowing the heat pump to be connected in an intelligent grid control.

BMS integration.

Aquarea heat pumps can be integrated into Modbus or KNX projects with an optional accessory, allowing comprehensive bi-directional monitoring and control of all operating parameters.

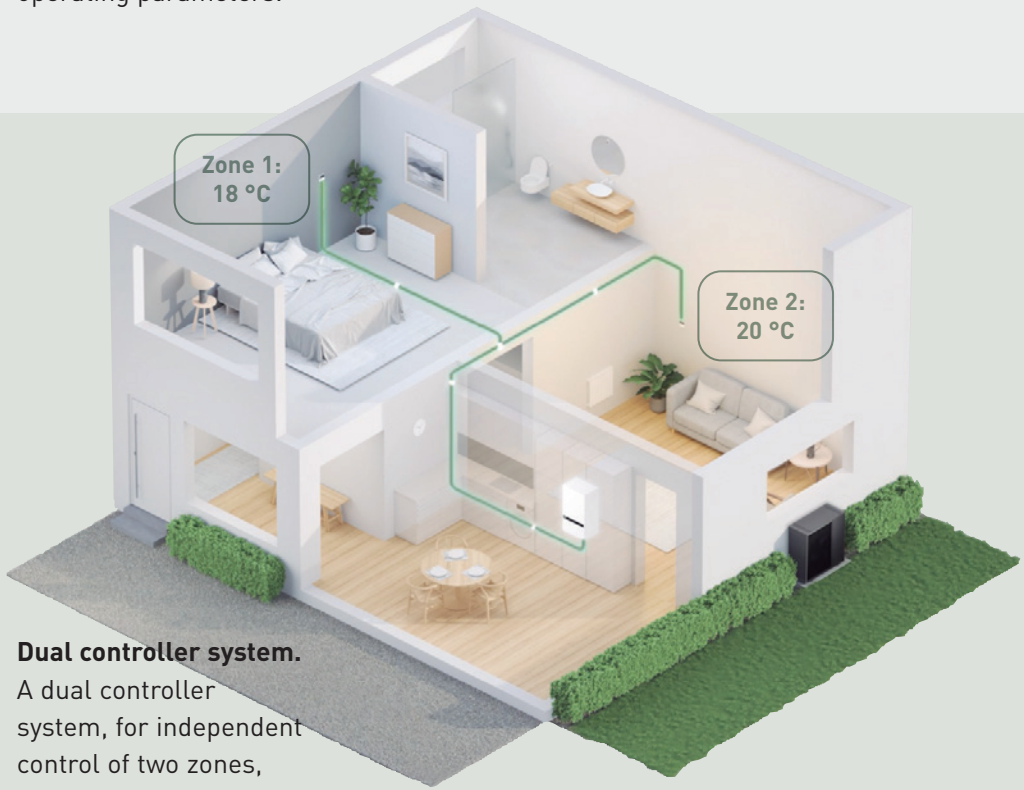
Advanced control features, enhanced interface.

Remote controller designed in harmony with the whole system, with optimised user interface and improved features.

Smart bivalency.
Cost effective bivalent mode with power tariff logic.

Optimised user interface.
Each touch point designed in harmony, with optimised user interface across the range.

Additional interface connection port.
Enhanced connectivity provided by a second interface connection port (CN-CNT) when the outdoor unit is connected to the control module or an indoor unit.



Dual controller system.
A dual controller system, for independent control of two zones, within the home.

High degree of living comfort and energy management.

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 Aquarea 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.

Watch demo Panasonic Comfort Cloud App.

More possibilities with IFTTT.

IF This Then That: IFTTT service enables user to automatically trigger actions for Aquarea system based on other apps, web services or devices.

AQUAREA+

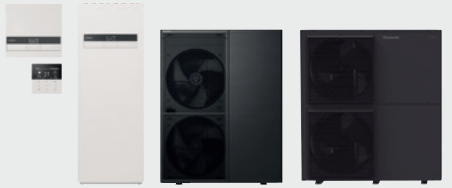
Get the most out of your Aquarea Heat Pump.

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+

Internet adapter included for Wi-Fi and LAN connection.

R290



A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

A+ DHW Scale from A+ to F

Combination table

Indoor unit		Backup heater capacity	DHW tank capacity	CN-CNT	Backup heater	Expansion vessel (10 L)	Additional functions		Outdoor unit – Heating capacity							
									Single phase		Three phase					
									9,0 kW	12,0 kW	9,0 kW	12,0 kW	16,0 kW	20,0 kW	25,0 kW	30,0 kW
									WH-WXG09ME5	WH-WXG12ME5	WH-WXG09ME8	WH-WXG12ME8	WH-WXG16ME8	WH-WXG20ME8	WH-WXG25ME8	WH-WXG30ME8
Hydraulic All in One	1ph	3 kW	185 L					**WH-ADC0316M3E52**	✔	✔	—	—	—	—	—	—
		6 kW	185 L	✔ (2)	✔	✔	CZ-NS6P	**WH-ADC0316M6E52**	✔	✔	—	—	—	—	—	—
	3ph	9 kW	185 L					**WH-ADC0316M9E82**	✔	✔	✔	✔	✔	—	—	—
Control module	1ph	—	—					**WH-CME5**	✔	✔	—	—	—	—	—	—
	3ph	—	—	✔ (2)	Field supply	—	CZ-NS7P	**WH-CME8**	✔	✔	✔	✔	✔	—	—	—
	3ph	—	—					**WH-CME8L**	—	—	—	—	—	✔	✔	✔
Remote controller with Wi-Fi adapter	—	—	—	✔ (1)	—	—	—	**CZ-RTW2TAW1C**	✔	✔	✔	✔	✔	✔	✔	✔

			Aquarea T-CAP M Series					Big Aquarea T-CAP M Series		
Outdoor unit		**WH-**	**WXG09ME5**	**WXG12ME5**	**WXG09ME8**	**WXG12ME8**	**WXG16ME8**	**WXG20ME8**	**WXG25ME8**	**WXG30ME8**
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	9,00/5,23	12,00/5,06	9,00/5,23	12,00/5,06	16,00/4,89	20,00/4,66	25,00/4,40	30,00/4,36
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	9,00/3,24	12,00/3,23	9,00/3,24	12,00/3,23	16,00/3,20	20,00/2,49	25,00/2,35	30,00/2,18
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	9,00/3,81	12,00/3,54	9,00/3,81	12,00/3,54	16,00/3,30	20,00/3,39	25,00/3,21	30,00/2,98
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,00/2,54	12,00/2,42	9,00/2,54	12,00/2,42	16,00/2,37	20,00/2,08	25,00/1,96	30,00/1,95
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	9,00/3,45	12,00/3,00	9,00/3,45	12,00/3,00	16,00/2,53	20,00/2,48	25,00/2,35	30,00/2,32
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	9,00/2,35	12,00/2,17	9,00/2,35	12,00/2,17	16,00/1,97	20,00/1,60	25,00/1,51	30,00/1,49
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	9,00/3,61	9,00/3,61	9,00/3,61	9,00/3,61	9,00/3,61	20,00/3,12	25,00/2,95	30,00/2,02
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	9,00/5,26	12,00/5,26	9,00/5,26	12,00/5,26	16,00/5,26	20,00/3,58	25,00/3,44	30,00/3,31
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η_{s} %)	4,96/3,57 (195/140)	5,00/3,46 (197/135)	4,96/3,57 (195/140)	5,00/3,46 (197/135)	4,20/3,31 (168/129)	4,01/3,50	3,78/3,30	3,55/3,10
	Energy class [1]	A+++ to D	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A+++/A++	A++/A++	A++/A++	A+/A+
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η_{s} %)	6,47/4,34 (256/171)	6,47/4,34 (256/171)	6,47/4,34 (256/171)	6,47/4,34 (256/171)	5,88/4,09 (232/160)			
	Energy class [1]	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++			
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η_{s} %)	4,31/3,26 (169/127)	4,31/3,26 (169/127)	4,31/3,26 (169/127)	4,31/3,26 (169/127)	3,83/3,20 (150/125)			
	Energy class [1]	A+++ to D	A++/A++	A++/A++	A++/A++	A++/A++	A++/A++			
Sound power [2]	Heat	dB(A)	52	53	52	53	57	68	69	69
Dimension	H x W x D	mm	1520x1200 x430	1520x1200 x430	1520x1200 x430	1520x1200 x430	1520x1200 x430	1645 x 1500 x 460	1645 x 1500 x 460	1645 x 1500 x 460
Net weight		kg	161	161	161	161	165	260	260	260
Refrigerant (R290) / CO_2 Eq. [3]		kg / T	1,78/0,006	1,78/0,006	1,78/0,006	1,78/0,006	1,77/0,006	2,6/0,008	2,6/0,008	2,6/0,008
Operating range - outdoor ambient	Heat	°C	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35	-25 ~ +35	-25 ~ +35	-25 ~ +35
	Cool	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet	Heat / Cool	°C	25 ~ 75/ 5 ~ 20	25 ~ 75/ 5 ~ 20	25 ~ 75/ 5 ~ 20	25 ~ 75/ 5 ~ 20	25 ~ 75/ 5 ~ 20	20 ~ 75/ 5 ~ 20	20 ~ 75/ 5 ~ 20	20 ~ 75/ 5 ~ 20

1) Scale from A+++ to D. 2) Sound power level in accordance to EN12102 under conditions of the EN14825. 3) WH-WXG models are hermetically sealed. 4) Check local regulations.* EER and COP classification is at 230 V only in accordance with EU directive 2003/32/EC.

Indoor unit		WH-	ADC0316M3E52	ADC0316M6E52	ADC0316M9E82
Dimension	H x W x D	mm		1642 x 599 x 602	
Net weight		kg		89	
Water volume		L		185	
Maximum DHW temperature		°C		65	
Material inside tank				Stainless steel	
Pipe length range std. / max.		m		5/30	
Elevation difference (in / out)		m		30	
Electric backup heater		kW	3,00	6,00	9,00

Domestic Hot Water energy efficiency

Indoor unit		WH-	ADC0316M3E52	ADC0316M9E82
Outdoor unit			**WH-WXG09ME5/8**	**WH-WXG16ME8**
			WH-WXG12ME5/8	
Tapping profile according EN16147			L	L
DHW tank ERP η / COPdHW / efficiency [1]	Average climate	ηwh % / COPdHW	123/3,00/A+	117/2,85/A+
	Warm climate		132/3,30/A+	128/3,20/A+
	Cold climate		88/2,20/A	84/2,10/A

1) Scale from A+ to F. ** 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-CME5	WH-CME8	WH-CME8L
Dimension	H x W x D	mm	450 x 450 x 117	450 x 450 x 117	450 x 450 x 117
Net weight		kg	7	7	7
Field supply electrical backup heater		kW	Up to 3 kW	Up to 9 kW	

Aquarea Quick Selector.

Helping you to find the Aquarea Heat Pump for your home in just a few clicks!

Visit Aquarea Quick Selector

AR Heat Pump Viewer.

This tool allows you to see how a Panasonic Aquarea Heat Pump looks in a home, utilising augmented reality.

Visit AR Heat Pump Viewer

R290

Natural refrigerant R290 with GWP 3.
The new construction ensures a reduced noise level and increased safety for the use of R290.

A++ ErP 55°C

Better efficiency and value for medium temperature applications.
Energy efficiency class up to A++ in a scale from A+++ to D.

A+++ ErP 35°C

Better efficiency and Value for low temperature applications.
Energy efficiency class up to A+++ in a scale from A+++ to D.

A+ DHW

Better efficiency and Value for domestic hot water.
Energy efficiency class up to A+ in a scale from A+ to F.

INVERTER+

Inverter Plus.
Panasonic Inverter Plus compressors are designed to achieve outstanding level of performance.

A CLASS WATER PUMP AUTO SPEED

A class water pump.
Aquarea are built-in with A class energy efficiency water pump. High efficiency circulating the water in the heating installation.

DHW

DHW.
With Aquarea you can also heat your domestic hot water at a very low cost with the optional hot water cylinder.

-28 °C HEATING MODE

Down to -28 °C in heating mode.
The heat pumps work in heating mode with an outdoor temperature is as low as -28 °C.

WATER FILTER WITH MAGNET

Water filter with magnet.
Easy access and fast clip technology for J Series onwards.

75°C OUTPUT WATER FLOW TEMPERATURE

75 °C output water.
Reaches water outlet temperature up to 75 °C.

FLOW SENSOR

Water flow sensor.
Included on H Series onwards.

BOILER CONNECTION

Renovation.
Our Aquarea Heat Pumps can be connected to an existing or new boiler for optimum comfort even at very low outdoor temperatures.

WI-FI INCLUDED

Internet control. Wi-Fi adapter included.
A next generation system providing user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android™ or iOS smartphone, tablet or PC via the internet.

BMS CONNECTIVITY

BMS connectivity.
The communication port can be integrated into the indoor unit and provides easy connection to, and control of, your Panasonic heat pump to your home or Building Management System.

5 YEARS COMPRESSOR WARRANTY

5 Years compressor warranty.
We guarantee the outdoor unit compressors in the entire range for five years.

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

EU-LFTAQM0324