

R454b Refrigerant

SUBMITTAL DATA SHEET



Series Name: Advanced Heat WM AHU Series
Model Number: MAWHE-H18B-2A/MO1BE-H18B-2A

Air Handler Heat Pump System

Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:



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 (W×D×H)	inch	20-1/4 x 15-3/4 x 36-1/2
	mm	515 × 399 × 928
Package (W×D×H)	inch	22-7/8 x 19-1/2 x 42-7/8
	mm	580 × 495 × 1090
Net/Gross Weight	lbs	111 / 91
	kg	50.5 / 41.5

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 (W×D×H)	inch	31-3/4 x 13 x 21-3/4
	mm	805 ×330 ×554
Package (W×D×H)	inch	36 x 14-9/16 x 24-3/16
	mm	915 × 370 × 615
Net/Gross Weight	lbs	77 / 84
	kg	35 / 38

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

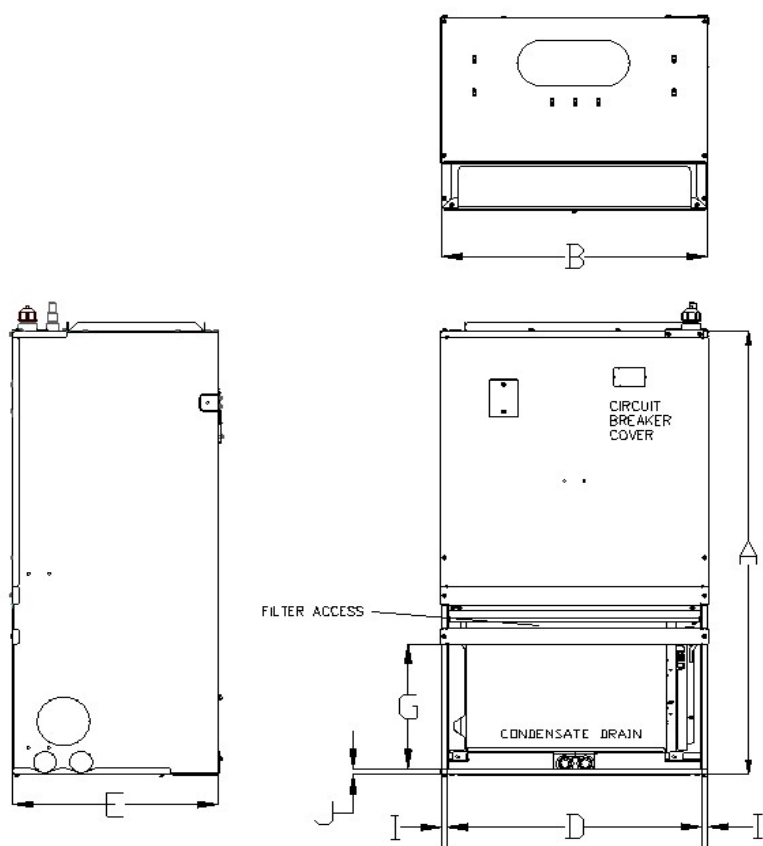
Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	4
Indoor MOP	15.0
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	16.0
Outdoor MOP	20.0
Communication Wiring	AWG 20-2
Compressor RLA	10
Outdoor Fan Motor RLA	0.8
Outdoor Fan Motor W	/
Indoor Fan Motor RLA	3
Indoor Fan Motor W	250
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.

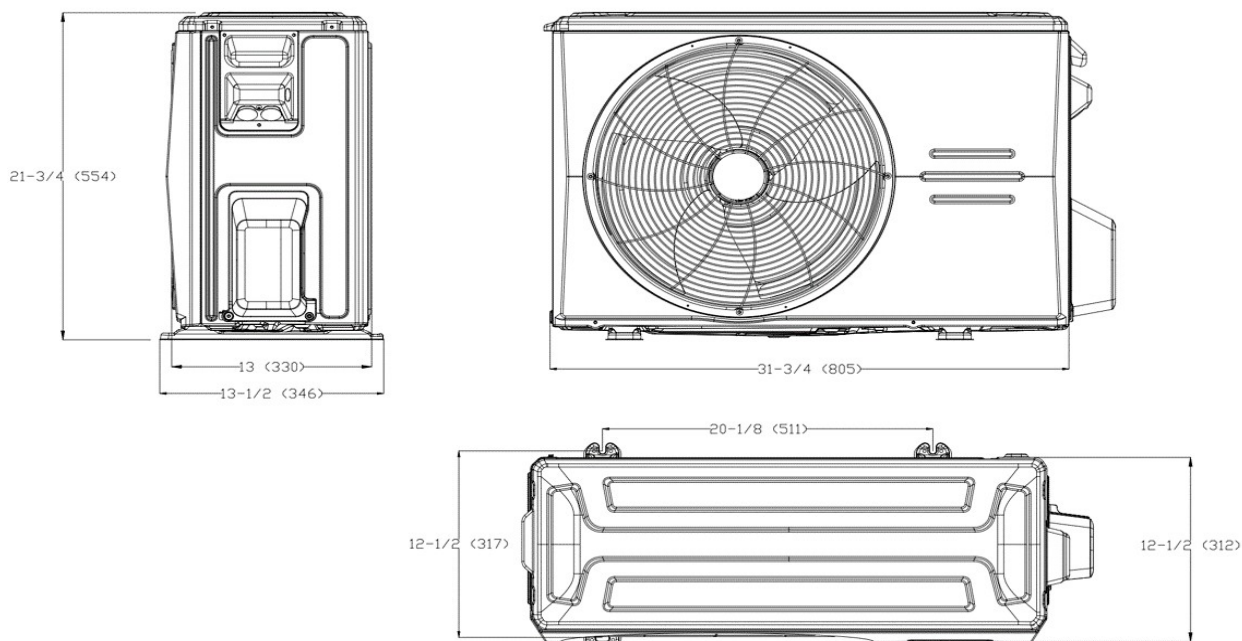
Indoor Unit Dimension



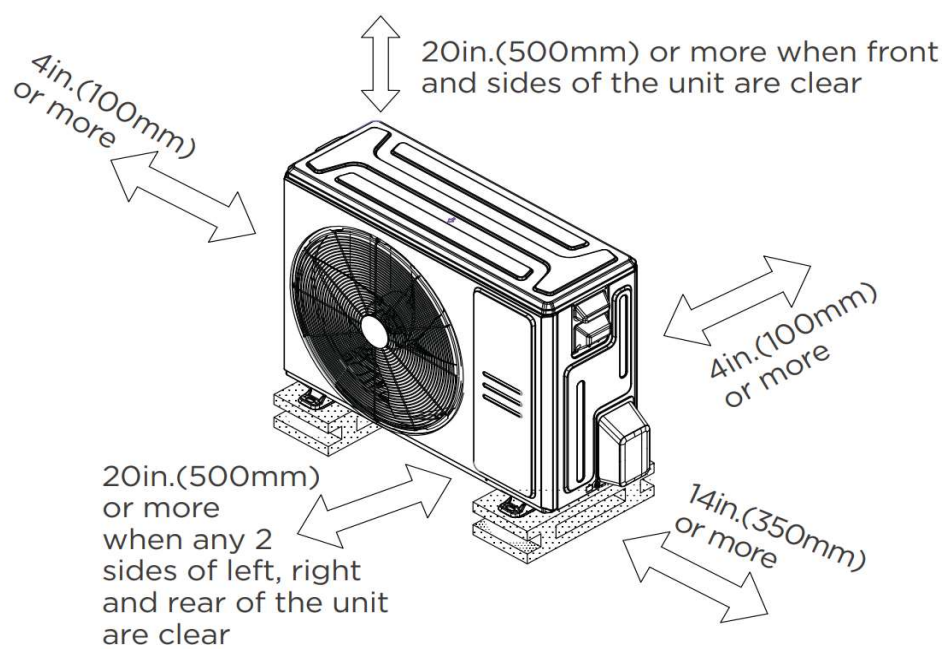
Dimensions		Model(Btu/h)		18K/24K		30K/36K	
				inch	mm	inch	mm
A	Model Height			36-1/2	928	40	1017
B	Model Width			20-1/4	515	22	559
C	Supply Air Opening Width			17-13/32	442	18-27/32	478.6
D	Return Air Opening Width			19-7/16	493.8	21-5/32	537.8
E	Model Depth			15-3/4	399	19	483
F	Supply Air Opening 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

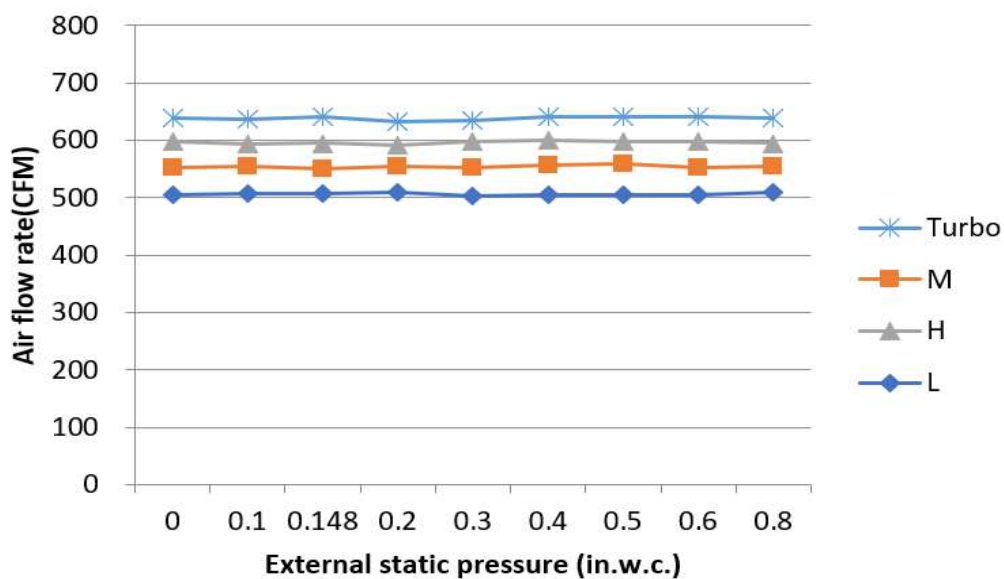
Unit:inch(mm)



Installation Instruction For Outdoor Unit



18K



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