

R454b
Refrigerant

SUBMITTAL DATA SHEET



Series Name: Advanced Heat WM AHU Series
Model Number: MAWHE-H18B-2A/M01BE-H18B-2A

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



AHRI CERTIFIED

necc

ETL
Intertek

INDOOR SPECIFICATION	
ESP(inWG)	0~0.8
Indoor Air Flow (Turbo/H/M/L/Si) (CFM)	618 / 577 / 530 / 489 / 489
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	48 / 47 / 45 / 39 / 39
Dimension (WxDxH)	inch mm
Package (WxDxH)	inch mm
Net/Gross Weight	lbs kg

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)	55.5
Dimension (WxDxH)	inch mm
Package (WxDxH)	inch mm
Net/Gross Weight	lbs kg

EFFICIENCY			
Cooling		Heating	
SEER2	18.5	HSPF2-4	9.4
EER2	11.5	COP	3.55

PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	18,000
Min/Max Capacity	5,900~20,600
Moisture Removal(L/h)	1.87
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

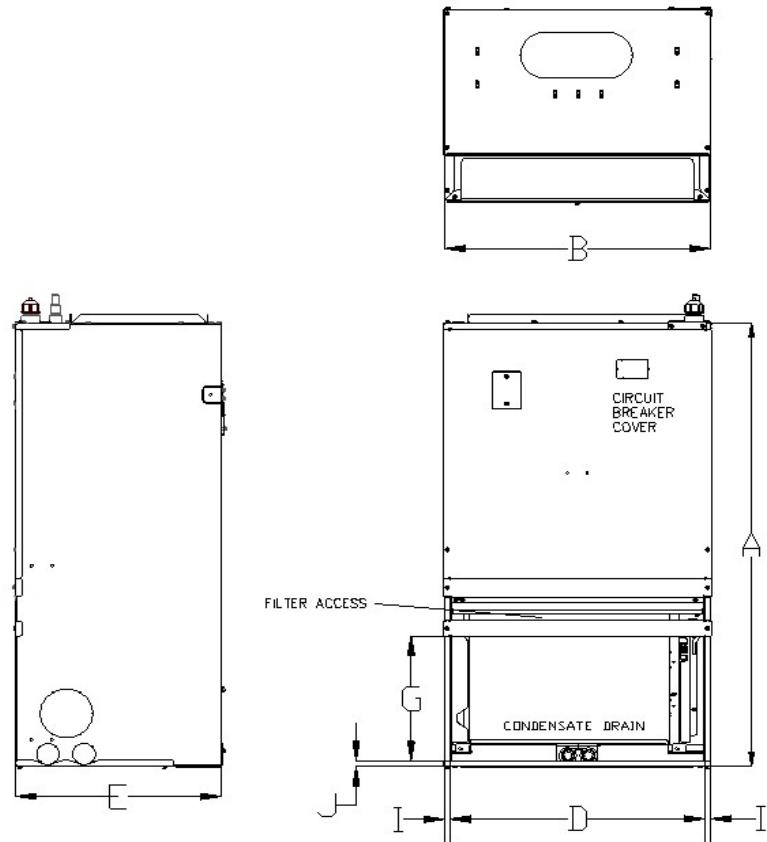
PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	18,000
2. @ 47°F Min/Max Capacity	3,900~19,600
3. @ 17°F Rated	12,600
4. @ 5°F Rated: Capacity / COP	11,400/2.1
5. @ 5°F Max: Capacity	11,400
Standard Operating Range(°F/°C)	-13~75 (-25~24)
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB 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

ELECTRICAL	
Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	4
Indoor MOP	15.0
Outdoor Power Supply	208/230V,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	/
Indoor Fan Motor RLA	3
Indoor Fan Motor W	250
System Power Input @ Cooling (W)	1,565 (360 ~ 1,820)
System Power Input @ Heating (W)	1,485 (275 ~ 1,610)
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*

*The gas valve of the outdoor unit is 5/8", 5/8" to 3/4" flare to flare connector is required for the installation.

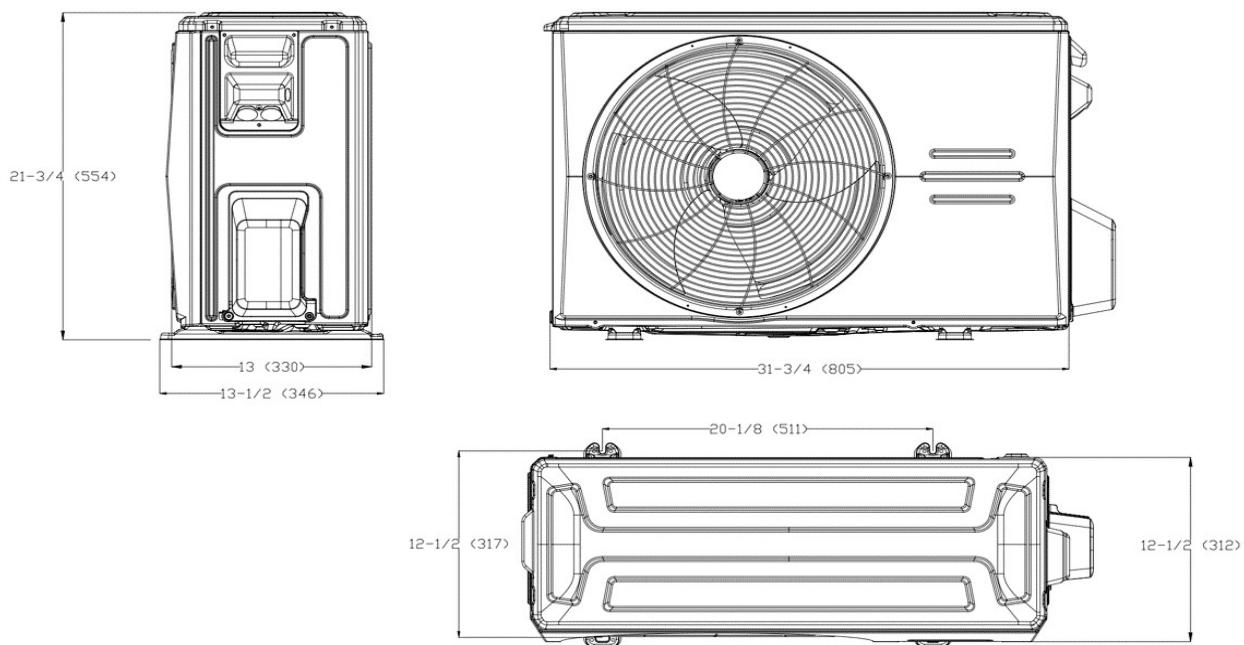
Indoor Unit Dimension



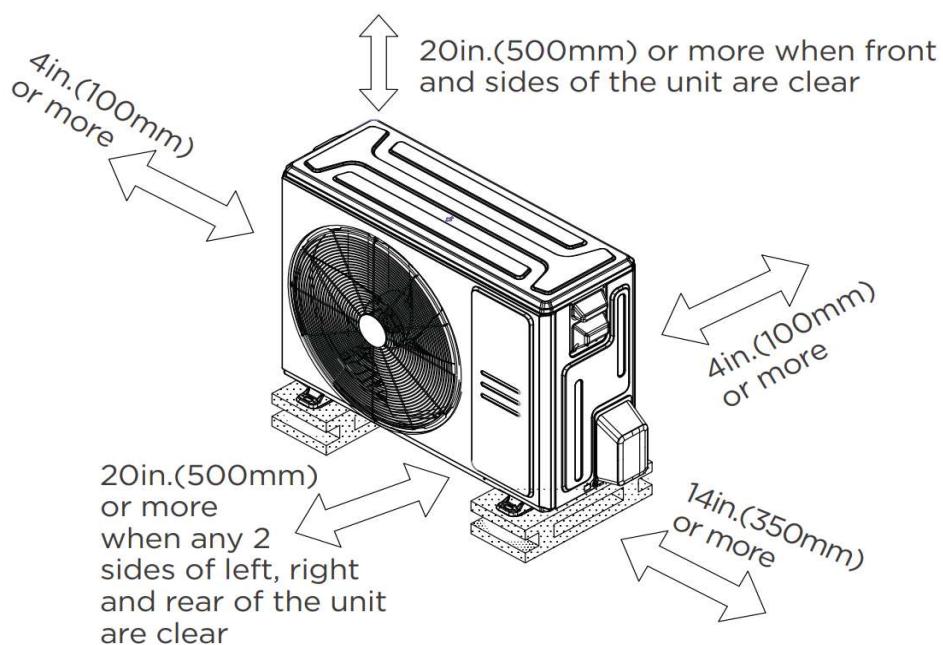
Dimensions	Model(Btu/h)	18K/24K		30K/36K	
		inch	mm	inch	mm
A	Model Height	36-1/2	928	40	1017
B	Model Width	20-1/4	515	22	559
C	Supply Air Opening Width	17-13/32	442	18-27/32	478.6
D	Return Air Opening Width	19-7/16	493.8	21-5/32	537.8
E	Model Depth	15-3/4	399	19	483
F	Supply Air Opening Depth	10-7/16	265.2	9-9/32	235.4
G	Return Air Opening Depth	10-9/32	261	13-2/32	332.5
H	Supply Air Opening Clearance	1-5/32	29.1	1-5/8	41
I	Return Air Opening Side Clearance	13/32	10.6	13/32	10.6
J	Return Air Opening Front Clearance	15/32	12	5/8	16

Outdoor Unit Dimension

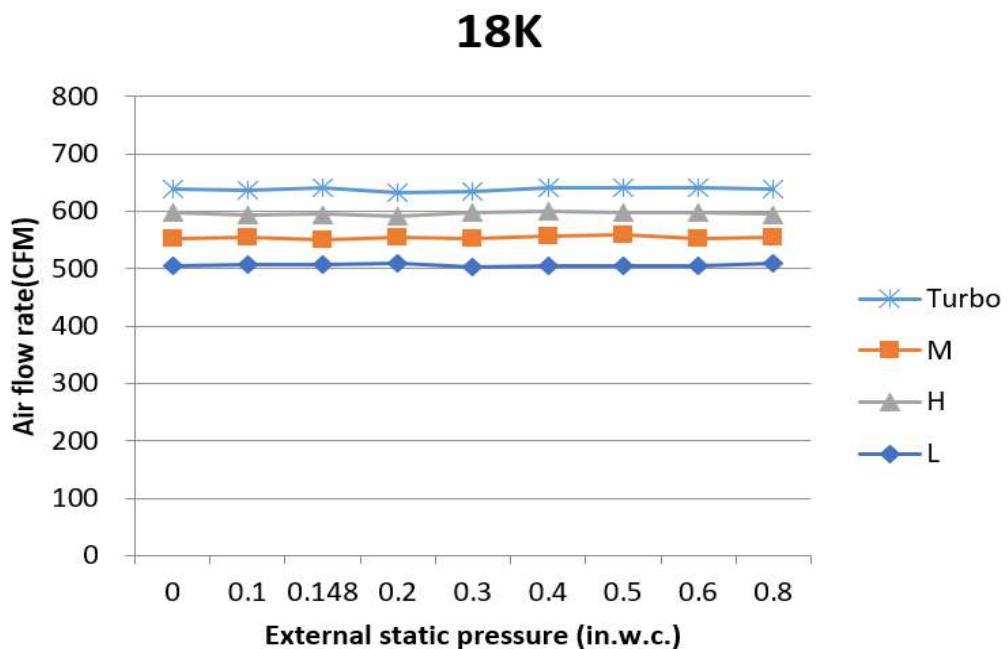
Unit:inch(mm)



Installation Instruction For Outdoor Unit



Fan Performance For Indoor Unit



Features

- Multi-position of return air: front(factory standard) or bottom
- Aluminum Coil
- 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 control
 - Third-Party 24V Thermostat
- High efficiency up to 19.3 SEER2, 12.1 EER2, 10.8 HSPF2
- Base pan heater and crankcase heater are equipped as standard