

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Extreme Heat AHU Series  
Model Number: MACHU-H24B-2A/MO1HS-H24B-2A

## Air Handler Heat Pump System

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



## INDOOR SPEINDOOR SPECIFICATIONCIFICATION

Indoor Air Flow (Turbo/H/M/L/Si) (CFM)	824 / 760 / 694 / 630 / 630
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	43.5 / 43.5 / 40 / 25.5 / 25.5
Dimension (W×D×H)	inch 17-1/2 x 21 x 45 mm 445 x 534 x 1143
Package (W×D×H)	inch 26-5/8 x 20-7/8 x 48-5/8 mm 675 x 530 x 1235
Net/Gross Weight	lbs 104 / 126 kg 47.3 / 57.1

## OUTDOOR SPECIFICATION

Compressor Type	ROTARY
Compressor Model	KTM240D46UKT2
Refrigerant	R454B
Refrigerant Oil Charge(mL)	620
Refrigerant Oil	VG74
Outdoor Air Flow (Max) (CFM)	2,237
Outdoor Noise Level (dBA)	61.5
Dimension (W×D×H)	inch 37-1/4 x 16-1/8 x 31-7/8 mm 946 x 410 x 810
Package (W×D×H)	inch 42-7/8 x 19-5/8 x 34-7/8 mm 1090 x 500 x 885
Net/Gross Weight	lbs 130 / 141 kg 59.1 / 64.1

## EFFICIENCY

Cooling	Heating
SEER2 18.7	HSPF2-4 10.0
EER2 12	COP 3.5

## PERFORMANCE of Cooling

Cooling (Btu/hr)
Rated Capacity 23,000
Min/Max Capacity 7,500 ~ 27,000
Moisture Removal(L/h) 2.25
Standard Operating Range(*F/*C) -22~-122 (-30 ~ 50)
Conditions: Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB

## PERFORMANCE of Heating

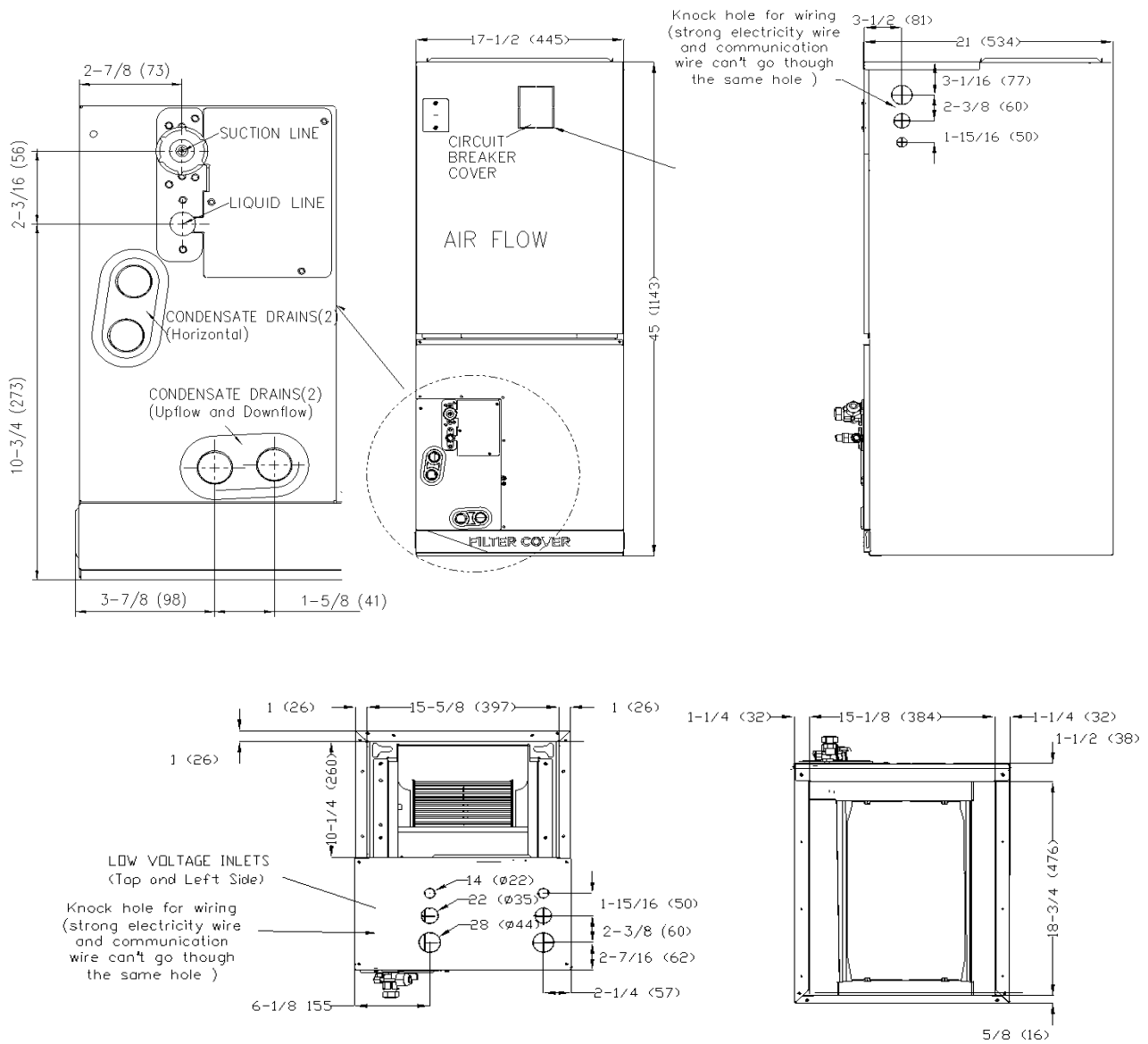
Heating (Btu/hr)
1. @ 47°F Rated 26,000
1. @ 47°F Min/Max Capacity 8,800 ~ 29,000
2. @ 17°F Rated 16,900
3. @ 5°F Rated: Capacity / COP 23,600 / 2.1
3. @ 5°F Max: Capacity 23,600
Standard Operating Range(*F/*C) -22~-75 (-30 ~ 24)
1. Conditions: Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Conditions: Indoor: 70°F DB/60°F WB Outdoor: 17°F DB/15°F WB
3. Conditions: Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

## ELECTRICAL

Power Supply	208/230V, 60Hz, 1Ph
System MCA	24.9
Connection Wiring	AWG 14/4
System MOCP	25.0
Compressor RLA	15.0
Outdoor Fan Motor RLA	1.3
Outdoor Fan Motor W	120
Indoor Fan Motor RLA	3.0
Indoor Fan Motor W	250
System Power Input @ Cooling (W)	1,916 (280 ~ 2,600)
System Power Input @ Heating (W)	2,180 (410 ~ 2600)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

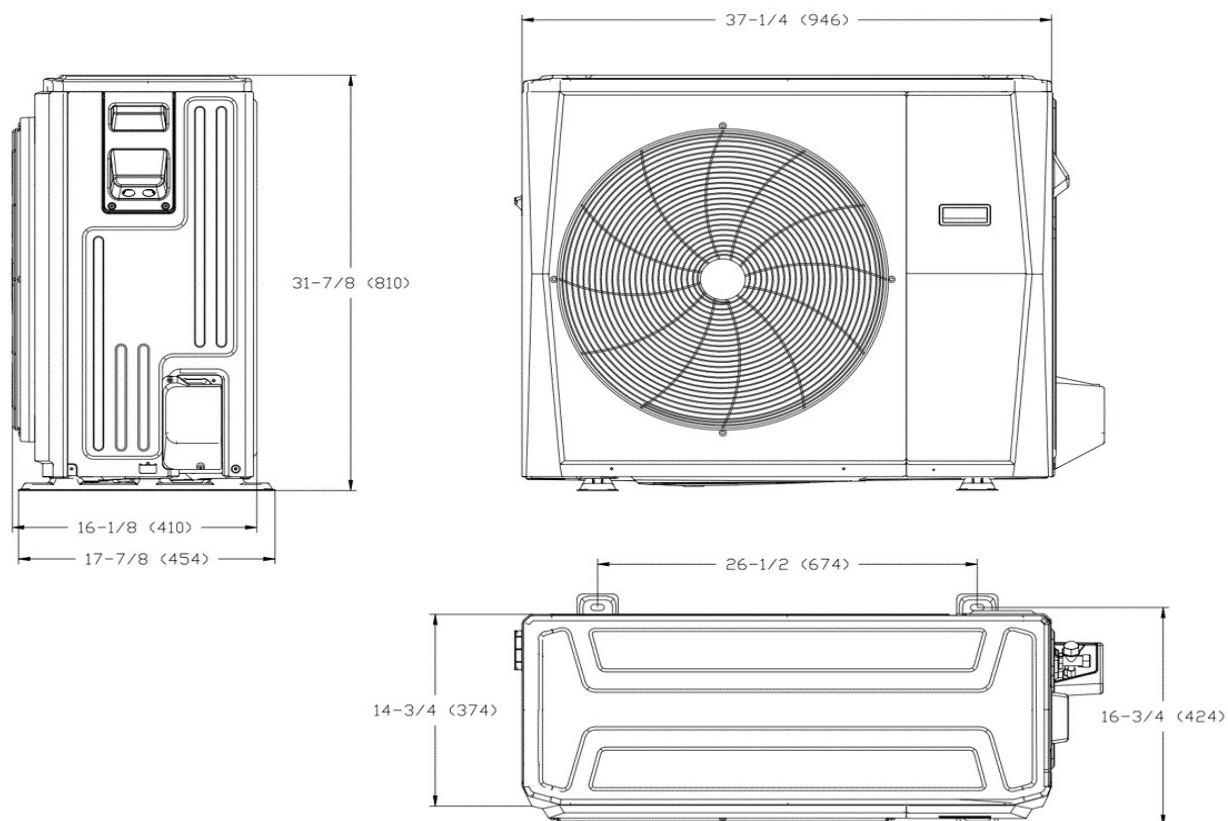
## PIPING

Throttle type(Indoor)	N/A
Throttle type(Outdoor)	EXV+Throttle valve
Liquid Size	3/8" (9.52mm)
Gas Size	5/8" (15.9mm)
Max. Piping Length(ft/m)	164 (50)
Max. Height Difference(ft/m)	82 (25)
Max. Pre-charged Length(ft/m)	25 (7.5)
Refrigerant Pre-charged Amount(oz/kg)	64 (1.8)
Additional Charge of Refrigerant((oz/ft)/(g/m)	0.32 (30)
Connection Method	Flared

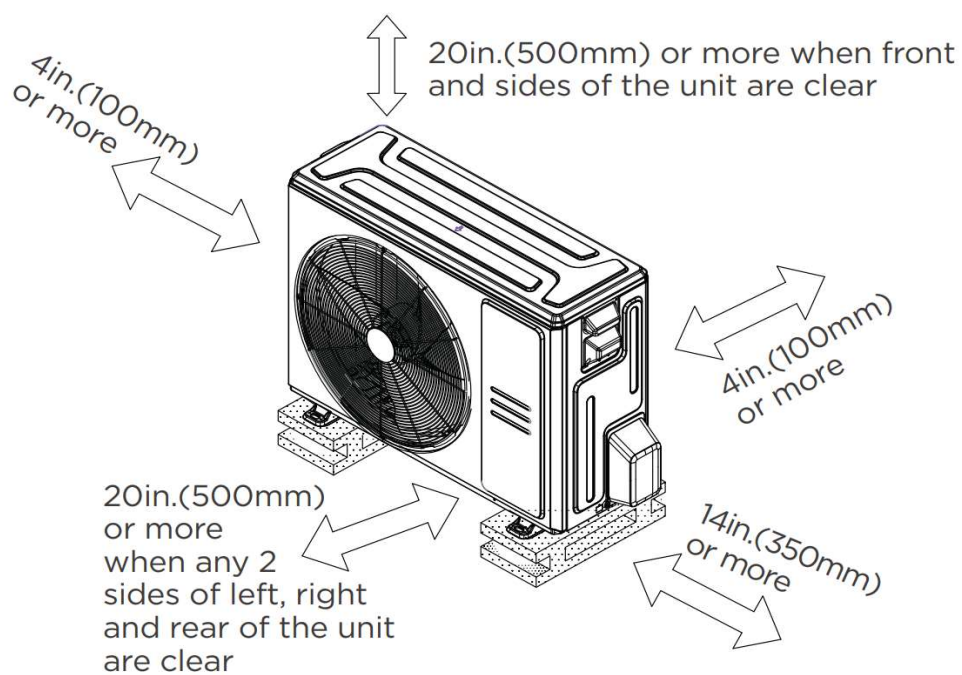


## Outdoor Unit Dimension

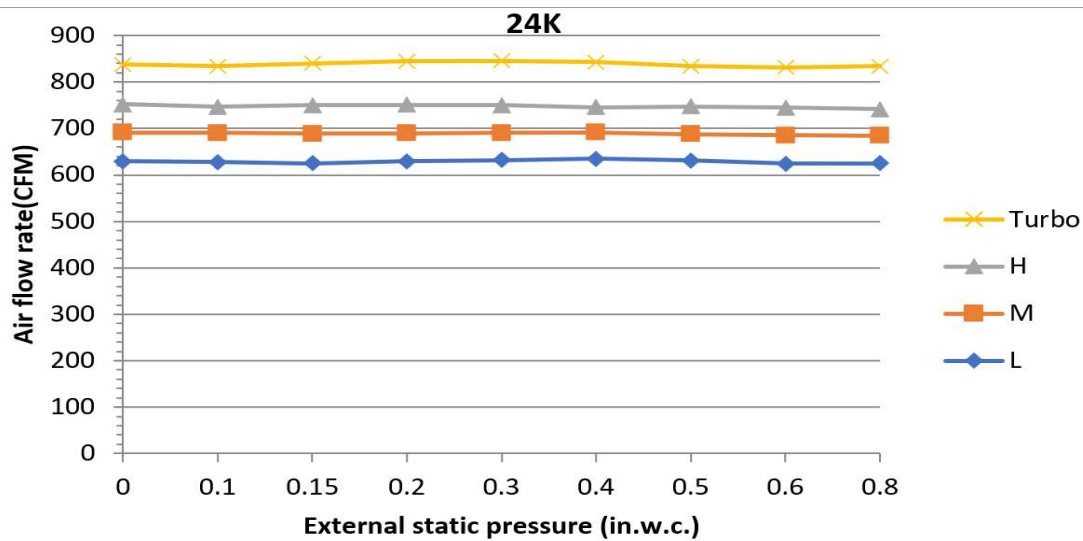
Unit:inch(mm)



## Installation Instruction



#### Fan Performance For Indoor Unit



#### Features

- Multi-position installation: horizontal(left or right), vertical( up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller:120N(X6)
  - Two way communication wired controller with built-in WiFi:120N(X6W)
  - Wireless remote controller
  - Third-Party 24V Thermostat
- High efficiency up to 18.7 SEER2, 12 EER2, 10 HSPF2
- 100% heat output at 5F\*
- Energy Star and Cold Climate Energy Star certified
- Chassis heater and crankcase heater equipped as standard

\* Rated cooling capacity/heating capacity at 5F>=100%