At the forefront of heating innovation: Panasonic Aquarea with natural refrigerant R290

Aquarea air to water heat pumps with R290 refrigerant offer an advanced, energy efficient solution for heating, cooling, and domestic hot water that delivers outstanding performance, aligning with our vision of a carbon-free society and our GREEN IMPACT plan.

R290
NATURAL REFRIGERANT



0,02 Global Warming Potential

Panasonic's newest series are engineered with industry leading natural refrigerant R290, which has a low Global Warming Potential (GWP) of just 0,02, helping reduce CO_2 emissions and environmental impact.



Output water.

Up to 75 °C water outlet down to -15 °C* outdoor.

*-10 °C for L Series. Down to 15 °C outdoor for 20, 25 and 30 kW models.



Quiet operation.

Only 27 dB(A) sound pressure at 5m*.

*Sound pressure calculation for WH-WDG05LE5, free standing, A +7 °C, W 35 °C in Quiet mode 3.



Flexible hydronic installation.

Hydronic connection between indoor and outdoor.

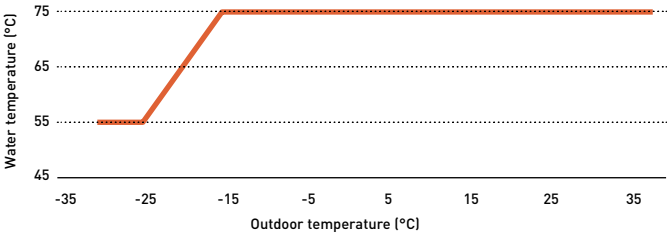


Made and designed by Panasonic.

Reliable outdoor units with Panasonic compressor.

Output water. High performance under extreme conditions

Excellent solution for heating system retrofit.
The compressor operates without backup heating down to -28 °C ambient temperatures, and can be integrated alongside existing radiators with a high-water flow temperature of up to 75 °C at -15 °C outside temperature. Even at -28 °C outside temperature, it can supply hot water at 55 °C.



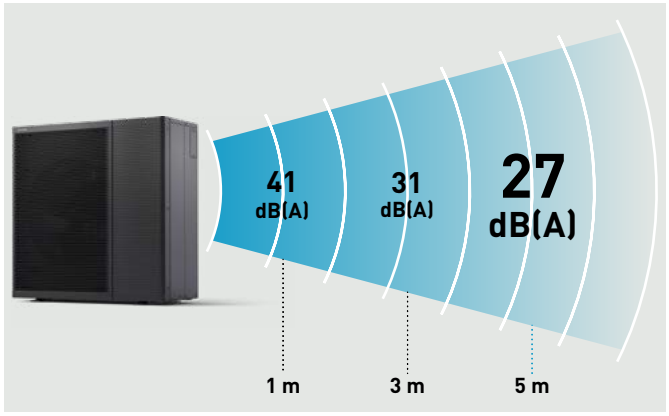
*For M Series T-CAP 9, 12 and 16 kW models. M Series High Performance operates down to -25 °C with 75 °C water outlet down to -15 °C ambient. L Series operates down to -25 °C with 75 °C water outlet down to -10 °C ambient.

Sterilisation process without heater.
It can also reach a domestic hot water temperature of up to 65 °C without the use of the electric heater, so the tank sterilisation can be performed with the heat pump operation.



Quiet operation. Panasonic's unique low noise architecture

The compressor, which is a major source of noise, is equipped with a double-bottomed structure to provide a safe, quiet structure that does not disturb neighbours in crowded residential areas.

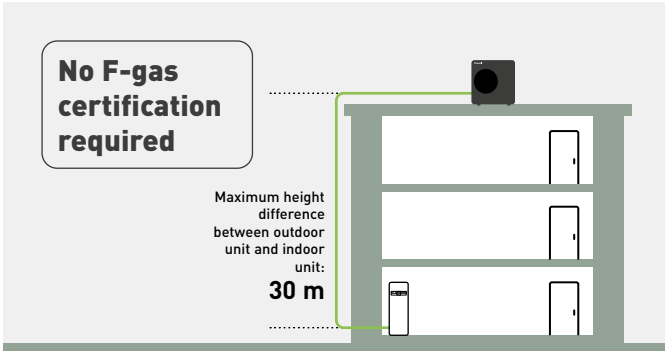


*Sound pressure calculation for WH-WDG05LE5, free standing, A +7 °C, W 35 °C in Quiet mode 3.

Flexible hydronic installation

The installation of the system is 100% hydronic, with only water pipes between the outdoor unit and the interior of the home.

More living space at home.
No indoor safety measures needed for refrigerant or fuel gas piping.



*For L Series only when the outdoor unit is installed above the indoor unit, and the water pressure does not exceed 1 bar at the outdoor unit.

Made and designed by Panasonic.

Aquarea High Performance L Series from 5 to 9 kW.



Wi-Fi adapter included

Aquarea High Performance M Series from 9 to 16 kW.
Aquarea T-CAP M Series from 9 to 30 kW.



Wi-Fi adapter included

*Check availability of units and combinations.

Aquarea High Performance Hydraulic L Series. Single phase · R290

Natural refrigerant R290 with GWP 0,02.
Energy efficiency: A+++ in heating at 35 °C.
Flexibility: Hydronic connection between indoor and outdoor / Built-in magnetic water filter.
Comfort: Operation without backup heater down to -25 °C / 75 °C flow temperature at -10 °C / 55 °C flow temperature at -25 °C.

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



A++ ERP 55 °C A+++ TO D
A+++ ERP 35 °C A+++ TO D
A+ DHW* A+ TO F
Included

*For All in One.

Combination table						Outdoor unit		
Indoor unit						Heating capacity		
						Single phase (power to indoor)		
		DHW tank	Backup heater capacity	2 zones	Electrical anode	5,0 kW	7,0 kW	9,0 kW
						WH-WDG05LE5	WH-WDG07LE5	WH-WDG09LE5
Hydraulic All in One	1ph	120 L	3 kW	—	—	WH-ADC0509L3E51	✔	✔	✔
		185 L	3 kW	—	—	WH-ADC0509L3E5	✔	✔	✔
		185 L	3 kW	—	✔	WH-ADC0509L3E5AN	✔	✔	✔
		185 L	6 kW	—	—	WH-ADC0509L6E5	✔	✔	✔
		185 L	6 kW	—	✔	WH-ADC0509L6E5AN	✔	✔	✔
		185 L	3 kW	✔	—	WH-ADC0509L3E5B	✔	✔	✔
Hydraulic Bi-bloc	1ph	—	3 kW	—	—	WH-SDC0509L3E5	✔	✔	✔
		—	6 kW	—	—	WH-SDC0509L6E5	✔	✔	✔

Outdoor unit			WH-WDG05LE5	WH-WDG07LE5	WH-WDG09LE5
Heating capacity / COP (A +7 °C, W 35 °C)		kW / COP	5,00/5,05	7,00/4,93	9,00/4,55
Heating capacity / COP (A +7 °C, W 55 °C)		kW / COP	5,00/3,07	7,00/2,98	8,90/3,03
Heating capacity / COP (A +2 °C, W 35 °C)		kW / COP	5,00/3,52	6,85/3,43	7,00/3,41
Heating capacity / COP (A +2 °C, W 55 °C)		kW / COP	5,00/2,34	6,25/2,34	7,00/2,41
Heating capacity / COP (A -7 °C, W 35 °C)		kW / COP	5,00/3,01	5,80/3,01	7,00/2,80
Heating capacity / COP (A -7 °C, W 55 °C)		kW / COP	5,00/2,12	5,80/2,12	7,00/2,13
Cooling capacity / EER (A 35 °C, W 7 °C)		kW / EER	5,00/3,23	7,00/3,03	8,20/2,82
Cooling capacity / EER (A 35 °C, W 18 °C)		kW / EER	5,00/5,00	7,00/4,73	9,00/4,19
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η_s %)	5,06/3,63 (200/142)	4,96/3,62 (195/142)	4,84/3,67 (190/144)
	Energy class [1]	A+++ to D	A+++/A++	A+++/A++	A+++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η_s %)	6,00/4,27 (237/168)	6,31/4,52 (249/178)	6,44/4,50 (255/177)
	Energy class [1]	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η_s %)	4,25/3,28 (167/128)	4,25/3,29 (167/129)	4,31/3,33 (170/130)
	Energy class [1]	A+++ to D	A++/A++	A++/A++	A++/A++
Sound power [2]	Heat	dB(A)	52	53	54
Dimension / Net weight	H x W x D	mm / kg	996 x 980 x 430/98	996 x 980 x 430/98	996 x 980 x 430/97
Refrigerant (R290) / CO_2 Eq.		kg / T	0,96/0,00002	0,96/0,00002	1,00/0,00002
Operating range - outdoor ambient	Heat	°C	-25 ~ +35	-25 ~ +35	-25 ~ +35
	Cool	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet	Heat / Cool	°C	20 ~ 75/5 ~ 20	20 ~ 75/5 ~ 20	20 ~ 75/5 ~ 20

1) Scale from A+++ to D. 2) Sound power level in accordance to EN 12102 under conditions of the EN14825 (part load). *EER and COP calculation is based in accordance to EN 14511.

R290 REFRIGERANT · A++ ErP 55 °C · A+++ ErP 35 °C · A+ DHW · INVERTER+ · A CLASS WATER PUMP AUTO SPEED · DHW · -25 °C HEATING MODE · WATER FILTER WITH MAGNET · 75 °C OUTPUT WATER FLOW TEMPERATURE · FLOW SENSOR · BOILER CONNECTION · WI-FI INCLUDED · BMS CONNECTIVITY · 5 YEARS COMPRESSOR WARRANTY

DHW A+: For All in One.

All in One:

Energy efficiency: A+ in DHW / DHW up to 65 °C without heater / Stainless steel DHW tank with U-Vacua™.
Flexibility: Built-in 2 zone kit (for 2 zones models) / Suitable for harsh-water installations (AN version).
Control: Optimised user interface and improved features (2 zone control, bivalent control).
Connectivity: Wi-Fi adapter included for smart control via Comfort Cloud App.

Indoor unit			**WH-ADC0509L3E51**	**WH-ADC0509L3E5**	**WH-ADC0509L6E5**
Indoor unit 2 zones			**—**	**WH-ADC0509L3E5B**	**—**
Indoor unit with Electrical Anode			**—**	**WH-ADC0509L3E5AN**	**WH-ADC0509L6E5AN**
Sound pressure	Heat / Cool	dB(A)	31/31	28/28	28/28
Dimension	H x W x D	mm	1293 x 599 x 602	1642 x 599 x 602	1642 x 599 x 602
Net weight / 2 zones model		kg	79/—	93/101	94/—
Water pipe connector	Room	Inch	1¼	1¼	1¼
	Shower	Inch	¾	¾	¾
A class pump	Number of speeds		Variable speed	Variable speed	Variable speed
	Input power (Min/Max)	W	30/145	30/145	30/145
Heating water flow (ΔT=5 K. 35 °C)		L/min	14,3	14,3	25,8
Water volume		L	120	185	185
Maximum DHW temperature		°C	65	65	65
Material inside tank			Stainless steel	Stainless steel	Stainless steel
Water pipe connector (indoor / outdoor units)		Inch	1/1	1/1	1/1
Pipe length range standard / maximum		m	5/30	5/30	5/30
Elevation difference (in / out)		m	10	10	10
Electric backup heater		kW	3,00	3,00	6,00
Recommended fuse, supply 1 / 2 [1]		A	25/16	25/16	25/30
Recommended minimum cable size, supply 1 / 2 [1]		mm²	3x2,5/3x1,5	3x2,5/3x1,5	3x2,5/3x4,0

Domestic Hot Water energy efficiency		**120 L**	**185 L**	**120 L**	**185 L**	**120 L**	**185 L**
Indoor unit	**WH-**	**ADC0509L3E51**	**ADC0509L3E5**	**ADC0509L3E51**	**ADC0509L3E5**	**ADC0509L3E51**	**ADC0509L3E5**
		—	**ADC0509L3E5AN**	**—**	**ADC0509L3E5AN**	**—**	**ADC0509L3E5AN**
		—	**ADC0509L3E5B**	**—**	**ADC0509L3E5B**	**—**	**ADC0509L3E5B**
		—	**ADC0509L6E5**	**—**	**ADC0509L6E5**	**—**	**ADC0509L6E5**
		—	**ADC0509L6E5AN**	**—**	**ADC0509L6E5AN**	**—**	**ADC0509L6E5AN**
Outdoor unit		**WH-WDG05LE5**		**WH-WDG07LE5**		**WH-WDG09LE5**	
Tapping profile according EN16147		M	L	M	L	M	L
DHW tank ERP efficiency average / warm / cold [2]	A+ to F	A+/A++/A	A+/A+/A	A+/A++/A	A+/A+/A	A+/A++/A	A+/A+/A
DHW tank ERP average climate η / COPdHW	ηwh%/COPdHW	115/2,88	148/3,61	115/2,88	148/3,61	115/2,88	148/3,61
DHW tank ERP warm climate η / COPdHW	ηwh%/COPdHW	134/3,35	160/4,00	134/3,35	160/4,00	134/3,35	160/4,00
DHW tank ERP cold climate η / COPdHW	ηwh%/COPdHW	90/2,26	112/2,80	90/2,26	112/2,80	90/2,26	112/2,80

1) Check local regulations. 2) Scale from A+ to F. *This product is designed to comply with the European drinking water standard (EU) 2020/2184. 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.

Bi-bloc:

Flexibility: Flexible choice of DHW tank size.
Control: Optimised user interface and improved features (2 zone control, bivalent control).
Connectivity: Wi-Fi adapter included for smart control via Comfort Cloud App.

Indoor unit			**WH-SDC0509L3E5**	**WH-SDC0509L6E5**
Sound pressure	Heat / Cool	dB(A)	28/28	28/28
Dimension / Net weight	H x W x D	mm / kg	892 x 500 x 348 / 33	892 x 500 x 348 / 33
Water pipe connector	Room	Inch	R 1¼	R 1¼
A class pump	Number of speeds		Variable speed	Variable speed
	Input power (Min/Max)	W	30/145	30/145
Heating water flow (ΔT=5 K. 35 °C)		L/min	14,3	20,1
Water pipe connector (indoor / outdoor units)		Inch	1/1	1/1
Pipe length range standard / maximum		m	5/30	5/30
Elevation difference (in / out)		m	10	10
Electric backup heater		kW	3,00	6,00
Recommended fuse, supply 1 / 2 [1]		A	25/16	25/30
Recommended minimum cable size, supply 1 / 2 [1]		mm²	3x2,5/3x1,5	3x2,5/3x4,0

1) Check local regulations. *This product is designed to comply with the European drinking water standard (EU) 2020/2184. 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.

Common accessories	
CZ-RTW1	Optional remote controller for 2 zone control. K and L Series
CZ-NS5P	PCB for advanced functions
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat
PAW-A2W-AFVLV-1	1 antifreeze valve 1". It is required to order 2 valves per system

Bi-bloc accessories	
PAW-TD20C1E5-1	Tank 200 L - Stainless steel
PAW-TD30C1E5-1	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-NV2	3 way valve kit to fit inside the hydrokit. K and L Series
PAW-BTANK50L-2	Buffer tank 50 L

Heating and cooling capacity tables

Based on outlet temperature and outside temperature.

Aquarea High Performance Hydraulic L Series. Single phase · R290

WH-WDG05LE5															
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45	45	45	55	55	55	65	65	65	75	75	75
-25	2,45	1,76	1,39	3,80	2,30	1,65	3,60	2,46	1,46	—	—	—	—	—	—
-20	4,70	2,19	2,15	4,50	2,37	1,90	4,25	2,57	1,65	—	—	—	—	—	—
-15	5,00	1,94	2,58	5,00	2,31	2,16	5,00	2,63	1,90	4,60	2,88	1,60	—	—	—
-7	5,00	1,66	3,01	5,00	1,94	2,58	5,00	2,36	2,12	5,00	2,62	1,91	4,30	2,87	1,50
2	5,00	1,42	3,52	5,00	1,71	2,92	5,00	2,14	2,34	5,00	2,54	1,97	4,60	2,76	1,67
7	5,00	0,99	5,05	5,00	1,27	3,94	5,00	1,63	3,07	5,00	2,03	2,46	4,70	2,57	1,83
WH-WDG07LE5															
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45	45	45	55	55	55	65	65	65	75	75	75
-25	4,75	2,53	1,88	4,30	2,66	1,62	3,95	2,78	1,42	—	—	—	—	—	—
-20	5,50	2,56	2,15	5,10	2,75	1,85	4,90	2,97	1,65	—	—	—	—	—	—
-15	6,00	2,50	2,40	5,50	2,60	2,12	5,20	2,89	1,80	4,80	3,00	1,60	—	—	—
-7	5,80	1,93	3,01	5,80	2,32	2,50	5,80	2,74	2,12	5,70	3,16	1,80	4,80	3,56	1,35
2	6,85	2,00	3,43	6,60	2,34	2,82	6,25	2,67	2,34	5,60	2,80	2,00	5,00	3,13	1,60
7	7,00	1,42	4,93	7,00	1,90	3,68	7,00	2,35	2,98	6,60	2,85	2,32	6,30	3,40	1,85
WH-WDG09LE5															
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45	45	45	55	55	55	65	65	65	75	75	75
-25	6,05	3,43	1,76	5,25	3,28	1,60	4,65	3,15	1,48	—	—	—	—	—	—
-20	7,00	3,56	1,97	6,20	3,50	1,77	5,60	3,43	1,63	—	—	—	—	—	—
-15	7,40	3,20	2,31	6,80	3,40	2,00	6,30	3,55	1,77	5,60	3,55	1,58	—	—	—
-7	7,00	2,50	2,80	7,00	2,98	2,35	7,00	3,29	2,13	6,50	3,53	1,84	5,40	3,56	1,52
2	7,00	2,05	3,41	7,00	2,50	2,80	7,00	2,90	2,41	6,70	3,35	2,00	5,70	3,40	1,68
7	9,00	1,98	4,55	9,00	2,58	3,49	8,90	2,94	3,03	8,90	3,56	2,50	7,30	3,56	2,05

Aquarea High Performance Hydraulic L Series. Single phase · R290

WH-WDG05LE5									
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	6,00	1,01	5,94	7,50	1,05	7,14	6,00	0,67	8,96
25	5,70	1,20	4,75	7,00	1,20	5,83	5,70	0,78	7,31
35	5,00	1,55	3,23	6,30	1,44	4,38	5,00	1,00	5,00
43	4,50	1,60	2,81	5,60	1,64	3,41	4,50	1,12	4,02
WH-WDG07LE5									
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	7,00	1,36	5,15	8,50	1,39	6,12	8,00	1,04	7,69
25	7,00	1,65	4,24	8,00	1,57	5,10	7,50	1,18	6,36
35	7,00	2,31	3,03	8,00	2,26	3,54	7,00	1,48	4,73
43	6,00	2,50	2,40	7,00	2,60	2,69	5,70	1,70	3,35
WH-WDG09LE5									
Tamb	CC	IP	EER	CC	IP	EER	CC	IP	EER
LWC	7	7	7	14	14	14	18	18	18
16	9,00	2,00	4,50	11,00	2,12	5,19	11,00	1,80	6,11
25	9,00	2,50	3,60	11,00	2,60	4,23	10,00	1,85	5,41
35	8,20	2,91	2,82	10,00	3,10	3,23	9,00	2,15	4,19
43	6,40	2,67	2,40	7,40	2,70	2,74	8,20	2,50	3,28

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 EN 14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.