AQUAREA G GENERATION HIGH PERFORMANCE MONO-BLOC SINGLE PHASE.
HEATING AND COOLING - MDC

The Aquarea MDC range adapts well in an existing installation with a boiler backup, and in a new application 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 minimise the impact on the ecosystem. Finally, it is possible to connect a thermostat for even better heating and cooling control and management.
Whatever the weather, Aquarea can work even at -20°C. The Mono-bloc is easy to install in new and existing residential properties.

Technical focus

- Efficient control of room temperature based on the outdoor temperature, indoor temperature using the Aquarea Manager.
- Optional Smartphone control
- Range from 5 to 16kW, Single Phase
- Maximum hydraulic module output temperature: 55°C
- Works at temperatures as low as -20°C
- Cooling temperature range 5 ~ 20°C
- Plug and play system (WH-MDC05F3E5)

Outdoor Unit			WH-MDC05F3E5	WH-MDC06G3E5	WH-MDC09G3E5	WH-MDC12G6E5	WH-MDC16G6E5
Heating capacity at +7°C (heating water at 35°C)		kW	5.00	6.00	9.00	12.00	16.00
COP at +7°C (heating water at 35°C)		W/W	5.08	4.46	4.15	4.74	4.28
Heating capacity at +2°C (heating water at 35°C)		kW	4.80	5.00	7.45	11.40	13.00
COP at +2°C (heating water at 35°C)		W/W	3.75	3.45	3.14	3.44	3.28
Heating capacity at -7°C (heating water at 35°C)		kW	4.50	5.15	7.70	10.00	11.40
COP at -7°C (heating water at 35°C)		W/W	2.98	2.68	2.12	2.73	2.68
Cooling capacity at 35°C (cooling water at 7°C)		kW	4.50	5.50	7.00	10.00	12.20
EER at 35°C (cooling water at 7°C)		W/W	3.33	2.74	2.44	2.81	2.56
Energy Efficiency Class at 35°C			A++	A++	A++	A++	A++
Energy Efficiency Class at 55°C			A++	A++	A++	A++	A++
Sound pressure	Heating / Cooling	dB(A)	49 / 47	49 / 47	51 / 49	52 / 50	55 / 54
Sound power level	Heating / Cooling	dB	65 / 65	65 / 65	69 / 67	69 / 68	72 / 72
Dimensions	H x W x D	mm	865 x 1283 x 320	865 x 1283 x 320	865 x 1283 x 320	1410 x 1283 x 320	1410 x 1283 x 320
Weight		kg	107	112	112	147	147
Refrigerant (R410A)[1]		kg / TCO2 Eq.	1.42 / 2.965	1.45 / 3.028	1.45 / 3.028	2.10 / 4.385	2.10 / 4.385
Water pipe connector			R 1 ¼	R 1 ¼	R 1 ¼	R 1 ¼	R 1 ¼
Pump	Number of speeds		7	7	7	7	7
	Input power (Min / Max)	W	34 / 96	36 / 100	39 / 108	34 / 110	38 / 120
Heating water flow (ΔT=5 K. 35°C)		l/min	14.3	17.2	25.8	34.4	45.9
Capacity of integrated electric heater		kW	3	3	3	6	6
Input Power	Heating	kW	0.985	1.34	2.17	2.53	3.74
	Cooling	kW	1.35	2.01	2.87	3.56	4.76
Running and Starting current	Heating	A	4.5	6.1	9.9	11.7	17.3
	Cooling	A	6.1	9.3	13.0	16.5	22.0
Current 1		A	19.5	20.5	22.9	24.0	26.0
Current 2		A	13.0	13.0	13.0	26.0	26.0
Recommended Fuse		A	30 / 15		30 / 16	30 / 30	30 / 30
Recommended cable size, supply 1 & 2		mm²	3 x 4.0 or 6.0 / 3 x 4.0	3 x 4.0 or 6.0 / 3 x 4.0	3 x 4.0 or 6.0 / 3 x 4.0	3 x 4.0 or 6.0 / 3 x 4.0	3 x 4.0 or 6.0 / 3 x 4.0
Operation range	Outdoor ambient	°C	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35	-20 ~ +35
Water outlet	Heating	°C	20 ~ 55	20 ~ 55	20 ~ 55	25 ~ 55	25 ~ 55
	Cooling	°C	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20	5 ~ 20

Accessories	
PAW-TE18E3STD-UK	180L Standard Heat Pump Tank
PAW-TE30E3STD-UK	300L Standard Heat Pump Tank
PAW-TE18C2E3STD-UK	180L Standard Twin coil Heat Pump Tank
PAW-TE30C2E3STD-UK	300L Standard Twin coil Heat Pump Tank
CZ-TK1	Temperature sensor for 3rd party tank
PAW-3WYVLV-SI	3 way valve

Accessories	
PAW-BTANK50L	Buffer tank 50L
PA-AW-WIFI-1TE	Wifi interface
PAW-A2W-BIV	Bivalent control
PAW-FILTER	Filter
PAW-A2W-RTWIRED	Room thermostat

COP classification is at 230V only in accordance with EU directive 2003/32/EC. Sound pressure measured at 1m from the outdoor unit and at 1.5m height. Heating sound pressure measured at +7°C (heating water at 55°C). Performance in agreement with EN14511. Authorized service partner or Authorized installer can enable the cooling mode through a special operation via the remote controller on site. 1) WH-MDC models are hermetically sealed.

A++ ErP 55°C | A++ ErP 35°C | INVERTER+ | A CLASS WATER PUMP 7 SPEEDS | 5.08 COP HIGH PERFORMANCE | DHW | -20°C HEATING MODE | BOILER CONNECTION | SOLAR KIT | INTERNET CONTROL | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY | 7 YEAR WARRANTY | APPROVED PRODUCT MCS

INTERNET CONTROL: Optional. 5 YEARS COMPRESSOR WARRANTY and EXTENDED 7 YEARS COST OPTION: Exclusively for PRO Partners. MCS APPROVED PRODUCT: For full MCS approved product list please go to www.microgenerationcertification.org/consumers or www.aircon.panasonic.co.uk/GB_en/downloads/others.