

Aquarea High Performance Mono-bloc J Generation Single phase. Heating and Cooling - MDC · R32

011-1W0398
011-1W0399
011-1W0400



Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Built-in magnetic water filter / Built-in 6L expansion vessel.

Comfort: Operating range and heating curve down to -20 °C / 60 °C water outlet temperature / Cooling mode down to +10 °C.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.



Outdoor unit		Single phase			
		WH-MDC05J3E5	WH-MDC07J3E5	WH-MDC09J3E5	
Heating capacity / COP (A +7 °C, W 35 °C)	kW / COP	5,00/5,08	7,00/4,76	9,00/4,48	
Heating capacity / COP (A +7 °C, W 55 °C)	kW / COP	5,00/3,01	7,00/2,82	8,95/2,78	
Heating capacity / COP (A +2 °C, W 35 °C)	kW / COP	5,00/3,57	7,00/3,40	7,45/3,13	
Heating capacity / COP (A +2 °C, W 55 °C)	kW / COP	5,00/2,27	6,30/2,16	7,00/2,12	
Heating capacity / COP (A -7 °C, W 35 °C)	kW / COP	5,00/2,78	6,80/2,81	7,50/2,63	
Heating capacity / COP (A -7 °C, W 55 °C)	kW / COP	5,00/1,85	6,30/1,86	7,00/1,80	
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	5,00/3,31	7,00/3,06	9,00/2,71	
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	5,00/5,05	7,00/4,73	9,00/4,25	
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η _s %)	5,12/3,63(202/142)	4,90/3,32(193/130)	4,90/3,32(193/130)
	Energy class	A+++ to D	A+++/A++	A+++/A++	A+++/A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η _s %)	6,00/4,20(237/165)	5,75/4,07(227/160)	5,75/4,07(227/160)
	Energy class	A+++ to D	A+++/A+++	A+++/A+++	A+++/A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η _s %)	4,08/2,95(160/115)	4,18/2,98(164/116)	4,18/2,98(164/116)
	Energy class	A+++ to D	A++/A+	A++/A+	A++/A+
Sound power ¹⁾	Heat	dB(A)	59	59	59
Dimension	HxWxD	mm	865 x 1283 x 320	865 x 1283 x 320	865 x 1283 x 320
Net weight		kg	99	104	104
Refrigerant (R32) / CO ₂ Eq. ²⁾		kg / T	1,3/0,878	1,3/0,878	1,3/0,878
Water pipe connector		Inch	R 1½	R 1½	R 1½
Pump	Number of speeds		Variable Speed	Variable Speed	Variable Speed
	Input power (Min/Max)	W	34/96	36/100	39/108
Heating water flow [ΔT=5 K, 35 °C]		L/min	14,3	20,1	25,8
Electric backup heater		kW	3,00	3,00	3,00
Input power	Heat	kW	0,985	1,47	2,01
	Cool	kW	1,51	2,29	3,32
Running and starting current	Heat	A	4,7	7,0	9,3
	Cool	A	7,0	10,5	14,7
Current 1		A	12	17	17
Current 2		A	13	13	13
Recommended fuse		A	30/15	30/15	30/16
Recommended minimum cable size, supply 1 / 2 ³⁾		mm ²	3x1,5/3x1,5	3x2,5/3x1,5	3x2,5/3x1,5
Operating range - outdoor ambient	Heat	°C	-20 ~ -35	-20 ~ -35	-20 ~ -35
	Cool	°C	+10 ~ +43	+10 ~ +43	+10 ~ +43
Water outlet	Heat	°C	20 ~ 60	20 ~ 60	20 ~ 60
	Cool	°C	5 ~ 20	5 ~ 20	5 ~ 20

1) Sound power in accordance to 811/2013, 813/2013 and EN12102-1:2017 at +7 °C. 2) WH-MDC models are hermetically sealed. 3) Check local regulations. * EER and COP calculation is based in accordance to EN14511.

Accessories	
PAW-TD20C1E5-1	Tank 200 L - Stainless steel
PAW-TD30C1E5-1	Tank 300 L - Stainless steel
PAW-TA20C1E5STD	Tank 200 L - Enamelled
PAW-TA30C1E5STD	Tank 300 L - Enamelled
PAW-TD20B8E3-2	Combo Tank 185 L + 80 L - Enamelled
PAW-TD23B6E5	Combo Tank 230 L + 60 L - Stainless Steel
PAW-3WYVLV-HW	3 way valve for DHW tanks
PAW-BTANK50L-2	Buffer tank 50 L

Accessories	
CZ-TAW1B	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1B
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional.

Aquarea High Performance Mono-bloc H Generation Single phase. Heating and Cooling - MDC - R410A

Energy efficiency: A+++ in heating at 35 °C / "A" water pump with variable speed / Built-in flow meter.

Flexibility: Optional magnet for the water filter.

Comfort: Operating range and heating curve down to -20 °C / 55 °C water outlet temperature.

Control: Additional functions with optional PCB (2 zone control, bivalent control, Smart Grid contact and more).

Connectivity: Optional Aquarea Smart and Service Cloud and integration into BMS projects.

011-1W0509



Outdoor unit		Single phase		
		WH-MDC12H6E5	WH-MDC16H6E5	
Heating capacity / COP (A +7 °C, W 35 °C)	kW / COP	12,00/4,74	16,00/4,28	
Heating capacity / COP (A +7 °C, W 55 °C)	kW / COP	12,00/2,93	14,50/2,72	
Heating capacity / COP (A +2 °C, W 35 °C)	kW / COP	11,40/3,44	13,00/3,28	
Heating capacity / COP (A +2 °C, W 55 °C)	kW / COP	9,10/2,23	9,80/2,21	
Heating capacity / COP (A -7 °C, W 35 °C)	kW / COP	10,00/2,73	11,40/2,57	
Heating capacity / COP (A -7 °C, W 55 °C)	kW / COP	8,20/1,95	9,00/1,84	
Cooling capacity / EER (A 35 °C, W 7 °C)	kW / EER	10,00/2,81	12,20/2,56	
Cooling capacity / EER (A 35 °C, W 18 °C)	kW / EER	9,39/4,65	11,40/4,10	
Heating average climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η _s , %)	4,82/3,42(190/134)	4,82/3,33(190/130)
	Energy class	A+++ to D	A+++ / A++	A+++ / A++
Heating warm climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η _s , %)	6,20/4,05(245/159)	6,20/4,30(245/169)
	Energy class	A+++ to D	A+++ / A+++	A+++ / A+++
Heating cold climate (W 35 °C / W 55 °C)	Seasonal energy efficiency	SCOP (η _s , %)	4,28/3,10(168/121)	4,28/3,10(168/121)
	Energy class	A+++ to D	A++ / A+	A++ / A+
Sound power ¹⁾	Heat	dB(A)	65	65
Dimension	H x W x D	mm	1410 x 1283 x 320	1410 x 1283 x 320
Net weight		kg	140	140
Refrigerant (R410A) / CO ₂ Eq. ²⁾		kg / T	2,10/4,385	2,10/4,385
Water pipe connector		Inch	R 1½	R 1½
Pump	Number of speeds		Variable Speed	Variable Speed
	Input power (Min/Max)	W	34/110	38/120
Heating water flow (ΔT=5 K, 35 °C)		L/min	34,4	45,9
Electric backup heater		kW	6,00	6,00
Input power	Heat	kW	2,53	3,74
	Cool	kW	3,56	4,76
Running and starting current	Heat	A	11,7	16,9
	Cool	A	16,2	21,5
Current 1		A	24,0	26,0
Current 2		A	26,0	26,0
Recommended fuse		A	30/30	30/30
Recommended minimum cable size, supply 1 / 2 ³⁾		mm ²	3 x 4,0 or 6,0 / 3 x 4,0	3 x 4,0 or 6,0 / 3 x 4,0
Operating range - outdoor ambient	Heat	°C	-20 ~ +35	-20 ~ +35
	Cool	°C	+16 ~ +43	+16 ~ +43
Water outlet	Heat	°C	25 - 55	25 - 55
	Cool	°C	5 - 20	5 - 20

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PAW-TD23B6E5	Combo Tank 230 L + 60 L - Stainless Steel
PAW-3WYVLV-HW	3 way valve for DHW tanks
PAW-BTANK50L-2	Buffer tank 50 L

Accessories	
CZ-TAW1B	Aquarea Smart Cloud for remote control and maintenance through wireless or wired LAN
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1B
PAW-A2W-MGTFILTER	Magnet for the water filter
PAW-A2W-AFVLV	1 anti-freeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat



INTERNET CONTROL: Optional.