

R454b
Refrigerant

SUBMITTAL DATA SHEET

Series Name: Advanced Heat Pancake Series
Model Number: MAPHE-H18B-2A/MO18E-H18B-2A



Air Handler Heat Pump System	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:



EFFICIENCY			
Cooling		Heating	
SEER2	16.8	HSPF2-4	8.8
EER2	11.5	COP	3.5
PERFORMANCE of Cooling			
Cooling (Btu/hr)			
Rated Capacity	18,000		
Min/Max Capacity	6,000~20,000		
Moisture Removal(L/h)	1.46		
Standard Operating Range(°F/°C)	-13~122(-25~50)		
Rated Cooling Conditions:	Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB		
PERFORMANCE of Heating			
Heating (Btu/hr)			
1. @ 47°F Rated	18,000		
1. @ 47°F Min/Max Capacity	5,500~19,600		
2. @ 17°F Rated	11,800		
3. @ 5°F Rated: Capacity / COP	11,400/1.8		
3. @ 5°F Max: Capacity	11,400		
Standard Operating Range(°F/°C)	-13~75(-25~24)		
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB		
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB		
3. Heating Conditions, Compressor Operating at Max. Frequency	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB		

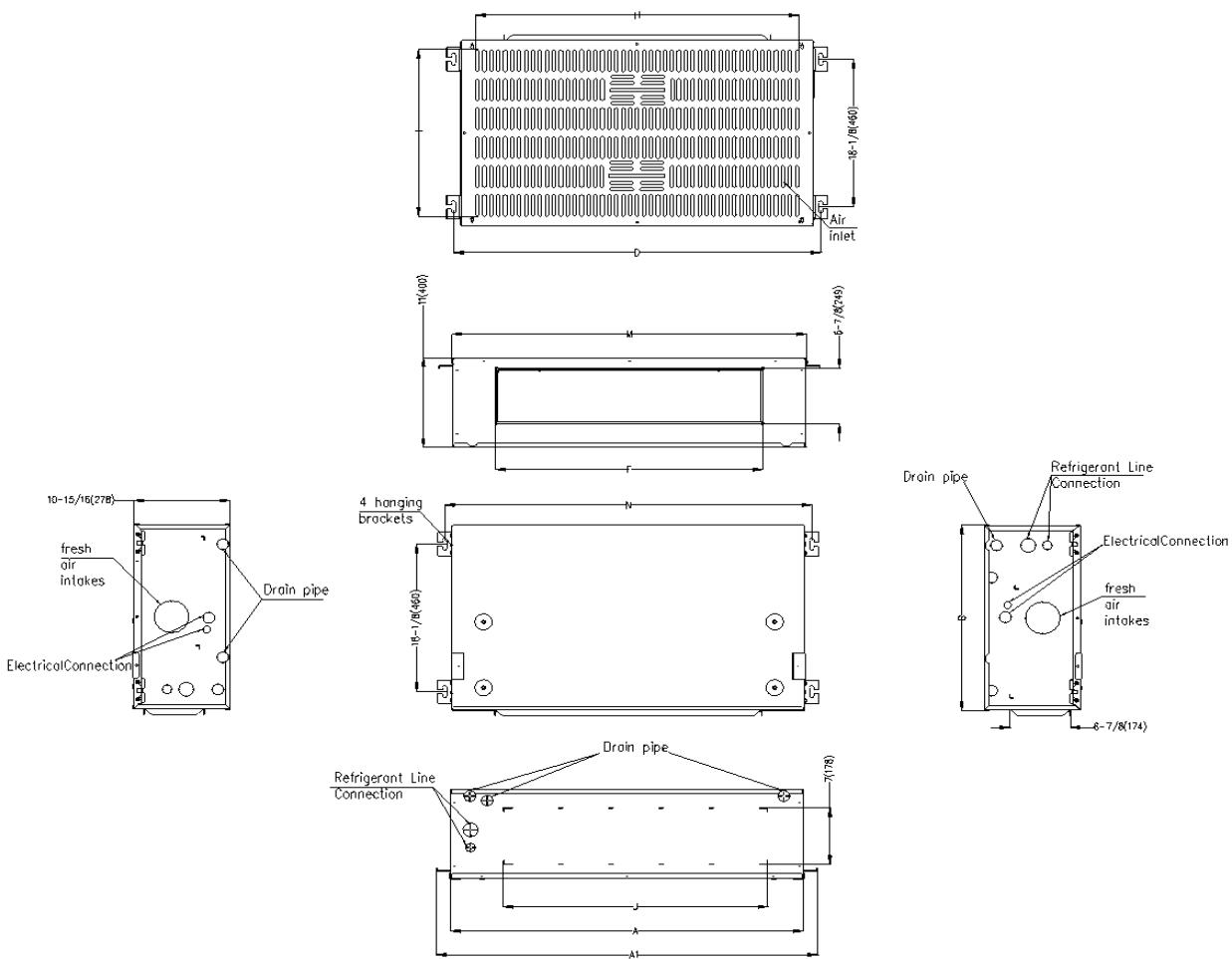
INDOOR SPECIFICATION	
ESP(in.W.G)	0-0.8
Indoor Air Flow (Turbo/H/M/L/Si) (CFM)	600 / 565 / 530 / 489 / 489
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	55.5 / 55.5 / 52.5 / 50.5 / 50.5
Dimension (WxDxH)	inch
	43-1/4 x 23-3/8 x 10-15/16
	mm
	1098 x 593 x 278
Package (WxDxH)	inch
	47-1/4 x 26-3/4 x 13-5/8
	mm
	1200 x 680 x 345
Net/Gross Weight	lbs
	118/127.87
	kg
	53.5/58

OUTDOOR SPECIFICATION	
Compressor Type	ROTARY
Compressor Model	KSN140D58UFZ
Refrigerant	R454B
Refrigerant Oil Charge(mL)	440
Refrigerant Oil	VG74
Outdoor Air Flow (Max) (CFM)	1,451
Outdoor Noise Level (dBA)	56
Dimension (WxDxH)	inch
	31-3/4 x 13 x 21-3/4
	mm
	805 x 330 x 554
Package (WxDxH)	inch
	36 x 14-9/16 x 24-3/16
	mm
	915 x 370 x 615
Net/Gross Weight	lbs
	77 / 84
	kg
	35 / 38

ELECTRICAL	
Indoor Power Supply	115/208/230,60Hz,1Ph
Indoor MCA 115V/(208/230V)	115V:6;208/230V:5
Indoor MOP	15.0
Outdoor Power Supply	208/230,60Hz,1Ph
Outdoor MCA	16.0
Outdoor MOP	20.0
Communication Wiring	AWG 20/2
Compressor RLA	10
Outdoor Fan Motor RLA	0.8
Outdoor Fan Motor W	34
Indoor Fan Motor RLA	115V:4;208/230V:3.5
Indoor Fan Motor W	250
System Power Input @ Cooling (W)	1,565(600 ~ 1,900)
System Power Input @ Heating (W)	1,512(390 ~1,700)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	3/8" (9.52mm)
Gas Size	3/4" (19mm)
Max. Piping Length(ft/m)	98(30)
Max. Height Difference(ft/m)	66(20)
Max. Pre-charged Length(ft/m)	25(7.5)
Refrigerant Pre-charged Amount(oz/kg)	51(1.45)
Additional Charge of Refrigerant((oz/ft)/(g/m)	0.7(65)
Connection Method	Flared

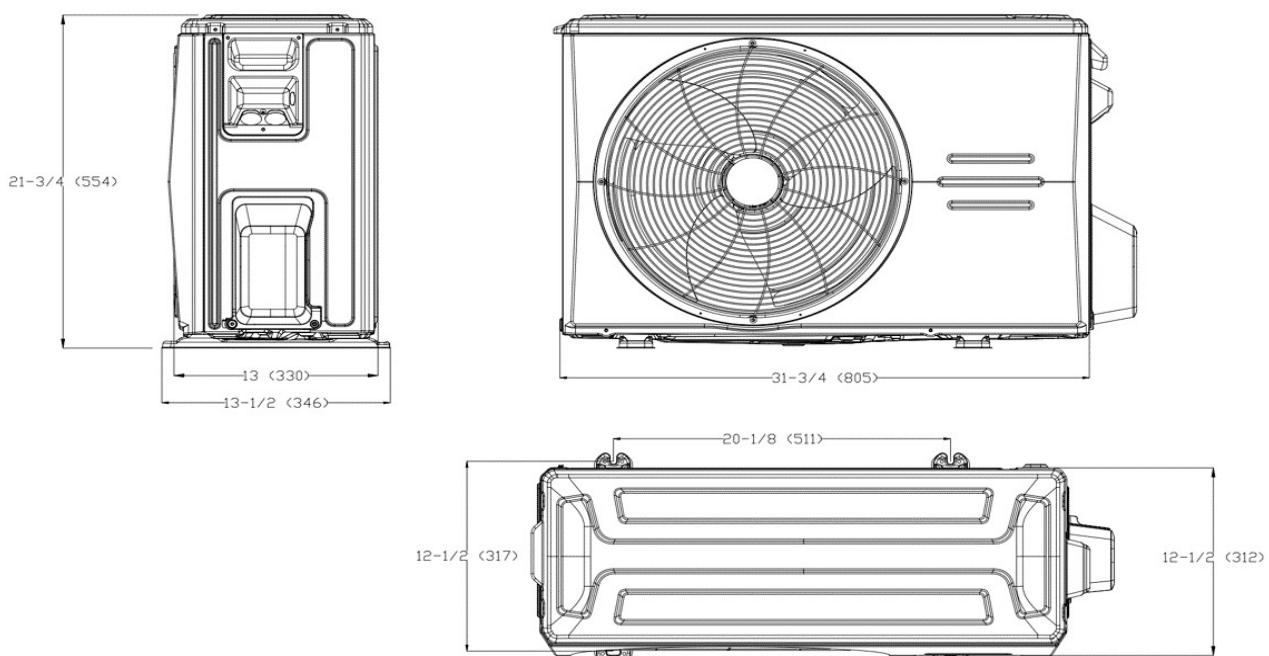
Indoor Unit Dimension



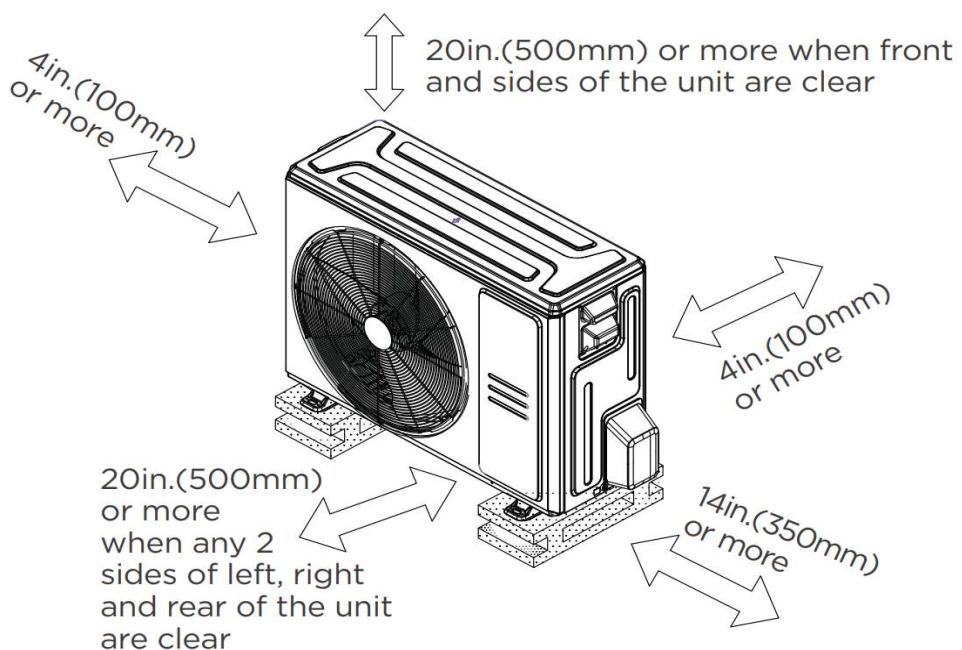
	18K		24K		30K		36K	
	inch	mm	inch	mm	inch	mm	inch	mm
A	39-15/16	1015	45-7/8	1165	51-15/16	1320	58-7/8	1495
A1	43-1/4	1098	49-1/8	1248	55-1/4	1403	62-1/8	1578
J	30	761	35-7/8	911	41-15/16	1066	48-7/8	1241
D	41-5/8	1057	47-1/2	1207	53-5/8	1362	60-1/2	1537
F	30-1/4	769	36-3/16	919	42-5/16	1074	49-3/16	1249
H	36-5/8	930	39-3/4	1010	47-5/8	1210	53-15/16	1370
M	40-3/16	1020	46-1/16	1170	52-3/16	1325	59-1/16	1500
N	41-5/8	1057	40-7/16	1027	53-5/8	1362	60 1/2	1537

Outdoor Unit Dimension

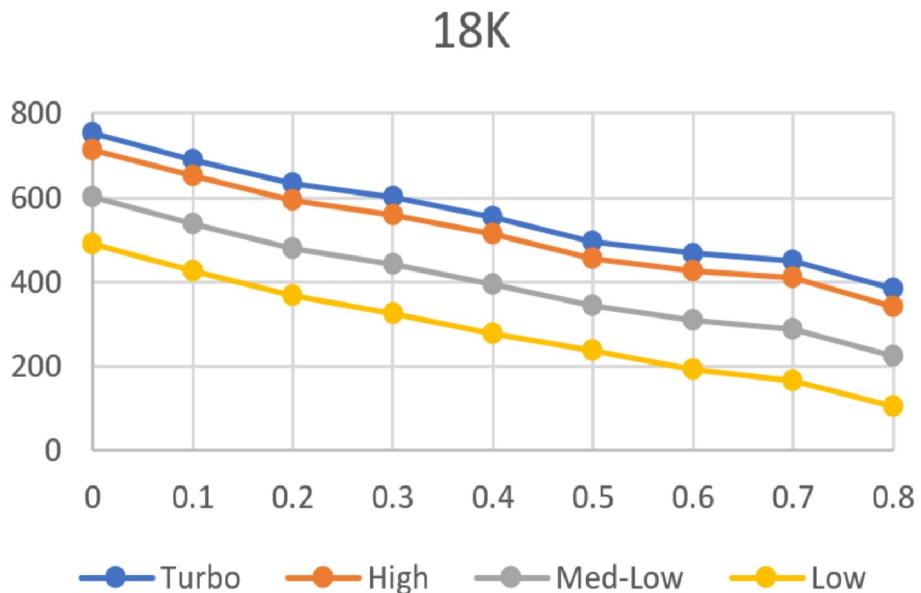
Unit:inch(mm)



Installation Instruction For Outdoor Unit



Fan Performance For Indoor Unit



Features

- Downward or backward (optional) air inlet
- Aluminum Coil
- The IDU supports 115/230V voltage compatibility
- Constant Air Flow system: Up to 0.80 In.W.C.
- Optional Auxiliary heat kit up to 10kW
- Easy Maintenance
- Multiple control options available:
 - Two-way communication wired controller with built-in Wi-Fi: 120N (X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat
- Adaptive control systems with 24V and RS485 communication
- High efficiency up to 17.5 SEER2, 12 EER2, 10.5 HSPF2
- Base pan heater and crankcase heater are equipped as standard