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.

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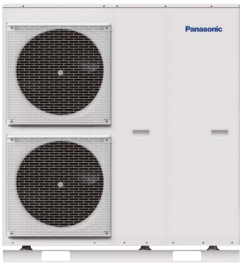



A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D

			Single phase	
Outdoor unit			**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 1¼	R 1¼
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

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-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.