

**Air Handler Heat Pump System**

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


**INDOOR SPECIFICATION**

Dimension (W×D×H)	inch	17-1/2 x 21 x 23-1/2
	mm	445 x 533 x 599
Package (W×D×H)	inch	20-1/2 x 26-1/8 x 26-3/8
	mm	520 x 665 x 670
Net/Gross Weight	lbs	59.5 / 68
	kg	27 / 30.9

**OUTDOOR SPECIFICATION**

Compressor Type		TWIN-ROTARY
Compressor Model		EKPQ420D1UMUA
Refrigerant		R454B
Refrigerant Oil Charge(mL)		1460
Refrigerant Oil		VG75
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 × 415 × 975
Package (W×D×H)	inch	45-1/16 x 19-11/16 x 42-1/2
	mm	1145 × 500 × 1080
Net/Gross Weight	lbs	204 / 235
	kg	92.6 / 106.7

**EFFICIENCY**

Cooling	Heating
SEER2	HSPF2-4
15.8	9.4
EER2	COP
10.7	3.3

**PERFORMANCE of Cooling**

Cooling (Btu/hr)	
Rated Capacity	36,000
Min/Max Capacity	12,100~41,000
Moisture Removal(L/h)	4.91
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	38,000
2. @ 47°F Min/Max Capacity	11,500~46,000
3. @ 17°F Rated	29,200
4. @ 5°F Rated: Capacity / COP	36,000/1.9
5. @ 5°F Max: Capacity	36,000
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

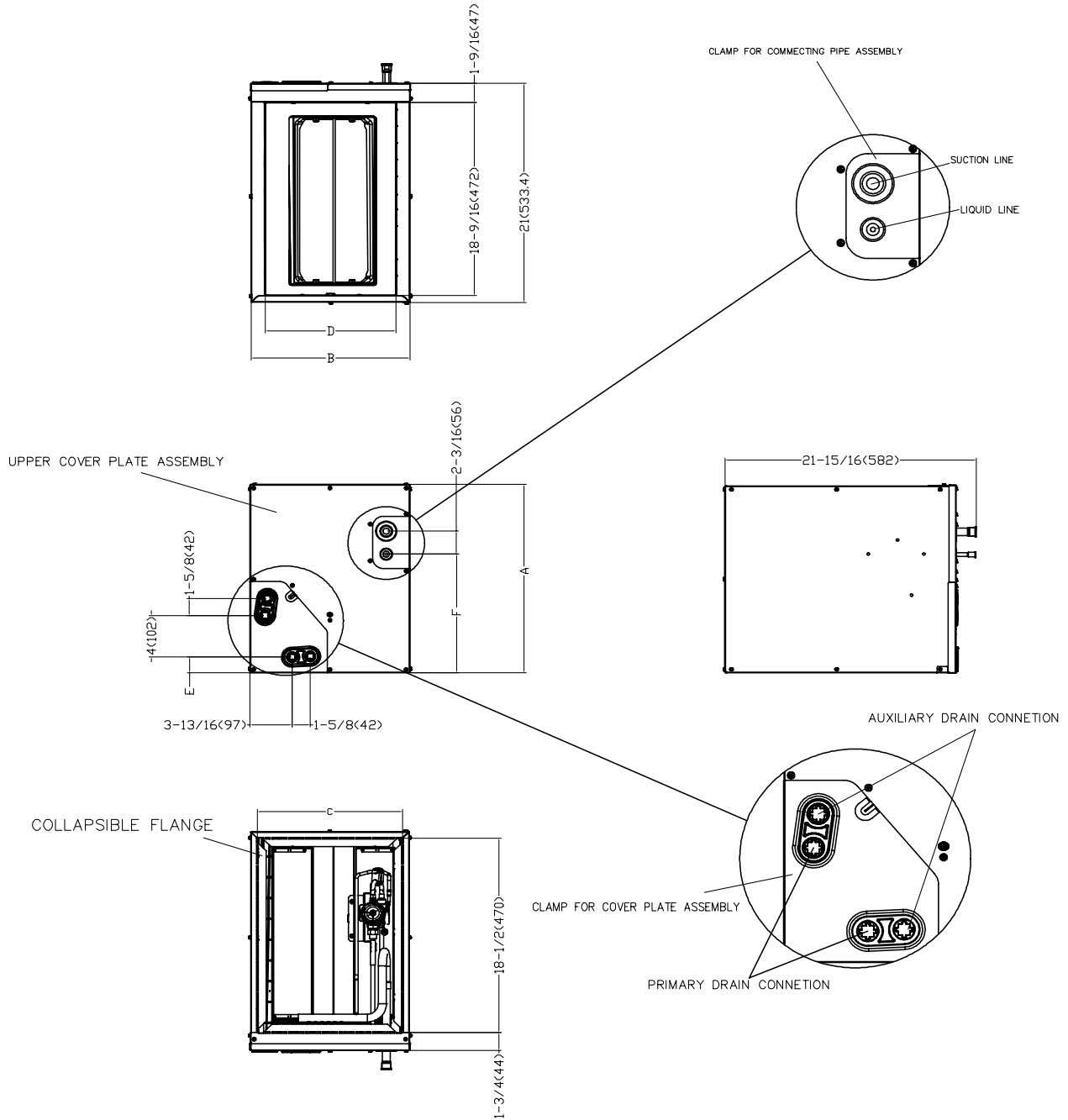
**ELECTRICAL**

Indoor Power Supply	24V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	/
Indoor MOP	/
Outdoor Power Supply	208/230,60Hz,1Ph
Outdoor MCA	29
Outdoor MOP	30
Communication Wiring	AWG 20-2
Compressor RLA	20.5
Outdoor Fan Motor RLA	2.4
Outdoor Fan Motor W	/
Indoor Fan Motor RLA	/
Indoor Fan Motor W	/
System Power Input @ Cooling (W)	3,364(1,020 ~ 4,520)
System Power Input @ Heating (W)	3,375(800 ~ 4,540)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

**PIPING**

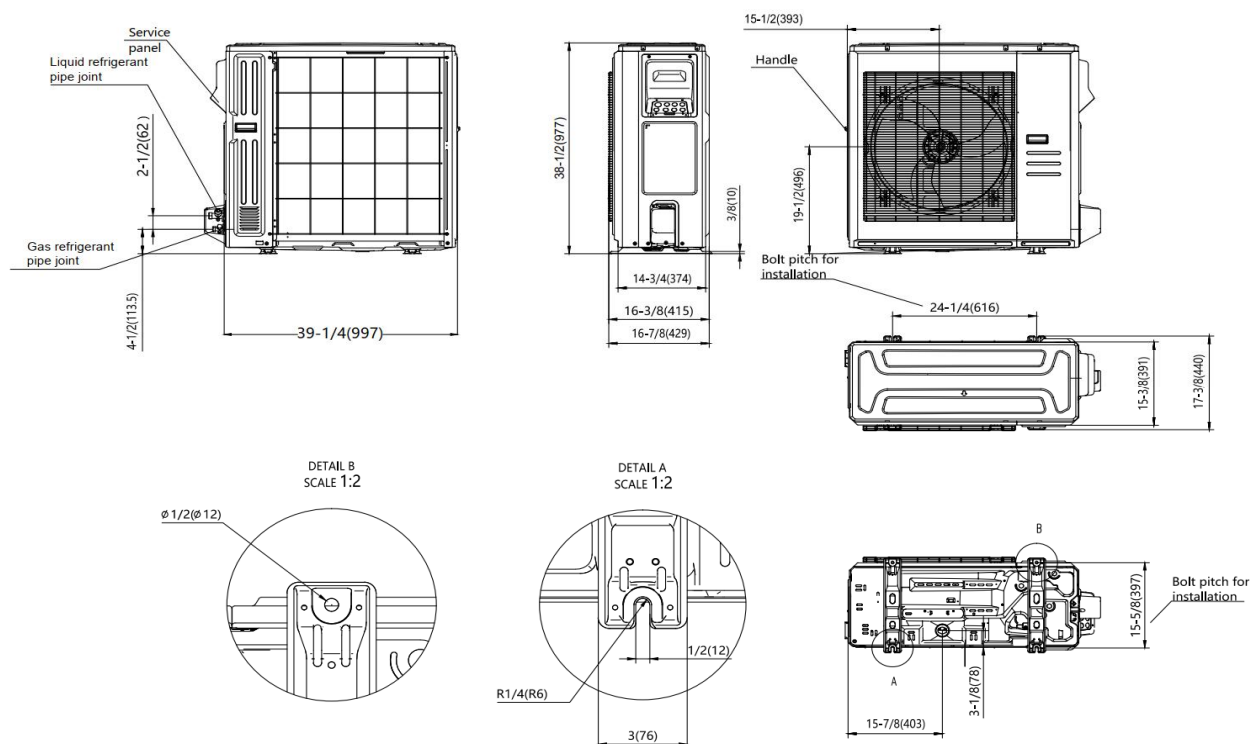
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	246(75)
Max. Height Difference(ft/m)	98(30)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	126.99(3.6)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared

## Indoor Unit Dimension

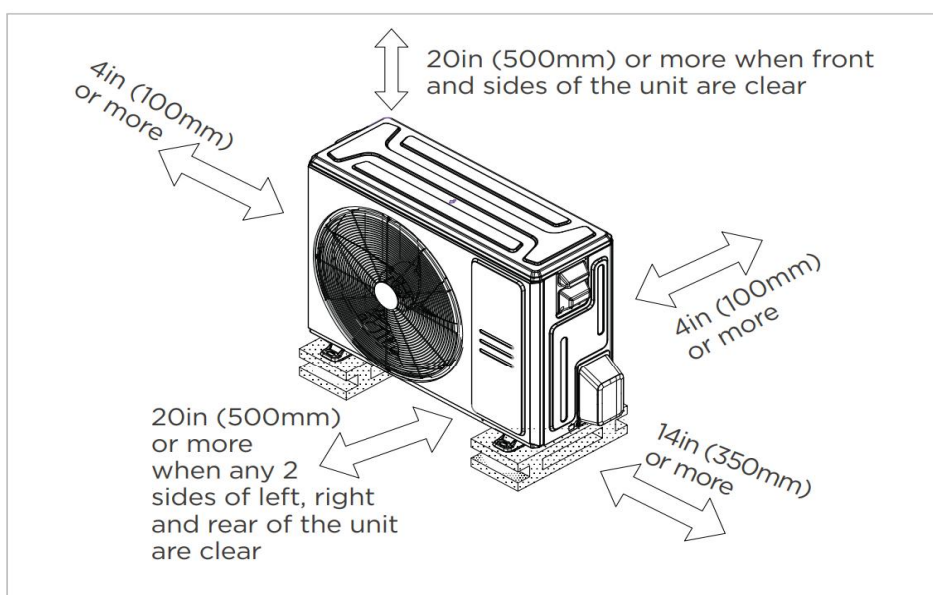


Dimensions	Model	MVBM-24B18T3N10		MVBM-24A18T3N10		MVBM-36A24T4N10		MVBM-36B24T4N10		MVBM-36C24T4N10		MVBM-60D28T6N10	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
A	Model Height	18	457	18	457	23-5/16	592	23-9/16	599	24	611	28	711
B	Model Width	17-1/2	445	14-1/2	368	14-1/2	368	17-1/2	445	21	534	24-1/2	622
C	Supply Air Opening Width	16-3/16	411	13-1/4	336	13-1/4	336	16-3/16	411	19-3/4	502	23-1/4	591
D	Return Air Opening Width	14-15/16	380	11-15/16	303	11-15/16	303	14-15/16	380	19-1/2	498	23-1/8	587
E	Condensate Drains Height	1-7/16	1-7/16	1-7/16	38	1-7/16	38	1-7/16	38	2-3/16	55	2-3/16	55
F	Liquid Line Height	11-3/8	290	11-3/8	290	17-15/16	455	16-3/8	417	17-1/2	445	21-7/16	545

## Outdoor Unit Dimension



## Installation Instruction For Outdoor Unit



Meets all spatial requirements shown in Installation Clearance Requirements above.

## Features

- Multi-position installation: horizontal(left or right), vertical( up or down)
- Aluminum Coil
- R454B refrigerant sensor
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller with built-in WiFi:AWC-8P-LC-WIFI
  - Third-Party 24V Thermostat