



AQUAREA

**NEW AQUAREA RANGE**  
**HIGH-EFFICIENCY**  
**HEAT PUMP TECHNOLOGY**





AQUAREA

## AQUAREA'S NEW AIR-TO-WATER HEAT PUMP FOR RESIDENTIAL APPLICATION

The biggest line-up on the market to meet with your demand! Cost-effective and environmentally friendly

**NEW**  
2012

AQUAREA  
PRO  
BBO

## AQUAREA'S NEW AIR-TO-WATER HEAT PUMP FOR RESIDENTIAL COMMERCIAL, AND CHILLER APPLICATION

Up to 80 kW capacity on a easy to install system

## PANASONIC'S NEW AQUAREA AIR-TO-WATER SYSTEM PROVIDES MAXIMUM EFFICIENCY AND CAPACITY EVEN AT -20 °C

Panasonic's new Aquarea system, based on high-efficiency heat pump technology, not only heats your home and hot water, but also cools your home in summer with incredible performances. This creates perfect comfort whatever the weather conditions, even at outdoor temperatures as low as -20°C. Panasonic has design new Heat Pumps adopted to new demand for low consumption houses, with high efficiency and low capacity.

**NEW**  
2012

### ENERGY SAVING

high efficiency heating  
**INVERTER+**

**INVERTER+ SYSTEM**  
The A Inverter+ system provides energy savings of up to 30% compared to non inverter models. You win and nature wins.

environmentally friendly refrigerant  
**R410A**

**REFRIGERANT R410A**  
R410A 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 air conditioner works in heat pump mode with an outdoor temperature as low as -20°C.

### HIGH CONNECTIVITY

boiler connection  
**RETROFIT**

**RENOVATION**  
Our Aquarea heat pumps can be connect to an existing or new boiler for optimum comfort even at very low outside temperatures.

solar panels connection  
**SOLAR KIT**

**SOLAR KIT**  
For even greater efficiency, our Aquarea heat pumps can be connected to solar panels with an optional kit.

domestic hot water  
**DHW**

**DHW**  
With Aquarea you can also heat your domestic hot water at a very low cost with the optional hot water cyclinder.

5 year compressor warranty

**5 YEARS WARRANTY**  
We guarantee the compressors in the entire range for five years.



## "GREEN" HIGH-EFFICIENT HEATING WITH PANASONIC'S NEW AIR-TO-WATER HEAT PUMP SYSTEMS

**At the forefront of energy innovation, Aquarea is resolutely positioned as a "green" heating and air-conditioning system.**

Aquarea is part of a new generation of heating and air-conditioning systems that use a renewable, free energy source – the air – to heat or cool the home and to produce hot water. The Aquarea heat pump is a much more flexible and cost-effective alternative to a traditional fossil fuel boiler.

### An ideal heating solution for new and old buildings:

- A wide range from 3 to 16 kW, single and three phase, mono-bloc and bi-bloc
- 3 Versions:
  - the Standard Heat Pump
  - the High temperature Heat Pump (output water temperature of 65°C)
  - the Total capacity Heat Pump even at -20°C
- The High-efficiency Heat Pump which operates at outside temperatures as low as -20°C
- Reduces energy costs with its COP of 4.74\*
- Reduces energy consumption and CO<sub>2</sub> emissions
- Provides cooling in summer
- Highly flexible:
  - Connects to an existing heating system
  - Connects to solar panels

At the forefront of energy innovation, Aquarea is resolutely positioned as a "green" heating and air-conditioning system. Aquarea is part of a new generation of heating and air-conditioning systems that use a renewable, free energy source; air, to heat or cool the home and to produce hot water. The Aquarea heat pump is a much more flexible and cost-effective alternative to a traditional fossil fuel boiler.

We are surrounded by free, inexhaustible energy: supplied by the sun present in all spheres of our environment, in the air, the ground, the groundwater...

Heat pumps enable us to recover this free, inexhaustible energy and to use it to heat our homes. These systems have the huge advantage, apart from reducing your electricity bill, of saving fossil fuels while at the same time limiting greenhouse gas emissions\*.

Thus, Panasonic's Aquarea system is an air/water heat pump system that uses calories from the outdoor air and transmits them via a heat exchanger to the water used to heat your home in winter, in addition, some Aquarea models can even be used to cool your house in summer timer and produce your hot water all year round.

\* We note that ADEME (French environmental and energy management agency) encourages consumers to choose heating and cooling systems that use heat pump systems.

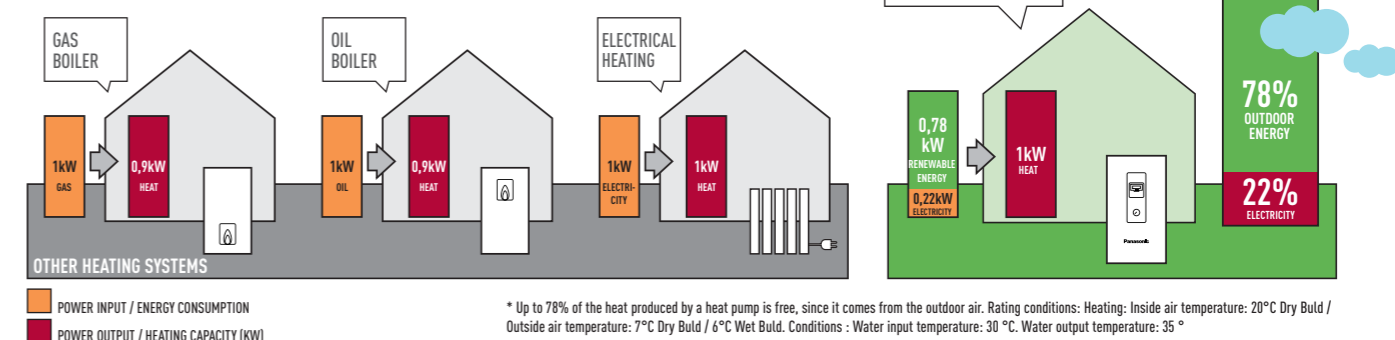
UP TO  
**78%**  
energy savings\*



### UP TO 78% ENERGY SAVINGS\*

Panasonic's Aquarea heat pump provides savings of up to 78% on heating expenses compared with electrical heaters. For example, the Aquarea system of 9 kW has a COP of 4,74 which means that for every kW of electricity consumed, it returns 4,74 kW of energy, i.e. 3,74 kW more than a conventional electrical heating system which has a maximum COP of 1. This is equivalent to a 78% saving.

Consumption can be further reduced by connecting solar panels to the Aquarea system.



\* COP: energy efficiency in heating mode. COP of 4.74 for the 9kW WH-MDF09C9E8 or WH-UD09CE8 models at an outside temperature of 7 °C, and for water, input and output temperatures of 30 °C and 35 °C (according to EN 14511-2) We note that ADEME (French environmental and energy management agency) encourages consumers to choose heating and cooling systems that use heat pump systems.

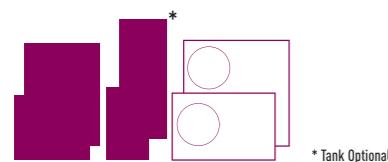


## PANASONIC HAS DESIGNED A COMPLETELY NEW LINE-UP TO GIVE THE BEST TO OUR CUSTOMERS

### THERE ARE SEVERAL TYPES OF HEAT PUMP:

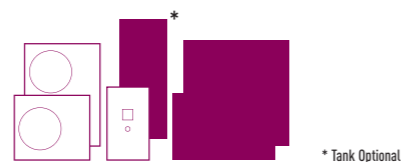
#### The mono-bloc system

It only has an outdoor unit. The installation doesn't require a refrigerated connection and is only connected to the heating system.



#### The bi-bloc system

This is formed by an outdoor unit and a hydraulic module, normally located in the utility room or garage.



## AQUAREA INCREASE LINE-UP!

- New 3/5 BI-bloc for low consumption houses
- New 6/9 Mono-bloc Heat Pumps
- New line-up of high temperature Heat Pumps (output water temperature of 65°C)
- New line-up of Total capacity Heat Pumps even at -15°C

### WHICH PRODUCT FOR WHICH APPLICATION?



#### AQUAREA HIGH CONNECTIVITY

For a house with low temperature radiators or floor heating, our high connectivity Aquarea heat pump is a good solution. This solution can work as a stand-alone unit or can be combined with a gas or oil boiler depending on requirements. This solution has the best ratio for heating capacity and efficiency.



#### AQUAREA HT

For a house with high temperature radiators (for example, cast iron radiators), the Aquarea High Temperature Solution is probably the most adequate as Aquarea HT provides output water temperatures of 65°C even at -15°C. Aquarea HT is able to deliver 65°C with the Heat Pump alone.

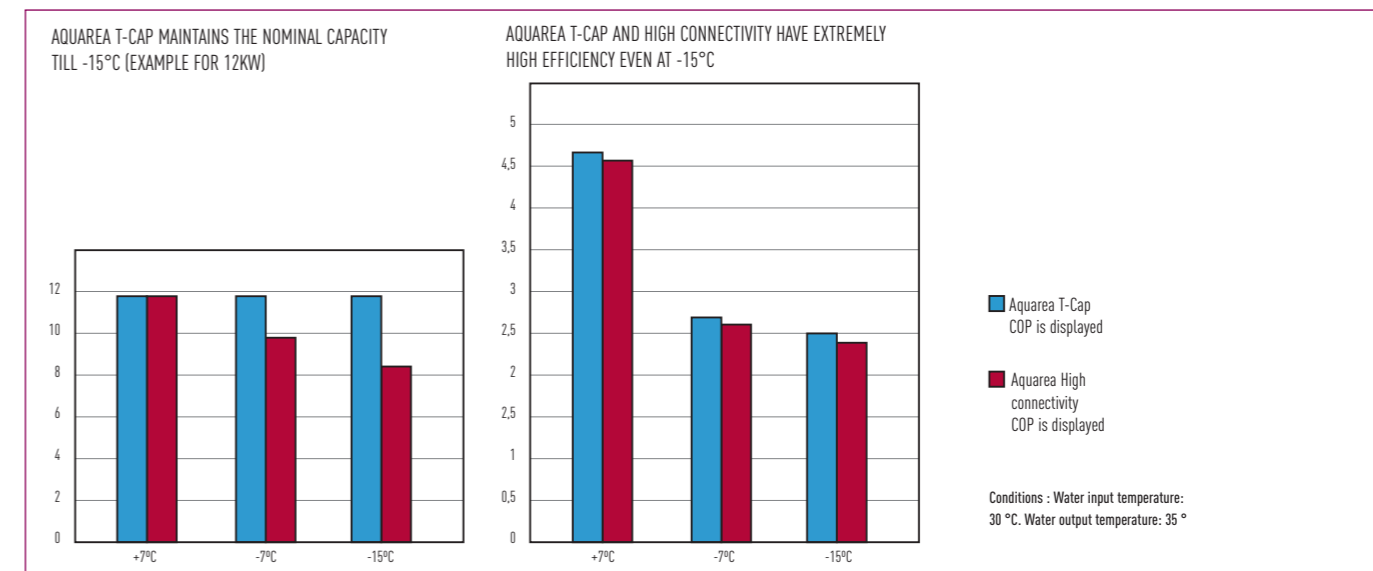


#### AQUAREA T-CAP

If the most important aspect is to keep nominal capacities even at temperatures of -7°C or -15°C. This ensures that there is always enough capacity to heat the house without help from an external boiler – even at extremely low temperatures.

Aquarea T-cap always has high efficiency and high heating capacity even at extremely low temperatures. With Aquarea T-Cap, you can always enjoy high savings.

### AQUAREA T-CAP AND HIGH CONNECTIVITY COMPARISON



\*Tentative spec. Conditions : Water input temperature: 30 °C. Water output temperature: 35 °; outside temperature: +7°C. Mini mono bloc is perfect where space is limited ie balcony.

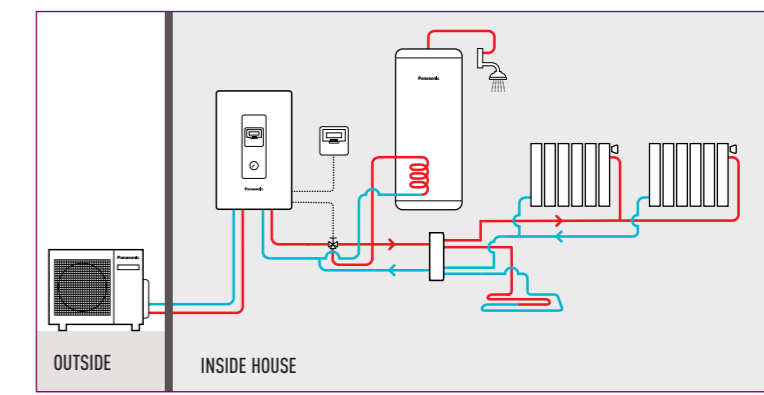


**NEW 3/5, 6/9 kW  
FOR LOW  
CONSUMPTION HOUSES**

down to  
**-20°C** in  
heating mode  
OUTDOOR  
TEMPERATURE

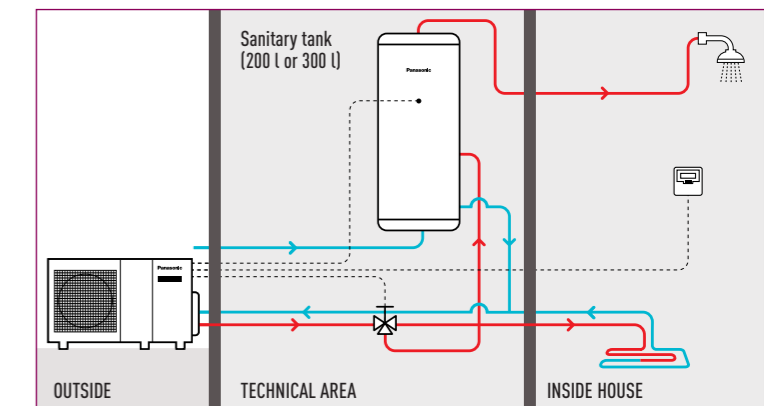
**BI-BLOC APPLICATION**

EXAMPLE LOW CONSUMPTION HOUSE + SANITARY HOT WATER

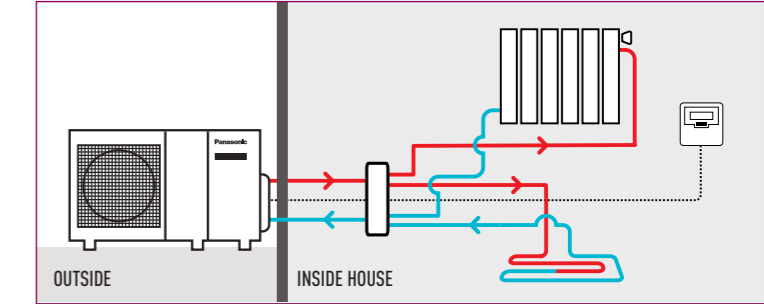


**MONO-BLOC APPLICATION**

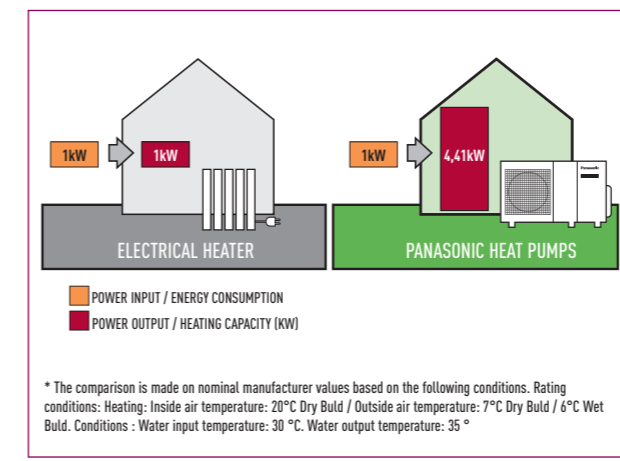
EXAMPLE HEATING + SANITARY HOT WATER



EXAMPLE HEATING PLUG AND PLAY SYSTEM



**COP COMPARISON**



**TECHNICAL BENEFITS**

- Plug and play heating system
- No indoor box needed
- Extremely compact system
- 3 kW heater included
- High efficiency even at -20 degrees

**TECHNICAL ELEMENTS**

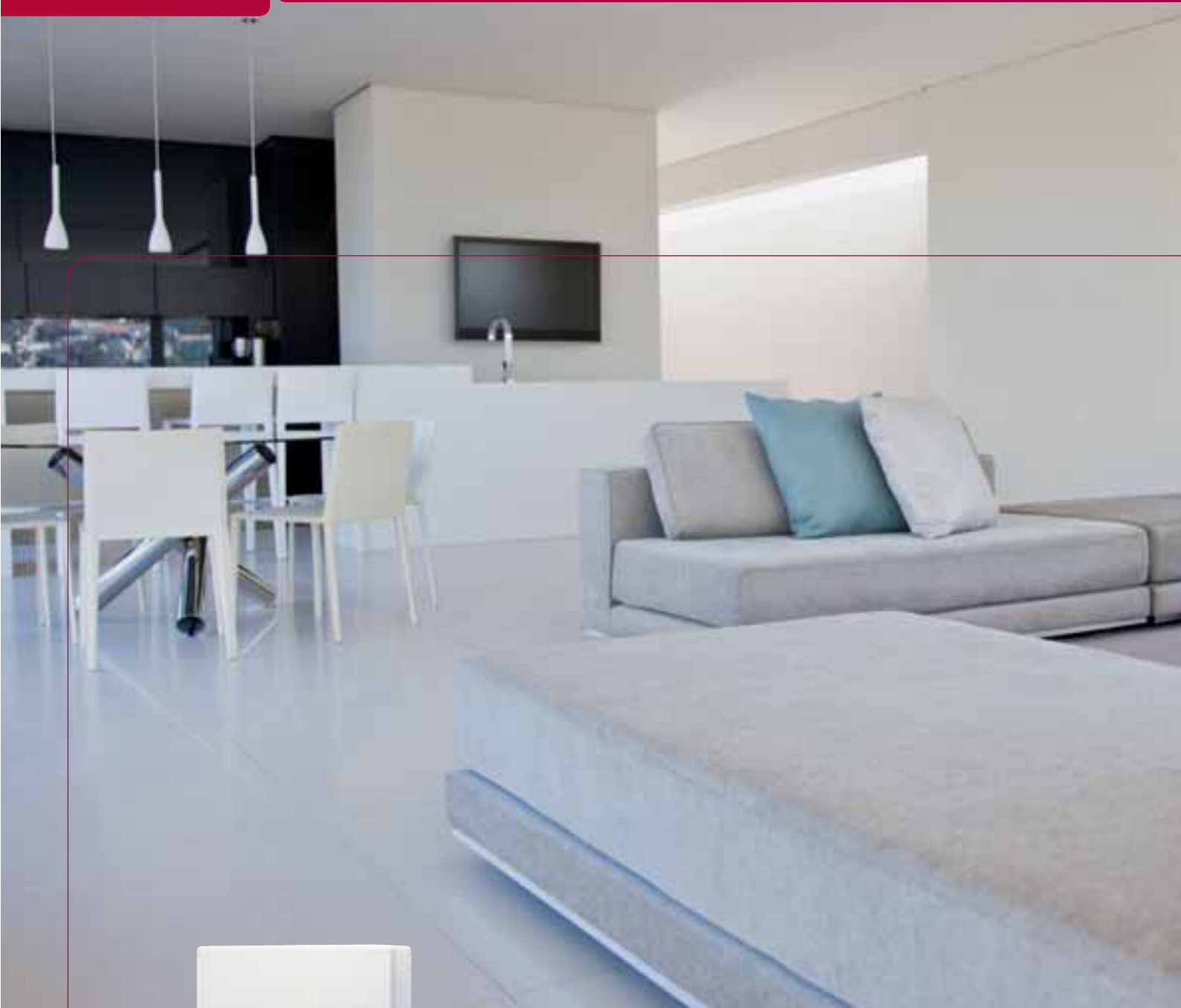
- Mono-bloc unit includes:
  - Heat exchanger
  - 3 speed hot water circulator
  - 6 l expansion vessel
  - Safety valve
  - Pressure gauge
  - 3 kW electrical heater

**NEW AQUAREA 3/5 AND 6/9 kW BI-BLOC MONO-BLOC AIR TO WATER HEAT PUMP**  
 MAXIMUM SAVINGS, MAXIMUM EFFICIENCY,  
 MINIMUM CO<sub>2</sub> EMISSIONS, MINIMUM OF SPACE

Panasonic has designed the new Aquarea Bi-bloc Mono-bloc heat pump for houses which have high performance requirements but limited space to install the outdoor unit. Whatever the weather, Aquarea will always give you maximum efficiency, even at -20 degrees! The New Aquarea is easy to install on new or existing installations, in all type of houses.

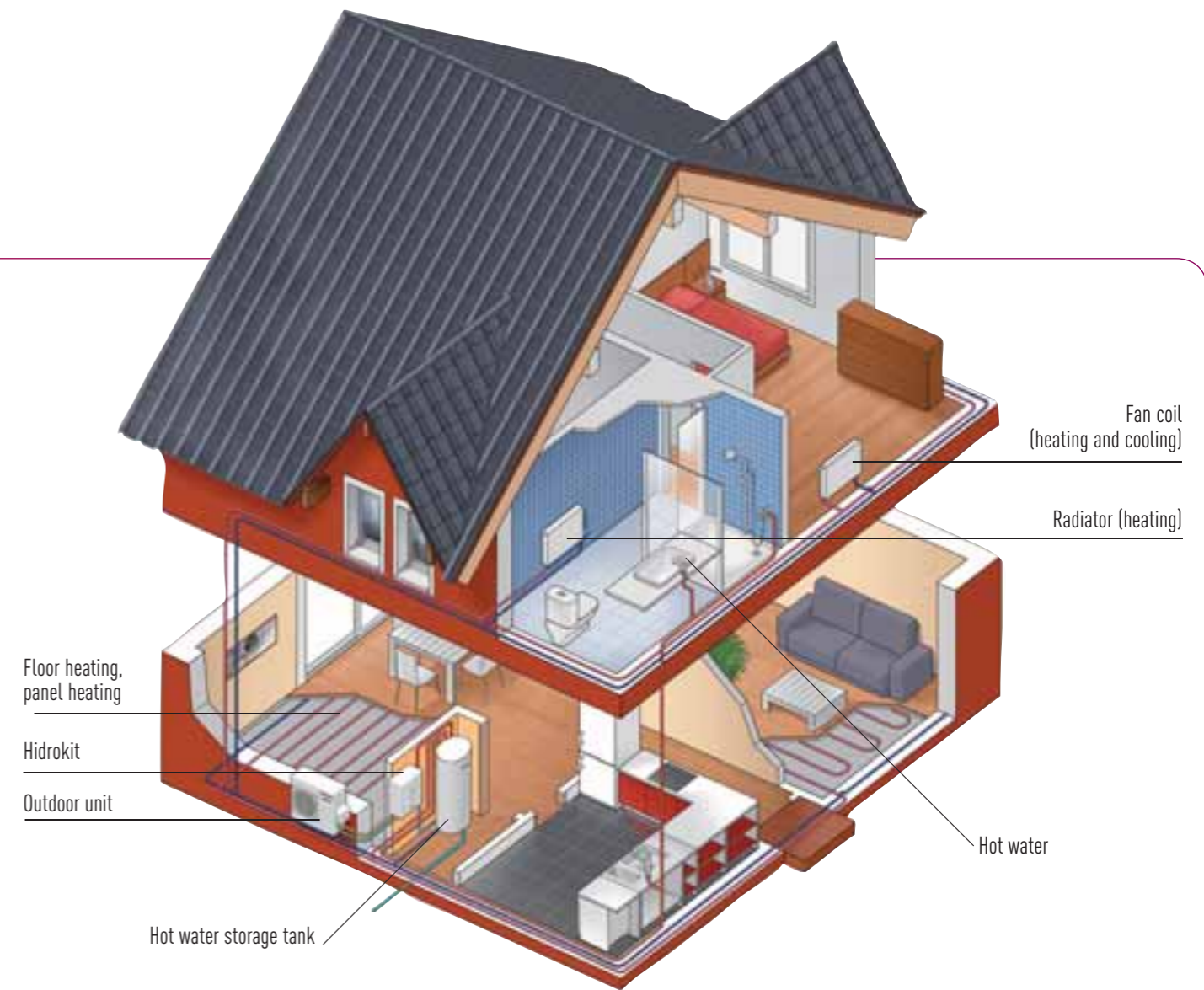


**NEW  
2012**



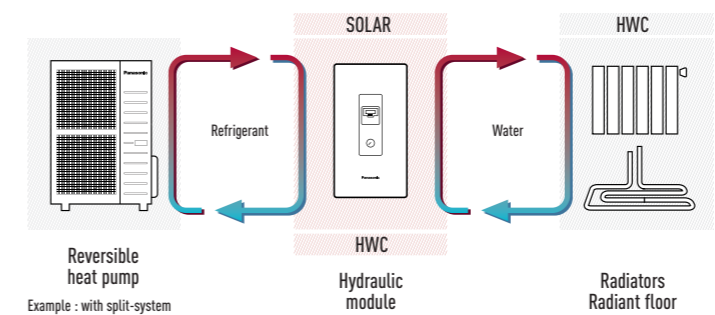
### A COMPACT DESIGN: EASY TO INSTALL AND MAINTAIN

Aquarea is a very easy heating and air conditioning system to install either in new or old buildings. Panasonic's Aquarea air to water system provides a considerable reduction on installation and maintenance costs. For new buildings, no drilling or excavation work is necessary to capture the heat, unlike geothermal installations, nor any gas connection, chimneys or fuel reservoirs. For retrofits or refurbishing, it is easy to connect to an existing heating system with low-temperature radiators or under floor heating.



### HOW DOES THE AQUAREA SYSTEM WORK ?

An air to water heat pump system uses heat energy present in the outdoor air to heat the house, cool it and also to produce hot water. The Aquarea system therefore uses free energy to heat or cool your home. It only consumes electricity to operate the compressor, the electronics, the pumps and in the event of very low temperatures, the electric elements. The result is very high efficiency and real energy savings.



### THERE ARE SEVERAL TYPES OF HEAT PUMP:

- The bi-bloc system  
This is formed by an outdoor unit and a hydraulic module, normally located in the utility room or garage. This configuration requires refrigerant pipes between the two units but is easily integrated in the house and can be connected to an existing boiler, for example.
- The mono-bloc system  
It only has an outdoor unit. The installation doesn't require a refrigerated connection and is only connected to the heating system. This system is therefore easier to install, but requires more outdoor space.



## COMFORT, SAVINGS AND POWER EVEN AT VERY LOW TEMPERATURES

### Panasonic's inverter+ system

After quickly reaching the selected temperature, the Inverter+ system will gradually adjust the power in order to maintain a constant temperature. Thus, there will not be any sudden changes in temperature and the capacity of the power also guarantees a constant and pleasant temperature, even when the outside temperature changes.

### Maximum efficiency even at extremely low temperatures

The Aquarea range has been specially designed to provide maximum efficiency even at extreme temperatures when compared with electrical heaters or gas boilers.

SDF/SDC/MDF/MDC	7 kW	9 kW	12kW	14 kW	16 kW
Heating Capacity at +7°C (kW)	7	9	12	14	16
COP at +7°C with heating water temperature at 35°C	4,4	4,74	4,67	4,5	4,23
Heating Capacity at +2°C	6,55	9	11,4	12,4	13
COP at +2°C with heating water temperature at 35°C	3,31	3,53	3,4	3,32	3,25
Heating Capacity at -7°C (kW)	5,15	9	10	10,7	11,4
COP at -7°C with heating water temperature at 35°C	2,65	2,81	2,7	2,62	2,55
Heating Capacity at -15°C (kW)	4,6	8,3	8,9	9,5	10,3
COP at -15°C with heating water temperature at 35°C	2,3	2,55	2,43	2,35	2,33

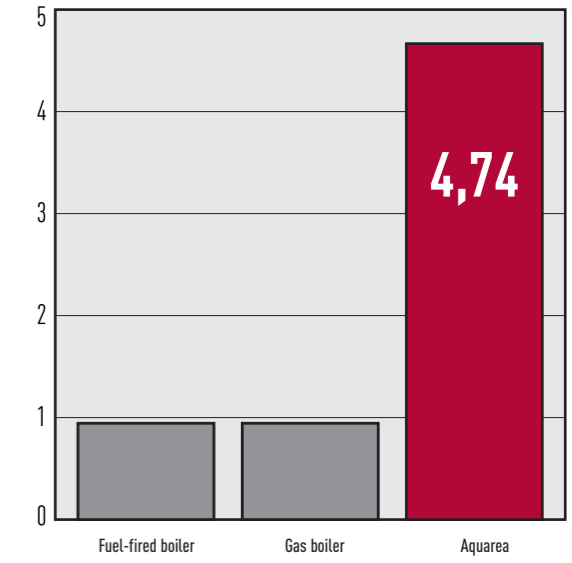
SXF/SXC/MXF/MXC	9 kW	12 kW
Heating Capacity at +7°C (kW)	9	12
COP at +7°C with heating water temperature at 35°C	4,74	4,67
Heating Capacity at +2°C	9	12
COP at +2°C with heating water temperature at 35°C	3,53	3,4
Heating Capacity at -7°C (kW)	9	12
COP at -7°C with heating water temperature at 35°C	2,81	2,7
Heating Capacity at -15°C (kW)	9	12
COP at -15°C with heating water temperature at 35°C	2,54	2,4

Conditions : Water input temperature: 30 °C. Water output temperature: 35 °.  
\* Tentative specifications

## HEAT PUMPS: MORE EFFICIENT THAN OTHER HEATING SYSTEMS

Panasonic heat pumps have a maximum COP of 4.74 at + 7°C which makes them much more efficient than fuel-fired boilers, gas boilers and electrical heaters.

## BEST EFFICIENCY COMPARED TO OTHER HEATING EFFICIENCY SYSTEMS

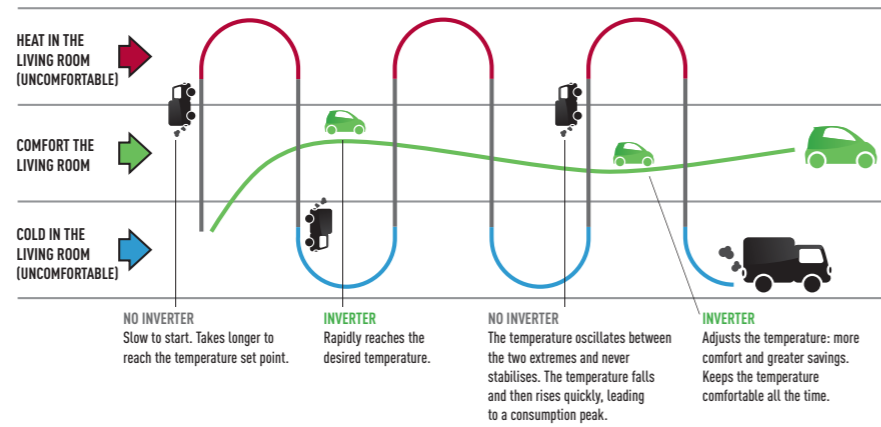


## INVERTER+ COMPRESSOR FOR EVEN GREATER EFFICIENCY

With over 100 million compressors supplied, Panasonic has demonstrated its status as leader and the excellent quality and reliability of its heat pumps. With a Panasonic Inverter+ compressor, you can save up to 30% energy compared to a traditional system no inverter.

### THE ADVANTAGES OF INVERTER AIR CONDITIONERS

Comparing Inverter and non-Inverter air conditioners.



## AQUAREA DESIGNER

Using Panasonic's Aquarea Designer, projects can be developed simply and easily, by either using the Quick Design or Expert Design options. Each allows the engineer to build up the project data in a simple step-by-step process and choose to output reports (in either Quick or Large formats) as HTML files or as print outs. To create the useful reports, project data is input, including:

- Heated area
- Heating requirement
- Heating flow and return temperatures
- Climate data (from a simple drop-down menu) including outdoor design temperature
- Type of hot water tank, storage capacity and hot water target temperature.

Aquarea Designer will calculate the project's energy costs in terms of hot water, heating and pumping. It will show the equipment running times and calculate the Annual COP (coefficient of performance). It then allows the designer to show clients a comparison with other equipment options such as heating by conventional gas-fired boilers, oil systems, wood, standard electric heating and electric night storage heaters. This compares running costs, initial investment costs and maintenance costs. The comparison can also be made for CO2 emissions and savings.

Available to download on [www.panasonicproclub.com](http://www.panasonicproclub.com)





## WHAT MAKES THE AIR-TO-WATER HEAT PUMP WORK

- The outdoor unit: this captures the free energy from the outdoor air and brings it into the house by means of the hydraulic module. These free calories are transported to the hydraulic module using an environmentally-friendly refrigerant gas with a high thermal exchange coefficient (R410A).
- Via the hydraulic module, with control panel, the temperature inside the house can be controlled and efficiency maximised. It has a heat exchanger which transmits the calories contained in the refrigerant coming from the outdoor unit to the water used for the house's heating and hot water. The hydraulic module manages priorities in terms of heating and hot water production.
- This hydraulic module is situated in the house in the case of the bi-bloc system or in the outdoor unit in the case of the mono-bloc system.
- The hot water cylinder heats the hot water. It is made of stainless steel, which guarantees it a very long life. It is also fitted with a 3 kW element to ensure maximum comfort when outdoor temperatures are very low. The heater, situated at the top of the cylinder, guarantees maximum efficiency and faster heat-up.

A 3-way valve for the hot water cylinder connection is supplied with the hot water cylinder.

- Other necessary or optional features (not provided by Panasonic):
  - Room temperature thermostat, which can be connected to the Aquarea system to ensure optimum room temperature conditions.
  - Solar kit, to connect solar panels for even greater efficiency.
- 3 kW of electric heater are included into the sanitary tank to ensure:
  - maximum comfort
  - maximum efficiency and more for sterilization cycle

### TWO OR THREE EARTH LEAKAGE CUT-OUTS

The Aquarea hydraulic module has differential cut-outs ensuring maximum safety in the event of a short circuit:

- 2 differential cut-outs: 3 /5 and 6/9 KW
- 3 differential cut-outs: 12, 14 and 16 KW



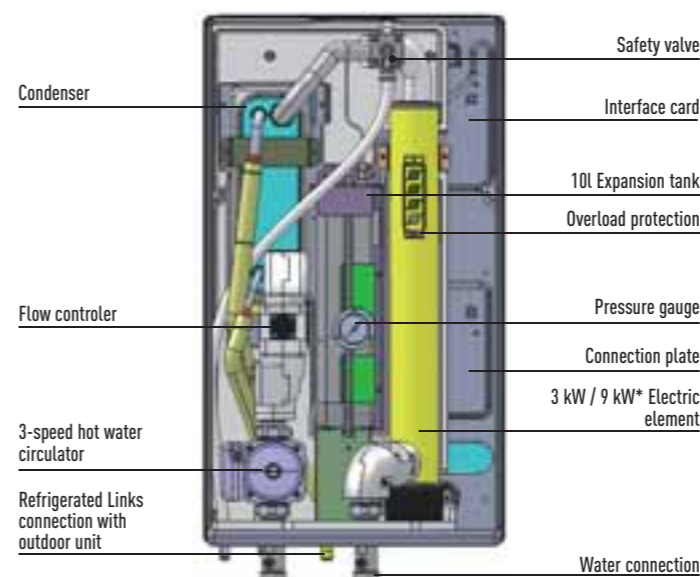
### THE CONTROL PANEL

The control panel allows perfect temperature control based on the outdoor temperature, providing maximum efficiency and comfort. The control panel controls the heating temperature and the hot water cylinder temperature very simply.

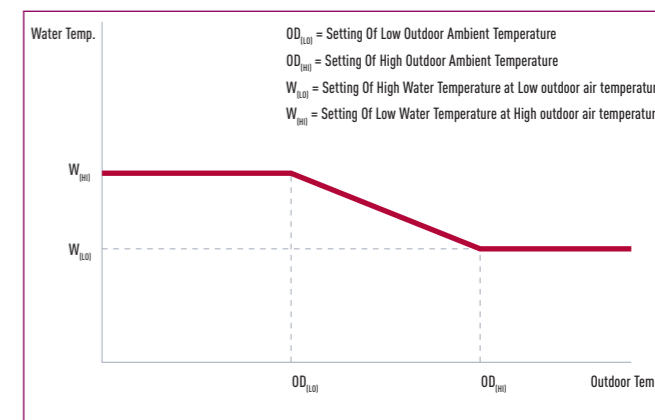
### EASY PROGRAMMING OF THE CONTROL PANEL

The primary circuit temperature is controlled based on the outdoor temperature. The temperature of the primary circuit is determined by your heating specialist depending on your installation. Enter the below parameters in the remote control on starting up the system. Your heating specialist must also select the type of operation you need: heating priority or hot water cylinder priority.

### THE HYDRAULIC MODULE



\* 3 kW for 7 and 9 kW, 6 kW for 12, 14, 16 kW single-phase  
9 kW for 12, 14, 16 kW three-phase



### EASY READING OF CONTROL OF WATER PRESSURE

Pressure gauge  
The water pressure must be between 0.055 and 0.19 MPa

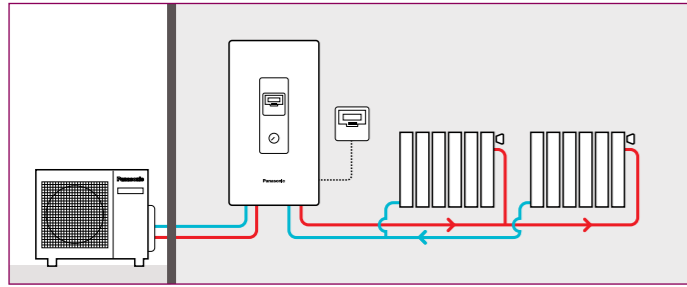




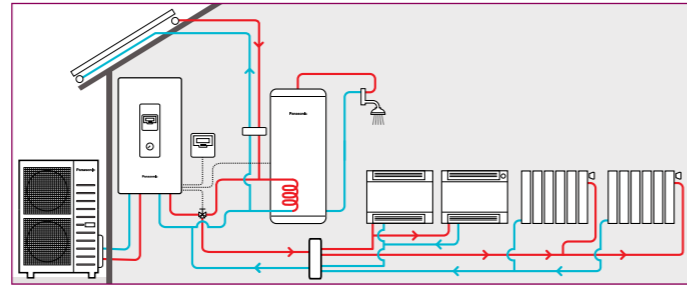


## HP BI-BLOC APPLICATION EXAMPLES

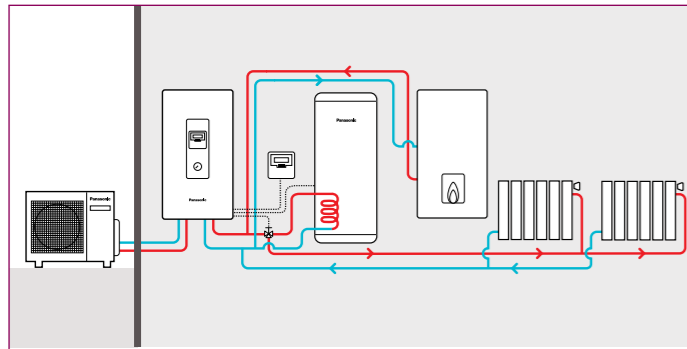
HP BI-BLOC + RADIATORS



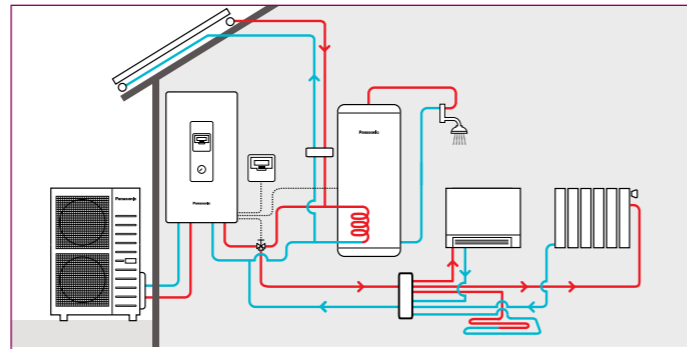
HP BI-BLOC + BOILER + RADIATORS + FAN COILS + SOLAR KIT



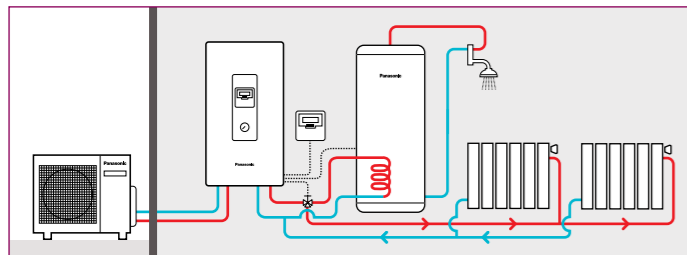
HP BI-BLOC + ACS + BOILER + RADIATORS



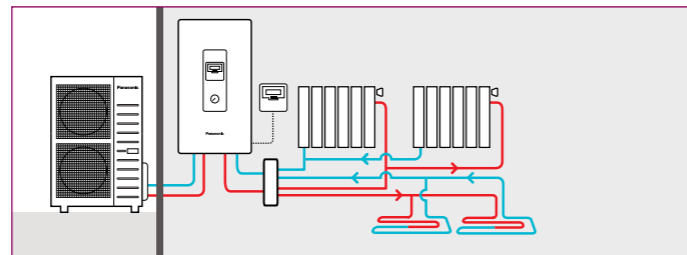
HP BI-BLOC + ACS+ BUFFER TANK + RADIATORS + FLOOR HEATING + SOLAR KIT



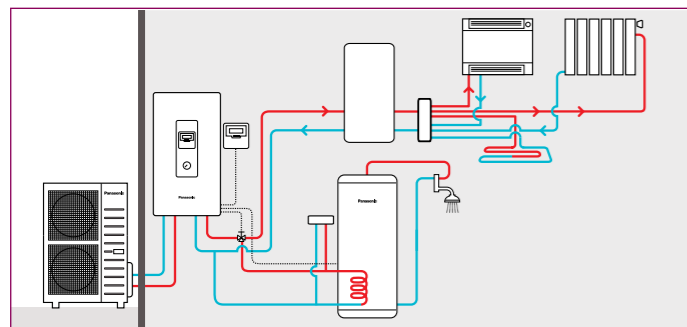
HP BI-BLOC + ACS+ RADIATORS



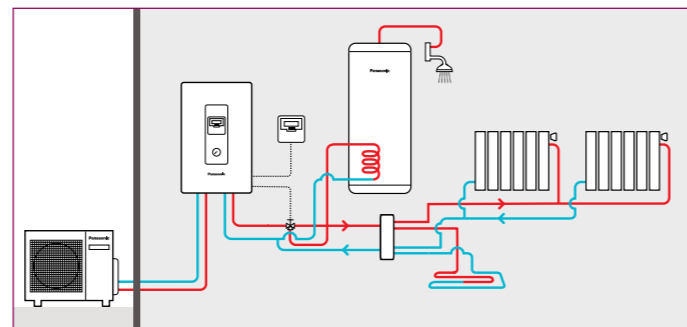
HP BI-BLOC + RADIATORS + BUFFER TANK + FLOOR HEATING



HP BIBLOC + ACS + BUFFER TANK + FAN COIL + FLOOR HEATING + RADIATORS

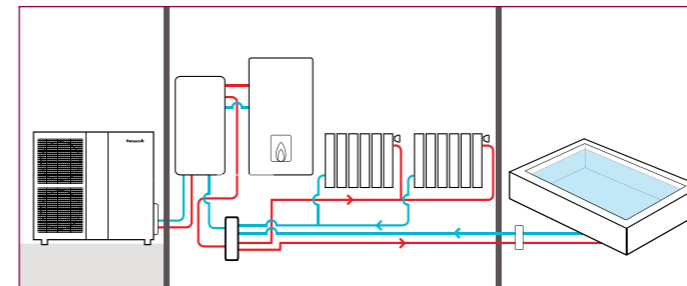


HP BI-BLOC 3 AND 5 KW .LOW CONSUMPTION + SANITARY HOT WATER + BUFFER TANK + RADIATORS + FLOOR HEATING

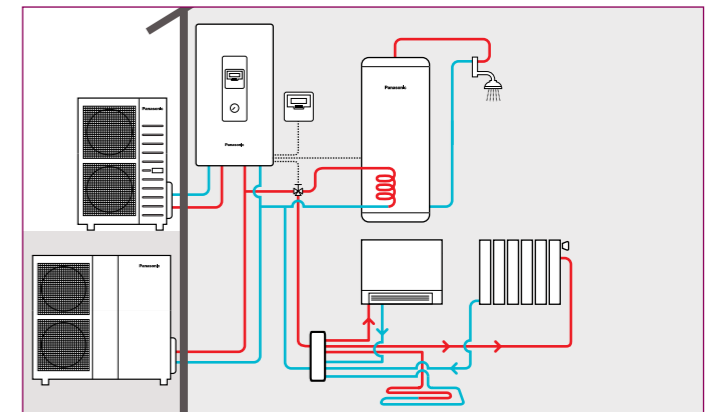


## HP MONO-BLOC APPLICATION EXAMPLES

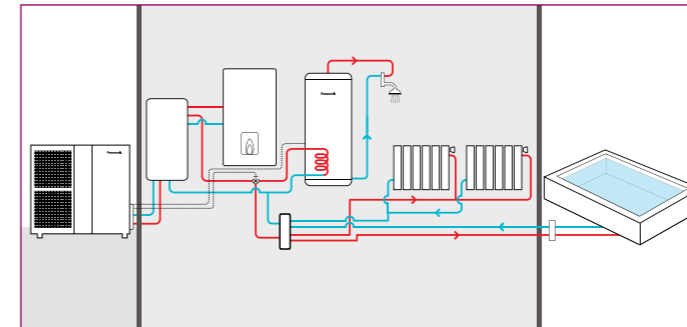
HP MONO-BLOC + BUFFER TANK + BOILER + RADIATORS + SWIMMING POOL



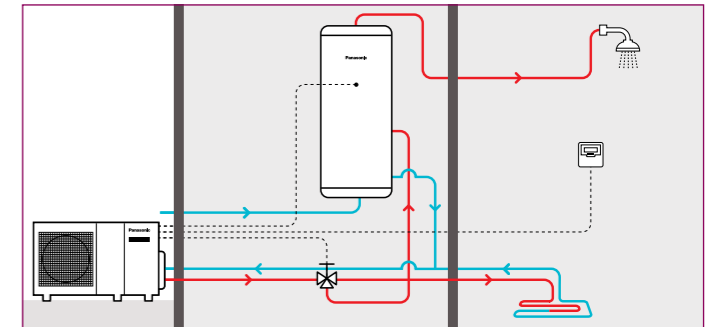
HP MONO-BLOC + BI-BLOC + ACS + RADIATORS + FLOOR HEATING



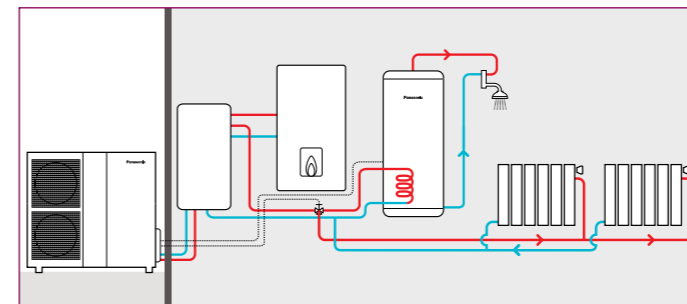
HP MONO-BLOC + BUFFER TANK + ACS + BOILER + RADIATORS + SWIMMING POOL



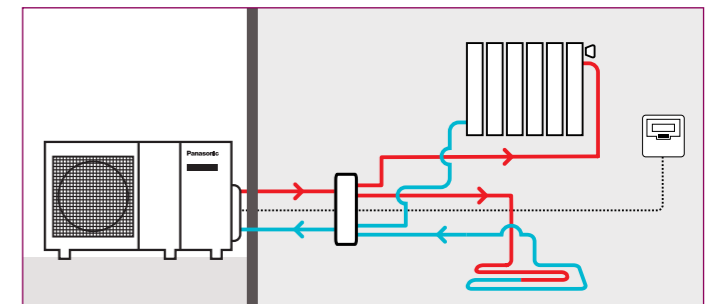
HP MONO-BLOC 6 AND 9KW .EASY TO INSTALL, WITHOUT ANY BOX INSIDE THE HOUSE + BUFFER TANK + ACS + FLOOR HEATING



HP MONO BLOC + BUFFER TANK + ACS + BOILER + RADIATORS



HP MONO-BLOC 6 AND 9 KW .EASY TO INSTALL, WITHOUT ANY BOX INSIDE THE HOUSE + RADIATORS + FLOOR HEATING



# AQUAREA LINE-UP!



LINE UP				3KW	5KW	6KW	7KW	9KW	12KW	14KW	16KW	20KW	50KW	71 kW	
Aquarea High connectivity	Bi-Bloc	Single phase	Heating only				WH-SDF07C3E5 WH-UD07CE5-A (F2)	WH-SDF09C3E5 WH-UD09CE5-A (F2)	WH-SDF22C6E5 WH-UD12CE5-A (F3)	WH-SDF24C6E5 WH-UD14CE5-A (F3)	WH-SDF26C6E5 WH-UD16CE5-A (F3)				
			Heating and cooling				WH-SDC07C3E5 WH-UD07CE5-A (F2)	WH-SDC09C3E5 WH-UD09CE5-A (F2)	WH-SDC12C6E5 WH-UD12CE5-A (F3)	WH-SDC14C6E5 WH-UD14CE5-A (F3)	WH-SDC16C6E5 WH-UD16CE5-A (F3)				
		Three phase	Heating only					WH-SDF09C3E8 WH-UD09CE8 (F3)	WH-SDF22C9E8 WH-UD12CE8 (F3)	WH-SDF24C9E8 WH-UD14CE8 (F3)	WH-SDF26C9E8 WH-UD16CE8 (F3)				
			Heating and cooling					WH-SDC09C3E8 WH-UD09CE8 (F3)	WH-SDC12C9E8 WH-UD12CE8 (F3)	WH-SDC14C9E8 WH-UD14CE8 (F3)	WH-SDC16C9E8 WH-UD16CE8 (F3)				
		Mono-Bloc	Single phase	Heating only			WH-MDF06D3E5 (F5)		WH-MDF09C3E5 (F4) WH-MDF09D3E5 (F5)	WH-MDF22C6E5 (F4)	WH-MDF24C6E5 (F4)	WH-MDF26C6E5 (F4)			
				Heating and cooling					WH-MDC09C3E5 (F4)	WH-MDC12C6E5 (F4)	WH-MDC14C6E5 (F4)	WH-MDC16C6E5 (F4)			
	Three phase		Heating only					WH-MDF09C3E8 (F4)	WH-MDF22C9E8 (F4)	WH-MDF24C9E8 (F4)	WH-MDF26C9E8 (F4)				
			Heating and cooling					WH-MDC09C3E8 (F4)	WH-MDC12C9E8 (F4)	WH-MDC14C9E8 (F4)	WH-MDC16C9E8 (F4)				
	Aquarea T-CAP	Bi-Bloc	Single phase	Heating only	WH-SDF03C3E5* (F1)	WH-SDF05C3E5* (F1)			WH-SXF09D3E5 (F3) WH-UX09DE5 (F3)	WH-SXF22D6E5 (F3) WH-UX12DE5 (F3)					
				Heating and cooling	WH-SDC03C3E5* (F1)	WH-SDC05C3E5* (F1)			WH-SXC09D3E5 (F3) WH-UX09DE5 (F3)	WH-SXC12D6E5 (F3) WH-UX12DE5 (F3)					
			Three phase	Heating only					WH-SXF09D3E8 (F3) WH-UX09DE8 (F3)	WH-SXF22D9E8 (F3) WH-UX12DE8 (F3)					
				Heating and cooling					WH-SXC09D3E8 (F3) WH-UX09DE8 (F3)	WH-SXC12D9E8 (F3) WH-UX12DE8 (F3)					
Mono-Bloc		Single phase	Heating only					WH-MXF09D3E5 (F4)	WH-MXF22D6E5 (F4)						
			Heating and cooling					WH-MXC09D3E5 (F4)	WH-MXC12D6E5 (F4)						
		Three phase	Heating only					WH-MXF09D3E8 (F4)	WH-MXF22D9E8 (F4)						
			Heating and cooling					WH-MXC09D3E8 (F4)	WH-MXC12D9E8 (F4)						
Aquarea High temperature	Bi-Bloc	Single phase	Heating only					WH-SHF09D3E5 (F2) WH-UH09DE5 (F2)	WH-SHF22D6E5 (F2) WH-UH12DE5 (F2)						
		Three phase	Heating only					WH-SHF09D3E8 (F2) WH-UH09DE8 (F2)	WH-SHF22D9E8 (F2) WH-UH12DE8 (F2)						
	Mono-Bloc	Single phase	Heating only					WH-MHF09D3E5 (F4)	WH-MHF22D6E5 (F4)						
		Three phase	Heating only					WH-MHF09D3E8 (F4)	WH-MHF22D9E8 (F4)						
AQUAREA PRO	VRF ECOi + Water Heat Exchanger	Three phase	Heating and cooling									U-250WX2E5 (F6) <b>NEW 2012</b>	U-500WX2E5 (F6) <b>NEW 2012</b>		
	GAS VRF ECOg + Water Heat Exchanger	Three phase	Heating and cooling									S-250WX2E5 (F6) <b>NEW 2012</b>	S-500WX2E5 (F6) <b>NEW 2012</b>	S-710WX2E5 (F7) <b>NEW 2012</b>	

Low connectivity : control of 3 way valve, tank heater On/Off signal, tank thermostat signal reception, On/Off from external control, weekly timer  
 High connectivity : Low connectivity + solar pannels connection, room thermostat connection

4.74 COP  
high efficiency

AQUAREA  
HIGH CONNECTIVITY

HIGH СОИМЕСТИМА  
ВОЛНЬЕВ


εφικτιευλ  
μνδμ  
↑ ↓ ↑ ↓ COP

## BI-BLOC // MINI T-CAP // 3/5 KW AQUAREA // HEATING ONLY - SDF // HEATING AND COOLING - SDC

The new 3kW and 5kW Aquarea heat pump from Panasonic is specially design for low consumption houses. Due to his high technology and advance control, they are able to keep a high capacity and efficiency even at -7 and -15 degrees.

The very compact outdoor unit makes the installation very easy. Whatever the weather, Aquarea will always give you maximum efficiency, even at -20 degrees!

high efficiency heating



environmentally friendly refrigerant

R410A

down to -20°C in heating mode

OUTDOOR TEMPERATURE

5 year compressor warranty



**NEW**  
2011-2012

### BI-BLOC // MINI T-CAP // HEATING ONLY // HEATING AND COOLING // SDC

INDOOR UNIT	SINGLE-PHASE HEATING ONLY		SINGLE-PHASE HEATING AND COOLING		
	WH-SDF03C3E5*	WH-SDF05C3E5*	WH-SDC03C3E5*	WH-SDC05C3E5*	
Heating Capacity at +7°C	kW	3	5	3	5
COP at +7°C with heating water temperature at 35°C		4,62	4,5	4,62	4,5
Heating Capacity at -7°C	kW	3	5	3	5
COP at -7°C with heating water temperature at 35°C		2,7	2,8	2,7	2,8
Cooling capacity at 35°C	kW	-	-	3	4,5
EER at 35°C with cooling water temperature at 7/12°C		-	-	2,97	2,95
Dimensions (H x W x D)	mm	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353
Weight	kg	50	50	50	50
Water pipe connector					
Pump	No. of Speed				
	Input Power(max)	W			
Heating water flow (ΔT=5 K, 35°C)		l/min			
Capacity of integrated electric heater		kW			
Input Power		kW			
	Running and starting Current	A			
	Maximum Current	A			
INDOOR UNIT	WH-UD03CE5		WH-UD05CE5		
Sound pressure level	dB(A)	47	48	47	48
Sound power level	dB				
Dimensions (H x W x D)	mm	618 x 833 x 301	618 x 833 x 301	618 x 833 x 301	618 x 833 x 301
Weight	kg	38	38	38	38
Pipe Diameter	Liquid	mm (Inch)	12,70 (1/2")	12,70 (1/2")	12,70 (1/2")
	Gas	mm (Inch)	6,35 (1/4")	6,35 (1/4")	6,35 (1/4")
Refrigerant (R410A)	kg				
Pipe Length Range	m	5 - 15	5 - 15	5 - 15	5 - 15
Pipe Length for nominal capacity	m				
Pipe Length for additional gas	m				
Additional Gas Amount (R410A)	g/m				
I/D&O/D Hight Difference	m	5	5	5	5
Operation Range	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35
	Water Outlet (at -2/-7/-15) 2)	°C	25 - 55 / 5 - 20	25 - 55 / 5 - 20	25 - 55 / 5 - 20

COP classification is at 230 V only in accordance with EU directive 2003/32/EC. Sound pressure measured at 1 m from the outdoor unit and at 1.5 m height.



OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Hight / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

Performance calculation in agreement with Eurovent.  
Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height  
Conditions : Water input temperature: 30 °C. Water output temperature: 35 °

\* Available from August 2012



WH-UD03CE5  
WH-UD05CE5

#### ENERGY AND ENVIRONMENTAL EFFICIENCY

- Super efficient even till -15 degrees
- Maximum COP of 4,62
- Environmentally-friendly refrigerant gas R410A

#### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised based on the return water temperature
- Built-in management of the hot water cylinder and heating

#### EASY TO USE

- Wired control panel for installation in the house
- Easy programming on the control panel
- Ipad/android ready with the intesishome box (optional)

#### EASY INSTALLATION AND MAINTENANCE

- Outdoor unit easy to open for maintenance
- Expansion vessel included



WH-TDS20B3E5

WH-TDS30B3E5

4.74 COP  
high efficiency

AQUAREA  
HIGH CONNECTIVITY

HIGH CONNECTIVITY  
ΑΥΤΟΜΑΤΑ

επιχειρησι-  
μυδια  
↑ ↓ ↕ COP

## AQUAREA MDF // MONO-BLOC // HIGH CONNECTIVITY // 6/9 KW AQUAREA // HEATING ONLY // SINGLE-PHASE

Panasonic has designed the new Aquarea Mono-bloc heat pump for houses which have high performance requirements but limited space to install the outdoor unit.

Whatever the weather, Aquarea will always give you maximum efficiency, even at -20 degrees! The Mono-bloc is easy to install on new or existing installations, in all type of houses.



MONO-BLOC // 6/9 KW AQUAREA // HEATING // MDF			
SINGLE-PHASE		WH-MDF06D3E5	WH-MDF09D3E5
Heating Capacity at +7°C	kW	6	9
COP at +7°C with heating water temperature at 35°C		4.41	4.10
Heating Capacity at +2°C	kW	5	7
COP at +2°C with heating water temperature at 35°C		3.4	3
Heating Capacity at -7°C	kW	5.15	7.70
COP at -7°C with heating water temperature at 35°C		2.65	2.10
Heating Capacity at -15°C	kW	5.9	7.6
COP at -15°C with heating water temperature at 35°C		2.2	2.0
Sound pressure level	dB(A)	47	49
Sound power level	dB	65	67
Dimensions (H x W x D)	mm	865 x 1283 x 320	865 x 1283 x 320
Weight	kg	112	112
Water pipe connector		R 1-3/16	R 1-3/16
Pump	No. of Speed	3	3
	Water Flow (ΔT=5 K, 35°C)	l/min	25.8
	Input Power	W	75
Capacity of integrated electric heater	kW	3.0	3.0
Input Power at +7°C	kW	1.36	2.2
Running and starting Current at +7°C	A	6.2	10.1
Maximum Current	A	20.5	22.9
Operation Range	Outdoor Ambient	°C	-20 to 35
	Water Outlet (at-2/-7/-15)	°C	25 - 55

COP classification is at 230 V only in accordance with EU directive 2003/32/EC. Sound pressure measured at 1 m from the outdoor unit and at 1.5 m height.

Performance calculation in agreement with Eurovent.  
Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height  
Conditions : Water input temperature: 30 °C. Water output temperature: 35 °C

\* Tentative specifications  
Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

PANASONIC ACCESSORIES (NOT INCLUDED WITH THE OUTDOOR UNIT)	
Solar Kit Accessories	CZ-NS3P Solar connection PCB
Sanitary Tank Accessories	CZ-TK1 Temperature sensor kit for third party tank
Deice Accessories	CZ-NE1P Base pan heater kit

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Height / Diameter	mm	mm
		1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1.4	1.8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1.7	2
3 Way valve included		YES	YES

### TECHNICAL FOCUS

- RANGE FROM 6/9 KW, SINGLE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- PLUG AND PLAY SYSTEM

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4,41
- Environmentally-friendly refrigerant gas R410A

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised based on the return water temperature
- Built-in management of the hot water cylinder and heating

### EASY TO USE

- Single-unit range, with no refrigerant connections
- Wired control panel for installation in the house
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Outdoor unit easy to open for maintenance



WH-MDF06D3E5  
WH-MDF09D3E5



WH-TDS20B3E5  
WH-TDS30B3E5

4.74 COP  
high efficiency

AQUAREA  
HIGH CONNECTIVITY

HIGH CONNECTIVITY  
ВОЗМЬЕВ

εφικεινελ  
μνδμ  
↑ ↓ ↕ COP

## AQUAREA SDF // BI-BLOC // HIGH CONNECTIVITY // HEATING ONLY SINGLE-PHASE // THREE-PHASE

The Aquarea SDF range adapts equally well to an existing installation such as a boiler backup or to a new installation with floor heating, low-temperature radiators or even fan-coil heaters. These ranges can also be connected to a solar kit in order to increase efficiency and minimize the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating control and management.

high efficiency heating  
**INVERTER+**

environmentally friendly refrigerant  
**R410A**

down to **-20°C** in heating mode  
**OUTDOOR TEMPERATURE**

boiler connection  
**RETROFIT**

solar panels connection  
**SOLAR KIT**

domestic hot water  
**DHW**

**5 year** compressor warranty



		SINGLE-PHASE					THREE-PHASE			
Indoor unit		WH-SDF07C3E5	WH-SDF09C3E5	WH-SDF12C6E5	WH-SDF14C6E5	WH-SDF16C6E5	WH-SDF09C3E8	WH-SDF12C9E8	WH-SDF14C9E8	WH-SDF16C9E8
Heating Capacity at +7°C	kW	7	9	12	14	16	9	12	14	16
COP at +7°C with heating water temperature at 35°C		4,4	4,09	4,67	4,5	4,23	4,74	4,67	4,5	4,23
Heating Capacity at -7°C	kW	5,15	5,9	10	10,7	11,4	9	10	10,7	11,4
COP at -7°C with heating water temperature at 35°C		2,65	2,5	2,7	2,62	2,55	2,81	2,7	2,62	2,55
Heating Capacity at -15°C	kW	4,6	5,9	8,9	9,5	10,3	8,3	8,9	9,5	10,3
COP at -15°C with heating water temperature at 35°C		2,3	2,2	2,43	2,35	2,33	2,55	2,43	2,35	2,33
Dimensions (H x W x D)	mm	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
Weight	kg	43	43	49	49	49	50	51	51	51
Water pipe connector		R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4
Pump	No. of Speed	3	3	3	3	3	3	3	3	3
	Input power(max)	W	100	100	190	190	190	190	190	190
Heating water flow (ΔT=5 K, 35°C)	l/min	20,1	25,8	34,4	40,1	45,9	25,8	34,4	40,1	45,9
Capacity of integrated electric heater	kW	3	3	6	6	6	3	9	9	9
Input Power	kW	1,59	2,2	2,57	3,11	3,78	1,9	2,57	3,11	3,78
Running and starting Current	A	7,3	10,1	11,7	14,1	17,1	2,9	3,9	4,7	5,7
Maximum Current	A	21	22,9	24	25	26	7,5	8,8	9,4	9,9
Outdoor unit		WH-UD07CE5-A	WH-UD09CE5-A	WH-UD12CE5-A	WH-UD14CE5-A	WH-UD16CE5-A	WH-UD09CE8	WH-UD12CE8	WH-UD14CE8	WH-UD16CE8
Sound pressure level	dB(A)	48	49	50	51	53	49	50	51	53
Sound power level	dB	66	67	67	68	70	66	67	68	70
Dimensions (H x W x D)	mm	795 x 900 x 320	795 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	KG	66	66	106	106	106	109	109	109	109
Pipe Diameter	Liquid	mm (Inch)	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Gas	mm (Inch)	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")
Refrigerant (R410A)	kg	1,45	1,45	2,75	2,75	2,75	2,75	2,75	2,75	2,95
Pipe Length Range	m	3 - 30	3 - 30	3 - 40	3 - 40	3 - 40	3 - 40	3 - 40	3 - 40	3 - 40
Pipe Length for nominal capacity	m	7	7	7	7	7	7	7	7	7
Pipe Length for additional gas	m	10	10	30	30	30	30	30	30	30
Additional Gas Amount (R410A)	g/m	30	30	50	50	50	50	50	50	50
I/D&D Height Difference	m	20	20	30	30	30	30	30	30	30
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
	Water Outlet (at-2/-7/-15) <sup>1)</sup>	°C	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55

\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Hight / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

Performance calculation in agreement with Eurovent.  
Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height  
Conditions : Water input temperature: 30 °C. Water output temperature: 35 °C

### TECHNICAL FOCUS

- RANGE FROM 7 TO 16 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- MAXIMUM 30 m RISE BETWEEN THE OUTDOOR UNIT AND THE HYDRAULIC MODULE

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4.74
- Environmentally-friendly refrigerant gas R410A

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised based on the return water temperature
- Built-in management of the hot water cylinder and heating

### EASY TO USE

- Control on the hydraulic module
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Easy-to-access pressure gauge for easy control of the water pressure
- Easy-to-open hydraulic module and outdoor unit



WH-UD07CE5-A  
WH-UD09CE5-A  
WH-UD09CE8  
WH-UD12CE5-A  
WH-UD14CE5-A  
WH-UD16CE5-A  
WH-UD12CE8  
WH-UD14CE8  
WH-UD16CE8



WH-TDS20B3E5  
WH-TDS30B3E5

4.74 COP  
high efficiency

AQUAREA  
HIGH CONNECTIVITY

HIGH CONNECTIVITY  
ВОЗВЬЕВ

επιχειρησιμότητα  
↑ ↓ ↑ ↓ COP

## AQUAREA SDC // BI-BLOC // HIGH CONNECTIVITY // HEATING AND COOLING SINGLE-PHASE // THREE-PHASE

The Aquarea SDC range adapts equally well to an existing installation such as a boiler backup or to a new installation with floor heating, low-temperature radiators or even fan-coil heaters. These ranges can also be connected to a solar kit in order to increase efficiency and minimize the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating and cooling control and management.

high efficiency heating  
**INVERTER+**

environmentally friendly refrigerant  
**R410A**

down to **-20°C** in heating mode  
**OUTDOOR TEMPERATURE**

boiler connection  
**RETROFIT**

solar panels connection  
**SOLAR KIT**

domestic hot water  
**DHW**

**5 year** compressor warranty



### BI-BLOC // HIGH-CONNECTIVITY // HEATING AND COOLING // SDC

Indoor unit	SINGLE-PHASE					THREE-PHASE				
	WH-SDC07C3E5	WH-SDC09C3E5	WH-SDC12C6E5	WH-SDC14C6E5	WH-SDC16C6E5	WH-SDC09C9E8	WH-SDC12C9E8	WH-SDC14C9E8	WH-SDC16C9E8	
Heating Capacity at +7°C	kW	7	9	12	14	16	9	12	14	16
COP at +7°C with heating water temperature at 35°C		4,4	4,09	4,67	4,5	4,23	4,74	4,67	4,5	4,23
Heating Capacity at -7°C	kW	5,15	5,9	10	10,7	11,4	9	10	10,7	11,4
COP at -7°C with heating water temperature at 35°C		2,65	2,5	2,7	2,62	2,55	2,81	2,7	2,62	2,55
Heating Capacity at -15°C	kW	4,6	5,9	8,9	9,5	10,3	8,3	8,9	9,5	10,3
COP at -15°C with heating water temperature at 35°C		2,3	2,2	2,43	2,35	2,33	2,55	2,43	2,35	2,33
Cooling capacity at 35°C		6	7	10	11,5	12,2	7	10	11,5	12,2
EER at 35°C with cooling water temperature at 7/12°C		2,2	2,1	2,39	2,24	2,19	2,68	2,42	2,25	2,19
Dimensions (H x W x D)	mm	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
Weight	kg	45	45	51	51	51	51	52	52	52
Water pipe connector		R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4	R1 1/4
Pump	No. of Speed	3	3	3	3	3	3	3	3	3
	Input power(max)	W	75	75	190	190	190	190	190	190
Heating water flow (ΔT=5 K, 35°C)	l/min	20,1	25,8	34,4	40,1	45,9	25,8	34,4	40,1	45,9
Capacity of integrated electric heater	kW	3	3	6	6	6	3	9	9	9
Input Power (Input power H/C)	kW	1,59 / 2,30	2,2 / 2,9	2,57 / 3,6	3,11 / 4,4	3,78 / 4,8	1,9 / 2,25	2,57 / 3,55	3,11 / 4,4	3,78 / 4,8
Running and starting Current	A	7,30 / 10,40	10,1 / 13,1	11,7 / 16,1	14,1 / 19,7	17,1 / 21,5	2,9 / 3,4	3,9 / 5,3	4,7 / 6,6	5,7 / 7,2
Maximum Current	A	21	22,9	24	25	26	7,5	8,8	9,4	9,9
Outdoor unit	WH-UD07CE5-A		WH-UD09CE5-A		WH-UD12CE5-A		WH-UD14CE5-A		WH-UD16CE5-A	
Sound pressure level	dB(A)	48	49	50	51	53	49	50	51	53
Sound power level	dB	66	67	67	68	70	66	67	68	70
Dimensions (H x W x D)	mm	795 x 900 x 320	795 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	KG	66	66	106	106	106	109	109	109	109
Pipe Diameter	Liquid	mm (Inch)	6,35 (1/4")	6,35 (1/4")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Gas	mm (Inch)	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")
Refrigerant (R410A)	kg	1,45	1,45	2,75	2,75	2,75	2,75	2,75	2,75	2,95
Pipe Length Range	m	3 - 30	3 - 30	3 - 40	3 - 40	3 - 40	3 - 40	3 - 40	3 - 40	3 - 40
Pipe Length for nominal capacity	m	7	7	7	7	7	7	7	7	7
Pipe Length for additional gas	m	10	10	30	30	30	30	30	30	30
Additional Gas Amount (R410A)	g/m	30	30	50	50	50	50	50	50	50
I/D&O Height Difference	m	20	20	30	30	30	30	30	30	30
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
	Water Outlet (at -2/-7/-15) <sup>*)</sup>	°C	25 - 55 / 5 - 20	25 - 55 / 5 - 20	25 - 55 / 5 - 20	25 - 55 / 5 - 20	25 - 55 / 5 - 20	25 - 55 / 5 - 20	25 - 55 / 5 - 20	25 - 55 / 5 - 20

\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Height / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

performance calculation in agreement with Eurovent.  
Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height  
Conditions : Water input temperature: 30 °C. Water output temperature: 35 °C

### TECHNICAL FOCUS

- RANGE FROM 7 TO 16 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- MAXIMUM 30 m RISE BETWEEN THE OUTDOOR UNIT AND THE HYDRAULIC MODULE
- COOLING TEMPERATURE RANGE 5-20 °C

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4.74
- Environmentally-friendly refrigerant gas R410A

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised based on the return water temperature
- Built-in management of the hot water cylinder and heating

### EASY TO USE

- Control on the hydraulic module
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Easy-to-access pressure gauge for easy control of the water pressure
- Easy-to-open hydraulic module and outdoor unit





4.74 COP  
high efficiency

AQUAREA  
HIGH CONNECTIVITY

HIGH CONNECTIVITY  
ВОЗВЬЕВ

επιχειρησιμότητα  
↑ ↓ ↑ ↓ COP

## AQUAREA MDF // MONO-BLOC // HIGH CONNECTIVITY // HEATING ONLY SINGLE-PHASE // THREE-PHASE

The Aquarea MDF range adapts equally well to an existing installation such as a boiler backup or to a new installation with floor heating, low-temperature radiators or even fan-coil heaters. These ranges can also be connected to a solar kit in order to increase efficiency and minimize the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating control and management.

high efficiency heating  
**INVERTER+**

environmentally friendly refrigerant  
**R410A**

down to **-20°C** in heating mode  
**OUTDOOR TEMPERATURE**

boiler connection  
**RETROFIT**

solar panels connection  
**SOLAR KIT**

domestic hot water  
**DHW**

**5 year** compressor warranty



### MONO-BLOC // HIGH-CONNECTIVITY // HEATING ONLY // MDF

Outdoor unit	SINGLE-PHASE				THREE-PHASE			
	WH-MDF09C3E5	WH-MDF12C6E5	WH-MDF14C6E5	WH-MDF16C6E5	WH-MDF09C3E8	WH-MDF12C9E8	WH-MDF14C9E8	WH-MDF16C9E8
Heating Capacity at +7°C	kW 9	12	14	16	9	12	14	16
COP at +7°C with heating water temperature at 35°C	4,74	4,67	4,5	4,23	4,74	4,67	4,5	4,23
Heating Capacity at -7°C	kW 9	10	10,7	11,4	9	10	10,7	11,4
COP at -7°C with heating water temperature at 35 °C	2,81	2,7	2,62	2,55	2,81	2,7	2,62	2,55
Heating Capacity at -15°C	kW 8,3	8,9	9,5	10,3	8,3	8,9	9,5	10,3
COP at -15°C with heating water temperature at 35°C	2,55	2,43	2,35	2,33	2,55	2,43	2,35	2,33
Sound pressure level	dB(A) 49	50	51	53	49	50	51	53
Sound power level	dB 66	67	68	70	66	67	68	70
Dimensions (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	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320
Weight	kg 153	153	153	153	157	157	157	157
Water pipe connector	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4
Pump	No. of Speed	3	3	3	3	3	3	3
	Input power(max)	W 190	190	190	190	190	190	190
Heating water flow (*Δt=5 K, 35°C)	l/min 25,8	34,4	40,1	45,9	25,8	34,4	40,1	45,9
Capacity of integrated electric heater	kW 3	6	6	6	3	9	9	9
Input Power	kW 1,9	2,57	3,11	3,78	1,9	2,57	3,11	3,78
Starting Current	A 8,7	11,6	14,1	17,1	2,9	3,9	4,7	5,7
Maximum Current	A 22,9	24	25	26	7,5	8,8	9,4	9,9
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
	Water Outlet (at -7/-15) <sup>1)</sup>	°C 25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55

COP classification is at 230 V only in accordance with EU directive 2003/32/EC. Sound pressure measured at 1 m from the outdoor unit and at 1.5 m height.

\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

Performance calculation in agreement with Eurovent.

Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height

Conditions : Water input temperature: 30 °C. Water output temperature: 35 °

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Height / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

### TECHNICAL FOCUS

- RANGE FROM 9 TO 16 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4.74

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised according to the return water temperature
- Autonomous management of the hot water cylinder and heating

### EASY TO USE

- Single-unit range, with no refrigerant connections
- Wired control panel for installation in the house
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Outdoor unit easy to open for maintenance



WH-TDS20B3E5

WH-TDS30B3E5

4.74 COP  
high efficiency

AQUAREA  
HIGH CONNECTIVITY

HIGH COMMEЦИАЛЛА  
VOЛHBEV

εφικιενυλ  
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## AQUAREA MDC // MONO-BLOC // HIGH CONNECTIVITY // HEATING AND COOLING SINGLE-PHASE // THREE-PHASE

The Aquarea MDC range adapts equally well to an existing installation such as a boiler backup or to a new installation with floor heating, low-temperature radiators or even fan-coil heaters. These ranges can also be connected to a solar kit in order to increase efficiency and minimize the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating and cooling control and management.

high efficiency heating  
**INVERTER+**

environmentally friendly refrigerant  
**R410A**

down to **-20°C** in heating mode  
**OUTDOOR TEMPERATURE**

boiler connection  
**RETROFIT**

solar panels connection  
**SOLAR KIT**

domestic hot water  
**DHW**

**5 year** compressor warranty



### MONO-BLOC // HIGH-CONNECTIVITY // HEATING AND COOLING // MDC

Outdoor unit	SINGLE-PHASE				THREE-PHASE				
	WH-MDC09C3E5	WH-MDC12C6E5	WH-MDC14C6E5	WH-MDC16C6E5	WH-MDC09C3E8	WH-MDC12C9E8	WH-MDC14C9E8	WH-MDC16C9E8	
Heating Capacity at +7°C	kW	9	12	14	16	9	12	14	16
COP at +7°C with heating water temperature at 35°C		4,74	4,67	4,5	4,23	4,74	4,67	4,5	4,23
Heating Capacity at -7°C	kW	9	10	10,7	11,4	9	10	10,7	11,4
COP at -7°C with heating water temperature at 35°C		2,81	2,7	2,62	2,55	2,81	2,7	2,62	2,55
Heating Capacity at -15°C	kW	8,3	8,9	9,5	10,3	8,3	8,9	9,5	10,3
COP at -15°C with heating water temperature at 35°C		2,55	2,43	2,35	2,33	2,55	2,43	2,35	2,33
Cooling capacity at 35°C		7	10	11,5	12,2	7	10	11,5	12,2
EER at 35°C with cooling water temperature at 7/12°C	kW	2,68	2,39	2,25	2,19	2,68	2,39	2,25	2,19
Sound pressure level	dB(A)	49	50	51	53	49	50	51	53
Sound power level	dB	66	67	68	70	66	67	68	70
Dimensions (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	1410 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320
Weight	kg	153	153	153	153	157	157	157	157
Water pipe connector		R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4
Pump	No. of Speed	3	3	3	3	3	3	3	3
	Input power(max)	W	190	190	190	190	190	190	190
Heating water flow (*aT=5 K, 35°C)	l/min	25,8	34,4	40,1	45,9	25,8	34,4	40,1	45,9
Capacity of integrated electric heater	kW	3	6	6	6	3	9	9	9
Input Power (Input Power H/C)	kW	1,9 / 2,25	2,57 / 3,6	3,11 / 4,4	3,78 / 4,8	1,9 / 2,25	2,57 / 3,6	3,11 / 4,4	3,78 / 4,8
Starting Current (Input Power H/C)	A	8,7 / 10,2	11,6 / 16,1	14,1 / 19,7	17,1 / 21,5	2,9 / 3,4	3,9 / 5,3	4,7 / 6,6	5,7 / 7,2
Maximum Current	A	22,9	24	26	26	7,5	8,8	9,4	9,9
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
	Water Outlet (at -2/-7/-15) <sup>1)</sup>	°C	22 - 55 / 5 - 20	22 - 55 / 5 - 20	22 - 55 / 5 - 20	22 - 55 / 5 - 20	22 - 55 / 5 - 20	22 - 55 / 5 - 20	22 - 55 / 5 - 20

COP classification is at 230 V only in accordance with EU directive 2003/32/EC. Sound pressure measured at 1 m from the outdoor unit and at 1.5 m height.

\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

Performance calculation in agreement with Eurovent.

Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height

Conditions : Water input temperature: 30 °C. Water output temperature: 35 °

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Hight / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

### TECHNICAL FOCUS

- RANGE FROM 9 TO 16 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- COOLING TEMPERATURE RANGE 5-20 °C

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4.74

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised according to the return water temperature
- Autonomous management of the hot water cylinder and heating

### EASY TO USE

- Single-unit range, with no refrigerant connections
- Wired control panel for installation in the house
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Outdoor unit easy to open for maintenance



WH-TDS20B3E5

WH-TDS30B3E5

100% capacity at -15°C

AQUAREA T-CAP

ΑQUAREA T-CAP

at -15°C capacity

## AQUAREA SXF // BI-BLOC // T-CAP // HEATING ONLY SINGLE-PHASE // THREE-PHASE

The Aquarea SXF is the new Aquarea product from Panasonic for central heating. T-CAP stands for Total capacity as this new line-up is able to keep the same nominal capacity even at -15°C without the help of an electrical booster heater. T-CAP is also able to provide extremely high efficiency, whatever the outside temperature or the water temperature.

**The new SXF is ideal for houses where keeping the same capacity is important such as new houses or houses without support from an external boiler.**

The SXF can be adapted to an existing installation such as a boiler backup or to a new installation with floor heating, low-temperature radiators or even fan-coil heaters. These ranges can also be connected to a solar kit in order to increase efficiency and minimize the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating control and management.

high efficiency heating

**INVERTER+**

environmentally friendly refrigerant

**R410A**

down to **-20°C** in heating mode

**OUTDOOR TEMPERATURE**

boiler connection

**RETROFIT**

solar panels connection

**SOLAR KIT**

domestic hot water

**DHW**

5 year compressor warranty



### BI-BLOC // AQUAREA T-CAP // HEATING ONLY // SXF

		SINGLE-PHASE		THREE-PHASE		
Indoor unit		WH-SXF09D3E5	WH-SXF12D6E5	WH-SXF09D3E8	WH-SXF12D9E8	
Heating Capacity at +7°C	kW	9	12	9	12	
COP at +7°C with heating water temperature at 35°C		4,74	4,67	4,74	4,67	
Heating Capacity at -7°C	kW	9	12	9	12	
COP at -7°C with heating water temperature at 35°C		2,81	2,7	2,81	2,7	
Heating Capacity at -15°C	kW	9	12	9	12	
COP at -15°C with heating water temperature at 35°C		2,54	2,4	2,54	2,4	
Dimensions (H x W x D)	mm	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	
Weight	kg	47	49	50	51	
Water pipe connector		R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	
Pump	No. of Speed	3	3	3	3	
	Input power(max)	W	190	190	190	190
Heating water flow (ΔT=5 K, 35°C)	l/min	25,8	34,4	25,8	34,4	
Capacity of integrated electric heater	kW	3	3	3	3	
Input Power	kW	1,9	2,57	1,9	2,57	
Starting Current	A	8,8	11,9	2,9	3,9	
Maximum Current	A	25	29	10,4	11,9	
Outdoor unit		WH-UX09DE5	WH-UX12DE5	WH-UX09DE8	WH-UX12DE8	
Sound pressure level	dB(A)	49	49	49	49	
Sound power level	dB	66	66	66	66	
Dimensions (H x W x D)	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	
Weight	KG	107	107	109	109	
Pipe Diameter	Liquid	mm (Inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Gas	mm (Inch)	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")
Refrigerant (R410A)	kg	3,10	3,10	3,10	3,10	
Pipe Length Range	m	3 - 30	3 - 30	3 - 30	3 - 30	
Pipe Length for nominal capacity	m	7	7	7	7	
Pipe Length for additional gas	m	15	15	15	15	
Additional Gas Amount (R410A)	g/m	50	50	50	50	
I/D&O/D Height Difference	m	20	20	20	20	
Operation Range	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35	-20 to 35
	Water Outlet (at -2/-7/-15) 2)	°C	25 - 55	25 - 55	25 - 55	25 - 55

\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Height / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

Performance calculation in agreement with Eurovent.  
Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height  
Conditions : Water input temperature: 30 °C. Water output temperature: 35 °C

### TECHNICAL FOCUS

- RANGE FROM 9 TO 12 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- MAXIMUM 20 m RISE BETWEEN THE OUTDOOR UNIT AND THE HYDRAULIC MODULE
- CONSTANT CAPACITY AT OUTDOOR TEMPERATURES DOWN TO -15 °C (AT A HEATING WATER TEMPERATURE OF 35 °C)

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4.74
- Environmentally-friendly refrigerant gas R410A

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised based on the return water temperature
- Built-in management of the hot water cylinder and heating

### EASY TO USE

- Control on the hydraulic module
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Easy-to-access pressure gauge for easy control of the water pressure
- Easy-to-open hydraulic module and outdoor unit



WH-UX09DE5  
WH-UX12DE5  
WH-UX09DE8



WH-TDS20B3E5  
WH-TDS30B3E5

100% capacity at -15°C

AQUAREA T-CAP

ΑQUAREA T-CAP

ατ -15°C  
capacité

## AQUAREA SXC // BI-BLOC // T-CAP // HEATING AND COOLING SINGLE-PHASE // THREE-PHASE

The Aquarea SXC is the new Aquarea product from Panasonic for heating and cooling. T-CAP stands for Total capacity as this new line-up is able to keep the same nominal capacity even at -15°C without the help of an electrical booster heater. T-CAP is also able to provide extremely high efficiency, whatever the outside temperature or the water temperature.

**The new SXC is ideal for houses where keeping the same capacity is important such as new houses or houses without support from an external boiler.**

The SXC can be adapted to an existing installation such as a boiler backup or to a new installation with floor heating, low-temperature radiators or even fan-coil heaters. These ranges can also be connected to a solar kit in order to increase efficiency and minimize the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating or cooling control and management.

high efficiency heating  
**INVERTER+**

environmentally friendly refrigerant  
**R410A**

down to **-20°C** in heating mode  
**OUTDOOR TEMPERATURE**

boiler connection  
**RETROFIT**

solar panels connection  
**SOLAR KIT**

domestic hot water  
**DHW**

**5 year** compressor warranty



**NEW 2011**

### BI-BLOC // AQUAREA T-CAP // HEATING AND COOLING // SXC

		SINGLE-PHASE		THREE-PHASE	
Indoor unit		WH-SXC09D3E5	WH-SXC12D6E5	WH-SXC09D3E8	WH-SXC12D9E8
Heating Capacity at +7°C	kW	9	12	9	12
COP at +7°C with heating water temperature at 35°C		4,74	4,67	4,74	4,67
Heating Capacity at -7°C	kW	9	12	9	12
COP at -7°C with heating water temperature at 35°C		2,81	2,7	2,81	2,7
Heating Capacity at -15°C	kW	9	12	9	12
COP at -15°C with heating water temperature at 35°C		2,54	2,4	2,54	2,4
Cooling capacity at 35°C		7	10	7	10
EER at 35°C with cooling water temperature at 7/12°C		3,11	2,78	3,11	2,78
Dimensions (H x W x D)	mm	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353
Weight	kg	48	51	51	52
Water pipe connector		R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4
Pump	No. of Speed	3	3	3	3
	Input power(max)	W	180	180	180
Heating water flow (ΔT=5 K, 35°C)	l/min	25,8	34,4	25,8	34,4
Capacity of integrated electric heater	kW	3	6	3	9
Input Power	kW	1,9	2,57	1,9	2,57
Starting Current	A	10,4	16,7	3,5	5,6
Maximum Current	A	25	29	10,4	11,9
Outdoor unit		WH-UX09DE5	WH-UX12DE5	WH-UX09DE8	WH-UX12DE8
Sound pressure level	dB(A)	49	50	49	50
Sound power level	dB	66	67	66	67
Dimensions (H x W x D)	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320
Weight	kg	107	107	110	110
Pipe Diameter	Liquid	mm (Inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")
	Gas	mm (Inch)	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")
Refrigerant (R410A)	kg	3,10	2,75	2,75	2,75
Pipe Length Range	m	3 - 30	3 - 30	3 - 30	3 - 30
Pipe Length for nominal capacity	m	7	7	7	7
Pipe Length for additional gas	m	15	15	15	15
Additional Gas Amount (R410A)	g/m	50	50	50	50
I/D&O/D Height Difference	m	20	20	20	20
Operation Range	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35
	Water Outlet (at -2/-7/-15) 2)	°C	25 - 55	25 - 55	25 - 55

\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Height / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

Performance calculation in agreement with Eurovent.  
Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height  
Conditions : Water input temperature: 30 °C. Water output temperature: 35 °C

### TECHNICAL FOCUS

- RANGE FROM 9 TO 12 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- MAXIMUM 20 m RISE BETWEEN THE OUTDOOR UNIT AND THE HYDRAULIC MODULE
- CONSTANT CAPACITY AT OUTDOOR TEMPERATURES DOWN TO -15 °C (AT A HEATING WATER TEMPERATURE OF 35 °C)
- COOLING TEMPERATURE RANGE 5-20 °C

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4.74
- Environmentally-friendly refrigerant gas R410A

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised based on the return water temperature
- Built-in management of the hot water cylinder and heating

### EASY TO USE

- Control on the hydraulic module
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Easy-to-access pressure gauge for easy control of the water pressure
- Easy-to-open hydraulic module and outdoor unit



WH-UX09DE5  
WH-UX12DE5  
WH-UX09DE8  
WH-UX12DE8



WH-TDS20B3E5  
WH-TDS30B3E5

100% capacity at -15°C

AQUAREA T-CAP

100% capacity at -15°C

100% capacity at -15°C

## AQUAREA MXF // MONO-BLOC // T-CAP // HEATING ONLY SINGLE-PHASE // THREE-PHASE

The Aquarea MXF is the new Aquarea product from Panasonic for central heating. T-CAP stands for Total capacity as this new line-up is able to keep the same nominal capacity even at -15°C without the help of an electrical booster heater. T-CAP is also able to provide extremely high efficiency, whatever the outside temperature or the water temperature. The new MXF is ideal for houses where keeping the same capacity is important such as new houses or houses without support from an external boiler.

The MXF can be adapted to an existing installation such as a boiler backup or to a new installation with floor heating, low-temperature radiators or even fan-coil heaters. These ranges can also be connected to a solar kit in order to increase efficiency and minimize the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating control and management.

high efficiency heating

**INVERTER+**

environmentally friendly refrigerant

**R410A**

down to **-20°C** in heating mode

**OUTDOOR TEMPERATURE**

boiler connection

**RETROFIT**

solar panels connection

**SOLAR KIT**

domestic hot water

**DHW**

5 year compressor warranty



### MONO-BLOC // AQUAREA T-CAP // HEATING ONLY // MXF

Outdoor unit		SINGLE-PHASE		THREE-PHASE	
		WH-MXF09D3E5	WH-MXF12D6E5	WH-MXF09D3E8	WH-MXF12D9E8
Heating Capacity at +7°C	kW	9	12	9	12
COP at +7°C with heating water temperature at 35°C		4,74	4,67	4,74	4,67
Heating Capacity at -7°C	kW	9	12	9	12
COP at -7°C with heating water temperature at 35°C		2,81	2,7	2,81	2,7
Heating Capacity at -15°C	kW	9	12	9	12
COP at -15°C with heating water temperature at 35°C		2,54	2,4	2,54	2,4
Sound pressure level	dB(A)	49	50	49	50
Sound power level	dB	66	67	66	67
Dimensions (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
Weight	kg	155	155	158	158
Water pipe connector		R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4
Pump	No. of Speed	3	3	3	3
	Input power(max)	190	190	190	190
Heating water flow ( $\Delta t=5$ K, 35°C)	l/min	25,8	34,4	25,8	34,4
Capacity of integrated electric heater	kW	3	6	3	9
Input Power	kW	1,9	2,57	1,9	2,57
Starting Current	A	8,8	11,9	2,9	3,9
Maximum Current	A	25	29	10,4	11,9
Operation Range	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35
	Water Outlet (at -7/-15) 2)	°C	25 - 55	25 - 55	25 - 55

COP classification is at 230 V only in accordance with EU directive 2003/32/EC. Sound pressure measured at 1 m from the outdoor unit and at 1.5 m height.



\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

Performance calculation in agreement with Eurovent.

Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height

Conditions : Water input temperature: 30 °C. Water output temperature: 35 °

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Height / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

### TECHNICAL FOCUS

- RANGE FROM 9 TO 12 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4.74

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised according to the return water temperature
- Autonomous management of the hot water cylinder and heating

### EASY TO USE

- Single-unit range, with no refrigerant connections
- Wired control panel for installation in the house
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Outdoor unit easy to open for maintenance



WH-TDS20B3E5

WH-TDS30B3E5

100% capacity at -15°C

AQUAREA T-CAP

ΑQUAREA T-CAP

αφ -15°C capacity

## AQUAREA MXC // MONO-BLOC // T-CAP // HEATING AND COOLING SINGLE-PHASE // THREE-PHASE

The Aquarea MXC is the new Aquarea product from Panasonic for heating and cooling. T-CAP stands for Total capacity as this new line-up is able to keep the same nominal capacity even at -15°C without the help of an electrical booster heater. T-CAP is also able to provide extremely high efficiency, whatever the outside temperature or the water temperature. The new MXC is ideal for houses where keeping the same capacity is important such as new houses or houses without support from an external boiler.

The MXC can be adapted to an existing installation such as a boiler backup or to a new installation with floor heating, low-temperature radiators or even fan-coil heaters. These ranges can also be connected to a solar kit in order to increase efficiency and minimize the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating or cooling control and management.

high efficiency heating

**INVERTER+**

environmentally friendly refrigerant

**R410A**

down to **-20°C** in heating mode

**OUTDOOR TEMPERATURE**

boiler connection

**RETROFIT**

solar panels connection

**SOLAR KIT**

domestic hot water

**DHW**

5 year compressor warranty



### MONO-BLOC // AQUAREA T-CAP // HEATING AND COOLING// MXC

Outdoor unit	SINGLE-PHASE		THREE-PHASE			
	WH-MXC09D3E5	WH-MXC12D6E5	WH-MXC09D3E8	WH-MXC12D9E8		
Heating Capacity at +7°C	kW	9	12	9	12	
COP at +7°C with heating water temperature at 35°C		4,74	4,67	4,74	4,67	
Heating Capacity at -7°C	kW	9	12	9	12	
COP at -7°C with heating water temperature at 35°C		2,81	2,7	2,81	2,7	
Heating Capacity at -15°C	kW	9	12	9	12	
COP at -15°C with heating water temperature at 35°C		2,54	2,4	2,54	2,4	
Cooling capacity at 35°C		7	10	7	10	
EER at 35°C with cooling water temperature at 7/12°C	kW	3,11	2,78	3,11	2,78	
Sound pressure level	dB(A)	49	50	49	50	
Sound power level	dB	66	67	66	67	
Dimensions (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	
Weight	kg	155	155	158	158	
Water pipe connector		R 1 1/4	R 1 1/4	R 1 1/4	R 1 1/4	
Pump	No. of Speed	3	3	3	3	
	Input power(max)	W	190	190	190	190
Heating water flow (^aT=5 K, 35°C)	l/min	25,8	34,4	25,8	34,4	
Capacity of integrated electric heater	kW	3	6	3	9	
Input Power	kW	1,9	2,57	1,9	2,57	
Starting Current	A	10,4	16,7	2,9	3,9	
Maximum Current	A	25	29	10,4	11,9	
Operation Range	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35	-20 to 35
	Water Outlet (at -2/-7/-15) 2)	°C	22 - 55 / 5 - 20	22 - 55 / 5 - 20	22 - 55 / 5 - 20	22 - 55 / 5 - 20

COP classification is at 230 V only in accordance with EU directive 2003/32/EC. Sound pressure measured at 1 m from the outdoor unit and at 1.5 m height.

\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

Performance calculation in agreement with Eurovent.

Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height

Conditions : Water input temperature: 30 °C. Water output temperature: 35 °

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Height / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

### TECHNICAL FOCUS

- RANGE FROM 9 TO 12 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- COOLING TEMPERATURE RANGE 5-20 °C

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- 78% more efficient than an electrical convection system
- Maximum COP of 4.74 for the 9 kW model

### COMFORT

- Optimum control possible with a room temperature thermostat (not supplied)
- Maximum hydraulic module output temperature: 55 °C
- Power optimised according to the return water temperature
- Autonomous management of the hot water cylinder and heating

### EASY TO USE

- Single-unit range, with no refrigerant connections
- Wired control panel for installation in the house
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Outdoor unit easy to open for maintenance



WH-TDS20B3E5

WH-TDS30B3E5

output water  
65°C

HIGH TEMP  
HEAT PUMP

HEVЛ ЁПНВ  
HIGH TEMP

65°C

## AQUAREA SHF // BI-BLOC // HT // HEATING ONLY SINGLE-PHASE // THREE-PHASE

For a house with high temperature radiators (for example, cast iron radiators), the Aquarea High Temperature Solution is probably the most adequate as Aquarea HT provides output water temperatures of 65°C even at -15°C. Aquarea HT is able to deliver 65°C with the Heat Pump alone.

high efficiency heating  
**INVERTER+**

environmentally friendly refrigerant  
**R407C**

down to **-20°C** in heating mode  
**OUTDOOR TEMPERATURE**

boiler connection  
**RETROFIT**

solar panels connection  
**SOLAR KIT**

domestic hot water  
**DHW**

5 year compressor warranty



### BI-BLOC // AQUAREA HT // HEATING ONLY // SHF

Indoor unit		SINGLE-PHASE		THREE-PHASE			
		WH-SHF09D3E5*	WH-SHF12D6E5*	WH-SHF09D3E8*	WH-SHF12D9E8*		
Heating Capacity at +7°C COP at +7°C	With heating water temperature at 35°C	kW	9	12	9	12	
			4,55	4,4	4,55	4,4	
		Heating Capacity at -7°C COP at -7°C	kW	9	12	9	12
				2,7	2,5	2,7	2,5
Heating Capacity at -15°C COP at -15°C	With heating water temperature at 35°C	kW	9	12	9	12	
			2,4	2,15	2,4	2,15	
		Heating Capacity at +7°C COP at +7°C	kW	9	12	9	12
				2,25	2,2	2,25	2,2
Heating Capacity at -7°C COP at -7°C	With heating water temperature at 65°C	kW	8,9	9,6	8,9	9,6	
			1,64	1,61	1,64	1,61	
		Heating Capacity at -15°C COP at -15°C	kW	7,8	8	7,8	8
				1,32	1,3	1,32	1,3
Dimensions (H x W x D)	mm	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353	892 x 502 x 353		
Weight	kg						
Water pipe connector							
Pump	No. of Speed						
	Input power(max)	W					
Heating water flow (ΔT=5 K, 35°C)	l/min						
Capacity of integrated electric heater	kW	3	6	3	9		
Input Power	kW						
Starting Current	A						
Maximum Current	A						
Outdoor unit		WH-UH09DE5	WH-UH12DE5	WH-UH09DE8	WH-UH12DE8		
Sound pressure level	dB(A)	49	50	49	50		
Sound power level	dB	66	67	66	67		
Dimensions (H x W x D)	mm	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320	1340 x 900 x 320		
Weight	kg						
Pipe Diameter	Liquid	mm (Inch)	9,52 (3/8")	9,52 (3/8")	9,52 (3/8")		
	Gas	mm (Inch)	15,88 (5/8")	15,88 (5/8")	15,88 (5/8")		
Refrigerant (R407C)	kg	2,95	2,95	2,95	2,95		
Pipe Length Range	m	3 - 30	3 - 30	3 - 30	3 - 30		
Pipe Length for nominal capacity	m	7	7	7	7		
Pipe Length for additional gas	m	15	15	15	15		
Additional Gas Amount (R407C)	g/m	70	70	70	70		
I/D&O/D Height Difference	m	20	20	20	20		
Operation Range	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35		
	Water Outlet (at -2/-7/-15) 2	°C	25 - 65	25 - 65	25 - 65		

\* Tentative specifications.  
Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Height / Diameter	mm	mm
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

Performance calculation in agreement with Eurovent.  
Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height  
Conditions : Water input temperature: 30 °C. Water output temperature: 35 °C

### TECHNICAL FOCUS

- RANGE FROM 9 TO 12 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 65 °C
- WORKS DOWN TO -20 °C
- MAXIMUM 20 M RISE BETWEEN THE OUTDOOR UNIT AND THE HYDRAULIC MODULE

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- Maximum COP of 4.55
- Environmentally-friendly refrigerant gas R407C

### COMFORT

- Maximum hydraulic module output temperature: 65 °C
- Optimum control possible with an outside thermometer (not supplied)
- Power optimised based on the return water temperature
- Built-in management of the hot water cylinder and heating

### EASY TO USE

- Control on the hydraulic module
- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Easy-to-access pressure gauge for easy control of the water pressure
- Easy-to-open hydraulic module and outdoor unit



WH-UH09DE5  
WH-UH12DE5  
WH-UH09DE8  
WH-UH12DE8



WH-TDS20B3E5  
WH-TDS30B3E5

output water  
65°C

HIGH TEMP  
HEAT PUMP

HEVЛ БИЛЫБ  
HIGH LEWB

65°C  
AQUAREA

## AQUAREA MHF // MONO-BLOC // HT // HEATING ONLY SINGLE-PHASE // THREE-PHASE

For a house with high temperature radiators (for example, cast iron radiators), the Aquarea High Temperature Solution is probably the most adequate as Aquarea HT provides output water temperatures of 65°C even at -15°C. Aquarea HT is able to deliver 65°C with the Heat Pump alone.

high efficiency heating

**INVERTER+**

environmentally friendly refrigerant

**R407C**

down to **-20°C** in heating mode

**OUTDOOR TEMPERATURE**

boiler connection

**RETROFIT**

solar panels connection

**SOLAR KIT**

domestic hot water

**DHW**

**5 year** compressor warranty



**NEW**  
2012

### MONO-BLOC // AQUAREA T-CAP // HEATING ONLY // MHF

Indoor unit				SINGLE-PHASE		THREE-PHASE	
				WH-MHF09D3E5*	WH-MHF12D6E5*	WH-MHF09D3E8*	WH-MHF12D9E8*
Heating Capacity at +7°C	With heating water temperature at 35°C	kW	9	12	9	12	
COP at +7°C			4,55	4,4	4,55	4,4	
Heating Capacity at -7°C		kW	9	12	9	12	
COP at -7°C			2,7	2,5	2,7	2,5	
Heating Capacity at -15°C		kW	9	12	9	12	
COP at -15°C			2,4	2,15	2,4	2,15	
Heating Capacity at +7°C		With heating water temperature at 65°C	kW	9	12	9	12
COP at +7°C				2,25	2,2	2,25	2,2
Heating Capacity at -7°C			kW	8,9	9,6	8,9	9,6
COP at -7°C				1,64	1,61	1,64	1,61
Heating Capacity at -15°C	kW		7,8	8	7,8	8	
COP at -15°C			1,32	1,3	1,32	1,3	
Sound pressure level			dB(A)	49	50	49	50
Sound power level			dB	66	67	66	67
Dimensions (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
Weight			kg				
Water pipe connector							
Pump	No. of Speed						
	Input Power(max)						
Heating water flow (ΔT=5 K, 35°C)		l/min					
Capacity of integrated electric heater		kW	3	6	3	9	
Input Power		kW					
Running and starting Current		A					
Maximum Current		A					
Operation Range	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35	-20 to 35	
	Water Outlet (at -7/-15) <sup>1)</sup>	°C	25 - 65	25 - 65	25 - 65	25 - 65	

COP classification is at 230 V only in accordance with EU directive 2003/32/EC. Sound pressure measured at 1 m from the outdoor unit and at 1.5 m height.



\* Tentative specifications

Super efficient Tank with high exchange surface in order to get the maximum of you heat pump

Performance calculation in agreement with Eurovent.

Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height

Conditions : Water input temperature: 30 °C. Water output temperature: 35 °

OPTIONAL STANDARD SANITARY TANK			WH-TDS20B3E5	WH-TDS30B3E5
Water volume		L	200	300
Max. water temperature		°C	85	85
Dimension	Height / Diameter	mm	1230 / 580	1700 / 580
Weight		kg	42	54
Power supply			230V	230V
Material inside tank			Inox	Inox
Exchange surface		m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)		kWh/24h	1,7	2
3 Way valve included			YES	YES

### TECHNICAL FOCUS

- RANGE FROM 9 TO 12 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 65 °C
- WORKS DOWN TO -20 °C

### ENERGY AND ENVIRONMENTAL EFFICIENCY

- Maximum COP of 4.55
- Environmentally-friendly refrigerant gas R407C

### COMFORT

- Maximum hydraulic module output temperature: 65 °C
- Optimum control possible with an outside thermometer (not supplied)
- Power optimised based on the return water temperature
- Built-in management of the hot water cylinder and heating

### EASY TO USE

- Easy programming on the control panel

### EASY INSTALLATION AND MAINTENANCE

- Easy-to-access pressure gauge for easy control of the water pressure
- Easy-to-open outdoor unit



WH-TDS20B3E5

WH-TDS30B3E5





AQUAREA  
PRO  
580

**AQUAREA PRO**  
THE NEW PANASONIC SOLUTION FOR CHILLED  
AND HOT WATER PRODUCTION!

FROM 28 kW to 168 kW



**NEW**  
2012

**KEY BENEFITS:**

- No cascade installation up to 80kW with GHP outdoor unit and 60kW with ECOi
- No Glycol needed when WHE is located on the heated part of the building
- Full line-up of outdoor units which can cover up to 80 kW heat demand
- Large number of remote controls and interfaces
- 3.25 COP with water at 45°C and outdoor temperature of +7°C

**With ECOi outdoor units:**

- Maximum hot water outlet temperature: 45 °C
- Minimum chilled water outlet temperature: 7 °C
- Outdoor temperature range in cooling mode: +5 °C to +43 °C
- Outdoor temperature range in heating mode: -20 °C to +15 °C

**With GHP outdoor units:**

- Hot water outlet temperatures from 35 °C to 55 °C
- Chilled water outlet temperatures from 5 °C to 15 °C
- Outdoor temperature range in cooling mode: -10 °C to +43 °C
- Minimum outdoor temperature in heating mode: -21 °C

**ECOi Water Heat Exchanger**

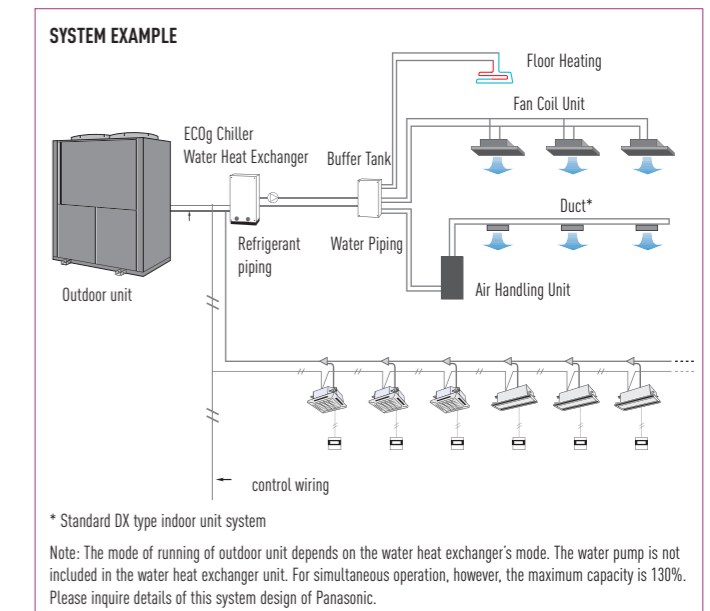
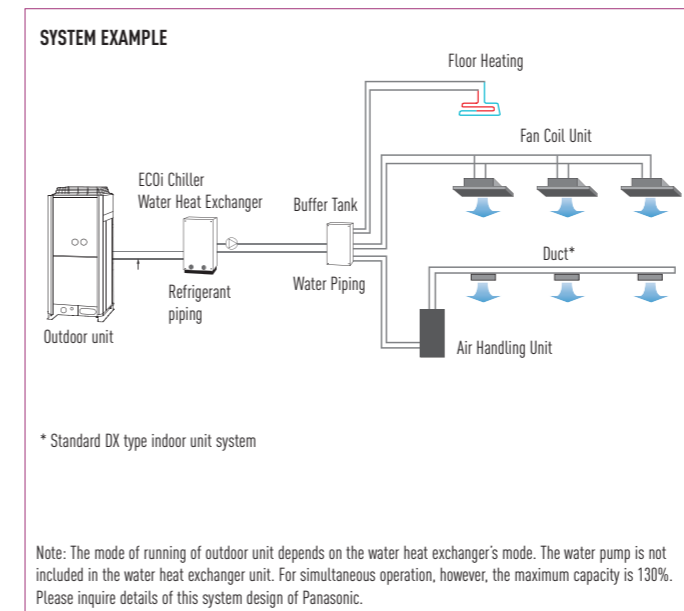
**Mixed System Application**

- Combined with a water heat exchanger unit, the Panasonic GHP can create a flexible system--the ideal replacement for existing chiller and boiler systems.
- The GHP Multi System can have an indoor unit plus a GHP chiller. When the two systems are operated independently, an outdoor unit with 130% capacity can be connected.

**ECOg Water Heat Exchanger**

**Mixed System Application**

- Combined with a water heat exchanger unit, the Panasonic GHP can create a flexible system--the ideal replacement for existing chiller and boiler systems.
- The GHP Multi System can have an indoor unit plus a GHP chiller. When the two systems are operated independently, an outdoor unit with 130% capacity can be connected.





## AQUAREA PRO // NEW ECOi 2-WAY 6 SERIES WITH WATER HEAT EXCHANGER

DESIGNED FOR CHILLED AND HOT WATER PRODUCTION

With this easy to install Aquarea Pro system, you can now cover projects up to 51 kW hot water demand or 44 kW on chilled application on a efficient way and cost effective.

environmentally friendly refrigerant  
**R407C**

down to **-20°C** in heating mode  
**OUTDOOR TEMPERATURE**

boiler connection  
**RETROFIT**

solar panels connection  
**SOLAR KIT**

domestic hot water  
**DHW**

5 year compressor warranty

**OPTIONAL CONTROLLER**  
Timer remote controller  
CZ-RTCZ



AQUAREA PRO

AQUAREA PRO // GAS VRF ECOi + WATER HEAT EXCHANGER		Eco-i	
Water heat exchanger		U-250WX2E5	U-500WX2E5
Heating Capacity at +7°C, heating water temperature at 35°C	kW		
COP at +7°C with heating water temperature at 35°C			
Heating Capacity at +7°C, heating water temperature at 45°C	kW	28,0	51,3
COP at +7°C with heating water temperature at 45°C			
Heating Capacity at -7°C, heating water temperature at 35°C	kW	23,4	44,9
COP at -7°C, heating water temperature at 35°C			
Heating Capacity at -15°C, heating water temperature at 35°C	kW	20,7	39,3
COP at -15°C with heating water temperature at 35°C			
Heating capacity at +32°C, outlet tp 6°C, inlet tp 12°C	kW		
COP at +32°C, outlet tp 6°C, inlet tp 12°C			
Heating capacity at +35°C, outlet tp 7°C, inlet tp 12°C	kW		
COP at +32°C, outlet tp 6°C, inlet tp 12°C			
Dimensions (H x W x D)	mm	1000x395x965	1000x395x965
Weight	kg	165	190
Water pipe connector		Rp2 Nut thread (50A)	Rp2 Nut thread (50A)
Pump	No. of Speed	(Field supply)	(Field supply)
	Input Power(max)	W	---
Heating water flow (ΔT=5 K, 35°C)	l/min	4,3 ?	8,6 ?
Capacity of integrated electric heater	kW	(Not equipped)	(Not equipped)
Input Power	kW	0,01	0,01
Starting Current	A	---	---
Maximum Current	A	0,07	0,07
Outdoor unit		U-10ME1E81	U-20ME1E81
Sound pressure level	dB(A)	59	63
Sound power level	dB	73,5	77,5
Dimensions (H x W x D)	mm	1758x770x930	1758x1540x930
Weight	kg	281	423
Pipe Diameter	Liquid	mm (Inch)	22,22
	Gas	mm (Inch)	9,52
Refrigerant (R410A)	kg	"6,3 <sup>1</sup>	"9,0 <sup>1</sup>
Pipe Length Range	m	max. 170	max. 170
Pipe Length for nominal capacity	m	7,5	7,5
Pipe Length for additional gas	m	0 <	0 <
Additional Gas Amount (R410A)	g/m	Refer to Manual	Refer to Manual
l/D&O/D Hight Difference	m	"50 (OD above) 35 (OD below)"	"50 (OD above) 35 (OD below)"
Operation Range	Outdoor Ambient	°C	-20 - 15
	Water Outlet (at-2/-7/-15) 2	°C	35 - 45

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Hight / Diameter	mm	1230 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m <sup>2</sup>	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES

In ECOi 2-way systems, the water heat exchanger can only be used as a one-to-one solution for ECOi 2-way systems. A combination with other indoor or outdoor units is not allowed.  
<sup>1</sup> Need Additional charge at site"  
<sup>\*</sup> Max. piping lengths for 100 % one-to-one combination ratio.  
<sup>\*</sup> All values shown as tentative data.

Rating conditions:  
 Cooling: outdoor 35 °C; water outlet/inlet: 7/12 °C.  
 Heating: outdoor 7 °C DB / 6 °C WB, water outlet/inlet: 45/40 °C

### TECHNICAL FOCUS

- UP TO 56KW ON ONLY 1 OUTDOOR UNIT
- PRODUCE HOT WATER AT 45°C WITH HIGH EFFICIENCY
- CHILLED WATER OUTLET TEMPERATURES FROM 5 °C TO 15 °C
- LARGE LINE-UP OF REMOTE CONTROLS FROM ECOi LINE-UP
- HIGH EFFICIENCY UP TO -20°C ON HEATING MODE
- HIGH EFFICIENCY UP TO +5 °C ON COOLING MODE (CHILLER APPLICATION)

### DESCRIPTION

- New water heat exchanger for GHP and ECOi 6 series, dimensions reduced by 45 %
- Operation and control by wired remote control CZ-RTCZ
- Energy-efficient capacity control
- Stainless steel plate heat exchanger with anti-freeze protection control
- Change-over between heating and cooling operation
- Maximum distance between outdoor unit and water heat exchanger: 170 m
- Maximum hot water outlet temperature: 45 °C
- Minimum chilled water outlet temperature: 7 °C
- Outdoor temperature range in cooling mode: +5 °C to +43 °C
- Outdoor temperature range in heating mode: -20 °C to +15 °C

OUTDOOR UNIT MODEL	CAPACITY		HEAT EXCHANGER MODEL	
	Cooling	Heating	S-250WX2E5	S-500WX2E5
U-10ME1E81	25	28	1	-
U-20ME1E81	50	56	-	1
U-12ME1E81	75	84	1	1



WH-TDS20B3E5 WH-TDS30B3E5



## AQUAREA PRO // NEW GAS VRF ECO G WITH WATER HEAT EXCHANGER

DESIGNED CHILLED AND HOT WATER PRODUCTION

NEW Aquarea Pro GHP+WHE system, based of Gas Heat Pump technology, for Hot water production and Chilled application even where electricity is not available!

environmentally friendly refrigerant  
**R407C**

down to **-20°C** in heating mode  
 OUTDOOR TEMPERATURE

boiler connection  
 RETROFIT

solar panels connection  
 SOLAR KIT

domestic hot water  
 DHW

5 year compressor warranty

OPTIONAL CONTROLLER  
Timer remote controller  
CZ-RTC2



# AQUAREA PRO

AQUAREA PRO // GAS VRF ECOg + WATER HEAT EXCHANGER		IN 1 TO 1 COMBINATION					
		S-250WX2E5		S-500WX2E5		S-710WX2E5	
Water heat exchanger		Cooling	Heating	Cooling	Heating	Cooling	Heating
Rated capacity	kW	25	30	50	60	67	80
Rated power input (cooling/heating)	kW		0,01		0,01		0,75
Rated current	A		0,07		0,07		3,2
Power supply	V/Ph/Hz	230/1/50		230/1/50		230/1/50	
Water volume flow	m³/h	4,3		8,6		11,5**	
Pressure loss	kPa	6,6		7,3		-	
Water volume in heat exchanger	m³	0,008		0,012		0,025	
Min. water volume in primary circuit	m³	0,28		0,5		0,75	
Max. water pressure	MPa	0,686		0,686		0,686	
Type of anti-freeze protection		Flow switch					
Dimensions (H x W x D)	mm	1000 x 395 x 965		1000 x 395 x 965		1000 x 550 x 965	
Weight	kg	110		130		160	
Refrigerant and electrical connection data U-xxGE2E5							
Pipe connections	Gas pipe	mm	22,2		28,6		28,6
	Liquid pipe	mm	9,5		15,9		15,9
Max. piping length	m	170*		170*		170*	
Max. height difference IU above OU	m	30*		30*		30*	
Max. height difference OU above IU	m	50*		50*		50*	
Power supply wire diameter	mm²	3 x 1,5		3 x 1,5		3 x 1,5	
Communication wire (LJYCY)	mm²	2 x 0,75		2 x 0,75		2 x 0,75	
Fuse size (slow-blow)	A	16		16		16	

Not valid in case of mixed systems, combination ratio in case of mixed systems: 50 to 130 %, combination ratio in case of one-to-one-systems: 100 %  
Water circulating pump. Power supply: 230 V / 1 Ph / 50 Hz; power input: 0.75 kW; external pressure head: 6 m

Performance calculation in agreement with Eurovent.  
Sound pressure measured at 1 m from the outdoor unit and at 1.5-m height  
Conditions : Water input temperature: 30 °C. Water output temperature: 35 °

OPTIONAL STANDARD SANITARY TANK		WH-TDS20B3E5	WH-TDS30B3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Hight / Diameter	1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m²	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES



### TECHNICAL FOCUS

- UP TO 56KW ON ONLY 1 OUTDOOR UNIT
- HOT WATER OUTLET TEMPERATURES FROM 35 °C TO 55 °C
- CHILLED WATER OUTLET TEMPERATURES FROM 5 °C TO 15 °C
- LARGE LINE-UP OF REMOTE CONTROLS FROM ECOI LINE-UP
- HIGH EFFICIENCY UP TO -20°C ON HEATING MODE
- HIGH EFFICIENCY UP TO +5 °C ON COOLING MODE (CHILLER APPLICATION)

### DESCRIPTION

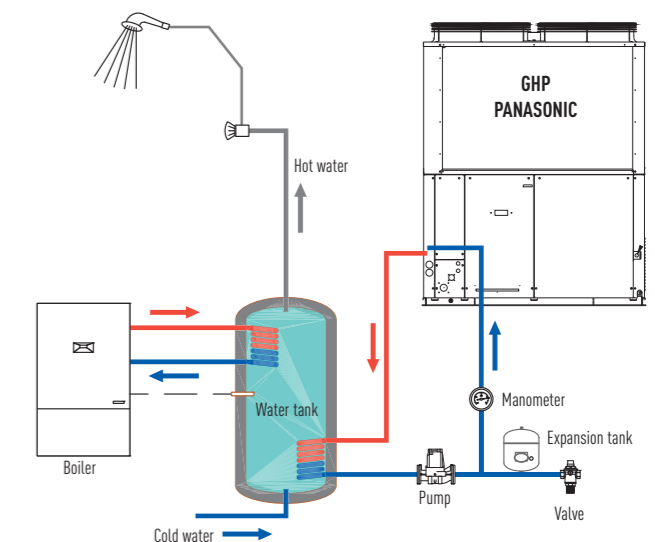
- Hot water outlet temperatures from 35 °C to 55 °C
- Chilled water outlet temperatures from 5 °C to 15 °C
- Operation and control by wired remote control CZ-RTC2
- Energy-efficient capacity control
- Stainless steel plate heat exchanger with anti-freeze protection control
- Change-over between heating and cooling operation
- Maximum distance between outdoor unit and water heat exchanger: 170 m
- Possibility to mix DX and water heat exchanger systems
- No cooling tower necessary
- Hot water outlet temperatures from 35 °C to 55 °C
- Chilled water outlet temperatures from 5 °C to 15 °C
- Outdoor temperature range in cooling mode: -10 °C to +43 °C
- Minimum outdoor temperature in heating mode: -21 °C

### HOT WATER SUPPLY FUNCTION

#### SYSTEM ADVANTAGE

The engine waste heat, which is normally exhausted into the atmosphere, is recovered via the heat exchanger and effectively used as hot water, so the GHP Chiller acts as a sub system that alleviates the load on the client's main hot water system, and therefore offers 'free' hot water.

CAPACITY AT COOLING STANDARD POINT		OUTLET TEMP 75°C	
Outdoor unit	U-16GE2E5	kW	16.00
	U-20GE2E5		20.00
	U-20GE2E5		22.00
	U-25GE2E5		25.00
Hot water piping allowable pressure			0.7
Hot water circulation rate		MPa	3.9
Hot water tube size		m³/h	Rp 3/4



# HEATING CAPACITY TABLE BASED ON OUTLET TEMPERATURE AND OUTSIDE TEMPERATURE

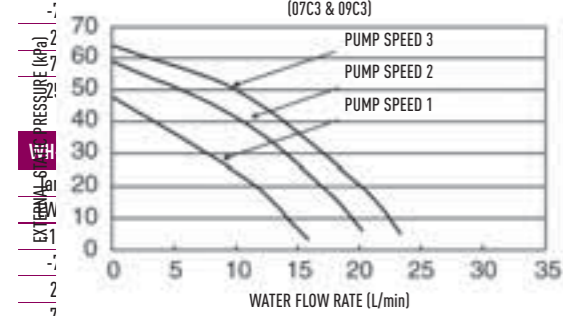
## MONO-BLOC // 6/9 KW AQUAREA // HEATING ONLY // MDF

WH-MDF06D3E5																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15	6.15	2.52	2.44	5.90	2.68	2.20	5.65	2.84	1.99	5.40	3.00	1.80	5.20	3.17	1.64	5.00	3.34	1.50			
-7	5.18	1.70	3.05	5.15	1.94	2.65	5.13	2.19	2.35	5.10	2.43	2.10	5.45	2.83	1.93	5.80	3.22	1.80			
2	5.00	1.25	4.02	5.00	1.47	3.40	5.00	1.70	2.95	5.00	1.92	2.60	5.00	2.21	2.26	5.00	2.50	2.00			
7	6.00	1.15	5.24	6.00	1.37	4.38	6.00	1.60	3.76	6.00	1.82	3.30	6.00	2.11	2.84	6.00	2.40	2.50			
25	7.30	0.80	9.18	7.10	0.95	7.47	6.90	1.11	6.24	6.70	1.26	5.32	6.50	1.43	4.55	6.30	1.60	3.94			

WH-MDF09D3E5																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15	7.90	3.65	2.17	7.60	3.80	2.00	7.30	3.96	1.85	7.00	4.11	1.70	6.45	4.09	1.58	5.90	4.06	1.45			
-7	7.80	3.41	2.29	7.70	3.66	2.10	7.60	3.91	1.94	7.50	4.16	1.80	7.55	4.62	1.63	7.60	5.08	1.50			
2	7.00	2.04	3.44	7.00	2.33	3.00	7.00	2.63	2.67	7.00	2.92	2.40	7.00	3.40	2.06	7.00	3.88	1.80			
7	9.00	1.90	4.75	9.00	2.20	4.09	9.00	2.51	3.59	9.00	2.81	3.20	8.95	3.34	2.68	8.90	3.87	2.30			
25	9.00	1.02	8.82	9.00	1.34	6.72	9.00	1.66	5.42	9.00	1.98	4.55	9.00	2.23	4.04	9.00	2.48	3.63			

## BI-BLOC // HIGH-CONNECTIVITY // HEATING MODE // SDF

WH-SDF07C3E5																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15	4.60	1.87	2.46	4.60	2.00	2.30	4.60	2.19	2.10	4.60	2.42	1.90	4.55	2.68	1.70	4.50	3.00	1.50			



IP	COP
55	55
1.33	1.50
1.22	1.80
1.16	1.90
1.87	2.30
2.03	3.69

This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

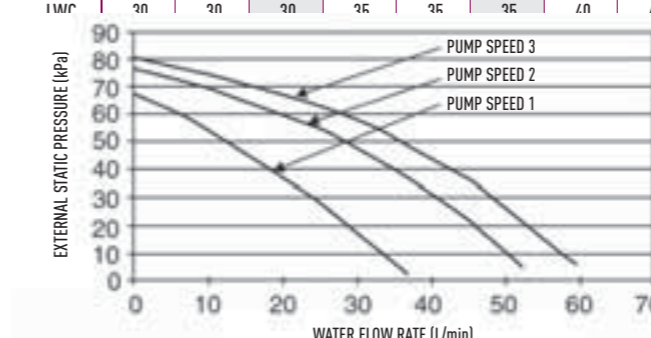
WH-SDF12C6E5																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15	9.30	3.50	2.66	8.90	3.66	2.43	8.50	3.83	2.22	8.10	3.99	2.03	7.50	4.09	1.83	7.00	4.20	1.67			
-7	10.40	3.41	3.05	10.00	3.70	2.70	9.60	3.99	2.41	9.20	4.28	2.15	8.70	4.30	2.02	8.20	4.31	1.90			
2	11.80	3.14	3.76	11.40	3.35	3.40	11.00	3.57	3.08	10.60	3.78	2.80	9.80	3.98	2.46	9.10	4.18	2.18			
7	12.00	2.14	5.61	12.00	2.57	4.67	12.00	3.00	4.00	12.00	3.43	3.50	12.00	3.82	3.14	12.00	4.20	2.86			
25	12.00	1.42	8.45	12.00	1.70	7.06	11.80	1.98	5.96	11.70	2.27	5.15	11.50	2.53	4.55	11.40	2.78	4.10			

WH-SDF14C6E5																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15	9.90	3.91	2.53	9.50	4.05	2.35	9.00	4.19	2.15	8.60	4.33	1.99	7.90	4.45	1.78	7.30	4.56	1.60			
-7	11.10	3.73	2.98	10.70	4.08	2.62	10.20	4.43	2.30	9.80	4.78	2.05	9.10	4.76	1.91	8.50	4.74	1.79			
2	12.90	3.51	3.68	12.40	3.73	3.32	11.90	3.95	3.01	11.40	4.17	2.73	10.40	4.29	2.42	9.50	4.40	2.16			
7	14.00	2.60	5.38	14.00	3.11	4.50	14.00	3.63	3.86	14.00	4.14	3.38	13.60	4.61	2.95	13.30	5.08	2.62			
25	14.00	1.75	8.00	14.00	2.10	6.67	14.00	2.45	5.71	14.00	2.80	5.00	14.00	3.05	4.59	14.00	3.44	4.07			

WH-SDF16C6E5																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15	10.60	4.13	2.57	10.30	4.42	2.33	10.00	4.71	2.12	9.70	5.00	1.94	8.80	4.98	1.77	7.90	4.95	1.60			
-7	11.90	4.07	2.92	11.40	4.47	2.55	10.80	4.87	2.22	10.30	5.26	1.96	9.60	5.13	1.87	9.00	4.99	1.80			
2	13.50	3.78	3.57	13.00	4.00	3.25	12.40	4.22	2.94	11.90	4.44	2.68	10.80	4.50	2.40	9.80	4.55	2.15			
7	16.00	3.25	4.92	16.00	3.78	4.23	16.00	4.31	3.71	16.00	4.84	3.31	15.20	5.15	2.95	14.50	5.45	2.66			
25	16.00	2.35	6.81	16.00	2.73	5.86	16.00	3.11	5.14	16.00	3.49	4.58	16.00	3.71	4.31	15.90	3.93	4.05			

WH-SDF09C9E8																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15	8.65	3.10	2.79	8.30	3.25	2.55	7.95	3.45	2.30	7.60	3.65	2.08	7.15	3.75	1.91	6.70	3.85	1.74			
-7	9.35	2.95	3.17	9.00	3.20	2.81	8.85	3.58	2.47	8.70	3.96	2.20	8.30	3.93	2.11	7.90	3.90	2.03			
2	9.31	2.39	3.90	9.00	2.55	3.53	9.00	2.82	3.19	9.00	3.09	2.91	8.90	3.53	2.52	8.80	3.98	2.21			
7	9.00	1.58	5.70	9.00	1.90	4.74	9.00	2.20	4.09	9.00	2.50	3.60	9.00	2.80	3.21	9.00	3.10	2.90			
25	9.00	1.09	8.26	9.00	1.28	7.03	8.73	1.48	5.90	8.46	1.68	5.04	8.28	1.86	4.45	8.10	2.04	3.97			

## WH-SDF12C9E8 HYDRAULIC PUMP PERFORMANCE



IP	COP
55	55
2.22	1.67
2.41	1.90
3.08	2.18
4.00	2.86
5.96	4.10

This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.

WH-SDF16C9E8																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15	10.60	4.13	2.57	10.30	4.42	2.33	10.00	4.71	2.12	9.70	5.00	1.94	8.80	4.98	1.77	7.90	4.95	1.60			
-7	11.90	4.07	2.92	11.40	4.47	2.55	10.80	4.87	2.22	10.30	5.26	1.96	9.60	5.13	1.87	9.00	4.99	1.80			
2	13.50	3.78	3.57	13.00	4.00	3.25	12.40	4.22	2.94	11.90	4.44	2.68	10.80	4.50	2.40	9.80	4.55	2.15			
7	16.00	3.25	4.92	16.00	3.78	4.23	16.00	4.31	3.71	16.00	4.84	3.31	15.20	5.15	2.95	14.50	5.45	2.66			
25	16.00	2.35	6.81	16.00	2.73	5.86	16.00	3.11	5.14	16.00	3.49	4.58	16.00	3.71	4.31	15.90	3.93	4.05			



## HEATING CAPACITY TABLE BASED ON OUTLET TEMPERATURE AND OUTSIDE TEMPERATURE

### MONO-BLOC // AQUAREA T-CAP // HEATING ONLY // MXF

WH-MXF09D3E5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,28	2,74	9,00	3,55	2,54	9,00	3,95	2,28	9,00	4,34	2,07	9,00	4,77	1,89	9,00	5,20	1,73
-7	9,00	2,75	3,27	9,00	3,20	2,81	9,00	3,66	2,46	9,00	4,11	2,19	9,00	4,31	2,09	9,00	4,50	2,00
2	9,00	2,40	3,75	9,00	2,55	3,53	9,00	2,82	3,19	9,00	3,09	2,91	9,00	3,60	2,50	9,00	4,11	2,19
7	9,00	1,68	5,36	9,00	1,90	4,74	9,00	2,20	4,09	9,00	2,50	3,60	9,00	2,88	3,13	9,00	3,10	2,90
25	13,60	1,54	8,83	13,60	1,75	7,77	13,20	1,97	6,70	12,80	2,18	5,87	12,00	2,45	4,90	11,20	2,71	4,13

WH-MXF12D6E5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,79	2,51	12,00	5,00	2,40	11,50	5,21	2,21	11,00	5,42	2,03	10,70	5,86	1,83	10,50	6,30	1,67
-7	12,00	3,89	3,08	12,00	4,45	2,70	12,00	5,02	2,39	12,00	5,58	2,15	12,00	5,94	2,02	12,00	6,30	1,90
2	12,00	3,23	3,72	12,00	3,53	3,40	12,00	3,91	3,07	12,00	4,29	2,80	12,00	4,90	2,45	12,00	5,51	2,18
7	12,00	2,22	5,41	12,00	2,57	4,67	12,00	3,00	4,00	12,00	3,43	3,50	12,00	3,82	3,14	12,00	4,20	2,86
25	13,60	1,59	8,55	13,60	1,80	7,56	13,40	2,14	6,26	13,20	2,47	5,34	12,60	2,70	4,67	12,00	2,93	4,10

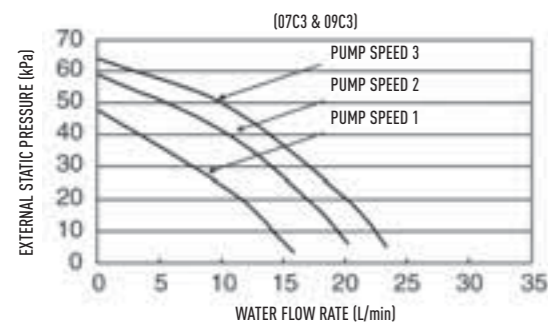
WH-MXF09D3E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,28	2,74	9,00	3,55	2,54	9,00	3,95	2,28	9,00	4,34	2,07	9,00	4,77	1,89	9,00	5,20	1,73
-7	9,00	2,75	3,27	9,00	3,20	2,81	9,00	3,66	2,46	9,00	4,11	2,19	9,00	4,31	2,09	9,00	4,50	2,00
2	9,00	2,40	3,75	9,00	2,55	3,53	9,00	2,82	3,19	9,00	3,09	2,91	9,00	3,60	2,50	9,00	4,11	2,19
7	9,00	1,68	5,36	9,00	1,90	4,74	9,00	2,20	4,09	9,00	2,50	3,60	9,00	2,88	3,13	9,00	3,10	2,90
25	13,60	1,54	8,83	13,60	1,75	7,77	13,20	1,97	6,70	12,80	2,18	5,87	12,00	2,45	4,90	11,20	2,71	4,13

WH-MXF12D9E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,79	2,51	12,00	5,00	2,40	12,00	5,45	2,20	12,00	5,90	2,03	11,50	6,28	1,83	11,10	6,66	1,67
-7	12,00	3,89	3,08	12,00	4,45	2,70	12,00	5,02	2,39	12,00	5,58	2,15	12,00	5,94	2,02	12,00	6,30	1,90
2	12,00	3,23	3,72	12,00	3,53	3,40	12,00	3,91	3,07	12,00	4,29	2,80	12,00	4,90	2,45	12,00	5,51	2,18
7	12,00	2,22	5,41	12,00	2,57	4,67	12,00	3,00	4,00	12,00	3,43	3,50	12,00	3,82	3,14	12,00	4,20	2,86
25	13,60	1,59	8,55	13,60	1,80	7,56	13,40	2,14	6,26	13,20	2,47	5,34	12,60	2,70	4,67	12,00	2,93	4,10

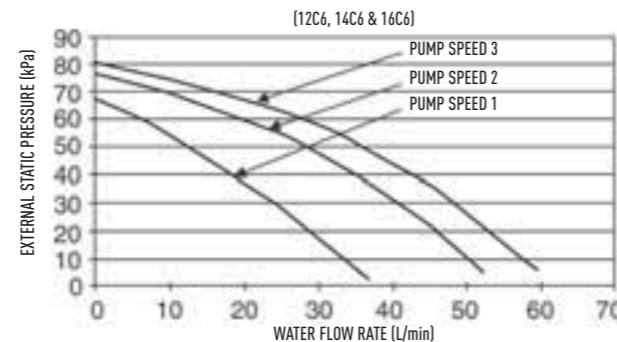
### BI-BLOC // AQUAREA T-CAP // ON COOLING MODE // SXC

SXC						
MODELS	WH-SXC09 E8			WH-SXC12 E8		
Tamb	HC	IP	COP	HC	IP	COP
16	7,00	1,40	5,00	7,50	1,45	5,17
25	7,65	1,95	3,92	8,90	2,20	4,05
35	7,00	2,25	3,11	10,00	3,60	2,78
43	6,25	2,70	2,31	8,00	3,05	2,62

### HYDRAULIC PUMP PERFORMANCE



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HC: Heating Capacity (kW)  
IP: Power Input (kW)  
LWC: Leaving Water Condenser Temperature (°C)  
Tamb: Ambient Temperature (°C)

### BI-BLOC // AQUAREA T-CAP // HEATING ONLY // SXF

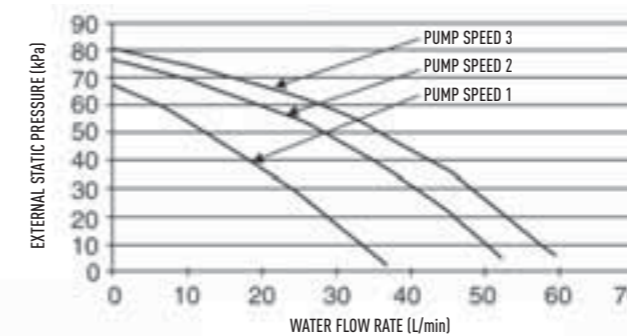
WH-SXF09DE5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,28	2,74	9,00	3,55	2,54	9,00	3,95	2,28	9,00	4,34	2,07	9,00	4,77	1,89	9,00	5,20	1,73
-7	9,00	2,75	3,27	9,00	3,20	2,81	9,00	3,66	2,46	9,00	4,11	2,19	9,00	4,31	2,09	9,00	4,50	2,00
2	9,00	2,40	3,75	9,00	2,55	3,53	9,00	2,82	3,19	9,00	3,09	2,91	9,00	3,60	2,50	9,00	4,11	2,19
7	9,00	1,68	5,36	9,00	1,90	4,74	9,00	2,20	4,09	9,00	2,50	3,60	9,00	2,88	3,13	9,00	3,10	2,90
25	13,60	1,54	8,83	13,60	1,75	7,77	13,20	1,97	6,70	12,80	2,18	5,87	12,00	2,45	4,90	11,20	2,71	4,13

WH-SXF12DE5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,79	2,51	12,00	5,00	2,40	11,50	5,21	2,21	11,00	5,42	2,03	10,70	5,86	1,83	10,50	6,30	1,67
-7	12,00	3,89	3,08	12,00	4,45	2,70	12,00	5,02	2,39	12,00	5,58	2,15	12,00	5,94	2,02	12,00	6,30	1,90
2	12,00	3,23	3,72	12,00	3,53	3,40	12,00	3,91	3,07	12,00	4,29	2,80	12,00	4,90	2,45	12,00	5,51	2,18
7	12,00	2,22	5,41	12,00	2,57	4,67	12,00	3,00	4,00	12,00	3,43	3,50	12,00	3,82	3,14	12,00	4,20	2,86
25	13,60	1,59	8,55	13,60	1,80	7,56	13,40	2,14	6,26	13,20	2,47	5,34	12,60	2,70	4,67	12,00	2,93	4,10

WH-SXF09D3E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,28	2,74	9,00	3,55	2,54	9,00	3,95	2,28	9,00	4,34	2,07	9,00	4,77	1,89	9,00	5,20	1,73
-7	9,00	2,75	3,27	9,00	3,20	2,81	9,00	3,66	2,46	9,00	4,11	2,19	9,00	4,31	2,09	9,00	4,50	2,00
2	9,00	2,40	3,75	9,00	2,55	3,53	9,00	2,82	3,19	9,00	3,09	2,91	9,00	3,60	2,50	9,00	4,11	2,19
7	9,00	1,68	5,36	9,00	1,90	4,74	9,00	2,20	4,09	9,00	2,50	3,60	9,00	2,88	3,13	9,00	3,10	2,90
25	13,60	1,54	8,83	13,60	1,75	7,77	13,20	1,97	6,70	12,80	2,18	5,87	12,00	2,45	4,90	11,20	2,71	4,13

WH-SXF12D3E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,79	2,51	12,00	5,00	2,40	12,00	5,45	2,20	12,00	5,90	2,03	11,80	6,28	1,88	11,60	6,66	1,74
-7	12,00	3,89	3,08	12,00	4,45	2,70	12,00	5,02	2,39	12,00	5,58	2,15	12,00	5,94	2,02	12,00	6,30	1,90
2	12,00	3,23	3,72	12,00	3,53	3,40	12,00	3,91	3,07	12,00	4,29	2,80	12,00	4,90	2,45	12,00	5,51	2,18
7	12,00	2,22	5,41	12,00	2,57	4,67	12,00	3,00	4,00	12,00	3,43	3,50	12,00	3,82	3,14	12,00	4,20	2,86
25	13,60	1,59	8,55	13,60	1,80	7,56	13,40	2,14	6,26	13,20	2,47	5,34	12,60	2,70	4,67	12,00	2,93	4,10

### HYDRAULIC PUMP PERFORMANCE



This data is measured by Panasonic in accordance with EN14511-2 standard.

## HEATING CAPACITY TABLE BASED ON OUTLET TEMPERATURE AND OUTSIDE TEMPERATURE

### MONO-BLOC // AQUAREA T-CAP // HEATING ONLY // MXF

WH-MXF09D3E5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,28	2,74	9,00	3,55	2,54	9,00	3,95	2,28	9,00	4,34	2,07	9,00	4,77	1,89	9,00	5,20	1,73
-7	9,00	2,75	3,27	9,00	3,20	2,81	9,00	3,66	2,46	9,00	4,11	2,19	9,00	4,31	2,09	9,00	4,50	2,00
2	9,00	2,40	3,75	9,00	2,55	3,53	9,00	2,82	3,19	9,00	3,09	2,91	9,00	3,60	2,50	9,00	4,11	2,19
7	9,00	1,68	5,36	9,00	1,90	4,74	9,00	2,20	4,09	9,00	2,50	3,60	9,00	2,80	3,21	9,00	3,10	2,90
25	13,60	1,54	8,83	13,60	1,75	7,77	13,20	1,97	6,70	12,80	2,18	5,87	12,00	2,45	4,90	11,20	2,71	4,13

WH-MXF12D6E5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,79	2,51	12,00	5,00	2,40	11,50	5,21	2,21	11,00	5,42	2,03	10,70	5,86	1,83	10,50	6,30	1,67
-7	12,00	3,89	3,08	12,00	4,45	2,70	12,00	5,02	2,39	12,00	5,58	2,15	12,00	5,94	2,02	12,00	6,30	1,90
2	12,00	3,23	3,72	12,00	3,53	3,40	12,00	3,91	3,07	12,00	4,29	2,80	12,00	4,90	2,45	12,00	5,51	2,18
7	12,00	2,22	5,41	12,00	2,57	4,67	12,00	3,00	4,00	12,00	3,43	3,50	12,00	3,82	3,14	12,00	4,20	2,86
25	13,60	1,59	8,55	13,60	1,80	7,56	13,40	2,14	6,26	13,20	2,47	5,34	12,60	2,70	4,67	12,00	2,93	4,10

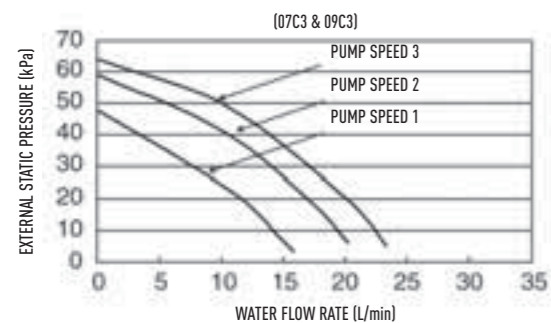
WH-MXF09D3E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,28	2,74	9,00	3,55	2,54	9,00	3,95	2,28	9,00	4,34	2,07	9,00	4,77	1,89	9,00	5,20	1,73
-7	9,00	2,75	3,27	9,00	3,20	2,81	9,00	3,66	2,46	9,00	4,11	2,19	9,00	4,31	2,09	9,00	4,50	2,00
2	9,00	2,40	3,75	9,00	2,55	3,53	9,00	2,82	3,19	9,00	3,09	2,91	9,00	3,60	2,50	9,00	4,11	2,19
7	9,00	1,68	5,36	9,00	1,90	4,74	9,00	2,20	4,09	9,00	2,50	3,60	9,00	2,80	3,21	9,00	3,10	2,90
25	13,60	1,54	8,83	13,60	1,75	7,77	13,20	1,97	6,70	12,80	2,18	5,87	12,00	2,45	4,90	11,20	2,71	4,13

WH-MXF12D9E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	12,00	4,79	2,51	12,00	5,00	2,40	11,50	5,21	2,21	11,00	5,42	2,03	10,70	5,86	1,83	10,50	6,30	1,67
-7	12,00	3,89	3,08	12,00	4,45	2,70	12,00	5,02	2,39	12,00	5,58	2,15	12,00	5,94	2,02	12,00	6,30	1,90
2	12,00	3,23	3,72	12,00	3,53	3,40	12,00	3,91	3,07	12,00	4,29	2,80	12,00	4,90	2,45	12,00	5,51	2,18
7	12,00	2,22	5,41	12,00	2,57	4,67	12,00	3,00	4,00	12,00	3,43	3,50	12,00	3,82	3,14	12,00	4,20	2,86
25	13,60	1,59	8,55	13,60	1,80	7,56	13,40	2,14	6,26	13,20	2,47	5,34	12,60	2,70	4,67	12,00	2,93	4,10

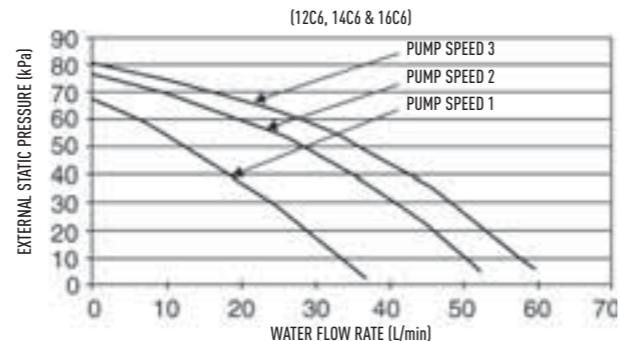
### MONO-BLOC // AQUAREA T-CAP // ON COOLING MODE // MXC

MXC						
MODELS	WH-MXC09			WH-MXC12		
Tamb	HC	IP	COP	HC	IP	COP
16	7,00	1,40	5,00	7,50	1,45	5,17
25	7,65	1,95	3,92	8,90	2,20	4,05
35	7,00	2,25	3,11	10,00	3,60	2,78
43	6,25	2,70	2,31	8,00	3,05	2,62

### HYDRAULIC PUMP PERFORMANCE



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HC: Heating Capacity (kW)  
IP: Power Input (kW)  
LWC: Leaving Water Condenser Temperature (°C)  
Tamb: Ambient Temperature (°C)

### BI-BLOC // AQUAREA HT // HEATING ONLY // SHF

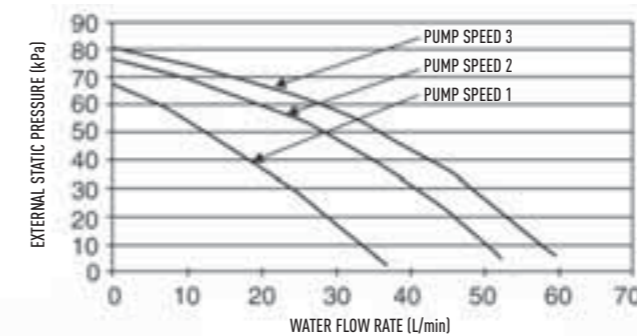
WH-SHF09D3E5												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45,00	45,00	45,00	55,00	55,00	55,00	65,00	65,00	65,00
-15	9	3,75	2,40	8,80	4,29	2,05	8,50	4,94	1,72	7,80	5,91	1,32
-7	9	3,33	2,70	8,90	3,87	2,30	8,90	4,49	1,98	8,90	5,43	1,64
2	9	2,65	3,40	9,00	3,25	2,77	9,00	3,91	2,30	9,00	4,79	1,88
7	9	1,98	4,55	9,00	2,50	3,60	9,00	3,16	2,85	9,00	4,00	2,25

WH-SHF12D6E5												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45
-15	9	3,75	2,40	8,80	4,29	2,05	8,50	4,94	1,72	7,80	5,91	1,32
-7	9	3,33	2,70	8,90	3,87	2,30	8,90	4,49	1,98	8,90	5,43	1,64
2	9	2,65	3,40	9,00	3,25	2,77	9,00	3,91	2,30	9,00	4,79	1,88
7	9	1,98	4,55	9,00	2,50	3,60	9,00	3,16	2,85	9,00	4,00	2,25

WH-SHF09D3E8												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45,00	45,00	45,00	55,00	55,00	55,00	65,00	65,00	65,00
-15	9	3,75	2,40	8,80	4,29	2,05	8,50	4,94	1,72	7,80	5,91	1,32
-7	9	3,33	2,70	8,90	3,87	2,30	8,90	4,49	1,98	8,90	5,43	1,64
2	9	2,65	3,40	9,00	3,25	2,77	9,00	3,91	2,30	9,00	4,79	1,88
7	9	1,98	4,55	9,00	2,50	3,60	9,00	3,16	2,85	9,00	4,00	2,25

WH-SHF12D9E8												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45
-15	9	3,75	2,40	8,80	4,29	2,05	8,50	4,94	1,72	7,80	5,91	1,32
-7	9	3,33	2,70	8,90	3,87	2,30	8,90	4,49	1,98	8,90	5,43	1,64
2	9	2,65	3,40	9,00	3,25	2,77	9,00	3,91	2,30	9,00	4,79	1,88
7	9	1,98	4,55	9,00	2,50	3,60	9,00	3,16	2,85	9,00	4,00	2,25

### HYDRAULIC PUMP PERFORMANCE



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HC: Heating Capacity (kW)  
IP: Power Input (kW)  
LWC: Leaving Water Condenser Temperature (°C)  
Tamb: Ambient Temperature (°C)

## HEATING CAPACITY TABLE BASED ON OUTLET TEMPERATURE AND OUTSIDE TEMPERATURE

### MONO-BLOC // AQUAREA T-CAP // HEATING ONLY // MHF

WH-MHF09D3E5												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45,00	45,00	45,00	55,00	55,00	55,00	65,00	65,00	65,00
-15	9	3,75	2,40	8,80	4,29	2,05	8,50	4,94	1,72	7,80	5,91	1,32
-7	9	3,33	2,70	8,90	3,87	2,30	8,90	4,49	1,98	8,90	5,43	1,64
2	9	2,65	3,40	9,00	3,25	2,77	9,00	3,91	2,30	9,00	4,79	1,88
7	9	1,98	4,55	9,00	2,50	3,60	9,00	3,16	2,85	9,00	4,00	2,25

WH-MHF12D6E5												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45,00	45,00	45,00	55,00	55,00	55,00	65,00	65,00	65,00
-15	12	5,58	2,15	10,80	5,54	1,95	9,70	5,81	1,67	8,00	6,15	1,30
-7	12	4,80	2,50	11,20	5,09	2,20	10,10	5,32	1,90	9,60	5,96	1,61
2	12	3,72	3,23	11,30	4,19	2,70	10,80	4,91	2,20	10,30	5,63	1,83
7	12	2,73	4,40	12,00	3,48	3,45	12,00	4,32	2,78	12,00	5,45	2,20

WH-MHF09D3E8												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45,00	45,00	45,00	55,00	55,00	55,00	65,00	65,00	65,00
-15	9	3,75	2,40	8,80	4,29	2,05	8,50	4,94	1,72	7,80	5,91	1,32
-7	9	3,33	2,70	8,90	3,87	2,30	8,90	4,49	1,98	8,90	5,43	1,64
2	9	2,65	3,40	9,00	3,25	2,77	9,00	3,91	2,30	9,00	4,79	1,88
7	9	1,98	4,55	9,00	2,50	3,60	9,00	3,16	2,85	9,00	4,00	2,25

WH-MHF12D9E8												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45,00	45,00	45,00	55,00	55,00	55,00	65,00	65,00	65,00
-15	12	5,58	2,15	10,80	5,54	1,95	9,70	5,81	1,67	8,00	6,15	1,30
-7	12	4,80	2,50	11,20	5,09	2,20	10,10	5,32	1,90	9,60	5,96	1,61
2	12	3,72	3,23	11,30	4,19	2,70	10,80	4,91	2,20	10,30	5,63	1,83
7	12	2,73	4,40	12,00	3,48	3,45	12,00	4,32	2,78	12,00	5,45	2,20

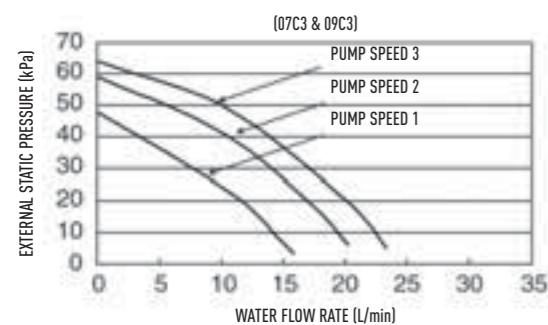
### AQUAREA PRO // ECOi + U-250WX2E5 // HEATING

MDC																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15							22,90	9,76	2,34	20,70	8,83	2,34									
-7							25,80	10,3	2,50	23,40	9,26	2,52									
2							31,40	11,0	2,85	28,00	9,64	2,90									
7							31,50	9,75	3,23	28,00	8,61	3,25									
25							31,50	6,83	4,61	28,00	6,06	4,62									

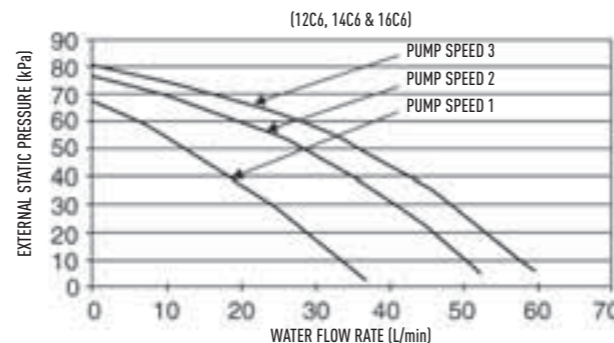
### AQUAREA PRO // ECOi + U-500WX2E5 // HEATING

MDC																					
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55	55	55	55
-15							42,40	19,4	2,18	39,30	17,5	2,24									
-7							48,00	20,5	2,34	44,90	18,5	2,42									
2							56,00	21,0	2,66	51,30	18,4	2,78									
7							56,00	18,1	3,09	51,30	16,5	3,10									
25							56,00	12,8	4,37	51,30	11,5	4,46									

### HYDRAULIC PUMP PERFORMANCE

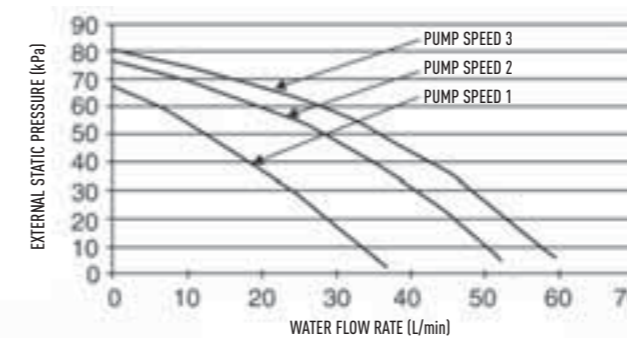


This data is measured by Panasonic in accordance with EN14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.



HC: Heating Capacity (kW)  
IP: Power Input (kW)  
LWC: Leaving Water Condenser Temperature (°C)  
Tamb: Ambient Temperature (°C)

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## ACCESSORIES

### PANASONIC ACCESSORIES

SOLAR KIT ACCESSORIES	
CZ-NS1P	Solar connection PCB ( for Bi-split type )
CZ-NS2P	Solar connection PCB ( for Mono-bloc type )
SANITARY TANK ACCESSORIES	
CZ-TK1	Temperature sensor kit for third party tank
DEICE ACCESSORIES	
CZ-NE1P	Base pan heater kit

### TANKS

		High Efficiency Tank		Super High Efficiency Tank	
		HR 200	HR 300	HRS 300	HRS 500
Water volume	L	200	300	300	500
Max. water temperature	°C	95	95	95	95
Dimension. Hight Diameter	mm	1340	1797	1435	1806
	mm	600	600	680	760
Weight	kg	108	140	170	254
Electric heater	kW	3	3	3	3
Power supply		230V	230V	230V	230V
Material inside tank		enamelled	enamelled	enamelled	enamelled
Exchange surface	m <sup>2</sup>	1,80	2,60	3,50	6,00
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,8	2,2	2,2	2,7
3 Way valve included		YES	YES	YES	YES

### FIELD PROCURED OPTIONAL PARTS

SOLAR KIT		
Brand	Model No.	Feature
RESOL	FlowConS_DeltaSol_BS_Plus	Remote Control
Oventrop	Regusol X-25	Remote Control
3 WAY-VALVE		
Brand	Model No.	Feature
Siemens	CZV322 3 Port	Spring return
2 WAY VALVE		
Brand	Model No.	Feature
Honeywell	V4043C1007	Spring return
Siemens	CZV222 2 Port	Spring return
ROOM THERMOSTAT ON / OFF		
Brand	Model No.	Feature
Siemens	RAA20	Dial type
Siemens	REV200	Programme
THERMAL VALVE		
Brand	Model No.	Feature
Taconova	RA57	NC
Danfoss	AVB-NC	NC



RESOL  
FlowConS\_DeltaSol\_  
BS\_Plus



Oventrop  
REGSOL UNO X-15



WH-HR20B3E5



WH-HR30B3E5



WH-HRS30B3E5



WH-HRS50B3E5



Siemens  
RAA20



Siemens  
REV200



Taconova  
RA57



Danfoss  
AVB-NC

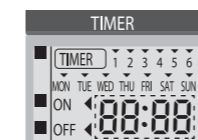


Siemens  
CZV322 3 Port



Siemens  
CZV222 2 Port

### THE OPERATION LED BLINKS AND AN ERROR CODE APPEARS ON THE CONTROL PANEL DISPLAY.



- Turn the unit off and inform the authorised dealer of the error code.
- The timer operation is cancelled when an error code occurs.

### FORCE HEATER MODE BUTTON

- The backup heater also serves as backup in case of malfunctioning of the outdoor unit.
- Press to stop the force heater operation.
- During Force Heater mode, all other operations are not allowed.

### ERROR CODES TABLE

Diagnosis display	Abnormality / Protection control	Abnormality Judgement	Primary location to verify
H00	No abnormality detected	—	—
H12	Indoor/Outdoor capacity unmatched	90s after power supply	• Indoor/outdoor connection wire • Indoor/outdoor PCB • Specification and combination table in catalogue
H15	Outdoor compressor temperature sensor abnormality	Continue for 5 sec.	• Compressor temperature sensor (defective or disconnected)
H23	Indoor refrigerant liquid temperature sensor abnormality	Continue for 5 sec.	• Refrigerant liquid temperature sensor (defective or disconnected)
H38	Indoor/Outdoor mismatch	—	• Indoor/Outdoor PCB
H42	Compressor low pressure abnormality	—	• Outdoor pipe temperature sensor • Clogged expansion valve or strainer • Insufficient refrigerant • Outdoor PCB • Compressor
H62	Water flow switch abnormality	Continue for 1 min.	• Water flow switch
H64	Refrigerant high pressure abnormality	Continue for 5 sec.	• Outdoor high pressure sensor (defective or disconnected)
H70	Back-up heater OLP abnormality	Continue for 60 sec.	• Back-up heater OLP (Disconnection or activated)
H72	Tank sensor abnormal	Continue for 5 sec.	• Tank sensor
H76	Indoor - control panel communication abnormality	—	• Indoor - control panel (defective or disconnected)
H90	Indoor / outdoor abnormal communication	> 1 min after starting operation	• Internal / external cable connections • Indoor / Outdoor PCB
H91	Tank heater OLP abnormality	Continue for 60 sec.	• Tank heater OLP (Disconnection or activated)
H95	Indoor/Outdoor wrong connection	—	• Indoor/Outdoor supply voltage
H98	Outdoor high pressure overload protection	—	• Outdoor high pressure sensor • Water pump or water leakage • Clogged expansion valve or strainer • Excess refrigerant • Outdoor PCB
H99	Indoor heat exchanger freeze prevention	—	• Indoor heat exchanger • Refrigerant shortage
F12	Pressure switch activate	4 times occurrence within 20 minutes	• Pressure switch
F14	Outdoor compressor abnormal revolution	4 times occurrence within 20 minutes	• Outdoor compressor
F15	Outdoor fan motor lock abnormality	2 times occurrence within 30 minutes	• Outdoor PCB • Outdoor fan motor
F16	Total running current protection	3 times occurrence within 20 minutes	• Excess refrigerant • Outdoor PCB
F20	Outdoor compressor overheating protection	4 times occurrence within 30 minutes	• Compressor tank temperature sensor • Clogged expansion valve or strainer • Insufficient refrigerant • Outdoor PCB • Compressor
F22	IPM (power transistor) overheating protection	3 times occurrence within 30 minutes	• Improper heat exchange • IPM (Power transistor)
F23	Outdoor Direct Current (DC) peak detection	7 times occurrence continuously	• Outdoor PCB • Compressor
F24	Refrigeration cycle abnormality	2 times occurrence within 20 minutes	• Insufficient refrigerant • Outdoor PCB • Compressor low compression
F25	Cooling / Heating cycle changeover abnormality	4 times occurrence within 30 minutes	• 4-way valve • V-coil
F27	Pressure switch abnormality	Continue for 1 min.	• Pressure switch
F36	Outdoor air temperature sensor abnormality	Continue for 5 sec.	• Outdoor air temperature sensor (defective or disconnected)
F37	Indoor water inlet temperature sensor abnormality	Continue for 5 sec.	• Water inlet temperature sensor (defective or disconnected)
F40	Outdoor discharge pipe temperature sensor abnormality	Continue for 5 sec.	• Outdoor discharge pipe temperature sensor (defective or disconnected)
F41	PFC control	4 times occurrence within 10 minutes	• Voltage at PFC
F42	Outdoor heat exchanger temperature sensor abnormality	Continue for 5 sec.	• Outdoor heat exchanger temperature sensor (defective or disconnected)
F43	Outdoor defrost sensor abnormality	Continue for 5 sec.	• Outdoor defrost sensor (defective or disconnected)
F45	Indoor water outlet temperature sensor abnormality	Continue for 5 sec.	• Water outlet temperature sensor (defective or disconnected)
F46	Outdoor Current Transformer open circuit	—	• Insufficient refrigerant • Outdoor PCB • Compressor low
F95	Cooling high pressure overload protection	—	• Outdoor high pressure sensor • Water pump or water leakage • Clogged expansion valve or strainer • Excess refrigerant • Outdoor PCB