

R454b Refrigerant

SUBMITTAL DATA SHEET



Series Name: Extreme Heat WM AHU Series
Model Number: MAWHE-H36B-2A/MO1SE-H36B-2A

Air Handler Heat Pump System

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



INDOOR SPECIFICATION

ESP(in.W.G)	0-0.8
Indoor Air Flow (Turbo/H/M/L/Si) (CFM)	1189 / 1083 / 971 / 865 / 865
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	52 / 52 / 48.5 / 36.5 / 36.5
Dimension (W×D×H)	inch 22 x 19 x 40 mm 559 x 483 x 1017
Package (W×D×H)	inch 24-5/8 x 22-7/8 x 47 mm 625 x 580 x 1193
Net/Gross Weight	lbs 110 / 131 kg 50 / 59.6

OUTDOOR SPECIFICATION

Compressor Type	TWIN-ROTARY
Compressor Model	EKPQ420D1UMUA
Refrigerant	R454B
Refrigerant Oil Charge(mL)	1460
Refrigerant Oil	VG74
Outdoor Air Flow (Max) (CFM)	3,002
Outdoor Noise Level (dBA)	64
Dimension (W×D×H)	inch 38-9/16 x 16-3/8 x 38-3/8 mm 980 x 415 x 975
Package (W×D×H)	inch 45-1/16 x 19-11/16 x 42-1/2 mm 1145 x 500 x 1080
Net/Gross Weight	lbs 204 / 235 kg 92.6 / 106.7

EFFICIENCY

Cooling	Heating
SEER2	HSPF2-4
EER2	COP

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	36,000
Min/Max Capacity	13,700~41,500
Moisture Removal(L/h)	3.47
Standard Operating Range(*F/*C)	-22~122 (-30 ~ 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	37,000
2. @ 47°F Min/Max Capacity	10,100~48,500
3. @ 17°F Rated	30,200
4. @ 5°F Rated: Capacity / COP	34,600/1.8
5. @ 5°F Max: Capacity	34,600
Standard Operating Range(*F/*C)	-22~75 (-30 ~ 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

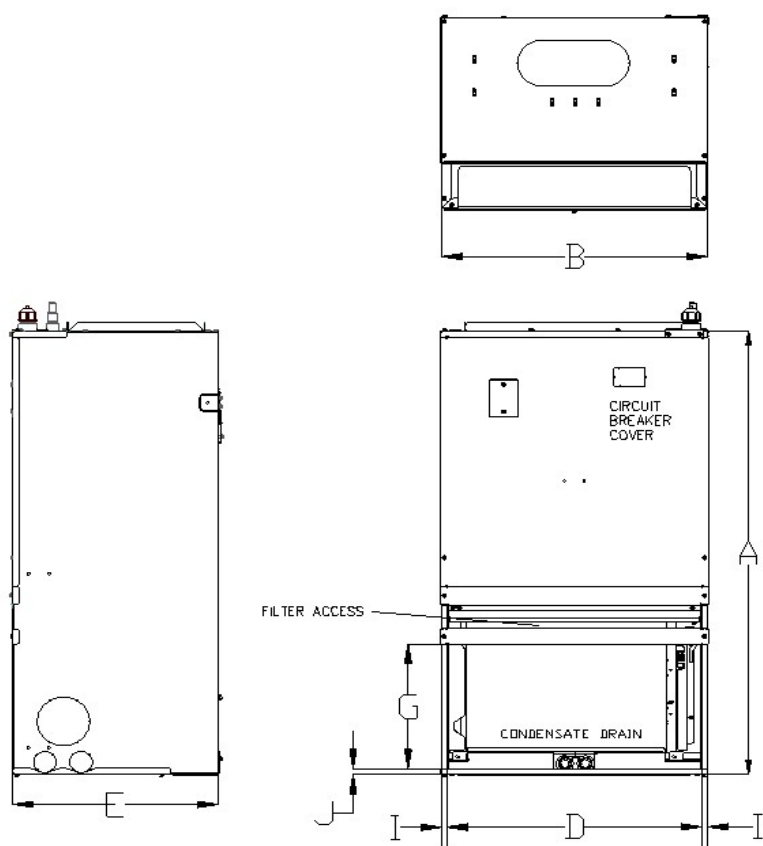
ELECTRICAL

Indoor Power Supply	115V/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	6.5
Indoor MOP	15.0
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	29.0
Outdoor MOP	30.0
Communication Wiring	AWG 20-2
Compressor RLA	20.5
Outdoor Fan Motor RLA	2.4
Outdoor Fan Motor W	/
Indoor Fan Motor RLA	5
Indoor Fan Motor W	375
System Power Input @ Cooling (W)	3,214 (1,170 ~ 4,400)
System Power Input @ Heating (W)	3,189 (725 ~ 4,420)
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)	246 (75)
Max. Height Difference(ft/m)	98 (30)
Max. Pre-charged Length(ft/m)	25 (7.5)
Refrigerant Pre-charged Amount(oz/kg)	127 (3.6)
Additional Charge of Refrigerant(oz/ft)/(g/m)	0.7 (65)
Connection Method	Flared

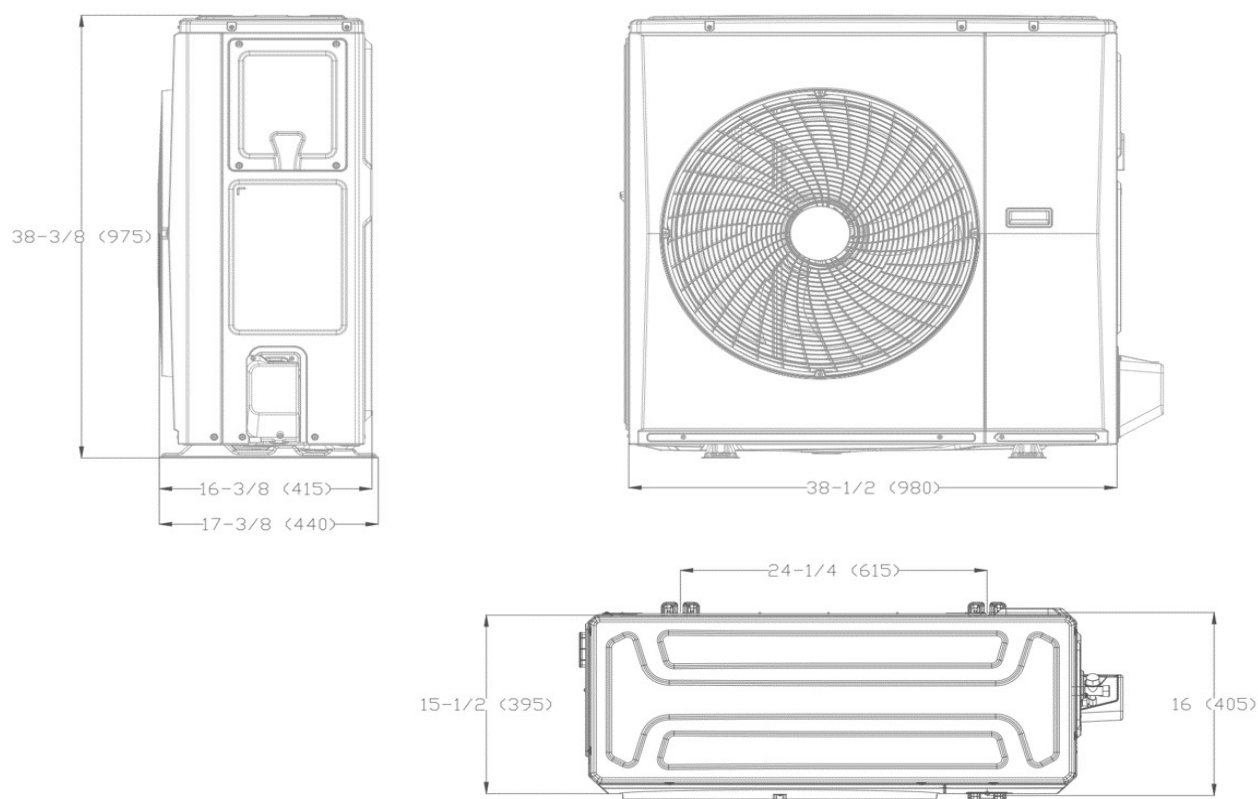
Indoor Unit Dimension



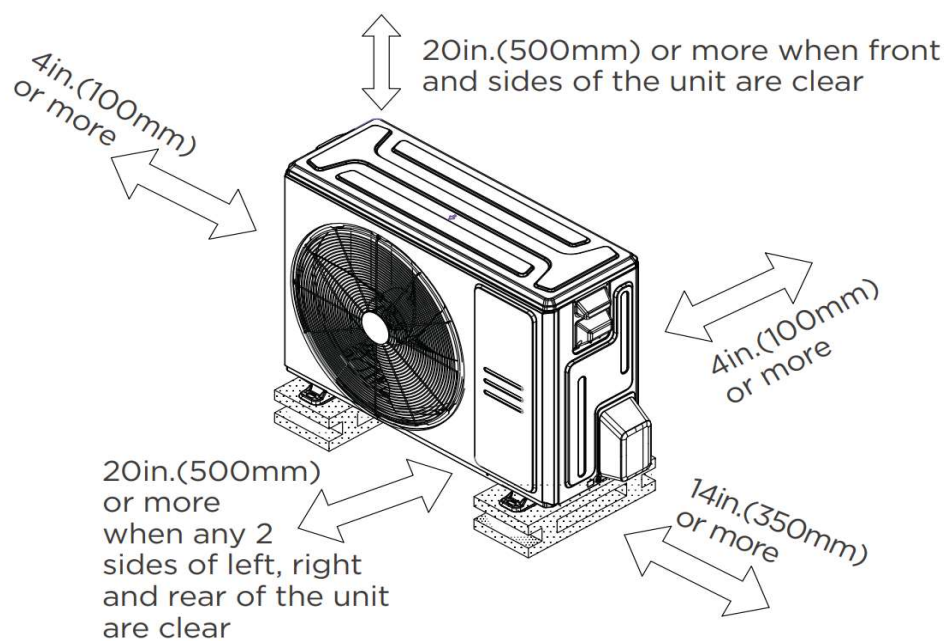
Dimensions		Model(Btu/h)		18K/24K		30K/36K	
				inch	mm	inch	mm
A	Model Height			36-1/2	928	40	1017
B	Model Width			20-1/4	515	22	559
C	Supply Air Opening Width			17-13/32	442	18-27/32	478.6
D	Return Air Opening Width			19-7/16	493.8	21-5/32	537.8
E	Model Depth			15-3/4	399	19	483
F	Supply Air Opening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

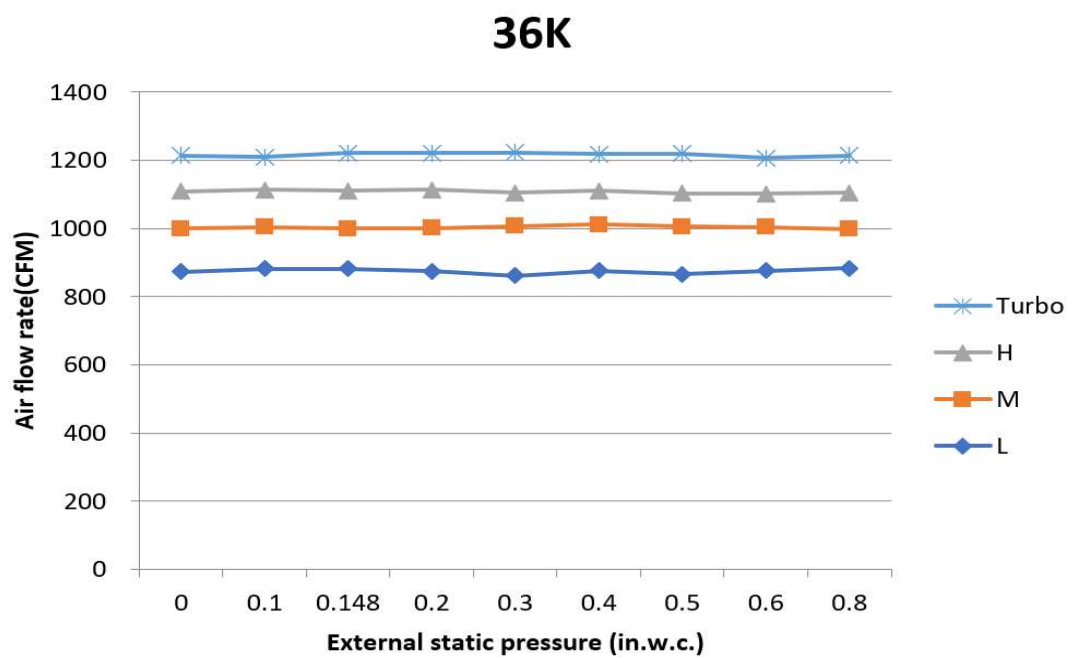
Unit:inch(mm)



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