# Panasonic

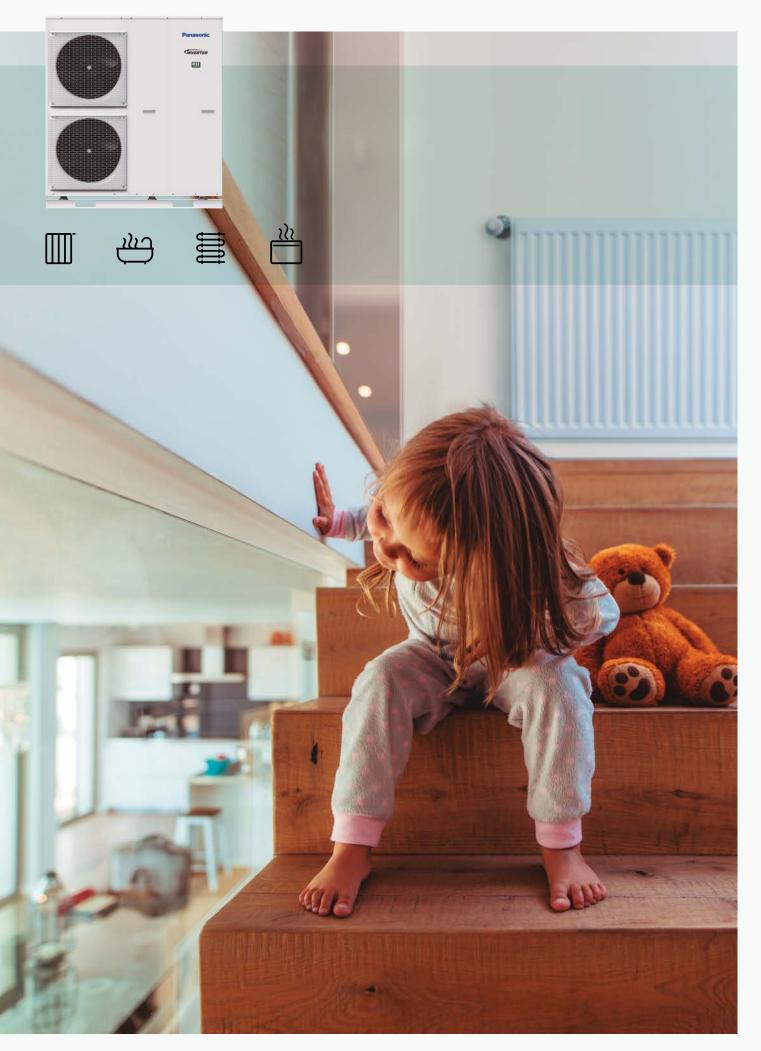
# AQUAREA

### NEW AQUAREA T-CAP MONO-BLOC J GENERATION · R32

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



heating & cooling solutions



## AQUAREA T-CAP MONO-BLOC J GENERATION PROVIDES BOTH DOMESTIC HOT WATER AND HEAT FOR RADIATORS AND UNDERFLOOR HEATING FROM ONE OUTDOOR UNIT.



### Adapts to your home

Selecting from a range of capacities, from 9kW to 16kW, you can find lower initial investment and lower operational cost options. The range fully adapts the system to the needs of your home, whether it is a new build or a refurbishment, as it is able to reach up to 65°C water outlet.



### Heat Pump, 80% of energy for free

Based on Air to Water heat pump technology, Aquarea is highly efficient and environmentally friendly. It 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. In this way, up to 80% of the heat energy required is taken from the ambient air - even in extremely low temperatures.



### 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.



### Space-saving solution

Aquarea T-CAP Mono-bloc is the ideal spacesaving solution for any home as the unit does not require a separate hydrokit inside. Additionally, thanks to the unit's neat design, all refrigerant is sealed in the outdoor unit, leaving only water pipes needed inside the property. For further space-saving ideas, combine Aquarea Mono-bloc with a Combo tank, which incorporates the DHW with a buffer tank.



### 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 T-CAP MONO-BLOC J GENERATION. MORE SAVINGS, MORE EFFICIENCY AND MORE COMFORT.**

#### 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 outdoor temperature without the help of an electrical booster heater<sup>1</sup>.

#### 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>2)</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.

<sup>1) 35°</sup>C flow temperature. 2) In case of  $\Delta$ T 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.



# 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.

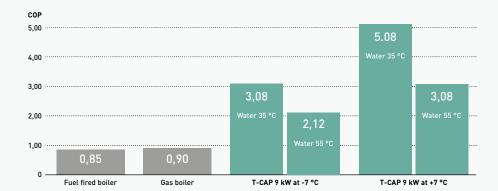
#### No need to oversize to reach required capacity at low temperatures

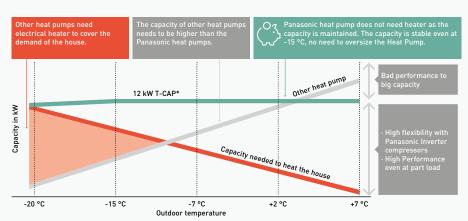
Panasonic heat pumps can work in outdoor temperatures as low as -20 °C and maintain capacity without backup heating at -20 °C<sup>1</sup>. With other heat pumps, a larger capacity is required to achieve the same level of comfort at low temperatures.

1) 35 °C flow temperature.

### 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.





\* 55 °C flow temperature. In case of 35 °C the capacity is mantained down to -20 °C.

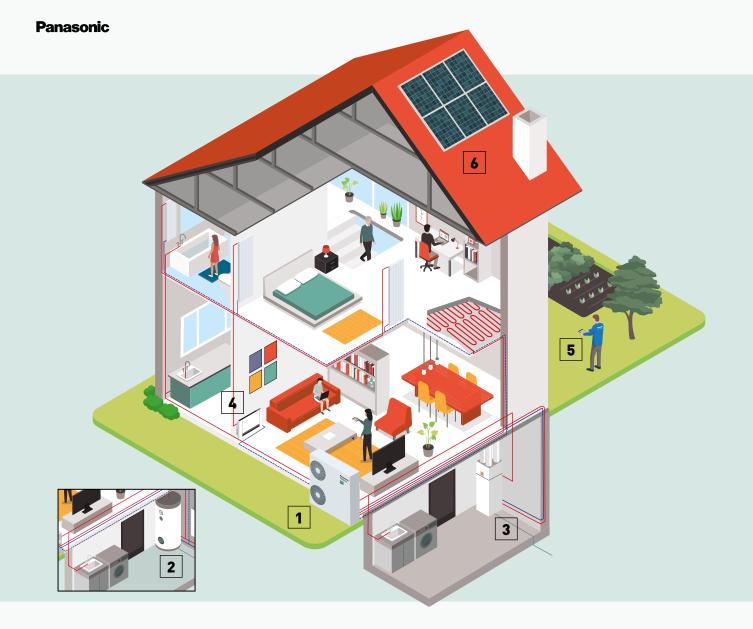


# R32 refrigerant gas: A 'small' change that changes everything

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

In line with the European countries who are concerned in protecting and maintaining the environment by participating in the Montreal Protocol to protect the Ozone Layer and prevent Global Warming, Panasonic is leading the switch to R32.





## COMBINE AQUAREA T-CAP MONO-BLOC WITH A HIGH EFFICIENCY OPTIONAL ACCESSORIES FOR HIGHER ENERGY SAVINGS.



Mono-bloc system.



**DHW Tanks (optional)** Combo Tank, Enamelled Tank or Stainless Steel Tank.



Heat Recovery Ventilation + DHW Combo Tank (optional).



Fan coils for heating and cooling (optional).



Control through smartphone, tablet or computer (optional, requires CZ-TAW1).



Heat Pump + HIT Photovoltaic solar panel (optional).



Anti-freeze valve (optional, PAW-A2W-AFVLV).



Wired LCD room thermostat with weekly timer (optional, PAW-A2W-RTWIRED).



Wireless LCD room thermostat with weekly timer (optional, PAW-A2W-RTWIRELESS).

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







Watch demo

\* User interface image may change without notification.



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.

# Aquarea Smart Cloud for the user

Aquarea can be connected to the Cloud with the accessory CZ-TAW1, enabling both user control and remote maintenance by service partners.

# 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 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.

# 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:

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



Aquarea T-CAP Mono-bloc J Generation			Single phase		Three phase		
Outdoor unit			WH-MXC09J3E5	WH-MXC12J6E5	WH-MXC09J3E8	WH-MXC12J9E8	WH-MXC16J9E8
Heating capacity / COP (A +7	7 °C, W 35 °C)	kW / COP	9,00/5,08	12,00/4,80	9,00/5,08	12,00/4,80	16,00/4,52
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	16,00/2,86
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	16,00/3,10
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	9,00/2,54	12,00/2,42	9,00/2,54	12,00/2,42	16,00/2,07
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	16,00/2,39
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	16,00/1,71
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	14,50/2,84
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	16,00/3,75
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	<b>η</b> s %	195/140	195/140	195/140	195/140	176/129
		SCOP	4,96/3,57	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++	A+++/A++	A+++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	ηs %	256/171	256/171	256/171	256/171	232/160
		SCOP	6,47/4,34	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+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	<b>η</b> s %	169/127	169/127	169/127	169/127	150/125
		SCOP	4,31/3,26	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++	A++/A++	A++/A++
Sound power 1]	Heat	dB(A)	65	65	65	65	66
Dimension	HxWxD	mm	1410 x 1283 x 320				
Net weight		kg	140	140	140	140	150
Refrigerant (R32) / CO, Eq. 2)		kg / T	1,60/1,080	1,60/1,080	1,60/1,080	1,60/1,080	1,80/1,215
Water pipe connector		Inch	R 1¼	R 11/4	R 11/4	R 1¼	R 11/4
Pump	Number of speeds		Variable Speed				
	Input power (Min/Max)	W	32/102	34/110	32/173	34/173	38/173
Heating water flow ( $\Delta$ T=5 K. 35 °C)		L/min	25,8	34,4	25,8	34,4	45,9
Capacity of integrated electric heater		kW	3	6	3	9	9
Input power	Heat	kW	1,77	2,50	1,77	2,50	3,54
	Cool	kW	2,83	4,14	2,91	4,23	5,11
Running and starting current	Heat	A	8,3	11,6	2,6	3,7	5,3
	Cool	A	13,1	19,1	4,3	6,3	7,6
Current 1		A	29,0	29,0	14,7	11,8	16,4
Current 2		A	13,0	26,0	13,0	13,0	13,0
Recommended fuse, supply 1 / 2		A	30/30	30/30	20/16	20/20	20/20
Recommended cable size, supply 1 / 2		mm²	3x4,0or6,0/3x4,0	3x4,0or6,0/3x4,0	5x1,5/3x1,5	5x1,5/5x1,5	5x2,5/5x1,5
Operating range - outdoor ambient	Heat	°C	-20~+35	-20~+35	-20~+35	-20~+35	-20~+35
	Cool	°C	10~+43	10~+43	10~+43	10~+43	10~+43
Water outlet <sup>3]</sup>	Heat	°C	20~65	20~65	20~65	20~65	20~65
	Cool	°C	5~20	5~20	5~20	5~20	5~20



INTERNET CONTROL: Optional.



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

Panasonic

www.aircon.panasonic.eu



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

A CLASS WATER PUMP
AUTO SPEED

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



Higher performance and energy saving. Improvement of SCOP \* and cooling capacity vs conventional model.



Aquarea T-CAP for extremely low temperatures. 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.



**65 °C output water.** Reaches water outlet temperature up to 65 °C.

> Keymark: Check all our certified heat pumps on: www.heatpumpkeymark.com

### heating & cooling solutions

Panasonic Marketing Europe GmbH Panasonic Air Conditioning

To find out how Panasonic cares for you, log on to:

Hagenauer Strasse 43, 65203 Wiesbaden, Germany

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