

NEW HIGH PERFORMANCE

Panasonic

**IDEAL FOR
NEW HOUSING
AND RETROFIT**



**New High Performance
Heat pumps**

- Maximum savings
- Maximum efficiency
- Minimum CO₂ emissions
- Minimum of space.

AQUAREA

5,08 COP
high efficiency

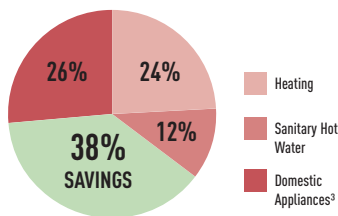
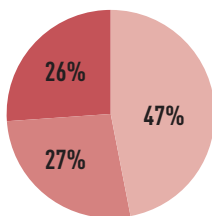
AQUAREA
HIGH PERFORMANCE

Panasonic has designed the new Aquarea Bi-Bloc, Mono-Bloc and All in One heat pumps for homes which have high performance requirements. Whatever the weather, Aquarea can work even at -20 °C! The New Aquarea is easy to install on new or existing installations, in all types of properties.

Total energy consumption of a conventional house, compared to the energy consumption with Panasonic heat pumps

TOTAL ENERGY CONSUMPTION OF A CONVENTIONAL HOUSE¹

ENERGY CONSUMPTION WITH PANASONIC HEAT PUMPS²

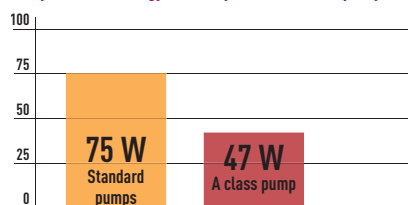


1. Source: IDEA, European values 2010. Consumption of a conventional house of 80 kWh/(m²·year). 2. Source: Panasonic, RT2012 simulation, house of 50 kWh/(m²·year) per year, equipped by Panasonic heat pump. 3. Eg. Fridge, telephone, oven,...

A new A-class Pump with Constant water flow (Dynamic pump control) for 5kW Mono-Bloc

A Class pump adapts water pressure according to demand, reducing energy consumption, noise on the valves, and makes installation easy.

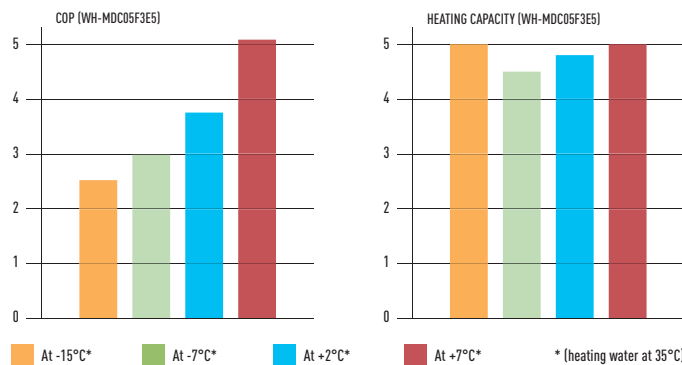
Comparison of energy consumption - Standard pumps vs A class pump



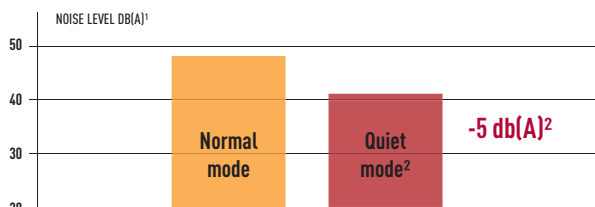
Equivalent to 100 €/year saving*

* Based on German market: Assuming Standard pump may vary depending on consumption and energy cost.

The new Panasonic High Connectivity house extremely high performance even at low temperature



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



1. Sound pressure measured at 1 m from the outdoor unit and at 1.5 m height.
2. At standard condition working at heating capacity at +7°C (heating water at 35°C) for two fans outdoor units. For one fan outdoor units, night mode reduction is 3dB(A).



AQUAREA HIGH PERFORMANCE BI-BLOC SINGLE PHASE HEATING ONLY - SDF HEATING AND COOLING - SDC 3 AND 5KW					
Kit	Single Phase Heating Only		Single Phase Heating and Cooling		
	KIT-WF03C3E5	KIT-WF05C3E5	KIT-WC03C3E5	KIT-WC05C3E5	
Indoor unit	WH-SDF03E3E5	WH-SDF05E3E5	WH-SDC03E3E5	WH-SDC05E3E5	
Outdoor unit	WH-UD03E5E5	WH-UD05E5E5	WH-UD03E5E5	WH-UD05E5E5	
Heating capacity at +7°C	kW	3,20	5,00	3,20	5,00
COP at +7°C ¹⁾		5,00	4,63	5,00	4,63
Heating capacity at +2°C	kW	3,20	4,20	3,20	4,20
COP at +2°C ¹⁾		3,56	3,11	3,56	3,11
Heating capacity at -7°C	kW	3,20	4,20	3,20	4,20
COP at -7°C		2,69	2,59	2,69	2,59
Cooling capacity at 35°C	kW	-	-	3,20	4,50
EER at 35°C (cooling water at 7/12°C)		-	-	3,08	2,69
Dimensions (Indoor) H x W x D	mm / kg	892 x 502 x 353 / 43	892 x 502 x 353 / 43	892 x 502 x 353 / 44	892 x 502 x 353 / 44
Dimensions (Outdoor) H x W x D	mm / kg	622 x 824 x 298 / 39	622 x 824 x 298 / 39	622 x 824 x 298 / 39	622 x 824 x 298 / 39
Sound pressure level	dB(A)	47	48	47	48
Operation range	Outdoor ambient °C	-20 to 35	-20 to 35	-20 to 35	-20 to 35



AQUAREA HIGH PERFORMANCE MONO-BLOC SINGLE PHASE HEATING ONLY - MDF HEATING AND COOLING - MDC					
Heating capacity at +7°C	Single Phase Heating Only		Single Phase Heating and Cooling		
	WH-MDF06E3E5	WH-MDF09E3E5	WH-MDC05F3E5	WH-MDC06E3E5	
COP at +7°C ¹⁾		6,00	9,00	5,00	9,00
Heating capacity at +2°C	kW	4,48	4,15	5,08	4,48
COP at +2°C ¹⁾		5,00	7,45	4,80	5,00
Heating capacity at -7°C	kW	3,45	3,14	3,75	3,45
COP at -7°C ¹⁾		5,15	7,70	4,50	5,15
Cooling capacity at 35°C	kW	2,68	2,12	2,98	2,68
EER at 35°C (cooling water at 7°C) ¹⁾		-	-	4,50	5,50
Sound pressure level	dB(A)	47	49	47	49
Dimensions H x W x D	mm	865 x 1283 x 320	865 x 1283 x 320	865 x 1.283 x 320	865 x 1.283 x 320
Weight	kg	112	112	107	112
Pump	No. of Speed	Variable Speed	Variable Speed	Variable Speed	Variable Speed
Input power	W	110	110	110	110
Operation range	Outdoor ambient °C	-20 to 35	-20 to 35	-20 to 35	-20 to 35

1) Heating water at 35°C



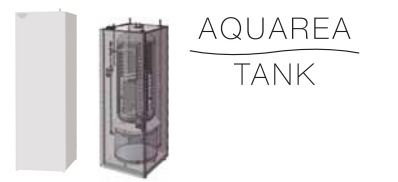
AQUAREA HIGH PERFORMANCE BI-BLOC SINGLE PHASE / THREE PHASE HEATING AND COOLING - SDC										
Kit	Single Phase (Power to indoor)					Three Phase (Power to indoor)				
	KIT-WC07F3E5	KIT-WC09F3E5	KIT-WC12F4E5	KIT-WC14F4E5	KIT-WC16F4E5	KIT-WC09F3E8	KIT-WC12F3E8	KIT-WC14F3E8	KIT-WC16F3E8	KIT-WC16F9E8
Indoor unit	WH-SDC07F3E5	WH-SDC09F3E5	WH-SDC12F4E5	WH-SDC14F4E5	WH-SDC16F4E5	WH-SDC09F3E8	WH-SDC12F3E8	WH-SDC14F3E8	WH-SDC16F3E8	WH-SDC16F9E8
Outdoor unit	WH-UD07F5E5	WH-UD09F5E5	WH-UD12F5E5	WH-UD14F5E5	WH-UD16F5E5	WH-UD09F5E8	WH-UD12F5E8	WH-UD14F5E8	WH-UD16F5E8	
Heating capacity at +7°C	kW	7,00	9,00	12,0	14,00	16,00	9,00	12,00	14,00	16,00
COP at +7°C ¹⁾		4,46	4,13	4,74	4,56	4,28	4,84	4,14	4,56	4,28
Heating capacity at +2°C	kW	6,55	6,70	11,40	12,40	13,00	9,00	11,40	12,40	16,00
COP at +2°C ¹⁾		3,34	3,13	3,44	3,36	3,28	3,59	3,44	3,36	3,28
Heating capacity at -7°C	kW	5,15	5,90	10,00	10,70	11,40	9,00	10,00	10,70	11,40
COP at -7°C ¹⁾		2,68	2,68	2,73	2,70	2,68	2,85	2,23	2,70	2,68
Cooling capacity at 35°C	kW	6,00	7,00	10,00	11,50	12,20	7,00	10,00	11,50	12,20
EER at 35°C (cooling water at 7°C)		2,61	2,41	2,81	2,64	2,56	3,17	2,81	2,64	2,56
Dimensions (Indoor) H x W x D	mm / kg	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353
Dimensions (Outdoor) H x W x D	mm / kg	795 x 900 x 320 / 66	1.340 x 900 x 320 / 101							
Sound pressure level	dB(A)	48	49	50	51	53	49	50	51	53
Operation range	Outdoor ambient °C	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35



AQUAREA HIGH PERFORMANCE MONO-BLOC SINGLE PHASE / THREE PHASE HEATING ONLY - MDF HEATING AND COOLING - MDC							
Heating capacity at +7°C	Single Phase				Three Phase		
	WH-MDF12C6E5	WH-MDF14C6E5	WH-MDF16C6E5	WH-MDF16C9E5	WH-MDF09C3E8	WH-MDF12C9E8	WH-MDF14C9E8
COP at +7°C ¹⁾		4,67	4,50	4,23	4,74	4,67	4,50
Heating capacity at +2°C	kW	11,40	12,40	13,00	9,00	11,40	12,40
COP at +2°C ¹⁾		3,41	3,32	3,25	3,53	3,41	3,32
Heating capacity at -7°C	kW	10,00	10,70	11,40	9,00	10,00	10,70
COP at -7°C ¹⁾		2,70	2,68	2,65	2,81	2,70	2,68
Cooling capacity at 35°C	kW	10,00	11,50	12,20	7,00	10,00	11,50
EER at 35°C (cooling water at 7°C) ¹⁾		2,78	2,61	2,54	3,11	2,78	2,61
Sound pressure level	dB(A)	50	51	53	49	50	51
Dimensions H x W x D	mm	1.410 x 1.283 x 320	1.410 x 1.283 x 320	1.410 x 1.283 x 320	1.410 x 1.283 x 320	1.410 x 1.283 x 320	1.410 x 1.283 x 320
Weight	kg	153	153	153	157	157	157
Pump	No. of Speed	3	3	3	3	3	3
Input power (Max.)	W	190	190	190	190	190	190
Operation range	Outdoor ambient °C	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35	-20 to 35

TANKS	Stainless Steel Tank		Enamelled Tank		Enamelled high efficiency Tank		Enamelled 2 coils Tank (for bi-valent Solar + HP)		
Model	WH-TD20E3E5	WH-TD30E3E5-1*	PAW-TE20E3STD*	PAW-TE30E3STD*	PAW-TE50E3STD*	PAW-TE20E3HI*	PAW-TE30E3HI*	PAW-TE30C2E3STD*	
Water volume	L	200	300	190	290	440	200	288	287
Maximum water temperature	°C	75	75	95	95	95	95	95	95
Dimensions Height / Diameter	mm	1.150 / 580	1.600 / 580	1.432 / 540	1.794 / 600	1.921 / 700	1.804 / 600	1.294 / 700	1.294 / 700
Weight	kg	49	65	65	85	222	78	139	145
Electric heater	kW	3	3	3	3	3	3	3	3
Power supply	V	230	230	230	230	230	230	230	230
Material inside tank		Stainless steel	Stainless steel	Enamelled	Enamelled	Enamelled	Enamelled	Enamelled	Enamelled
Exchange surface	m ²	1,4	1,8	1,90	2,55	6,20	2,25	3,20	2,4 (for HP) +1,1 (for solar or boiler)
Energy loss at 65°C ¹⁾	kWh/24h	1,9	2,3	1,6	1,8	2,4	1,2	1,8	2,7
3 Way valve included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20 m temperature sensor cable included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Heat up time	Valuation	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Energy losses	Valuation	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Efficiency of the tank	Valuation	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Warranty		10 years	10 years	7 years	7 years	7 years	7 years	7 years	7 years
Maintenance required		No	No	Yearly	Yearly	Yearly	Yearly	Yearly	Yearly

1) Insulated tested under EN12897. // * Available from March 2014.



AQUAREA TANK, TANKS AND BUFFER TANK IN ONE!	
Tanks and buffer tank in one!	Standard Sanitary PAW-TD20B8E3-MDS
Water volume	L 185 (for DHW tank) / 80 (for buffer tank)
Maximum water temperature	°C 100
Dimension H x W x D	mm 1.810 x 600 x 632
Weight	kg 150
Electric heater	kW 3
Power supply	V 230 - 2p
Material inside tank	Stainless steel
Exchange surface	m ² 2,3
Energy loss at 65°C ¹⁾	kWh/24h 1,3
A class pump	Number of speed Stepless (800-4250 rpm)
Pressure drop (Min / Max)	kPa 5 / 6
Input power (Min / Max)	W 3 / 45
3 Way valve included	Yes
Safety thermostat with contact for failure part of	Yes
E-Heating	Yes
Location of the electrical heater	Mid
Electrical backup heater on the buffer tank	Optional

Internet Control Ready

Internet Control is a next generation system providing a user-friendly remote control of air conditioning or heat pump units from everywhere, using a simple Android or iOS smartphone, tablet or PC via internet.

5,08 COP high efficiency

AQUAREA HIGH PERFORMANCE

Exceptional Seasonal Heating Efficiency based on the new ErP regulation. Higher the SCOP ratings mean greater efficiency. Save all the year while heating!

High efficiency heating

INVERTER+

Inverter+ System. The A Inverter+ system provides energy savings of up to 30% compared to non Inverter models. Both you, and nature, wins!

Environmentally friendly refrigerant

R410A

Refrigerant R410A / R407C. R410A / R407C offers optimal performance and involves no environmental cost since it does not harm the ozone layer.

Down to -20°C in heating mode

OUTDOOR TEMPERATURE

Up to -20°C in Heating Mode. The Heat Pumps works in heat pump mode with an outdoor temperature as low as -20°C.

Boiler connection

RETROFIT

Renovation. Our Aquaarea heat pumps can be connected to an existing or new boiler for optimum comfort even at very low outdoor temperatures.

Solar panels connection

SOLAR KIT

Solar Kit. For even greater efficiency, our Aquaarea heat pumps can be connected to photovoltaic solar panels with an optional kit.

Domestic hot water

DHW

DHW With Aquaarea you can also heat your domestic hot water at a very low cost with the optional hot water cylinder.

Easy control by BMS

CONNECTIVITY

The communication port is 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 year compressor warranty

5 Years Warranty. We guarantee the compressors in the entire range for five years.

Panasonic

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

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