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.



R32
NEW REFRIGERANT GAS

heating & cooling solutions



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[1].

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.

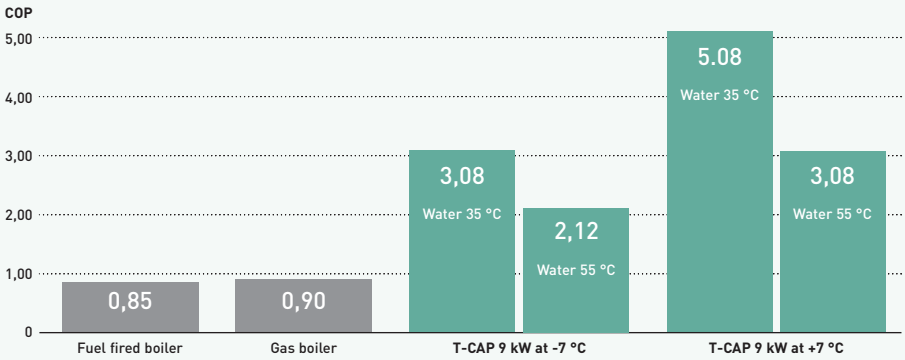
65 °C[2] water temperature possible.
By optimising the system and the refrigerant cycle, the unit can work under higher pressure and realise a water temperature of 65°C.



1) 35ºC flow temperature.
2) 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.

Higher efficiency compared to other heating systems

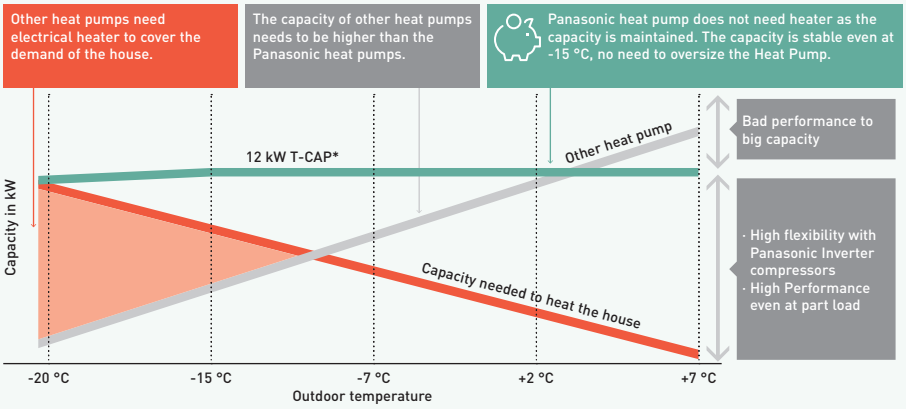
Panasonic heat pumps have a maximum COP of 5,08 at +7 °C which makes them much more efficient than others heating systems.
T-CAP is also able to provide extremely high efficiencies, whatever the outside or the water temperature.



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

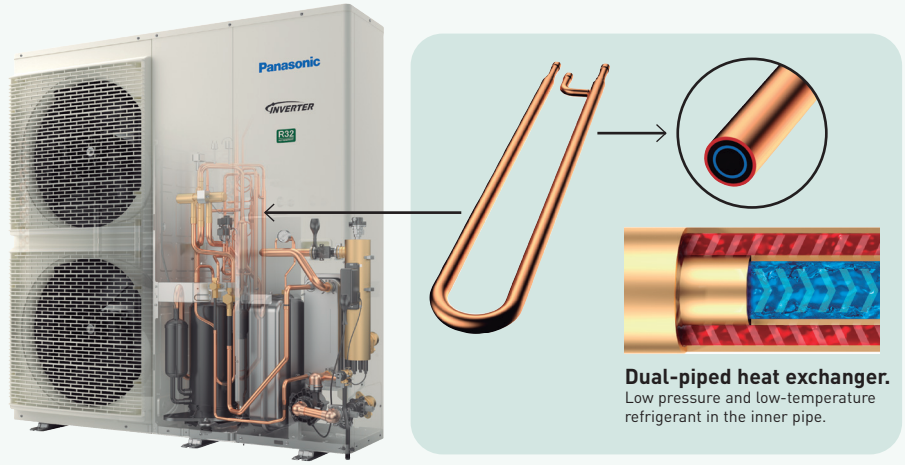
1) 35 °C flow temperature.



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

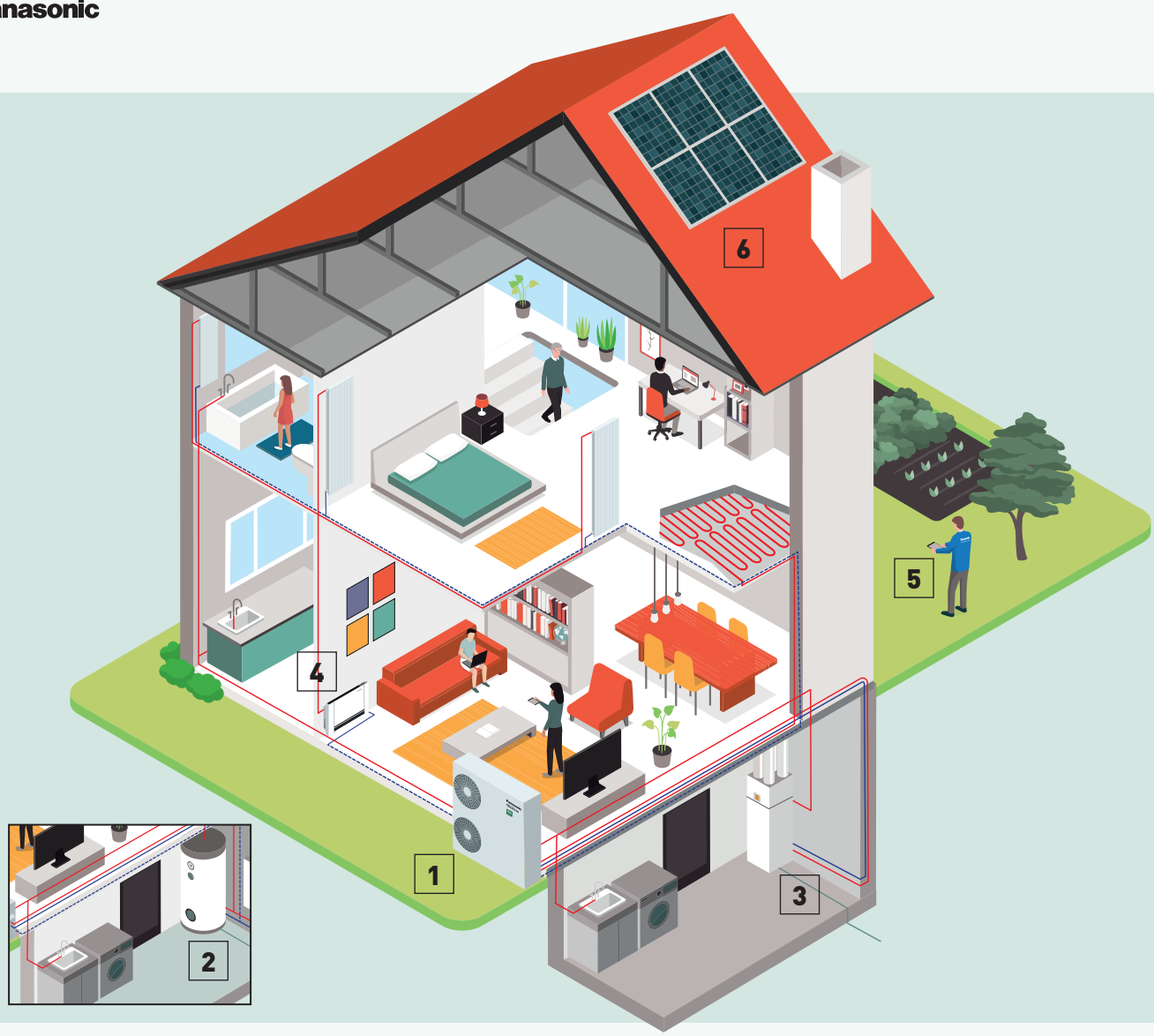


Dual-piped heat exchanger.
Low pressure and low-temperature refrigerant in the inner pipe.

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.

1



Mono-bloc system.

2



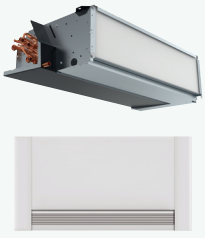
DHW Tanks (optional)
Combo Tank, Enamelled Tank or Stainless Steel Tank.

3



Heat Recovery Ventilation + DHW Combo Tank (optional).

4



Fan coils for heating and cooling (optional).

5



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

6



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).

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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 °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	ηs %	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	ηs %	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	H x W x D	mm	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320
Net weight		kg	140	140	140	140	150
Refrigerant (R32) / CO_2 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 1¼	R 1¼	R 1¼	R 1¼
Pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	32/102	34/110	32/173	34/173	38/173
Heating water flow (ΔT=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	3 x 4,0 or 6,0/3 x 4,0	3 x 4,0 or 6,0/3 x 4,0	5 x 1,5/3 x 1,5	5 x 1,5/5 x 1,5	5 x 2,5/5 x 1,5
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 [3]	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.



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



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.

Panasonic®

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