Aquarea High Performance Mono-bloc J Series. Single phase - MDC · R32

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 6 L 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.

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

A++ ErP 55 °C Scale from A+++ to D

A+++ ErP 35 °C Scale from A+++ to D



			Single phase		
Outdoor unit			**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	H x W x D	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 1¼	R 1¼	R 1¼
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 [3]		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 EN 12102-1:2017 at +7 °C. 2) WH-MDC models are hermetically sealed. 3) Check local regulations. * EER and COP calculation is based in accordance to EN 14511.

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-TAW1C	Optional Wi-Fi or WLAN adapter for smart control via Panasonic Comfort Cloud and/or remote maintenance via Aquarea Service Cloud
CZ-TAW1-CBL	10 m extension cable for CZ-TAW1C
PAW-A2W-AFVLV-1	1 antifreeze valve. It is required to order 2 valves per system
PAW-A2W-RTWIRED	Room thermostat
PAW-A2W-RTWIRELESS	Wireless LCD room thermostat

R32 REFRIGERANT | A++ ErP 55°C | A+++ ErP 35°C | INVERTER+ | A CLASS WATER PUMP AUTO SPEED | 5,08 COP HIGH PERFORMANCE | DHW | -20 °C HEATING MODE | WATER FILTER WITH MAGNET | FLOW SENSOR | BOILER CONNECTION | SOLAR KIT | ADVANCED CONTROL | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

INTERNET CONTROL: Optional.

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WH-MDC05J3E5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	4,37	1,73	2,53	4,16	2,03	2,05	3,84	2,37	1,62	3,43	2,64	1,30	—	—	—
-15	5,13	1,78	2,88	5,00	2,17	2,30	4,75	2,51	1,89	3,70	2,45	1,51	—	—	—
-7	5,17	1,49	3,47	5,00	1,80	2,78	4,80	2,16	2,22	5,00	2,70	1,85	4,68	2,71	1,73
2	5,00	1,11	4,50	5,00	1,40	3,57	5,00	1,81	2,76	5,00	2,20	2,27	4,80	2,40	2,00
7	5,09	0,78	6,53	5,00	0,99	5,05	5,00	1,31	3,82	5,00	1,66	3,01	4,58	1,90	2,41
25	4,96	0,77	6,44	5,04	0,90	5,60	5,31	1,16	4,58	5,61	1,34	4,19	5,15	1,33	3,87
WH-MDC07J3E5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	4,86	2,03	2,39	4,66	2,35	1,98	4,44	2,75	1,61	4,23	3,13	1,35	—	—	—
-15	5,80	2,11	2,75	5,60	2,40	2,33	5,30	2,84	1,87	5,00	3,32	1,51	—	—	—
-7	6,76	2,07	3,27	6,80	2,42	2,81	6,30	2,82	2,23	6,30	3,39	1,86	4,74	2,76	1,72
2	6,83	1,66	4,11	7,00	2,06	3,40	6,85	2,50	2,74	6,30	2,92	2,16	4,80	2,40	2,00
7	7,32	1,19	6,15	7,00	1,47	4,76	7,00	1,96	3,57	7,00	2,48	2,82	6,18	2,44	2,53
25	6,80	0,64	10,63	6,67	0,93	7,17	6,79	1,38	4,92	6,70	1,80	3,72	6,22	1,78	3,49
WH-MDC09J3E5															
Tamb	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**	**HC**	**IP**	**COP**
LWC	**25**	**25**	**25**	**35**	**35**	**35**	**45**	**45**	**45**	**55**	**55**	**55**	**60**	**60**	**60**
-20	5,33	2,36	2,26	6,43	3,60	1,79	5,78	3,83	1,51	4,83	3,64	1,33	—	—	—
-15	7,76	3,20	2,43	7,60	3,41	2,23	7,00	3,71	1,89	5,60	3,80	1,47	—	—	—
-7	7,39	2,45	3,02	7,50	2,85	2,63	7,30	3,37	2,17	7,00	3,89	1,80	6,44	3,67	1,75
2	7,38	1,89	3,90	7,45	2,38	3,13	7,00	2,85	2,46	7,00	3,30	2,12	5,46	2,72	2,01
7	9,15	1,59	5,75	9,00	2,01	4,48	9,00	2,61	3,45	8,95	3,22	2,78	7,25	2,87	2,53
25	8,02	0,98	8,18	7,88	1,32	5,97	8,46	1,86	4,55	7,60	2,03	3,74	6,30	1,87	3,37

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WH-MDC05J3E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	5,18	0,82	6,32	6,17	0,84	7,35	5,78	0,60	9,63
25	5,38	1,22	4,41	6,64	1,25	5,31	5,55	0,78	7,12
35	5,00	1,54	3,25	5,86	1,61	3,64	5,00	0,99	5,05
43	4,19	1,85	2,26	5,36	1,92	2,79	4,37	1,30	3,36
WH-MDC07J3E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	5,38	0,83	6,48	6,69	0,85	7,87	7,65	0,76	10,07
25	6,96	1,82	3,82	9,06	1,98	4,58	7,58	1,23	6,16
35	7,00	2,29	3,06	8,37	2,47	3,39	7,00	1,48	4,73
43	5,60	2,55	2,20	6,87	2,58	2,66	6,10	1,88	3,24
WH-MDC09J3E5									
Tamb	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**	**CC**	**IP**	**EER**
LWC	**7**	**7**	**7**	**14**	**14**	**14**	**18**	**18**	**18**
16	6,89	1,21	5,69	8,65	1,23	7,03	9,82	1,19	8,25
25	9,50	2,84	3,35	11,55	3,06	3,77	9,68	1,82	5,32
35	9,00	3,32	2,71	10,10	3,51	2,88	9,00	2,12	4,25
43	5,42	2,56	2,12	6,56	2,56	2,56	7,40	2,56	2,89

Tamb: Ambient Temperature (°C). LWC: Leaving Water Condenser Temperature (°C). HC: Heating Capacity (kW). CC: Cooling Capacity (kW). IP: Input Power (kW).
This data is measured by Panasonic in accordance with EN 14511-2 standard. This data is for reference purpose only, and does not guarantee the performance.