

Panasonic

UP TO 75%
ENERGY
SAVINGS

NEW PANASONIC AQUAREA DHW

Heat Pump Water Heaters



NEW PANASONIC AQUAREA DHW 2014 / 2015



NEW AQUAREA DHW

DHW tank with built-in Heat Pump.

The Heat Pump is one of the most energy efficient and cost effective methods of water heating. The pump is mounted on the storage tank and draws energy from the ambient air, using that extra energy source to heat the water up to 55°C.

NEW Aquarea DHW Advantages



High-technology rotational compressor ensures higher energy efficiency and a higher coefficient of performance, which means major energy savings – up to 75 percent.



Wrapped around the inside of the outer cover of the tank, it prevents the build-up of limescale, extends the useful life of the equipment and improves safety.



The dimensions and heating capability of a medium volume Aquarea DHW tank can easily replace an existing electric water heater. Its small size allows it to be installed in spaces where previously a conventional electric water heater would be installed.



Impressive tank protection is provided through the use of superior super-clean enamel and a large magnesium element. These ensure durability even in the harshest operating conditions without harmful additives in the water.



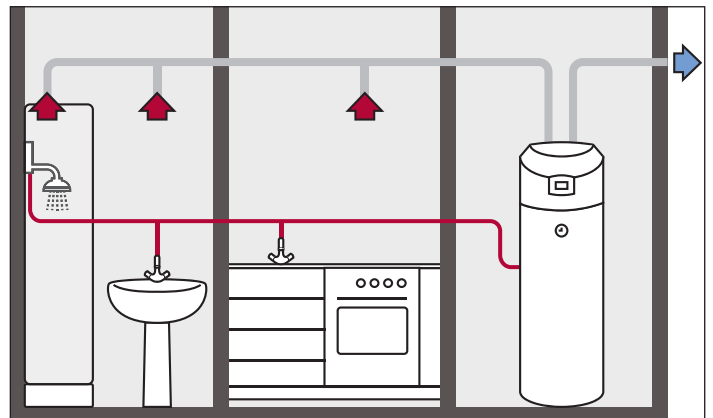
User-friendly electronic controller with LCD touch screen display on Aquarea DHW:

- Temperature settings and display
- Time and day settings and display
- Display of available hot water
- Time and day programming
- Fast heating "TURBO" mode
- Heating on higher temp. (75°C)
- Setting a several day absence
- Independent ventilation function
- Error diagnostic



Modern buildings are characterized by tightly sealed windows and doors, and efficient wall insulation. Aquarea DHW makes it possible to ventilate the home while using the exhaust hot air for the heating of domestic water at the same time. Cool air can be piped out of the building or into any part of the home that requires cooling. Aquarea DHW design further serves to preserve the functionality of the room in which it is installed.

Example of ventilation with air ducts connection to Aquarea DHW



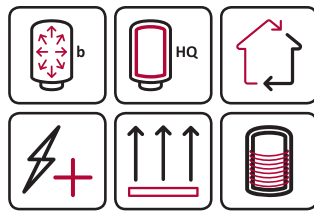
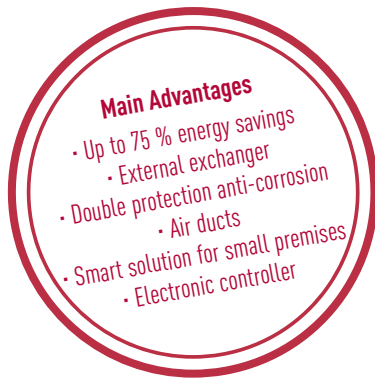
Bathroom examples

The wall-mounted unit takes up warm, moist air, cools it down and pumps it outside the bathroom.



Wall mounted heat pumps allows connecting air ducts to the heat pump and therefore possibility of selecting inlet and outlet air points.





Floor standing Aquarea DHW

High capacity: 200/285l.

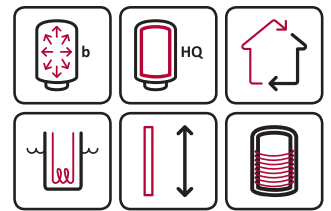
The floor standing Aquarea DHW is designed to achieve levels of high efficiency, particularly with high volumes of water, from 200l to 285l of hot water capacity. With this range it is also possible to connect additional heat source such as solar energy. The heat pump cools and de-humidifies the air pumped either from outdoors or from within the building. By choosing the point of air capture and exhaust, you can ventilate and de-humidify some rooms, while the extracting the cooled air either into the environment or into another room that you wish to cool.

Technical focus

- Capacity: 200 and 300 litres
- Upright floor version
- Operating range from +7°C to +35°C
- Additional one or two tubular heat exchangers for combination with other energy sources (central heating system, solar energy, etc.)



AQUAREA DHW



Wall mounted Aquarea DHW

Mid Capacity: 80/100/120l.

Designed for maximum energy savings, Aquarea DHW's new medium tank volume has been designed as a perfect replacement for the electric water heater, available in 80, 100 and 120l. The conventional medium tank volume has been boosted with a heat pump generator, which delivers superior energy performance. The air-to-water heat pump design with air ducts enables the selection of inlet and outlet points for the air, which allows it to be used in various parts of the home (kitchen, bathroom, sunrooms, etc.).

Technical focus

- Capacity: 80, 100 and 120 litres
- Vertical Wall mounting
- Operating range from -7°C to +35°C
- LCD touch screen display

Aquarea DHW

- Electronic controller
- Rotation compressor
- Wrap around condenser
- Tank made of high quality steel sheet, enamel coated at 850°C
- Mg anode for additional anticorrosion protection of the tank
- High quality heat insulation
- Eco friendly refrigerant R134a
- Legionella Control Programme





PAW-DHWM200ZC // PAW-DHWM300ZC // PAW-DHWM300ZE

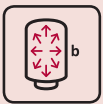
| Model | | PAW-DHWM200ZC | PAW-DHWM300ZC | PAW-DHWM300ZE |
|---|-------------------|--------------------|--------------------|--------------------|
| Volume | l | 200 | 285 | 280 |
| Dimensions of Connections | | | | |
| Height / with air ducts | mm | 1.540 / 1.680 | 1.940 / 2.080 | 1.940 / 2.080 |
| Diameter | mm | 660 | 660 | 660 |
| Connections to the water supply network | | G 1 | G 1 | G 1 |
| Dimensions of air ducts | mm/m | Ø 150/10 | Ø150/10 | Ø150/10 |
| Net weight / with water | kg | 120 / 320 | 149 / 434 | 166 / 446 |
| Heat Pump | | | | |
| Nominal electrical power | W | 620 | 620 | 620 |
| Heating up period A7 / W10-55 ¹ | 7 h 22 min | 11h 10 min | 11h 10 min | |
| Heating up period A15 / W10-55 ² | — | — | — | |
| Energy consumption in heating up period A7 / W10-55 ¹ | kWh | 3,25 | 4,76 | 4,76 |
| Energy consumption in heating up period A15 / W10-55 ² | kWh | — | — | — |
| Reference tapping cycle | L | XL | XL | |
| Energy consumption by chosen cycle A7 / W10-55 ¹ | kWh | 4,9 | 7,26 | 7,26 |
| Energy consumption by chosen cycle A15 / W10-55 ² | kWh | — | — | — |
| COP DHW (A7 / W10-55) EN 16147 ¹ | | 2,6 | 2,8 | |
| COP DHW (A15 / W10-55) EN 16147 ² | | — | — | — |
| COP EN 255-3 | | 4,2 | 4,2 | 4,2 |
| Maximum amount of usable water (minimum 40°C) ¹ | l | 252,08 | 345,76 | 345,76 |
| Standby power input according to EN16147 | W | 47 | 40 | 40 |
| Sound power / Sound Pressure on 1m | dB / dB(A) | 56,7 / 44 | 56,7 / 44 | 56,7 / 44 |
| Refrigerant | | R134a | R134a | R134a |
| Quantity of refrigerant | g | 780 | 780 | 780 |
| Operating range - air temperature | °C | +7 / +35 | +7 / +35 | +7 / +35 |
| Nominal air flow rate | m ³ /h | 480 | 480 | 480 |
| Maximum pressure Drop | Pa | 90 | 90 | 90 |
| Maximum temperature / Anti legionella program | °C | 55 / 65 | 55 / 65 | 55 / 65 |
| Voltage / Frequency | V / Hz | 230 / 50 | 230 / 50 | 230 / 50 |
| Maximum power consumption | W | 620 | 620 | 620 |
| Storage Tank | | | | |
| Enamelled steel tank / Protective magnesium anode | | + / + | + / + | + / + |
| Average insulation thickness | mm | 57 | 57 | 57 |
| Degree of protection | | IP 21 | IP 21 | IP 21 |
| Heat Exchanger - Bottom | | | | |
| Connection | | G 1 | G 1 | G 1 |
| Exchanger area | m ² | 1,05 | 1,6 | 1,6 |
| Volume | l | 6,6 | 10 | 10 |
| Heating Power ³ | kW | 25,8 | 42,7 | 42,7 |
| Heat Exchanger - Top | | | | |
| Connection | | — | — | G 1 |
| Exchanger area | m ² | — | — | 1,09 |
| Volume | l | — | — | 6,8 |
| Heating Power ³ | kW | — | — | 26,9 |
| Working Pressure | | | | |
| Storage tank / Heat Exchanger | Mpa (bar) | 0,6 (6) / 1,2 (12) | 0,6 (6) / 1,2 (12) | 0,6 (6) / 1,2 (12) |
| Maximum Temperature | | | | |
| Storage tank / Heat Exchanger | °C | 85 / 85 | 85 / 85 | 85 / 85 |
| Option | | | | |
| Installation of an elec. heater to the connecting bushing G 6/4 | | + | + | + |
| Transport Data | | | | |
| Packaging dimensions | mm | 750 x 750 x 1.700 | 750 x 750 x 2.100 | 750 x 750 x 2.100 |



PAW-DHWM80ZNT // PAW-DHWM100ZNT // PAW-DHWM120ZNT

| Model | | PAW-DHWM80ZNT | PAW-DHWM100ZNT | PAW-DHWM120ZNT |
|---|-------------------|--------------------|--------------------|--------------------|
| Volume | l | 80 | 100 | 120 |
| Dimensions of Connections | | | | |
| Dimensions H x W x D | mm | 1.197 x 506 x 533 | 1.342 x 506 x 533 | 1.497 x 506 x 533 |
| Connections to the water supply network | | G 1/2 | G 1/2 | G 1/2 |
| Dimensions of air ducts | mm/m | Ø125 (150x70) / 10 | Ø125 (150x70) / 10 | Ø125 (150x70) / 10 |
| Net weight/with water | kg | 58 / 138 | 62 / 162 | 68 / 188 |
| Heat Pump | | | | |
| Nominal electrical power | W | 250 | 250 | 250 |
| Heating up period A7 / W10-55 ¹ | | 5 h 20 min | 6 h 50 min | 8 h 41 min |
| Heating up period A15 / W10-55 ² | | 4 h 40 min | 5 h 40 min | 6 h 40 min |
| Energy consumption by heating up period A7 / W10-55 ¹ | kWh | 1,12 | 1,43 | 1,78 |
| Energy consumption by heating up period A15 / W10-55 ² | kWh | 0,99 | 1,19 | 1,41 |
| Reference tapping cycle | M | M | M | M |
| Energy consumption by chosen cycle A7 / W10-55 ¹ | kWh | 2,45 | 2,35 | 2,51 |
| Energy consumption by chosen cycle A15 / W10-55 ² | kWh | 2,04 | 2,05 | 2,08 |
| COP DHW (A7 / W10-55) EN 16147 ¹ | | 2,65 | 2,63 | 2,61 |
| COP DHW (A15 / W10-55) EN 16147 ² | | 3,1 | 3,1 | 3,1 |
| COP EN 255-3 | | 4,2 | 4,2 | 4,2 |
| Maximum amount of usable water (minimum 40°C) ² | l | 90 | 130 | 142 |
| Standby power input according to EN16147 | W | 19 | 20 | 27 |
| Sound power / Sound pressure on 1m | dB / dB(A) | 51 / 39,5 | 51 / 39,5 | 51 / 39,5 |
| Refrigerant | | R134a | R134a | R134a |
| Quantity of refrigerant | g | 540 | 540 | 540 |
| Operating range - air temperature | °C | -7 / +35 | -7 / +35 | -7 / +35 |
| Working air flow rate | m ³ /h | 100-230 | 100-230 | 100-230 |
| Pressure drop by 150 m ³ /h (60%/80%) ⁴ | Pa | 70 (90) | 70 (90) | 70 (90) |
| Electrical Specifications | | | | |
| Maximum power consumption | W | 2350 | 2350 | 2350 |
| Number of electrical heaters x power | W | 2 x 1.000 | 2 x 1.000 | 2 x 1.000 |
| Voltage / Frequency | V / Hz | 230 / 50 | 230 / 50 | 230 / 50 |
| Electric protection | A | 16 | 16 | 16 |
| Degree of protection | | IP24 | IP24 | IP24 |
| Storage Tank | | | | |
| Enamelled steel tank / Protective magnesium anode | | + / + | + / + | + / + |
| Average insulation thickness | mm | 40 - 85 | 40 - 85 | 40 - 85 |
| Working pressure | Mpa (bar) | 0,6 (6) | 0,6 (6) | 0,6 (6) |
| Maximum Temperature | | | | |
| Heating with heat pump | °C | 55 | 55 | 55 |
| Heating with electrical heater | °C | 75 | 75 | 75 |
| Transport Data | | | | |
| Packaging dimensions | mm | 575 x 600 x 1.365 | 575 x 600 x 1.510 | 575 x 600 x 1.665 |

- 1) Heating of sanitary water up to 55°C with inlet air temperature at 7°C, humidity at 89% and inlet water temperature at 10°C. According to EN16147.
- 2) Heating of sanitary water up to 55°C with inlet air temperature at 15°C, humidity at 74% and inlet water temperature at 10°C. According to EN16147.
- 3) Heating of Sanitary water from 10°C up to 45°C with the inlet temperature of heating medium at 80°C and with flow rate 3000 l/h. According to EN16147.
- 4) Normal fan speed 60%, higher fan speed - special setting on 80%.



Pressurised



High-Quality insulation



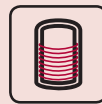
Air ducts



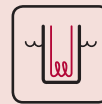
Additional heating source



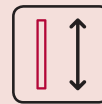
Vertical floor mounting



External exchanger



Indirect tubular air heating element



Vertical wall mounting

Panasonic

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