

R454b Refrigerant

SUBMITTAL DATA SHEET



Series Name: Extreme Heat AHU Series
Model Number: MASHS-H48B-2A/MO1HU-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 / 54.5 / 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	TWIN-ROTARY		
Compressor Model	EKPQ420D1UMUA		
Refrigerant	R454B		
Refrigerant Oil Charge(mL)	1,460		
Refrigerant Oil	VG75		
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	HSPF2-4	10.2
EER2	10	COP	3.5

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	48,000
Min/Max Capacity	7,300 ~ 55,500
Moisture Removal(L/h)	4.84
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	9,500 ~ 65,000
2. @ 17°F Rated	40,000
3. @ 5°F Rated: Capacity / COP	46,000 / 2
3. @ 5°F Max: Capacity	46,000
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

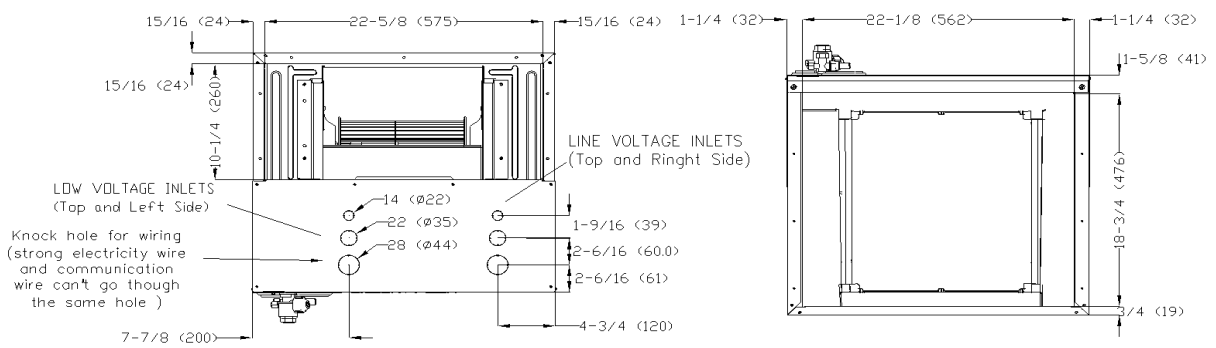
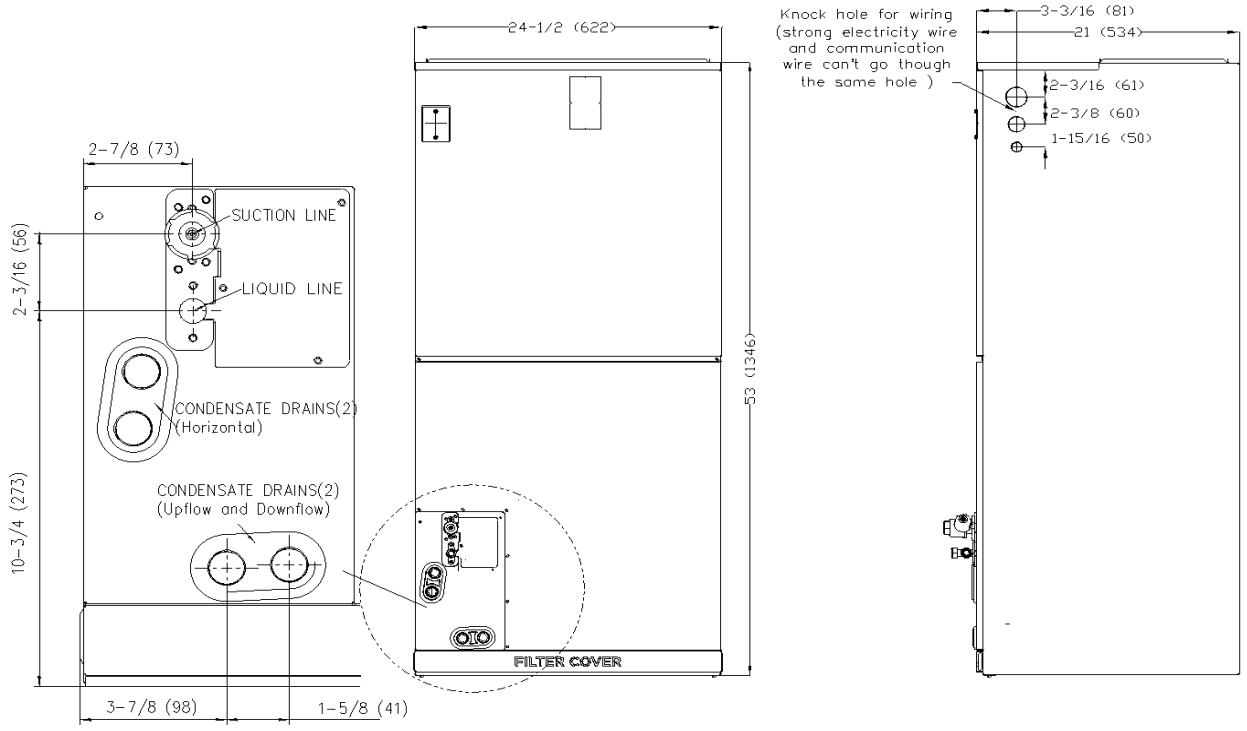
Power Supply	208/230V,60Hz,1Ph		
System MCA	44.0		
Communication Wiring	AWG 20/2		
System MOCP	45.0		
Compressor RLA	27.0		
Outdoor Fan Motor RLA	1.2		
Outdoor Fan Motor W	85		
Indoor Fan Motor RLA	7.8		
Indoor Fan Motor W	750		
System Power Input @ Cooling (W)	4,752 (1,360 ~ 6,250)		
System Power Input @ Heating (W)	4,186 (720 ~5,450)		
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		

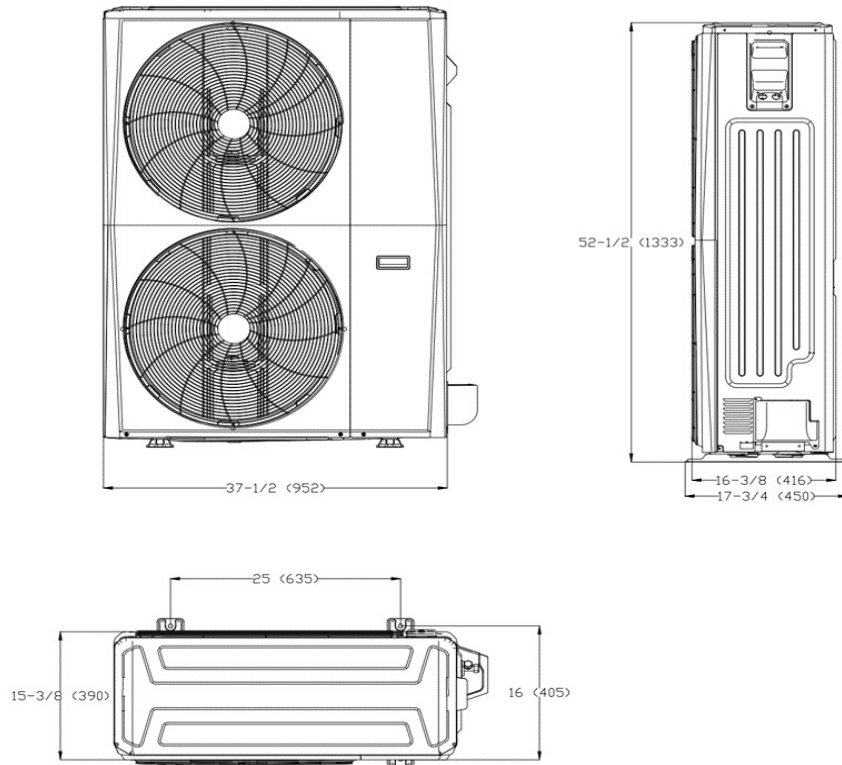
Indoor Unit Dimension

Unit:inch(mm)

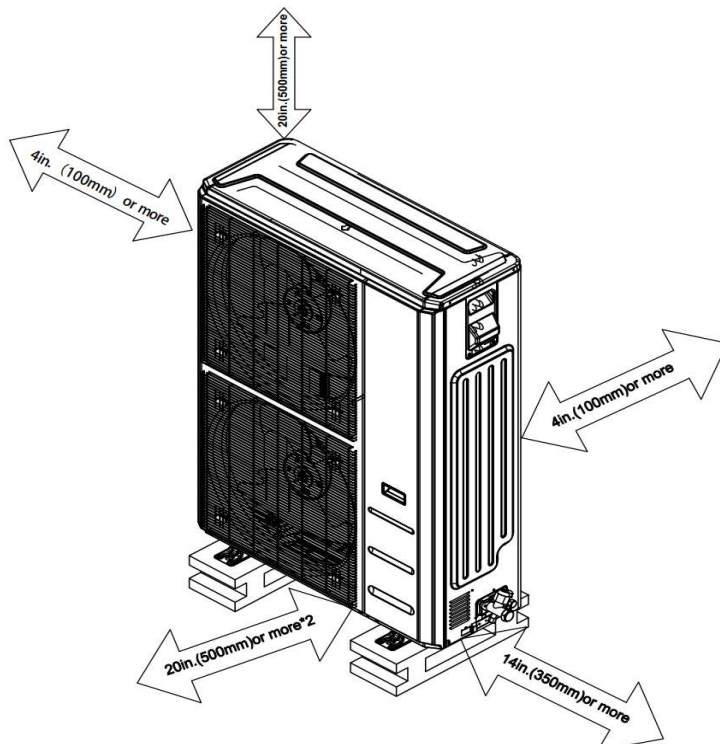


Outdoor Unit Dimension

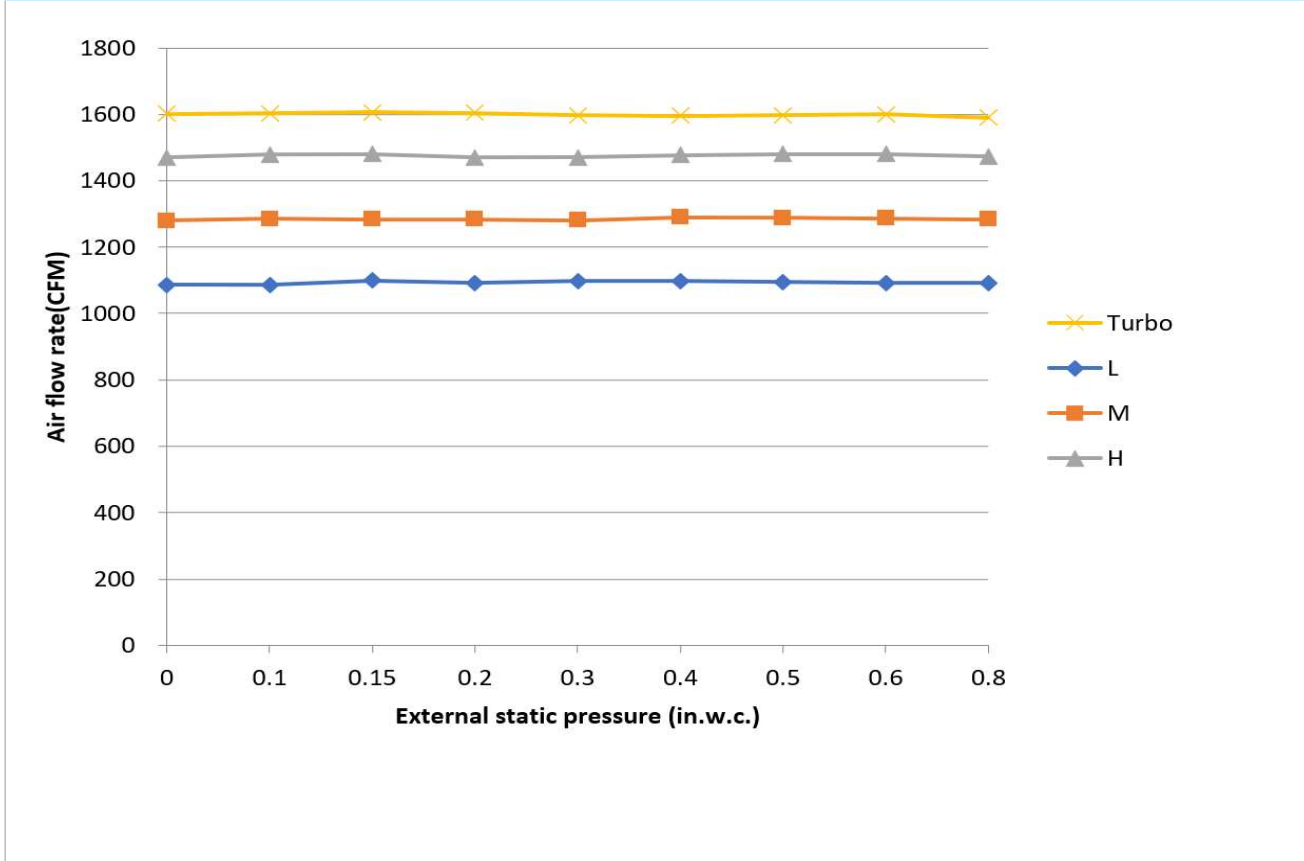
Unit:inch(mm)



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