



Heat pump monoblock air/water

Rakentaa MONO EVI FDC

RA-M-13-001

13kW



MODEL		RA-M-13-001 13kW
FUNCTIONS		HEATING / COOLING + DHW
Heating A7/W35	Heating Capacity Range (kW)	4.40~13.00
	Heating input Range (kW)	0.90~3.02
	Current Range (A)	1.39~4.68
	COP Range	4.30~4.90
Heating A2/W35	Heating Capacity Range (kW)	11.44
	Heating input Range (kW)	2.87
	Current Range (A)	5.14
	COP Range	3.98
Heating A-7/W35	Heating Capacity Range (kW)	9.49
	Heating input Range (kW)	2.92
	Current Range (A)	5.22
	COP Range	3.25
Cooling A35/W7	Cooling capacity Range (kW)	2.80~8.20
	Cooling input power (kW)	0.85~3.31
	Current Range (A)	1.32~5.13
	EER Range	2.48~3.29
Cooling A35/W18	Cooling capacity Range (kW)	8.6
	Cooling input power (kW)	2.63
	Current Range (A)	4.69
	EER Range	3.28
Refrigerant		R32
Qty of Refrieerant		1600g
Power supply		380V/3Ph/50-60Hz
Working area		-30 ~ +43°C

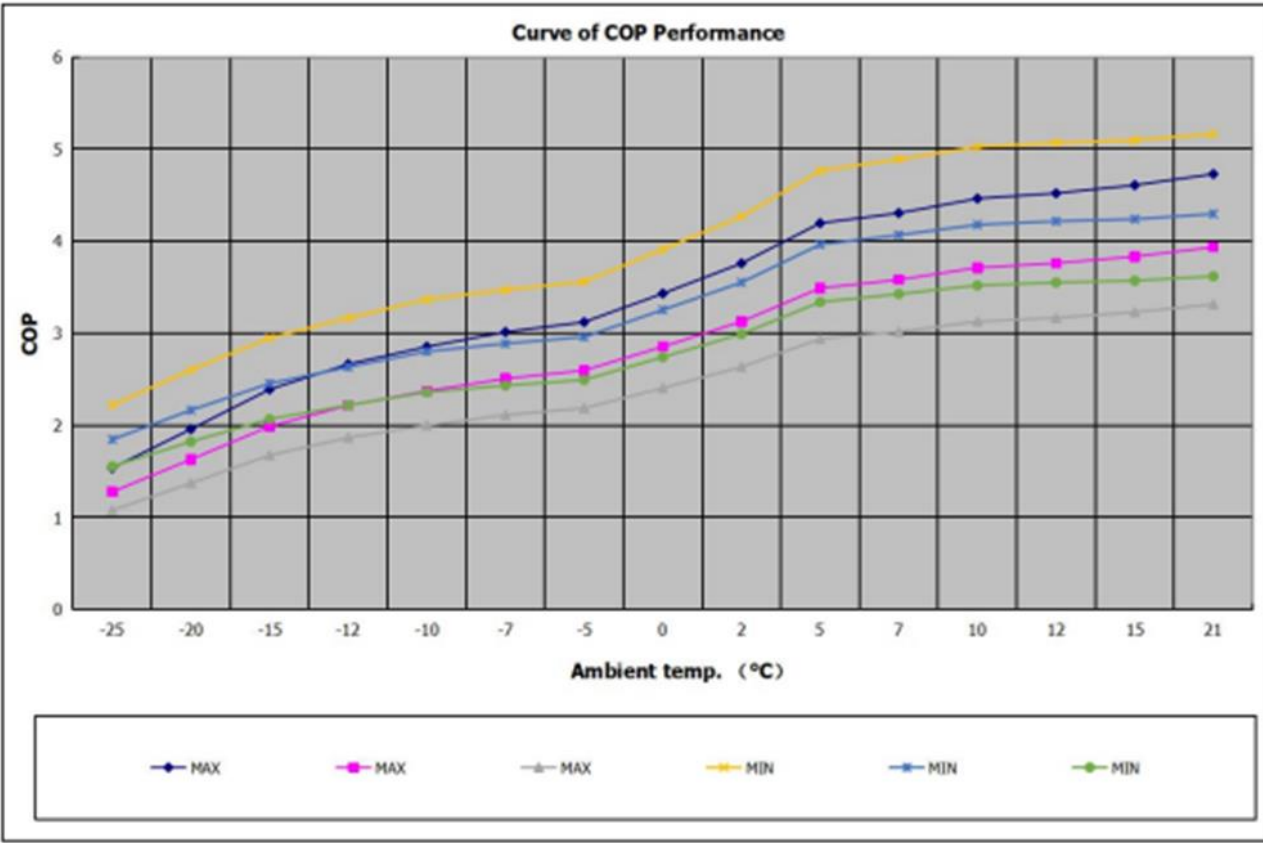
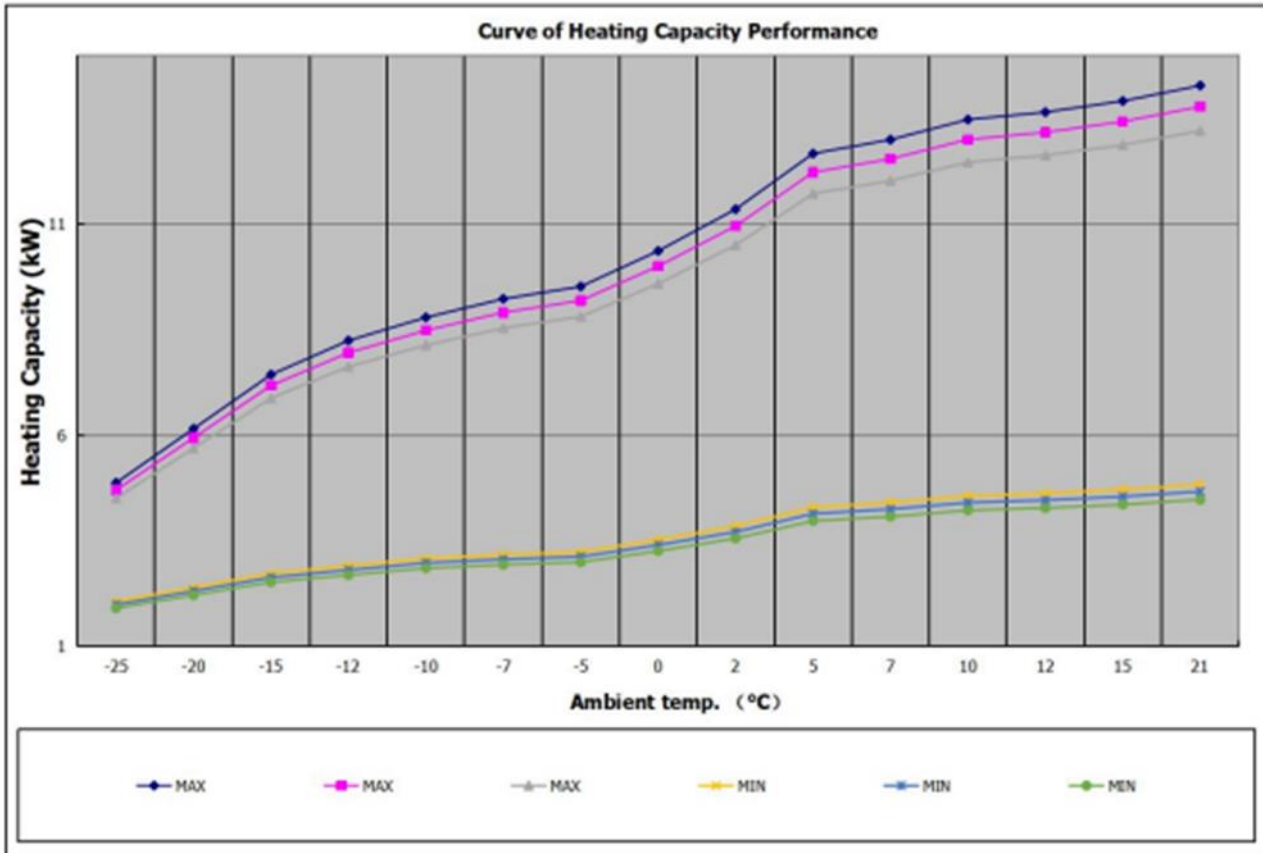


Working area	2.2
Water circulation (m ³ /H)	25
Water pressure drop (kPa)	IPX4
IP Grade (Level of protection)	I
Anti-electric shock Rate	≤55
Noise (dB(A)) Sound Pressure 1m distance	130/120
Net weight/Gross weight (kg)	DN25
Diameter of pipe (mm)	1100×475×985
Size (W*D*H) mm	1140x515x1110
ErP Level (35°C)	A+++
ErP Level (55°C)	A++
Compressor Brand	Panasonic Twin-Rotary (EVI)
Qty of Compressor	1
Condensor	High-Efficiency Tube-In Shell
Built-in Circulation pump	Optional
Shape of Evaporator	L-Shape
Built-in Water Flow Switch	Yes
Four-way valve	Sanhua
Expansion valve	Sanhua
Operating water temperature (°C) DHW	9~55°C
Operating water temperature (°C) Heating	9~55°C
Operating water temperature (°C) Cooling	7~35°C



RA-M-13-001 13kW IN HEATING MODE

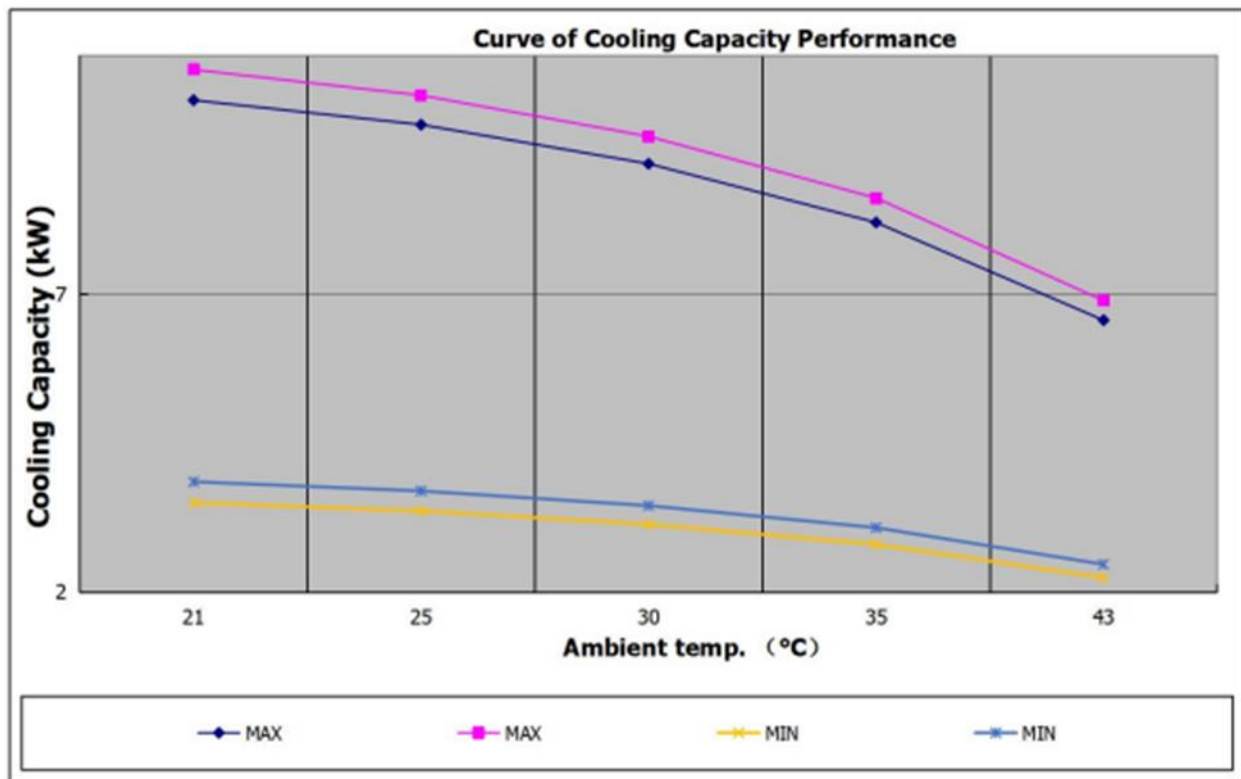
Water temp. outlet 35°C	MAX	Heating Capacity (kW)	4.9	6.2	7.4	8.2	8.8	9.2	9.5	10.4	11.4	12.7	13.0	13.5	13.7	13.9	14.3	
		Input power (kW)	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
		COP	1.54	1.96	2.39	2.66	2.85	3.01	3.12	3.43	3.76	4.2	4.3	4.46	4.52	4.61	4.73	
	MIN	Heating Capacity (kW)	2.1	2.4	2.7	2.9	3.1	3.2	3.2	3.5	3.8	4.3	4.4	4.6	4.6	4.7	4.8	
		Input power (kW)	0.93	0.92	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.91	0.91	0.92	0.94	
		COP	2.22	2.6	2.95	3.16	3.37	3.47	3.56	3.91	4.27	4.76	4.89	5.02	5.07	5.1	5.16	
Water temp. outlet 45°C	MAX	Heating Capacity (kW)	4.7	5.9	7.2	8.0	8.5	8.9	9.2	10.0	11.0	12.2	12.5	13.0	13.2	13.4	13.8	
		Input power (kW)	3.7	3.6	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
		COP	1.28	1.63	1.99	2.22	2.37	2.51	2.60	2.85	3.13	3.49	3.58	3.71	3.76	3.83	3.93	
	MIN	Heating Capacity (kW)	2.0	2.3	2.6	2.8	3.0	3.1	3.1	3.4	3.7	4.1	4.2	4.4	4.5	4.5	4.7	
		Input power (kW)	1.08	1.06	1.07	1.06	1.06	1.06	1.05	1.04	1.04	1.04	1.04	1.04	1.06	1.07	1.09	
		COP	1.85	2.16	2.45	2.63	2.8	2.89	2.96	3.25	3.55	3.96	4.07	4.18	4.22	4.24	4.3	
Water temp. outlet 55°C	MAX	Heating Capacity (kW)	4.5	5.7	6.9	7.6	8.1	8.5	8.8	9.6	10.5	11.7	12.0	12.5	12.6	12.9	13.2	
		Input power (kW)	4.2	4.1	4.1	4.1	4.1	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
		COP	1.08	1.37	1.67	1.87	2.0	2.11	2.19	2.4	2.63	2.94	3.02	3.13	3.17	3.23	3.31	
	MIN	Heating Capacity (kW)	1.9	2.2	2.5	2.7	2.8	2.9	3.0	3.3	3.6	4.0	4.1	4.2	4.3	4.4	4.5	
		Input power (kW)	1.22	1.21	1.22	1.21	1.21	1.20	1.20	1.19	1.19	1.19	1.19	1.20	1.20	1.22	1.24	
		COP	1.56	1.82	2.07	2.22	2.36	2.43	2.49	2.74	2.99	3.34	3.43	3.52	3.55	3.57	3.62	
Ambient temp. (°C)			-25	-20	-15	-12	-10	-7	-5	0	2	5	7	10	12	15	21	

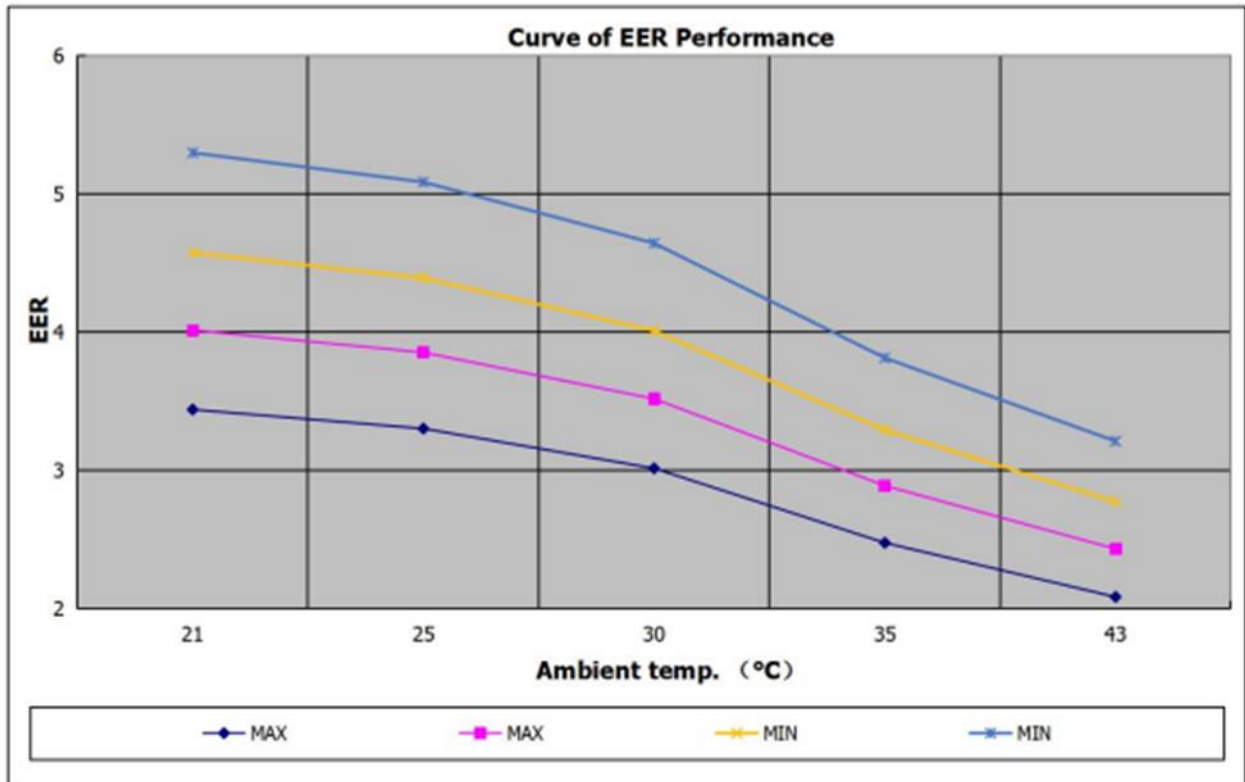




RA-M-13-001 IN COOLING MODE

Water temp. outlet 7°C	MAX	Cooling Capacity (kW)	10.3	9.8	9.2	8.2	6.6
		Input power (kW)	3.0	3.0	3.0	3.3	3.1
		EER	3.44	3.3	3.02	2.48	2.09
	MIN	Cooling Capacity (kW)	3.5	3.4	3.1	2.8	2.2
		Input power (kW)	0.77	0.77	0.78	0.85	0.81
		EER	4.58	4.39	4.01	3.29	2.77
Water temp. outlet 18°C	MAX	Cooling Capacity (Kw)	10.8	10.3	9.6	8.6	6.9
		Input power (kW)	2.7	2.7	2.7	3.0	2.8
		EER	4.01	3.85	3.52	2.89	2.43
	MIN	Cooling Capacity (kW)	3.9	3.7	3.4	3.1	2.5
		Input power (kW)	0.7	0.7	0.7	0.8	0.8
		EER	5.3	5.09	4.64	3.81	3.21
Ambient temp. (°C)			21	25	30	35	43







RA-M-13-001 IN DHW MODE

Heating Capacity (kW)	6.3	6.6	7.1	7.7	9.2	10.5	11.6	12.4	13.1
Input power (kW)	3.0	2.97	2.93	2.89	2.86	2.86	2.86	2.86	2.86
COP	2.1	2.23	2.44	2.67	3.21	3.67	4.04	4.33	4.59
Ambient temp. (°C)	-25	-20	-12	-5	2	7	20	30	43

