



AQUAREA

NEW AQUAREA RANGE
HIGH-EFFICIENCY
HEAT PUMP TECHNOLOGY



Panasonic

ideas for life



'ECO IDEAS' FOR LIFESTYLES: WE WILL PROMOTE LIFESTYLES WITH VIRTUALLY ZERO CO₂ EMISSIONS THROUGHOUT THE WORLD. SPECIFICALLY:

- 30% of total sales will be achieved through "eco labeled" products. This includes both external labels such as EU eco flower, Blue Angel or Nordic Swan, and our internal 'eco ideas' label, which is given to products which achieve industry-leading environmental performance.¹⁾
- 3,500,000t of contribution in reducing CO₂ emissions with energy solution products (such as Solar Panels, Fuel Cells, Heat Pumps, Energy Recovering Ventilation, LED and Energy Saving Lamps).²⁾
- Educate 100,000 children on eco related topics through the 'kids school – eco learning' programme.

'ECO IDEAS' FOR BUSINESS-STYLES: WE WILL CREATE AND PURSUE BUSINESS-STYLES THAT MAKE THE BEST USE OF RESOURCES AND ENERGY:

- 99% of waste materials generated in European production will be recycled³⁾, meaning less than 1% will be allowed to go to landfill.
- 1,000t of reduction in CO₂ emissions from Panasonic's offices across Europe.⁴⁾
- 7,000t of contribution in reducing CO₂ emissions from production activities.⁵⁾

1) Products awarded the 'eco ideas' label include those whose environmental performance is greater than the industry's No.2 model by 10% or more at the time of release, and those which achieve the highest rank in the market by external environmental labels in accordance to environmental performance.

2) An amount of CO₂ reduction compared to the estimated figure assuming no improvement. Measures were taken after March 31, 2006.

3) Includes all Panasonic Group's European factories with the exception of IPS-Alpha and Panasonic

4) Based on offices with 100 employees or more, based on FY 2009.

5) An amount of CO₂ reduction compared to the estimated figure assuming no improvement. Measures were taken after March 31, 2006.

PANASONIC GLOBAL VISION

The Panasonic Group strives to be a green innovation company with a global perspective. Its aim is to be the leading green company in the electronics sector by 2018 - the year that Panasonic celebrates its centenary.

HEATING & COOLING

Panasonic Home Appliances is the European leader in heating and cooling solutions for the home. When it comes to market share, Panasonic is the No. 1 company for home solutions in Europe, the No. 1 company for domestic cooling & heating solutions in Spain, and the No. 1 company for heating systems in the Nordic countries.

Panasonic invests significantly in Research & Development, with a strong network of design, manufacturing and training centres throughout Europe. As part of Panasonic's continued programme of growth, a new R&D facility is open in Langen, Germany. The centre is focused on developing products to meet the needs of European customers, as well as European legislation.

ECO IDEAS FOR LIFESTYLES

Panasonic is making the environment central to all of its business activities. It will become the No 1 green innovation company in the electronics sector through its eco ideas initiative: eco ideas for lifestyles to change people's lives and eco ideas for business to bring forth green innovation in Panasonic's own global business operations.

Panasonic always strives to offer better living, with a sense of joy, security and comfort, as well as with virtually zero CO₂ emissions in the entire house or building.

ECO IDEAS FOR BUSINESS

Panasonic will create and pursue a business-style which makes the best use of resources and energy. As well as making eco-conscious products and delivering them to customers, Panasonic aims to reduce waste of energy and resources during the manufacturing process. As well as tackling its own business, Panasonic will take a leading role for sharing and working on environmental challenges in entire societies.



SUMMARY

PANASONIC – LEADING THE WAY IN HEATING & COOLING	4
IDEAS FOR A CLEANER FUTURE	6
REALISING ECO-CONSCIOUS SOLUTIONS IN ENTIRE TOWNS.....	8
PANASONIC PROFESSIONAL	10
AQUAREA'S NEW AIR-TO-WATER HEAT PUMP	12
"GREEN" HIGH-EFFICIENCY	14
NEW LINE-UP	16
NEW AQUAREA 3 AND 5 KW BI-BLOC AND 6 AND 9 KW MONO-BLOC AIR TO WATER HEAT.....	18
HEAT PUMP + PHOTOVOLTAIC	20
INVERTER+ COMPRESSOR FOR EVEN GREATER EFFICIENCY.....	22
WHAT MAKES THE AIR-TO-WATER HEAT PUMP WORK.....	24
CONTROL YOUR HEAT PUMP WITH YOUR SMART DEVICE -SMARTPHONE & INTERNET-.....	26
CONNECTIVITY	28
HP BI-BLOC AND MONO-BLOC APPLICATION EXAMPLES	30
AQUAREA LINE-UP	32
BI-BLOC // HIGH CONNECTIVITY // 3 AND 5 KW AQUAREA // HEATING ONLY - SDF // HEATING AND COOLING - SDC.....	34
AQUAREA MDF & MDC // MONO-BLOC // HIGH CONNECTIVITY // 6 AND 9 KW AQUAREA // HEATING AND COOLING // SINGLE-PHASE	36
AQUAREA SDF // BI-BLOC // HIGH CONNECTIVITY // HEATING ONLY SINGLE-PHASE // THREE-PHASE.....	38
AQUAREA SDC // BI-BLOC // HIGH CONNECTIVITY // HEATING AND COOLING SINGLE-PHASE // THREE-PHASE	40
AQUAREA MDF // MONO-BLOC // HIGH CONNECTIVITY // HEATING ONLY SINGLE-PHASE // THREE-PHASE	42
AQUAREA MDC // MONO-BLOC // HIGH CONNECTIVITY // HEATING AND COOLING SINGLE-PHASE // THREE-PHASE.....	44
AQUAREA SXF // BI-BLOC // T-CAP // HEATING ONLY SINGLE-PHASE // THREE-PHASE.....	46
AQUAREA SXC // BI-BLOC // T-CAP // HEATING AND COOLING SINGLE-PHASE // THREE-PHASE.....	48
AQUAREA MXF // MONO-BLOC // T-CAP // HEATING ONLY SINGLE-PHASE // THREE-PHASE.....	50
AQUAREA MXC // MONO-BLOC // T-CAP // HEATING AND COOLING SINGLE-PHASE // THREE-PHASE.....	52
AQUAREA SHF // BI-BLOC // HT // HEATING ONLY SINGLE-PHASE // THREE-PHASE	54
AQUAREA MHF // MONO-BLOC // HT // HEATING ONLY SINGLE-PHASE // THREE-PHASE.....	56
AQUAREA PRO // THE NEW PANASONIC SOLUTION FOR CHILLED AND HOT WATER PRODUCTION!.....	58
AQUAREA PRO // NEW ECOI 2-WAY 6 SERIES WITH WATER HEAT EXCHANGER	60
AQUAREA PRO // NEW GAS VRF ECO G WITH WATER HEAT EXCHANGER	62
HEATING CAPACITY TABLE BASED ON OUTLET TEMPERATURE AND OUTSIDE TEMPERATURE	64
ACCESSORIES	66

PANASONIC – LEADING THE WAY IN HEATING & COOLING

With more than 30 years of experience, selling to more than 120 countries around the world, Panasonic is unquestionably one of the leaders in the heating and cooling sector.

HISTORY OF AIR CONDITIONING GROUP

Panasonic starts with a desire to create things of value. As hard work and dedication results in one innovative product after another, the fledgling company takes its first steps towards becoming the electronics giant of today.



1936

First electric Fan with Automatic Oscillation (36 cm table top model).



1958

First room air conditioner launched for domestic installation. Prior to this date, air conditioners were large and only for commercial use. Panasonic developed the first compact air conditioner for windows; it was lightweight and easy to install, improving the quality of life in Japanese homes. 1,100 units were sold in Japan in the first year, and just two years later, in 1960, this figure rose to 230,000.



1973

Panasonic launches the first highly efficient air-to-water heat pump in Japan.



1975

Panasonic becomes the first Japanese air conditioner manufacturer in Europe.



PANASONIC EUROPE

Panasonic is committed to offering our customers innovative products in the heating and cooling market across Europe, which not only meet but exceed their requirements. Key to success is Panasonic's investment in R&D, manufacture and training to ensure innovative, cutting edge products and investment in our distribution channels and partners so that these products are accessible in Europe. Panasonic has developed a comprehensive network across Europe of training centers and training academies for installers, design offices and service teams in all major countries.



PANASONIC FACTORIES AND R&D DEPARTMENT

There is a close relationship between R&D innovation and good manufacturing processes, and so Panasonic has placed its R&D facilities very close to its manufacturing bases. This ensures good integration between all divisions to deliver high quality and reliable solutions to our markets.

The company is also a world leader in innovation as it has filed more than 91539 patents to improve its customers' lives. Moreover, Panasonic is determined to remain at the forefront of its market. In all, the company has produced more than 200 million compressors and its products are manufactured in 294 plants which are located all over the world. You can be assured of the extremely high quality of Panasonic's heat pumps. This wish to excel has made Panasonic the international leader in heating and air conditioning solutions of turnkey for homes, medium-sized buildings such as offices and restaurants, and large-scale buildings. These offer maximum effectiveness, comply with the strictest environmental standards and meet the most avant-garde construction requirements of our time. At Panasonic we know what a great responsibility it is to install heating and cooling systems. Because offering you the best solutions in heating and cooling matters.



2002

The Ion and Oxygen Generator — two of the most important contributions to air conditioning systems.



2008

Etherea new concept of air conditioning systems: high efficiency and high performances with a great design. Etherea also includes a very innovative air quality sensor and air purifier in order to enjoy healthy air at home at all times.



2010

New Aquarea
Panasonic has created Aquarea, an innovative new, low-energy system, designed to help you enjoy ideal temperatures and hot water in your home, even with extreme outdoor temperatures. Aquarea cools or heats to ensure maximum comfort. Aquarea is far cleaner, safer, cheaper and environmentally friendly than alternatives using gas, oil and other electrical systems.



2011

New Eco i VRF solution
The new Panasonic VRF solution for big buildings is the most efficient in the industry in more than 74% of combinations. ECO i satisfies the most demanding standards required by design offices, architects, owners and installers.



2012

New GHP units
Panasonic's gas-driven VRF systems are ideal for projects where power restrictions apply. In 2012, Panasonic extends the Gas Heat Pump range with a new GHP line-up, new GHP G Power (electricity production) and the new Chiller Units.

LIVING ECO-FRIENDLY

Panasonic is globally committed to developing environmentally-conscious products in the following three aspects: global warming prevention, effective resources utilisation and chemical substances management. In particular, we have been striving to increase a rate of products with industry-leading energy efficiency and phase out those with low performance, with the aim of contributing to the prevention of global warming. In the 'eco ideas' House, which embodies a lifestyle with virtually zero CO₂ emissions and that will be realised in three to five years into the future, we are proposing wide-ranging ideas that create comfortable lifestyles with minimum energy consumption, as well as presenting products and services that make full use of our original environmental technologies. Furthermore, to face the challenge of stepping up to the new field from the enhancement of products' energy efficiency, Panasonic is promoting the development of energy-saving equipment such as heat pumps, fuel cells and solar power generators as well as energy-storing devices.

eco
ideas!q692
6CO

Ideas for a Cleaner Future

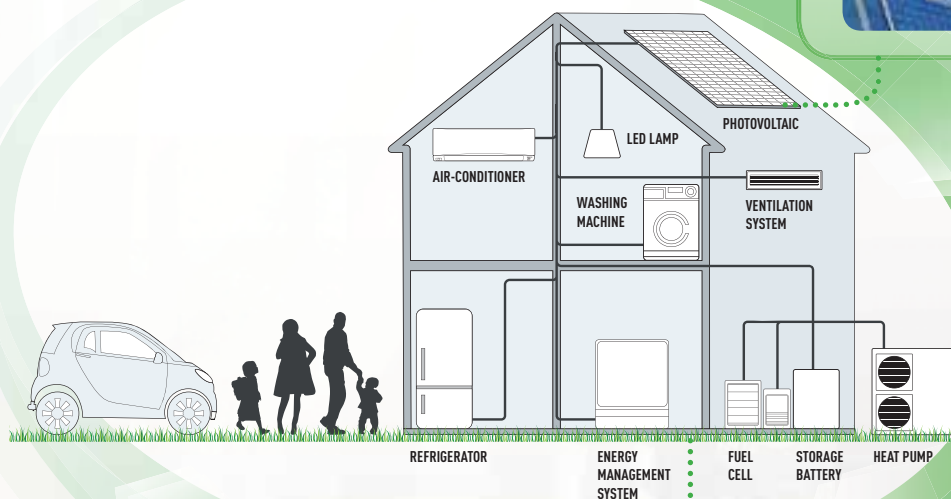
Panasonic is committed to developing environmentally-conscious products from three aspects, such as prevention of global warming, effective utilisation of resources and chemical substances management.

ENERGY MANAGEMENT

The SEG (Smart Energy Gateway) connects residential energy sources with smart appliances with a wireless network and a server.

CREATE ENERGY

Solar Cells and Fuel Cells to create energy more cleanly and efficiently



STORE ENERGY

Residential lithium-ion batteries for a stable energy supply



SAVE ENERGY

From top resource savings to efficient heating – Panasonic offers many eco-friendly appliances: LED/ESL, ERV, Air Conditioner, Washing Machine, Fridge, Heat Pump



In an era when the world is tackling the reduction of CO₂ emissions, Panasonic proposes a lifestyle with virtually zero CO₂ emissions throughout the entire home. CO₂ emissions are thoroughly reduced by enhancing energy-saving performance of home appliances and utilising building materials with high insulation performance. And energy required will be supplied by creating and storing energy by a combination of solar power generators, fuel cells and storage batteries. The Panasonic energy management system realises a lifestyle with virtually zero CO₂ emissions by linking these benefits together and smartly controlling all energy use. Meanwhile, intelligent use will also be made of natural elements such as air, light, water and heat to realise a more comfortable lifestyle. Experience an ecological and comfortable lifestyle that only Panasonic can present.



REALISING ECO-CONSCIOUS SOLUTIONS IN ENTIRE TOWNS

TIANJIN ECO-CITY

Panasonic is taking part in a pioneering project by China and Singapore to create the Tianjin Eco-City, some 40 km from Tianjin city centre and 150 km from Beijing. Designed to be practical, replicable and scalable, the Tianjin Eco-city will demonstrate the determination of both countries in tackling environmental protection, resource and energy conservation, and sustainable development, and serve as a model for sustainable development for other cities in China. By 2020, there will be around 30 square kilometres of city capable of accommodating a population of around 400,000.



HOME ENERGY MANAGEMENT SYSTEM

Panasonic is supplying each of the houses built in Tianjin Eco-City with a mini-VRF air conditioning system with Home Energy Management System (HEMS). The HEMS will be central to saving energy in homes. By linking a

whole range of domestic appliances, solar power generation equipment, electric vehicle chargers, storage batteries and other devices, the HEMS shows the amount of energy being used in the home. The system will indicate whether or not energy-saving goals are being achieved and will display advice on where further savings could be made.

By using easily-read displays on all screens throughout the home, homeowners will become more conscious of energy-saving activities and adopt a more natural and eco-friendly lifestyle.



FUJISAWA SUSTAINABLE SMART TOWN

Panasonic is converting its former factory site in Fujisawa City in Japan, 50 km west of Tokyo, into a smart town deploying services and energy systems based on Panasonic's eco ideas for green lifestyles. Panasonic is working in partnership with eight other companies and Fujisawa City to build an innovative smart town. The developers, manufacturers and service providers will work closely together throughout every phase of the project, from the master planning stage to actual operation of the town that will have about 1,000 households spread over 19 hectares.

Homes will employ the full range of Panasonic's most advanced systems for energy production, storage and management. Houses will be fully self-sufficient by generating power from efficient solar modules and fuel cell systems, with energy stored in powerful lithium-ion batteries. Low energy lighting, air conditioning and household appliances will be interconnected via a computer system, and televisions and PCs will be used to display energy consumption and tips on savings.

PANASONIC PROFESSIONAL

Panasonic has an impressive range of support services for designers, specifiers, engineers and distributors working in the heating and cooling markets.

SOFTWARE

Panasonic provides bespoke software helping system designers, installers and dealers to very quickly design and size systems, create wiring diagrams and issue bills of quantities at the push of a button.



ECOI VRF DESIGNER

The VRF Designer Software is very easy to use. By using it, engineers can develop projects quickly, by either using the drag and drop icons or the project wizard. It comes fully loaded with all appropriate Panasonic product details and is designed with flexibility in mind so that several different system designs can be created within one project. The program will check system designs and correction factors are automatically applied to indoor unit capacities, depending on height differences, piping lengths, indoor/outdoor capacity ratio and design conditions. VRF Designer will also calculate any additional amounts of refrigerant that may be required, based on configuration and piping lengths. Existing projects can easily be modified or even extended at a later stage. Reports can be exported and printed showing piping and wiring diagrams, power supply diagrams as well as bill of quantities.



AQUAREA DESIGNER

This program allows HVAC designers, installers and distributors to identify the correct heat pump for a particular application from Panasonic's Aquarea range, calculate the savings compared to other heat sources and very quickly calculate CO₂ emissions.

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 user 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.

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 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.

iPAD APP

For a quick and easy introduction to the Aquarea Heat Pump range, the iPad app can be used to show clients the benefits of this energy-efficient heating and hot water system.



NEW
PRO CLUB



Panasonic

PRO Club 

PANASONIC PRO CLUB

Panasonic announces a new initiative for all professionals involved in the heating and cooling business - the Panasonic PRO Club (www.panasonicproclub.com).

This exciting new portal provides distributors, installers, engineers and specifiers with a direct communication channel with one of the industry's major manufacturers.

The website contains a wealth of information from the latest versions of Panasonic's Aquarea and Etherea Design Software, to Technical Documentation, Catalogues and Images for the company's wide range of heating and cooling systems - all in an easy to navigate and use website.

Also, registered users will be able to access news regarding special promotions and take advantage of these offers, as well as access helpful business advice such as ideas and guidelines for showroom decoration or van livery featuring Panasonic logos and display material.

www.panasonicproclub.com

or connect simply with your smartphone to the proclub using this QR:



Panasonic

PRO Academy 

THE PANASONIC PRO-ACADEMY OPENS ITS DOORS

Panasonic takes its responsibility to its distributors, specifiers and installers seriously and has developed a comprehensive Training Programme. The Panasonic Pro-Academy encompasses the traditional hands-on approach, as well as embracing today's technology to offer an eLearning facility available 24 hours, 7 days a week!

NEW TRAINING COURSES COVER THREE LEVELS

Design, installation, and commissioning & trouble-shooting

Training courses include:

- VRF ECOi
- Aquarea air source heat pumps (MCS accredited)
- GHP (2012)

The courses are offered on site at Panasonic's premises across Europe as well as via the Panasonic ProClub eLearning site. The Training Centres display Panasonic's latest product range and give delegates an opportunity to get hands-on experience with the latest controllers, indoor and outdoor units from the VRF ECOi, Etherea, GHP and Aquarea ranges.

NEW
2012



AQUAREA

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

Offering capacities from 3kW to 16kW, the Aquarea Heat Pump Range is the biggest line-up on the market, designed to meet all your heating and cooling demands. Cost-effective and environmentally friendly.

AQUAREA
PRO

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

Up to 80 kW capacity from an easy-to-install system providing impressive efficiency, even at outdoor temperatures as low as -20°C.



* Not all products certified. As the certification process is on-going and the list of certified products constantly changing, please check for latest details on the official websites.



PANASONIC'S NEW AQUAREA AIR-TO-WATER SYSTEM PROVIDES MAXIMUM EFFICIENCY AND CAPACITY EVEN AT -15°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 operating performance. This creates perfect comfort whatever the weather conditions, even at outdoor temperatures as low as -15°C .

Panasonic new heat pumps are designed in response to the new demand for low consumption housing, with high efficiency and low running cost's.

ENERGY SAVING



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



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



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



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



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



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



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



"GREEN" HIGH-EFFICIENCY 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 both new and old properties:

- 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 -15°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 CO₂ emissions
- Provides cooling in summer
- Highly flexible:
 - Connects to an existing heating system
 - Connects to photovoltaic solar panels

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

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

Thus, Panasonic's Aquarea system is an air/water heat pump system that uses energy 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 time and produce 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.

* COP: energy efficiency in heating mode. COP of 4.74 for the 9kW WH-MDF09CE8 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.



UP TO
78%
energy savings*

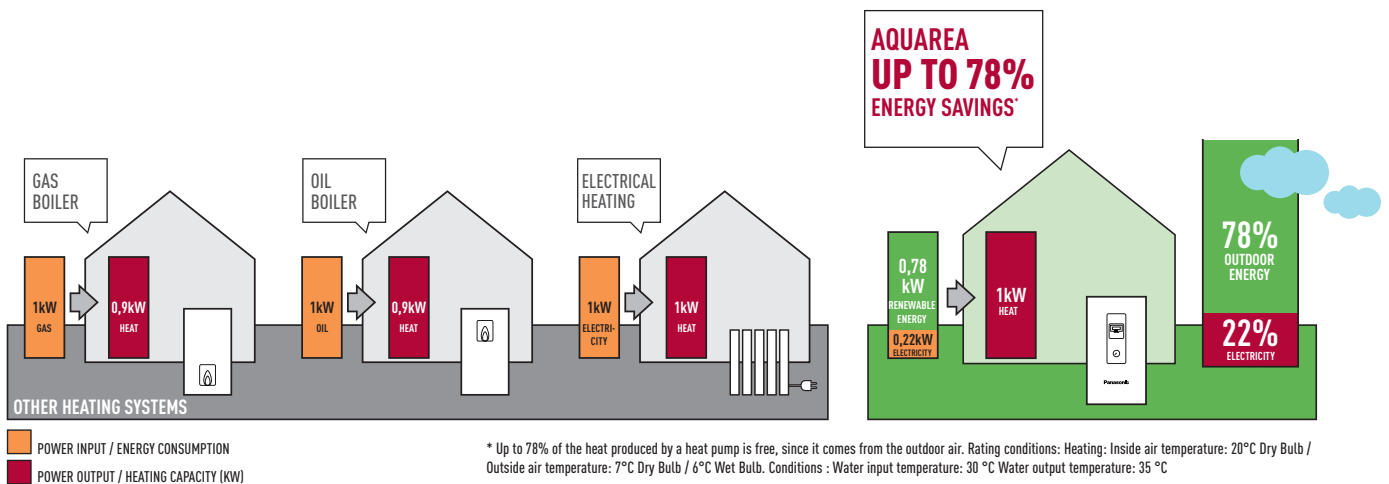


NEW
3 & 5 kW

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 9kW system has a COP of 4.74. This is 3.74kW 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 photovoltaic solar panels to the Aquarea system.



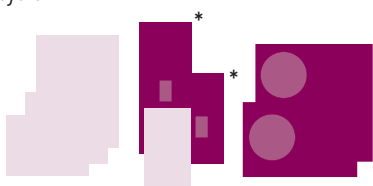


PANASONIC HAS DESIGNED A COMPLETELY NEW LINE-UP TO GIVE THE BEST TO OUR CUSTOMERS

THERE ARE SEVERAL TYPES OF HEAT PUMP AVAILABLE:

The mono-bloc system

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



* Tank Optional

The bi-bloc system

This system is made up of an outdoor unit and a hydraulic module, normally located in the utility room or garage.



* Tank Optional

AQUAREA INCREASE LINE-UP!

- New 3 and 5 KW Bi-bloc for low energy homes
- New 6 and 9 KW Mono-bloc Heat Pumps for low energy homes
- New line-up of high temperature Heat Pumps (output water temperature of 65°C)

WHICH PRODUCT FOR WHICH APPLICATION?



AQUAREA HIGH CONNECTIVITY

For a house with low temperature radiators or under-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-fired depending on requirements.



AQUAREA HT

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

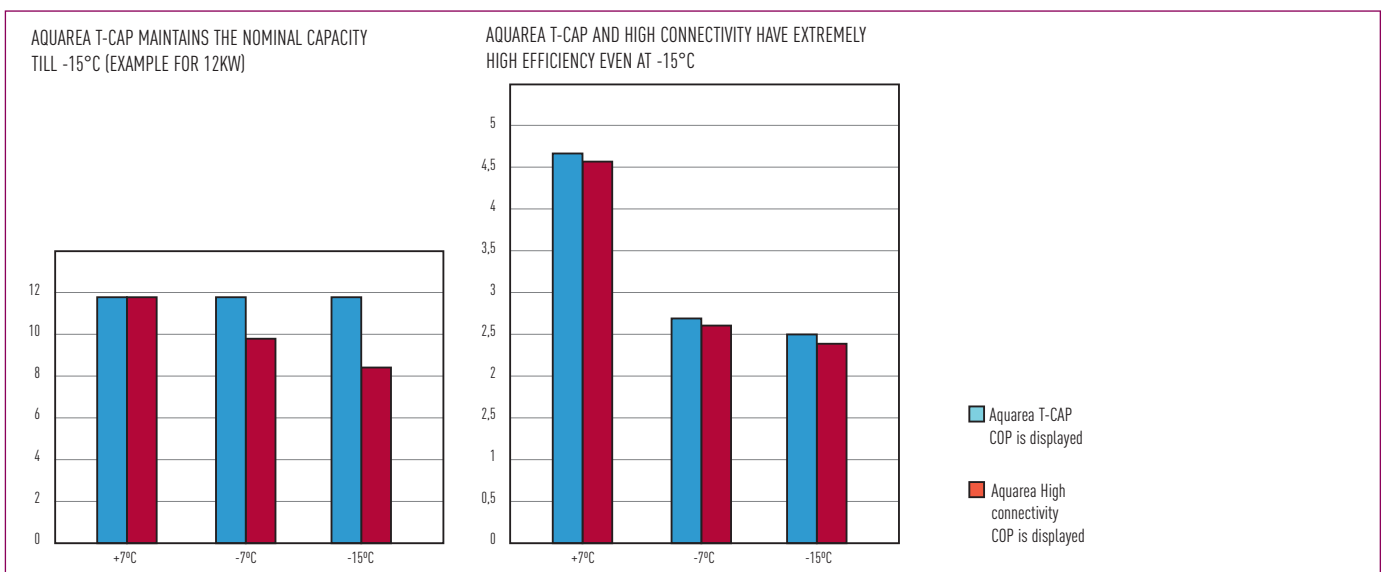
Aquarea HT is able to deliver hot water to 65°C with the Heat Pump alone.



AQUAREA T-CAP

If the most important aspect is to keep nominal heating capacities even at temperatures as low as -7°C or -15, select the Aquarea T-CAP. 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



* Conditions : Water input temperature: 30 °C. Water output temperature: 35 °C; outside temperature: +7°C.



NEW
2012

NEW AQUAREA 3 AND 5 KW BI-BLOC AND 6 AND 9 KW MONO-BLOC AIR TO WATER HEAT PUMP MAXIMUM SAVINGS, MAXIMUM EFFICIENCY, MINIMUM CO₂ EMISSIONS, MINIMUM OF SPACE

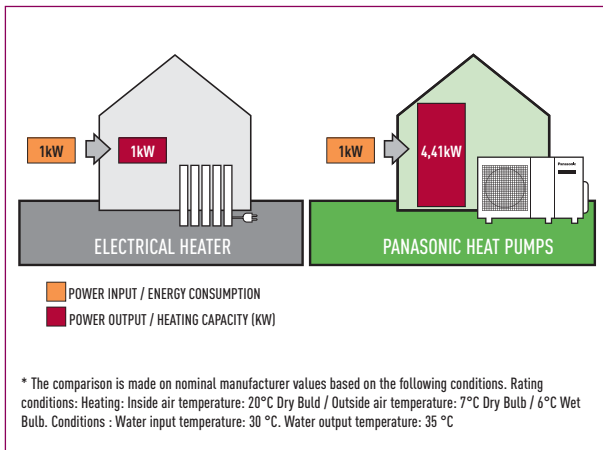
Panasonic has designed the new Aquarea Bi-bloc and Mono-bloc heat pumps for homes which have high performance requirements.

Whatever the weather, Aquarea will always give you maximum efficiency, even at -20°C! The New Aquarea is easy to install on new or existing installations, in all types of properties.

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

down to
-20°C in
heating mode
OUTDOOR
TEMPERATURE

COP COMPARISON (ELECTRICAL HEATER WITH PANASONIC HEAT PUMP)



TECHNICAL BENEFITS

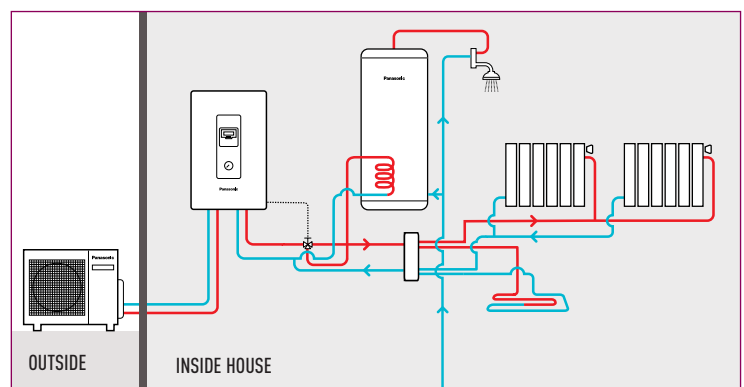
- Plug and play heating system
- No indoor box needed (for 6 and 9 kW Monobloc)
- Extremely compact system
- 3 kW heater included
- High efficiency even at -20°C

TECHNICAL ELEMENTS

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

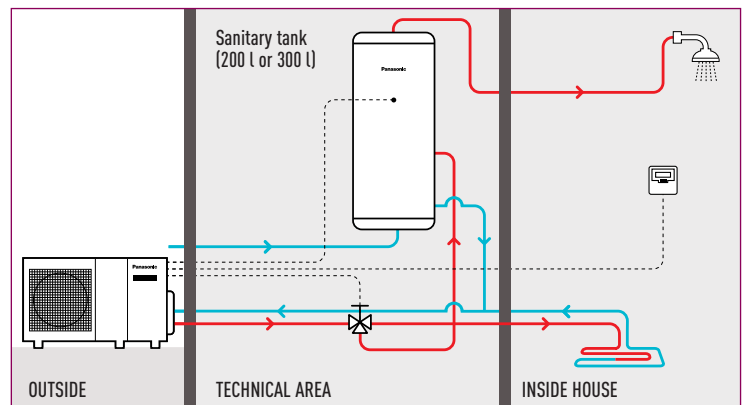
BI-BLOC APPLICATION

EXAMPLE LOW CONSUMPTION HOMES + SANITARY HOT WATER

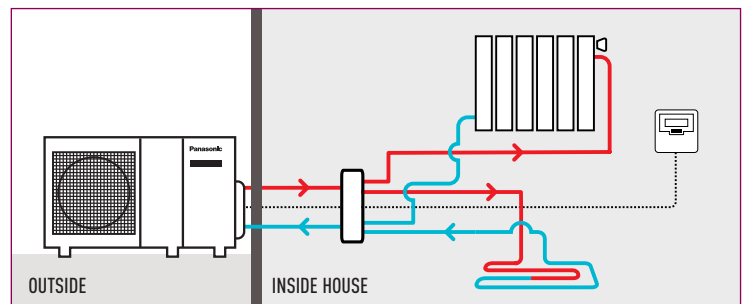


MONO-BLOC APPLICATION

EXAMPLE HEATING + SANITARY HOT WATER



EXAMPLE HEATING PLUG AND PLAY SYSTEM





HEAT PUMP + PHOTOVOLTAIC PHOTOVOLTAIC SOLAR PANELS: THE BEST SOLUTION FOR BIG SAVINGS

Panasonic Aquarea heat pumps can easily be integrated with photovoltaic solar panels in order to achieve maximum energy savings, cut fuel bills, and to reduce CO₂ emissions.

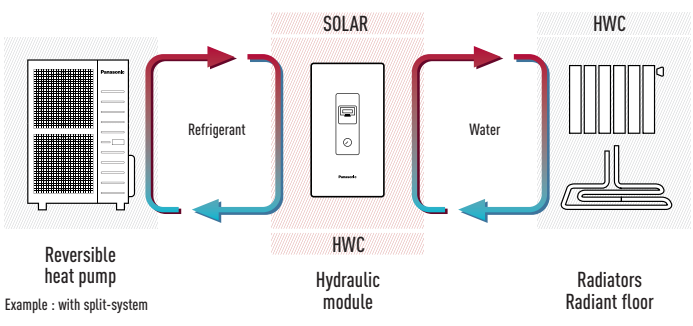
HIT Photovoltaic solar panel from Panasonic

NEW
2012



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.



PHOTOVOLTAIC SOLAR PANELS FOR EVEN MORE SAVINGS

Combining photovoltaic solar panels with your heat pump can help to further reduce your electrical consumption and CO₂ emissions. Additionally, with the unique HIT photovoltaic solar panel technology from Panasonic, you can produce more electricity per square meter, helping you to increase your energy savings still further.

HIT cell technology

The Panasonic HIT (Heterojunction with Intrinsic Thin layer) solar cell is made of a thin mono crystalline silicon wafer surrounded by ultra-thin amorphous silicon layers. This product provides the industry's leading performance and value using state-of-the-art manufacturing techniques.

Environmentally-Friendly Solar Cell

More Clean Energy. HIT can generate more clean Energy than other conventional crystalline solar cells.

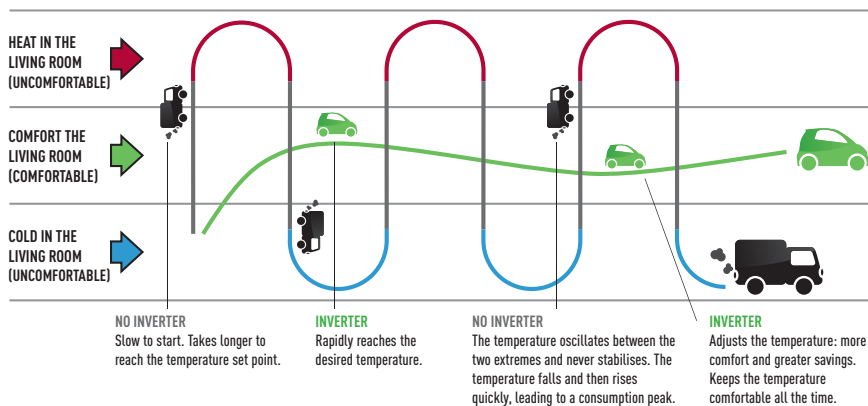


INVERTER+ COMPRESSOR FOR EVEN GREATER EFFICIENCY

Panasonic has clearly demonstrated its status as leader in this field with over 100 million compressors supplied 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 with no inverter. With a Panasonic Inverter compressor, the heat pump is always producing heat with the maximum of efficiency and adapting the capacity to the element.

THE ADVANTAGES OF INVERTER AIR CONDITIONERS

Comparing Inverter and non-Inverter air conditioners.





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

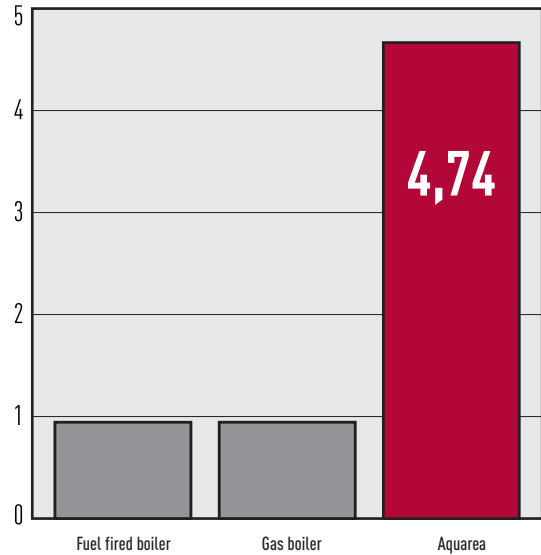
SXF/SXC/MXF/MXC	9 kW	12 kW
Heating Capacity at +7°C (kW)	9	12
COP at +7°C with heating water temperature at 35°C	4,74	4,67
Heating Capacity at +2°C	9	12
COP at +2°C with heating water temperature at 35°C	3,53	3,4
Heating Capacity at -7°C (kW)	9	12
COP at -7°C with heating water temperature at 35°C	2,81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

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 fossil fuel fired boilers, gas boilers and electrical heaters.

BEST EFFICIENCY COMPARED TO OTHER HEATING EFFICIENCY SYSTEMS



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 from 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. This free energy are transported to the hydraulic module using an environmentally-friendly refrigerant gas with a high thermal exchange coefficient (R407C).
- 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 energy contained in the refrigerant coming from the outdoor unit to the water used for the home's heating and hot water. The hydraulic module manages priorities in terms of heating and hot water production.
This hydraulic module is situated inside the property 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 photovoltaic solar panels for even greater efficiency.
- A 3kW immersion heater is included within the hot water tank to ensure:
 - Maximum comfort
 - Maximum efficiency and more for ensure protection against the legionella virus

TWO OR THREE EARTH LEAKAGE CUT-OUTS

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

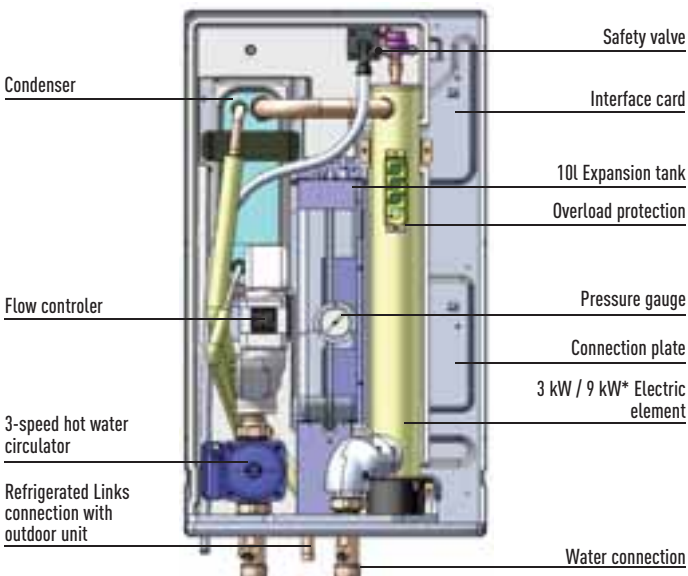
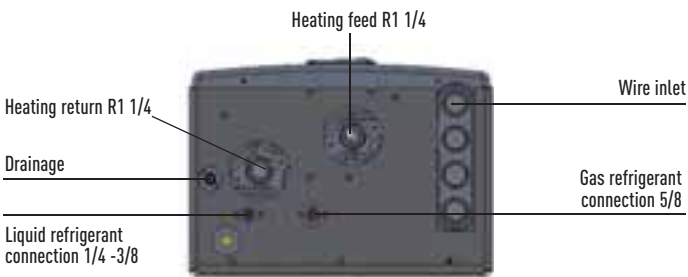
- 2 differential cut-outs: 3 and 5 and 6 and 9 kW
- 3 differential cut-outs: 12, 14 and 16 kW



THE CONTROL PANEL

The control panel allows accurate 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.

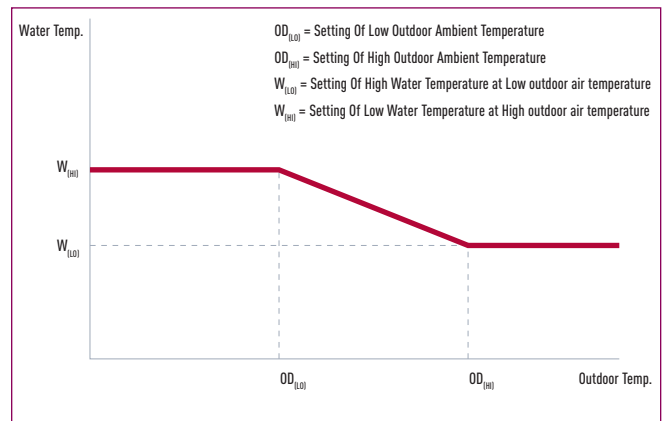
THE HYDRAULIC MODULE



* 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 PROGRAMMING OF THE CONTROL PANEL

The primary circuit temperature is controlled based on the outdoor temperature. Who will adjust the control parameters through the remote control during the commissioning of the system as is shown in the diagram below. Your heating specialist must also select the type of operation you need: heating priority or hot water cylinder priority.



EASY READING OF CONTROL OF WATER PRESSURE





IntesisHome®  By Intesis (www.intesis.com)

CONTROL YOUR HEAT PUMP WITH YOUR SMART DEVICE -SMARTPHONE & INTERNET-

Panasonic has always offered its customers the most efficient Heat Pumps and Air Conditioners. Now it has taken a step forward and presents with and presents, in partnership with Intesis, the IntesisHome - the most advanced, the most advanced service taking advantage of the latest Cloud Technology to manage your climate system from anywhere in the world.

Control your environment from your iPad, iPhone, any Android device or from a PC with Internet access using IntesisHome®. Offering the same functions as if you were at home: start/stop, Mode Operation, Set Temperature, Room Temperature etc. Experience the new, advanced functionality provided by IntesisHome® to achieve the best comfort and efficiency with the lowest energy consumption.

NEW
 IPHONE & ANDROID
 READY

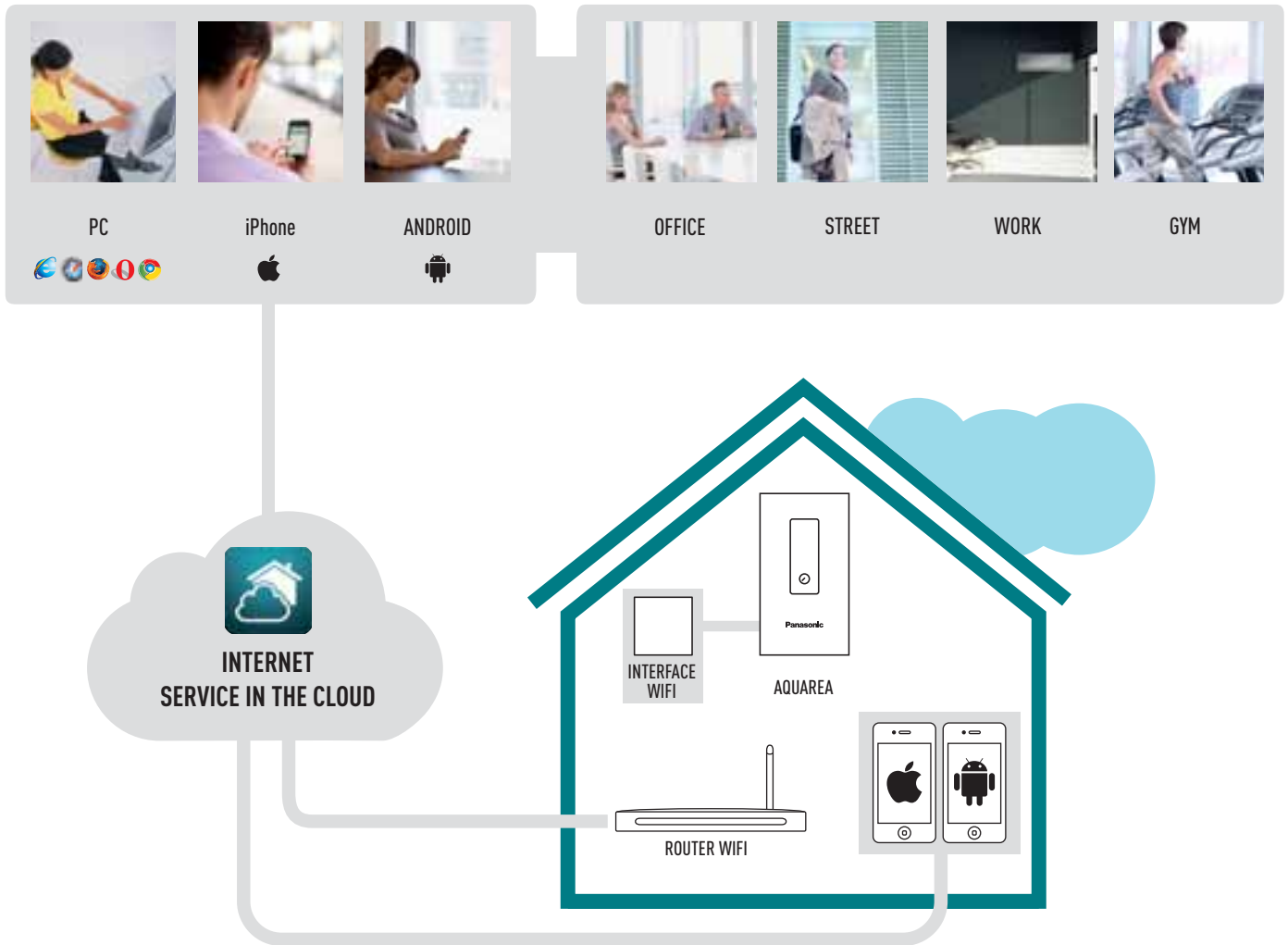


CONTROL YOUR HEAT PUMP WITH THE IntesisHome® SMART DEVICE VIA SMARTPHONES & INTERNET

INTERNET
 VIA SMARTPHONES &
 SMART DEVICE

IntesisHome®
 PUMP WITH THE
 CONTROL YOUR HEAT

TAKE CONTROL FROM WHEREVER YOU ARE!



IntesisHome[®]

ADVANCED SERVICE HOSTED IN THE CLOUD THAT PROVIDES ACCESS FROM ANYWHERE TO YOUR AC SYSTEM.

FUNCTIONALITY

- Remote control: On/Off, Mode, Temp. Setting, etc.
- Scheduler calendar, Energy Saving functions, Preset configuration features
- Maintenance functions:
 - Dirty Air Filter alerts
 - Technical Service network
 - Error list
- ECO advices.
- Multi-lingual application

INSTALLATION

- Easy installation.
- Videos and Manuals from www.intesishome.com
- Helpline (Phone & Internet).
- Automatic updates.

REFERENCE

- CZ-HI-Aquarella. IntesisHome for Aquarella



CONNECTIVITY

GREAT FLEXIBILITY FOR INTEGRATION INTO YOUR KNX / ENOCEAN / MODBUS PROJECTS ALLOWS FULLY BI-DIRECTIONAL MONITORING AND CONTROL OF ALL THE FUNCTIONING PARAMETERS

The Intesis interface has been designed specifically for Panasonic and provides complete monitoring, control and full functionality of the entire Aquarea line-up from KNX, EnOcean and Modbus installations.

Interfaces must be purchased at Intesis.
More information on www.intesis.com

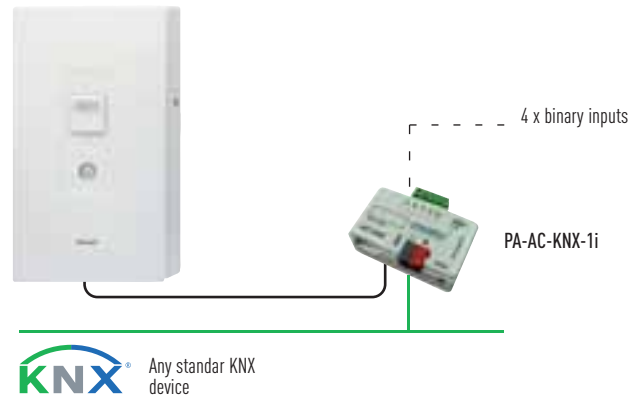
To know more about compatibility of Panasonic Heat pumps with Intesis interfaces, please visit: http://www.intesis.com/pdf/IntesisBox_PA-AC-xxx-1_AC_Compatibility.pdf

INTERFACE TO CONNECT AQUAREA TO KNX

INTESIS PART N°: PA-AW-KNX-1i

Intesis new Aquarella-KNX interface allows monitoring and control, fully bi-directionally, all the functioning parameters of Aquarella control from KNX installations.

- Small dimensions.
- Quick installation and possibility of hidden installation.
- External power not required.
- Direct connection to the unit.
- Fully KNX interoperable. Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication.
- Aquarella unit can be controlled simultaneously by the remote control of the Aquarella unit and by KNX devices.
- 4 Binary inputs, they work as standard KNX Binary Inputs (On/Off, Send value, Lights, Blinds, etc) as well as being used to control the Aquarella unit directly.
- Manual of installation: www.intesis.com

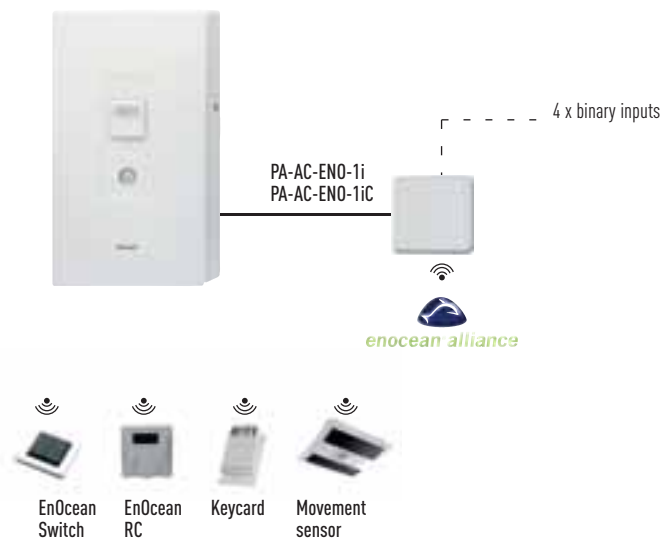


INTERFACE TO CONNECT AQUAREA TO ENOCEAN

INTESIS PART N°: PA-AW-ENO-1i / PA-AW-ENO-1iC

Intesis new Aquarella-EnOcean PA-AW-ENO-1i interface allows monitoring and control, fully bi-directionally, all the functioning parameters of the Aquarella control from EnOcean installations.

- Small dimensions.
- Quick installation.
- External power not required.
- Direct connection to the Aquarella unit using the same parameters as on the control.
- Fully EnOcean interoperable. Control and monitoring, from sensors or gateways, of the internal variables of the indoor unit and error codes and indication.
- Aquarella unit can be controlled simultaneously by the remote control of the Aquarella unit and by EnOcean devices.
- 4 binary inputs. They work as standard EnOcean binary inputs as well as being used to control the Aquarella unit directly.
- Manual of installation: www.intesis.com

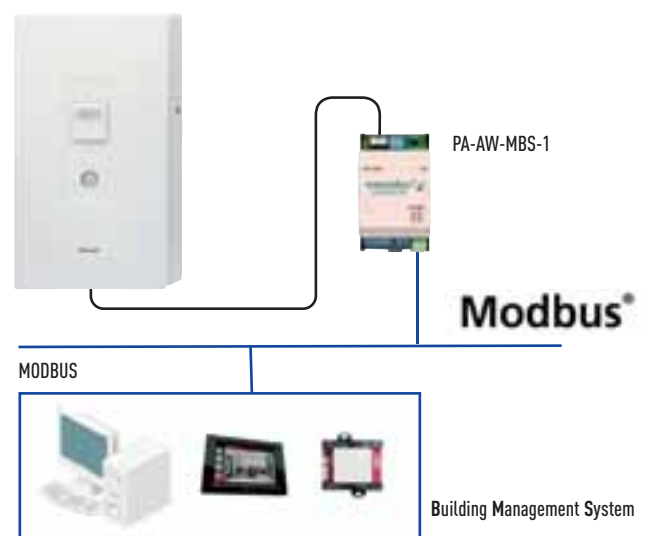


INTERFACE TO CONNECT AQUAREA TO MODBUS

INTESIS PART N°: PA-AW-MBS-1

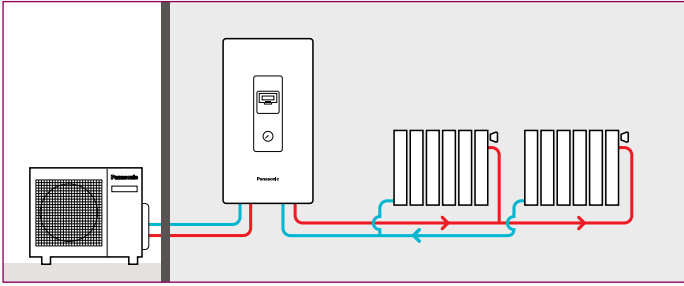
Intesis new Aquarella-Modbus RTU Slave interface allows monitoring and control, fully bi-directionally, all the functioning parameters of Aquarella control from Modbus installations.

- Small dimensions.
- Quick installation and possibility of hidden installation.
- External power not required.
- Direct connection to the unit.
- Fully Modbus interoperable. Control and monitoring, from any BMS or PLC Modbus Master, of internal variables of the indoor unit and error codes and indication.
- Aquarella unit can be controlled simultaneously by the remote control of the Aquarella unit and by Modbus Master device.
- Manual of installation: www.intesis.com

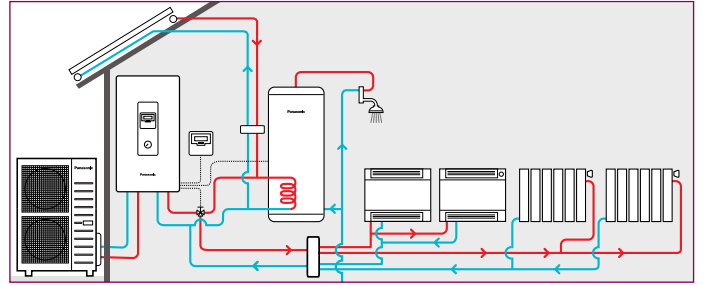


HP BI-BLOC APPLICATION EXAMPLES

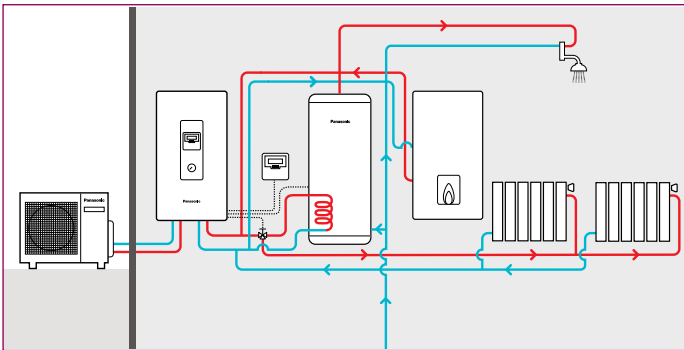
HP BI-BLOC + RADIATORS



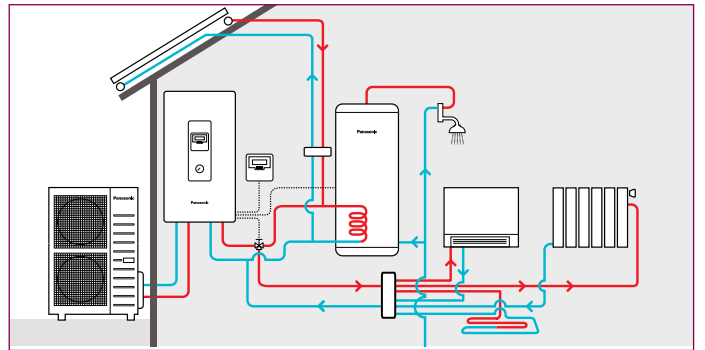
HP BI-BLOC + BOILER + RADIATORS + FAN COILS + SOLAR KIT



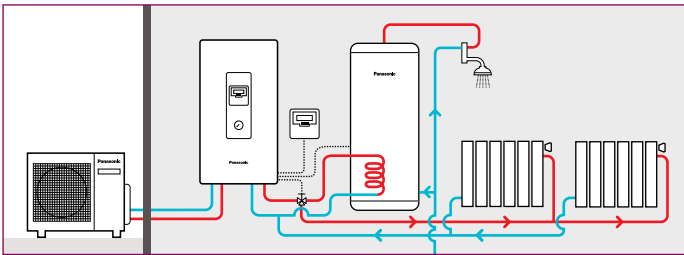
HP BI-BLOC + ACS + BOILER + RADIATORS



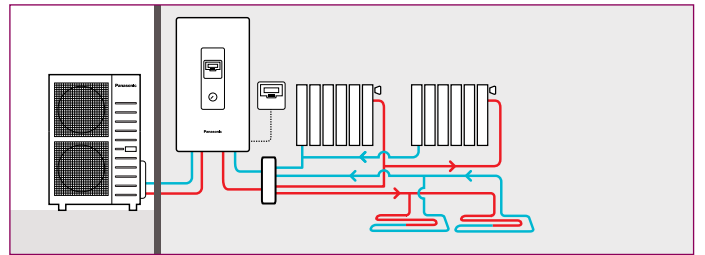
HP BI-BLOC + ACS+ BUFFER TANK + RADIATORS + FLOOR HEATING + SOLAR KIT



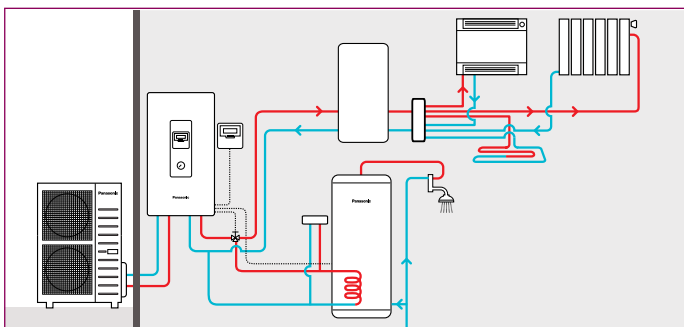
HP BI-BLOC + ACS+ RADIATORS



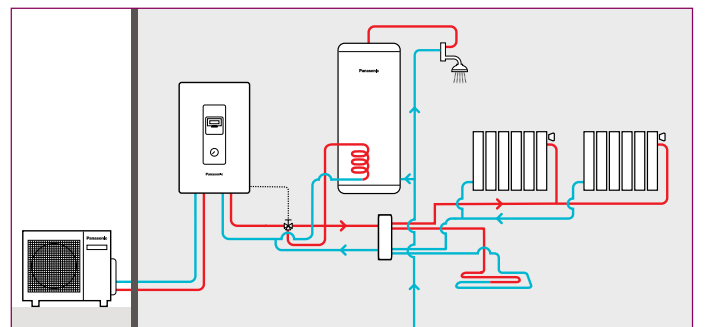
HP BI-BLOC + RADIATORS + BUFFER TANK + FLOOR HEATING



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

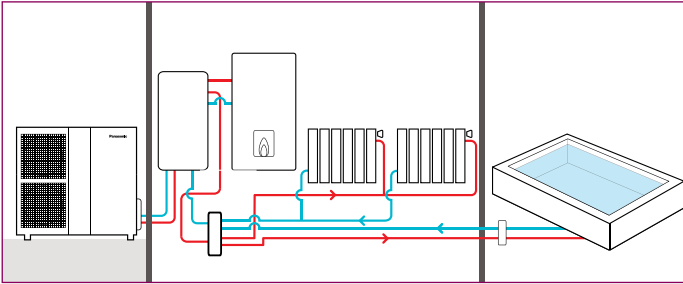


HP BI-BLOC 3 AND 5 KW .LOW CONSUMPTION + SANITARY HOT WATER + BUFFER TANK + RADIATORS + FLOOR HEATING

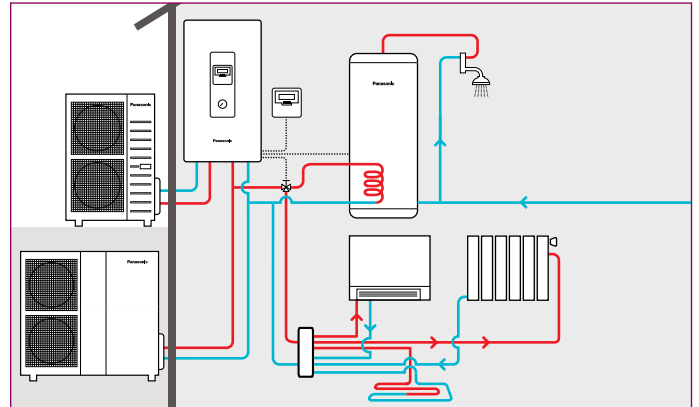


HP MONO-BLOC APPLICATION EXAMPLES

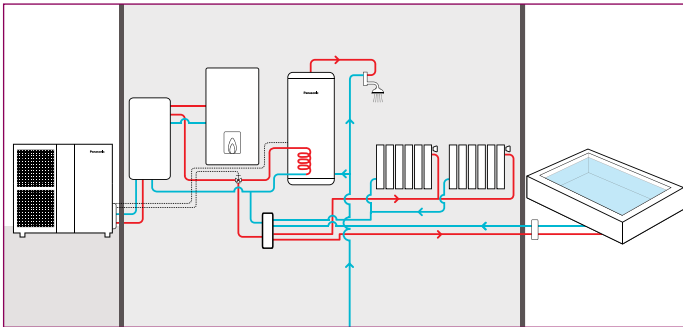
HP MONO-BLOC + BUFFER TANK + BOILER + RADIATORS + SWIMMING POOL



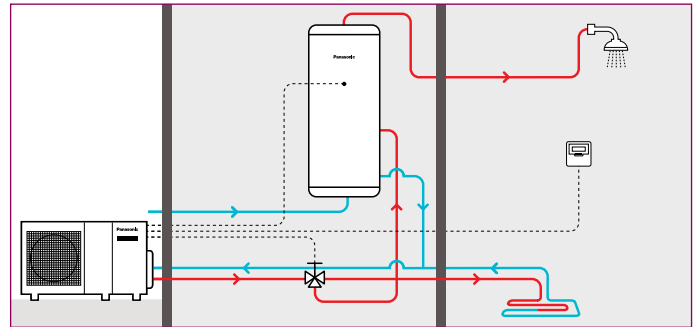
HP MONO-BLOC + BI-BLOC + ACS + RADIATORS + FLOOR HEATING



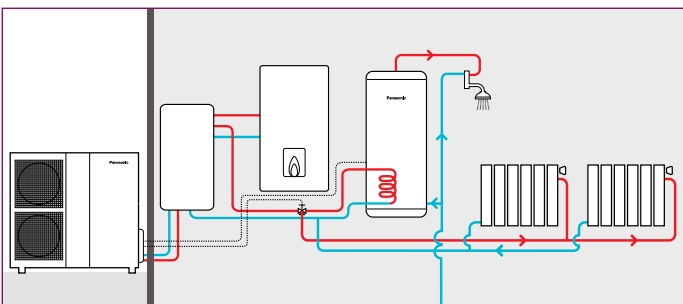
HP MONO-BLOC + BUFFER TANK + ACS + BOILER + RADIATORS + SWIMMING POOL



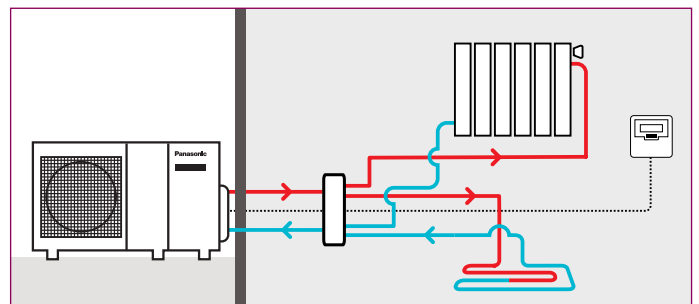
HP MONO-BLOC 6 AND 9 KW .EASY TO INSTALL, WITHOUT ANY BOX INSIDE THE HOUSE + BUFFER TANK + ACS + FLOOR HEATING



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
Aquarea High Connectivity	Bi-Bloc	Single phase	Heating only	WH-SDF03E3E5* (F1) WH-UD03EE5	WH-SDF05E3E5* (F1) WH-UD05EE5		WH-SDF07C3E5 WH-UD07CE5-A (F2)
			Heating and cooling	WH-SDC03E3E5* (F1) WH-UD03EE5	WH-SDC05E3E5* (F1) WH-UD05EE5		WH-SDC07C3E5 WH-UD07CE5-A (F2)
		Three phase	Heating only				
			Heating and cooling				
	Mono-Bloc	Single phase	Heating only			WH-MDF06D3E5 (F3)	
			Heating and cooling			WH-MDC06E3E5 ** (F5)	
		Three phase	Heating only				
			Heating and cooling				
Aquarea T-CAP	Bi-Bloc	Single phase	Heating only				
			Heating and cooling				
		Three phase	Heating only				
			Heating and cooling				
	Mono-Bloc	Single phase	Heating only				
			Heating and cooling				
		Three phase	Heating only				
			Heating and cooling				
Aquarea High temperature	Bi-Bloc	Single phase	Heating only				
		Three phase	Heating only				
	Mono-Bloc	Single phase	Heating only				
		Three phase	Heating only				
AQUAREA PRO	VRF ECOi + Water Heat Exchanger	Three phase	Heating and cooling				
	GAS VRF ECOg + Water Heat Exchanger	Three phase	Gas. Heating and cooling				

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



AQUAREA PRO



FIGURE 6 (F6)



FIGURE 7 (F7)

9KW	12KW	14KW	16KW	28KW	50KW	71 kW
WH-SDF09C3E5 WH-UD09CE5-A (F2)	WH-SDF12C6E5 WH-UD12CE5-A (F3)	WH-SDF14C6E5 WH-UD14CE5-A (F3)	WH-SDF16C6E5 WH-UD16CE5-A (F3)			
WH-SDC09C3E5 WH-UD09CE5-A (F2)	WH-SDC12C6E5 WH-UD12CE5-A (F3)	WH-SDC14C6E5 WH-UD14CE5-A (F3)	WH-SDC16C6E5 WH-UD16CE5-A (F3)			
WH-SDF09C3E8 WH-UD09CE8 (F3)	WH-SDF12C9E8 WH-UD12CE8 (F3)	WH-SDF14C9E8 WH-UD14CE8 (F3)	WH-SDF16C9E8 WH-UD16CE8 (F3)			
WH-SDC09C3E8 WH-UD09CE8 (F3)	WH-SDC12C9E8 WH-UD12CE8 (F3)	WH-SDC14C9E8 WH-UD14CE8 (F3)	WH-SDC16C9E8 WH-UD16CE8 (F3)			
WH-MDF09C3E5 (F4) WH-MDF09D3E5 (F5) NEW 2012	WH-MDF12C6E5 (F4)	WH-MDF14C6E5 (F4)	WH-MDF16C6E5 (F4)			
WH-MDC09C3E5 (F4) WH-MDC09E3E5** (F5) NEW 2012	WH-MDC12C6E5 (F4)	WH-MDC14C6E5 (F4)	WH-MDC16C6E5 (F4)			
WH-MDF09C3E8 (F4)	WH-MDF12C9E8 (F4)	WH-MDF14C9E8 (F4)	WH-MDF16C9E8 (F4)			
WH-MDC09C3E8 (F4)	WH-MDC12C9E8 (F4)	WH-MDC14C9E8 (F4)	WH-MDC16C9E8 (F4)			
WH-SXF09D3E5 WH-UX09DE5 NEW 2012	WH-SXF12D6E5 WH-UX12DE5 (F3) NEW 2012					
WH-SXC09D3E5 WH-UX09DE5 (F2)	WH-SXC12D6E5 WH-UX12DE5 (F3) NEW 2012					
WH-SXF09D3E8 WH-UX09DE8 (F3) NEW 2012	WH-SXF12D9E8 WH-UX12DE8 (F3) NEW 2012					
WH-SXC09D3E8 WH-UX09DE8 (F3) NEW 2012	WH-SXC12D9E8 WH-UX12DE8 (F3) NEW 2012					
WH-MXF09D3E5 (F4) NEW 2012	WH-MXF12D6E5 (F4) NEW 2012					
WH-MXC09D3E5 (F4) NEW 2012	WH-MXC12D6E5 (F4) NEW 2012					
WH-MXF09D3E8 (F4) NEW 2012	WH-MXF12D9E8 (F4) NEW 2012					
WH-MXC09D3E8 (F4) NEW 2012	WH-MXC12D9E8 (F4) NEW 2012					
WH-SHF09D3E5 WH-UH09DE5 (F3) NEW 2012	WH-SHF12D6E5 WH-UH12DE5 (F3) NEW 2012					
WH-SHF09D3E8 WH-UH09DE8 (F3) NEW 2012	WH-SHF12D9E8 WH-UH12DE8 (F3) NEW 2012					
WH-MHF09D3E5 (F4) NEW 2012	WH-MHF12D6E5 (F4) NEW 2012					
WH-MHF09D3E8 (F4) NEW 2012	WH-MHF12D9E8 (F4) NEW 2012					
				S-250WX2E5 (F6) NEW 2012	S-500WX2E5 (F6) NEW 2012	
				S-250WX2E5 (F6) NEW 2012	S-500WX2E5 (F6) NEW 2012	S-710WX2E5 (F7) NEW 2012

** Available in November 2012

4.62 COP
high efficiency

AQUAREA
HIGH CONNECTIVITY

HIGH CONNECTIVITY
ΥΟΛΩΦΕΥ

επιχειρησιμότητα
μείωση
κόστος

BI-BLOC // HIGH CONNECTIVITY // 3 AND 5 KW AQUAREA // HEATING ONLY - SDF // HEATING AND COOLING - SDC

The new 3 kW and 5 kW Aquarea heat pump from Panasonic is specially design specially designed for low energy homes.

Thanks to the system's high degree of technology and advanced control, they are able to maintain a high capacity and efficiency event at -7°C and -15°C.

The very compact outdoor unit makes the installation very easy.

Whatever the weather, Aquarea will always give you maximum efficiency, even at -20 °C.

NEW
PHONE & ANDROID
READY

CONTROL YOUR HEAT PUMP WITH THE
IntesisHome
SMART DEVICE
VIA SMARTPHONES & INTERNET

OPTIONAL

high efficiency heating
INVERTER+

environmentally friendly refrigerant
R410A

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

5 year compressor warranty

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

			SINGLE-PHASE HEATING ONLY		SINGLE-PHASE HEATING AND COOLING	
INDOOR UNIT			WH-SDF03D3E5*	WH-SDF05D3E5*	WH-SDC03D3E5*	WH-SDC05D3E5*
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	4,2	3	5
COP at -7°C with heating water temperature at 35°C			2,7	2,5	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	2,90
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				
OUTDOOR UNIT			WH-UD03EE5	WH-UD05EE5	WH-UD03EE5	WH-UD05EE5
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")	12,70 (1/2")
	Gas	mm (Inch)	6,35 (1/4")	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	-20 to 35
	Water Outlet (at-2/-7/-15) 2)	°C	25 – 55 / 5 – 20	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.

* Available in September, Preliminary specifications

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK			WH-TD20E3E5	WH-TD30E3E5
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 ²	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 EN14511.

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



NEW
2011-2012

**DESIGN FOR
LOW CONSUMPTION
HOMES**



TECHNICAL FOCUS

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- **NEW!** RANGE FROM 3 AND 5 KW, SINGLE-PHASE, HEATING ONLY AND HEATING AND COOLING
- MAXIMUM OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- EASY AND FAST TO INSTALL

ENERGY AND ENVIRONMENTAL EFFICIENCY

- Super efficient even at outdoor temperatures as low as -15°C
- 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- Wired control panel for installation in the house
- Easy programming on the control panel
- Ipad/Android ready with the IntensisHome box (optional)

EASY INSTALLATION AND MAINTENANCE

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



WH-UD03EE5
WH-UD05EE5



WH-TD20E3E5



WH-TD30E3E5

4.41^{*} COP
high efficiency

AQUAREA
HIGH CONNECTIVITY

HIGH COINVESTMENT
СОУПЛАВЕ

EFFICIENCY
μΙDΜ

↑ ↓ ↕ COB

AQUAREA MDF & MDC // MONO-BLOC // HIGH CONNECTIVITY // 6 AND 9 KW AQUAREA // HEATING AND COOLING // 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 °C. The Mono-bloc is easy to install on new or existing installations, in all type of houses.

NEW
PHONE & ANDROID
READY

CONTROL YOUR HEAT
PUMP WITH THE
IntesisHome™
SMART DEVICE
VIA SMARTPHONES &
INTERNET

OPTIONAL

high efficiency
heating

INVERTER+

environmentally
friendly
refrigerant

R410A

down to
-20°C in
heating mode

**OUTDOOR
TEMPERATURE**

5 year
compressor
warranty

MONO-BLOC // 6 AND 9 KW AQUAREA // HEATING // MDF & MDC

SINGLE-PHASE		WH-MDF06D3E5	WH-MDF09D3E5	WH-MDC06E3E5*	WH-MDC09E3E5*	
Heating Capacity at +7°C	kW	6	9	6	9	
COP at +7°C with heating water temperature at 35°C		4.41	4.10	4.41	4.10	
Heating Capacity at +2°C	kW	5	7	5	7	
COP at +2°C with heating water temperature at 35°C		3.4	3	3.4	3	
Heating Capacity at -7°C	kW	5.15	7.45	5.15	7.45	
COP at -7°C with heating water temperature at 35°C		2.65	3.10	2.65	3.10	
Heating Capacity at -15°C	kW	5.9	7.6	5.9	7.6	
COP at -15°C with heating water temperature at 35°C		2.2	2.0	2.2	2.0	
Cooling capacity at 35°C	kW	-	-	5.5	7.0	
EER at 35°C with cooling water temperature at 7/12°C		-	-	2.71	2.41	
Sound pressure level	dB(A)	47	49	47	49	
Sound power level	dB	65	67	65	67	
Dimensions (H x W x D)	mm	865 x 1283 x 320	865 x 1283 x 320	865 x 1283 x 320	865 x 1283 x 320	
Weight	kg	112	112	112	112	
Water pipe connector		R 1-3/16	R 1-3/16	R 1-3/16	R 1-3/16	
Pump	No. of Speed	3	3	3	3	
	Water Flow (ΔT=5 K, 35°C)	l/min	17.2	25.8	17.2	25.8
	Input Power	W	75	75	75	75
Capacity of integrated electric heater	kW	3.0	3.0	3.0	3.0	
Input Power at +7°C	kW	1.36	2.2	1.36	2.2	
Running and starting Current at +7°C	A	6.2	10.1	6.2	10.1	
Maximum Current	A	20.5	22.9	20.5	22.9	
Operation Range	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35	
	Water Outlet (at -2/-7/-15)	°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.

* Preliminary specifications

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK			WH-TD20E3E5	WH-TD30E3E5
Water volume	L		200	300
Max. water temperature	°C		85	85
Dimension	Hight / Diameter	mm	1230 / 580	1700 / 580
Weight	kg		42	54
Power supply			230V	230V
Material inside tank			Inox	Inox
Exchange surface	m ²		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 EN14511.

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



NEW
2011-2012

**DESIGN FOR
LOW CONSUMPTION
HOMES**



TECHNICAL FOCUS

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- **NEW!** RANGE FROM 6 AND 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-MDF06E3E5
WH-MDF09E3E5



WH-TD20E3E5



WH-TD30E3E5

4.74^{COP}
high efficiency

AQUAREA
HIGH CONNECTIVITY

HIGH CONNECTIVITY
ВОЗМОВЕВ

EFFICIENCY
ΠΙΣΤΗ
↑ ↓ ↕ COB

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 underfloor heating, low-temperature radiators or even fan-coil heaters. This range 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.



OPTIONAL



BI-BLOC // HIGH-CONNECTIVITY // HEATING ONLY // SDF

		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	4,10	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&O/D Hight 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) ²⁾	°C	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	25 - 55	

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK		WH-TD20E3E5	WH-TD30E3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Hight / Diameter	mm	mm
		1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m ²	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 EN14511.

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

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- RANGE FROM 7 TO 16 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- MAXIMUM 40 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-TD20E3E5

WH-TD30E3E5

4.74^{COP}
high efficiency

AQUAREA
HIGH CONNECTIVITY

HIGH CONNECTIVITY
ВОЗМОВЕВ

EFFICIENCY
MIDM
SMARTPHONE
CONTROL

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 underfloor heating, low-temperature radiators or even fan-coil heaters. This range 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.



OPTIONAL



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	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&O/D Hight 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) ²⁾	°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	

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK		WH-TD20E3E5	WH-TD30E3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Hight / Diameter	mm	mm
		1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m ²	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 EN14511.

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

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- RANGE FROM 7 TO 16 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 55 °C
- WORKS DOWN TO -20 °C
- MAXIMUM 40 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-TD20E3E5

WH-TD30E3E5

4.74^{COP}
high efficiency

AQUAREA
HIGH CONNECTIVITY

HIGH CONNECTIVITY
СОУПРАВЛЕНИЕ

EFFICIENCY
ИДИУ
↑ ↓ ↕ СОБ

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 underfloor heating, low-temperature radiators or even fan-coil heaters. This range 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.



OPTIONAL



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	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	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-2/-7/-15) ²⁾	°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

Performance calculation in agreement with EN14511.

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

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK		WH-TD20E3E5	WH-TD30E3E5
Water volume	L	200	300
Max. water temperature	°C	85	85
Dimension	Hight / Diameter	mm	mm
		1230 / 580	1700 / 580
Weight	kg	42	54
Power supply		230V	230V
Material inside tank		Inox	Inox
Exchange surface	m ²	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 EN14511.

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

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-TD20E3E5



WH-TD30E3E5

4.74^{COP}
high efficiency

AQUAREA
HIGH CONNECTIVITY

HIGH CONNECTIVITY
BOILER BACKUP

EFFICIENCY
MIDM
↑ ↓ ↕ COB

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. This range 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.



OPTIONAL



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 / 14,1	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	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 -2/-7/-15) ²⁾	°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.

Performance calculation in agreement with EN14511.

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

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK			WH-TD20E3E5	WH-TD30E3E5
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 ²	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

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-TD20E3E5



WH-TD30E3E5

100%
capacity
at -15°C

AQUAREA T-CAP

100% CAPACITY AT -15°C

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 maintain 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 maintaining 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. This Range 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.

NEW
IPHONE & ANDROID
READY

CONTROL YOUR HEAT
PUMP WITH THE
IntesisHome
SMART DEVICE
VIA SMARTPHONES &
INTERNET

OPTIONAL

high
efficiency
heating

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
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	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
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")
	Gas	mm (Inch)	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 Hight 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

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK		WH-TD20E3E5	WH-TD30E3E5
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 ²	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 EN14511.

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



NEW
2011



TECHNICAL FOCUS

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- RANGE FROM 9 TO 12 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
- 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-UX12DE8
WH-UX12DE5
WH-UX09DE8



WH-TD20E3E5



WH-TD30E3E5

100%
capacity
at -15°C

AQUAREA T-CAP

VOYABEV I-CVB

9f -12.0C
csbsciyA

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 maintain 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 maintaining 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. This range 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.

NEW
IPHONE & ANDROID
READY

CONTROL YOUR HEAT
PUMP WITH THE
IntesisHome
SMART DEVICE
VIA SMARTPHONES &
INTERNET

OPTIONAL

high efficiency heating

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 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 Hight 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

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK		WH-TD20E3E5	WH-TD30E3E5
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

Performance calculation in agreement with EN14511.
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



NEW
2011



TECHNICAL FOCUS

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-TD20E3E5



WH-TD30E3E5



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

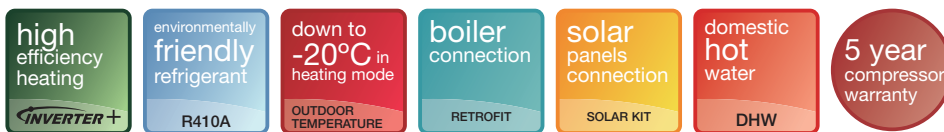
The Aquarea MXF is the new Aquarea product from Panasonic for central heating. T-CAP stands for Total capacity as this new line-up is able to maintain the same nominal capacity even at -15°C without the help of an electrical booster heater. T-CAP is also able to provide extremely high efficiency, whatever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

The new MXF is ideal for houses where maintaining 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. This range 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.



OPTIONAL



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)	W	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	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 -2/-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.

Performance calculation in agreement with EN14511.

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

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK			WH-TD20E3E5	WH-TD30E3E5
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 ²	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)		kWh/24h	1,7	2
3 Way valve included			YES	YES



NEW
2012



TECHNICAL FOCUS

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-TD20E3E5



WH-TD30E3E5



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 maintain 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 maintaining 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. This range 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.



OPTIONAL



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		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)	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	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.

Performance calculation in agreement with EN14511.

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

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK		WH-TD20E3E5	WH-TD30E3E5
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 ²	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)	kWh/24h	1,7	2
3 Way valve included		YES	YES



NEW
2012



TECHNICAL FOCUS

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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

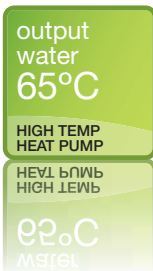
- Outdoor unit easy to open for maintenance



WH-TD20E3E5



WH-TD30E3E5



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.



OPTIONAL



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

			SINGLE-PHASE		THREE-PHASE		
INDOOR UNIT			WH-SHF09D3E5*	WH-SHF12D6E5*	WH-SHF09D3E8*	WH-SHF12D9E8*	
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		
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")	9,52 (3/8")	
	Gas	mm (Inch)	15,88 (5/8")	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 Hight Difference		m	20	20	20	20	
Operation	Outdoor Ambient	°C	-20 to 35	-20 to 35	-20 to 35	-20 to 35	
Range	Water Outlet (at -2/-7/-15) 2)	°C	25 - 65	25 - 65	25 - 65	25 - 65	

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK			WH-TD20E3E5	WH-TD30E3E5
Water volume		L	200	300
Max. water temperature		°C	85	85
Dimension	Hight / Diameter	mm	1230 / 580	1700 / 580
Weight		kg	42	54
Power supply			230V	230V
Material inside tank			Inox	Inox
Exchange surface		m ²	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)		kWh/24h	1,7	2
3 Way valve included			YES	YES

* Tentative specifications.

Performance calculation in agreement with EN14511.
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



NEW
2012



TECHNICAL FOCUS

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- RANGE FROM 9 TO 12 KW, SINGLE AND THREE-PHASE
- MAXIMUM HYDRAULIC MODULE OUTPUT TEMPERATURE: 65 °C
- WORKS DOWN TO -20 °C
- MAXIMUM 30 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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



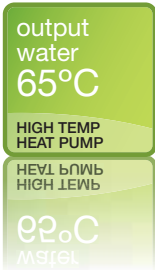
WH-UH09DE5
WH-UH12DE5
WH-UH09DE8
WH-UH12DE8



WH-TD20E3E5



WH-TD30E3E5



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.



OPTIONAL



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 (T=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 -2/-7/-15) ²⁾	°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.

Performance calculation in agreement with EN14511.

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

TANKS (MORE TANK ON THE ACCESSORIES PART)

OPTIONAL STANDARD SANITARY TANK			WH-TD20E3E5	WH-TD30E3E5
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 ²	1,4	1,8
Energy loss at 65°C (insulated tested under EN12897)		kWh/24h	1,7	2
3 Way valve included			YES	YES



NEW
2012



TECHNICAL FOCUS

- **NEW!** OPTIONAL SMARTPHONE CONTROL WITH INTENSISHOME® DEVICE
- 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

- **NEW!** Optional Smartphone control with IntensisHome® device
- 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-TD20E3E5



WH-TD30E3E5



AQUAREA
PRO

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

FROM 28 kW to 80 kW



KEY BENEFITS:

- No cascade installation up to 80 kW with GHP outdoor unit and 51,3 kW 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 choice-remote controls and interfaces
- 3.25 COP with water at 45°C and outdoor temperature of +7°C

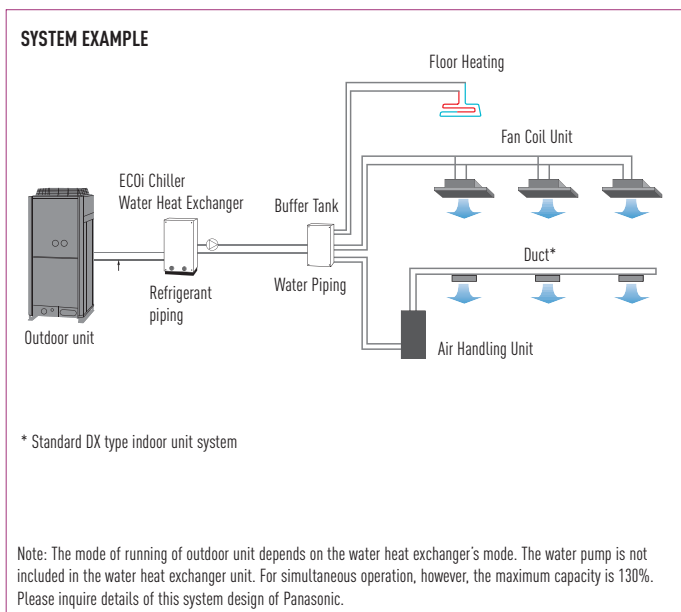
With ECOi outdoor units:

- 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

ECOi Water Heat Exchanger

Electrical VRF with water heat exchanger

- 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.



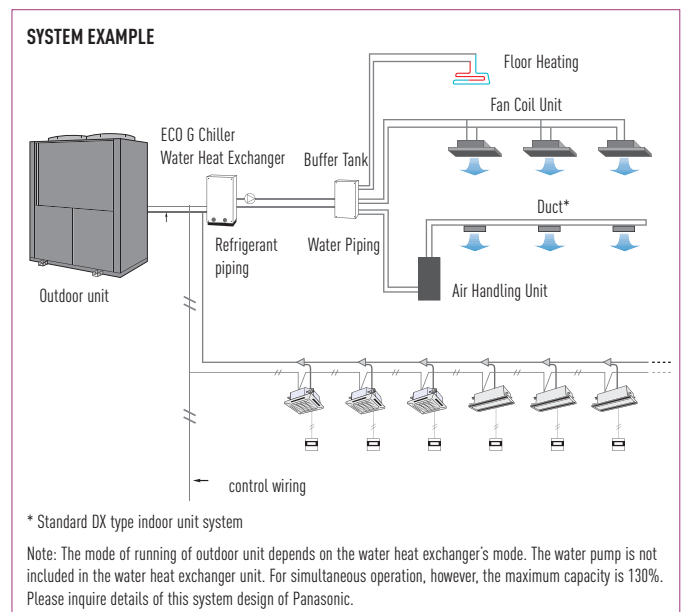
With GHP outdoor units:

- 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

ECO G 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.



AQUAREA PRO // GAS VRF ECOi + WATER HEAT EXCHANGER			Eco-i	
Water heat exchanger			S-250WX2E5	S-500WX2E5
Nominal Heating Capacity	kW		28	51,3
Nominal Cooling Capacity	kW		25	50
Heating Capacity at +7°C, heating water temperature at 35°C	kW		28	51,3
COP at +7°C with heating water temperature at 35°C			25	50
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			3,25	3,10
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			2,52	2,42
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			2,34	2,24
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	28,58
	Gas	mm (Inch)	9,52	15,88
Refrigerant (R410A)	kg		"6.3 (Need Additional charge at site)	"9.0 (Need Additional charge at site)
Pipe Length Range	m		max. 170	max. 170
Pipe Length for nominal capacity	m		7,5	7,5
Pipe Length for additional capacity	m		0 <	0 <
Additional Gas Amount (R410A)	g/m		Refer to Manual	Refer to Manual
I/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	-20 - 15
	Water Outlet (at-2/-7/-15) 2	°C	35 - 45	35 - 45

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.

* Max. piping lengths for 100 % one-to-one combination ratio.

* 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



NEW
2012

OPTIONAL CONTROLLER

Timer remote controller
CZ-RTC2



AQUAREA
PRO

TECHNICAL FOCUS

- UP TO 51 kW 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-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
- 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



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!



WATER HEAT EXCHANGER		S-250WX2E5	S-500WX2E5	S-710WX2E5
Nominal Heating Capacity	kW	30	60	80
Nomimal Cooling Capacity	kW	25	50	67
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	30	60	80
COP at +7°C with heating water temperature at 45°C			1,49	1,34
Heating Capacity at -7°C, heating water temperature at 35°C	kW		59,2	77,4
COP at -7°C, heating water temperature at 35°C			0,75	0,76
Heating Capacity at -15°C, heating water temperature at 35°C			59,2	77,4
COP at -15°C with heating water temperature at 35°C			0,75	0,76
Cooling capacity at +32°C, outlet tp 6°C, inlet tp 12°C	kW			
EER at +32°C, outlet tp 6°C, inlet tp 12°C				
Cooling capacity at +35°C, outlet tp 7°C, inlet tp 12°C	kW			
EER at +32°C, outlet tp 6°C, inlet tp 12°C				
Dimensions (H x W x D)	mm	1000x395x965	1000x395x965	1000x395x965
Weight	kg	110	130	150
Water pipe connector		Rp2 Nut thread (50A)	Rp2 Nut thread (50A)	Rp2 Nut thread (50A)
Pump	No. of Speed	(Field supply)	(Field supply)	(Field supply)
	Input Power(max)	W	---	---
Heating water flow (ΔT=5 K, 35°C)	l/min	4,3	8,6	12,2
Capacity of integrated electric heater	KW			
Input Power	kW	0,01	0,01	0,01
Starting Current	A	---	---	---
Maximum Current	A	0,07	0,07	0,07
Outdoor unit		-	U-20GE2E5	U-30GE2E5
OUTDOOR UNIT		-	U-20GE2E5	U-30GE2E5
Sound pressure level	dB(A)		58	63
Sound power level	dB		83	86
Dimensions (H x W x D)	mm		2228x1650x1000	2228x2026x1000
Weight	kg		770	830
Pipe Diameter	Liquid	mm (Inch)	28,58	31,75
	Gas	mm (Inch)	15,88	19,05
Refrigerant (R410A)	kg		"11.5 *Need additional chatge at site"	"11.5 *Need additional chatge at site"
Pipe Length Range	m		max. 170	max. 170
Pipe Length for nominal capacity	m		7	7
Pipe Length for additional gas	m		0 <	0 <
Additional Gas Amount (R410A)	g/m		Refer to Manual	Refer to Manual
I/D&O/D Hight Difference	m		"50 (OD above) / 35 (OD below)"	"50 (OD above) / 35 (OD below)"
Operation Range	Outdoor Ambient	°C	-21 ~ 15.5	-21 ~ 15.5
	Water Outlet (at -2/-7/-15) 2)	°C	35 ~ 55	35 ~ 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. 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 EN14511.
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



NEW
2012

OPTIONAL CONTROLLER

Timer remote controller
CZ-RTC2



AQUAREA
PRO

TECHNICAL FOCUS

- UP TO 80 kW ON ONLY 1 OUTDOOR UNIT, WE CAN PROVIDE A 25 OR 30HP GHP FOR THIS WHE
- 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

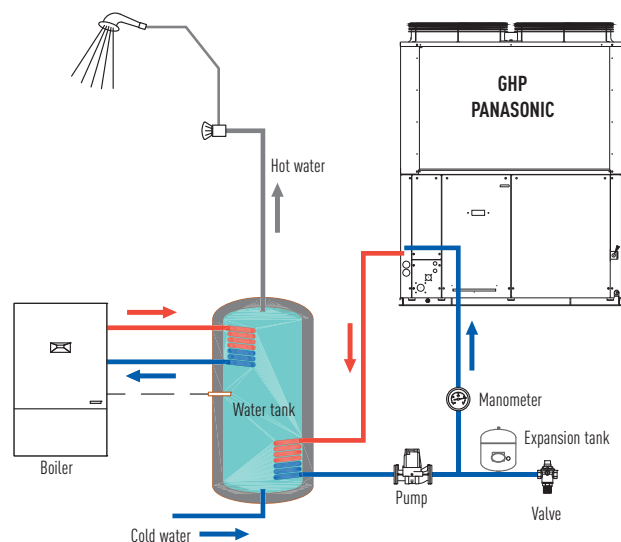
- Hot water outlet temperatures from 35 °C to 55 °C
- Chilled water outlet temperatures from 5 °C to 15 °C
- Operation and control by wired remote control CZ-RTC2
- Energy-efficient capacity control
- Stainless steel plate heat exchanger with anti-freeze protection control
- Change-over between heating 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-20GE62E5		22.00
	U-25GE2E5		25.00
Hot water piping allowable pressure			0.7
Hot water circulation rate		MPa	3.9
Hot water tube size		m ³ /h	Rp 3/4



HEATING CAPACITY TABLE BASED ON OUTLET TEMPERATURE AND OUTSIDE TEMPERATURE

MONO-BLOC // 6 AND 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
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	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
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	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

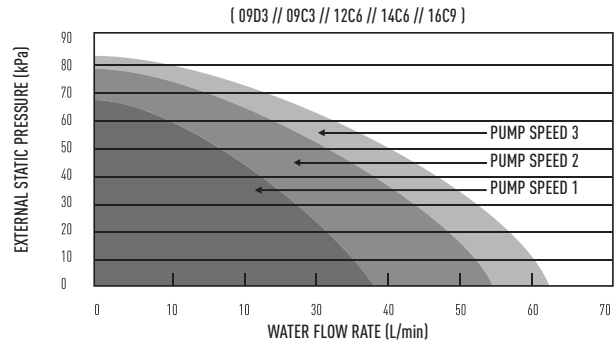
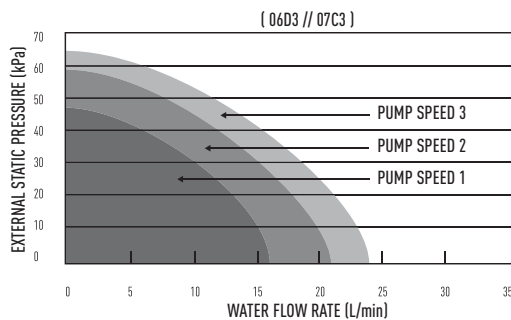
BI-BLOC // HIGH-CONNECTIVITY // HEATING MODE // SDF

WH-SDF07C3E5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	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
-7	5.15	1.80	2.86	5.15	1.94	2.65	5.08	2.14	2.37	5.00	2.38	2.10	4.90	2.47	1.98	4.80	2.67	1.80
2	6.70	1.83	3.66	6.55	1.98	3.31	6.58	2.29	2.87	6.60	2.64	2.50	6.30	2.90	2.17	6.00	3.16	1.90
7	7.00	1.43	4.90	7.00	1.59	4.40	7.00	1.77	3.95	7.00	2.12	3.30	6.90	2.30	3.00	6.80	2.72	2.50
25	7.00	0.79	8.86	7.00	0.93	7.53	6.40	1.03	6.21	6.10	1.17	5.21	5.90	1.33	4.44	5.70	1.49	3.83

WH-SDF09C3E5																		
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	6.00	2.55	2.35	5.90	2.68	2.20	5.50	2.82	1.95	5.40	3.00	1.80	5.20	3.14	1.66	5.00	3.33	1.50
-7	6.10	2.16	2.82	5.90	2.36	2.50	5.85	2.63	2.22	5.80	2.90	2.00	5.80	3.06	1.90	5.80	3.22	1.80
2	6.80	1.87	3.64	6.70	2.16	3.10	6.70	2.38	2.82	6.60	2.64	2.50	6.30	2.90	2.17	6.00	3.16	1.90
7	9.00	1.93	4.66	9.00	2.20	4.09	9.00	2.45	3.67	9.00	2.81	3.20	8.95	3.23	2.77	8.90	3.87	2.30
25	9.00	1.07	8.41	9.00	1.27	7.09	8.40	1.40	6.00	8.00	1.59	5.03	7.80	1.81	4.31	7.50	2.03	3.69

WH-SDF12C6E5																		
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	9.30	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

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)

WH-SDF14C6E5

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	9,90	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
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	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
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	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

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	9,30	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-SDF14C9E8

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	9,90	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-SDF16C9E8

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	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

BI-BLOC // HIGH-CONNECTIVITY // ON COOLING MODE // SDC

SDC												
MODELS	WH-SDC09			WH-SDC12			WH-SDC14			WH-SDC16		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
16	5.90	1.01	5.84	7.65	1.30	5.88	8.85	1.50	5.90	9.62	1.63	5.90
25	7.45	1.59	4.69	9.20	2.30	4.00	10.00	2.68	3.73	10.51	2.85	3.69
35	7.00	2.25	3.11	10.00	3.55	2.82	11.50	4.40	2.61	12.20	4.80	2.54
43	5.80	2.59	2.24	7.60	3.95	1.92	9.05	5.01	1.81	10.08	5.47	1.84

MONO-BLOC // HIGH-CONNECTIVITY // HEATING MODE // MDF

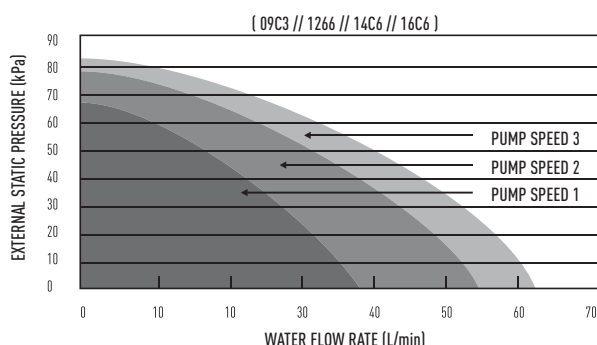
WH-MDF09C3E5																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	8.65	3.10	2.79	8.30	3.25	2.55	7.95	3.45	2.30	7.60	3.65	2.08	7.15	3.75	1.91	6.70	3.85	1.74
-7	9.35	2.95	3.17	9.00	3.20	2.81	8.85	3.50	2.53	8.70	3.80	2.29	8.30	3.85	2.16	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-MDF12C6E5																		
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	9.30	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	3.90	2.46	9.20	4.10	2.24	8.70	4.20	2.07	8.20	4.31	1.90
2	11.80	3.14	3.76	11.40	3.34	3.41	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-MDF14C6E5																		
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	9.90	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	4.00	2.68	10.20	4.20	2.43	9.80	4.40	2.23	9.10	4.57	1.99	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-MDF16C6E5																		
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	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	4.30	2.65	10.80	4.50	2.40	10.30	4.70	2.19	9.60	4.85	1.98	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

HYDRAULIC PUMP PERFORMANCE



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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)



WH-MDF09C3E8

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	8,65	3,10	2,79	8,30	3,25	2,55	7,95	3,45	2,30	7,95	3,45	2,30	7,15	3,75	1,91	7,15	3,75	1,91
-7	9,35	2,95	3,17	9,00	3,20	2,81	8,85	3,50	2,53	8,85	3,50	2,53	8,30	3,85	2,16	8,30	3,85	2,16
2	9,31	2,39	3,90	9,00	2,55	3,53	9,00	2,82	3,19	9,00	2,82	3,19	8,90	3,53	2,52	8,90	3,53	2,52
7	9,00	1,58	5,70	9,00	1,90	4,74	9,00	2,20	4,09	9,00	2,20	4,09	9,00	2,80	3,21	9,00	2,80	3,21
25	9,00	1,09	8,26	9,00	1,28	7,03	8,73	1,48	5,90	8,73	1,48	5,90	8,28	1,86	4,45	8,28	1,86	4,45

WH-MDF12C9E8

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	9,30	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	3,90	2,46	9,20	4,10	2,24	8,70	4,20	2,07	8,20	4,31	1,90
2	11,80	3,14	3,76	11,40	3,34	3,41	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-MDF14C9E8

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	9,90	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	4,00	2,68	10,20	4,20	2,43	9,80	4,40	2,23	9,10	4,57	1,99	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-MDF16C9E8

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	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	4,30	2,65	10,80	4,50	2,40	10,30	4,70	2,19	9,60	4,85	1,98	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

MONO-BLOC // HIGH-CONNECTIVITY // ON COOLING MODE // MDC

MDC

MODELS	WH-MDC09			WH-MDC12			WH-MDC14			WH-MDC16		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
16	5,90	1,01	5,84	7,65	1,30	5,88	8,85	1,50	5,90	9,62	1,63	5,90
25	7,45	1,59	4,69	9,20	2,30	4,00	10,00	2,68	3,73	10,51	2,85	3,69
35	7,00	2,25	3,11	10,00	3,60	2,78	11,50	4,40	2,61	12,20	4,80	2,54
43	5,80	2,59	2,24	7,60	3,95	1,92	9,05	5,01	1,81	10,08	5,47	1,84

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

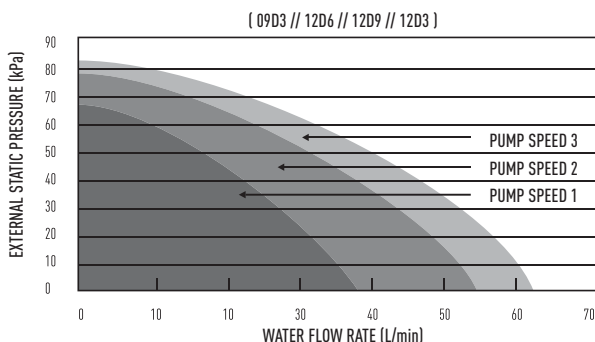
WH-MXF09D3E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,28	2,74	9,00	3,55	2,54	9,00	3,95	2,28	9,00	4,34	2,07	9,00	4,77	1,89	9,00	5,20	1,73
-7	9,00	2,75	3,27	9,00	3,20	2,81	9,00	3,66	2,46	9,00	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

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-SXF09D3E5																		
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-SXF12D3E5																		
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	2,80	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-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

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

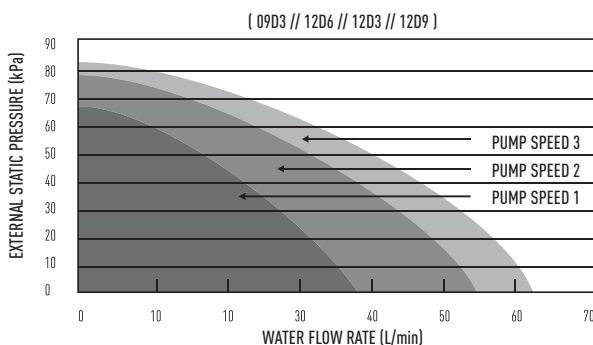
WH-MXF09D3E8																		
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	55	55	55
-15	9,00	3,28	2,74	9,00	3,55	2,54	9,00	3,95	2,28	9,00	4,34	2,07	9,00	4,77	1,89	9,00	5,20	1,73
-7	9,00	2,75	3,27	9,00	3,20	2,81	9,00	3,66	2,46	9,00	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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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)



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

HEATING CAPACITY TABLE BASED ON OUTLET TEMPERATURE AND OUTSIDE TEMPERATURE

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

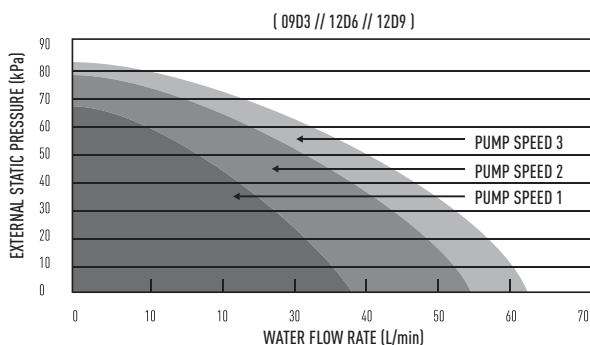
WH-MHF09D3E5												
Tamb	HC	IP	COP	HC	IP	COP	HC	IP	COP	HC	IP	COP
LWC	35	35	35	45,00	45,00	45,00	55,00	55,00	55,00	65,00	65,00	65,00
-15	9	3,75	2,40	8,80	4,29	2,05	8,50	4,94	1,72	7,80	5,91	1,32
-7	9	3,33	2,70	8,90	3,87	2,30	8,90	4,49	1,98	8,90	5,43	1,64
2	9	2,65	3,40	9,00	3,25	2,77	9,00	3,91	2,30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

HYDRAULIC PUMP PERFORMANCE



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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)



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
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	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
LWC	30	30	30	35	35	35	40	40	40	45	45	45	50	50	50	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						

ACCESSORIES

THIRD PARTY 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. High 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 ²	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	SFA21/18 / VXI46/25	Spring return
2 WAY VALVE		
Brand	Model No.	Feature
Honeywell	V4043C1007	Spring return
Siemens	SFA21/18 // VVI46/25	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

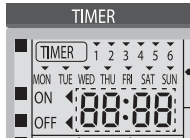
PANASONIC ACCESSORIES

SOLAR KIT ACCESSORIES	
CZ-NS1P	Solar connection PCB (for Bi-split type)
CZ-NS3P	Solar connection PCB (for Mono-bloc type)
CZ-NS2P	Solar connection PCB (for Mono-bloc)
SANITARY TANK ACCESSORIES	
CZ-TK1	Temperature sensor kit for third party tank
CZ-TK3	Temperature sensor kit for third party tank for mini Monobloc
DEICE ACCESSORIES	
CZ-NE1P	Base pan heater kit




* Panasonic's term of warranty is based on the warranty conditions provided by the tank supplier being met. Please ensure the maintenance programme is carried out as instructed in the tank manufacturer's manual.

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	<ul style="list-style-type: none"> • Indoor/outdoor connection wire • Indoor/outdoor PCB • Specification and combination table in catalogue
H15	Outdoor compressor temperature sensor abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Compressor temperature sensor (defective or disconnected)
H23	Indoor refrigerant liquid temperature sensor abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Refrigerant liquid temperature sensor (defective or disconnected)
H38	Indoor/Outdoor mismatch	—	<ul style="list-style-type: none"> • Indoor/Outdoor PCB
H42	Compressor low pressure abnormality	—	<ul style="list-style-type: none"> • Outdoor pipe temperature sensor • Clogged expansion valve or strainer • Insufficient refrigerant • Outdoor PCB • Compressor
H62	Water flow switch abnormality	Continue for 1 min.	<ul style="list-style-type: none"> • Water flow switch
H64	Refrigerant high pressure abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Outdoor high pressure sensor (defective or disconnected)
H70	Back-up heater OLP abnormality	Continue for 60 sec.	<ul style="list-style-type: none"> • Back-up heater OLP (Disconnection or activated)
H72	Tank sensor abnormal	Continue for 5 sec.	<ul style="list-style-type: none"> • Tank sensor
H76	Indoor - control panel communication abnormality	—	<ul style="list-style-type: none"> • Indoor - control panel (defective or disconnected)
H90	Indoor / outdoor abnormal communication	> 1 min after starting operation	<ul style="list-style-type: none"> • Internal / external cable connections • Indoor / Outdoor PCB
H91	Tank heater OLP abnormality	Continue for 60 sec.	<ul style="list-style-type: none"> • Tank heater OLP (Disconnection or activated)
H95	Indoor/Outdoor wrong connection	—	<ul style="list-style-type: none"> • Indoor/Outdoor supply voltage
H98	Outdoor high pressure overload protection	—	<ul style="list-style-type: none"> • Outdoor high pressure sensor • Water pump or water leakage • Clogged expansion valve or strainer • Excess refrigerant • Outdoor PCB
H99	Indoor heat exchanger freeze prevention	—	<ul style="list-style-type: none"> • Indoor heat exchanger • Refrigerant shortage
F12	Pressure switch activate	4 times occurrence within 20 minutes	<ul style="list-style-type: none"> • Pressure switch
F14	Outdoor compressor abnormal revolution	4 times occurrence within 20 minutes	<ul style="list-style-type: none"> • Outdoor compressor
F15	Outdoor fan motor lock abnormality	2 times occurrence within 30 minutes	<ul style="list-style-type: none"> • Outdoor PCB • Outdoor fan motor
F16	Total running current protection	3 times occurrence within 20 minutes	<ul style="list-style-type: none"> • Excess refrigerant • Outdoor PCB
F20	Outdoor compressor overheating protection	4 times occurrence within 30 minutes	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Improper heat exchange • IPM (Power transistor)
F23	Outdoor Direct Current (DC) peak detection	7 times occurrence continuously	<ul style="list-style-type: none"> • Outdoor PCB • Compressor
F24	Refrigeration cycle abnormality	2 times occurrence within 20 minutes	<ul style="list-style-type: none"> • Insufficient refrigerant • Outdoor PCB • Compressor low compression
F25	Cooling / Heating cycle changeover abnormality	4 times occurrence within 30 minutes	<ul style="list-style-type: none"> • 4-way valve • V-coil
F27	Pressure switch abnormality	Continue for 1 min.	<ul style="list-style-type: none"> • Pressure switch
F36	Outdoor air temperature sensor abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Outdoor air temperature sensor (defective or disconnected)
F37	Indoor water inlet temperature sensor abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Water inlet temperature sensor (defective or disconnected)
F40	Outdoor discharge pipe temperature sensor abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Outdoor discharge pipe temperature sensor (defective or disconnected)
F41	PFC control	4 times occurrence within 10 minutes	<ul style="list-style-type: none"> • Voltage at PFC
F42	Outdoor heat exchanger temperature sensor abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Outdoor heat exchanger temperature sensor (defective or disconnected)
F43	Outdoor defrost sensor abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Outdoor defrost sensor (defective or disconnected)
F45	Indoor water outlet temperature sensor abnormality	Continue for 5 sec.	<ul style="list-style-type: none"> • Water outlet temperature sensor (defective or disconnected)
F46	Outdoor Current Transformer open circuit	—	<ul style="list-style-type: none"> • Insufficient refrigerant • Outdoor PCB • Compressor low
F95	Cooling high pressure overload protection	—	<ul style="list-style-type: none"> • Outdoor high pressure sensor • Water pump or water leakage • Clogged expansion valve or strainer • Excess refrigerant • Outdoor PCB



Panasonic





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heating and cooling systems

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