

M thermal Arctic Split



Table 2-1.1: MHA-V12(14, 16)W/D2RN8-B specifications¹

Model name MHA-			V12W/D2RN8-B	V14W/D2RN8-B	V16W/D2RN8-B
Compatible hydronic box HB-			A160/CGN8-B		
Power supply		V/Ph/H	380-415/3/50		
Heating(A7W35)	Capacity	kW	12.1	14.5	16.0
	Rated input	kW	2.44	3.09	3.56
	COP			4.95	4.70
Heating(A7W45)	Capacity	kW	12.3	14.2	16.0
	Rated input	kW	3.24	3.89	4.44
	COP			3.80	3.65
Heating(A7W55)	Capacity	kW	12.0	13.8	16.0
	Rated input	kW	3.87	4.60	5.52
	COP			3.10	3.00
Heating(A-7W35)	Capacity	kW	10	12	13.3
	Rated input	kW	3.33	4.29	4.93
	COP			3	2.8
Heating(A-7W55)	Capacity	kW	10	11	12.5
	Rated input	kW	4.88	5.37	6.19
	COP			2.05	2.05
Cooling(A35W18)	Capacity	kW	12.00	13.50	14.2
	Rated input	kW	3.00	3.74	3.94
	EER			4.00	3.61
Cooling(A35W7)	Capacity	kW	11.6	12.7	14.0
	Rated input	kW	4.22	4.98	5.71
	EER			2.75	2.55
Seasonal space heating energy efficiency class	LWT at 35°C		A+++	A+++	A+++
	LWT at 55°C		A++	A++	A++
SCOP	Warmer climate	35°C	6.47	6.57	6.28
		55°C	4.42	4.49	4.47
	Average climate	35°C	A+++	A+++	A+++
			4.81	4.72	4.62
		55°C	A++	A++	A++
	Colder climate		3.45	3.47	3.41
35°C		4.08	4.07	4.02	
	55°C	3.02	3.05	3.12	
SEER	LWT at 7°C		4.86	4.83	4.67
	LWT at 18°C		7.04	6.85	6.71
Rated water flow		m ³ /h	2.08	2.49	2.75
Compressor	Type		Twin rotary DC inverter		
Outdoor fan	Motor type		Brushless DC motor		
	Number of fans		1	1	1
Air side heat exchanger	Type		Finned tube		
Refrigerant(R32)	Factory charge	kg	1.84	1.84	1.84
Throttle type			Electronic expansion valve		
Piping connections	Type		Flare	Flare	Flare
	Liquid/ Gas Dia.(OD)	mm	Φ9.52/15.9	Φ9.52/15.9	Φ9.52/15.9
	Min. /Max. pipe length		m	2/30	2/30

Installation height difference	Outdoor unit above/below	m	20	20	20
Sound power level ²		dB	64	65	68
Sound pressure level(1m) ³		dB	50	51	55
ODU Net dimensions (W×H×D)		mm	1118×865×523	1118×865×523	1118×865×523
ODU Packed dimensions (W×H×D)		mm	1190×970×560	1190×970×560	1190×970×560
ODU Net/Gross weight		kg	112/125.5	112/125.5	112/125.5
Operating temperature range	Cooling	°C	-5 to 43		
	Heating	°C	-25 to 35		
	DHW	°C	-25 to 43		

Note:

1. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811:2013; (EU) No 813:2013; OJ 2014/C 207/02:2014.
2. Test standard: EN12102-1
3. Sound pressure level is the maximum value tested under the two conditions of Heating: A7W35 and Cooling: A35W18.

Table 2-1.2: HB-A60(100,160)/ CGN8-B specifications

Model name HB-			A60/CGN8-B	A100/CGN8-B	A160/CGN8-B	
Compatible Outdoor unit model MHA-			V4(6)W/D2N8-B	V8(10)W/D2N8-B	V12(14,16)W/D2(R)N8-B	
Function			Heating and cooling			
Setting water temperature range	Cooling	°C	5~25			
	Heating	°C	25~65			
	DHW ³	°C	20~60			
Power supply	V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50		
Sound power level ¹	dB	38	42	43		
Sound pressure level(1m) ²	dB	28	30	32		
Dimension (W×H×D)	mm	420×790×270	420×790×270	420×790×270		
Packing (W×H×D)	mm	525×1050×360	525×1050×360	525×1050×360		
Net/gross weight	kg	37/43	37/43	39/45		
Water circuit	Piping connections	inch	R1"	R1"	R1"	
	Safety valve set pressure	MPa	0.3	0.3	0.3	
	Drainage pipe connection	mm	Φ25	Φ25	Φ25	
	Expansion tank	Volume	L	8.0	8.0	8.0
		Max. water pressure	MPa	0.3	0.3	0.3
		Pre-pressure	MPa	0.1	0.1	0.1
	Water side	Type	Plate type	Plate type	Plate type	
	Water pump head	m	9	9	9	
	Water flow range	m ³ /h	0.4~1.25	0.4~2.10	0.70~3.00	
	Internal water volume	L	2.2-5.0	2.2-5.0	2.5-7.3	
Refrigerant circuit	Liquid Dia. (OD)	mm	Φ6.35	Φ9.52	Φ9.52	
	Gas Dia. (OD)	mm	Φ15.9	Φ15.9	Φ15.9	

Note: 1. Test standard: EN12102-1

2. Sound pressure level is the maximum value tested under the two conditions of Heating: A7W35 and Cooling: A35W18 for different combination between outdoor unit and hydronic box.

3. Maximum domestic hot water temperature 60°C is only available with TBH support.