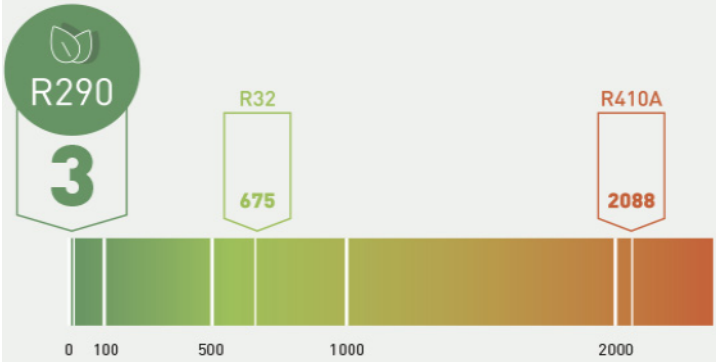
A revolution in design, efficiency and connectivity



Contributing to the decarbonisation of society

Aquarea air to water heat pumps with R290 refrigerant range is a groundbreaking low energy system for heating, cooling and domestic hot water production that delivers outstanding performance, aligning with our vision of a carbon-free society and our GREEN IMPACT plan.
Panasonic's newest series are engineered with industry leading natural refrigerant R290, which has a low Global Warming Potential (GWP) of just 3, helping reduce CO_2 emissions and environmental impact.

Graphic:
Global Warming Potential refrigerant (GWP) comparison.
R290 Natural refrigerant = 3
R32 = 675
R410A = 2088



Introducing M Series the latest generation of Aquarea air to water heat pumps with R290

Flexible installation, suitable for retrofit and new buildings.
Thanks to its new, modular concept, the outdoor unit can function independently with just an indoor remote control, for those seeking basic functionalities. Homeowners can opt for enhanced functionality by incorporating the more advanced control module or selecting between the range of indoor units.

Flexible installation, suitable for retrofit and new buildings

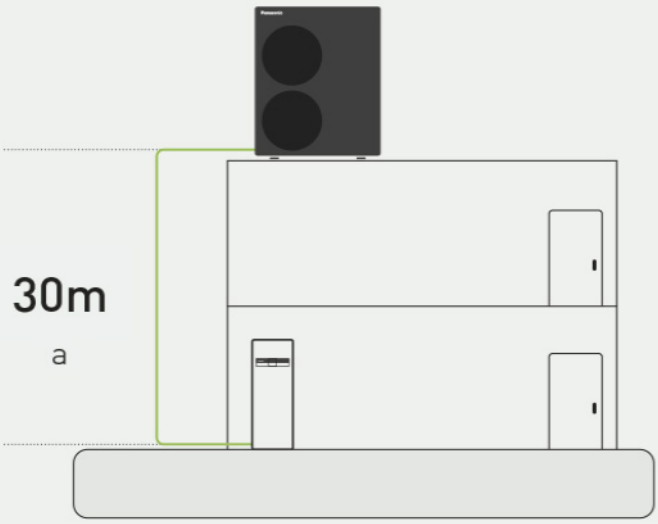
Flexible hydraulic installation

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

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

No F-gas certification required

a: Maximum height difference between outdoor unit and indoor unit.



High energy efficiency in heating and domestic hot water

The Aquarea M Series saves energy and significantly reduces operating cost by achieving the highest ErP energy rating. Aquarea M Series can reach a domestic hot water temperature of up to 65°C without the use of the electric heater, so the tank sterilization can be performed with the heat pump operation for further energy savings.

* Rating conditions: Heating: Inside air temperature: 20°C Dry Bulb / Outside air temperature: 7°C Dry Bulb / 6°C Wet Bulb. Conditions: Water input temperature: 30°C / Water output temperature: 35°C. Energy rating for WH-WXG12ME8.

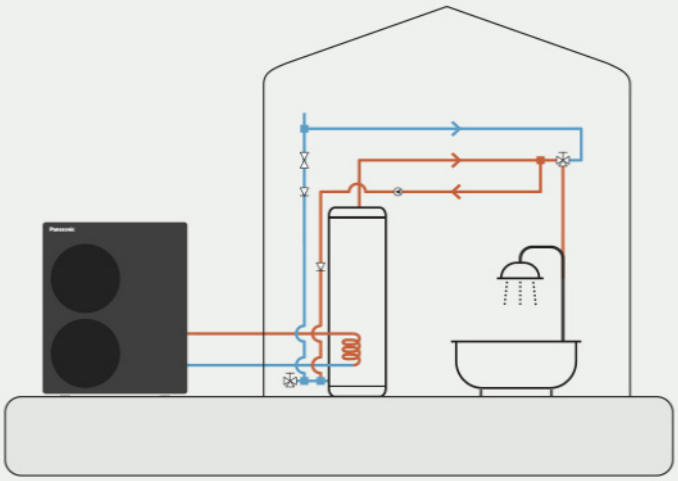
High energy rank for domestic hot water.
Energy efficiency class up to A+ in a scale from A+ to F.

High energy rank for low/medium temperature applications.
ErP 35°C / 55°C.
Energy efficiency class up to A+++/A++ in a scale from A+++ to D.

Maximising hot water comfort

· Up to 40% more tap water with a higher tank temperature setting to save space
· New domestic hot water circulation mode for instant availability of hot tap water
· During sterilisation, the domestic hot water circulation mode is activated to ensure sterilisation of the water pipes

The hot water in the pipes recirculates back to the tank at set intervals during the set time period, ensuring instant hot water for the end user.



Aquarea M Series gives you even more



Remote controller designed in harmony

Remote controller designed in harmony with the whole system, with optimised user interface and improved features.

Smart bivalency: Cost effective bivalent mode with power tariff logic.
Optimised user interface: Each touch point designed in harmony, with optimised user interface across the range.



Dual controller system

A dual controller system, for independent control of two zones, within the home.

a: Zone 1: 18°C - b: Zone 2: 20°C.



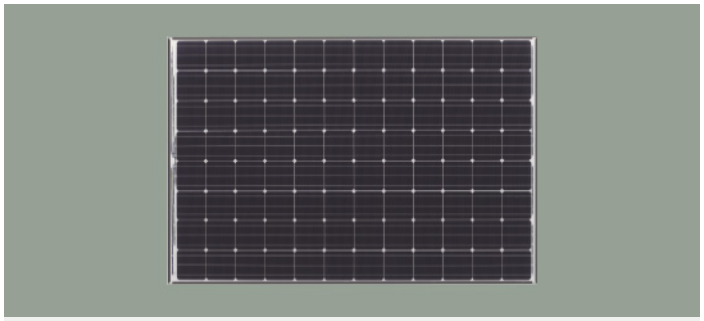
BMS integration

Aquarea heat pumps can be integrated into Modbus or KNX projects with an optional accessory, allowing comprehensive bi-directional monitoring and control of all operating parameters.



Ventilation unit on top for a low-energy house

Heat recovery ventilation units are ideal for homes, for these owners who are looking for high performance and maximum comfort.
Combine the Residential ventilation unit with Panasonic Aquarea for an space saving and highly efficient solution for heating, cooling, ventilation and DHW.



Aquarea + PV panels

Aquarea heat pumps can synchronise with PV panels, using the optional PCB CZ-NS5P or CZ-NS4P. Thanks to this feature, demand of heating, cooling and domestic hot water production is adapted to the PV panel production.

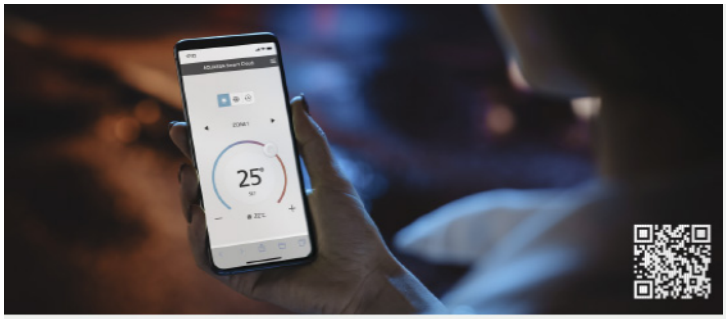


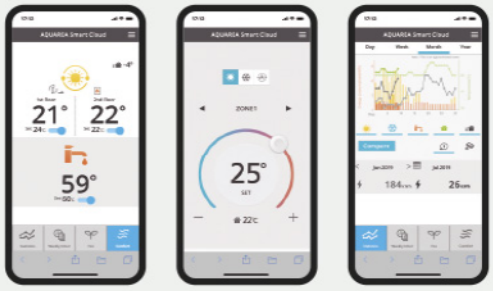
Smart Grid Ready

Aquarea heat pumps in combination with the optional PCB CZ-NS5P or CZ-NS4P hold the SG Ready function, allowing the heat pump to be connected in an intelligent grid control.

*J series or later

Home connectivity and energy management systems





Works with IFTTT

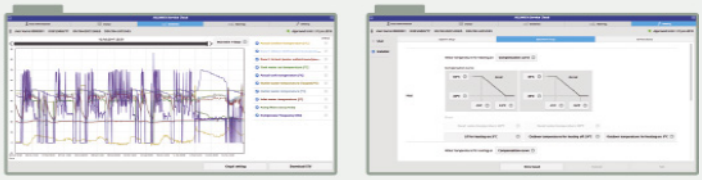
Panasonic Comfort Cloud App

The IoT solution for your heating and cooling systems to help maximize comfort while managing energy consumption.
The Panasonic Comfort Cloud App enables you to conveniently manage and monitor the Aquarea range of heating, cooling and hot water functions from just one mobile device. Also, energy monitoring is possible allowing opportunity to learn how to reduce the operating cost even more.

Internet adapter included for Wi-Fi and LAN connection

https://demo.aquarea-smart.panasonic.com

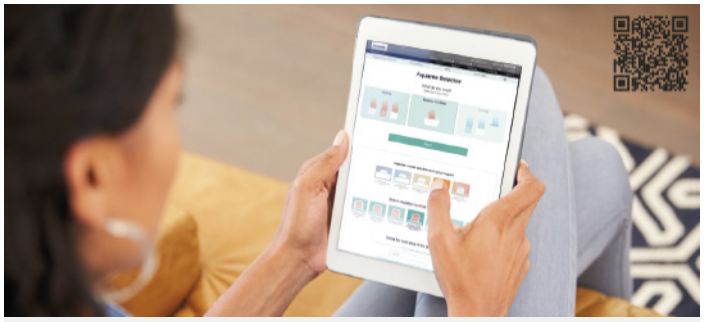




Aquarea Service Cloud

The real remote maintenance made simple.
Aquarea Service Cloud is an advanced service that allows your service provider to take care of your heating system remotely. It saves time and money and offers the quickest service and solutions for your heat pump.
Accurate monitoring and maintenance expands the system's lifespan and guarantees a higher Return On Investment for your heat pump.

Convenience and support



Aquarea Quick Selector

Helping you to find the Aquarea Heat Pump for your home in just a few clicks!

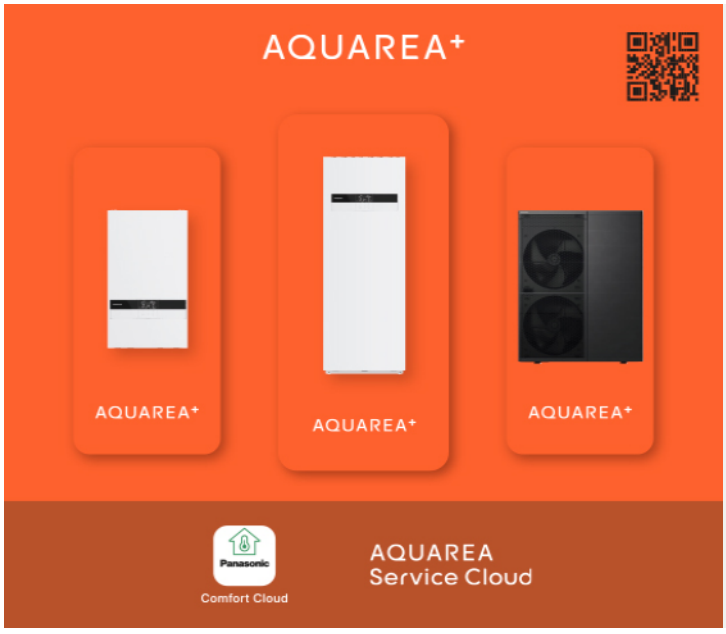
https://aircon.panasonic.eu/visit/selection-tool/



AR Heat Pump Viewer

This tool allows you to see how a Panasonic Aquarea Heat Pump looks in a home, utilising augmented reality.

https://www.aircon.panasonic.eu/visit/ar-aquarea/



Aquarea+ get the most out of your Aquarea Heat Pump

Learn how to use and program your new Aquarea.

In this site, you will find useful information that will allow you to operate your Panasonic Aquarea system to provide heating, cooling & hot water in the most efficient and cost effective way. Discover Panasonic Comfort Cloud App, the IoT solution for your heating and cooling systems to help maximize comfort while managing energy consumption.

https://aquarea.panasonic.eu/plus



Aquarea Service+. A window to tranquility

Why choose our Aquarea Service+?
1. Our service technicians are experts in Aquarea aerothermics.
2. We diagnose faults remotely and avoid unnecessary technical support visits.
3. IoT technology embedded in your Aquarea system.

How to choose your right service package?
Aquarea Service+ Premium: Labour & travel costs included · Free Panasonic Spare parts · Service support within 24h including weekends · Priority support hotline 24/7 · On site annual maintenance.
Aquarea Service+ Smart: Daily diagnosis check · Service support within 24h including weekends · Priority support hotline 24/7 · On site annual maintenance.
Aquarea Service+ Comfort: On site annual maintenance · Priority support hotline.

https://shop.aircon.panasonic.eu/

Product and accessories

Combination table

			Outdoor unit				
			Heating capacity				
			1φ		3φ		
Indoor unit: Hydraulic All in One Bi-bloc			12,0 kW	16,0 kW	9,0 kW	12,0 kW	16,0 kW
	Backup heater capacity		WH-WDG12ME5	WH-WDG16ME5	WH-WDG09ME8	WH-WDG12ME8	WH-WDG16ME8
1φ	3 kW	WH-SDC0916M3E5	✔	✔	—	—	—
1φ	6 kW	WH-SDC0916M6E5	✔	✔	—	—	—
3φ	9 kW	WH-SDC0316M9E8	✔	✔	✔	✔	✔

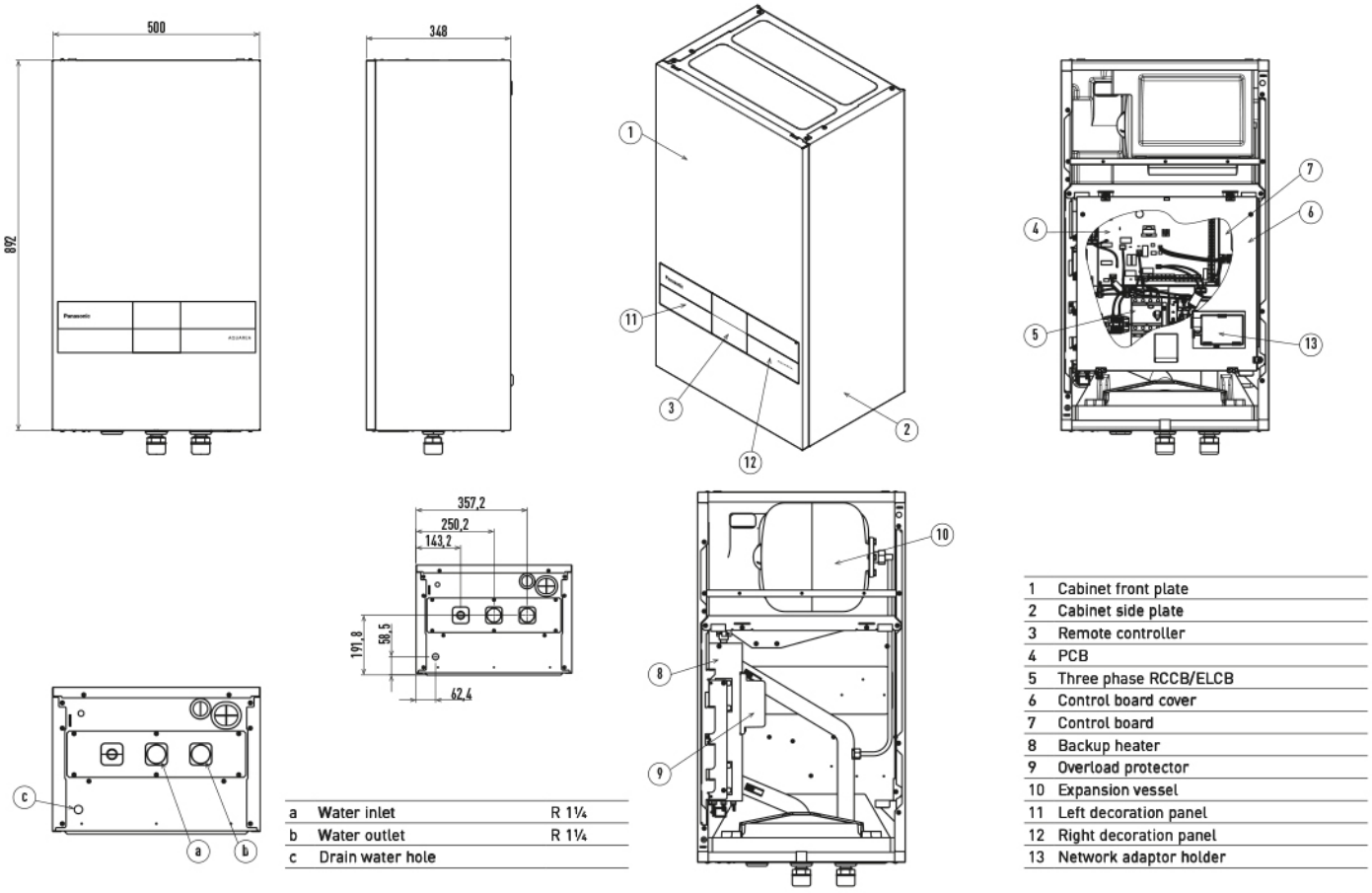
Aquarea High Performance Hydronic Bi bloc M Series · R290

Bi-bloc M Series 1 phase – 3 phase · R290		SINGLE PHASE		THREE PHASE		
		12.00 kW	16.00 kW	9.00 kW	12.00 kW	16.00 kW
Outdoor unit		WH-WDG12ME5	WH-WDG16ME5	WH-WDG09ME8	WH-WDG12ME8	WH-WDG16ME8
Heating capacity (A +7°C, W 35°C)	kW	12,00	16,00	9,00	12,00	16,00
COP (A +7°C, W 35°C)		4,88	4,65	5,10	4,88	4,65
Heating capacity (A +7°C, W 55°C)	kW	12,00	14,70	9,00	12,00	14,70
COP (A +7°C, W 55°C)		3,06	3,00	3,10	3,06	3,00
Heating capacity (A +2°C, W 35°C)	kW	12,00	13,00	9,00	12,00	13,00
COP (A +2°C, W 35°C)		3,46	3,30	3,81	3,46	3,30
Heating capacity (A +2°C, W 55°C)	kW	12,00	12,00	9,00	12,00	12,00
COP (A +2°C, W 55°C)		2,27	2,27	2,52	2,27	2,27
Heating capacity (A -7°C, W 35°C)	kW	10,50	11,70	9,00	10,50	11,70
COP (A -7°C, W 35°C)		3,00	2,63	3,16	3,00	2,63
Heating capacity (A -7°C, W 55°C)	kW	10,00	10,80	9,00	10,00	10,80
COP (A -7°C, W 55°C)		1,97	1,90	2,07	1,97	1,90
Cooling capacity (A 35°C, W 7°C)	kW	9,00	9,00	9,00	9,00	9,00
EER (A 35°C, W 7°C)		3,61	3,61	3,61	3,61	3,61
Cooling capacity (A 35°C, W 18°C)	kW	9,00	9,00	9,00	9,00	9,00
EER (A 35°C, W 18°C)		5,26	5,26	5,26	5,26	5,26
Heating average climate. Seasonal energy efficiency (W 35°C / W 55°C)	SCOP	4,65 / 3,50	4,58 / 3,58	4,84 / 3,57	4,65 / 3,58	4,58 / 3,58
Heating average climate. Seasonal energy efficiency (W 35°C / W 55°C)	ηs %	183 / 137	180 / 140	191 / 140	183 / 140	180 / 140
Heating average climate. Energy class (W 35°C / W 55°C) (1)	A+++ to D	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++	A+++ / A++
Heating warm climate. Seasonal energy efficiency (W 35°C / W 55°C)	SCOP	6,20 / 4,34	6,20 / 4,34	6,01 / 4,17	6,20 / 4,34	6,20 / 4,34
Heating warm climate. Seasonal energy efficiency (W 35°C / W 55°C)	ηs %	245 / 171	245 / 171	237 / 164	245 / 171	245 / 171
Heating warm climate. Energy class (W 35°C / W 55°C) (1)	A+++ to D	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++	A+++ / A+++
Heating cold climate. Seasonal energy efficiency (W 35°C / W 55°C)	SCOP	4,35 / 3,26	4,30 / 3,26	4,23 / 3,12	4,35 / 3,26	4,30 / 3,26
Heating cold climate. Seasonal energy efficiency (W 35°C / W 55°C)	ηs %	171 / 127	169 / 127	166 / 122	171 / 127	169 / 127
Heating cold climate. Energy class (W 35°C / W 55°C) (1)	A+++ to D	A++ / A++	A++ / A++	A++ / A+	A++ / A++	A++ / A++
Outdoor sound power (Heat) (2)	dB(A)	55	58	54	55	58
Outdoor dimension (Height)	mm	1.520	1.520	1.520	1.520	1.520
Outdoor dimension (Width)	mm	1.200	1.200	1.200	1.200	1.200
Outdoor dimension (Depth)	mm	370	370	370	370	370
Outdoor net weight	kg	147	147	151	151	151
A class pump (Number of speeds)		Variable speed	Variable speed	Variable speed	Variable speed	Variable speed
A class pump (Input power Min)	W	30	30	30	30	30
A class pump (Input power Max)	W	175	175	175	175	175
Heating water flow (ΔT=5 K. 35°C)	L/min	34,4	45,9	25,8	34,4	45,9
Refrigerant (R290) / CO2 Eq. (3)	kg / T	1,58 / 0,00003	1,58 / 0,00003	1,58 / 0,00003	1,58 / 0,00003	1,58 / 0,00003
Operation range - Outdoor ambient (Heat)	°C	-25 ~ +35	-25 ~ +35	-25 ~ +35	-25 ~ +35	-25 ~ +35
Operation range - Outdoor ambient (Cool)	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet (Cool)	°C	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20
Indoor unit 3kW electric heater		WH-SDC0916M3E5	WH-SDC0916M3E5	—	—	—
Indoor unit 6kW electric heater		WH-SDC0916M6E5	WH-SDC0916M6E5	—	—	—
Indoor unit 9kW electric heater		—	—	WH-SDC0316M9E8	WH-SDC0316M9E8	WH-SDC0316M9E8
Indoor dimension (Height)	mm	892	892	892	892	892
Indoor dimension (Width)	mm	500	500	500	500	500
Indoor dimension (Depth)	mm	348	348	348	348	348
Indoor net weight	kg	28	28	29	29	29
Water pipe connector (room)	Inch	1¼	1¼	1¼	1¼	1¼
Water pipe connector (indoor units)	Inch	1¼	1¼	1¼	1¼	1¼
Water pipe connector (outdoor units)	Inch	1¼	1¼	1¼	1¼	1¼
Pipe length range standard	m	5	5	5	5	5
Pipe length range maximum	m	30	30	30	30	30
Elevation difference (in/out)	m	30	30	30	30	30

(1) Scale from A+++ to D.
(2) Sound power level in accordance with EN 12102 under conditions of the EN 14825 (part load).
(3) WH-WDG models are hermetically sealed.
(4) Water outlet up to 75°C above -15°C outdoor. Between outdoor ambient -15°C and -25°C, the water outlet temperature gradually decreases from 75°C to 55°C.
(5) Check local regulations.
*EER and COP calculation is based in accordance with EN 14511.
**This product is designed to comply with the European drinking water standard (EU) 2020/2184. The lifespan of the product is not guaranteed in the case of the use of groundwater, such as spring water or well water, the use of tap water when salt or other impurities are contained, nor in areas of acidic water quality. Maintenance and warranty costs related to these cases are the customer's responsibility.

Dimensions

Aquarea Hydraulic Bi-bloc M Series.

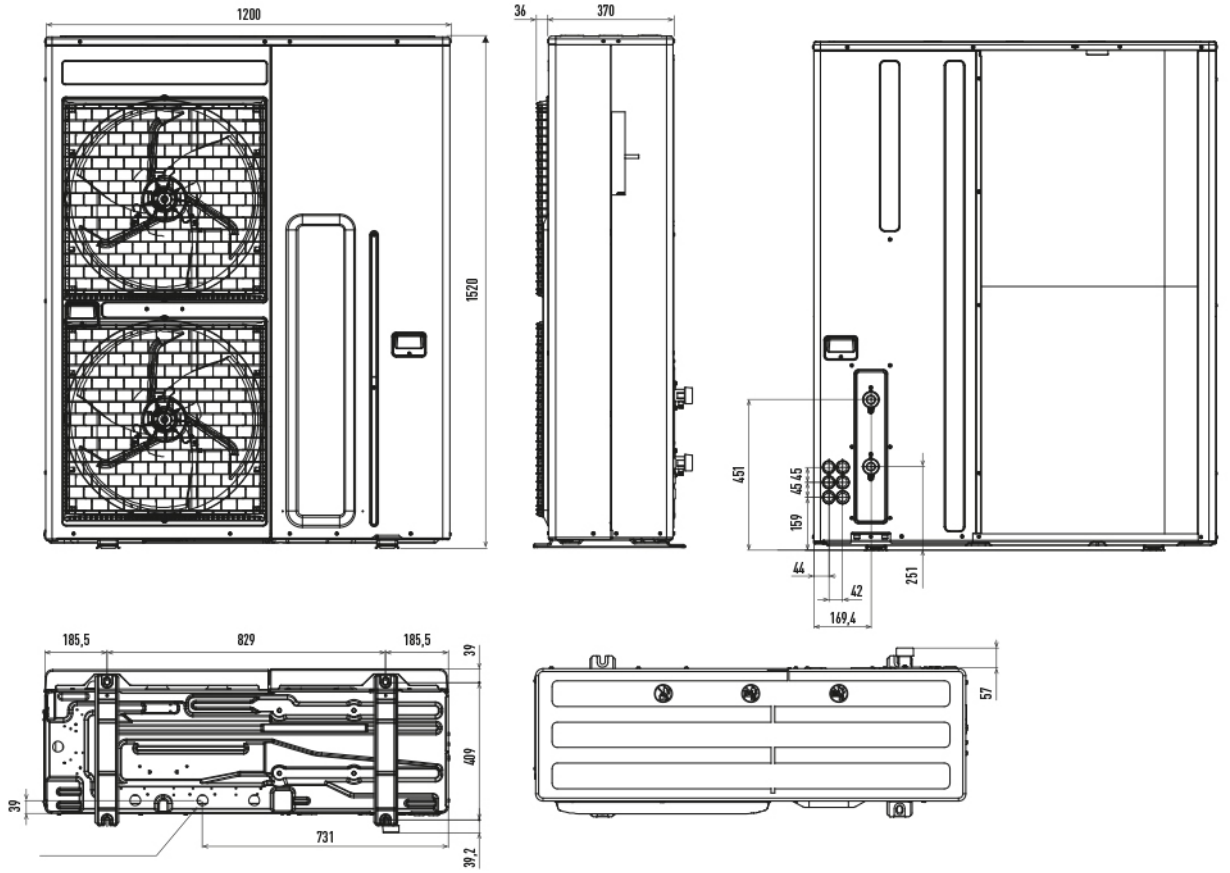


a	Water inlet	R 1¼
b	Water outlet	R 1¼
c	Drain water hole	

1	Cabinet front plate
2	Cabinet side plate
3	Remote controller
4	PCB
5	Three phase RCCB/ELCB
6	Control board cover
7	Control board
8	Backup heater
9	Overload protector
10	Expansion vessel
11	Left decoration panel
12	Right decoration panel
13	Network adaptor holder

Unit: mm

Aquarea High Performance Hydraulic outdoor units from 9 to 16 kW M Series.



Unit: mm