# Panasonic

# AQUAREA

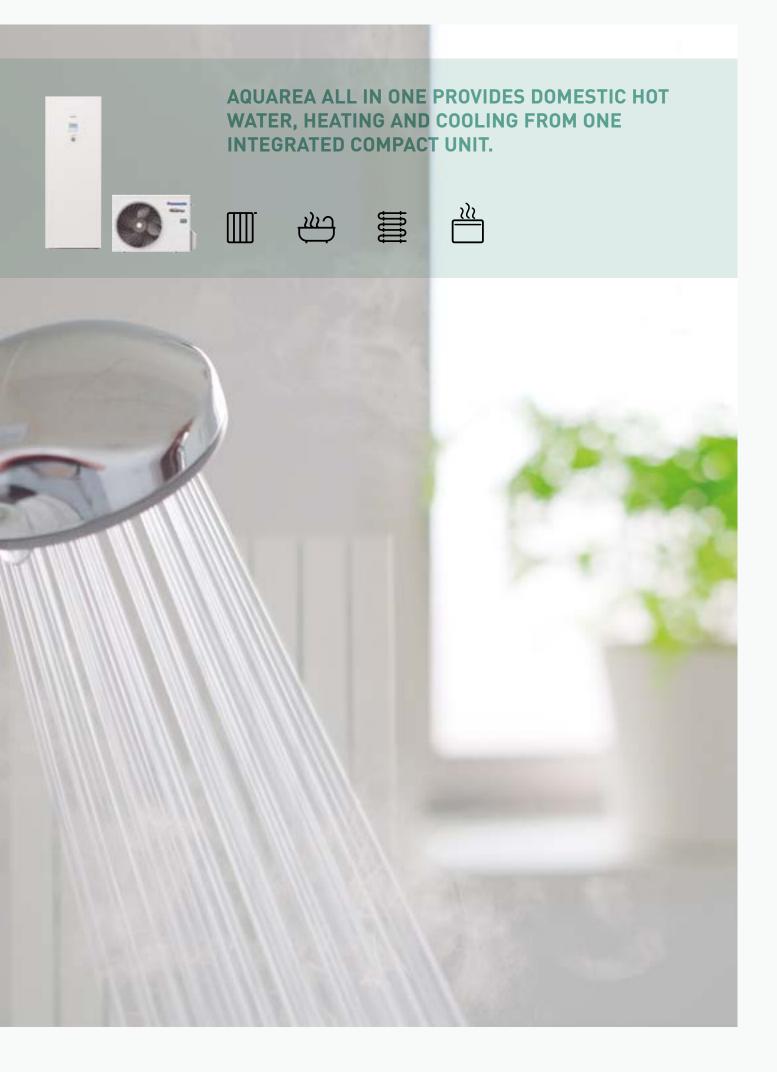
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R32

# NEW AQUAREA HIGH PERFORMANCE ALL IN ONE COMPACT J GENERATION · R32

The efficient space-saving solution for heating, cooling and DHW

heating & cooling solutions





#### Adapts to your home

The Aquarea All in One Compact range is extremely flexible. From 3kW to 9kW, you can find lower initial investment and lower operational cost options. If you have a well insulated home, why install oversized equipment that will cost more and will have higher running costs? The Aquarea All in One Compact range fully adapts the system to the needs of your home, whether it is a new build or a refurbishment. It is able to reach up to 60°C water outlet and allows a degree of flexibility in installation thanks to the large piping length of up to 50m between indoor and outdoor (see table each model limitations).



# Energy saving means money savings

Panasonic Aquarea heat pumps are a smart choice for saving in heating, as they provide savings of up to 80 % on heating expenses compared to electrical heaters. Aquarea units reach A+++ within the range of A+++ to D in heating and A+ in the range of A+ to F in domestic hot water, all leading to large savings in electricity bills. Consumption can be further reduced by connecting photovoltaic solar panels to the system.



### Adapts to your needs.

Panasonic Aquarea heat pumps produce heating, cooling and domestic hot water with a single system that can be connected to floor heating, radiators or fan coil units. In refurbishment projects Aquarea can be integrated in existing heating systems. Aquarea is able to reach up to 60 °C water outlet and allows high flexibility in installation thanks to the large piping length of up to 50 m between indoor and outdoor (see table each model limitations). From 3 kW to 9 kW, there is always an option for lower initial investment and lower operational cost.



#### More inside, more space for you

The Aquarea All in One Compact is the ultimate space-saving solution. Supplying efficient heating, the unit generates domestic hot water and stores it inside a 185 litre stainless steel tank with high insulation to reduce energy losses. The fully integrated elements reduce the number of additional parts, shortens installation time, and allows for more space in the surrounding areas. Its 598 x 600 mm footprint, standard size of other big appliances, facilitates the integration and an easy and neat installation in the kitchen.



## Why Panasonic?

Panasonic has more than 60 years of Heat Pump experience, having produced an exceptional amount of compressors. Quality is what Panasonic stands for and this is a key factor for succeeding in the European market. As a member of the European Heat Pump Association, the production of Aquarea in Europe and maintaining high security protocols in European servers for the Aquarea Smart Cloud, makes Panasonic a trusted heating partner.





# AQUAREA ALL IN ONE: THE BEST PANASONIC TECHNOLOGY FOR YOUR HOME

Aquarea All in One intelligently integrates the best Hydrokit technology with a premium quality stainless steel tank, which is maintenance-free.

#### All in One with Vacuum Insulation Panel (VIP)

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



#### High quality components inside:

- · Maintenance free Inox stainless 185l tank
- · Variable speed water pump (class A)
- · Magnetic Filter with service valve
- · Expansion vessel
- $\cdot$  Vortex flow sensor
- $\cdot$  Back up heater
- $\cdot$  Safety valve
- $\cdot$  Air purge valves
- $\cdot$  3 way valve inside

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

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

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

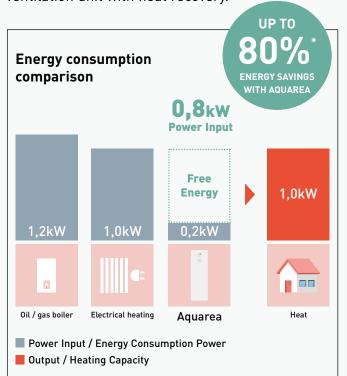
Highly efficient Panasonic solutions can help to significantly reduce the energy consumption of the house:

- 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



## Technology to save energy

Aquarea captures heat energy from the ambient air and transfers it to heat the water needed to warm your home for domestic hot water and even to cool the house if wished. This technology works even when outdoor temperatures are extremely low. With Aquarea up to 80% of the heat energy required is taken from the ambient air. For further energy savings, Aquarea All in One Compact can be combined with the residential ventilation unit with heat recovery.



\* Rating conditions: Heating: Inside air temperature: 20°C Dry Bulb / Outside air temperature: 7°C Dry Bulb / 6°C Wet Bulb. Conditions : Water input temperature: 30°C Water output temperature: 35°C





Combine Aquarea All in One Compact with Residential ventilation unit for an space saving and highly efficient solution for heating, cooling, ventilation and DHW.



## Technology to save space

Space-saving solutions, ideal for installations with restricted space.

- · Hydrokit and tank in a single compact unit
- · Standard 598 x 600 mm footprint
- · No buffer tank required
- · Piping length up to 50 m
- Modern remote controller can be installed up to 50 m from the indoor unit
- The residential ventilation unit with heat recovery can be installed over the unit

## **Technology for the future**

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

Panasonic recommends R32 because it is a more environmentally friendly solution. Compared to R22 and R410A, R32 has a very low potential impact on the depletion of the ozone layer and global warming.

#### 1. Installation innovation

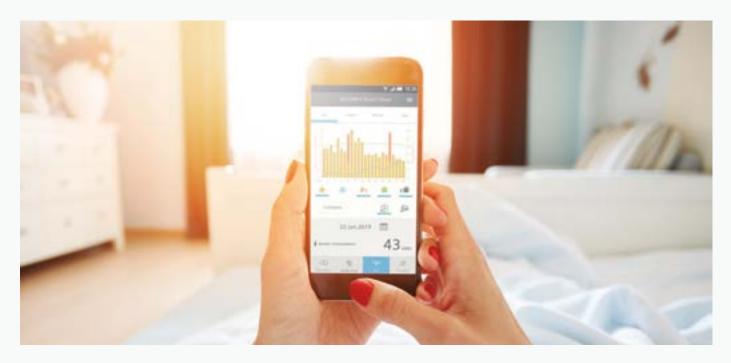
• This refrigerant is 100% pure, which makes it easier to recycle and reuse

#### 2. Environmental innovation

- · Zero impact on the ozone layer
- · 75% Less impact on global warming vs R410A

#### 3. Economic and energy consumption innovation

- $\cdot$  Lower cost and greater savings
- Higher energy efficiency than R410A



# AQUAREA SMART CLOUD: THE MOST ADVANCED HEATING CONTROL FOR **TODAY AND FOR THE FUTURE.**







# Aquarea Smart Cloud for end users

#### 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 works?

Connect Aquarea J and H Generation system to the cloud using wireless LAN or a wired LAN Network. The user connects to the Cloud portal to remotely operate all unit functions and can also permit partners to access customised functions for remote maintenance and monitoring.

Aquarea Smart Cloud works with 🛛 🖬 🕇 🕇 Aquarea Comfort Cloud connected to IFTTT is planned to be available in Autumn 2019

## Aquarea Service Cloud for installers and maintenance

The real remote maintenance made simple: The Aguarea Service Cloud allows installers to remotely take care of their customer's heating system, saving time and money. It also shortens the response time, increasing customer satisfaction.

#### 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



\* User interface image may change without notification.

# **New Aquarea High Performance** All in One Compact J Generation Single Phase. Heating and Cooling • R32 refrigerant

- · Top level COP 5,33
- · 598 x 600 mm footprint
- · Reduced installation time and minimised installation errors
- · Easy remote controller to set up
- · Reduced installation spaces
- · Electrical connections at the front
- $\cdot$  Easier installation and maintenance







		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	9,00/4,48
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	3,20/2,81	5,00/2,72	7,00/2,82	8,95/2,78
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	3,20/3,64	4,20/3,18	6,85/3,41	7,00/3,40
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	3,20/2,19	4,10/1,99	6,20/2,21	6,30/2,16
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	3,30/2,80	4,20/2,59	5,60/2,87	6,12/2,78
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	3,20/1,79	3,55/1,71	5,25/1,94	5,90/1,93
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	3,20/3,52	4,50/3,00	6,70/3,03	8,20/2,72
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	3,20/4,85	4,80/4,29	6,70/4,72	9,00/4,18
Seasonal energy efficiency - Heating average climate (W35 °C / W55 °C)		<b>η</b> s %	200/136	200/136	193/130	193/130
		SCOP	5,07/3,47	5,07/3,47	4,90/3,32	4,90/3,32
Energy class heating average	ge climate (W35 °C / W55 °C) 1	A+++ to D	A+++/A++	A+++/A++	A+++/A++	A+++/A++
Indoor unit			WH-ADC0309J3E5C	WH-ADC0309J3E5C	WH-ADC0309J3E5C	WH-ADC0309J3E5C
Sound pressure	Heat / Cool	dB(A)	28/28	28/28	28/28	28/28
Dimension	HxWxD	mm	1640 x 598 x 600	1640 x 598 x 600	1640 x 598 x 600	1640 x 598 x 600
Net weight		kg	101	101	101	101
Water pipe connector		Inch	R 11/4	R 1¼	R 11/4	R 11/4
	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed
A class pump	Input power (Min/Max)	W	30/120	30/120	30/120	30/120
Heating water flow (ΔT=5 K.	. 35 °C)	L/min	9,20	14,30	20,10	25,80
Capacity of integrated electric heater		kW	3,00	3,00	3,00	3,00
Power supply 1		Α	12,0	12,0	15,9	15,9
Power supply 2		A	13,0	13,0	13,0	13,0
Recommended cable size, supply 1 / 2		mm²	3x1,5/3x1,5	3x1,5/3x1,5	3x2,5/3x1,5	3x2,5/3x1,5
Water volume		L	185	185	185	185
Maximum water 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 average climate efficiency rating <sup>2)</sup>		A+ to F	A+	A+	A+	A+
DHW tank ErP average climate <b>n</b> / SCOP		<b>ŋ</b> wh % / SCOP	128/3,20	128/3,20	116/2,90	116/2,90
Outdoor unit			WH-UD03JE5	WH-UD05JE5	WH-UD07JE5	WH-UD09JE5-1
Sound power part load <sup>3)</sup>	Heat	dB(A)	55	55	59	59
Sound power full load	Heat / Cool	dB(A)	60/61	64/64	68/67	69/69
Dimension / Net weight	HxWxD	mm / kg	622x824x298/37	622 x 824 x 298/37	795x875x320/61	795x875x320/61
Refrigerant (R32) / CO <sub>2</sub> Eq.		kg / T	0,9/0,608	0,9/0,608	1,27/0,857	1,27/0,857
Pipe diameter	Liquid / Gas	Inch (mm)	1/4(6,35)/1/2(12,70)	1/4 (6,35) / 1/2 (12,70)	1/4 (6,35) / 5/8 (15,88)	1/4(6,35)/5/8(15,88)
Pipe length range / Elevation difference (in/out)		m / m	3~25/20	3~25/20	3~50/30	3~50/30
Pipe length for additional gas / Additional gas amount m / g/m		10/20	10/20	10/25	10/25	
	Outdoor ambient	°C	-20~+35	-20~+35	-20~+35	-20~+35
Operation range		C	20 100	-20+33	-20+35	-20+33

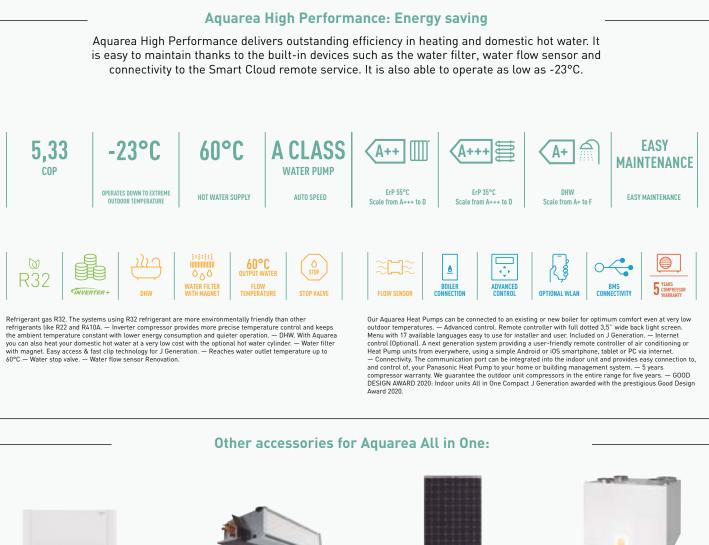
#### Accessories

CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN	
CZ-NS4P	Additional functions PCB	

#### Accessories PAW-A2W-RTWIRED Room thermostat

PAW-A2W-RTWIRELESS Wireless LCD room thermostat

1) Scale from A+++ to D. 2) Scale from A+ to F. 3) Sound power in accordance to 8112013,81312013 and EN12102-1:2017 at +7 °C. EER and COP calculation is based in accordance to EN14511. \* Available in Autumn 2020. 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.



AQUAREA

High efficient radiators for heating and cooling



Versatile and efficient fan coil for heating and cooling

Heat Pump + HIT Photovoltaic solar panel

Residential ventilation unit

# Panasonic

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

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SG Ready: Thanks to Aquarea HPM, Aquarea range (Bi-bloc and Mono-bloc) is holding the SG Ready Label (Smart Grid Ready Label), given by Bundesverband Wärmepumpe (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.\*



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