Panasonic

AQUAREA

AQUAREA HIGH PERFORMANCE BI-BLOC J GENERATION · R32

Outstanding efficiency and minimised CO_2 emission, for new installations and low energy homes

R32
NEW REFRIGERANT GAS

heating & cooling solutions

Panasonic

AQUAREA BI-BLOC PROVIDES BOTH DOMESTIC HOT WATER AND HEAT FOR RADIATORS AND UNDERFLOOR.

Adapts to your home

This Aquarea range is extremely flexible. Selecting from a wide range of capacities, 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 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

Aquarea is a smart choice for saving in heating. Using Air to Water heat pump technology, Aquarea is highly efficient and environmentally friendly. The heat pump is considered a 'green' choice as the heat energy is taken from the environment, making it a sustainable option. Aquarea units produce outstanding results. They are able to 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.

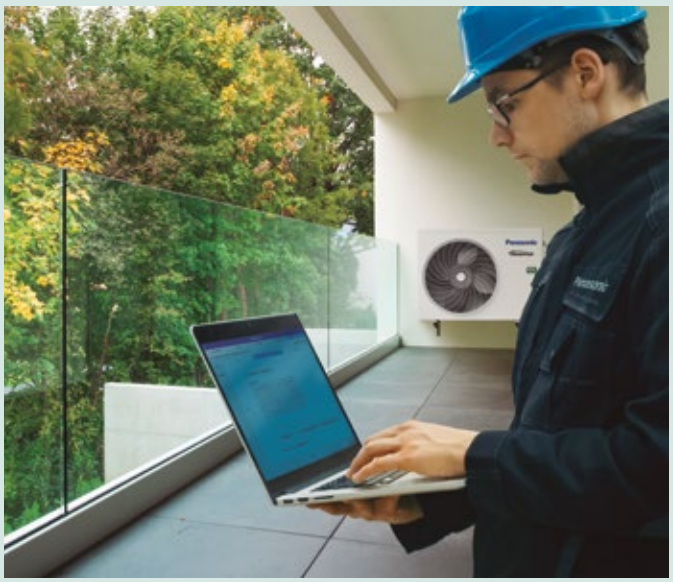
More comfort

The Aquarea Heat Pump is able to precisely control the temperature thanks to reliable Panasonic Inverter Compressors. Even in adverse weather conditions (-20°C), Aquarea warms your home effectively and efficiently. Aquarea can also cool space in summer and bring hot water all year round, offering different modes to give the ultimate comfort.

Contributes to a decarbonised society

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 helps reduce CO2 emissions and environmental impact, compared to conventional boilers and electric heaters.
Protecting the world of today means protecting the children of tomorrow. That's why we are committed to offering solutions that provide comfort and help us fulfil our responsibility to the environment.

* ec.europa.eu/eurostat

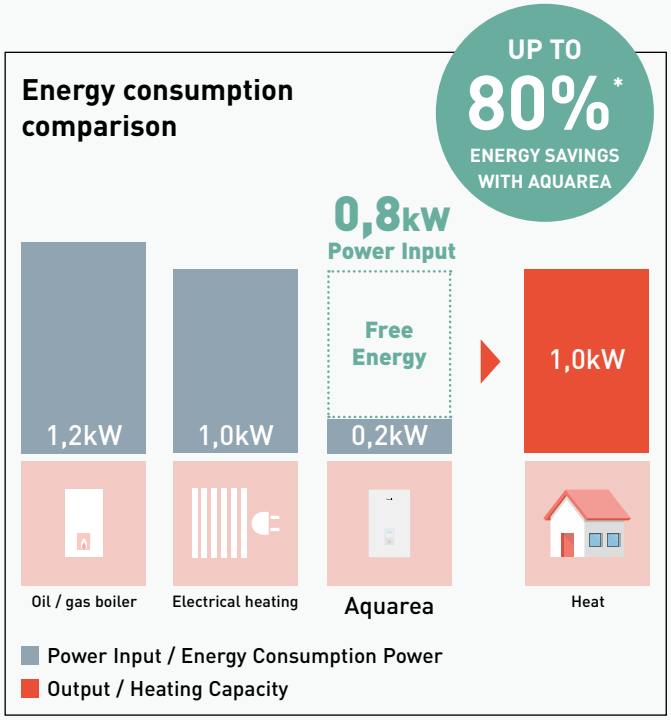


Why Panasonic?

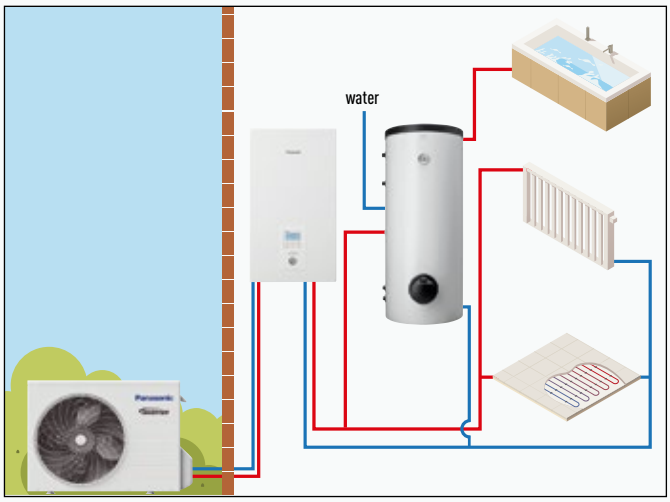
Panasonic has more than 60 years of Heat Pump experience, having produced an exceptional amount of compressors. Quality is what Panasonic stands for and this is a key factor for succeeding in the European market.
As a member of the European Heat Pump Association, the production of Aquarea in Europe and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

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.



* 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



Technology for comfort

The Aquarea range provide you the maximum comfort at the lowest running costs. It is able to reach up to 60°C water outlet even in adverse weather conditions Aquarea can also cool space in summer and bring hot water all year round, offering different modes to give the ultimate comfort.

Panasonic created a night mode to reduce the noise when it's needed. Special attention has been given to noise levels.

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

· Lower cost and greater savings
· Higher energy efficiency than R410A

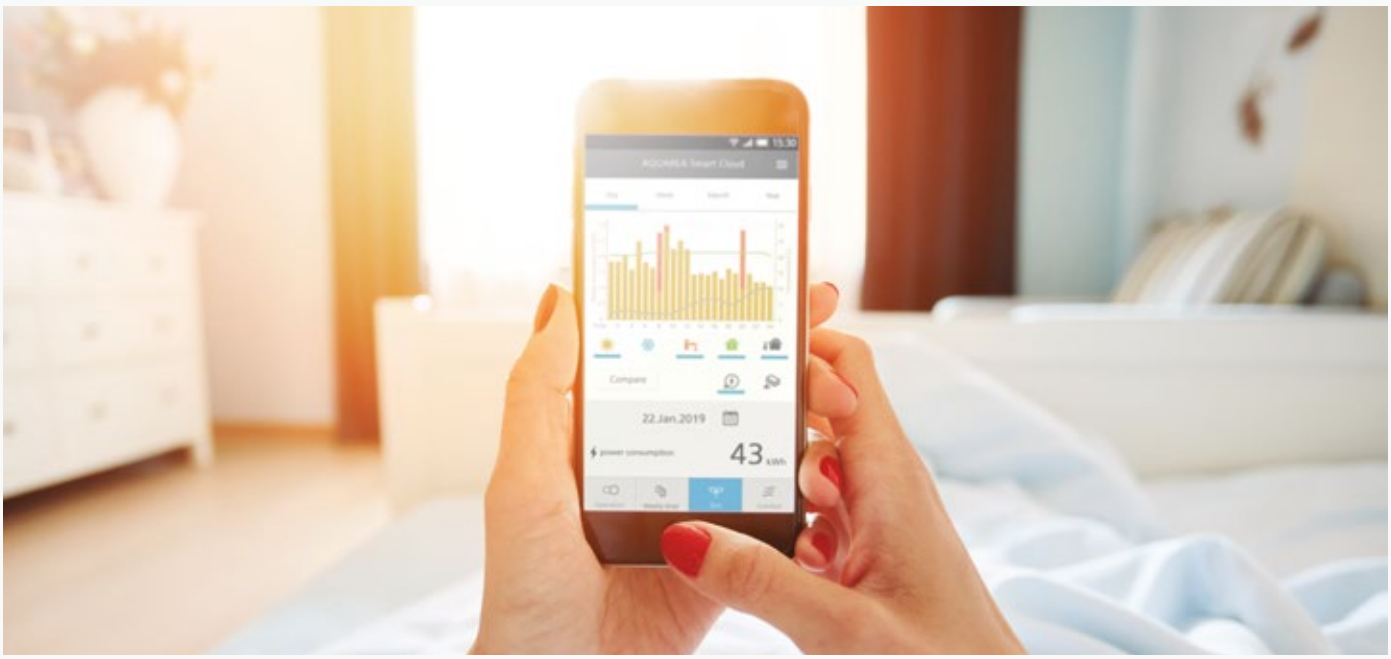
COMBINE AQUAREA BIBLOC WITH A HIGH EFFICIENCY TANK FOR HIGHER ENERGY SAVINGS.

Stainless Steel Tank.
Panasonic "A" Class Stainless Tank in capacities 192 and 280L. These models are anode free does not require any maintenance.

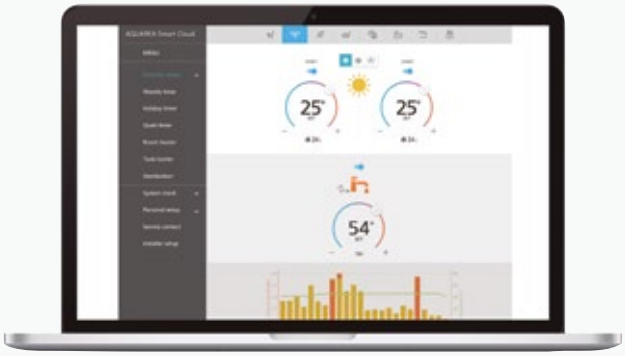
Enamelled Tank.
With our enamelled tanks wide range, we can satisfy any size needs. Consisting on 5 different sizes: 150, 200, 290, 350 and 380L.

Heat up domestic hot water for free with Aquarea + PV panels

Aquarea J Generation can synchronize with PV panels by using an additional PCB.
With this optional interface, Aquarea demand is adapting all moment with the PV panel production, in order to optimize the use of the energy.
This innovative algorithm balances the heat pump's consumption and the in-house comfort, based on the outside temperature, the PV panel production and the energy demand of the building.



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



WATCH DEMO

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.

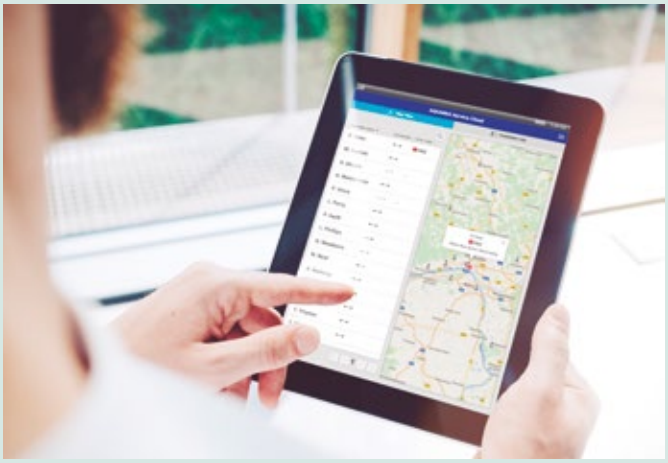
Aquarea Smart Cloud works with IFTTT

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 Aquarea 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.

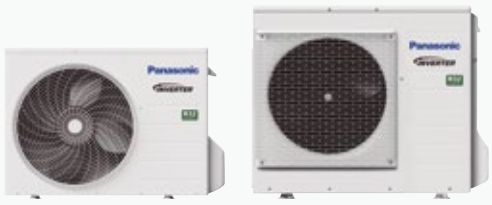
Advanced functions for remote maintenance with professional screens:
· Global view at a glance
· Error log history
· Full unit information
· Statistics always available
· Most settings available



* User interface image may change without notification.

New Aquarea High Performance Bi-bloc J Generation Single Phase. Heating and Cooling - SDC • R32 Gas

· Super efficient in the 3,2kW!
· Very high energy savings A+++ (*)
· Simple installation & maintenance
· Special software for low consumption homes with minimum output temperature: 20°C
· Works at temperatures as low as -20°C
· Automatic Air purge valve
· Display of the compressor frequency



			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	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	— / —
Seasonal energy efficiency - Heating Average Climate (W35°C / W55°C)		ETA %	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 Climate (W35°C / W55°C)		A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Seasonal energy efficiency - Heating Warm Climate (W35°C / W55°C)		ETA %	245 / 165	245 / 165	227 / 160	227 / 160
		SCOP	6,20 / 4,20	6,20 / 4,20	5,75 / 4,07	5,75 / 4,07
Energy Class Heating Warm Climate (W35°C / W55°C)		A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Seasonal energy efficiency - Heating Cold Climate (W35°C / W55°C)		ETA %	157 / 110	157 / 110	164 / 116	164 / 116
		SCOP	4,00 / 2,83	4,00 / 2,83	4,18 / 2,98	4,18 / 2,98
Energy Class Heating Cold Climate (W35°C / W55°C)		A+++ to D	A++ / A+	A++ / A+	A++ / A+	A++ / A+
Indoor unit			**WH-SDC0305J3E5**	**WH-SDC0305J3E5**	**WH-SDC0709J3E5**	**WH-SDC0709J3E5**
Sound pressure	Heat / Cool	dB(A)	28 / 28	28 / 28	30 / 30	30 / 31
Dimension	H x W x D	mm	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340	892 x 500 x 340
Net weight		kg	42	42	42	42
Water pipe connector		Inch	R 1¼	R 1¼	R 1¼	R 1¼
A class pump	Number of speeds		—	—	—	—
	Input power (Min / Max)	W	— / —	— / —	— / —	— / —
Heating water flow (ΔT=5 K. 35°C)		L/min	9,2	14,3	20,1	25,8
Capacity of integrated electric heater		kW	3	3	3	3
Recommended fuse		A	— / —	— / —	— / —	— / —
Recommended cable size, supply 1 / 2		mm²	— / —	— / —	— / —	— / —
Outdoor unit			**WH-UD03JE5**	**WH-UD05JE5**	**WH-UD07JE5**	**WH-UD09JE5-1**
Sound power at Quiet Mode 3 (A +7°C, W 55°C)		dB	55	55	59	59
Sound power full load	Heat / Cool	dB	60 / 61	64 / 64	68 / 67	69 / 69
Dimension	H x W x D	mm	622 x 824 x 298	622 x 824 x 298	795 x 875 x 320	795 x 875 x 320
Net weight		kg	37	37	61	61
Refrigerant (R32) / CO_2 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		m	3 ~ 25	3 ~ 25	3 ~ 50	3 ~ 50
Elevation difference (in/out)		m	20	20	30	30
Pipe length for additional gas		m	10	10	10	10
Additional gas amount		g/m	20	20	25	25
Operation range	Outdoor ambient	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
Water outlet	Heat / Cool	°C	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20	20 ~ 60 / 5 ~ 20

Accessories	
PAW-TD20C1E5	Tank 200L - Stainless steel
PAW-TD30C1E5	Tank 300L - Stainless steel
PAW-TA20C1E5STD	Tank 200L - Enamelled
PAW-TA30C1E5STD	Tank 300L - Enamelled
PAW-3WYVLV-SI	External 3 way valve
CZ-NV1	3 way valve Kit for inside of hydrokit

Accessories	
CZ-NS4P	Additional functions PCB
PAW-BTANK50L-1	Buffer tank 50L
CZ-TAW1	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
PAW-A2W-RTWIRED	Room thermostat

EER and COP calculation is based in accordance to EN14511. Sound pressure measured at 1m from the outdoor unit and at 1,5m height.
* Available in Autumn 2019.

AQUAREA

Aquarea High Performance: Energy saving

Aquarea High Performance delivers outstanding efficiency in heating and domestic hot water. It is easy to maintain thanks to the built-in devices such as the water filter, water flow sensor and connectivity to the Smart Cloud remote service. It is also able to operate as low as -23°C.

5,33
COP

-23°C
OPERATES DOWN TO EXTREME OUTDOOR TEMPERATURE

60°C
HOT WATER SUPPLY

A CLASS
WATER PUMP
AUTO SPEED

A++
ErP 55°C
Scale from A+++ to D

A+++
ErP 35°C
Scale from A+++ to D

EASY MAINTENANCE
EASY MAINTENANCE

R32

INVERTER+

A CLASS WATER PUMP
AUTO SPEED

-20°C
HEATING MODE

STOP
STOP VALVE

FLOW SENSOR

BOILER CONNECTION

SOLAR KIT

ADVANCED CONTROL

OPTIONAL WLAN

BMS CONNECTIVITY

5 YEARS COMPRESSOR WARRANTY

GOOD DESIGN

Refrigerant gas R32. The systems using R32 refrigerant are more environmentally friendly than other refrigerants like R22 and R410A. — Inverter compressor provides more precise temperature control and keeps the ambient temperature constant with lower energy consumption and quieter operation. — DHW. With Aquarea you can also heat your domestic hot water at a very low cost with the optional hot water cylinder. — Water filter with magnet. Easy access & fast clip technology for J Generation. — Reaches water outlet temperature up to 60°C — Water stop valve. — Water flow sensor Renovation. Our Aquarea Heat Pumps can be connected to an existing or new boiler for optimum comfort even at very low outdoor temperatures.

For even greater efficiency, our Aquarea Heat Pumps can be connected to photovoltaic solar panels with an optional kit. — Advanced control. 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 Generation. — Internet control (Optional). A next generation system providing a user-friendly remote controller of air conditioning or Heat Pump units from everywhere, using a simple Android or iOS smartphone, tablet or PC via internet.
— Connectivity. The communication port can be integrated into the indoor unit and provides easy connection to, and control of, your Panasonic Heat Pump to your home or building management system. — 5 years compressor warranty. We guarantee the outdoor unit compressors in the entire range for five years. — GOOD DESIGN AWARD 2017: Indoor units All in One and Bi-bloc awarded with the prestigious Good Design Award 2017.

Other accessories for Aquarea:

High efficient radiators for heating and cooling

Versatile and efficient fan coil for heating and cooling

Heat Pump + HIT Photovoltaic solar panel

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.*

APPROVED PRODUCT

Panasonic

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

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