

# R454b Refrigerant

# SUBMITTAL DATA SHEET



Series Name: Regular Heat AHU Series  
Model Number: MASHS-H48B-2A/MO1BU-H48B-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)	1601 / 1471 / 1283 / 1095 / 1095	
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	56.5 / 54 / 51 / 48 / 48	
Dimension (WxDxH)	inch	24-1/2 x 21 x 53
	mm	622 x 534 x 1346
Package (WxDxH)	inch	27-3/8 x 27-3/4 x 56-1/2
	mm	695 x 705 x 1435
Net/Gross Weight	lbs	162 / 192
	kg	73.4 / 86.9

### OUTDOOR SPECIFICATION

Compressor Type	ROTARY	
Compressor Model	KTQ420D1UMU	
Refrigerant	R454B	
Refrigerant Oil Charge(mL)	1,000	
Refrigerant Oil	VG74	
Outdoor Air Flow (Max) (CFM)	4,238	
Outdoor Noise Level (dBA)	65	
Dimension (WxDxH)	inch	37-1/2 x 16-3/8 x 52-1/2
	mm	952 x 416 x 1333
Package (WxDxH)	inch	43-1/8 x 19-1/2 x 58-1/4
	mm	1095 x 495 x 1480
Net/Gross Weight	lbs	209 / 240
	kg	94.7 / 108.8

### EFFICIENCY

Cooling		Heating	
SEER2	17.7	HSPF2-4	10.0
EER2	10	COP	3.50

### PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	48,000
Min/Max Capacity	9,500 ~ 52,000
Moisture Removal(L/h)	4.65
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	50,000
1. @ 47°F Min/Max Capacity	11,700 ~ 60,000
2. @ 17°F Rated	40,000
3. @ 5°F Rated: Capacity / COP	35,200 / 1.9
3. @ 5°F Max: Capacity	35,200
Standard Operating Range(*F/*C)	-13~75 (-25 ~ 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

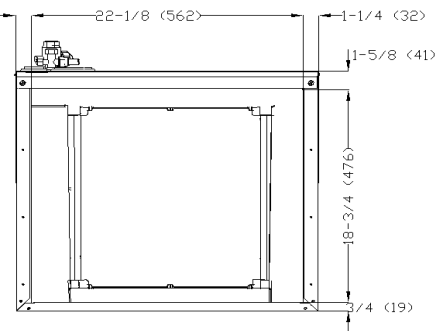
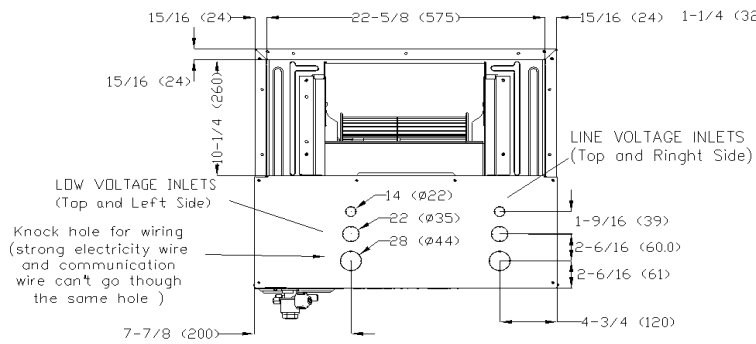
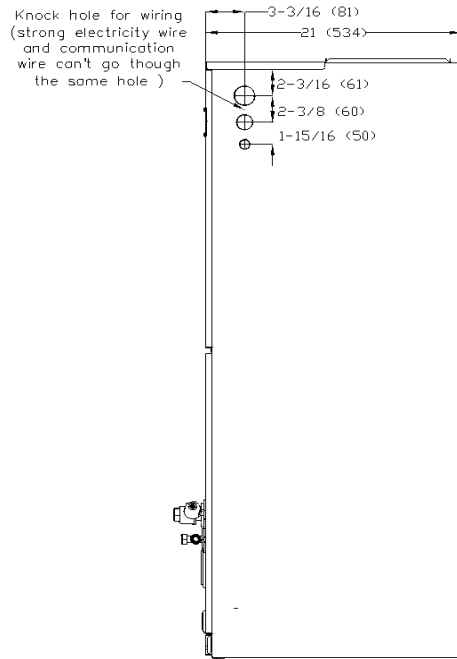
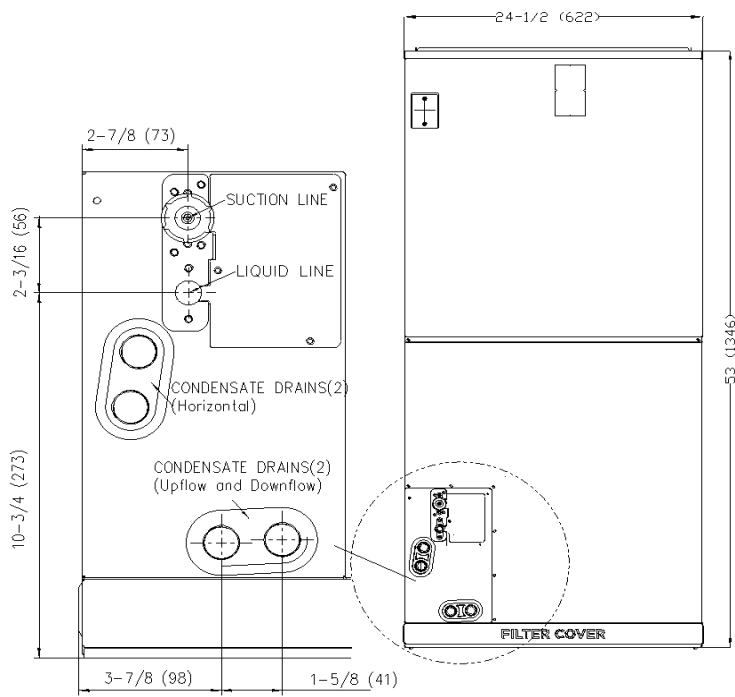
Power Supply	208/230V,60Hz,1Ph
System MCA	39.0
Communication Wiring	AWG 20/2
System MOCP	40.0
Compressor RLA	24.0
Outdoor Fan Motor RLA	1.2
Outdoor Fan Motor W	85
Indoor Fan Motor RLA	7.8
Indoor Fan Motor W	750
System Power Input @ Cooling (W)	4,706 (1,300 ~ 6,050)
System Power Input @ Heating (W)	4,605 (705 ~ 5,470)
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	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)	0.32 (30)
Connection Method	Flared

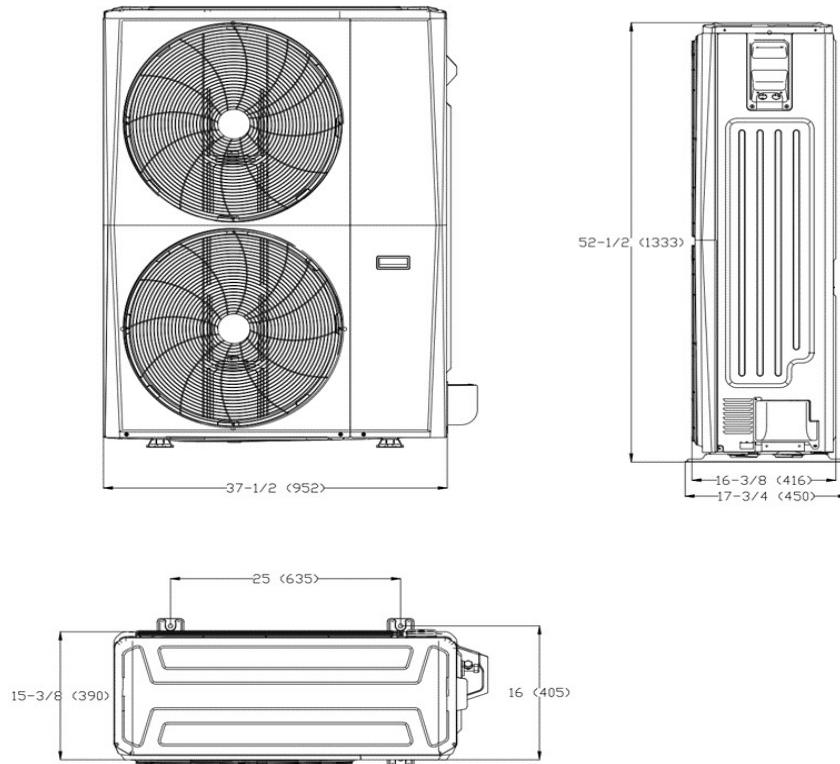
Indoor Unit Dimension

Unit:inch(mm)

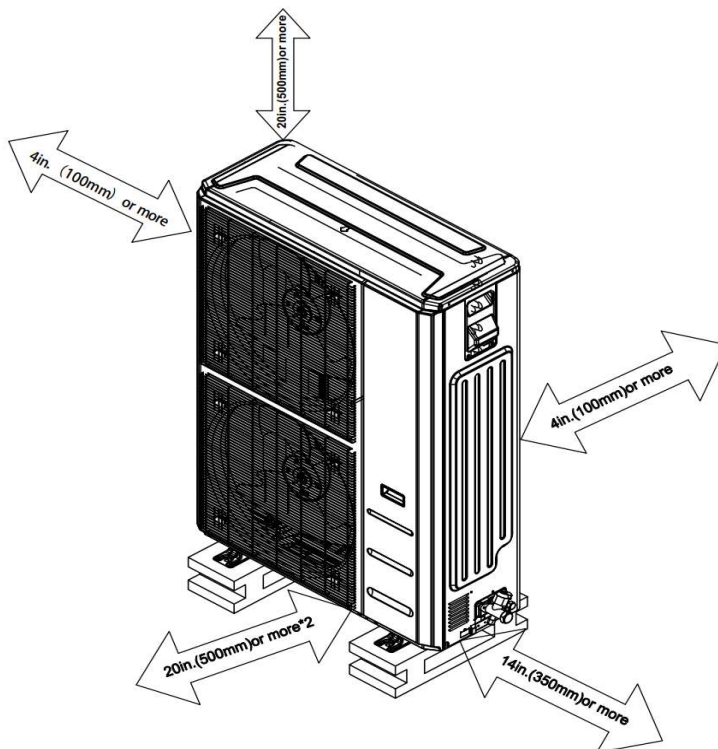


## Outdoor Unit Dimension

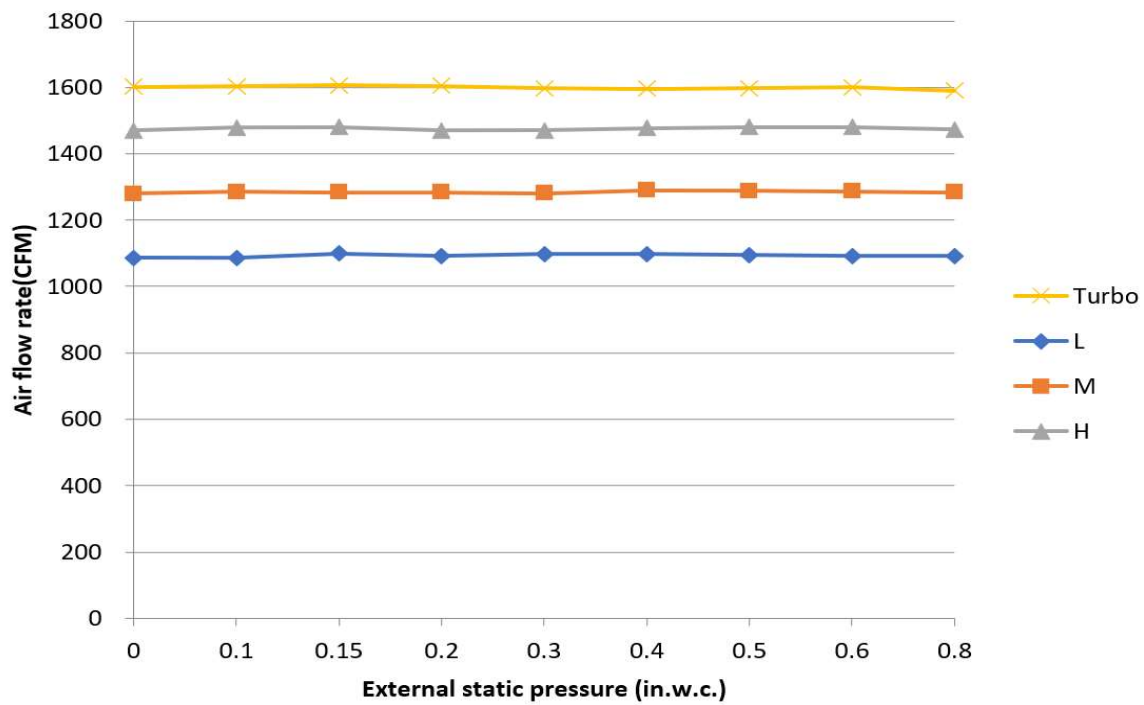
Unit:inch(mm)



## 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
- Chassis heater and crankcase heater equipped as standard