

AQUAREA



# Welcome to Aquarea air to water heat pump

Aquarea's air to water Heat Pump for residential and commercial applications.

Offering capacities from 3 kW all the way through to 16 kW, the Aquarea Heat Pump Range is the widest on the market, ensuring a system is available whatever your heating and cooling needs. Suitable for new build and refurbishment projects, the solutions are cost-effective with minimised environmental impact.

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## Highlighted features

Panasonic's Aquarea range of heat pumps deliver major energy savings thanks to its incredible efficiency even at -20 °C. The Panasonic Aquarea Heat Pumps are designed and produced by Panasonic and not by other companies.

Panasonic



The Aquarea Heat Pump is a system that generates the perfect temperature and produces hot water, in an easy, cheap and environmentally conscious way, by transferring heat instead of generating it. It is among the Technologies listed on the International Energy Agency (IEA) Blue Map, whose goal is to reduce CO<sub>2</sub> emissions to half the levels emitted in 2005, by the year 2050. Aquarea is part of a new generation of heating solutions that use a renewable, free energy source (the air) to heat or cool the home and to produce hot water.

AQUAREA

**The Good Design Award** is among the most prestigious awards for product design excellence. Winning this award has underscored the outstanding performance and energy savings of the Panasonic indoor units All in One and Bi-bloc. In addition, these units' clean, tidy design and functionality make the Aquarea line the ideal system for household applications.

 GOOD DESIGN AWARD 2017

## Energy saving

 <b>R32</b>	 ERP 65°C	 ERP 35°C	 DHW	 INVERTER+	 A CLASS WATER PUMP AUTO SPEED
<b>Refrigerant gas R32</b> Our heat pumps containing the refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP).	<b>Better efficiency and value for medium temperature applications.</b> Energy efficiency class up to A++ in a scale from A++ to D.	<b>Better efficiency and value for low temperature applications.</b> Energy efficiency class up to A+++ in a scale from A+++ to D.	<b>Better efficiency and value for domestic hot water.</b> Energy efficiency class up to A+ in a scale from A+ to F.	<b>Inverter Plus.</b> Panasonic Inverter Plus compressors are designed to achieve outstanding level of performance.	<b>A class water pump.</b> Aquarea are built-in with A class energy efficiency water pump. High efficiency circulating the water in the heating installation.

## High Performance

 <b>HIGH PERFORMANCE</b>	 T-CAP	 HIGH TEMPERATURE	 DHW	 HEATING MODE	 WATER FILTER WITH MAGNET
<b>Aquarea High Performance for low consumption houses.</b> From 3 to 16 kW. For a house with low temperature radiators or under-floor heating, our high performance Aquarea HP is a good solution. *COP of 5,33 for J Generation 3 kW.	<b>Aquarea T-CAP for extremely low temperatures.</b> From 9 to 16 kW. If the most important aspect is to maintain nominal heating capacities even at temperatures as low as -7 °C or -20 °C, select the Aquarea T-CAP.	<b>Aquarea HT ideal for retrofit. From 9 to 12 kW.</b> For a house with traditional high-temperature radiators, the Aquarea HT solution is the most appropriate, can work in output water temperatures of 65 °C even at outdoor temperatures as low as -20 °C.	<b>DHW.</b> With Aquarea you can also heat your domestic hot water at a very low cost with the optional hot water cylinder.	<b>Down to -20 °C in heating mode.</b> The heat pumps work in heating mode with an outdoor temperature as low as -20 °C.	<b>Water filter with magnet.</b> Easy access and fast clip technology for J Generation. Water filter only for H Generation.
 <b>FLOW TEMPERATURE</b>	 FLOW SENSOR	 5 years compressor warranty			

Aquarea J and H Generation heat pumps in combination with the optional PCB CZ-NSP2 hold the SG Ready Label (Smart Grid Ready Label), given by Bundesverband Warmepumpe (German Heat Pump Association). This Label shows the real capacity of Aquarea to be connected in an intelligent grid control.  
MCS Certificate number: MCS HP0086.\*  
Keymark: Check all our certified heat pumps on: [www.heatpumpkeymark.com](http://www.heatpumpkeymark.com).  
Passive House Institute: Certified models can be checked in <https://database.passivhouse.com>.

## High connectivity

 <b>BOILER CONNECTION</b>	 <b>SOLAR KIT</b>	 <b>ADVANCED CONTROL</b>	 <b>OPTIONAL WI-FI</b>	 <b>BMS CONNECTIVITY</b>
<b>Renovation.</b> Our Aquarea Heat Pumps can be connected to an existing or new boiler for optimum comfort even at very low outdoor temperatures.	<b>Solar kit.</b> For even greater efficiency, our Aquarea Heat Pumps can be connected to photovoltaic solar panels with an optional kit.	<b>Advanced control.</b> Remote controller with full dotted 3,5" wide back light screen. Menu with 17 available languages easy to use for installer and user. Included on J and H Generation.	<b>Internet control.</b> 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.	<b>Connectivity.</b> 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.

### Warning on quality of water and groundwater use:

This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. 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.

\* Not all products certified. As the certification process is on-going and the list of certified products constantly changing, please check for latest details on the official websites.

# Introducing the Panasonic Aquarea – air source heat pump

At the forefront of energy innovation, Aquarea is resolutely positioned as a “green” heating and air conditioning solution.

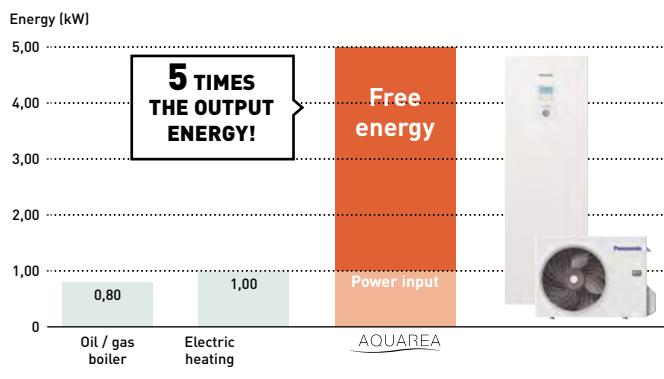


## Introducing the Panasonic Aquarea – air source heat pump

In European households, 79 %\* of energy consumption comes from heating and producing domestic hot water. By converting heat energy in the air into household warmth, highly efficient Aquarea technology reduces CO<sub>2</sub> emissions and environmental impact, compared to conventional boilers and electric heaters. Compared to an electric heater, the Aquarea Heat Pumps offer up to five times the output in kilowatts per every input in kilowatts.

\* ec.europa.eu/eurostat

### Comparison: 1 kW input versus output in kW.



\* 35 °C flow temperature.



## Why Panasonic Aquarea air source heat pumps?



### Optimum solutions for premium comfort.

Panasonic Aquarea Heat Pumps warm your home effectively and efficiently, to optimise the comfort.

- Precise control the indoor temperature thanks to reliable Panasonic Inverter Compressors
- Aquarea can cool space in summer and brings hot water all year round
- Night mode to reduce the noise when it's needed
- Aquarea T-CAP heat pumps can work in outdoor temperatures as low as -28 °C (for All in One and Bi-bloc)
- Energy savings, comfort and convenient control from any location thanks to Aquarea Smart Cloud
- Aquarea Service Cloud enables remote maintenance of the system



### Energy saving means money savings.

Panasonic Aquarea Heat Pumps are a smart choice for saving in heating, all leading to large savings in electricity bills.

- Savings of up to 80 % on heating expenses, compared to electrical heaters
- Up to A+++ in heating, within the range of A+++ to D, and A+ in domestic hot water, in the range of A+ to F
- Energy consumption can be further reduced by connecting photovoltaic panels to the system
- In combination with a ventilation solution, the indoor air becomes cleaner and the heating requirements of the building are reduced



### Adapts to your needs.

Panasonic Aquarea Heat Pumps produce heating, cooling and domestic hot water with a single system.

- From 3 kW to 16 kW, there is always an option for lower initial investment and lower operational cost
- Aquarea can be connected to floor heating, radiators or fan coil units
- In refurbishment projects, Aquarea can be integrated in existing heating systems
- Able to reach up to 65 °C water outlet<sup>1)</sup>
- Large piping length of up to 50 m between indoor and outdoor
- Aquarea T-CAP heat pumps guarantee the capacity without back-up heating down to -20 °C<sup>2)</sup>

<sup>1)</sup> Aquarea T-CAP Mono-bloc J Generation and Aquarea HT.

<sup>2)</sup> At 35 °C flow temperature.



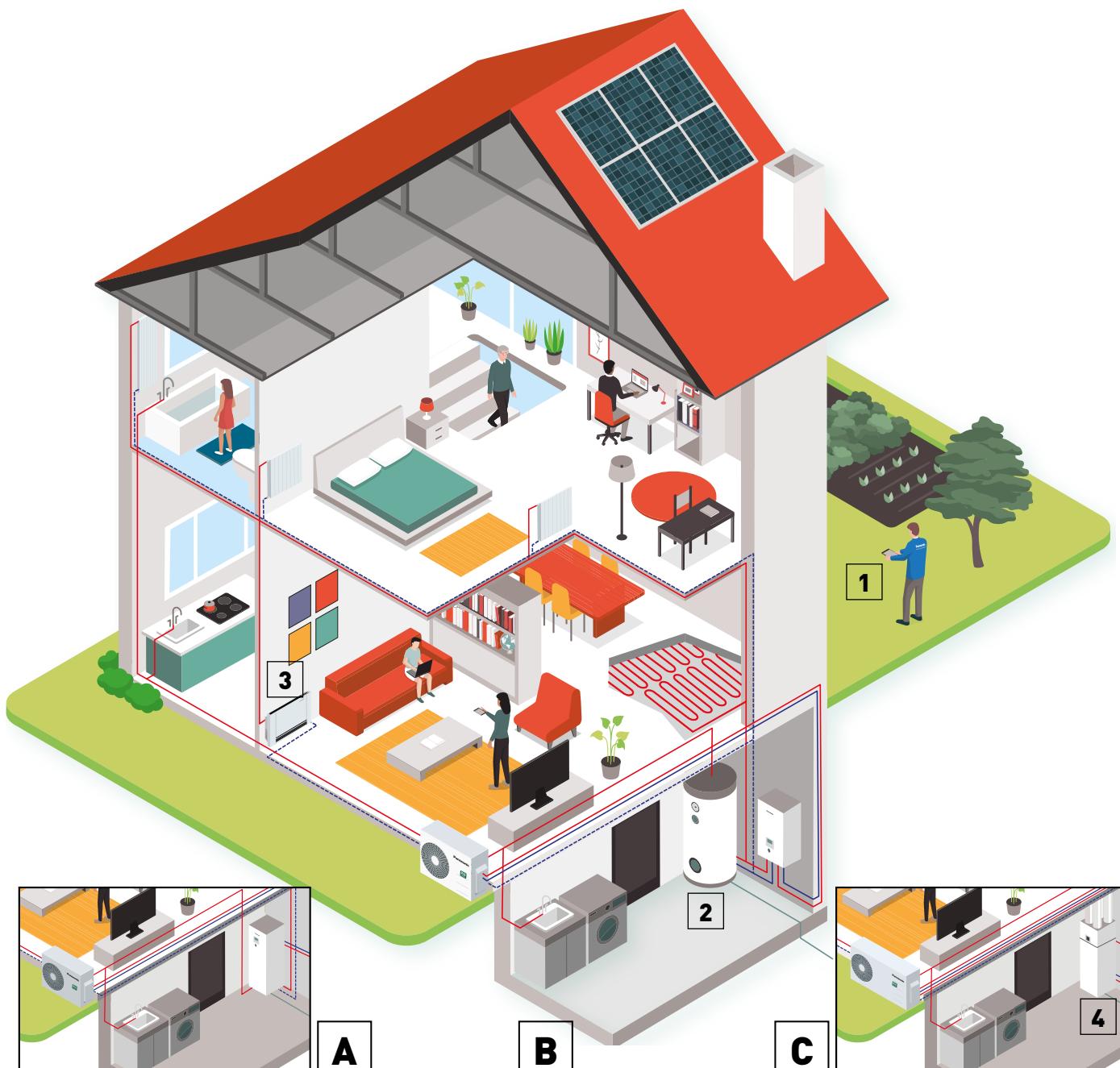
### Contributing to a decarbonised society.

The heat pump is considered a 'green' choice as the heat energy is taken from the environment, making it a sustainable option.

- It maintains a comfortable indoor temperature while significantly reducing environmental burden
- All Aquarea Heat Pumps can also be connected to a solar thermal or PV system in order to increase efficiency and minimise environmental impact



# Aquarea Heat Pump line-up



All in One system.



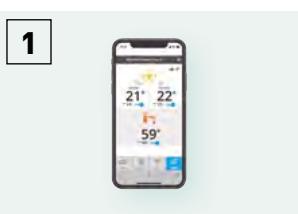
Bi-bloc system.



Mono-bloc system.



Aquarea EcoFlex.



Control through smartphone, tablet or computer (optional).



Super high efficiency cylinder (optional).



Fan coils for heating and cooling (optional).



Heat recovery Ventilation + DHW Tank (optional).

Panasonic Aquarea offers you solutions, helping to make the home more efficient and the installation cheaper and easier.

### Aquarea EcoFleX

**For new installations, specially those with limited spaces.**  
New Aquarea EcoFleX is a groundbreaking heat pump that connects an air ducted unit with nanoe™ X technology providing heat recovery hot water, space heating, space cooling and cleaner air. Outstanding efficiency and energy savings with low CO<sub>2</sub> emissions.

### Aquarea High Performance

**For new installations and low consumption homes.**  
Outstanding efficiency and energy savings with minimised CO<sub>2</sub> emissions and minimum space. Improved performance with COPs up to 5,33 for J Generation 3 kW.

### Aquarea T-CAP

**For extremely low temperatures, refurbishment and innovation.**

Ideal to ensure that the heating capacity is maintained even at very low temperatures. This line-up is able to maintain the heat pump output capacity until -20 °C<sup>1)</sup> outdoor temperature without the help of an electrical booster heater.

1) At 35 °C flow temperature.

### Aquarea HT

**For a house with old high-temperature radiators.**

Ideal for retrofit: green energy source works with existing radiators. Aquarea HT Solution is the most appropriate, providing output water temperatures of 65 °C even at outdoor temperatures as low as -15 °C.

Aquarea EcoFlex	Aquarea High Performance	Aquarea T-CAP	Aquarea HT
<b>Connectable to</b>			
Radiators - Underfloor heating - DHW - Air conditioning	Radiators - Fan coil - Underfloor heating - DHW	Radiators - Fan coil - Underfloor heating - DHW	Traditional high-temperature radiators - DHW
<b>Application</b>			
New buildings	Normal installation	For extreme cold ambient	Retrofit for old radiators
<b>Energy efficiency</b>			
Heating 35 °C / 55 °C <sup>1)</sup>	Heating 35 °C / 55 °C <sup>1)</sup>	Heating 35 °C / 55 °C <sup>1)</sup>	Heating 35 °C / 55 °C <sup>1)</sup>
<b>Minimum outdoor temperature</b>			
-15 °C	-20 °C	-28 °C (All in One and Bi-bloc) -20 °C (Mono-bloc) <sup>2)</sup>	-20 °C
<b>Minimum outdoor temperature to provide constant capacity at 35 °C supply water temperature</b>			
—	-7 °C (not for all units)	-20 °C <sup>2)</sup>	-15 °C
<b>Supply temperature for heating. Maximum / Heat pump only</b>			
65 °C / 55 °C	75 °C <sup>3)</sup> / 55 °C <sup>4)</sup> (or 60 °C for Aquarea J Generation)	75 °C <sup>3)</sup> / 60 °C <sup>4)</sup> (65 °C <sup>5)</sup> for Aquarea J generation)	75 °C <sup>3)</sup> / 65 °C
<b>Control and connectivity</b>			
Smart Grid Contact <sup>6)</sup> Wi-Fi included	Smart Grid Contact <sup>6)</sup> Wireless LAN Ready	Smart Grid Contact <sup>6)</sup> Wireless LAN Ready	—
<b>Range</b>			
Aquarea EcoFleX 8 kW (185 L)	All in One from 3 to 16 kW (185 L) Bi-bloc from 3 to 16 kW Mono-bloc from 5 to 16 kW	All in One from 9 to 16 kW (185 L) Bi-bloc from 9 to 16 kW Mono-bloc from 9 to 16 kW	Bi-bloc from 9 to 12 kW Mono-bloc from 9 to 12 kW

All data in this chart is applicable in most of models in each line up, check product specs to confirm. 1) Scale from A+++ to D. 2) 9 and 12 kW. 3) DHW maximum temperature with heater. 4) In case of outdoor temperature over -10 °C. 5) It is possible to set temperature by 65 °C on remote controller. Normally, outlet water temperature is 60 °C or lower. In case of ΔT setting with remote controller is 15 °C and the outdoor ambient temperature is 5 to 20 °C, outlet water temperature 65 °C is possible. 6) J and H Generation with CZ-NS4P.

## New Aquarea EcoFleX

**2-in-1 - Sustainable and efficient comfort all year long.**

New Aquarea EcoFleX is a groundbreaking heat pump that connects an air ducted unit with nanoe™ X technology providing heat recovery hot water, space heating, space cooling and cleaner air. Outstanding efficiency and energy savings with low CO<sub>2</sub> emissions.



## 1 Multi solution

- Trendy air to water + DX value added solution, featuring bi-heating and heat recovery function.
- Bi-heating: Simultaneous air heating and DHW or heating
- Heat recovery: Re-use wasted heat from the outdoor unit for DHW production
- Non-stop heating: Air heating runs continuously even in defrost operation

## 2 Compact design

Aquarea EcoFleX offers outstanding design and efficiency, ideal for installations with limited spaces such as apartments or housing complexes. The compact outdoor unit can supply both air conditioning and hot water at the same time. The Tank fits beautifully in any kitchen, small laundry space, or any other desired area. No need for gas supply.

## 3 Smart convenience

Energy savings, comfort and control from anywhere. Aquarea EcoFleX is equipped standard with Wi-Fi to enable smart control and energy consumption monitoring, using Aquarea Smart Cloud.



## 4 nanoe™ X technology to improve protection 24/7

This advanced technology utilises hydroxyl radicals (also known as OH radicals), which inhibit the growth of certain pollutants such as allergens, bacteria, viruses, moulds, odours, and certain hazardous substances. This naturally occurring process has major benefits indoors and improves the protection inside a room 24/7.

The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect (see page 10 for more detail). nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed.

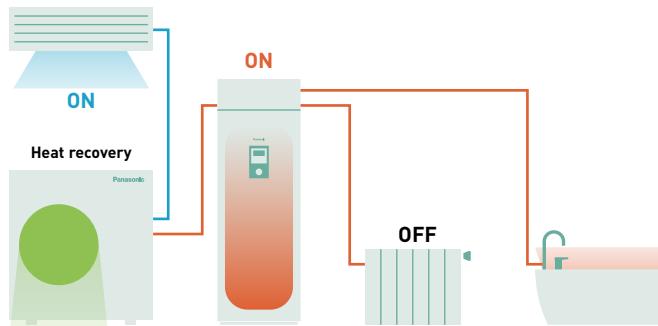


### Unique technology that drives the system

#### Heat recovery.

#### Cooling (air to air) + DHW (air to water).

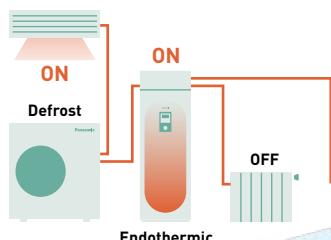
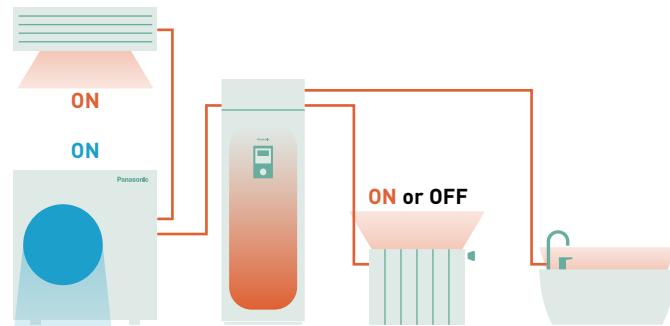
Heat exchange that took place in outdoor unit now is carried out in the water heater.



#### Bi-heating.

#### Heating (air to air) + Heating (air to water) or DHW.

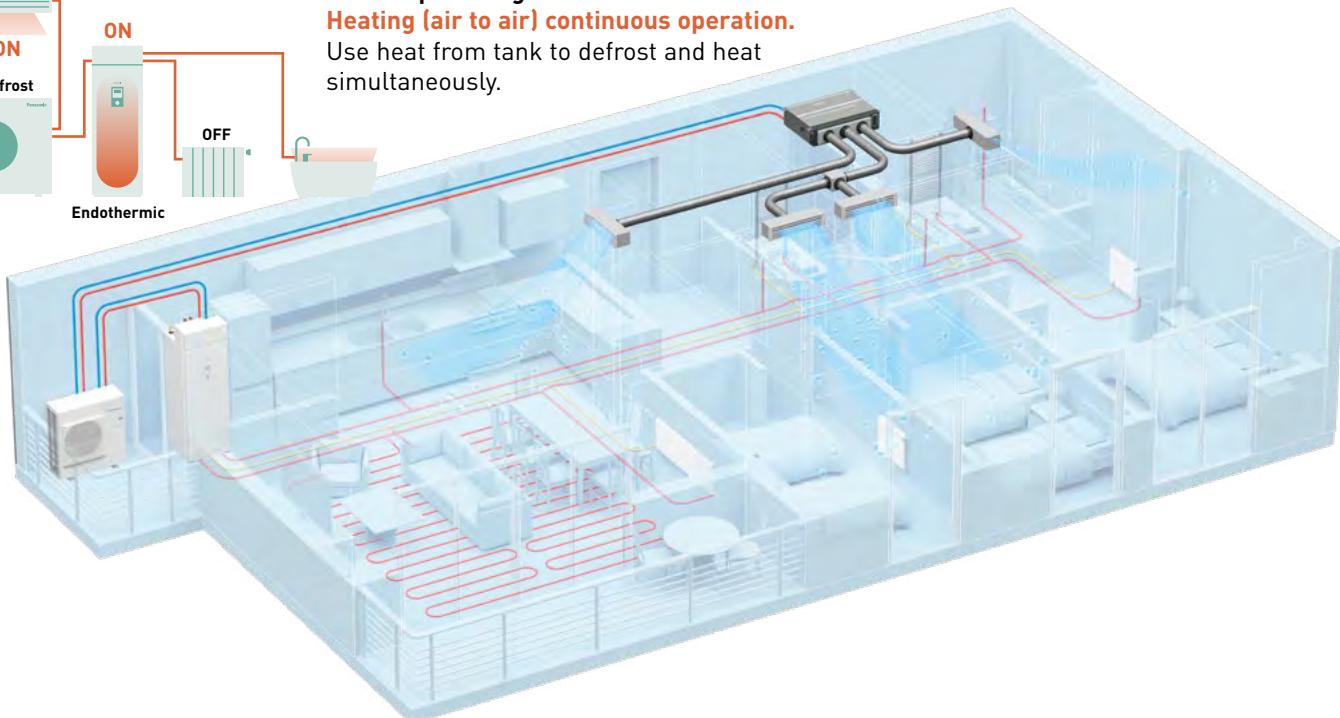
Heat from the compressor is supplied for heating and DHW simultaneously.



#### Non-stop heating.

#### Heating (air to air) continuous operation.

Use heat from tank to defrost and heat simultaneously.



# New Aquarea EcoFlex.

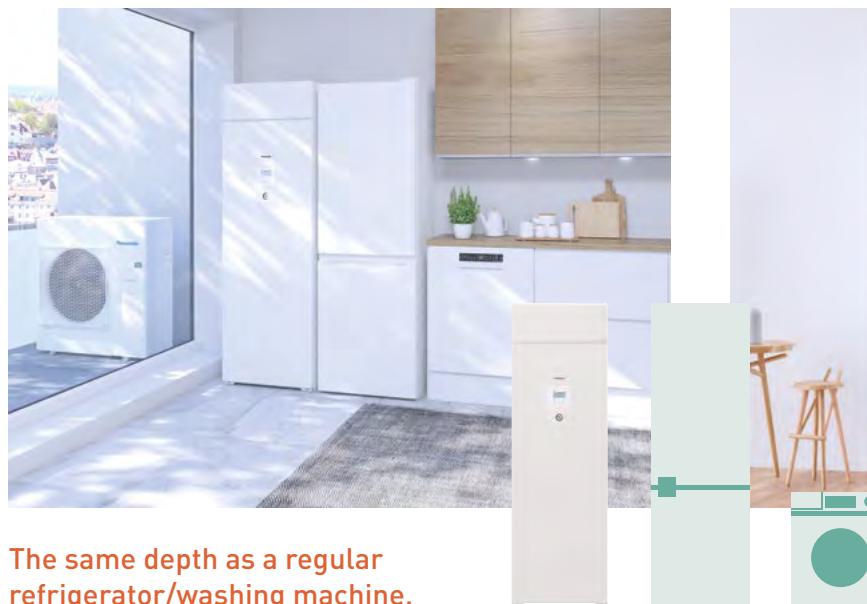
## Air to water

Tank unit + heat exchanger box to produce domestic hot water and space heating using radiators or floor heating.



Fits beautifully in any kitchen, small laundry space, or any other desired area

Kitchen.



Laundry space.



The same depth as a regular refrigerator/washing machine.

Deep: 600 mm  
Wide: 598 mm

Deep: 600 mm  
Wide: 600 mm

Deep: 600 mm  
Wide: 600 mm

### Compact, yet easy to maintain



#### 1 | Heat exchanger box structure to mitigate R32 refrigerant restrictions, flexible installation.

Water heat exchanger is designed above the top plate to comply with installation area regulation for products using large amounts of R32 refrigerant.



#### 2 | Maintained serviceability.

- Easy maintenance concept
- Access to hydraulic parts thanks to door opening mechanism
- No buffer tank required, reducing space, cost and installation time



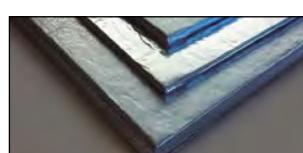
#### 3 | Improved water filter for less maintenance.

Superior dust removal capacity of the water filter. Less frequent filter cleaning means more convenience.



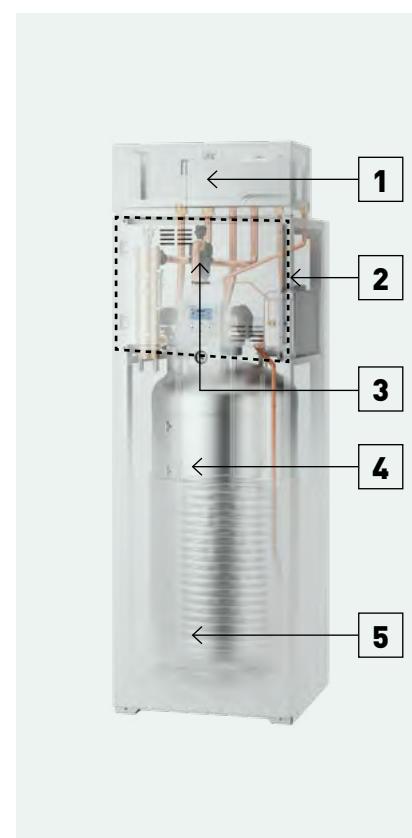
#### 4 | Slim indoor unit with big tank capacity.

Built-in 185 L water tank in a slim W 598 x D 600 mm indoor unit housing.



#### 5 | U-Vacua insulation technology.

Panasonic U-Vacua™ is a high performance vacuum insulation panel with very low thermal conductivity, that performs about 19 times better than standard urethane foam.



# New Aquarea EcoFlex.

## Air heating or cooling and cleaner air

Aquarea EcoFlex ducted unit has been designed to provide better comfort and flexibility.



[SEE PRODUCT SPECIFICATIONS](#)

### 1 Superior air quality

Standard equipped with nanoe™ X, a unique technology that cleans indoor air.

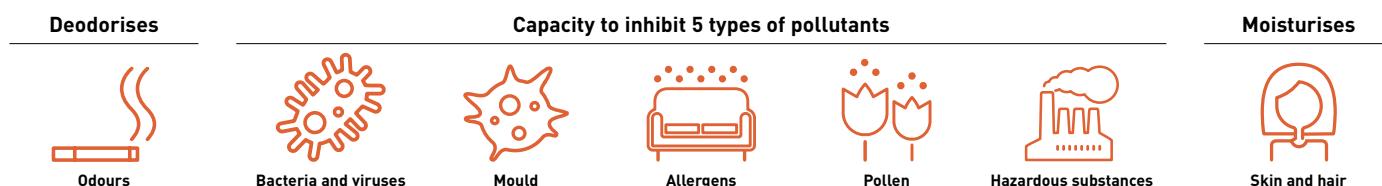
### 2 Ideal for living spaces

- Static pressure level: 10 - 150 Pa
- Compact body: Only 250 mm high
- Smart control ready via CONEX
- Rated up to SEER / SCOP class A++
- Low noise operation [22 ~ 29 dB(A)] using an improved fan casing
- DC fan motor, built-in drain pump

Panasonic's nanoe™ X technology takes this a step further and brings nature's detergent – hydroxyl radicals – indoors to help create an ideal environment



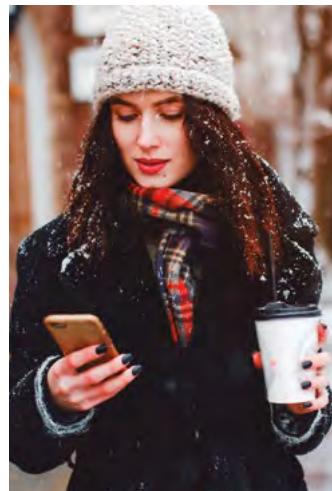
Thanks to the nanoe™ X properties, several types of pollutants can be inhibited such as certain types of bacteria, viruses, mould, allergens, pollen and certain hazardous substances.



The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed.



[REFER TO PAGE 10 FOR MORE DETAILS AND VALIDATION DATA](#)



#### nanoe™ X: improving protection 24/7.

Acts to clean your air, so that the indoor environment can be a cleaner and more pleasant place to be all day long. nanoe™ X works together with heating or cooling function when you are at home and can work independently when you are away.



Give the air conditioning the strength to increase the protection at home with nanoe™ X technology and convenient control via the Panasonic Comfort Cloud App.

#### Cleans the air when you are away.

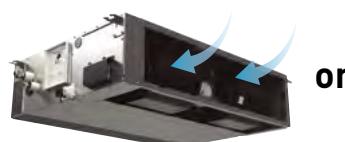
Leave the nanoe™ mode ON to inhibit certain pollutants and deodorise before you return home.

#### Improves your environment when you are at home.

Enjoy a cleaner, comfortable space with loved ones.

#### Selectable inlet air position

Inlet air position may be adjusted by means of a removable panel, to allow rear or bottom entry, depending on the duct installation.



#### Compact body

- Only 250 mm high
- Light units from 25 to 39 kg

Conventional model	33 kg	290 mm
Ducted unit	30 kg	250 mm

#### Ducted unit



## All in One Compact

The Aquarea All in One Compact unit is the ultimate space-saving solution. Its 598 x 600 mm footprint, standard size of other big appliances, reduces the space required for the installation





## Aquarea All in One: the best Panasonic technology for your home

### High quality components inside:

- Maintenance free Inox stainless 185 l tank
- Variable speed water pump (class A)
- Less frequent maintenance with pre-installed improved magnet filter
- Expansion vessel
- Vortex flow sensor
- Back up heater
- Safety valve
- Air purge valves
- 3 way valve inside

### The ultimate space-saving solution.

- 598 x 600 mm footprint reduces required installation space
- Low height leaves space for a ventilation unit
- No buffer tank required, reducing space, cost and installation time

### Further flexibility.

- Easy access to hydraulic parts
- Less frequent maintenance with pre-installed improved magnet filter
- Operation without back-up heating at -20 °C
- Can supply 60 °C hot water even at -10 °C outside temperature
- Piping length up to 50 m (for J Generation 7 and 9 kW)
- Modern remote controller can be installed up to 50 m from the indoor unit
- Can connect additional room temperature sensor, solar kit, 2 zones control, swimming pool and circulating pump (need optional PCB: CZ-NS4P)

## Aquarea All in One Compact: Made compact but maintenance is still easy



### 1 | Maintained serviceability.

- Easy maintenance concept
- Access to hydraulic parts thanks to door opening mechanism



### 2 | Slimmer, yet same tank capacity.

Piping layout at the top in order to maintain large 185 L tank capacity.



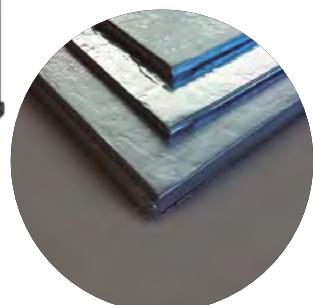
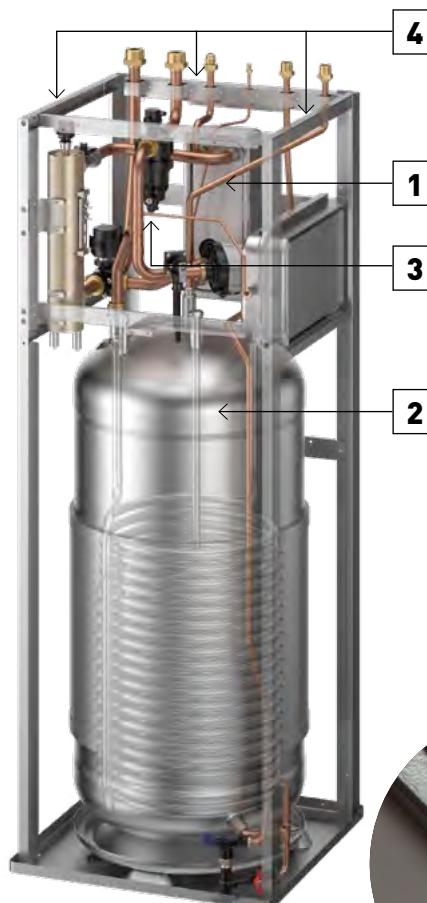
### 3 | Advanced magnetic water filter for less maintenance.

Superior dust removal capacity of the water filter. Less frequent filter cleaning means more convenience.



### 4 | Robust body for top ventilation unit.

Strengthening the body and top surface with a frame enables installation of a top ventilation unit. For safety, it's secured with bolts to prevent it falling.



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 minimising thermal conductivity.

## Aquarea All in One with 2 zone control: The optimal solution for an installation with 2 heating zones.

- 2 heating circuits, with 2 different water temperatures
- 2 water pumps and 2 water filters
- Floor heating water control with mixing valve

## Aquarea High Performance

For new installations and low consumption homes. Outstanding efficiency and energy savings with minimised CO<sub>2</sub> emissions and minimum space.



## High Performance helps you to meet strict building requirements and reduce building costs

The heating and production of domestic hot water have a very important impact on the energy consumption of a house. Efficient Panasonic heat pumps can help to significantly reduce the energy consumption of the house.

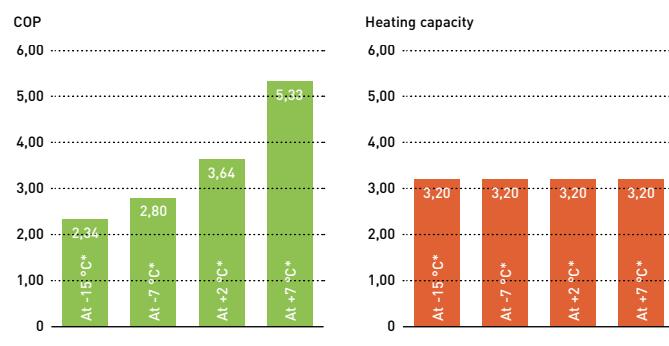
### Key points of the line-up

- Improved performance with COPs up to 5,33 for J Generation 3kW
- Reduced energy consumption through our circulating pump with energy efficiency class "A"
- Remote controller functions added: Auto mode, holiday mode, power consumption display

Panasonic has designed the Aquarea All in One, Bi-bloc and Mono-bloc heat pumps for homes which have high performance requirements.

Whatever the weather, Aquarea can work even at -20 °C! The Aquarea is easy to install on new or existing installations, in all types of properties.

### High Performance Heat Pumps are highly efficient (KIT-ADC03JE5 for example)



### Standard circulating pumps vs our circulating pump with energy efficiency class "A"

Comparison of energy consumption of circulation pumps. Circulating pump with energy efficiency class "A" with Dynamic flow control for 5 kW Mono-bloc.

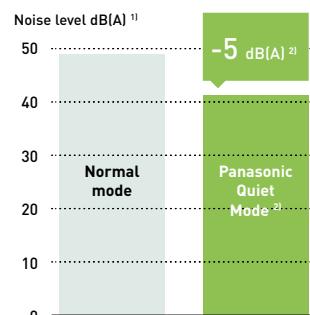
\* Based on German market: Assuming Standard pump may vary depending on consumption and energy cost.

<b>75 W</b> Standard pumps	Equivalent to <b>100 €/year saving*</b>
<b>47 W</b> Aquarea circulating pump with energy efficiency class "A"	

### Panasonic created a night mode to reduce the noise when it's needed

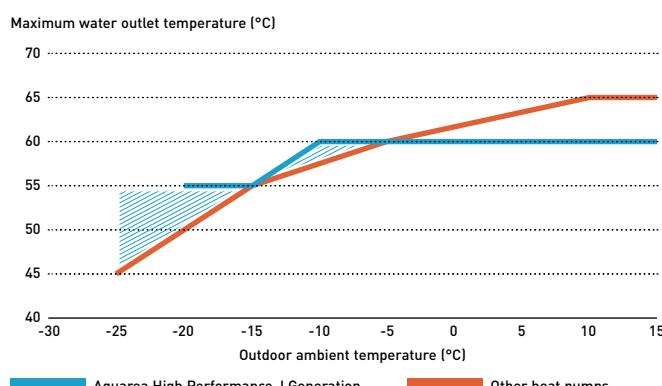
Special attention has been given to noise levels.

1) Sound pressure measured at 1 m from the outdoor unit and at 1,5 m height.  
2) At standard condition working at heating capacity at +7 °C (heating water at 35 °C) for two fans outdoor units. For one fan outdoor units, night mode reduction is 3 dB(A).



### High Performance J Generation keeps 60 °C water outlet temperature even at very low temperatures

Aquarea High performance J Generation is able to keep 60 °C water outlet temperature in outdoor temperatures down to -10 °C, keeping high comfort in the room even at low temperatures. With other heat pumps, water temperature dramatically drops at low outdoor temperatures, making the heat pump to work out of the design conditions and creating discomfort inside the room.



## Aquarea T-CAP

For retrofit and new builds, Aquarea T-CAP is the ideal solution for those installations where the output capacity is demanding.

The entire Aquarea T-CAP line-up is excellent for replacing gas or oil boilers and for connecting to new underfloor heating, radiators or fan coil units. Aquarea T-CAP can maintain the heat pump output capacity until -20 °C<sup>1)</sup> outdoor temperature without the help of an electrical booster heater, offering high heating capacity even at low ambient temperatures.

1) At 35 °C flow temperature.



## Aquarea T-CAP Mono-bloc J Generation R32

### R32 Refrigerant: A 'small' change that changes everything.

With Mono-bloc, the refrigerant circuit is sealed inside the outdoor unit, so there is no need to worry about the amount of refrigerant per room.

### 65 °C<sup>1)</sup> water temperature possible.

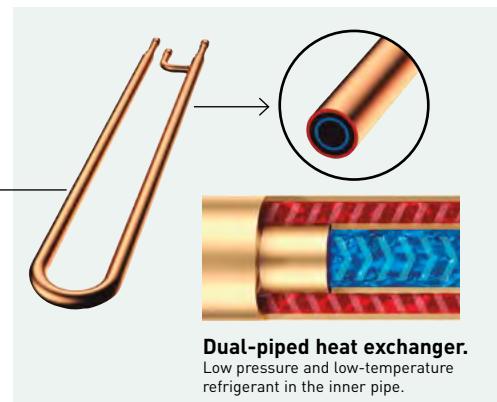
By optimising the system and the refrigerant cycle, the unit can work under higher pressure and realise a water temperature of 65°C.

1) In case of ΔT setting with remote controller is 15 °C and outdoor ambient temperature is 5 to 20 °C, 65 °C hot water temperature is possible. Even with the T-CAP series, capacity will drop when water temperature reaches 65 °C.



### 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.

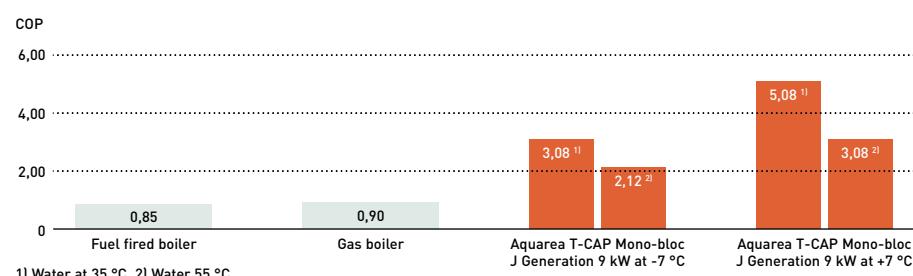


**Dual-piped heat exchanger.**  
Low pressure and low-temperature refrigerant in the inner pipe.

### Higher efficiency compared to other heating systems

Panasonic heat pumps have a maximum COP of 5,08 at +7 °C which makes them much more efficient than others heating systems.

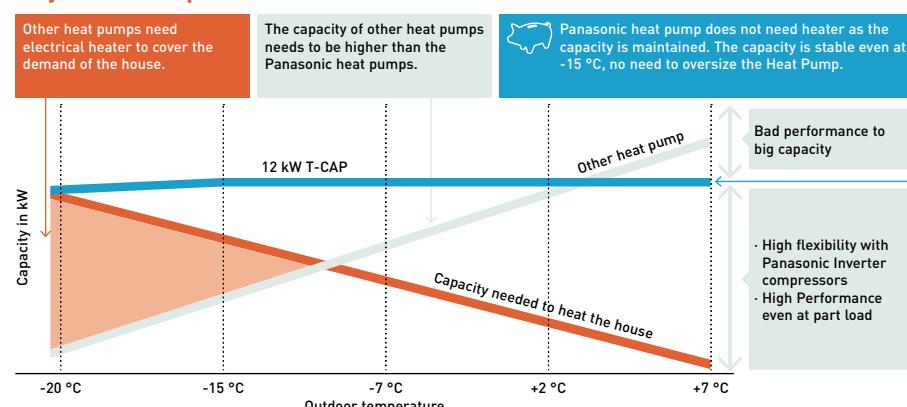
T-CAP is also able to provide extremely high efficiencies, whatever the outside or the water temperature.



### 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 and maintain capacity without back-up heating at -20 °C<sup>1)</sup>. With other heat pumps, a larger capacity is required to achieve the same level of comfort at low temperatures.

1) 35 °C flow temperature.



### Aquarea Super Quiet T-CAP Bi-bloc

The special outdoor chassis notably reduces operation sound by up to 15 dB.<sup>1)2)</sup>

1) When comparing WH-UQ12HE8 at quiet mode level 3 operation with WH-UX12HE8 at full load operation. 2) Heating capacity may drop.

## Aquarea HT

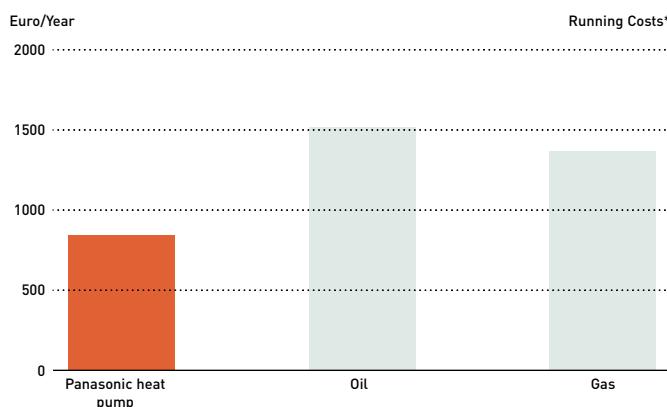
Aquarea HT can produce a flow temperature of 65 °C making it the ideal high efficiency replacement for oil/gas boilers connected to high temperature radiators.



## Green energy source works with existing radiators

The Aquarea HT (9 kW and 12 kW) allows you to replace your traditional heating source (such as oil or gas) while keeping the existing old style radiators for minimum disruption to the home.

### Yearly savings with Aquarea HT



### Aquarea HT: High savings and low CO<sub>2</sub>

The benefit of replacing a traditional heating systems with Aquarea HT are clear: Reduced CO<sub>2</sub> emissions, future proofing running costs.

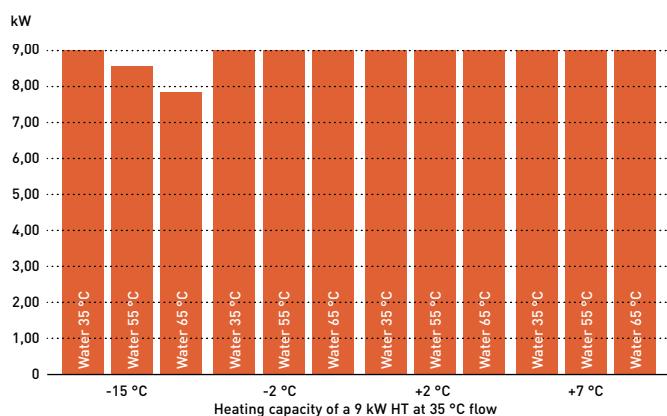
Panasonic heat pumps are much more efficient than fossil fueled boilers and help you to reach your house energy targets.

### Easy installation

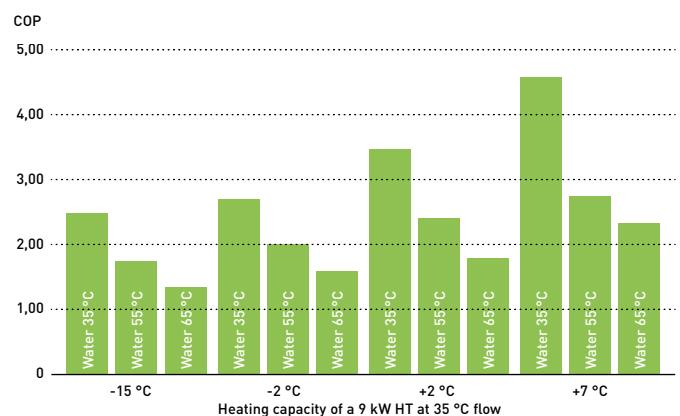
Air source heat pumps are simple to install. They do not require a chimney, gas connection or oil / lpg tank. All that is required is a power supply connection.

### Panasonic Aquarea HT is highly efficient even at low outdoor temperatures

Heating Capacity of a 9 kW HT (WH-SHF09F3E5).



COP (Coefficient of Performance) of a 9 kW HT (WH-MHF09G3E5).



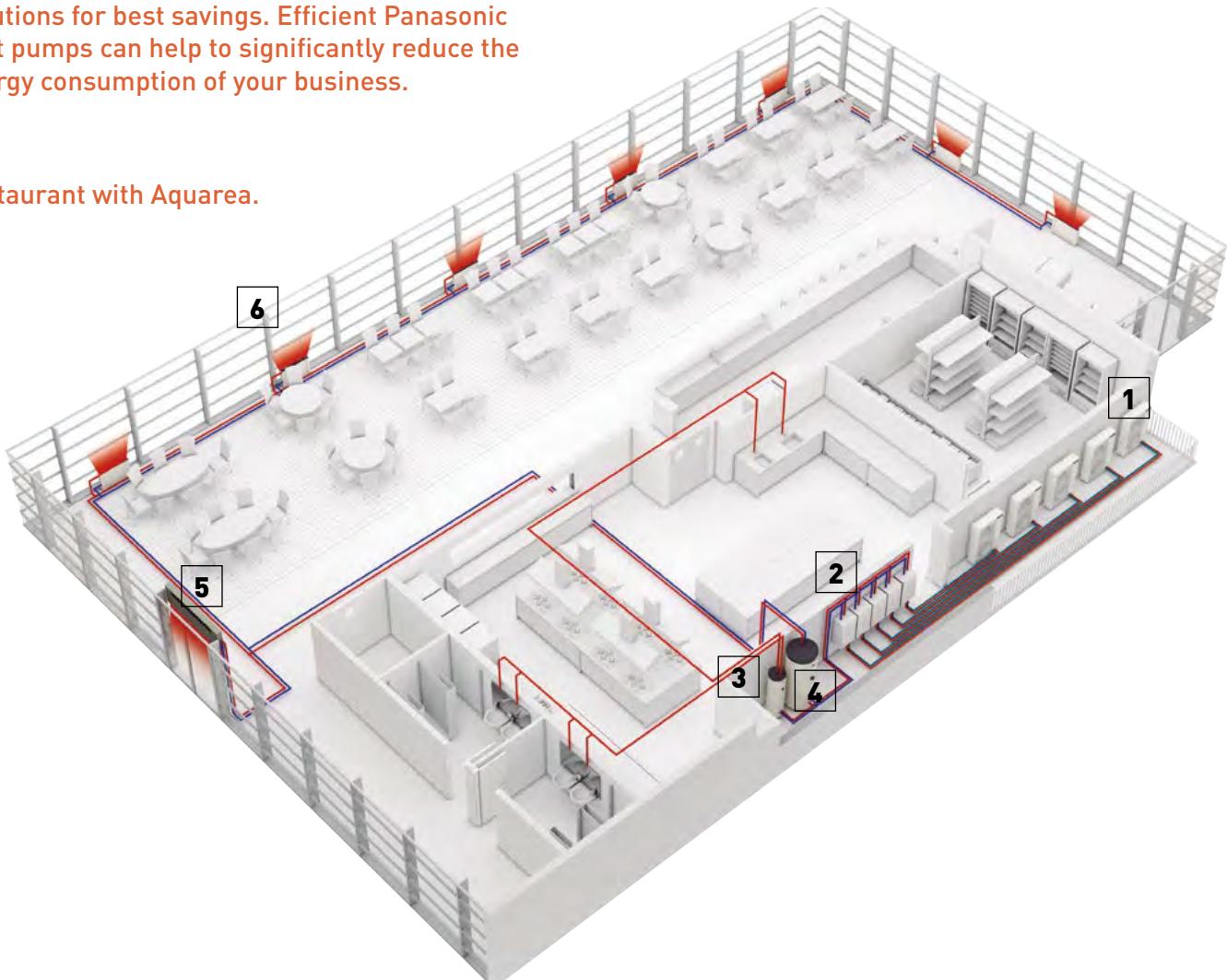
The Aquarea HT range is easy to install and is available with nominal heat outputs of 9 kW or 12 kW. These can be either single or three phase, in both Bi-bloc and Mono-bloc versions.



# Aquarea commercial

Solutions for best savings. Efficient Panasonic heat pumps can help to significantly reduce the energy consumption of your business.

Restaurant with Aquarea.



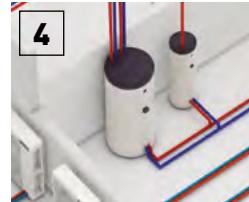
**Aquarea T-CAP.**  
16 kW heat pumps on cascade mode.  
T-CAP line-up is an ideal replacement for old gas/oil boilers.



**High efficiency Aquarea T-CAP hydromodule.**  
Indoor unit of Aquarea Bi-bloc systems. When a Mono-bloc system is used, the hydromodule is integrated in the outdoor unit.



**Super high efficiency Tanks.**  
Combining Panasonic Aquarea with a high efficiency tank ensures the desired volume of hot water, at the correct temperature while reduced energy costs.



**Buffer Tank.**  
Panasonic Aquarea can be combined with the hydraulic elements of the new or existing water system.



**Air Curtain with water Coil.**  
Water coil air curtains can be used in the hydraulic system to have efficient performance of the water system.

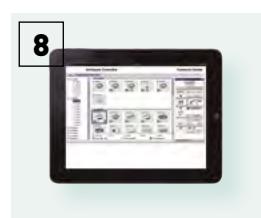


**Fan coils for heating and cooling.**

Aquarea Heat Pumps can be easily connected to the existing water system: 2 way and 4 way fan coils, floor heating, DHW tanks...



**Cascade manager.**  
The cascade system enables the control of up to 10 Aquarea Heat Pumps (balancing the working hours and making the operation more efficient) and up to 2 buffer tanks.



**BMS integration.**  
The cascade system can be easily integrated in a Modbus project thanks to the cascade manager.

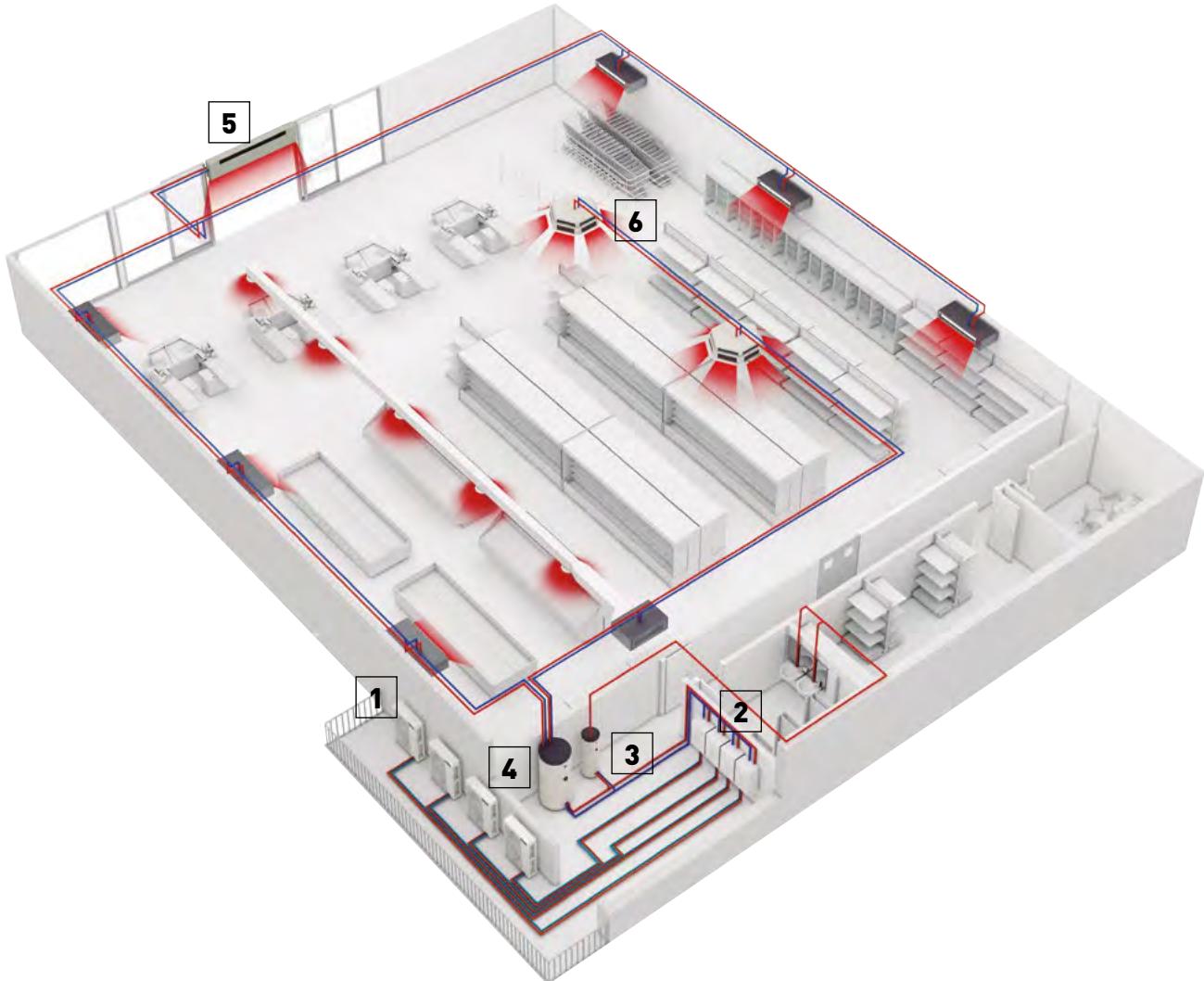
Panasonic Aquarea Heat Pumps offer space saving, energy-efficient heating and can be easily adapted for installation in flats, houses and commercial premises. Businesses producing heating, cooling and big quantities of hot water at 65 °C, such as restaurants or supermarkets, installing an Aquarea Heat Pump system can also use this wasted heat to improve energy efficiency further. Heat pump technology is scalable, meaning that it can be installed in buildings of varying sizes, offering both small and large-scale heating solutions. The technology is also environmentally friendly when compared to traditional

heating systems alternatives based on fossil fuel energy and in addition it is more energy efficient.

#### Key points:

- Efficient hot water production
- Fast return of investment
- Easy control
- Easy integration in the existing water system: fan coils, floor heating, domestic hot water tanks, etc
- Very good part load management
- High efficiency

#### Supermarket with Aquarea.



**Burger & Lobster restaurant. Bath, UK.**

Panasonic's air to water Aquarea system has been installed in the latest glamorous Burger & Lobster restaurant in Bath. The Octagon Chapel, a large listed building in the city centre, was converted to accommodate the restaurant, and Panasonic's Aquarea system provided an extensive, energy efficient and unobtrusive heating and cooling solution.



**Carluccio's restaurant. UK.**

One of UK's leading Italian restaurant, Carluccio's, wanted to install a system which would provide the desired volume of hot water, at the correct temperature while at the same time reduced energy costs. FWP installed a 12 kW Aquarea T-CAP mono bloc unit which would allow for the free air from the kitchen roof space to be transferred through condensing unit providing hot water at the optimum temperature.

# Aquarea Smart Cloud for the users

The most advanced heating control for today and for the future. Aquarea can be connected to the Cloud with the accessory CZ-TAW1, enabling both user control and remote maintenance by service partners.

[WATCH DEMO](#)


\* User interface image may change without notification.

Works with  
**IFTTT**



## 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.

Connect your Aquarea to your voice assistant, get an e-mail if your Aquarea gets an error or automatically turn on your Aquarea on Heat Mode when outdoor temperature drops below specified level.

## Easy and powerful energy management

The Aquarea Smart Cloud is much more than a simple thermostat for switching a heating device ON or OFF. It is a powerful and intuitive service for remotely controlling the full range of heating and hot water functions, including monitoring energy consumption.

## How does it work?

After connecting an Aquarea J or H generation to the cloud by wireless LAN or by wired LAN, the user accesses the Cloud portal to remotely operate all functions of his units. He can also permit service partners to access customised functions for remote maintenance and monitoring.

## Requirements

1. Aquarea J or H Generation
2. In-house internet connection with router wireless LAN or wired LAN
3. Get a Panasonic ID in <https://aquarea-smart.panasonic.com/>

## Functions:

- Visualization and Control
- Scheduling
- Energy Statistics
- Malfunction notification

## Advantages

Energy savings, comfort and control from anywhere. Increased efficiency and resources management, operating costs savings and owner satisfaction. The Aquarea Smart Cloud services are focused on enabling full remote maintenance of the Aquarea system. This allows maintenance specialists to engage in predictive maintenance and system fine-tuning, as well as fixing malfunctions when they occur.

Aquarea compatibility	J and H Generation
Connection point	CN-CNT Aquarea port
Home router connection	Wireless or Wired LAN
Temperature sensor	Can use remote controller sensor
Tablet or PC browser compatibility*	Yes
Operation from remote — ON / OFF — Temperature setting Mode selection — DHW setting — Error codes — Scheduling	Yes
Heating areas	Up to 2 zones
Power consumption estimation — Operation log history	Yes — Yes

\* Check browsers and version compatibility.

## 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.**

AQUAREA+



# Aquarea Service Cloud for installers or maintenance companies

[WATCH DEMO](#)


The Aquarea Service Cloud allows installers to take care of their customers' heating systems remotely. It saves time and money and shortens the response time, thus increasing the customers' satisfaction.



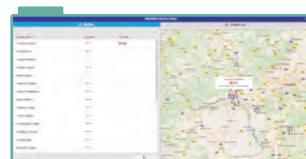
**The real remote maintenance made simple**

## Advanced functions for remote maintenance with professional screens:

- Global view at a glance
- Error log history
- Full unit information
- Statistics always available
- Most settings available

### Home page.

Status of connected users at a glance. 2 view options: map view or list view.



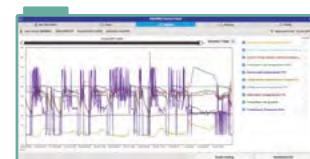
### Status tab.

Current status of unit with a maximum 28 parameters.



### Statistics tab.

Customisable statistics of a maximum of 71 parameters. Available anytime with the information of the last 7 days.



### Settings tab.

Most of the user and installer settings can be done remotely.



## Activation of the Aquarea Service Cloud

### Requirements.

Hardware and connection	End user registration	Installer / maintenance registration
J or H Generation Aquarea connected to CZ-TAW1	Get Panasonic ID	Get Service ID
In-house internet connection with Wireless LAN or Wired LAN	Aquarea Smart Cloud	Aquarea Service Cloud

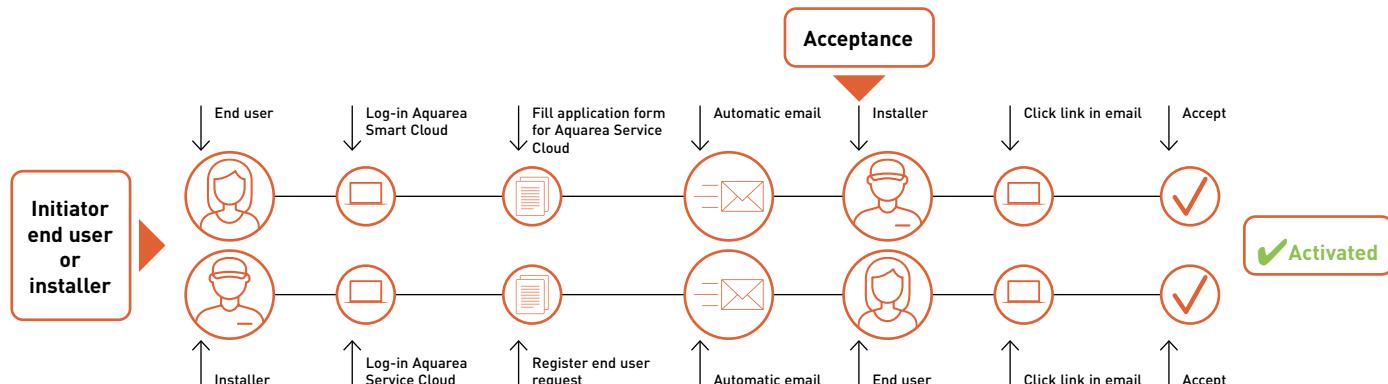
### Connecting the unit to the Aquarea Service Cloud.

The process can be initiated by the end user or by the installer.

The end user can select and change the installer's level of control anytime (4 levels).

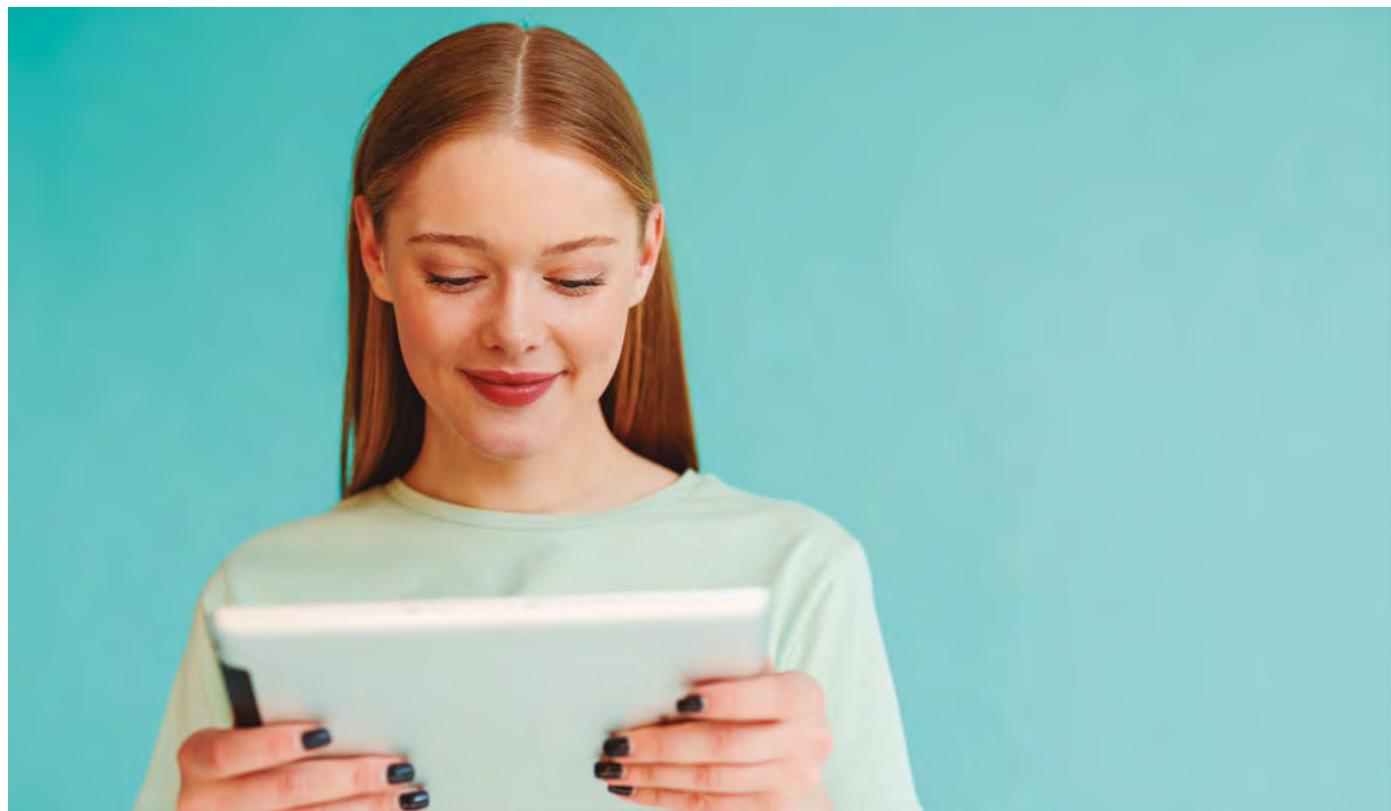
**Installer registration:** <https://aquarea-service.panasonic.com/>

**End user registration:** <https://aquarea-smart.panasonic.com/>



# Control and connectivity

Home connectivity and Home Managements Systems integration is becoming more and more popular. These integrations helps to control all house devices from centralised platform and helps to optimise the operation and running costs. Panasonic interfaces are made to work with both KNX and Modbus, the most populars protocols. Also for non integrated control, Panasonic developed a simple connection to Wireless LAN, with this end user can control remotely its own heat pump from wherever.



## Connectivity. Control by BMS

Great flexibility for integration into your KNX / Modbus projects allows fully bi-directional monitoring and control of all the functioning parameters.

Reference	 PAW-AW-KNX-1i / PAW-AW-KNX-H	Modbus® PAW-AW-MBS-1 / PAW-AW-MBS-H
Small dimensions	✓	✓
Quick installation and possibility of hidden installation	✓	✓
External power not required	✓	✓
Direct connection to the unit	✓	✓
Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication	✓ Fully interoperable	
Control and monitoring, from any BMS or PLC Modbus Master, of internal variables of the indoor unit and error codes and indication		✓ Fully interoperable
Aquarea unit can be controlled simultaneously by its remote controller and by KNX / Modbus Master devices	✓	✓

These interfaces allows full monitoring and control, bi-directional, of most of the functioning parameters of Aquarea control from KNX / Modbus installations.



## Advanced controller for J and H Generation

**Improved visibility and easy operation with large full dot LCD display and large touch panel!**

Remote controller can be removed from indoor unit and installed in living room.

### Key Points:

Full large dot LCD screen (3,5 inch): High resolution screen with backlight, easy set up, check conditions easily, flat, innovative design, temperature sensor included in controller.



#### Function for installer:

- Floor heating concrete dry mode: Allows for a slow increase in temperature of underfloor heating via software.
- Heating and Cooling Mode: Authorised PRO Partners can enable the cooling mode through a special operation via the remote controller on site
- Installer can select delta T. Water pump speed is selected automatically due to this setting

#### Function for End User:

- Auto Mode: Automatically changes from heating to cooling depending on outdoor temperature.
- Energy Consumption Display: Displays the heat pump's energy consumption, split by heating, cooling and domestic hot water, showing the total consumption figure.
- Holiday Mode: Enables the system to resume at the preset temperature after your holiday

## PCB for additional functions

### CZ-NS4P. Optional PCB for advanced functions.

The optional PCB CZ-NS4P enable advanced control functions for Aquarea Heat Pumps J and H Generation.

The optional PCB is connected to the main.

These functions are available through the connection of the optional PCB (CZ-NS4P) to the main PCB:

- Control of 2 zones with 2 mixing valves, 2 pumps and 2 room thermostats or sensors
- Control of swimming pool
- 0-10 V signal for heat pump demand control
- Buffer tank temperature sensor
- Solar thermal control
- External heating / cooling mode switch
- Stop compressor by external compressor switch
- Error output signal
- SG ready\*



\* Aquarea H and J Generation heat pumps in combination with the optional PCB CZ-NSP4 hold the SG Ready Label (Smart Grid Ready Label), given by Bundesverband Warmepumpe (German Heat Pump Association). This Label shows the real capacity of Aquarea to be connected in an intelligent grid control.

## Cascade controller

### PAW-A2W-CMH-1. Cascade manager.

- Cascade up to 10 heat pumps, getting up to 160 kW
- Manages the heat demand based on a PID logic, balancing working hours
- Can control 3 way valves for cooling (2 buffer tanks)
- Modbus IP for BMS communication
- High flexibility for external demand control, though an Analog Input 0-10 V or Modbus IP
- DHW control logic
- Large, easy-to- use touch screen display, with information about the heat pump
- All components in one case
- Compatible with Aquarea Heat Pumps, J or H Generation\*



\* Requires 1 PAW-AW-MBS-H per each Aquarea.

Model name	Interface
PAW-AW-KNX-H	KNX Interface for J and H Generation
PAW-AW-MBS-H	Modbus Interface for J and H Generation
PAW-AW-KNX-1i	KNX interface (not compatible with J and H Generation)
PAW-AW-MBS-1	Modbus interface (not compatible with J and H Generation)

Model name	Interface
PAW-A2W-CMH-1	Cascade controller
CZ-TAW1	Aquarea Smart Cloud, internet control through wireless or wired LAN for Aquarea J and H generation
CZ-NS4P	PCB for advanced functions in J and H Generation

# How Panasonic contributes to Nearly Zero Energy Buildings (nZEB)

Our expertise gained over the years has helped to launch a range of products that contribute to a more carbon-free society.

## Panasonic is committed to develop products with greater energy efficiency.

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.

- Aquarea High performance heat pump for heating, cooling and domestic hot water production
- Aquarea Smart Cloud, for energy monitoring
- Heat recovery ventilation system
- PV panels to produce renewable energy on-site



## Aquarea Heat Pumps and the ventilation unit with heat recovery certified as Passive House Component

Aquarea High Performance All in One Compact and Bi-bloc J Generation heat pumps<sup>1)</sup> and the ventilation unit with heat recovery PAW-A2W-VENTA have been certified by the Passive House Institute (PHI) as Passive House Component. This certification ensures highly energy efficient components according to international criteria for respective thermal performance, comfort and indoor air quality.

1) 3, 5 and 7 kW models.

Certified models can be checked under the certification section of  
<https://database.passivehouse.com>.



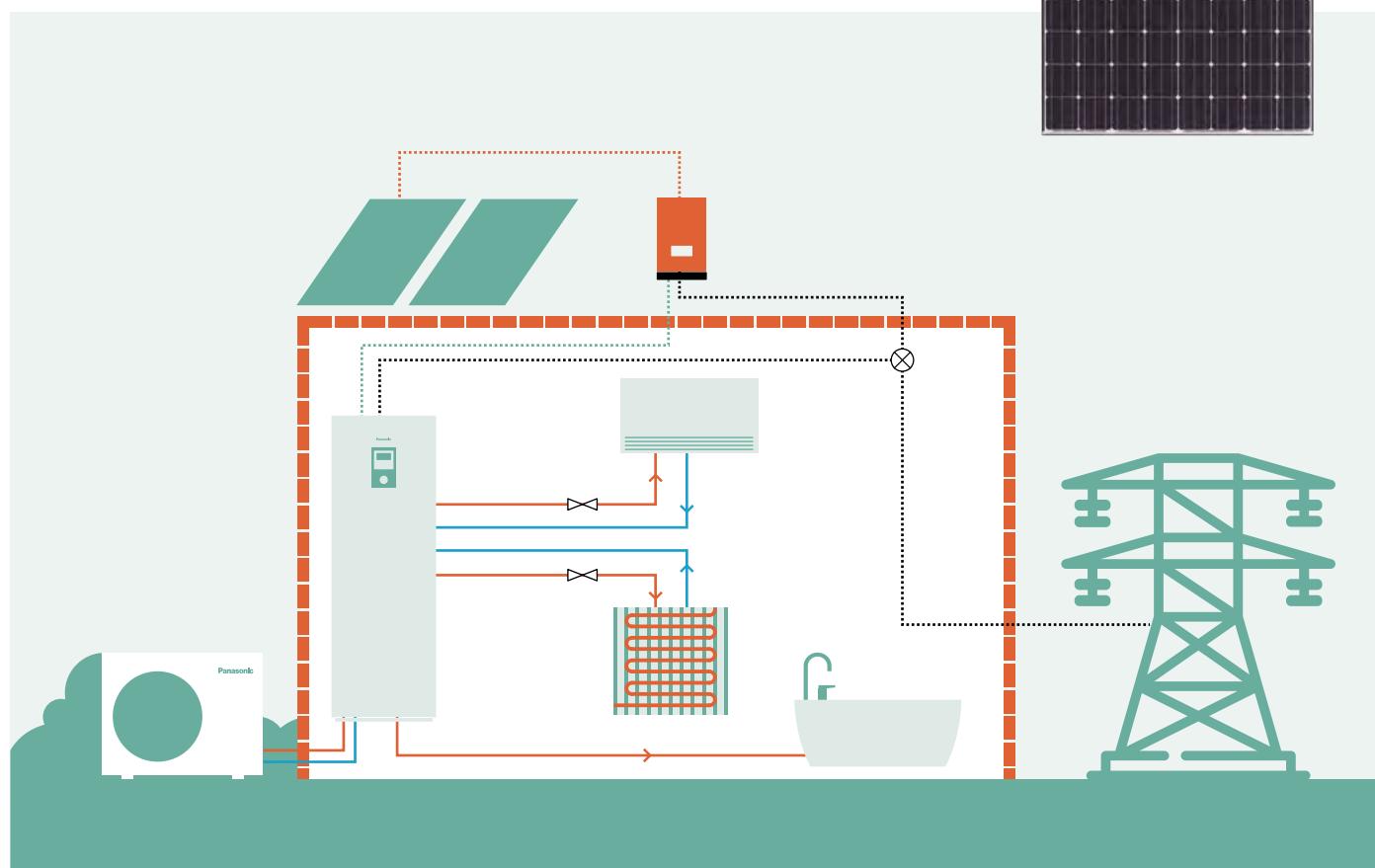
## H3 Grande Passive House, Poland.

When looking for a energy-efficient heating solution, Polish construction company Procyon selected a 5 kW Panasonic Aquarea High Performance heat pump for its passive house project, H3 Grande. Procyon found this solution reduced annual heating expenses by almost half compared to an oil-based system, or by 10 % in comparison to natural gas.

H3 Grande is a 175 m<sup>2</sup> detached house certified by the Passive House Institute (PHI) in Darmstadt. It is designed to minimise energy losses while incorporating an attractive, yet simple aesthetic. The building's shape, interior design and pitched roof contribute to the energy balance of the house, while large south-facing windows and wall insulation provide passive thermal comfort by retaining heat. The building has very low heating demand of approximately 15 kW/m<sup>2</sup> and is designed to minimise energy.

## Aquarea + PV panels

Aquarea Heat Pumps are designed with the future in mind. They can synchronise with PV panels with simple CZ-NS4P PCB. Thanks to this feature, demand of heating, cooling and domestic hot water production is adapted to the PV panel production.



A part of converting Aquarea in Smart Grid ready, the additional PCB allows 0-10 V control, for and advanced energy management.



### Turning a family home into an energy-neutral home with Panasonic air to water.

Sinne Technyk, installer, opts for Aquarea T-CAP heat pump combined with HIT KURO photovoltaic panels for a house in Oudemirdum in Friesland, the Netherlands. With this combination, the household enjoys energy-neutral and free heating, as well as domestic hot water, and benefit for a more comfortable indoor climate. The house had an annual gas consumption of 1800 to 2200 cubic meters per year. "The aim was to realize an energy-neutral home and reduce the usage of gas to zero," explains Leo van der Molen of Sinne Technyk. "That makes a heat pump an interesting option." With the comfort of the customers and neighbours in mind, a silent Aquarea T-CAP heat pump was chosen, powered by solar panels. A total of 24 Panasonic HIT KURO solar panels of 325 Wp each were installed. "The products of Panasonic are high end but offer a higher quality than other solutions. The price-quality ratio is, therefore, considerably better," says Van der Molen.

# Panasonic PRO Club makes your life easier. All Aquarea Designer - online tool can be found there

Panasonic has an impressive range of support services for designers, specifiers, engineers and distributors working in air to water heat pump projects.



## Energy Label

Fridges, dishwashers, washing machines, ovens – it all started with white goods in the 1990s. Today, other energy-consuming appliances also carry the European energy efficiency label, such as televisions and lighting. From 2013, the regulations applied to air conditioners and heat pumps but since September 2015, it has also been applicable to room heaters, water heaters and storage water heaters.

Minimum energy efficiency requirements are also specified for manufacturers of system and combi boilers, water heaters and DHW cylinders.

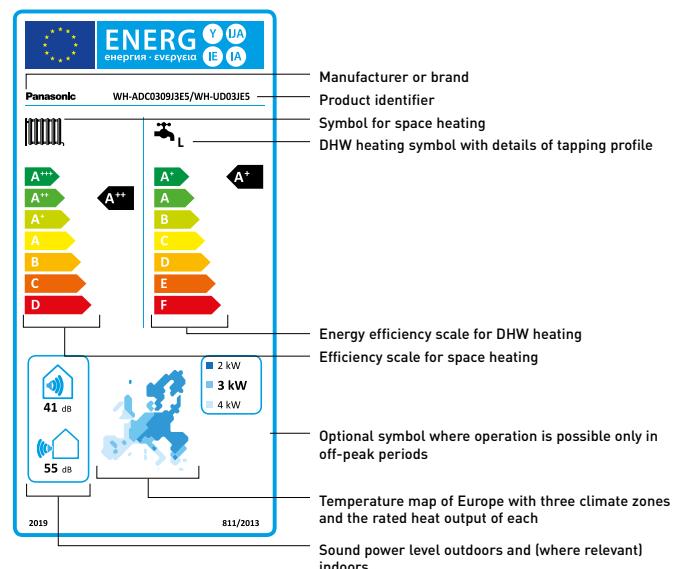
The purpose of Energy Labels are to assist consumers in their purchasing decisions, as well as ecodesign requirements on products which help reduce private energy demand and help to reduce global warming.

## Panasonic helps you to calculate the system label.

From 26th September 2015, installers can be assured that all products manufactured after this date will be sold with the required energy efficiency labels which will aid installers with their paperwork. While it is the manufacturer's responsibility to issue their products with the required labels, the installers will need to calculate and issue an energy efficiency label for the entire heating system. Whether installing a new heating system or installing new boilers, controls or renewables into an existing system, it is, and will continue to be, the installer's responsibility to calculate and issue energy efficiency labels. Calculators which assist installers with this process are available on [www.panasonicproclub.com](http://www.panasonicproclub.com).

## Information on the energy efficiency label.

The rating system for heat pumps classifies them into seven efficiency categories. From 26th September 2019, the best energy efficiency category is A++, least energy efficient is D. The energy efficiency label for system boilers shows its efficiency category on a scale from A++ to D, and from A+ to F for hot water cylinders.



# Aquarea Designer - online tool

With Panasonic's online tool, projects can be developed simply and easily. The newly developed tool is optimised to help HVAC professionals easily identify the most appropriate Aquarea air to water heat pump for a particular application.



## Aquarea Designer

This program allows HVAC designers, installers and distributors to identify the correct heat pump for a particular application from Panasonic's Aquarea range, calculate the savings compared to other heat sources and very quickly calculate CO<sub>2</sub> emissions.

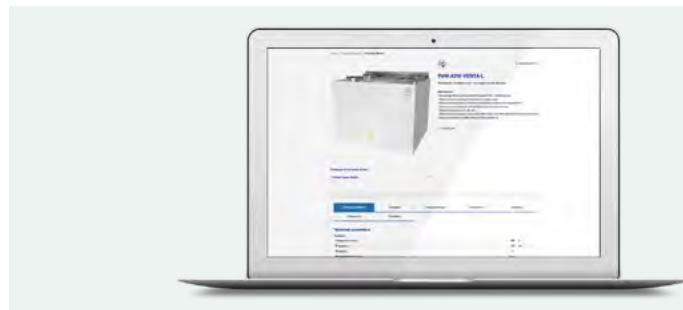
Using Panasonic's Aquarea Designer, projects can be developed simply and easily, by either using the Quick Design or Expert Design options. Each allows the user to build up the project data in a simple step-by-step process and choose to output reports (project data input includes: either Quick or Large formats) as HTML files or as print-outs. To create these useful reports, project data is input, including:

- Heated area
- Heating requirement
- Heating flow and return temperatures
- Climate data (from a simple drop-down menu) including outdoor temperature
- Type of hot water tank, storage capacity and hot water target temperature



## Aquarea Designer also means saving

Aquarea Designer will calculate the project's energy costs in terms of hot water, heating and pumping. It will show the equipment running times and calculate the COP (coefficient of performance). It then allows the designer to show clients a comparison with other equipment options such as heating by conventional gas-fired boilers, oil systems, wood, standard electric heating and electric night storage heaters. This compares running costs, initial investment costs and maintenance costs. The comparison can also be made for CO<sub>2</sub> emissions and savings.



## Heating demand calculator

This software can quickly and easily determine the heating requirements for the rooms in a project. The Heating demand calculator will help determine approximately how much power is needed to heat each room individually. The result in kilowatts will help you choose the space heater best suited to your needs.

## CAD images and spec texts

In order to add value in the design of projects, Panasonic has a wide library of 2D CAD, BIM objects (Building Information Modeling) and Spec texts to be used in Revit.

**All the support tools are available in Panasonic PRO Club ([www.panasonicproclub.com](http://www.panasonicproclub.com)).**

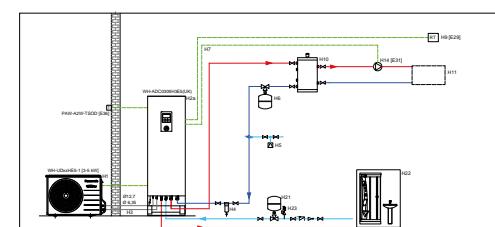
Among many others, these are the main tools for the design of Aquarea projects.

## Residential ventilation selection tool.

The tool contains all the information the HVAC professionals need for their residential ventilation projects (specifications, technical manuals, etc.) as well as a calculator of the performance curves.

## Hydraulic scheme generator

This tool allows customers to select the scheme between more than 110 different type according to their installation requirements in a simple way. It is possible to download hydraulic and electric part in pdf and in cad file. Moreover it is available a list, one for each scheme type, with the Panasonic codes and third party codes that the customers need to realize the installation in a proper way.



Panasonic helps you to calculate the system label [www.panasonicproclub.com](http://www.panasonicproclub.com) or connect simply with your smartphone to the PRO Club using this QR.

PRO Club



# Aquarea Heat Pump range

3 kW

5 kW

7 kW

**Aquarea  
EcoFleX**

1 Phase



P. 51

**Aquarea High  
Performance**
**All in One**

1 Phase

3 Phase

P. 52, 53,  
54, 55

WH-ADC0309J3E5  
WH-ADC0309J3E5B  
WH-ADC0309J3E5C  
WH-UD03JE5



WH-ADC0309J3E5  
WH-ADC0309J3E5B  
WH-ADC0309J3E5C  
WH-UD05JE5



WH-ADC0309J3E5  
WH-ADC0309J3E5B  
WH-ADC0309J3E5C  
WH-UD07JE5

**Bi-bloc**  
1 Phase  
3 Phase

P. 56, 57



WH-SDC0305J3E5  
WH-UD03JE5



WH-SDC0305J3E5  
WH-UD05JE5



WH-SDC0709J3E5  
WH-UD07JE5

**Mono-bloc**  
1 Phase

P. 58, 59



WH-MDC05J3E5



WH-MDC07J3E5

**Aquarea  
T-CAP**
**All in One**  
1 Phase  
3 PhaseP. 60, 61,  
62
**Bi-bloc**  
1 Phase  
3 Phase

P. 63, 64


**Mono-bloc**  
1 Phase  
3 Phase

P. 65


**Aquarea HT**
**Bi-bloc**  
1 Phase  
3 Phase

P. 66


**Mono-bloc**  
1 Phase

P. 67





Check all our certified heat pumps on:  
[www.heatpumpkeymark.com](http://www.heatpumpkeymark.com)

**9 kW****12 kW****16 kW****8 kW**

WH-ADF0309J3E5CM  
 S-71WF3E  
 CU-2WZ71YBE5



WH-ADC0309J3E5  
 WH-ADC0309J3E5B  
 WH-ADC0309J3E5C  
 WH-UD09JE5-1  
 WH-ADC0916H9E8  
 WH-UD09HE8



WH-ADC1216H6E5  
 WH-ADC1216H6E5C  
 WH-UD12HE5  
 WH-ADC0916H9E8  
 WH-UD12HE8



WH-ADC1216H6E5  
 WH-ADC1216H6E5C  
 WH-UD16HE5  
 WH-ADC0916H9E8  
 WH-UD16HE8



WH-SDC0709J3E5  
 WH-UD09JE5-1  
 WH-SDC09H3E8  
 WH-UD09HE8



WH-SDC12H6E5  
 WH-UD12HE5  
 WH-SDC12H9E8  
 WH-UD12HE8



WH-SDC16H6E5  
 WH-UD16HE5  
 WH-SDC16H9E8  
 WH-UD16HE8



WH-MDC09J3E5



WH-MDC12H6E5



WH-MDC16H6E5



WH-ADC1216H6E5  
 WH-ADC1216H6E5C  
 WH-UX09HE5  
 WH-ADC0916H9E8  
 WH-UX09HE8  
 WH-ADC0916H9E8  
 WH-UQ09HE8



WH-ADC1216H6E5  
 WH-ADC1216H6E5C  
 WH-UX12HE5  
 WH-ADC0916H9E8  
 WH-UX12HE8  
 WH-ADC0916H9E8  
 WH-UQ12HE8



WH-ADC0916H9E8  
 WH-UX16HE8  
 WH-ADC0916H9E8  
 WH-UQ16HE8



WH-SXC09H3E5  
 WH-UX09HE5  
 WH-SXC09H3E8  
 WH-UX09HE8  
 WH-SQC09H3E8  
 WH-UQ09HE8



WH-SXC12H6E5  
 WH-UX12HE5  
 WH-SXC12H9E8  
 WH-UX12HE8  
 WH-SQC12H9E8  
 WH-UQ12HE8



WH-SXC16H9E8  
 WH-UX16HE8  
 WH-SQC16H9E8  
 WH-UQ16HE8



WH-MXC09J3E5  
 WH-MXC09J3E8



WH-MXC12J6E5  
 WH-MXC12J9E8



WH-MXC16J9E8



WH-SHF09F3E5  
 WH-UH09FE5  
 WH-SHF09F3E8  
 WH-UH09FE8



WH-SHF12F6E5  
 WH-UH12FE5  
 WH-SHF12F9E8  
 WH-UH12FE8



WH-MHF09G3E5



WH-MHF12G6E5

# Aquarea, top-level efficiency across the board

**Aquarea J Generation:** much more than Aquarea in R32. Available in 3/5/7/9 kW All in One / Bi-bloc and 5/7/9/12/16 kW Mono-bloc.



## 1 Keeping Aquarea essence

- A+++ in heating mode at 35 °C (scale from A+++ to D)
- Optional Aquarea Smart and Service Cloud

## 2 Higher efficiency

- SCOP up to + 5 % vs H Generation
- DHW COP up to 3,30 (for 3 kW All in One and 5 kW models)

## 3 More flexibility in design

- 60 °C water temperature (up to 65 °C in T-CAP Mono-bloc)
- Piping length between indoor and outdoor units improved: 7/9 kW: 50/30 m (up to 40 m without minimum floor area\*) - 3/5 kW: 25/20 m
- Chiller function: cooling down to 10 °C outdoor temperature

\* With a 5 % decrease of the capacity.

## Aquarea H Generation.

The beauty of comfort. The H Generation is available from 3 to 16 kW. The small capacities are specially designed for low energy homes and achieve an impressive COP of 5 (on the 3 kW).

### Better efficiency and value A++ / A+++.

- A++ for medium temperature applications (radiators. ErP 55 °C in the scale from A+++ to D)
- A+++ for low temperature applications (floor heating. ErP 35 °C in the scale from A+++ to D)

## 4 Smart functions

- SG ready for heating, cooling and DHW modes
- Utility remote bivalent control: By dry contacts\*
- Stop external device when defrost by Dry contact (for fan coil fan stop)\*

\* Can not be used at same time.

## 5 More comfort

- Better comfort in extreme low temperature: Heating curve can be set up down to -20 °C
- Efficient or comfort mode for DHW: Part load for better efficiency or full load to reduce the heat up time
- DHW two sensor position selectable for All in One: Efficient position (best DHW COP) or bigger volume of hot water

Other improvements: More silent outdoor units / Magnet filter for water cycle.

## Aquarea, a generation of energy efficient heating and hot water.

Thanks to the system's high degree of technology and advanced control, it is able to maintain a high output capacity and efficiency even at -7 °C and -15 °C. The Aquarea's software can be set for the requirements of low consumption homes in order to maximise energy efficiency. Whatever the weather, Aquarea can work even at -28 °C (for T-CAP All in One and Bi-bloc) lower limit. The compact design of the outdoor unit makes installation very easy.



**NEW  
2022**

**nanoe™ X** as a standard.



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

## NEW AQUAREA EcoFleX. Single phase. Heating and Cooling - R32

**Energy efficiency:** Heat recovery function, to re-use wasted heat of outdoor unit for DHW production.

**Flexibility:** Small foot print outdoor unit, tank unit with a standard size of appliances.

**Comfort:** Non-stop heating operation / nanoe™ X technology to improve protection 24/7 (nanoe X Generator Mark 2).

**Connectivity:** Wi-Fi adapters included for instant connectivity via AQUAREA Smart Cloud or Panasonic Comfort Cloud App.

### WH-ADF0309J3E5CM

Air to water	Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	8,00/4,21
	Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	8,00/2,81
	Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	6,70/3,25
	Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	6,00/2,08
	Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	5,60/2,84
	Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	5,30/1,91
	Cooling capacity / EER [A 35 °C, W 7 °C]	kW / EER	—
	Cooling capacity / EER [A 35 °C, W 18 °C]	kW / EER	—
	Heating average climate [W 35 °C / W 55 °C]	Seasonal energy efficiency SCOP [ $\eta_s$ %]	4,00/3,20(157/125)
		Energy class <sup>1)</sup>	A+++ to D
	Heating warm climate [W 35 °C / W 55 °C]	Seasonal energy efficiency SCOP [ $\eta_s$ %]	5,69/3,69(224/145)
		Energy class <sup>1)</sup>	A+++ to D
	Heating cold climate [W 35 °C / W 55 °C]	Seasonal energy efficiency SCOP [ $\eta_s$ %]	3,61/2,80(141/109)
		Energy class <sup>1)</sup>	A+++ to D
	Sound pressure	Heat / Cool dB(A)	28/—
	Dimension / Net weight	HxWxD mm / kg	1880x598x600/108
	Capacity of integrated electric heater	kW	3,00
	Water volume	L	185
	Maximum DHW temperature	°C	65
	Heating water flow [ $\Delta T=5$ K, 35 °C]	L/min	22,90
	Tapping profile according EN16147		L
	DHW tank ERP efficiency average / warm / cold <sup>2)</sup>	A+ to F	A/A+/A
	DHW tank ERP average climate $\eta$ / COPdhw	$\eta_{wh}$ % / COPdhw	104/2,60
	DHW tank ERP warm climate $\eta$ / COPdhw	$\eta_{wh}$ % / COPdhw	134/3,35
	DHW tank ERP cold climate $\eta$ / COPdhw	$\eta_{wh}$ % / COPdhw	92/2,30
	Heat recovery capacity (DHW 55 °C)	kW	7,10+9,00
	Heat recovery input power (DHW 55 °C)	kW	3,15
	Heat recovery COP (DHW 55 °C)		5,11
	Water outlet	°C	20~55

### S-71WF3E

Air to air	Cooling capacity Nominal	kW	7,10
	EER <sup>3)</sup> Nominal	W/W	3,40
	<b>SEER <sup>4)</sup></b>		<b>5,60 A+</b>
	Pdesign (cooling)		7,10
	Heating capacity Nominal	kW	7,10
	COP <sup>3)</sup> Nominal	W/W	3,90
	<b>SCOP <sup>4)</sup></b>		<b>3,90 A</b>
	Pdesign at -10 °C	kW	4,80
	External static pressure <sup>5)</sup>	Pa	30(10-150)
	Air flow	m <sup>3</sup> /min	22,7
	Sound pressure <sup>6)</sup> Cool / Heat (Hi)	dB(A)	34/34
	Sound power <sup>7)</sup> Cool / Heat (Hi)	dB(A)	57/57
	Dimension / Net weight	HxWxD mm / kg	250x1000x730/30
	nanoe X Generator		Mark 2

### CU-2WZ71YBE5

Outdoor unit	Sound pressure Cool / Heat (air to air)	dB(A)	49/49
	Sound power <sup>7)</sup> Cool / Heat (air to air)	dB(A)	68/67
	Sound pressure Heat (air to water)	dB(A)	51
	Sound power <sup>8)</sup> Heat (air to water)	dB(A)	61
	Dimension / Net weight	HxWxD mm / kg	999x940x340/82
	Refrigerant (R32) / CO <sub>2</sub> , Eq.	kg / T	2,40/1,62
	Piping diameter Liquid / Gas	Inch (mm)	1/4{6,35}/1/2{12,70}
	Pipe length range / Elevation difference (in / out)	m / m	35/30
	Pipe length for additional gas / Additional gas amount	m / g/m	30/20
	Operating range - outdoor ambient	Heat (air to air) °C	-15 ~ +24
		Cool (air to air) °C	-10 ~ +46
		Heat (air to water) °C	-15 ~ +35
		Heat recovery (floor / DHW) °C	+10 ~ +35/+10 ~ +46

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) EER and COP calculation is based in accordance to EN14511. 4) SEER and SCOP is calculated based on values of EU/626/2011. 5) Medium external static pressure setting from factory. 6) The sound pressure of the units shows the value measured of the position 1,5 m below the unit. The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 7) Sound power is measured in accordance with EN14511 and EN12102-1:2017 at +7 °C. 8) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C.



GOOD DESIGN  
AWARD 2017

  
011-1W0207  
011-1W0208  
011-1W0209


## Aquarea High Performance All in One J Generation Single phase. Heating and Cooling 1 or 2 zones - R32

**Energy efficiency:** COP up to 5,33 / A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

**Flexibility:** Long piping lengths / Built-in magnetic water filter.

**Comfort:** Heating curve down to -20 °C / 60 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

### Single phase (Power to indoor)

Kit 1 zone (for 2 zone add B at the end)	KIT-ADC03JE5	KIT-ADC05JE5	KIT-ADC07JE5	KIT-ADC09JE5-1
Heating capacity / COP (A +7 °C, W 35 °C)	kW / COP	3,20/5,33	5,00/5,00	7,00/4,76
Heating capacity / COP (A +7 °C, W 55 °C)	kW / COP	3,20/2,81	5,00/2,72	7,00/2,82
Heating capacity / COP (A +2 °C, W 35 °C)	kW / COP	3,20/3,64	4,20/3,18	6,85/3,41
Heating capacity / COP (A +2 °C, W 55 °C)	kW / COP	3,20/2,19	4,10/1,99	6,20/2,21
Heating capacity / COP (A -7 °C, W 35 °C)	kW / COP	3,30/2,80	4,20/2,59	5,60/2,87
Heating capacity / COP (A -7 °C, W 55 °C)	kW / COP	3,20/1,79	3,55/1,71	5,25/1,94
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	3,20/3,52	4,50/3,00	6,70/3,03
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	3,20/4,71	4,80/4,29	6,70/4,72
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency ηs %	200/136	193/130	193/130
	SCOP	5,07/3,47	5,07/3,47	4,90/3,32
	Energy class <sup>1)</sup>	A+++ to D	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency ηs %	245/165	245/165	227/160
	SCOP	6,20/4,20	6,20/4,20	5,75/4,07
	Energy class <sup>1)</sup>	A+++ to D	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency ηs %	157/110	157/110	164/116
	SCOP	4,00/2,83	4,00/2,83	4,18/2,98
	Energy class <sup>1)</sup>	A+++ to D	A++ / A+	A++ / A+
<b>Indoor unit 1 zone hydrokit</b>	<b>WH-ADC0309J3E5</b>	<b>WH-ADC0309J3E5</b>	<b>WH-ADC0309J3E5</b>	<b>WH-ADC0309J3E5</b>
<b>Indoor unit 2 zones built-in hydrokit</b>	<b>WH-ADC0309J3E5B</b>	<b>WH-ADC0309J3E5B</b>	<b>WH-ADC0309J3E5B</b>	<b>WH-ADC0309J3E5B</b>
Sound pressure	Heat / Cool	dB(A)	28/28	28/28
Dimension	HxWxD	mm	1800x598x717	1800x598x717
Net weight 1 zone / 2 zones	kg	122/130	122/130	122/130
Water pipe connector	Inch	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds	Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	30/120	30/120
Heating water flow ( $\Delta T=5$ K, 35 °C)	L/min	9,20	14,30	20,10
Capacity of integrated electric heater	kW	3,00	3,00	3,00
Recommended fuse	A	16/16	16/16	25/16
Recommended cable size, supply 1 / 2	mm <sup>2</sup>	3x1,5/3x1,5	3x1,5/3x1,5	3x2,5/3x1,5
Water volume	L	185	185	185
Maximum DHW temperature	°C	65	65	65
Material inside tank		Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147		L	L	L
DHW tank ERP efficiency average / warm / cold <sup>2)</sup>	A+ to F	A+/A+/A	A+/A+/A	A+/A+/A
DHW tank ERP average climate η / COPdHW	ηwh % / COPdHW	132/3,30	132/3,30	120/3,00
DHW tank ERP warm climate η / COPdHW	ηwh % / COPdHW	155/3,88	155/3,88	140/3,50
DHW tank ERP cold climate η / COPdHW	ηwh % / COPdHW	99/2,48	99/2,48	99/2,47
<b>Outdoor unit</b>	<b>WH-UD03JE5</b>	<b>WH-UD05JE5</b>	<b>WH-UD07JE5</b>	<b>WH-UD09JE5-1</b>
Sound power <sup>3)</sup>	Heat	dB(A)	55	55
Dimension / Net weight	HxWxD	mm / kg	622x824x298/37	622x824x298/37
Refrigerant (R32) / CO <sub>2</sub> Eq.	kg / T	0,9/0,608	0,9/0,608	1,27/0,857
Piping diameter	Liquid / Gas	Inch (mm)	1/4(6,35)/1/2(12,70)	1/4(6,35)/1/2(12,70)
Pipe length range / Elevation difference (in / out)	m / m	3 ~ 25 / 20	3 ~ 25 / 20	3 ~ 50 / 30
Pipe length for additional gas / Additional gas amount	m / g/m	10/20	10/20	10/25
Operating range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35
	Cool	°C	+10 ~ +43	+10 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511. \*\* This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. 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.

### Accessories

PAW-ADC-PREKIT-1	Piping pre installation kit for J Generation
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1

### Accessories

CZ-NS4P	Additional functions PCB
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-block J and H Generation awarded with the prestigious Good Design Award 2017.



011-1W0515



## Aquarea High Performance All in One H Generation Single phase / Three phase. Heating and Cooling - R410A

**Energy efficiency:** A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

**Flexibility:** Optional magnet for the water filter.

**Comfort:** Operating range down to -20 °C.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

Kit	Single phase (Power to indoor)			Three phase (Power to indoor)	
	KIT-ADC12HE5	KIT-ADC16HE5	KIT-ADC09HE8	KIT-ADC12HE8	KIT-ADC16HE8
Heating capacity / COP (A +7 °C, W 35 °C)	kW / COP	12,00/4,74	16,00/4,28	9,00/4,84	12,00/4,74
Heating capacity / COP (A +7 °C, W 55 °C)	kW / COP	12,00/2,93	14,50/2,72	9,00/2,94	12,00/2,93
Heating capacity / COP (A +2 °C, W 35 °C)	kW / COP	11,40/3,44	13,00/3,28	9,00/3,59	11,40/3,44
Heating capacity / COP (A +2 °C, W 55 °C)	kW / COP	9,10/2,23	9,80/2,21	8,80/2,23	9,10/2,23
Heating capacity / COP (A -7 °C, W 35 °C)	kW / COP	10,00/2,73	11,40/2,57	9,00/2,85	10,00/2,73
Heating capacity / COP (A -7 °C, W 55 °C)	kW / COP	8,20/1,95	9,00/1,85	7,90/2,05	8,20/1,95
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	10,00/2,81	12,20/2,56	7,00/3,17	10,00/2,85
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	10,00/4,17	12,20/4,12	7,00/4,67	10,00/4,26
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	190/134	190/133	190/134
	SCOP	4,82/3,42	4,82/3,33	4,81/3,41	4,82/3,42
	Energy class <sup>1)</sup>	A+++ to D	A+++/A++	A+++/A++	A+++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245/159	245/169	245/159
	SCOP	6,21/4,05	6,21/4,30	6,21/4,05	6,21/4,05
	Energy class <sup>1)</sup>	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	168/121	168/121	168/121
	SCOP	4,29/3,10	4,28/3,10	4,28/3,10	4,28/3,10
	Energy class <sup>1)</sup>	A+++ to D	A++/A+	A++/A+	A++/A+
<b>Indoor unit</b>		<b>WH-ADC1216H6E5</b>	<b>WH-ADC1216H6E5</b>	<b>WH-ADC0916H9E8</b>	<b>WH-ADC0916H9E8</b>
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33
Dimension	HxWxD	mm	1800x598x717	1800x598x717	1800x598x717
Net weight	kg		124	124	126
Water pipe connector	Inch		R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	36/152	36/152	36/152
Heating water flow (ΔT=5 K, 35 °C)	L/min		34,4	45,9	25,8
Capacity of integrated electric heater	kW		6,00	6,00	9,00
Recommended fuse	A		30/30	30/30	16/16
Recommended cable size, supply 1 / 2	mm <sup>2</sup>		3x4,0/3x4,0	3x4,0/3x4,0	5x1,5/5x1,5
Water volume	L		185	185	185
Maximum DHW temperature	°C		65	65	65
Material inside tank			Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147			L	L	L
DHW tank ERP efficiency average / warm / cold <sup>2)</sup>	A+ to F	A/A/A	A/A/B	A/A/A	A/A/B
DHW tank ERP average climate η / COPdHW	ηwh % / COPdHW	95/2,37	91/2,28	95/2,37	95/2,37
DHW tank ERP warm climate η / COPdHW	ηwh % / COPdHW	110/2,75	107/2,67	110/2,75	110/2,75
DHW tank ERP cold climate η / COPdHW	ηwh % / COPdHW	75/1,87	72/1,80	75/1,87	72/1,80
<b>Outdoor unit</b>		<b>WH-UD12HE5</b>	<b>WH-UD16HE5</b>	<b>WH-UD09HE8</b>	<b>WH-UD12HE8</b>
Sound power <sup>3)</sup>	Heat	dB(A)	65	65	65
Dimension / Net weight	HxWxD	mm / kg	1340x900x320/101	1340x900x320/101	1340x900x320/107
Refrigerant (R410A) / CO <sub>2</sub> Eq.	kg / T		2,55/5,324	2,55/5,324	2,55/5,324
Piping diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)
Pipe length range / Elevation difference (in / out)	m / m		3~50/30	3~50/30	3~30/20
Pipe length for additional gas / Additional gas amount	m / g/m		10/50	10/50	10/50
Operating range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20~55/5~20	20~55/5~20	20~55/5~20

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511. \*\* This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. 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.

Accessories	
PAW-ADC-PREKIT-1	Piping pre installation kit for J Generation
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1

Accessories	
CZ-NS4P	Additional functions PCB
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.

GOOD DESIGN  
AWARD 2017011-1W0207  
011-1W0208  
011-1W02093, 5 and 7 kW  
models.**Aquarea High Performance All in One Compact J Generation Single phase. Heating and Cooling - R32**

**Energy efficiency:** COP up to 5,33 / A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

**Flexibility:** 598 x 600 footprint / Long piping lengths / Built-in magnetic water filter.

**Comfort:** Heating curve down to -20 °C / 60 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

**Single phase (Power to indoor)**

Kit	KIT-ADC03JE5C	KIT-ADC05JE5C	KIT-ADC07JE5C	KIT-ADC09JE5C-1
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	3,20/5,33	5,00/5,00	7,00/4,76
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	3,20/2,81	5,00/2,72	7,00/2,82
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	3,20/3,64	4,20/3,18	6,85/3,41
Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	3,20/2,19	4,10/1,99	6,20/2,21
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	3,30/2,80	4,20/2,59	5,60/2,87
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	3,20/1,79	3,55/1,71	5,25/1,94
Cooling capacity / EER [A 35 °C, W 7 °C]	kW / EER	3,20/3,52	4,50/3,00	6,70/3,03
Cooling capacity / EER [A 35 °C, W 18 °C]	kW / EER	3,20/4,71	4,80/4,29	6,70/4,72
Heating average climate [W 35 °C / W 55 °C]	Seasonal energy efficiency SCOP	ηs % 5,07/3,47	200/136 5,07/3,47	193/130 4,90/3,32
	Energy class <sup>1)</sup>	A+++ to D	A+++ / A++	A+++ / A++
Heating warm climate [W 35 °C / W 55 °C]	Seasonal energy efficiency SCOP	ηs % 6,20/4,20	245/165 6,20/4,20	227/160 5,75/4,07
	Energy class <sup>1)</sup>	A+++ to D	A+++ / A+++	A+++ / A+++
Heating cold climate [W 35 °C / W 55 °C]	Seasonal energy efficiency SCOP	ηs % 4,00/2,83	157/110 4,00/2,83	164/116 4,18/2,98
	Energy class <sup>1)</sup>	A+++ to D	A++ / A+	A++ / A+
Indoor unit	WH-ADC0309J3E5C	WH-ADC0309J3E5C	WH-ADC0309J3E5C	WH-ADC0309J3E5C
Sound pressure	Heat / Cool	dB(A)	28/28	28/28
Dimension	HxWxD	mm	1640x598x600	1640x598x600
Net weight	kg	101	101	101
Water pipe connector	Inch	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds	Variable Speed	Variable Speed	Variable Speed
	Input power [Min/Max]	W	30/120	30/120
Heating water flow [ $\Delta T=5$ K, 35 °C]	L/min	9,20	14,30	20,10
Capacity of integrated electric heater	kW	3,00	3,00	3,00
Recommended fuse	A	16/16	16/16	25/16
Recommended cable size, supply 1 / 2	mm²	3x1,5/3x1,5	3x1,5/3x1,5	3x2,5/3x1,5
Water volume	L	185	185	185
Maximum DHW temperature	°C	65	65	65
Material inside tank		Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147		L	L	L
DHW tank ERP efficiency average / warm / cold <sup>2)</sup>	A+ to F	A+/A+/A	A+/A+/A	A+/A+/A
DHW tank ERP average climate η / COPdHW	ηwh % / COPdHW	128/3,20	128/3,20	116/2,90
DHW tank ERP warm climate η / COPdHW	ηwh % / COPdHW	154/3,86	154/3,86	134/3,35
DHW tank ERP cold climate η / COPdHW	ηwh % / COPdHW	99/2,48	99/2,48	98/2,45
Outdoor unit	WH-UD03JE5	WH-UD05JE5	WH-UD07JE5	WH-UD09JE5-1
Sound power <sup>3)</sup>	Heat	dB(A)	55	55
Dimension / Net weight	HxWxD	mm / kg	622x824x298/37	622x824x298/37
Refrigerant (R32) / CO <sub>2</sub> Eq.		kg / T	0,9/0,608	0,9/0,608
Piping diameter	Liquid / Gas	Inch (mm)	1/4(6,35)/1/2(12,70)	1/4(6,35)/1/2(12,70)
Pipe length range / Elevation difference (in / out)	m / m	3~25/20	3~25/20	3~50/30
Pipe length for additional gas / Additional gas amount	m / g/m	10/20	10/20	10/25
Operating range - outdoor ambient	Heat Cool	°C	-20 ~ +35 +10 ~ +43	-20 ~ +35 +10 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60/5 ~ 20	20 ~ 60/5 ~ 20

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511. \*\* This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. 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.

**Accessories**

<b>CZ-TAW1</b>	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
<b>CZ-TAW1-CBL</b>	10 m extension cable for CZ-TAW1

**Accessories**

<b>CZ-NS4P</b>	Additional functions PCB
<b>PAW-A2W-RTWIRED</b>	Room thermostat
<b>PAW-A2W-RTWIRELESS</b>	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.

GOOD DESIGN  
AWARD 2017

011-1W0515

ErP 55 °C  
Scale from  
A+++ to DErP 35 °C  
Scale from  
A+++ to DDHW  
Scale from  
A+ to F

## Aquarea High Performance All in One Compact H Generation Single phase. Heating and Cooling - R410A

**Energy efficiency:** A+++ in heating at 35 °C and A in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

**Flexibility:** 598 x 600 footprint / Built-in magnetic water filter.

**Comfort:** Operating range down to -20 °C.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

### Single phase (Power to indoor)

Kit		KIT-ADC12HE5C	KIT-ADC16HE5C
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	12,00/4,74	16,00/4,28
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	-/-	-/-
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	11,40/3,44	13,00/3,28
Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	-/-	-/-
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	-/-	-/-
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	-/-	-/-
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	10,00/2,81	12,20/2,56
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	-/-	-/-
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	190/134
		SCOP	4,82/3,42
	Energy class <sup>1)</sup>	A+++ to D	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245/159
		SCOP	6,21/4,05
	Energy class <sup>1)</sup>	A+++ to D	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	168/121
		SCOP	4,29/3,10
	Energy class <sup>1)</sup>	A+++ to D	A++ / A+
Indoor unit		WH-ADC1216H6E5C	WH-ADC1216H6E5C
Sound pressure	Heat / Cool	dB(A)	33/33
Dimension	HxWxD	mm	1640x598x600
Net weight	kg	101	101
Water pipe connector	Inch	R 1½	R 1½
A class pump	Number of speeds	Variable Speed	Variable Speed
	Input power (Min/Max)	W	-/-
Heating water flow (ΔT=5 K, 35 °C)	L/min	34,40	45,90
Capacity of integrated electric heater	kW	6,00	6,00
Recommended fuse	A	-/-	-/-
Recommended cable size, supply 1 / 2	mm²	-/-	-/-
Water volume	L	185	185
Maximum DHW temperature	°C	65	65
Material inside tank		Stainless steel	Stainless steel
Tapping profile according EN16147		-	-
DHW tank ERP efficiency average / warm / cold <sup>2)</sup>	A+ to F	-/-/-	-/-/-
DHW tank ERP average climate η / COPdHW	ηwh % / COPdHW	92/2,30	88/2,20
DHW tank ERP warm climate η / COPdHW	ηwh % / COPdHW	107/2,67	104/2,59
DHW tank ERP cold climate η / COPdHW	ηwh % / COPdHW	72/1,81	70/1,74
Outdoor unit		WH-UD12HE5	WH-UD16HE5
Sound power <sup>3)</sup>	Heat	dB(A)	65
Dimension / Net weight	HxWxD	mm / kg	1340x900x320/101
Refrigerant (R410A) / CO <sub>2</sub> Eq.	kg / T	2,55/5,324	2,55/5,324
Piping diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)
Pipe length range / Elevation difference (in / out)	m / m	3~50/30	3~50/30
Pipe length for additional gas / Additional gas amount	m / g/m	10/50	10/50
Operating range - outdoor ambient	Heat	°C	-20 ~ +35
	Cool	°C	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 55/5 ~ 20
1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. * EER and COP calculation is based in accordance to EN14511. ** This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. 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.			

Accessories	Accessories
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1
CZ-NS4P	Additional functions PCB
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-block J and H Generation awarded with the prestigious Good Design Award 2017.


**GOOD DESIGN  
AWARD 2017**

**011-1W0207  
011-1W0208  
011-1W0209**

**3, 5 and 7 kW  
models.**


## Aquarea High Performance Bi-bloc J Generation Single phase. Heating and Cooling - SDC - R32

**Energy efficiency:** COP up to 5,33 / A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

**Flexibility:** Long piping lengths / Built-in magnetic water filter.

**Comfort:** Operating range and heating curve down to -20 °C / 60 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

### Single phase (Power to indoor)

Kit	KIT-WC03J3E5	KIT-WC05J3E5	KIT-WC07J3E5	KIT-WC09J3E5
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	3,20/5,33	5,00/5,00	7,00/4,76
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	3,20/2,81	5,00/2,72	7,00/2,82
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	3,20/3,64	4,20/3,18	6,85/3,41
Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	3,20/2,19	4,10/1,99	6,20/2,21
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	3,30/2,80	4,20/2,59	5,60/2,87
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	3,20/1,79	3,55/1,71	5,25/1,94
Cooling capacity / EER [A 35 °C, W 7 °C]	kW / EER	3,20/3,52	4,50/3,00	6,70/3,03
Cooling capacity / EER [A 35 °C, W 18 °C]	kW / EER	3,20/4,71	4,80/4,29	6,70/4,72
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	200/136 5,07/3,47	200/136 5,07/3,47	193/130 4,90/3,32
	Energy class	A+++ to D	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	245/165 6,20/4,20	245/165 6,20/4,20	227/160 5,75/4,07
	Energy class	A+++ to D	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	157/110 4,00/2,83	157/110 4,00/2,83	164/116 4,18/2,98
	Energy class	A+++ to D	A++ / A+	A++ / A+
Indoor unit	WH-SDC0305J3E5	WH-SDC0305J3E5	WH-SDC0709J3E5	WH-SDC0709J3E5
Sound pressure	Heat / Cool	dB(A)	28/28	28/28
Dimension	HxWxD	mm	892x500x340	892x500x340
Net weight	kg	42	42	42
Water pipe connector	Inch	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds Input power (Min/Max)	Variable Speed W	Variable Speed 33/106	Variable Speed 34/114
Heating water flow [ $\Delta T=5$ K, 35 °C]	L/min	9,2	14,3	20,1
Capacity of integrated electric heater	kW	3,00	3,00	3,00
Recommended fuse	A	15/30	15/30	15/30
Recommended cable size, supply 1 / 2	mm²	3x1,5/3x1,5	3x1,5/3x1,5	3x2,5/3x1,5
Outdoor unit	WH-UD03JE5	WH-UD05JE5	WH-UD07JE5	WH-UD09JE5-1
Sound power <sup>1)</sup>	Heat	dB(A)	55	55
Dimension	HxWxD	mm	622x824x298	622x824x298
Net weight	kg	37	37	61
Refrigerant [R32] / CO <sub>2</sub> Eq.	kg / T	0,9 / 0,608	0,9 / 0,608	1,27 / 0,857
Piping diameter	Liquid / Gas	Inch (mm)	1/4 {6,35} / 1/2 {12,70}	1/4 {6,35} / 1/2 {12,70}
Pipe length range	m	3~25	3~25	3~50
Elevation difference (in / out)	m	20	20	30
Pipe length for additional gas	m	10	10	10
Additional gas amount	g/m	20	20	25
Operating range - outdoor ambient	Heat Cool	°C °C	-20 ~ +35 +10 ~ +43	-20 ~ +35 +10 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511.

Accessories	
<b>PAW-TD20C1E5</b>	Tank 200 L - Stainless steel
<b>PAW-TD30C1E5</b>	Tank 300 L - Stainless steel
<b>PAW-TA20C1E5STD</b>	Tank 200 L - Enamelled
<b>PAW-TA30C1E5STD</b>	Tank 300 L - Enamelled
<b>PAW-3WYVVL-HW</b>	3 way valve for DHW Tanks
<b>CZ-NV1</b>	3 way valve kit for inside of hydrokit
<b>PAW-BTANK50L-2</b>	Buffer tank 50 L

Accessories	
<b>CZ-TAW1</b>	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
<b>CZ-TAW1-CBL</b>	10 m extension cable for CZ-TAW1
<b>CZ-NS4P</b>	Additional functions PCB
<b>PAW-A2W-RTWIRED</b>	Room thermostat
<b>PAW-A2W-RTWIRELESS</b>	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.

GOOD DESIGN  
AWARD 2017

011-1W0515

**Aquarea High Performance Bi-bloc H Generation Single phase / Three phase, Heating and Cooling - SDC - R410A****Energy efficiency:** A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.**Flexibility:** Optional magnet for the water filter.**Comfort:** Operating range down to -20 °C.**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

Kit	Single phase			Three phase (Power to indoor)	
	KIT-WC12H6E5	KIT-WC16H6E5	KIT-WC09H3E8	KIT-WC12H9E8	KIT-WC16H9E8
Heating capacity / COP (A +7 °C, W 35 °C)	kW / COP	12,00/4,74	16,00/4,28	9,00/4,84	12,00/4,74
Heating capacity / COP (A +7 °C, W 55 °C)	kW / COP	12,00/2,93	14,50/2,72	9,00/2,94	12,00/2,93
Heating capacity / COP (A +2 °C, W 35 °C)	kW / COP	11,40/3,44	13,00/3,28	9,00/3,59	11,40/3,44
Heating capacity / COP (A +2 °C, W 55 °C)	kW / COP	9,10/2,23	9,80/2,21	8,80/2,23	9,10/2,23
Heating capacity / COP (A -7 °C, W 35 °C)	kW / COP	10,00/2,73	11,40/2,57	9,00/2,85	10,00/2,73
Heating capacity / COP (A -7 °C, W 55 °C)	kW / COP	8,20/1,95	9,00/1,85	7,90/2,05	8,20/1,95
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	10,00/2,81	12,20/2,56	7,00/3,17	10,00/2,85
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	10,00/4,17	12,20/4,12	7,00/4,67	10,00/4,26
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	190/134	190/130	190/134
	SCOP	4,82/3,42	4,82/3,33	4,81/3,41	4,82/3,42
	Energy class	A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245/159	245/169	245/159
	SCOP	6,21/4,05	6,21/4,30	6,21/4,05	6,21/4,05
	Energy class	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	168/121	168/121	168/121
	SCOP	4,29/3,10	4,28/3,10	4,28/3,10	4,28/3,10
	Energy class	A+++ to D	A++ / A+	A++ / A+	A++ / A+
Indoor unit	WH-SDC12H6E5	WH-SDC16H6E5	WH-SDC09H3E8	WH-SDC12H9E8	WH-SDC16H9E8
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33
Dimension	HxWxD	mm	892x500x340	892x500x340	892x500x340
Net weight	kg	43	44	43	44
Water pipe connector	Inch	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power [Min/Max]	W	34/110	30/105	32/102
Heating water flow (ΔT=5 K, 35 °C)	L/min	34,4	45,9	25,8	34,4
Capacity of integrated electric heater	kW	6,00	6,00	3,00	9,00
Recommended fuse	A	30/30	30/30	15/30	15/30
Recommended cable size, supply 1 / 2	mm²	3x4,0 or 6,0/3x4,0	3x4,0 or 6,0/3x4,0	5x1,5/5x1,5	5x1,5/5x1,5
Outdoor unit	WH-UD12H6E5	WH-UD16H6E5	WH-UD09HE8	WH-UD12HE8	WH-UD16HE8
Sound power 1)	Heat	dB(A)	65	65	65
Dimension	HxWxD	mm	1340x900x320	1340x900x320	1340x900x320
Net weight	kg	101	101	107	107
Refrigerant (R410A) / CO <sub>2</sub> Eq.	kg / T	2,55/5,324	2,55/5,324	2,55/5,324	2,55/5,324
Piping diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)
Pipe length range	m	3~50	3~50	3~30	3~30
Elevation difference (in / out)	m	30	30	20	20
Pipe length for additional gas	m	10	10	10	10
Additional gas amount	g/m	50	50	50	50
Operating range - outdoor ambient	Heat	°C	-20~+35	-20~+35	-20~+35
	Cool	°C	+16~+43	+16~+43	+16~+43
Water outlet	Heat / Cool	°C	20~55/5~20	20~55/5~20	20~55/5~20

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511.

**Accessories**

PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-3WYVLV-HW	3 way valve for DHW Tanks
CZ-NV1	3 way valve kit for inside of hydrokit
PAW-BTANK50L-2	Buffer tank 50 L

**Accessories**

CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1
CZ-NS4P	Additional functions PCB
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.

011-1W0398  
011-1W0399  
011-1W0400



## Aquarea High Performance Mono-bloc J Generation Single phase. Heating and Cooling - MDC · R32

**Energy efficiency:** A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

**Flexibility:** Built-in magnetic water filter / Built-in 6L expansion vessel.

**Comfort:** Operating range and heating curve down to -20 °C / 60 °C water outlet temperature / Cooling mode down to +10 °C.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

Outdoor unit	Single phase		
	WH-MDC05J3E5	WH-MDC07J3E5	WH-MDC09J3E5
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	5,00/5,08	7,00/4,76
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	5,00/3,01	7,00/2,82
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	5,00/3,57	7,00/3,40
Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	5,00/2,27	6,30/2,16
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	5,00/2,78	6,80/2,81
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	5,00/1,85	6,30/1,86
Cooling capacity / EER [A 35 °C, W 7 °C]	kW / EER	5,00/3,31	7,00/3,06
Cooling capacity / EER [A 35 °C, W 18 °C]	kW / EER	5,00/5,05	7,00/4,73
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	ηs % 5,12/3,63	193/130 4,90/3,32
	Energy class	A+++ to D	A+++/A++ A+++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	ηs % 237/165	227/160 227/160
	Energy class	A+++ to D	A+++/A+++ A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	ηs % 160/115	164/116 164/116
	Energy class	A+++ to D	A++/A+ A++/A+
Sound power <sup>1)</sup>	Heat	dB(A)	59 59
Dimension	HxWxD	mm	865x1283x320 865x1283x320
Net weight	kg	99	104 104
Refrigerant [R32] / CO <sub>2</sub> Eq. <sup>2)</sup>	kg / T	1,3/0,878	1,3/0,878 1,3/0,878
Water pipe connector	Inch	R 1½	R 1½ R 1½
Pump	Number of speeds	Variable Speed	Variable Speed
	Input power [Min/Max]	W	34/96 36/100
Heating water flow [ΔT=5 K, 35 °C]	L/min	14,3	20,1 25,8
Capacity of integrated electric heater	kW	3,00	3,00
Input power	Heat kW Cool kW	0,985 1,51	1,47 2,29
Running and starting current	Heat A Cool A	4,7 7,0	7,0 10,5
Current 1	A	12	17 17
Current 2	A	13	13 13
Recommended fuse	A	30/15	30/15 30/16
Recommended cable size, supply 1 / 2	mm <sup>2</sup>	3x1,5/3x1,5	3x2,5/3x1,5 3x2,5/3x1,5
Operating range - outdoor ambient	Heat °C Cool °C	-20~35 +10~+43	-20~35 +10~+43
Water outlet	Heat °C Cool °C	20~60 5~20	20~60 5~20

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MDC models are hermetically sealed. \* EER and COP calculation is based in accordance to EN14511.

### Accessories

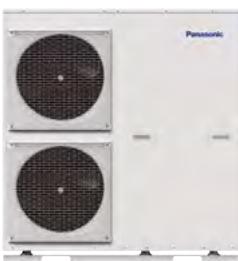
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L - Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L - Stainless Steel
PAW-3WYVVL-HW	3 way valve for DHW Tanks
PAW-BTANK50L-2	Buffer tank 50 L

### Accessories

CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional.



## Aquarea High Performance Mono-bloc H Generation Single phase. Heating and Cooling - MDC - R410A

**Energy efficiency:** A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

**Flexibility:** Optional magnet for the water filter.

**Comfort:** Operating range and heating curve down to -20 °C / 55 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

### Single phase

Outdoor unit		WH-MDC12H6E5	WH-MDC16H6E5
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	12,00/4,74	16,00/4,28
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	12,00/2,93	14,50/2,72
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	11,40/3,44	13,00/3,28
Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	9,10/2,23	9,80/2,21
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	10,00/2,73	11,40/2,57
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	8,20/1,95	9,00/1,84
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	10,00/2,81	12,20/2,56
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	9,39/4,65	11,40/4,10
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	190/134
	SCOP	4,82/3,42	4,82/3,33
	Energy class	A+++ to D	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	245/159
	SCOP	6,20/4,05	6,20/4,30
	Energy class	A+++ to D	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	168/121
	SCOP	4,28/3,10	4,28/3,10
	Energy class	A+++ to D	A++ / A+
Sound power <sup>1)</sup>	Heat	dB(A)	65
Dimension	HxWxD	mm	1410x1283x320
Net weight	kg	140	140
Refrigerant (R410A) / CO <sub>2</sub> Eq. <sup>2)</sup>	kg / T	2,10/4,385	2,10/4,385
Water pipe connector	Inch	R1½	R1½
Pump	Number of speeds	Variable Speed	Variable Speed
	Input power (Min/Max)	W	38/120
Heating water flow (ΔT=5 K, 35 °C)	L/min	34,4	45,9
Capacity of integrated electric heater	kW	6,00	6,00
Input power	Heat	2,53	3,74
	Cool	3,56	4,76
Running and starting current	Heat	A	11,7
	Cool	A	16,2
Current 1		A	24,0
Current 2		A	26,0
Recommended fuse		A	30/30
Recommended cable size, supply 1 / 2	mm <sup>2</sup>	3x4,0 or 6,0/3x4,0	3x4,0 or 6,0/3x4,0
Operating range - outdoor ambient	Heat	°C	-20 ~ +35
	Cool	°C	+16 ~ +43
Water outlet	Heat	°C	25 ~ 55
	Cool	°C	5 ~ 20

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MDC models are hermetically sealed. \* EER and COP calculation is based in accordance to EN14511.

### Accessories

PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L - Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L - Stainless Steel
PAW-3WYVLV-HW	3 way valve for DHW Tanks
PAW-BTANK50L-2	Buffer tank 50 L

### Accessories

CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional.


**GOOD DESIGN  
AWARD 2017**

**011-1W0510  
011-1W0511**



ErP 55 °C  
Scale from A+++ to D

ErP 35 °C  
Scale from A+++ to D

DHW  
Scale from A+ to F

### Aquarea T-CAP All in One H Generation Single phase / Three phase. Heating and Cooling - R410A

**Energy efficiency:** A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

**Flexibility:** Optional magnet for the water filter.

**Comfort:** Constant capacity down to -20 °C / Operating range down to -28 °C / 60 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

		Single phase (Power to indoor)		Three phase (Power to indoor)		
Kit		KIT-AXC09HE5	KIT-AXC12HE5	KIT-AXC09HE8	KIT-AXC12HE8	KIT-AXC16HE8
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	9,00/4,84	12,00/4,74	9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	9,00/2,94	12,00/2,88	9,00/2,94	12,00/2,88	16,00/2,71
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	9,00/3,59	12,00/3,44	9,00/3,59	12,00/3,44	16,00/3,10
Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	9,00/2,21	12,00/2,19	9,00/2,21	12,00/2,19	16,00/2,13
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	9,00/2,85	12,00/2,72	9,00/2,85	12,00/2,72	16,00/2,49
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	9,00/2,02	12,00/1,92	9,00/2,02	12,00/1,92	16,00/1,86
Cooling capacity / EER [A 35 °C, W 7 °C]	kW / EER	7,00/3,17	10,00/2,81	7,00/3,17	10,00/2,81	12,20/2,57
Cooling capacity / EER [A 35 °C, W 18 °C]	kW / EER	7,00/5,19	10,00/5,13	7,00/5,19	10,00/5,13	12,20/3,49
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	181/130	170/130	181/130	170/125
		SCOP	4,59/3,32	4,32/3,32	4,59/3,32	4,32/3,32
	Energy class <sup>1)</sup>	A+++ to D	A+++/A++	A++/A++	A+++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	235/158	231/158	235/158	231/158
		SCOP	5,95/4,02	5,86/4,02	5,95/4,02	5,86/4,02
	Energy class <sup>1)</sup>	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160/125	160/125	160/125	150/125
		SCOP	4,08/3,20	4,08/3,20	4,08/3,20	3,83/3,20
	Energy class <sup>1)</sup>	A+++ to D	A++/A++	A++/A++	A++/A++	A++/A++
Indoor unit		WH-ADC1216H6E5	WH-ADC1216H6E5	WH-ADC0916H9E8	WH-ADC0916H9E8	WH-ADC0916H9E8
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33	33/33
Dimension	HxWxD	mm	1800x598x717	1800x598x717	1800x598x717	1800x598x717
Net weight	kg		124	124	126	126
Water pipe connector	Inch		R 1½	R 1½	R 1½	R 1½
A class pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power [Min/Max]	W	36/152	36/152	36/152	36/152
Heating water flow [ $\Delta T=5$ K, 35 °C]	L/min		25,8	34,4	25,8	34,4
Capacity of integrated electric heater	kW		6,00	6,00	9,00	9,00
Recommended fuse	A		30/30	30/30	16/16	16/16
Recommended cable size, supply 1 / 2	mm <sup>2</sup>		3x4,0/3x4,0	3x4,0/3x4,0	5x1,5/5x1,5	5x1,5/5x1,5
Water volume	L		185	185	185	185
Maximum DHW temperature	°C		65	65	65	65
Material inside tank			Stainless steel	Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147			L	L	L	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/B
DHW tank ERP average climate η / COPdHW	ηwh % / COPdHW	95/2,37	95/2,37	95/2,37	95/2,37	91/2,27
DHW tank ERP warm climate η / COPdHW	ηwh % / COPdHW	110/2,75	110/2,75	110/2,75	110/2,75	107/2,67
DHW tank ERP cold climate η / COPdHW	ηwh % / COPdHW	75/1,87	75/1,87	75/1,87	75/1,87	72/1,80
Outdoor unit		WH-UX09HE5	WH-UX12HE5	WH-UX09HE8	WH-UX12HE8	WH-UX16HE8
Sound power <sup>3)</sup>	Heat	dB(A)	66	66	65	67
Dimension / Net weight	HxWxD	mm / kg	1340x900x320/101	1340x900x320/101	1340x900x320/108	1340x900x320/118
Refrigerant (R410A) / CO <sub>2</sub> Eq.	kg / T		2,85/5,951	2,85/5,951	2,85/5,951	2,90/6,055
Piping diameter	Liquid / Gas	Inch (mm)	3/8[9,52]/5/8[15,88]	3/8[9,52]/5/8[15,88]	3/8[9,52]/5/8[15,88]	3/8[9,52]/5/8[15,88]
Pipe length range / Elevation difference (in / out)	m / m		3~30/20	3~30/20	3~30/20	3~30/20
Pipe length for additional gas / Additional gas amount	m / g/m		10/50	10/50	10/50	10/50
Operating range - outdoor ambient	Heat	°C	-28 ~ +35	-28 ~ +35	-28 ~ +35	-28 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

<sup>1)</sup> Scale from A+++ to D. <sup>2)</sup> Scale from A+ to F. <sup>3)</sup> Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511. \*\* This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. 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.

#### Accessories

<b>PAW-ADC-PREKIT-1</b>	Piping pre installation kit for J Generation
<b>CZ-TAW1</b>	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
<b>CZ-TAW1-CBL</b>	10 m extension cable for CZ-TAW1

#### Accessories

<b>CZ-NS4P</b>	Additional functions PCB
<b>PAW-A2W-MGTFILTER</b>	Magnet for the water filter
<b>PAW-A2W-RTWIRED</b>	Room thermostat
<b>PAW-A2W-RTWIRELESS</b>	Wireless LCD room thermostat





011-1W0510  
011-1W0511



## Aquarea T-CAP All in One H Generation Three phase. Super Quiet outdoor unit. Heating and Cooling - R410A

**Energy efficiency:** A+++ in heating at 35 °C and A+ in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

**Flexibility:** Optional magnet for the water filter.

**Comfort:** Low noise level / Constant capacity down to -20 °C / Operating range down to -28 °C / 60 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

### Three phase (Power to indoor)

Kit	KIT-AQC09HE8	KIT-AQC12HE8	KIT-AQC16HE8
Heating capacity / COP (A +7 °C, W 35 °C)	kW / COP 9,00/4,84	12,00/4,74	16,00/4,28
Heating capacity / COP (A +7 °C, W 55 °C)	kW / COP 9,00/2,94	12,00/2,88	16,00/2,71
Heating capacity / COP (A +2 °C, W 35 °C)	kW / COP 9,00/3,59	12,00/3,44	16,00/3,10
Heating capacity / COP (A +2 °C, W 55 °C)	kW / COP 9,00/2,21	12,00/2,19	16,00/2,13
Heating capacity / COP (A -7 °C, W 35 °C)	kW / COP 9,00/2,85	12,00/2,72	16,00/2,49
Heating capacity / COP (A -7 °C, W 55 °C)	kW / COP 9,00/2,02	12,00/1,92	16,00/1,86
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER 7,00/3,17	10,00/2,81	12,20/2,57
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER 7,00/5,19	10,00/5,13	12,20/3,49
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP 4,59/3,32	181/130	160/125
	Energy class <sup>1)</sup> A+++ to D	A+++ / A++	A++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP 5,95/4,02	235/158	231/158
	Energy class <sup>1)</sup> A+++ to D	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP 4,08/3,20	160/125	150/125
	Energy class <sup>1)</sup> A+++ to D	A++ / A++	A++ / A++
<b>Indoor unit</b>	<b>WH-ADC0916H9E8</b>	<b>WH-ADC0916H9E8</b>	<b>WH-ADC0916H9E8</b>
Sound pressure	Heat / Cool dB(A) 33/33	33/33	33/33
Dimension	HxWxD mm 1800x598x717	1800x598x717	1800x598x717
Net weight	kg 126	126	126
Water pipe connector	Inch R 1 1/4	R 1 1/4	R 1 1/4
A class pump	Number of speeds Input power (Min/Max) W 36/152	Variable Speed 36/152	Variable Speed 36/152
Heating water flow ( $\Delta T=5$ K, 35 °C)	L/min 25,8	34,4	45,9
Capacity of integrated electric heater	kW 9,00	9,00	9,00
Recommended fuse	A 16/16	16/16	16/16
Recommended cable size, supply 1 / 2	mm <sup>2</sup> 5x1,5/5x1,5	5x1,5/5x1,5	5x1,5/5x1,5
Water volume	L 185	185	185
Maximum DHW temperature	°C 65	65	65
Material inside tank	Stainless steel	Stainless steel	Stainless steel
Tapping profile according EN16147	L	L	L
DHW tank ERP efficiency average / warm / cold <sup>2)</sup>	A+ to F A/A/A	A/A/A	A/A/B
DHW tank ERP average climate η / COPdHW	ηwh % / COPdHW 95/2,37	95/2,37	91/2,27
DHW tank ERP warm climate η / COPdHW	ηwh % / COPdHW 110/2,75	110/2,75	107/2,67
DHW tank ERP cold climate η / COPdHW	ηwh % / COPdHW 75/1,87	75/1,87	72/1,80
<b>Outdoor unit</b>	<b>WH-UQ09HE8</b>	<b>WH-UQ12HE8</b>	<b>WH-UQ16HE8</b>
Sound power <sup>3)</sup>	Heat dB(A) 58	58	62
Dimension / Net weight	HxWxD mm / kg 1410x1283x320/151	1410x1283x320/151	1410x1283x320/161
Refrigerant (R410A) / CO <sub>2</sub> Eq.	kg / T 2,85/5,951	2,85/5,951	2,99/6,243
Piping diameter	Liquid / Gas Inch (mm) 3/8[9,52]/5/8[15,88]	3/8[9,52]/5/8[15,88]	3/8[9,52]/5/8[15,88]
Pipe length range / Elevation difference (in / out)	m / m 3~30/20	3~30/20	3~30/20
Pipe length for additional gas / Additional gas amount	m / g/m 10/50	10/50	10/50
Operating range - outdoor ambient	Heat °C -28 ~ +35	-28 ~ +35	-28 ~ +35
	Cool °C +16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool °C 20~60/5~20	20~60/5~20	20~60/5~20

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511. \*\* This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. 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.

### Accessories

PAW-ADC-PREKIT-1	Piping pre installation kit for J Generation
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1

### Accessories

CZ-NS4P	Additional functions PCB
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.



011-1W0511



## Aquarea T-CAP All in One Compact H Generation Single phase. Heating and Cooling - R410A

**Energy efficiency:** A+++ in heating at 35 °C and A in DHW / "A" water pump with variable speed / Stainless steel DHW tank with U-Vacua™ insulation panel / Built-in flow meter.

**Flexibility:** 598 x 600 footprint / Built-in magnetic water filter.

**Comfort:** Constant capacity down to -20 °C / Operating range down to -28 °C / 60 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

### Single phase (Power to indoor)

Kit	KIT-AXC09HE5C	KIT-AXC12HE5C
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	9,00/4,84
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	—/—
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	9,00/3,59
Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	—/—
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	—/—
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	—/—
Cooling capacity / EER [A 35 °C, W 7 °C]	kW / EER	7,00/3,17
Cooling capacity / EER [A 35 °C, W 18 °C]	kW / EER	10,00/2,81
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	181/130
Energy class <sup>1)</sup>	A+++ to D	4,59/3,32
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	235/158
Energy class <sup>1)</sup>	A+++ to D	5,95/4,02
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	160/125
Energy class <sup>1)</sup>	A+++ to D	4,08/3,20
<b>Indoor unit</b>	<b>WH-ADC1216H6E5C</b>	<b>WH-ADC1216H6E5C</b>
Sound pressure	Heat / Cool	dB(A)
Dimension	HxWxD	mm
Net weight	kg	1640x598x600
Water pipe connector	Inch	101
A class pump	Number of speeds	Variable Speed
	Input power [Min/Max]	W
Heating water flow [ $\Delta T=5$ K, 35 °C]	L/min	—/—
Capacity of integrated electric heater	kW	25,80
Recommended fuse	A	6,00
Recommended cable size, supply 1 / 2	mm <sup>2</sup>	—/—
Water volume	L	—/—
Maximum DHW temperature	°C	185
Material inside tank		65
Tapping profile according EN16147		Stainless steel
DHW tank ERP efficiency average / warm / cold <sup>2)</sup>	A+ to F	—/—/—
DHW tank ERP average climate η / COPdHW	ηwh % / COPdHW	92/2,30
DHW tank ERP warm climate η / COPdHW	ηwh % / COPdHW	92/2,30
DHW tank ERP cold climate η / COPdHW	ηwh % / COPdHW	107/2,67
		107/2,67
		72/1,81
<b>Outdoor unit</b>	<b>WH-UX09HE5</b>	<b>WH-UX12HE5</b>
Sound power <sup>3)</sup>	Heat	dB(A)
Dimension / Net weight	HxWxD	mm / kg
Refrigerant (R410A) / CO <sub>2</sub> Eq.	kg / T	1340x900x320/101
Piping diameter	Liquid / Gas	Inch (mm)
Pipe length range / Elevation difference (in / out)	m / m	3/8[9,52]/5/8[15,88]
Pipe length for additional gas / Additional gas amount	m / g/m	3/8[9,52]/5/8[15,88]
Operating range - outdoor ambient	Heat °C	3~30/20
	Cool °C	-28 ~ +35
Water outlet	Heat / Cool °C	+16 ~ +43
		20 ~ 60/5 ~ 20
		20 ~ 60/5 ~ 20

<sup>1)</sup> Scale from A+++ to D. <sup>2)</sup> Scale from A+ to F. <sup>3)</sup> Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511. \*\* This product is designed to comply with the European Water Quality Directive 98/83/EC amended by 2015/1787/EU. 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.

### Accessories

<b>CZ-TAW1</b>	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
<b>CZ-TAW1-CBL</b>	10 m extension cable for CZ-TAW1

### Accessories

<b>CZ-NS4P</b>	Additional functions PCB
<b>PAW-A2W-RTWIRED</b>	Room thermostat
<b>PAW-A2W-RTWIRELESS</b>	Wireless LCD room thermostat




**GOOD DESIGN  
AWARD 2017**

011-1W0510  
011-1W0511
ErP 55 °C  
Scale from  
A+++ to DErP 35 °C  
Scale from  
A+++ to D

## Aquarea T-CAP Bi-bloc H Generation Single phase / Three phase. Heating and Cooling - SXC - R410A

**Energy efficiency:** A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

**Flexibility:** Optional magnet for the water filter.

**Comfort:** Constant capacity down to -20 °C / Operating range down to -28 °C / 60 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

Kit	Single phase (Power to indoor)			Three phase (Power to indoor)	
	KIT-WXC09H3E5	KIT-WXC12H6E5	KIT-WXC09H3E8	KIT-WXC12H9E8	KIT-WXC16H9E8
Heating capacity / COP (A +7 °C, W 35 °C)	kW / COP	9,00/4,84	12,00/4,74	9,00/4,84	12,00/4,74
Heating capacity / COP (A +7 °C, W 55 °C)	kW / COP	9,00/2,94	12,00/2,88	9,00/2,94	12,00/2,88
Heating capacity / COP (A +2 °C, W 35 °C)	kW / COP	9,00/3,59	12,00/3,44	9,00/3,59	12,00/3,44
Heating capacity / COP (A +2 °C, W 55 °C)	kW / COP	9,00/2,21	12,00/2,19	9,00/2,21	12,00/2,19
Heating capacity / COP (A -7 °C, W 35 °C)	kW / COP	9,00/2,85	12,00/2,72	9,00/2,85	12,00/2,72
Heating capacity / COP (A -7 °C, W 55 °C)	kW / COP	9,00/2,02	12,00/1,92	9,00/2,02	12,00/1,92
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	7,00/3,17	10,00/2,81	7,00/3,17	10,00/2,81
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	7,00/5,19	10,00/5,13	7,00/5,19	10,00/5,13
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	181/130	181/130	170/130
	SCOP	4,59/3,32	4,32/3,32	4,59/3,32	4,32/3,32
	Energy class	A+++ to D	A+++ / A++	A++ / A++	A++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	235/158	231/158	235/158
	SCOP	5,95/4,02	5,86/4,02	5,95/4,02	5,86/4,02
	Energy class	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	160/125	160/125	160/125
	SCOP	4,08/3,20	4,08/3,20	4,08/3,20	3,83/3,20
	Energy class	A+++ to D	A++ / A++	A++ / A++	A++ / A++
Indoor unit	WH-SXC09H3E5	WH-SXC12H6E5	WH-SXC09H3E8	WH-SXC12H9E8	WH-SXC16H9E8
Sound pressure	Heat / Cool	dB(A)	33/33	33/33	33/33
Dimension	HxWxD	mm	892x500x340	892x500x340	892x500x340
Net weight	kg	43	43	43	45
Water pipe connector	Inch	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power [Min/Max]	W	32/102	34/110	32/102
Heating water flow (ΔT=5 K, 35 °C)	L/min	25,8	34,4	25,8	34,4
Capacity of integrated electric heater	kW	3,00	6,00	3,00	9,00
Recommended fuse	A	30/30	30/30	16/16	16/16
Recommended cable size, supply 1 / 2	mm²	3x4,0 or 6,0/3x4,0	3x4,0 or 6,0/3x4,0	5x1,5/3x1,5	5x1,5/5x1,5
Outdoor unit	WH-UX09HE5	WH-UX12HE5	WH-UX09HE8	WH-UX12HE8	WH-UX16HE8
Sound power 1)	Heat	dB(A)	66	66	65
Dimension	HxWxD	mm	1340x900x320	1340x900x320	1340x900x320
Net weight	kg	101	101	108	118
Refrigerant (R410A) / CO <sub>2</sub> Eq.	kg / T	2,85/5,951	2,85/5,951	2,85/5,951	2,85/5,951
Piping diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)
Pipe length range	m	3~30	3~30	3~30	3~30
Elevation difference (in / out)	m	20	20	20	20
Pipe length for additional gas	m	10	10	10	10
Additional gas amount	g/m	50	50	50	50
Operating range - outdoor ambient	Heat	°C	-28 ~ +35	-28 ~ +35	-28 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43	+16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511.

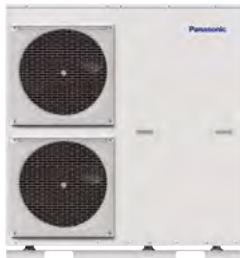
Accessories	
PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-3WYVLV-HW	3 way valve for DHW Tanks
CZ-NV1	3 way valve kit for inside of hydrokit
PAW-BTANK50L-2	Buffer tank 50 L

Accessories	
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1
CZ-NS4P	Additional functions PCB
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.


**GOOD DESIGN  
AWARD 2017**

**011-1W0510  
011-1W0511**

 ErP 55 °C  
Scale from  
A+++ to D

 ErP 35 °C  
Scale from  
A+++ to D

## Aquaera T-CAP Bi-bloc H Generation Three phase. Super Quiet outdoor unit. Heating and Cooling - SQC · R410A

**Energy efficiency:** A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

**Flexibility:** Optional magnet for the water filter.

**Comfort:** Low noise level / Constant capacity down to -20 °C / Operating range down to -28 °C / 60 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquaera Smart and Service Cloud and integration into BMS projects.

### Three phase (Power to indoor)

Kit	KIT-WQC09H3E8	KIT-WQC12H9E8	KIT-WQC16H9E8
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	9,00/4,84	12,00/4,74
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	9,00/2,94	12,00/2,88
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	9,00/3,59	12,00/3,44
Heating capacity / COP [A +2 °C, W 55 °C]	kW / COP	9,00/2,21	12,00/2,19
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	9,00/2,85	12,00/2,72
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	9,00/2,02	12,00/1,92
Cooling capacity / EER [A 35 °C, W 7 °C]	kW / EER	7,00/3,17	10,00/2,81
Cooling capacity / EER [A 35 °C, W 18 °C]	kW / EER	7,00/5,19	10,00/5,13
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	181/130 4,59/3,32	170/130 4,32/3,32
	Energy class	A+++ to D	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	235/158 5,95/4,02	231/158 5,86/4,02
	Energy class	A+++ to D	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	160/125 4,08/3,20	160/125 4,08/3,20
	Energy class	A+++ to D	A++ / A++
Indoor unit	WH-SQC09H3E8	WH-SQC12H9E8	WH-SQC16H9E8
Sound pressure	Heat / Cool	dB(A)	33/33
Dimension	HxWxD	mm	892x500x340
Net weight	kg	43	44
Water pipe connector	Inch	R 1½	R 1½
A class pump	Number of speeds	Variable Speed	Variable Speed
	Input power [Min/Max]	W	32/102
Heating water flow [ $\Delta T=5$ K, 35 °C]	L/min	25,8	34,4
Capacity of integrated electric heater	kW	3,00	9,00
Recommended fuse	A	15/30	15/30
Recommended cable size, supply 1 / 2	mm²	5x1,5/3x1,5	5x1,5/5x1,5
Outdoor unit	WH-U009HE8	WH-U012HE8	WH-U016HE8
Sound power <sup>1)</sup>	Heat	dB(A)	58
Dimension	HxWxD	mm	1410x1283x320
Net weight	kg	151	151
Refrigerant (R410A) / CO <sub>2</sub> , Eq.	kg / T	2,85/5,951	2,85/5,951
Piping diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)
Pipe length range	m	3~30	3~30
Elevation difference (in / out)	m	20	20
Pipe length for additional gas	m	10	10
Additional gas amount	g/m	50	50
Operating range - outdoor ambient	Heat Cool	°C °C	-28 ~ +35 +16 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20
			20 ~ 60 / 5 ~ 20

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511.

Accessories	
<b>PAW-TD20C1E5</b>	Tank 200 L - Stainless steel
<b>PAW-TD30C1E5</b>	Tank 300 L - Stainless steel
<b>PAW-TA20C1E5STD</b>	Tank 200 L - Enamelled
<b>PAW-TA30C1E5STD</b>	Tank 300 L - Enamelled
<b>PAW-3WYVVL-HW</b>	3 way valve for DHW Tanks
<b>CZ-NV1</b>	3 way valve kit for inside of hydrokit
<b>PAW-BTANK50L-2</b>	Buffer tank 50 L

Accessories	
<b>CZ-TAW1</b>	Aquaera Smart Cloud for remote control and maintenance through wireless or wired LAN
<b>CZ-TAW1-CBL</b>	10 m extension cable for CZ-TAW1
<b>CZ-NS4P</b>	Additional functions PCB
<b>PAW-A2W-MGTFILTER</b>	Magnet for the water filter
<b>PAW-A2W-RTWIRED</b>	Room thermostat
<b>PAW-A2W-RTWIRELESS</b>	Wireless LCD room thermostat



INTERNET CONTROL: Optional. GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc J and H Generation awarded with the prestigious Good Design Award 2017.

011-1W0463  
011-1W0464  
For 9 and 12 kW  
single and three  
phase.



ErP 55 °C  
Scale from  
A+++ to D

ErP 35 °C  
Scale from  
A+++ to D

## Aquarea T-CAP Mono-bloc J Generation Single phase / Three phase. Heating and Cooling - MXC - R32

**Energy efficiency:** A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

**Flexibility:** Built-in magnetic water filter.

**Comfort:** Constant capacity and operating range down to -20 °C / 65 °C water outlet temperature.

**Control:** Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

**Connectivity:** Optional Aquarea Smart and Service Cloud and integration into BMS projects.

Outdoor unit	Single phase			Three phase	
	WH-MXC09J3E5	WH-MXC12J6E5	WH-MXC09J3E8	WH-MXC12J9E8	WH-MXC16J9E8
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	9,00/5,08	12,00/4,80	9,00/5,08	12,00/4,80
Heating capacity / COP [A +7 °C, W 55 °C]	kW / COP	9,00/3,08	12,00/3,05	9,00/3,08	12,00/3,05
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	9,00/3,81	12,00/3,53	9,00/3,81	12,00/3,53
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
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	9,00/3,08	12,00/2,82	9,00/3,08	12,00/2,82
Heating capacity / COP [A -7 °C, W 55 °C]	kW / COP	9,00/2,12	12,00/2,00	9,00/2,12	12,00/2,00
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	9,00/3,18	12,00/2,90	9,00/3,09	12,00/2,84
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	9,00/4,62	12,00/3,95	9,00/4,46	12,00/3,79
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	$\eta_s$ %	195/140	195/140	195/140
	SCOP	4,96/3,57	4,96/3,57	4,96/3,57	4,46/3,31
	Energy class	A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	$\eta_s$ %	256/171	256/171	256/171
	SCOP	6,47/4,34	6,47/4,34	6,47/4,34	5,88/4,09
	Energy class	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	$\eta_s$ %	169/127	169/127	169/127
	SCOP	4,31/3,26	4,31/3,26	4,31/3,26	3,83/3,20
	Energy class	A+++ to D	A++ / A++	A++ / A++	A++ / A++
Sound power <sup>1)</sup>	Heat	dB(A)	65	65	65
Dimension	HxWxD	mm	1410x1283x320	1410x1283x320	1410x1283x320
Net weight	kg	140	140	140	150
Refrigerant (R32) / CO <sub>2</sub> Eq. <sup>2)</sup>	kg / T	1,60/1,080	1,60/1,080	1,60/1,080	1,80/1,215
Water pipe connector	Inch	R 1¼	R 1¼	R 1¼	R 1¼
Pump	Number of speeds	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	32/173	34/173	32/173
Heating water flow ( $\Delta T=5$ K, 35 °C)	L/min	25,8	34,4	25,8	34,4
Capacity of integrated electric heater	kW	3,00	6,00	3,00	9,00
Input power	Heat	kW	1,77	2,50	1,77
	Cool	kW	2,83	4,14	2,91
Running and starting current	Heat	A	8,3	11,6	2,6
	Cool	A	13,1	19,1	4,3
Current 1	A	29,0	29,0	14,7	11,8
Current 2	A	13,0	26,0	13,0	13,0
Recommended fuse, supply 1 / 2	A	30/30	30/30	20/16	20/20
Recommended cable size, supply 1 / 2	mm <sup>2</sup>	3x4,0 or 6,0/3x4,0	3x4,0 or 6,0/3x4,0	5x1,5/3x1,5	5x1,5/5x1,5
Operating range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35
	Cool	°C	10 ~ +43	10 ~ +43	10 ~ +43
Water outlet <sup>3)</sup>	Heat	°C	20 ~ 65	20 ~ 65	20 ~ 65
	Cool	°C	5 ~ 20	5 ~ 20	5 ~ 20

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MXC models are hermetically sealed. 3) It is possible to set temperature by 65 °C on remote controller. Normally, outlet water temperature is 60 °C or lower. In case of ΔT setting with remote controller is 15 °C and the outdoor ambient temperature is 5 to 20 °C, outlet water temperature 65 °C is possible. \* EER and COP calculation is based in accordance to EN14511.

### Accessories

PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L - Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L - Stainless Steel
PAW-3WYVVL-HW	3 way valve for DHW Tanks
PAW-BTANK50L-2	Buffer tank 50 L

### Accessories

CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

INTERNET CONTROL: Optional.





## Aquarea HT Bi-bloc F Generation Single phase / Three phase. Heating Only - SHF · R407C

**Energy efficiency:** "A" water pump with variable speed.

**Comfort:** Operating range down to -20 °C outdoor temperature / 65 °C water outlet temperature

		Single phase (Power to indoor)		Three phase (Power to indoor)	
Kit		KIT-WHF09F3E5	KIT-WHF12F6E5	KIT-WHF09F3E8	KIT-WHF12F9E8
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	9,00/4,64	12,00/4,46	9,00/4,64	12,00/4,46
Heating capacity / COP [A +7 °C, W 65 °C]	kW / COP	9,00/2,48	12,00/2,41	9,00/2,48	12,00/2,41
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	9,00/3,45	12,00/3,26	9,00/3,45	12,00/3,26
Heating capacity / COP [A +2 °C, W 65 °C]	kW / COP	9,00/2,06	10,30/2,01	9,00/2,06	10,30/2,01
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	9,00/2,74	12,00/2,52	9,00/2,74	12,00/2,52
Heating capacity / COP [A -7 °C, W 65 °C]	kW / COP	9,00/1,79	9,60/1,77	9,00/1,79	9,60/1,77
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs % SCOP	153/125 3,90/3,20	150/125 3,82/3,21	153/125 3,90/3,20
	Energy class	A+++ to D	A++/A++	A++/A++	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs % SCOP	191/156 4,84/3,97	188/156 4,77/3,97	191/156 4,84/3,97
	Energy class	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs % SCOP	137/116 3,50/2,97	134/113 3,42/2,90	137/116 3,50/2,97
	Energy class	A+++ to D	A+/A+	A+/A+	A+/A+
Indoor unit		WH-SHF09F3E5	WH-SHF12F6E5	WH-SHF09F3E8	WH-SHF12F9E8
Sound pressure	dB(A)	33	33	33	33
Dimension	H x W x D	mm	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353
Net weight	kg	46	47	47	48
Water pipe connector	Inch	R 1½	R 1½	R 1½	R 1½
A class pump	Number of speeds	7	7	7	7
	Input power (Min/Max)	W	38/100	40/106	38/100
Heating water flow (ΔT=5 K, 35 °C)	L/min	25,8	34,4	25,8	34,4
Capacity of integrated electric heater	kW	3,00	6,00	3,00	9,00
Recommended fuse	A	30/30	30/30	30/16	30/16
Recommended cable size, supply 1 / 2	mm²	3x4,0 or 6,0/3x4,0	3x4,0 or 6,0/3x4,0	5x1,5/3x1,5	5x1,5/5x1,5
Outdoor unit		WH-UH09FE5	WH-UH12FE5	WH-UH09FE8	WH-UH12FE8
Sound power <sup>1)</sup>	dB(A)	—	—	—	—
Dimension	H x W x D	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Net weight	kg	104	104	110	110
Refrigerant (R407C) / CO <sub>2</sub> , Eq.	kg / T	2,90/5,145	2,90/5,145	2,90/5,145	2,90/5,145
Piping diameter	Liquid / Gas	Inch (mm)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)	3/8(9,52)/5/8(15,88)
Pipe length range	m	3~30	3~30	3~30	3~30
Elevation difference (in / out)	m	20	20	20	20
Pipe length for additional gas	m	10	10	10	10
Additional gas amount	g/m	70	70	70	70
Operating range	Outdoor ambient (Heat)	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35
Water outlet	Heat	°C	25 ~ 65	25 ~ 65	25 ~ 65

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. \* EER and COP calculation is based in accordance to EN14511.

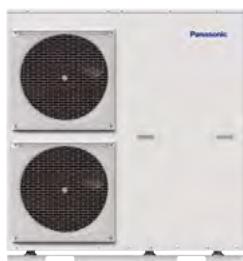
### Accessories

<b>PAW-TD20C1E5</b>	Tank 200 L - Stainless steel
<b>PAW-TD30C1E5</b>	Tank 300 L - Stainless steel
<b>PAW-TA20C1E5STD</b>	Tank 200 L - Enamelled
<b>PAW-TA30C1E5STD</b>	Tank 300 L - Enamelled

### Accessories

<b>PAW-3WYVLV-HW</b>	3 way valve for DHW Tanks
<b>PAW-BTANK50L-2</b>	Buffer tank 50 L
<b>PAW-A2W-RTWIRED</b>	Room thermostat
<b>PAW-A2W-RTWIRELESS</b>	Wireless LCD room thermostat



ErP 55 °C  
Scale from  
A+++ to DErP 35 °C  
Scale from  
A+++ to D

### Aquarea HT Mono-bloc G Generation Single phase. Heating Only - MHF · R407C

**Energy efficiency:** "A" water pump with variable speed.

**Comfort:** Operating range down to -20 °C outdoor temperature / 65 °C water outlet temperature

#### Single phase

Outdoor unit		WH-MHF09G3E5	WH-MHF12G6E5
Heating capacity / COP [A +7 °C, W 35 °C]	kW / COP	9,00/4,64	12,00/4,46
Heating capacity / COP [A +7 °C, W 65 °C]	kW / COP	9,00/2,48	12,00/2,41
Heating capacity / COP [A +2 °C, W 35 °C]	kW / COP	9,00/3,45	12,00/3,26
Heating capacity / COP [A +2 °C, W 65 °C]	kW / COP	9,00/2,06	10,30/2,01
Heating capacity / COP [A -7 °C, W 35 °C]	kW / COP	9,00/2,74	12,00/2,52
Heating capacity / COP [A -7 °C, W 65 °C]	kW / COP	9,00/1,79	9,60/1,77
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	153/125 3,90/3,20	150/125 3,82/3,21
	Energy class	A+++ to D	A++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	191/156 4,84/3,97	188/156 4,77/3,97
	Energy class	A+++ to D	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency SCOP	137/116 3,50/2,97	134/113 3,42/2,90
	Energy class	A+++ to D	A+/A+
Sound power <sup>1)</sup>	dB(A)	—	—
Dimension	HxWxD	mm	1410x1283x320
Net weight	kg	151	151
Refrigerant (R407C) / CO <sub>2</sub> Eq. <sup>2)</sup>	kg / T	1,92/3,406	1,92/3,406
Water pipe connector	Inch	R 1½	R 1½
Pump	Number of speeds	7	7
	Input power [Min/Max]	W	—
Heating water flow ( $\Delta T=5$ K, 35 °C)	L/min	25,8	34,4
Capacity of integrated electric heater	kW	3,00	6,00
Input power	kW	1,94	2,69
Running and starting current	A	9,3	12,8
Current 1	A	28,5	29,0
Current 2	A	13,0	26,0
Recommended fuse	A	30/30	30/30
Recommended cable size, supply 1 / 2	mm <sup>2</sup>	3x4,0 or 6,0/3x4,0	3x4,0 or 6,0/3x4,0
Operating range	Outdoor ambient (Heat)	°C	-20 ~ +35
Water outlet	Heat	°C	25 ~ 65
1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MHF models are hermetically sealed. * EER and COP calculation is based in accordance to EN14511.			

#### Accessories

PAW-TD20C1E5	Tank 200 L - Stainless steel
PAW-TD30C1E5	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L - Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L - Stainless Steel

#### Accessories

PAW-3WYVLV-HW	3 way valve for DHW Tanks
PAW-BTANK50L-2	Buffer tank 50 L
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



# Fan coils highlighted features

Available in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location.



MORE FAN COIL OPTIONS  
IN CHILLERS SECTION



## 1 Innovation for optimum comfort

Range of fan coil for heating and cooling with capacities from 0,2 to 9,6 kW in cooling and from 0,2 to 13,6 kW in heating. Bring full year comfort with water based systems.

## 3 Quality and efficient coil

Constructed from staggered copper tubes, mechanically expanded into aluminium fins, providing maximum heat transfer efficiency, durability and hygiene.

## 4 Flexible installation

Various types of unit to fit your needs with flexible installation options. A choice of service side for hydraulic connections, piping configuration and horizontal or vertical installation for ducted units.

Offering a great range of capacities and performance, available in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location. Whether the requirements are for cooling only, or for both heating and cooling, there is a fan coil to suit. With a variety of piping and fan configuration, the range is capable of meeting the most stringent of requirements. Line up available in AC and EC fans, it is possible to achieve both powerful performance, but with sustainability in mind.

**Controllers with sophisticated designs, provide a user friendly interface while enabling an easy and low cost integration to building management systems.**



**PAW-FC-RC1**

Optional wired remote controller for AC fan, 2-pipe and 4-pipe application.



**PAW-FC-TC903**

Optional wired remote controller for AC fan 2-pipe application.



**PAW-FC-907TC**

Optional wired remote controller for EC fan, 2-pipe and 4-pipe application.

## Smart fan coils



Built-in  
advanced  
thermostat.

		PAW-AAIR-200-2	PAW-AAIR-700-2	PAW-AAIR-900-2
Total cooling capacity	Lo/Med/Hi kW	0,2/0,3/0,6	0,8/1,0/1,2	1,2/1,5/1,7
Sensible cooling capacity	Lo/Med/Hi kW	0,2/0,3/0,5	0,6/0,9/1,1	1,1/1,4/1,6
Water flow	Lo/Med/Hi kg/h	40,0/59,0/95,0	129,0/178,0/207,0	198,0/261,0/300,0
Water pressure drop	Lo/Med/Hi kPa	0,4/2,0/2,9	1,0/2,0/2,0	6,0/9,0/12,0
Inlet water temperature	°C	10	10	10
Outlet water temperature	°C	15	15	15
Inlet air temperature	°C	27,0	27,0	27,0
Outlet air temperature	Lo/Med/Hi °C	15,0/17,0/18,0	14,0/16,0/17,0	16,0/17,0/18,0
Relative humidity of inlet air	%	47	47	47
Total heating capacity	Lo/Med/Hi kW	0,2/0,5/0,6	0,7/1,0/1,2	0,9/1,4/1,7
Water flow	Lo/Med/Hi kg/h	37,3/80,8/98,0	121,8/177,5/204,3	152,4/244,2/292,9
Water pressure drop	Lo/Med/Hi kPa	0,4/2,0/2,9	0,3/0,8/1,0	0,5/1,6/2,2
Inlet water temperature	°C	35	35	35
Outlet water temperature	°C	30	30	30
Inlet air temperature	°C	19,0	19,0	19,0
Outlet air temperature	Lo/Med/Hi °C	38,9/32,0/30,0	33,3/31,8/30,6	30,2/31,1/30,6
Air flow	Lo/Med/Hi m³/min	0,9/1,9/2,7	2,6/4,2/5,3	4,1/6,1/7,7
Maximum input power	Lo/Med/Hi W	7,0/9,0/13,0	14,0/18,0/22,0	16,0/20,0/24,0
Sound pressure	Lo/Med/Hi dB(A)	23/33/40	24/36/42	25/36/44
Dimension (HxWxD)	mm	735x579x129	935x579x129	1135x579x129
Net weight	kg	17	20	23
3 Ways valve included		Yes	Yes	Yes
Touch screen thermostat		Yes	Yes	Yes

\* Smart fan coils is produced by Innova.

## Accessories

**PAW-AAIR-LEGS-1** Kits of 2 legs to protect the water pipings

## Accessories

**PAW-AAIR-RHCABLE** Motor connection cable for units with hydraulic connections on the right

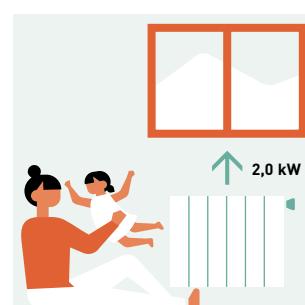
## Stylish floor-standing fan coils with advanced controller

## The slimline of Smart fan coils delivers high efficiency climate control.

With a depth of just under 130 mm they are at the cutting edge of the market. Blending easily into the home, Smart fan coil's elegant design and product refinements are clear to see in every detail.

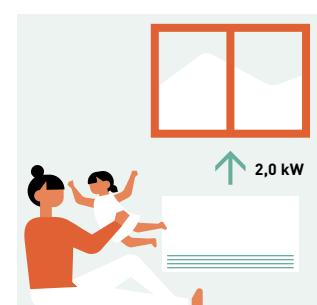
Exceptional ventilation efficiency means the motor uses considerably less energy (low wattage). The fan speed is continuously modulated by the temperature controller with proportional integral logic, with undoubted advantages for regulating the temperature and humidity in summer mode.

## With standard cast radiators.



Water at 65 °C needed.

## With Smart fan coil.



Water at 35 °C needed.

## Technical focus

- 4 operation modes (auto, silent, night-time and maximum ventilation speed)
- Exclusive design
- Extremely compact (only 129 mm deep)
- Cooling and dehumidification functions possible (drain is needed)
- 3-way valve included (no overflow valve needed on the installation if more than 3 units installed)
- Touch screen thermostat

All temperature curves and capacity are available on [www.panasonicproclub.com](http://www.panasonicproclub.com)

**PRO Club**





## Fan coils - ducted (AC)



**Optional controller.**  
Wired remote controller.  
PAW-FC-903TC



**Optional controller.**  
Advanced wired remote controller.  
PAW-FC-RC1

Left connection (PAW-)		FC2A-D010L	FC2A-D020L	FC2A-D030L	FC2A-D040L	FC2A-D050L	FC2A-D060L	FC2A-D070L	FC2A-D080L	
Right connection (PAW-)		FC2A-D010R	FC2A-D020R	FC2A-D030R	FC2A-D040R	FC2A-D050R	FC2A-D060R	FC2A-D070R	FC2A-D080R	
Total cooling capacity <sup>1)</sup>	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity <sup>1)</sup>	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity <sup>2)</sup>	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
<b>Sound levels</b>										
Global sound power	Lo/Med/Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure <sup>3)</sup>	Lo/Med/Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
<b>Fan</b>										
Number			1	1	1	2	2	2	2	3
Air flow	Lo/Med/Hi	m <sup>3</sup> /h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Maximum external pressure		Pa	55	55	65	85	85	115	125	70
Filter			G2							
<b>Electrical data</b>										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase							
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
<b>Water connections</b>										
Type			Female gas threaded							
Water connections	Inch		1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
<b>Dimension and weight</b>										
Dimension	H x W x D	mm	220 x 570 x 430	220 x 570 x 430	220 x 730 x 430	220 x 938 x 430	220 x 1122 x 430	220 x 1307 x 430	220 x 1121 x 530	220 x 1316 x 530
Weight		kg	13	13	15	20	22	26	27	38

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) The sound pressure levels are based on [NR] characteristics of a room having volume of 100 m<sup>3</sup> with reverberation of 0,5 seconds.

Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the selection software. \* Fan coil units are produced by Systemair.

**Accessories**

<b>PAW-FC-RC1</b>	Advanced wired remote controller for fan coil
<b>PAW-FC-903TC</b>	Wired remote controller for fan coil
<b>PAW-FC-2WY-11/55-1</b>	2 way valve + drain pan for models 010-060

**Accessories**

<b>PAW-FC-2WY-65/90-1</b>	2 way valve + drain pan for models 070-080
<b>PAW-FC-3WY-11/55-1</b>	3 way valve + drain pan for models 010-060
<b>PAW-FC-3WY-65/90-1</b>	3 way valve + drain pan for models 070-080

**Technical focus**

- Cooling capacity from 0,7 to 8,1 kW
- Heating capacity from 0,7 to 10,3 kW
- 5-speed AC fan motor(s)

**Main features and accessories**

- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

**Operating limits**

Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C



## Fan coils - ducted (EC)



Optional controller.  
Wired remote  
controller for EC fans.  
PAW-FC-907TC

Left connection (PAW-)	FC2E-D010L	FC2E-D020L	FC2E-D030L	FC2E-D040L	FC2E-D050L	FC2E-D060L	FC2E-D070L	FC2E-D080L	FC2E-F040L	
Right connection (PAW-)	FC2E-D010R	FC2E-D020R	FC2E-D030R	FC2E-D040R	FC2E-D050R	FC2E-D060R	FC2E-D070R	FC2E-D080R	FC2E-F040R	
Total cooling capacity <sup>1)</sup>	Lo/Med/Hi kW	0,6/1,2/2,1	0,6/1,4/2,4	0,9/2,1/3,1	1,3/2,9/4,2	1,3/4,0/5,0	2,0/4,5/5,2	2,7/5,9/6,9	5,1/6,5/8,8	3,6/6,6/9,2
Sensible cooling capacity <sup>1)</sup>	Lo/Med/Hi kW	0,5/1,1/1,9	0,5/1,1/1,9	0,6/1,6/2,4	1,0/2,1/3,0	1,1/3,0/3,7	1,4/3,5/4,0	2,0/4,3/5,2	3,7/4,8/6,6	2,9/6,1/9,1
Water flow	Lo/Med/Hi l/h	107/210/356	110/237/406	148/354/532	230/506/722	231/685/743	341/767/800	463/1008/1098	879/1111/1254	627/1142/1575
Water pressure drop	Lo/Med/Hi kPa	8,2/28,2/76,9	1,5/4,6/11,0	5,0/20,5/42,1	6,4/24,4/46,3	4,9/35,1/41,0	7,8/35,8/38,8	3,0/14,0/16,6	14,1/21,4/26,6	10,6/51,2/93,8
Heating capacity <sup>2)</sup>	Lo/Med/Hi kW	0,8/1,6/2,9	0,9/1,9/3,3	1,0/2,2/3,4	1,4/3,0/5,3	1,7/5,2/5,5	2,3/5,9/6,1	3,8/7,3/8,2	6,2/8,0/9,3	4,4/8,3/11,8
<b>Sound levels</b>										
Global sound power	Lo/Med/Hi dB(A)	34/47/60	34/47/60	31/50/59	29/44/52	30/51/57	32/54/58	40/54/59	51/56/64	42/58/68 <sup>3)</sup>
Global sound pressure <sup>4)</sup>	Lo/Med/Hi dB(A)	25/38/51	25/38/51	22/41/50	20/35/43	21/42/48	23/45/49	31/45/50	42/47/55	23/39/52
<b>Fan</b>										
Number		1	1	1	2	2	2	2	3	1
Air flow	Lo/Med/Hi m <sup>3</sup> /h	108/228/417	98/234/413	145/380/585	170/412/678	203/645/816	245/737/912	350/850/1050	685/927/1398	592/1284/1935
Maximum external pressure	Pa	75	75	75	105	70	105	115	115	190
Filter		G2								
<b>Electrical data</b>										
Power supply	Voltage	230	230	230	230	230	230	230	230	230
	Phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi W	5/11/41	5/13/41	4/16/42	2/13/43	4/24/46	2/30/54	11/44/77	23/42/108	11/62/197
<b>Water connections</b>										
Type		Female gas threaded								
Water connections	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
<b>Dimension and weight</b>										
Dimension	HxWxD mm	220 x 570 x 430	220 x 570 x 430	220 x 730 x 430	220 x 938 x 430	220 x 1122 x 430	220 x 1307 x 430	220 x 1121 x 530	220 x 1316 x 530	223 x 1233 x 653
Weight	kg	13	13	15	20	22	26	27	38	19

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) The sound power levels indicated are from return and radiated measurements. 4) The sound pressure levels are based on [NR] characteristics of a room having volume of 100 m<sup>3</sup> with reverberation of 0,5 seconds.

Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the selection software. \* Fan coil units are produced by Systemair.

**Accessories**

PAW-FC-907TC	Wired remote controller for fan coil
PAW-FC-2WY-11/55-1	2 way valve + drain pan for models 010-060
PAW-FC-2WY-65/90-1	2 way valve + drain pan for models 070-080
PAW-FC-2WY-F040	2 way valve + drain pan for model F040

**Accessories**

PAW-FC-3WY-11/55-1	3 way valve + drain pan for models 010-060
PAW-FC-3WY-65/90-1	3 way valve + drain pan for models 070-080
PAW-FC-3WY-F040	3 way valve + drain pan for model F040

**Technical focus**

- Cooling capacity from 0,5 to 9,6 kW
- Heating capacity from 0,6 to 13,6 kW
- Low energy consumption EC fan(s)

**Main features and accessories**

- Left or right hand arrangements
- Can be installed both horizontally and vertically\*
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

**Operating limits**

Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

\* PAW-FC-E-F040 may only be installed horizontally.



## Fan coils - wall-mounted (AC)



**Optional controller.**  
Wired remote controller.  
PAW-FC-903TC



**Optional controller.**  
Advanced wired remote controller.  
PAW-FC-RC1



**Infrared remote supplied with IR versions.**  
IR Controller

2-pipe		PAW-FC2A-K007	PAW-FC2A-K009	PAW-FC2A-K018	PAW-FC2A-K022
		PAW-FC2A-K007IR	PAW-FC2A-K009IR	PAW-FC2A-K018IR	PAW-FC2A-K022IR
Total cooling capacity <sup>1)</sup>	Lo/Med/Hi kW	1,0/1,3/1,7	1,6/1,7/2,4	2,8/3,0/3,5	2,9/3,1/3,9
Sensible cooling capacity <sup>1)</sup>	Lo/Med/Hi kW	0,7/1,0/1,2	1,2/1,3/1,9	2,1/2,3/2,7	2,3/2,5/3,1
Water flow	Lo/Med/Hi l/h	172/231/287	270/291/418	483/508/609	502/535/669
Water pressure drop	Lo/Med/Hi kPa	18,6/24,9/30,9	18,5/27,0/40,0	34,6/41,3/55,6	37,2/33,7/45,2
Heating capacity <sup>2)</sup>	Lo/Med/Hi kW	1,4/1,7/2,0	1,7/2,0/2,7	2,9/3,2/4,0	3,1/3,7/4,4
<b>Sound levels</b>					
Sound power	Lo/Med/Hi dB(A)	45/49/51	47/52/57	49/53/59	56/59/63
Sound pressure <sup>3)</sup>	Lo/Med/Hi dB(A)	32/36/38	34/39/44	40/43/46	43/46/50
<b>Fan</b>					
Number		1	1	1	1
Air flow	Lo/Med/Hi m³/h	282/321/360	367/413/551	532/592/680	617/709/850
Filter		G1	G1	G1	G1
<b>Electrical data</b>					
Power supply	Voltage	230	230	230	230
	Phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50
Fuse rating	A	3	3	3	3
Power consumption	Lo/Med/Hi W	39/42/62	30/47/59	44/50/55	50/55/70
<b>Water connections</b>					
Type		Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Water connections	Inch	1/2	1/2	1/2	1/2
<b>Dimension and weight</b>					
Dimension	HxWxD mm	275 x 180 x 845	275 x 180 x 845	298 x 200 x 940	298 x 200 x 940
Weight	kg	11	11	13	13

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in / out: 45 °C / 40 °C. 3) Sound pressure considering a local of 100 m³ a reverberation time of 0,5 seconds and a distance of 1 m.

**Accessories**

<b>PAW-FC-RC1</b>	Advanced wired remote controller for fan coil
<b>PAW-FC-903TC</b>	Wired remote controller for fan coil

**Accessories**

<b>PAW-FC2-2WY-K007</b>	2 way valve
<b>PAW-FC2-3WY-K007</b>	3 way valve

**Technical focus**

- 4 sizes
- Cooling capacity from 1,0 to 3,9 kW
- Heating capacity from 1,4 to 4,1 kW
- Version: 2-pipes, AC fan

**Main features and accessories**

- 2 way or 3 way valve ON / OFF
- 3-speed AC fan motor
- Silent unit for optimum customer comfort
- Aesthetic design suitable for residential and hotel applications
- Compatible with IR controller (supplied with IR versions)
- Coil with hydrophilic fins to improve the condensate flow

**Operating limits**

Entering water temperature	From 5 to 60 °C
Indoor air temperature	From 6 to 40 °C

# Wired controllers for AC and EC fan coils

## Advanced wired remote controller (AC)

### PAW-FC-RC1

This advanced controller provides a higher level of comfort in heating. The sensor can be used as a water flow sensor, stopping the fan when the water temperature is low, avoiding cold drafts in winter.

#### Features:

- For 2-pipe and 4-pipe, AC fan
- Change Over function (cold draft prevention)
- Room thermostat
- 3 outputs, 230 V relays for fan control
- 2 outputs, 230 V relays for heating / cooling control
- Connection to BMS - Modbus RTU slave
- 1 DI for presence detection (key card switch)
- 1 AI for sensor



## Wired remote controller (EC)

### PAW-FC-907TC

Stylish and sophisticated design with backlit LCD display, is suitable for installation within a wide variety of locations such as office, hotel and residential applications. By connecting the controller to the range of EC fan coils, the user can take advantage of the improved performance, higher levels of efficiency and thus improved energy savings.

#### Features:

- For 2-pipe and 4-pipe, EC fan
- Back lit LCD screen with touch control
- Adjustable range EC fan control
- Economiser
- Connection to BMS via Modbus
- 1 DI for presence detection (key card switch)



## Wired remote controller (AC)

### PAW-FC-903TC

Feature rich and perfectly adapted to control AC fan coils, the PAW-FC-903TC is the ideal addition for any fan coil. With intuitive user interface provided by the push button control and large LCD display, it will fit seamlessly with almost any location.

#### Features:

- For 2-pipe, AC fan
- Back lit LCD screen
- 3 speed control relay, for fan
- Economizer

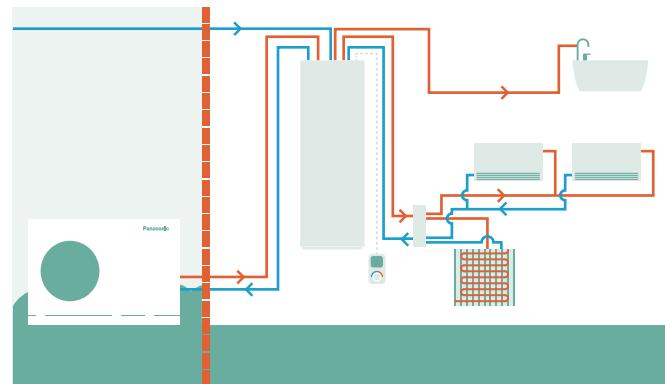


# Sanitary Tanks



## Combo tanks.

The best option to combine with Mono-bloc units. DHW tank with buffer tank. Designed for retrofit applications, the DHW tank with a buffer tank is particularly suitable for fast integration on an existing installation. Easy to install, nice looking, high efficiency for DHW production and for heating.



Type	Enamelled		Stainless steel	
Reference	PAW-TD20B8E3-2		PAW-TD23B6E5	
Dimension HxWxD mm		1770 x 640 x 690		1750 x 600 x 646
Weight (empty) kg		150		111
Volume L		185 + 80		230 + 60
Power supply V, Phase, Hz		230, 1, 50		230, 1, 50
	Hot water tank	Buffer tank	Hot water tank	Buffer tank
Volume L	185	80	230	60
Max working pressure MPa (bar)	0,8 [8]	0,6 [6]	1,0 [10]	0,3 [3,0]
Pressure test MPa (bar)	1,2 [12]	0,9 [9]	1,5 [15]	0,39 [3,9]
Max working temp °C	90	90	80	80
Connections mm	Ø22	Ø22	Ø22	Ø22, copper
Material	S 275 JR vitrified	S235 JR	EN 14521	EN 14521
Insulation	Material, t=mm	PUR, 50	PUR 40	PUR, 50
Heating coil surface m²	2,1	—	1,8	—
Electrical heater W	3000	—	2800	—
Energy loss at 65 °C <sup>1)</sup> kWh/24h	1,3	—	1,25	—
<b>Energy efficiency class (from A+ to F) <sup>2)</sup></b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>A</b>
Standing loss W	53	46	52	29

1) Tested pursuant to EN 12897:2006. 2) EU Regulation 812/2013. \* Enamelled Combo Tank is produced by Lapesa. Stainless Steel Combo Tank is produced by OSO.



## Buffer tanks.

Reference	PAW-BTANK50L-2	PAW-BTANK100L	PAW-BTANK200L	PAW-BTANK300L
Capacity L	48	100	199	289
Energy losses W	35	55	50	66
<b>Energy Efficiency Class (from A+ to F)</b>	<b>B</b>	<b>C</b>	<b>B</b>	<b>B</b>
Material	Stainless Steel	Stainless Steel	Stainless Steel	Stainless Steel
Dimension (Height / Diameter) mm	636 / 430	1175 / 430	1275 / 595	1755 / 595
Net weight kg	17	28	47	57

\* Automatic air vent and drain cock are included. Built-in pocket sensor (sensor not included). \*\* Buffer Tank are produced by OSO.



### Enamelled tanks.

Type	Enamelled Tank					Enamelled 2 coils Tank (for bivalent Solar + HP)	Square Tank
Reference	PAW-TA15C1E5STD	PAW-TA20C1E5STD	PAW-TA30C1E5STD	PAW-TA40C1E5STD	PAW-TA30C2E5STD	PAW-TA20C1E5C	
Water volume	L	150	200	290	380	350	200
Maximum water temperature	°C	95	95	95	95	95	95
Dimension (Height / Diameter)	mm	1210/520	1340/610	1800/610	1835/670	1835/670	1550x600x600
Weight / filled with water	kg	109/254	90/280	120/389	191/572	169/519	134 / 327
Electric heater	kW	—	3,00	3,00	3,00	3,00	—
Power supply	V	—	230	230	230	230	—
Material inside tank		Enamelled	Enamelled	Enamelled	Enamelled	Enamelled	Enamelled
Exchange surface	m²	1,2	1,8	2,6	3,8	3,5 / 1,2	1,83
Energy loss at 65 °C <sup>1)</sup>	kWh/24h	1,45	1,37	1,61	1,76	1,76	1,37
3 way valve accessory PAW-3WYVLV-HW or CZ-NV1	Optional	Optional	Optional	Optional	Optional	Optional	Built-in 3 way valve
20 m temperature sensor cable included	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Energy losses	W	60	57	67	73	73	57
<b>Energy Efficiency Class (from A+ to F)</b>	<b>C</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>B</b>
Warranty of the inner vessel	5 Years	5 Years					
Maintenance required	Every 2 years	Every 2 years					

1) Insulated tested under EN12897. \* Enamelled Tanks and Square Tank are produced by AEmail.



### Stainless steel tanks.

Reference	PAW-TD20C1E5	PAW-TD30C1E5	PAW-TD30C1E5-HI
Water volume	L	192	284
Maximum water temperature	°C	75	75
Dimension (Height / Diameter)	mm	1270/595	1750/595
Weight / filled with water	kg	50/—	61/—
Electric heater	kW	1,5	1,5
Power supply	V	230	230
Material inside tank		Stainless steel	Stainless steel
Exchange surface	m²	1,8	1,8
Energy loss at 65 °C <sup>1)</sup>	kWh/24h	1,01	1,18
3 way valve accessory PAW-3WYVLV-HW or CZ-NV1	Optional	Optional	Optional
20 m temperature sensor cable included	Yes	Yes	Yes
Energy losses	W	42	49
<b>Energy Efficiency Class (from A+ to F)</b>	<b>A</b>	<b>A</b>	<b>A</b>
Warranty	2 Years	2 Years	2 Years
Maintenance required	No	No	No

1) Insulated tested under EN12897. \* Stainless Steel Tanks are produced by OSO.

#### Accessories for sanitary tanks

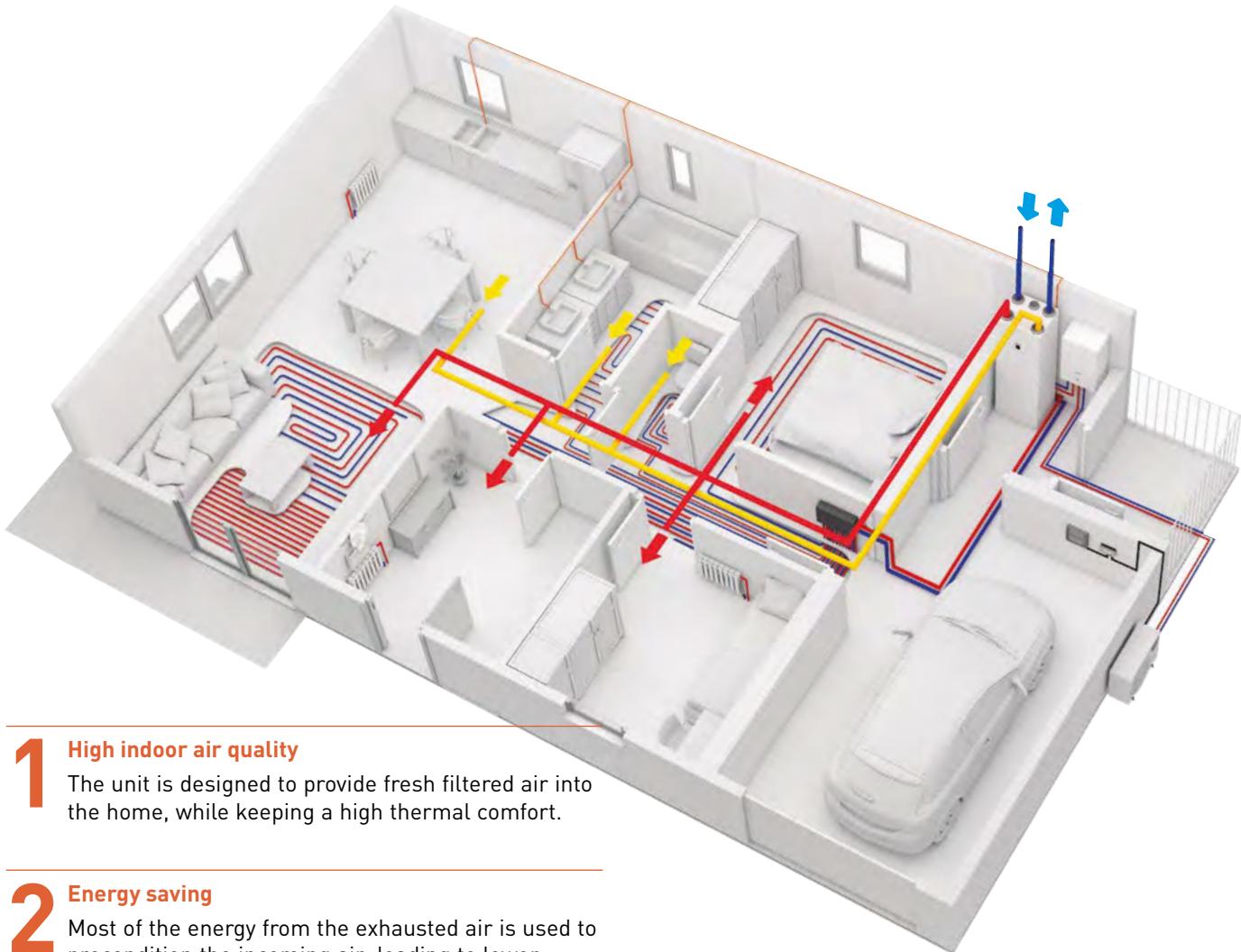
PAW-3WYVLV-HW 3 way valve for DHW Tanks

#### Accessories for sanitary tanks

CZ-NV1 3 way valve kit for inside of hydrokit

# Heat recovery ventilation unit

The heat recovery ventilation unit is design not only to provide a good indoor air quality, but it is also designed to recover heat that would otherwise be lost throughout ventilation. These heat recovery ventilation systems are used to assist in the retention of heat.



## 1 High indoor air quality

The unit is designed to provide fresh filtered air into the home, while keeping a high thermal comfort.

## 2 Energy saving

Most of the energy from the exhausted air is used to precondition the incoming air, leading to lower heating requirements in the building.

## 3 Space saving

The compact ventilation unit can be installed over the DHW square tank or the Aquarea All in One Compact indoor unit for an space-saving solution.

## 4 Better user interface

The Residential ventilation unit and the Aquarea Heat Pump can be controlled with one single user-friendly controller.

**AQUAREA**

Combine the Residential ventilation unit with Panasonic Aquarea for an space saving and highly efficient solution for heating, cooling, ventilation and DHW.



Heat Recovery Ventilation +  
Aquarea All in One Compact



Heat Recovery Ventilation +  
DHW Square Tank + Aquarea  
Mono-bloc



Heat Recovery Ventilation +  
DHW Square Tank + Aquarea  
Bi-bloc

\* The unit can be mounted on a PAW-TA20C1E5C, on a WH-ADC0309J3E5C or installed on the wall (PAW-VEN-WBRK is needed).



<b>Heat recovery Ventilation unit</b>		<b>PAW-A2W-VENTA-R</b>	<b>PAW-A2W-VENTA-L</b>
Nominal air flow rate	m³/h	204 @ 50 Pa	
Maximum air flow rate	m³/h	292 @ 100 Pa	
SPF		1,24 @ 204 m³/h	
Heat exchanger rotor drive type		Variable speed	
Exchanger type		Rotating	
Heat recovery efficiency		84 %	
Power supply	V / Hz	230 / 50 / 1 phase	
Power consumption	W	176	
<b>Energy Class, basic unit</b>		<b>A</b>	<b>A</b>
<b>Energy Class, unit with local control on demand</b>			
Noise level	dB(A)	40	
Dimension (W x H x D)	mm	598 x 450 x 500	
Weight	kg	46	
Mounting position		Vertical	
Supply side		Right	Left
Duct connections	mm	DN125	
Filter class, supply air		F7/ePM1 60 %	
Filter class, extract air		M5/ePM10 50 %	
Minimum outdoor temperature	°C	-20	

\* Heat recovery efficiency according to EN 13141-7. \*\* Heat recovery Ventilation unit is produced by Systemair.

#### Accessories

<b>PAW-VEN-FLTKIT</b>	Supply and extract filters kit
<b>PAW-VEN-ACCPBCB</b>	Optional PCB for additional functions
<b>PAW-VEN-DPL</b>	HRV touch control panel. White frame (cable must be ordered separately)
<b>PAW-VEN-CBLEXT12</b>	Cable with plug for electrical connection between unit and control panel, type CE and CD (12 m)
<b>PAW-VEN-DIVPLG</b>	Twin plugs for installation of several control panels type CD or CE for one unit

#### Accessories

<b>PAW-VEN-DPLBOX</b>	HRV touch control panel wall-mounted kit
<b>PAW-VEN-S-CO2RH-W</b>	CO <sub>2</sub> RH wall-mounted sensor
<b>PAW-VEN-S-CO2-W</b>	CO <sub>2</sub> wall-mounted sensor
<b>PAW-VEN-S-CO2-D</b>	CO <sub>2</sub> duct sensor
<b>PAW-VEN-WBRK</b>	Wall bracket kit for stand-alone installation on the wall
<b>PAW-VEN-HTR06</b>	Electrical duct heater 0,6 kW (includes relay)
<b>PAW-VEN-HTR12</b>	Electrical duct heater 1,2 kW (includes relay)

#### Main features of the residential ventilation unit

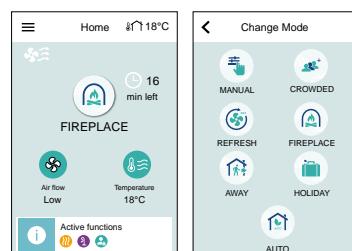
- Designed for areas up to approximately 140 m<sup>2</sup>
- High energy-efficiency rotary heat exchanger with EC - technology fans
- Moisture transfer function to minimize condensation in supply air during wintertime
- The built in humidity sensor in extract air can be used for demand control

- Control via touch display and Startup Wizard for easy commissioning
- Modbus communication via RS-485
- Option to control an Aquarea H or J Generation heat pump from PAW-A2W-VENTA control panel (PAW-AW-MBS-H and PAW-VEN-ACCPBCB required)

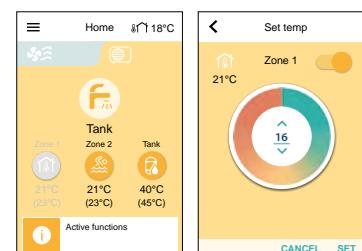
#### Control user-friendly interface

All settings and features accessible via a control panel, integrated into the front cover. The option for connecting one or more external control panels is available.

- Color touch screen with a user-friendly interface
- MANUAL and AUTO mode or choose preferred settings from the pre-configured user modes



- If Aquarea J and H Generations heat pumps are connected with PAW-A2W-VENTA, the heat pump control options appear on the home screen in a separate tab



# DHW Stand Alone

The wide range of DHW Stand Alone heat pump is a great solution to adapt to any type of family house.



## DHW Stand Alone: highly efficient heat pump water heater.

The wall type is available in 100 and 150 L capacities, and the floor-standing in 200 and 270 L. For reaching even more efficient use the 270 L is available in additional coil, it is able to connect solar water production.

- A+ Highly efficient domestic hot water heat pump
- Provides reduced power consumption up to 72 % compared with traditional electric water heater
- Easy to install
- Being CFC-free, this water heater is environmentally friendly

### 1 Energy saving

- Digital control panel with energy consumption monitoring
- Photovoltaic function
- Compatible with ducted fresh air intake installations
- Boiler / Solar Coil (only PAW-DHW270C1F)

### 2 Comfort

- Different modes of operation based on user needs
- Mode AUTO: Intelligent Temperature Set Point, thanks to monitoring hot water usage
- Mode BOOST, Mode ECO and Mode ABSENCE

### 3 Durability

- Diamond-quality enamel lining the inner tank
- Pressure relief valve which provides safety if any malfunctions or pressure rise
- Dielectric union preventing corrosion
- Specific lip gasket preventing rust around the flange



Type	Wall-mounted			Floor-standing	
Reference	PAW-DHW100W-1	PAW-DHW150W-1	PAW-DHW200F	PAW-DHW270F	PAW-DHW270C1F
Nominal capacity	L	100	150	200	270
Dimension (HxWxD)	mm	1209x522x538	1527x522x538	1617x620x665	1957x620x665
Empty weight	kg	57	66	80	92
Hot and cold connection		¾" M	¾" M	¾" M	¾" M
Anticorrosion system	Anode	Magnesium	Magnesium	Magnesium	Magnesium
Rated water pressure	Mpa (bar)	0,8 (8)	0,8 (8)	0,8 (8)	0,8 (8)
Electrical connection	V / Hz	230/50	230/50	230/50	230/50
Total maximum power	W	1550	1950	2300	2300
Maximal power heat pump	W	350	350	700	700
Power electric heating element	W	1200	1600	1600	1600
Heat pump water temperature range	°C	50 ~ 62	50 ~ 62	50 ~ 62	50 ~ 62
Heat pump air temperature range	°C	-5 ~ +43	-5 ~ +43	-5 ~ +43	-5 ~ +43
Duct diameter	mm	125	125	160	160
Air flow (without duct)	m³/h	160	160	310/390	310/390
Load losses acceptable on ventilation circuit, without affecting performance	Pa	70	70	25	25
Sound power <sup>1)</sup>	dB(A)	45	45	53	53
Refrigerant R134a (wall-mounted) / R513A (floor-standing)	kg	0,52	0,58	0,80	0,86
Refrigerant volume in tons of CO <sub>2</sub> equivalent	TCO <sub>2</sub> Eq.	0,74	0,83	0,50	0,54
Refrigerant weight per liter	kg/L	0,0052	0,0039	0,0040	0,0032
Hot water quantity at 40 °C: V40td	L	151,0	182,0	265,5	361,2
Acoustic power ErP <sup>2)</sup>	dB(A)	45	45	53	53
Energy Efficiency Class (from A+ to F)	<b>A+</b>	<b>A+</b>	<b>A+</b>	<b>A+</b>	<b>A+</b>
Connectable to PV	Yes	Yes	Yes	Yes	Yes
Additional coil exchanger connection	—	—	—	—	1" M
Additional coil surface	m <sup>2</sup>	—	—	—	1,2
Warranty of the inner vessel		5 Years	5 Years	5 Years	5 Years
<b>Performance at 7 °C air temperature (EN 16147)</b>					
Coefficient of performance [COP] according load profile		2,66 - M	3,05 - L	2,81 - L	3,16 - XL
Standby input power (P <sub>es</sub> )	W	18	24	32	29
Heating up time (t <sub>h</sub> )	h. Min	6h47	10h25	07h11	10h39
Reference hot water temperature (T <sub>ref</sub> )	°C	52,7	53,2	52,7	53,1
Flow rate (air)	m <sup>3</sup> /h	140	110	320	320
<b>Performance at 15 °C air temperature (EN 16147)</b>					
Coefficient of performance [COP] according load profile		2,88 - M	3,28 - L	3,05 - L	3,61 - XL
Standby input power (P <sub>es</sub> )	W	19	25	30	30
Heating up time (t <sub>h</sub> )	h. Min	6h07	9h29	6h24	8h34
Reference hot water temperature (T <sub>ref</sub> )	°C	52,6	53,4	52,8	53,0
Flow rate (air)	m <sup>3</sup> /h	140	110	320	320

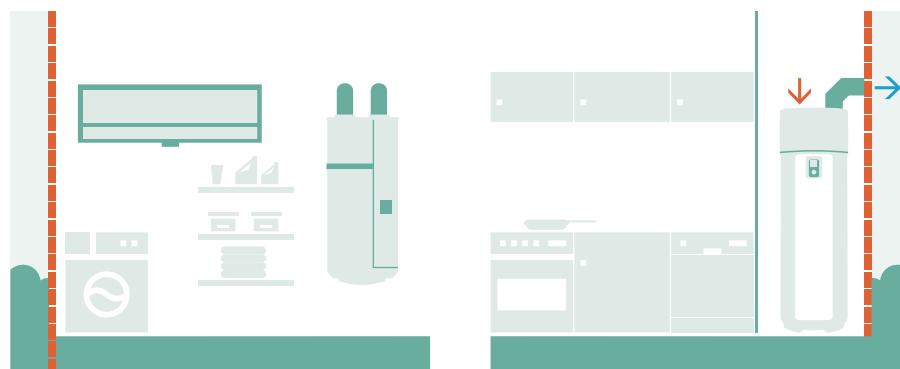
1) According to ISO3744. 2) Compliant with EN 16147 conditions. 3) Performance measured for a water heater from 10 °C to T<sub>ref</sub> according to the protocol of the NF Electricity Performance Mark specifications No.LCIE 103-15C, selfheating thermodynamic water heaters (based on standard EN 16147). \* DHW Stand Alone is produced by S.A.T.E.

#### Accessories

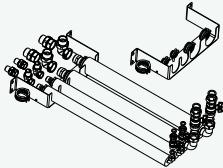
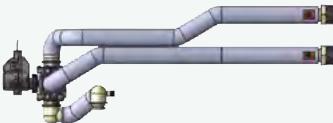
**PAW-DHW-STAND** Rack for suspended device for 100 and 150 liters models

#### Ideal for small surfaces

Suitable for all installations (adapted to small surfaces, low ceiling, corner).



# Accessories and control

All in One accessories	Special outdoor supports		
			
<b>Flexible pipings and wall mounting plate for All in One J Generation (not compatible with WH-ADC0309J3E5C).</b>	<b>Outdoor elevation platform.</b> Dimension (H x W x D): 400 x 900 x 400 mm		
----- PAW-ADC-PREKIT-1	----- PAW-WTRAY	----- PAW-GRDSTD40	----- PAW-GRDBSE20
PCB's for additional functions	Deice accessories		
			
<b>PCB for advanced functions in J and H Generation.</b>	<b>Base pan heater (for all old Bi-bloc and Mono-bloc, not for the 3 and 5 kW).</b>	<b>Base pan heater (for Bi-bloc 3 and 5 kW).</b>	<b>Base pan heater for J and H Generation.</b>
----- CZ-NS4P	----- CZ-NE1P	----- CZ-NE2P	----- CZ-NE3P
Hydraulic accessories			
			
<b>3 way valve kit for inside of hydrokit.</b>	<b>3 way valve for DHW Tanks.</b>	<b>1 anti-freeze valve.</b> It is required to order 2 valves per system.	<b>Optional magnet for the water filter in H Generation models.</b>
----- CZ-NV1	----- PAW-3WYVLV-HW	----- PAW-A2W-AFVLV	----- PAW-A2W-MGTFILTER



### Connectivity Solutions



**Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN.**

-----  
CZ-TAW1

**10 m extension cable for CZ-TAW1.**

-----  
CZ-TAW1-CBL



**KNX Interface for J and H Generation.**

-----  
PAW-AW-KNX-H



**Modbus Interface for J and H Generation.**

-----  
PAW-AW-MBS-H

### Cascade manager



**Cascade manager for Aquarea Heat Pumps.**

-----  
PAW-A2W-CMH-1



**Wired LCD room thermostat with weekly timer.**

-----  
PAW-A2W-RTWIRED



**Wireless LCD room thermostat with weekly timer.**

-----  
PAW-A2W-RTWIRELESS

### Room thermostats

#### Sensors for Aquarea J and H Generation



**Outdoor ambient sensor.**

-----  
PAW-A2W-TS0D



**Zone room sensor.**

-----  
PAW-A2W-TSRT



**Zone water sensor.**

-----  
PAW-A2W-TSHC



**Solar sensor.**

-----  
PAW-A2W-TSS0



**Buffer tank sensor.**

Zone water sensor PAW-A2W-TSHC is also required to operate buffer tank sensor.

-----  
PAW-A2W-TSBU

# Accessories and control

## Smart fan coil accessories

**Kits of 2 legs to protect the water pipings.**

-----  
PAW-AAIR-LEGS-1

**Motor connection cable for units with hydraulic connections on the right.**

-----  
PAW-AAIR-RHCABLE

## Fan coil accessories



**Wired remote controller for fan coil.**

-----  
PAW-FC-903TC



**Advanced wired remote controller for fan coil.**

-----  
PAW-FC-RC1



**Wired remote controller for EC fan coil.**

-----  
PAW-FC-907TC



**Infrared remote supplied with IR versions.**

-----  
IR Controller

**2 way valve + drain pan for ducted models 010-060.**

-----  
PAW-FC-2WY-11/55-1

**2 way valve + drain pan for ducted models 070-080.**

-----  
PAW-FC-2WY-65/90-1

**2 way valve + drain pan for ducted model F040.**

-----  
PAW-FC-2WY-F040

**2 way valve for wall-mounted.**

-----  
PAW-FC2-2WY-K007

**3 way valve + drain pan for ducted models 010-060.**

-----  
PAW-FC-3WY-11/55-1

**3 way valve + drain pan for ducted models 070-080.**

-----  
PAW-FC-3WY-65/90-1

**3 way valve + drain pan for ducted model F040.**

-----  
PAW-FC-3WY-F040

**3 way valve for wall-mounted.**

-----  
PAW-FC2-3WY-K007

## Sanitary Tank accessories



**Tank sensor with 6 m cable length.**

-----  
PAW-TS1



**Temperature sensor kit for third party tank (with copper pocket and 6 m length sensor cable).**

-----  
CZ-TK1



**Rack for suspended device for 100 and 150 liters models.**

-----  
PAW-DHW-STAND

**Tank sensor with 20 m cable length.**

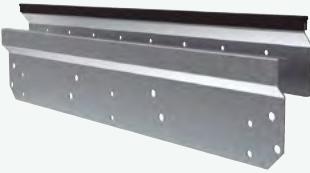
-----  
PAW-TS2

**Tank sensor with 6 m cable length and only 6 mm diameter.**

-----  
PAW-TS4

## DHW Stand Alone accessories

### Heat recovery Ventilation accessories

 <p><b>Supply and extract filters kit.</b></p> <p>PAW-VEN-FLTKIT</p>	 <p><b>Optional PCB for additional functions.</b></p> <p>PAW-VEN-ACCPBCB</p>	 <p><b>HRV touch control panel. White frame (cable must be ordered separately).</b></p> <p>PAW-VEN-DPL</p>
 <p><b>Cable with plug for electrical connection between unit and control panel, type CE and CD (12 m).</b></p> <p>PAW-VEN-CBLEXT12</p>	 <p><b>Twin plugs for installation of several control panels type CD or CE for one unit.</b></p> <p>PAW-VEN-DIVPLG</p>	 <p><b>HRV touch control panel wall-mounted kit.</b></p> <p>PAW-VEN-DPLBOX</p>
 <p><b>CO<sub>2</sub> RH wall-mounted sensor.</b></p> <p>PAW-VEN-S-CO2RH-W</p>	 <p><b>CO<sub>2</sub> wall-mounted sensor.</b></p> <p>PAW-VEN-S-CO2-W</p>	 <p><b>CO<sub>2</sub> duct sensor.</b></p> <p>PAW-VEN-S-CO2-D</p>
 <p><b>Wall bracket kit for stand-alone installation on the wall.</b></p> <p>PAW-VEN-WBRK</p>	 <p><b>Electrical duct heater 0,6 kW (includes relay).</b></p> <p>PAW-VEN-HTR06</p>	 <p><b>Electrical duct heater 1,2 kW (includes relay).</b></p> <p>PAW-VEN-HTR12</p>



**Aquarea High Performance Bi-bloc H Generation Single phase. Heating and Cooling - R410A****WH-UD12HE5**

Tamb	HC	IP	COP															
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,30	3,46	2,69	8,90	3,62	2,46	8,50	3,79	2,24	8,10	3,95	2,05	7,50	4,05	1,85	7,00	4,16	1,68
-7	10,40	3,37	3,09	10,00	3,66	2,73	9,60	3,95	2,43	9,20	4,24	2,17	8,70	4,26	2,04	8,20	4,27	1,92
2	11,80	3,10	3,81	11,40	3,31	3,44	11,00	3,53	3,12	10,60	3,74	2,83	9,80	3,94	2,49	9,10	4,14	2,20
7	12,00	2,10	5,71	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	12,00	3,78	3,17	12,00	4,16	2,88
25	12,00	1,38	8,70	12,00	1,66	7,23	11,80	1,94	6,08	11,70	2,23	5,25	11,50	2,49	4,62	11,40	2,74	4,16

**WH-UD16HE5**

Tamb	HC	IP	COP															
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	10,60	4,09	2,59	10,30	4,38	2,35	10,00	4,67	2,14	9,70	4,96	1,96	8,80	4,94	1,78	7,90	4,91	1,61
-7	11,90	4,03	2,95	11,40	4,43	2,57	10,80	4,83	2,24	10,30	5,22	1,97	9,60	5,09	1,89	9,00	4,95	1,82
2	13,50	3,74	3,61	13,00	3,96	3,28	12,40	4,18	2,97	11,90	4,40	2,70	10,80	4,46	2,42	9,80	4,51	2,17
7	16,00	3,21	4,98	16,00	3,74	4,28	16,00	4,27	3,75	16,00	4,80	3,33	15,20	5,11	2,97	14,50	5,41	2,68
25	16,00	2,31	6,93	16,00	2,69	5,95	16,00	3,07	5,21	16,00	3,45	4,64	16,00	3,67	4,36	15,90	3,89	4,09

**Aquarea High Performance Bi-bloc H Generation Single phase. Heating and Cooling - R410A****WH-UD12HE5**

Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	7,86	1,18	6,66	13,15	1,40	9,39	10,00	1,73	5,78
25	12,08	2,90	4,17	15,70	2,05	7,66	10,00	1,97	5,08
35	10,00	2,56	3,91	12,00	2,67	4,49	10,00	2,40	4,17
43	7,80	3,80	2,05	11,10	3,19	3,48	8,00	2,85	2,81

**WH-UD16HE5**

Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	9,20	1,62	5,68	16,40	2,58	6,36	12,20	2,45	4,98
25	14,40	3,92	3,67	19,20	3,83	5,01	12,20	2,79	4,37
35	12,20	4,76	2,56	15,00	4,98	3,01	12,20	2,96	4,12
43	7,75	3,40	2,28	13,80	5,95	2,32	9,70	4,00	2,43

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).

This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.





# Heating and cooling capacity tables

Based on outlet temperature and outside temperature.

## Aquarea High Performance Mono-bloc H Generation Single phase. Heating and Cooling - MDC · R410A

### WH-MDC12H6E5

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP									
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,30	3,46	2,69	8,90	3,62	2,46	8,50	3,79	2,24	8,10	3,95	2,05	—	—	—	7,00	4,10	1,71
-7	10,40	3,37	3,09	10,00	3,66	2,73	9,60	3,95	2,43	9,20	4,24	2,17	—	—	—	8,20	4,21	1,95
2	11,80	3,10	3,81	11,40	3,31	3,44	11,00	3,53	3,12	10,60	3,74	2,83	—	—	—	9,10	4,08	2,23
7	12,00	2,10	5,71	12,00	2,53	4,74	12,00	2,96	4,05	12,00	3,39	3,54	—	—	—	12,00	4,10	2,93
12	12,00	1,38	8,70	12,00	1,66	7,23	11,80	1,94	6,08	11,70	2,23	5,25	—	—	—	11,40	2,74	4,16

### WH-MDC16H6E5

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	10,60	4,09	2,59	10,30	4,38	2,35	10,00	4,67	2,14	9,70	4,96	1,96	7,90	4,84	1,63	—	—	—
-7	11,90	4,03	2,95	11,40	4,43	2,57	10,80	4,83	2,24	10,30	5,22	1,97	9,00	4,88	1,84	—	—	—
2	13,50	13,74	0,98	13,00	3,96	3,28	12,40	4,18	2,97	11,90	4,40	2,70	9,80	4,44	2,21	—	—	—
7	16,00	3,21	4,98	16,00	3,74	4,28	16,00	4,27	3,75	16,00	4,80	3,33	14,50	5,33	2,72	—	—	—
12	16,00	2,31	6,93	16,00	2,69	5,95	16,00	3,07	5,21	16,00	3,45	4,64	15,90	3,89	4,09	—	—	—

## Aquarea High Performance Mono-bloc H Generation Single phase. Heating and Cooling - MDC · R410A

### WH-MDC12H6E5

Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	7,86	1,18	6,66	13,15	2,05	6,41	10,00	1,73	5,78
25	12,08	2,90	4,17	15,70	3,05	5,15	10,00	1,97	5,08
35	10,00	3,56	2,81	12,00	3,67	3,27	10,00	2,15	4,65
43	7,80	3,80	2,05	11,10	3,19	3,48	8,00	2,85	2,81

### WH-MDC16H6E5

Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	9,20	1,62	5,68	16,40	2,58	6,36	12,20	2,45	4,98
25	14,40	3,92	3,67	19,20	3,83	5,01	12,20	2,79	4,37
35	12,20	4,76	2,56	15,00	4,98	3,01	12,20	2,96	4,12
43	7,75	3,40	2,28	13,80	5,95	2,32	9,70	4,00	2,43

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW). EER: Energy Efficiency Ratio. This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.





**Aquarea T-CAP Mono-bloc J Generation Single phase. Heating and Cooling - MXC · R32****WH-MXC09J3E5**

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	25	25	25	35	35	35	45	45	45	55	55	55	60	60	60
-20	9,00	3,44	2,62	9,00	3,95	2,28	9,00	4,65	1,94	7,90	5,58	1,42	—	—	—
-15	9,00	2,98	3,02	9,00	3,41	2,64	9,00	4,04	2,23	9,00	4,83	1,86	8,70	5,37	1,62
-7	10,50	2,72	3,86	9,00	2,92	3,08	9,00	3,54	2,54	9,00	4,24	2,12	9,00	4,62	1,95
2	10,80	2,14	5,05	9,00	2,36	3,81	9,00	2,91	3,09	9,00	3,55	2,54	9,00	4,05	2,22
7	9,00	1,38	6,52	9,00	1,77	5,08	9,00	2,37	3,80	9,00	2,92	3,08	9,00	3,29	2,74
25	9,00	0,77	11,69	9,00	1,00	9,00	10,00	1,67	5,99	10,00	2,28	4,39	11,00	2,86	3,85

**WH-MXC12J6E5**

Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	25	25	25	35	35	35	45	45	45	55	55	55	60	60	60
-20	12,00	5,02	2,39	12,00	5,80	2,07	11,00	5,95	1,85	10,00	6,50	1,54	—	—	—
-15	12,00	4,14	2,90	12,00	4,83	2,48	11,00	5,20	2,12	10,50	6,00	1,75	8,90	6,30	1,41
-7	13,50	4,30	3,14	12,00	4,25	2,82	12,00	5,02	2,39	12,00	6,00	2,00	11,00	6,30	1,75
2	14,50	3,23	4,49	12,00	3,40	3,53	12,00	4,20	2,86	12,00	4,95	2,42	12,00	5,77	2,08
7	12,00	2,00	6,00	12,00	2,50	4,80	12,00	3,24	3,70	12,00	3,94	3,05	12,00	4,52	2,65
25	12,00	1,20	10,00	12,00	1,49	8,05	12,00	2,10	5,71	12,00	2,75	4,36	12,00	3,11	3,86

**Aquarea T-CAP Mono-bloc J Generation Single phase. Heating and Cooling - MXC · R32****WH-MXC09J3E5**

Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	9,00	1,61	5,59	11,00	1,49	7,38	11,40	1,30	8,77
25	9,00	2,00	4,50	12,60	2,38	5,29	10,50	1,54	6,82
35	9,00	2,83	3,18	10,90	2,98	3,66	9,00	1,95	4,62
43	7,20	3,26	2,21	8,70	3,23	2,69	7,30	2,43	3,00

**WH-MXC12J6E5**

Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	11,40	2,10	5,43	13,60	2,09	6,51	15,00	2,06	7,28
25	12,00	2,87	4,18	15,70	3,60	4,36	14,00	2,56	5,47
35	12,00	4,14	2,90	13,60	4,35	3,13	12,00	3,04	3,95
43	10,30	4,89	2,11	11,80	4,98	2,37	10,40	3,72	2,80

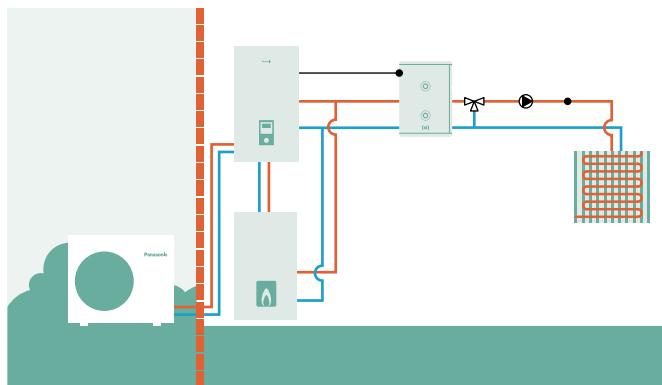
Tamb: Ambient Temperature [°C]. LWC: Leaving Water Condenser Temperature [°C]. HC: Heating Capacity [kW]. CC: Cooling Capacity [kW]. IP: Input Power [kW].

This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

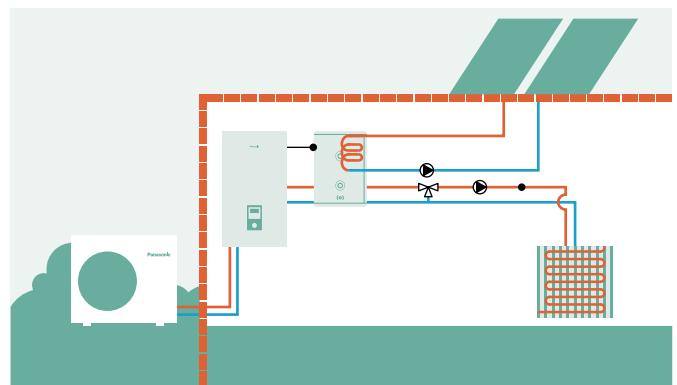


# Examples of installations

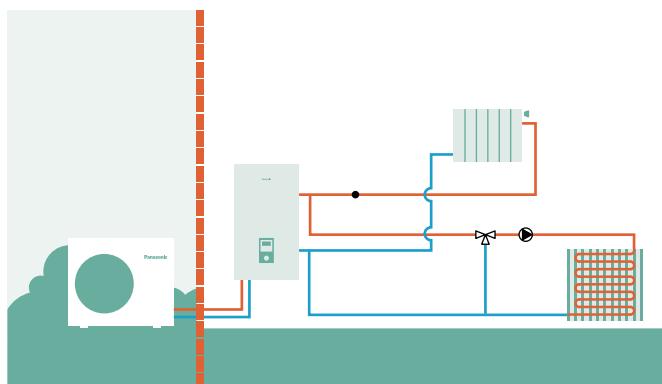
**Aquarea J and H Generation:  
Bivalent with buffer tank and mixing valve**



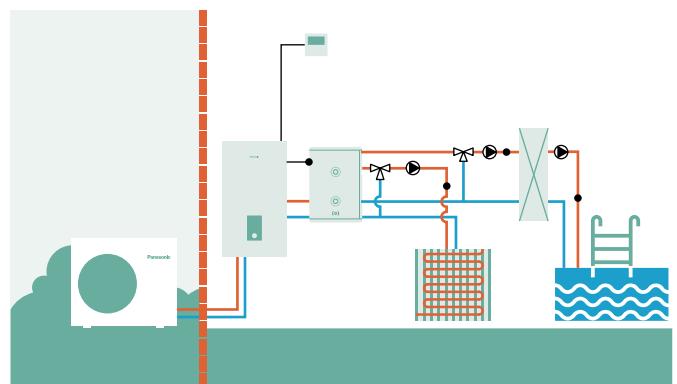
**Aquarea J and H Generation:  
Buffer tank with solar and mixing valve**



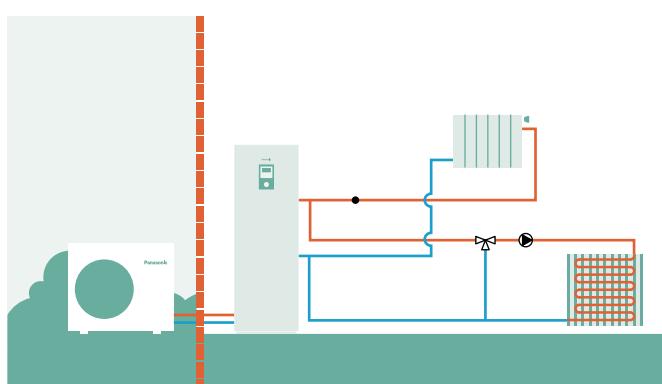
**Aquarea J and H Generation:  
2 zones with external kit without buffer tank**



**Aquarea J and H Generation:  
2 zones with external kit, buffer tank and swimming pool**



**Aquarea All in One J and H Generation:  
2 zones with external kit, without buffer tank**



**Aquarea All in One 2 zones J and H Generation:  
2 zones built-in, without buffer tank**

