



Aquarea T-CAP All in One K Generation

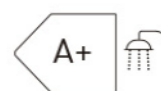
Ideal to ensure that the heating capacity is maintained even at very low temperatures.

1. For retrofit and new builds, the ideal solution when capacity is demanding
2. Three award-winning design
3. **High energy savings:** Top class ErP A+++ for heating at 35°C water outlet temperature* / Tank boasts high heat retention thanks to U-Vacua™** / Constant rated capacity down to -20°C without back-up heater
4. **Quiet operation:** Up to -8dB(A) in Super Quiet mode
5. **Compatible with Panasonic Comfort Cloud App and Aquarea Service Cloud**

* Scale from A+++ to D. Might not apply to all the models / ** U-Vacua™ is a vacuum insulation panel (VIP) technology



AQUAREA



A revolution in design, efficiency, connectivity and sustainability.



Introducing the new Aquarea T-CAP K Generation air to water heat pumps

The wide range of Aquarea products makes possible optimum solutions that are tailored to individual lifestyles while offering outstanding environmental performance, aligning with our vision of a carbon-free society and our GREEN IMPACT plan.

For retrofit and new builds, Aquarea T-CAP is excellent for replacing gas or oil boilers, or connecting to new underfloor heating, radiators or fan coil units. Aquarea T-CAP is able to maintain the heat pump output capacity until -20°C¹⁾ outdoor temperature without the help of an electrical booster heater.

1) At 35°C flow temperature.



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.



A revolution in design

The outdoor unit.

The outdoor unit, with an anthracite grey colour which dresses the entire range, is designed to harmonize with architecture and the environment with a quiet operation.

The indoor unit.

The indoor unit is designed to blend into your interior space effortlessly. In premium white, faithful to the Aquarea spirit, underlined by the seamlessly integrated controller which provides a sleek black band across the unit.

Aquarea T-CAP All in One K Generation



T-CAP K Generation

No need to oversize to reach required capacity at low temperatures.

With Aquarea T-CAP technology, Panasonic heat pumps can work in outdoor temperatures as low as -20°C maintaining capacity without backup heating at -20°C ¹⁾.

With other heat pumps, a larger capacity is required to achieve the same level of comfort at low temperatures.

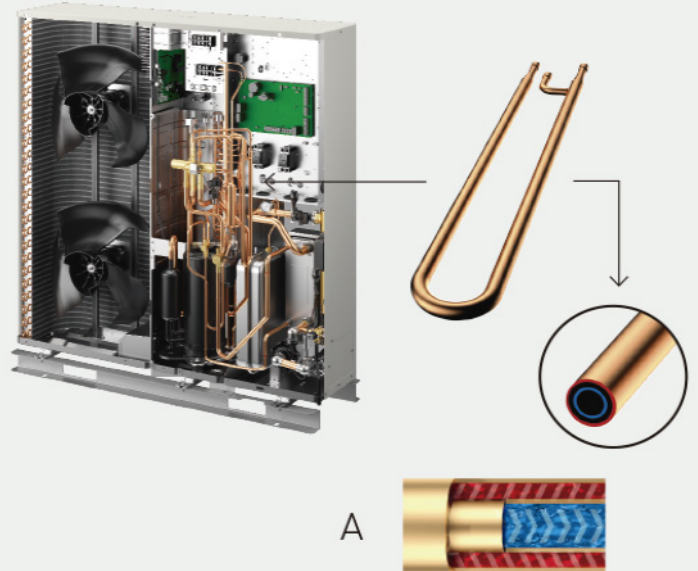
1) At 35°C flow temperature.

Maintaining heating capacity

How Aquarea T-CAP maintains performance even at -20°C outdoors:

A patent has been obtained for technology that can maintain heating capacity even in low outdoor temperatures through optimal control that comes from incorporating dual-piped heat exchanger into the refrigeration cycle.

a) Dual-piped heat exchanger: Low pressure and low-temperature refrigerant in the inner pipe.



Further flexibility

- Less frequent maintenance with pre-installed magnet filter
- Operating range down to -28°C
- Can supply 60°C hot water even at -10°C outside temperature
- Bluefin treatment protection on outdoor heat exchanger for harsh ambient conditions



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.

With the Quiet mode 3, the noise level can be reduced by 8dB(A).

Aquarea T-CAP All in One K Generation Main Features



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

With its small 598x600mm footprint, the 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.

Aquarea All in One Compact: design in innovation in a single unit

1. Great serviceability.

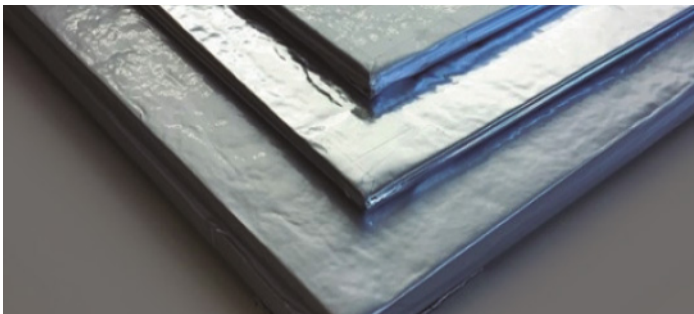
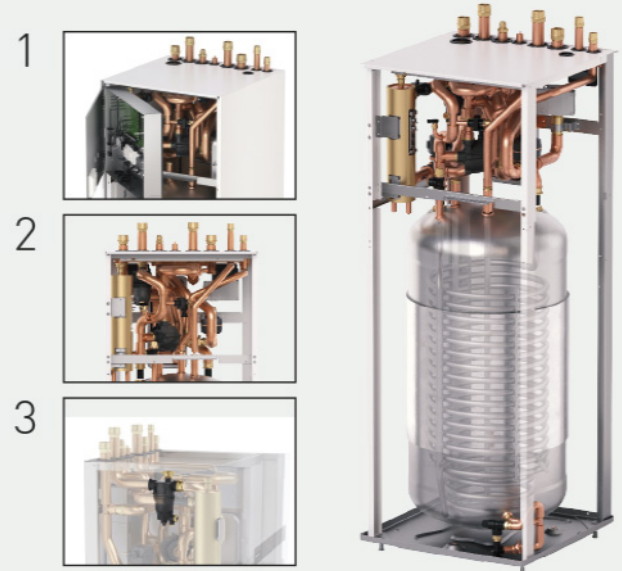
- Easy access to hydraulic part thanks to door opening mechanism
- No buffer tank required, reducing space, cost and installation time
- All sensors can be checked from the remote controller
- Water pressure sensor

2. Slimmer, yet 185 L tank capacity.

Piping layout at the top in order to maintain large tank capacity.

3. Improved water filter for less maintenance.

Dust removal capacity of the water filter has been increased 5 times. Less frequent filter cleaning means more convenience.



U-Vacua™; Vacuum insulation panel

Significant energy savings with world-leading insulation performance

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 1-20Pa, thereby minimising thermal conductivity.



Ventilation unit on top 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.

Home connectivity and energy management systems



Remote controller designed in harmony

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.

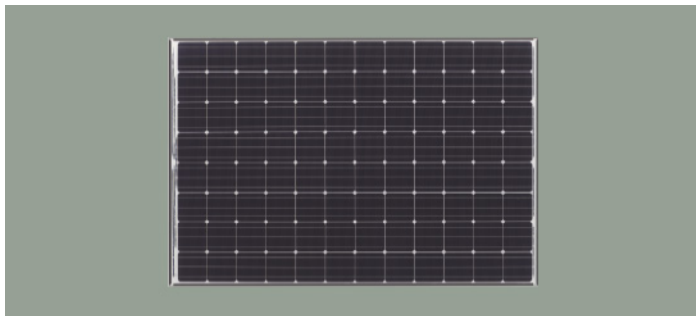
Optimised user interface: Each touch point designed in harmony, with optimised user interface across the range.



Dual controller system

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

a: Zone 1: 18°C - b: Zone 2: 20°C.



Aquarea + PV panels

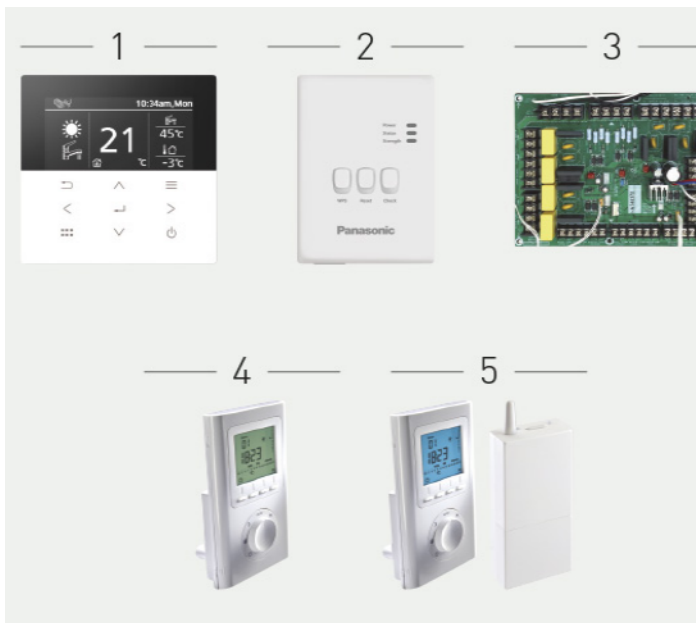
Aquarea heat pumps can synchronise with PV panels, using the optional PCB CZ-NS5P or CZ-NS4P. Thanks to this feature, demand of heating, cooling and domestic hot water production is adapted to the PV panel production.



Smart Grid Ready

Aquarea heat pumps in combination with the optional PCB CZ-NS5P or CZ-NS4P hold the SG Ready function, allowing the heat pump to be connected in an intelligent grid control.

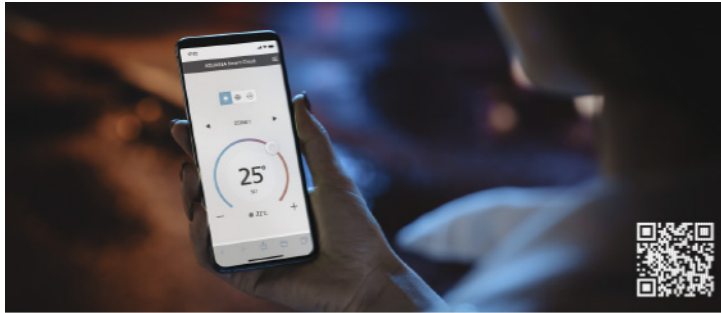
*J series or later



Accessories

1. **CZ-RTW1:** Additional remote controller for K and L Generations.
2. **CZ-TAW1B:** Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN.
3. **CZ-NS5P:** Additional functions PCB.
4. **PAW-A2W-RTWIRED:** Room thermostat.
5. **PAW-A2W-RTWIRELESS:** Wireless LCD room thermostat.

Home connectivity and energy management systems



Panasonic Comfort Cloud App

The IoT solution for your heating and cooling systems to help maximize comfort while managing energy consumption.

The Panasonic Comfort Cloud App enables you to conveniently manage and monitor the Aquarea range of heating, cooling and hot water functions from just one mobile device. Also, energy monitoring is possible allowing opportunity to learn how to reduce the operating cost even more.

Optional internet adapter for Wi-Fi and LAN connection, CZ-TAW1B

<https://demo.aquarea-smart.panasonic.com>

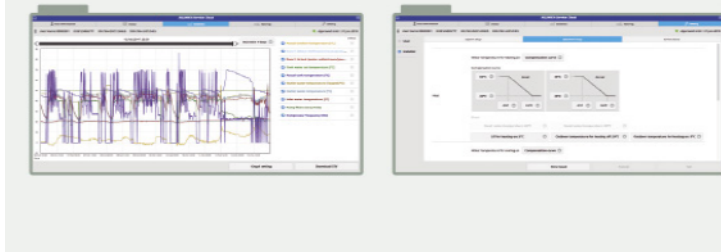


Aquarea Service Cloud

The real remote maintenance made simple.

Aquarea Service Cloud is an advanced service that allows your service provider to take care of your heating system remotely. It saves time and money and offers the quickest service and solutions for your heat pump.

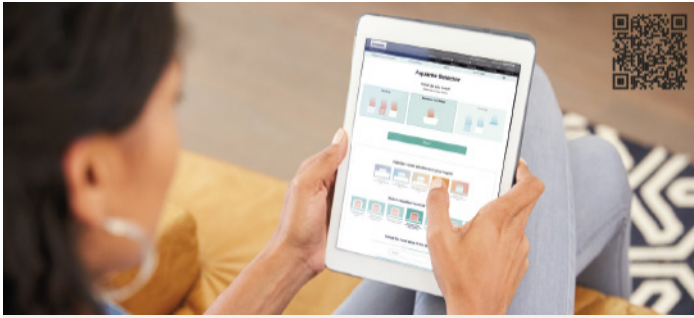
Accurate monitoring and maintenance expands the system's lifespan and guarantees a higher Return On Investment for your heat pump.



Easy Installation of Cloud Adaptor

Flexible and intuitive connectivity, with a simple connection of the Cloud adaptor through the front panel, which integrates seamlessly into the indoor unit.

Convenience and support



Aquarea Quick Selector

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

<https://aircon.panasonic.eu/visit/selection-tool/>



AR Heat Pump Viewer

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

<https://www.aircon.panasonic.eu/visit/ar-aquarea/>



Aquarea+ get the most out of your Aquarea Heat Pump

Learn how to use and program your new Aquarea.

In this site, you will find useful information that will allow you to operate your Panasonic Aquarea system to provide heating, cooling & hot water in the most efficient and cost effective way. Discover Panasonic Comfort Cloud App, the IoT solution for your heating and cooling systems to help maximize comfort while managing energy consumption.

<https://aquarea.panasonic.eu/plus>



Aquarea Service+. A window to tranquility

Why choose our Aquarea Service+?

1. Our service technicians are experts in Aquarea aerothermics.
2. We diagnose faults remotely and avoid unnecessary technical support visits.
3. IoT technology embedded in your Aquarea system.

How to choose your right service package?

Aquarea Service+ Premium: Labour & travel costs included · Free Panasonic Spare parts · Service support within 24h including weekends · Priority support hotline 24/7 · On site annual maintenance.

Aquarea Service+ Smart: Daily diagnosis check · Service support within 24h including weekends · Priority support hotline 24/7 · On site annual maintenance.

Aquarea Service+ Comfort: On site annual maintenance · Priority support hotline.

<https://shop.aircon.panasonic.eu/>

AQUAREA
SERVICE+



Aquarea T-CAP All in One K Generation 1 phase · R32

T-CAP All in One K Series 1 phase - 3 phase · R32		SINGLE PHASE		THREE PHASE		
		9 kW	12 kW	9 kW	12 kW	16 kW
Kit		KIT-AXC09K6E5	KIT-AXC12K6E5	KIT-AXC09K9E8*	KIT-AXC12K9E8*	KIT-AXC16K9E8*
Heating capacity (A +7°C, W 35°C)	kW	9,00	12,10	9,00	12,10	16,00
COP (A +7°C, W 35°C)		5,03	4,84	5,03	4,84	4,38
Heating capacity (A +7°C, W 55°C)	kW	9,00	12,10	9,00	12,10	16,00
COP (A +7°C, W 55°C)		3,07	3,04	3,07	3,04	2,72
Heating capacity (A +2°C, W 35°C)	kW	9,00	12,00	9,00	12,00	16,00
COP (A +2°C, W 35°C)		3,69	3,44	3,69	3,44	3,10
Heating capacity (A +2°C, W 55°C)	kW	9,00	12,00	9,00	12,00	16,00
COP (A +2°C, W 55°C)		2,31	2,29	2,31	2,29	2,07
Heating capacity (A -7°C, W 35°C)	kW	9,00	12,00	9,00	12,00	16,00
COP (A -7°C, W 35°C)		3,00	2,72	3,00	2,72	2,39
Heating capacity (A -7°C, W 55°C)	kW	9,00	12,00	9,00	12,00	16,00
COP (A -7°C, W 55°C)		2,10	2,29	2,10	2,29	1,71
Cooling capacity (A 35°C, W 7°C)	kW	8,80	10,70	8,80	10,70	13,40
EER (A 35°C, W 7°C)		3,11	2,68	3,11	2,68	2,64
Cooling capacity (A 35°C, W 18°C)	kW	8,80	10,70	8,80	10,70	13,40
EER (A 35°C, W 18°C)		4,63	3,92	4,63	3,92	2,64
Heating average climate. Seasonal energy efficiency SCOP (W 35°C / W 55°C)	SCOP	4,96 / 3,57	4,96 / 3,57	4,96 / 3,57	4,58 / 3,46	4,46 / 3,31
Heating average climate. Seasonal energy efficiency η (W 35°C / W 55°C)	ηs %	195 / 140	195 / 140	195 / 140	180 / 135	176 / 129
Heating average climate. Energy class (W 35°C / W 55°C) (1)	A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Heating warm climate. Seasonal energy efficiency SCOP (W 35°C / W 55°C)	SCOP	6,47 / 4,34	6,47 / 4,34	6,47 / 4,34	6,47 / 4,34	5,88 / 4,09
Heating warm climate. Seasonal energy efficiency η (W 35°C / W 55°C)	ηs %	256 / 171	256 / 171	256 / 171	256 / 171	232 / 160
Heating warm climate. Energy class (W 35°C / W 55°C) (1)	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate. Seasonal energy efficiency SCOP (W 35°C / W 55°C)	SCOP	4,31 / 3,26	4,31 / 3,26	4,31 / 3,26	4,31 / 3,26	3,83 / 3,20
Heating cold climate. Seasonal energy efficiency η (W 35°C / W 55°C)	ηs %	169 / 127	169 / 127	169 / 127	169 / 127	150 / 125
Heating cold climate. Energy class (W 35°C / W 55°C) (1)	A+++ to D	A++ / A++	A++ / A++	A++ / A++	A++ / A++	A++ / A++
Indoor unit		WH-ADC0912K6E5	WH-ADC0912K6E5	WH-ADC0912K9E8	WH-ADC0912K9E8	WH-ADC16K9E8
Indoor sound pressure (Heat)	dB(A)	33	33	33	33	33
Indoor sound pressure (Cool)	dB(A)	33	33	33	33	33
Indoor dimension (Height)	mm	1.642	1.642	1.642	1.642	1.642
Indoor dimension (Width)	mm	599	599	599	599	599
Indoor dimension (Depth)	mm	602	602	602	602	602
Indoor net weight	kg	101	101	102	102	103
Water pipe connector	Inch	R 1¼	R 1¼	R 1¼	R 1¼	R 1¼
A class pump (Number of speeds)		Variable speed	Variable speed	Variable speed	Variable speed	Variable speed
A class pump (Input power)	W	145	145	145	145	173
Heating water flow (ΔT=5 K, 35°C)	L/min	25,8	34,4	25,8	34,4	45,9
Water volume	L	185	185	185	185	185
Maximum DHW temperature	°C	65	65	65	65	65
Material inside tank		Stainless steel	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147		L	L	L	L	L
DHW tank ERP average climate efficiency rating (2)	A+ to F	A	A	A	A	A
DHW tank ERP warm climate efficiency rating (2)	A+ to F	A+	A+	A+	A+	A+
DHW tank ERP cold climate efficiency rating (2)	A+ to F	A	A	A	A	A
DHW tank ERP average climate η	ηwh %	112	112	112	112	107
DHW tank ERP average climate COPdHW	COPdHW	2,80	2,80	2,80	2,80	2,68
DHW tank ERP warm climate η	ηwh %	132	132	132	132	128
DHW tank ERP warm climate COPdHW	COPdHW	3,30	3,30	3,30	3,30	3,20
DHW tank ERP cold climate η	ηwh %	88	88	88	88	84
DHW tank ERP cold climate COPdHW	COPdHW	2,20	2,20	2,20	2,20	2,10
Outdoor unit		WH-UXZ09KE5	WH-UXZ12KE5	WH-UXZ09KE8	WH-UXZ12KE8	WH-UXZ16KE8
Outdoor sound power (Heat) (3)	dB(A)	65	65	65	65	65
Outdoor dimension (Height)	mm	1.340	1.340	1.340	1.340	1.340
Outdoor dimension (Width)	mm	900	900	900	900	900
Outdoor dimension (Depth)	mm	320	320	320	320	320
Outdoor net weight	kg	88	88	90	90	103
Refrigerant (R32) / CO2 Eq.	kg / T	1,60 / 1,080	1,60 / 1,080	1,60 / 1,080	1,60 / 1,080	1,83 / 1,235
Piping diameter (Liquid)	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Piping diameter (Gas)	Inch (mm)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)
Pipe length range	m	3 ~ 30	3 ~ 30	3 ~ 30	3 ~ 30	3 ~ 30
Elevation difference (in/out)	m	20	20	20	20	20
Pre-charged pipe length	m	10	10	10	10	10
Additional gas amount	g/m	30	30	30	30	30
Operation range - Outdoor ambient (Heat)	°C	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35
Operation range - Outdoor ambient (Cool)	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet (Heat) (4)	°C	20 ~ 60	20 ~ 60	20 ~ 60	20 ~ 60	20 ~ 60
Water outlet (Cool) (4)	°C	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20
Electrical information		WH-ADC0912K6E5	WH-ADC0912K6E5	WH-ADC0912K9E8	WH-ADC0912K9E8	WH-ADC16K9E8
Electric backup heater	kW	6,00	6,00	9,00	9,00	9,00
Recommended fuse	A	30 / 30	30 / 30	20 / 20	20 / 20	20 / 20
Recommended minimum cable size, supply 2 (5)	mm²	3x4,0	3x4,0	5x1,5	5x1,5	5x2,5
Recommended minimum cable size, supply 1 (5)	mm²	3x4,0	3x4,0	5x1,5	5x1,5	5x1,5

Dimensions

