

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 (W×D×H)	inch	21 x 24-1/2 x 53
	mm	534 x 622 x 1346
Package (W×D×H)	inch	27-15/16 x 26-3/4 x 56-1/2
	mm	710 x 680 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 (W×D×H)	inch	37-1/2 x 16-3/8 x 52-1/2
	mm	952 x 416 x 1333
Package (W×D×H)	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

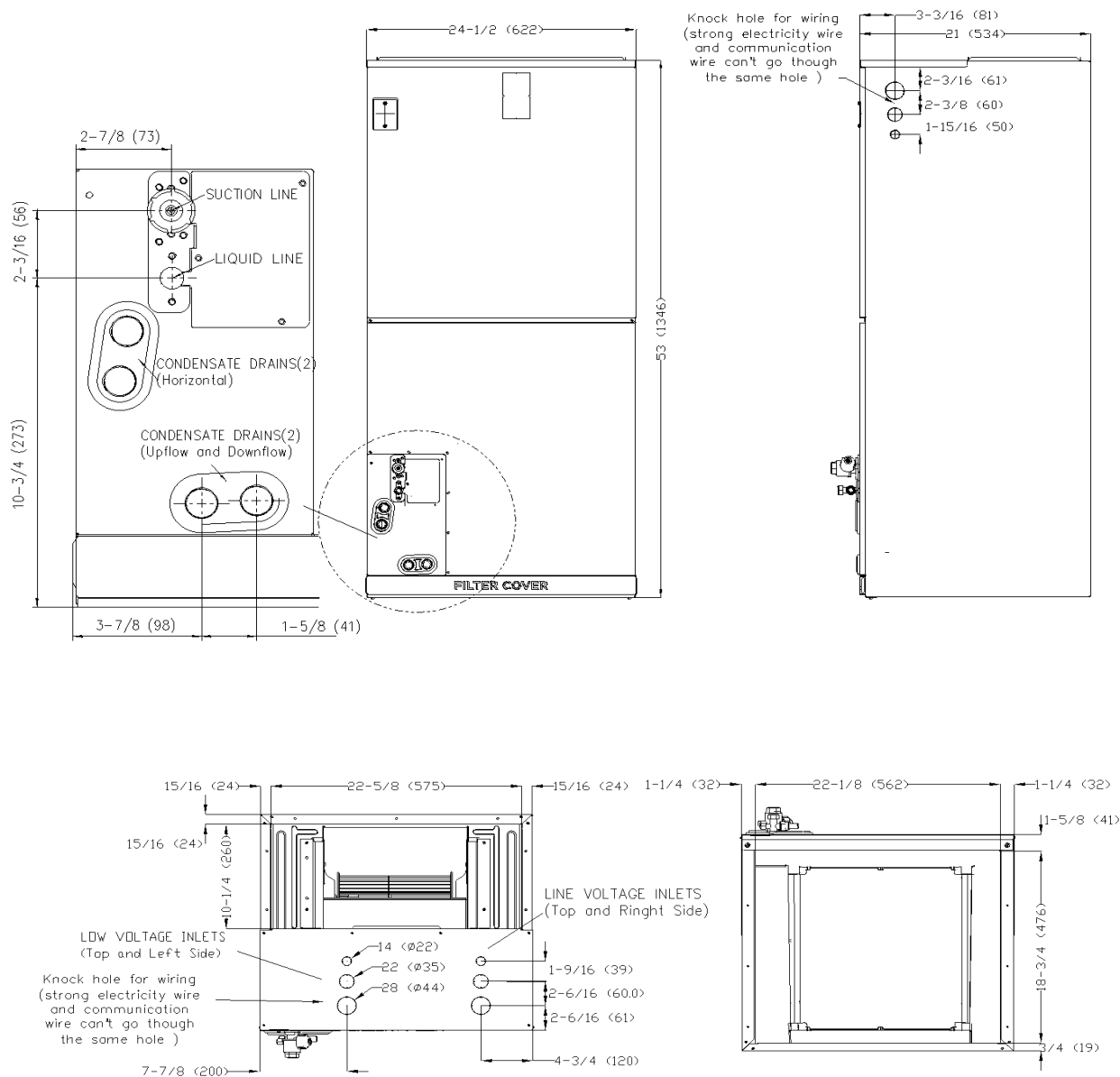
Power Supply	208/230V,60Hz,1Ph
System MCA	39.0
Communication Wiring	AWG 20/2
System MOCP	40.0
Compressor RLA	24.0
Outdoor Fan Motor RLA	1.2
Outdoor Fan Motor W	85
Indoor Fan Motor RLA	7.8
Indoor Fan Motor W	750
System Power Input @ Cooling (W)	4,706 (1,300 ~ 6,050)
System Power Input @ Heating (W)	4,605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

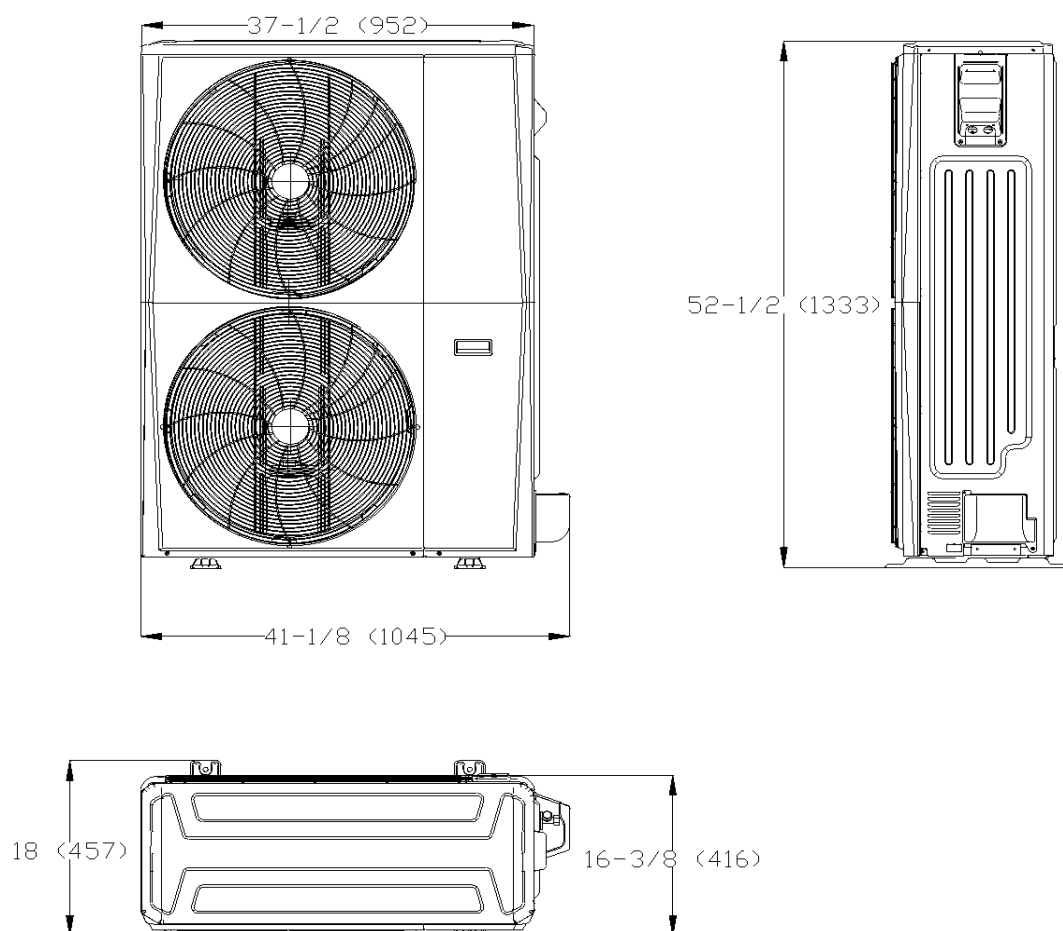
Indoor Unit Dimension

Unit:inch(mm)

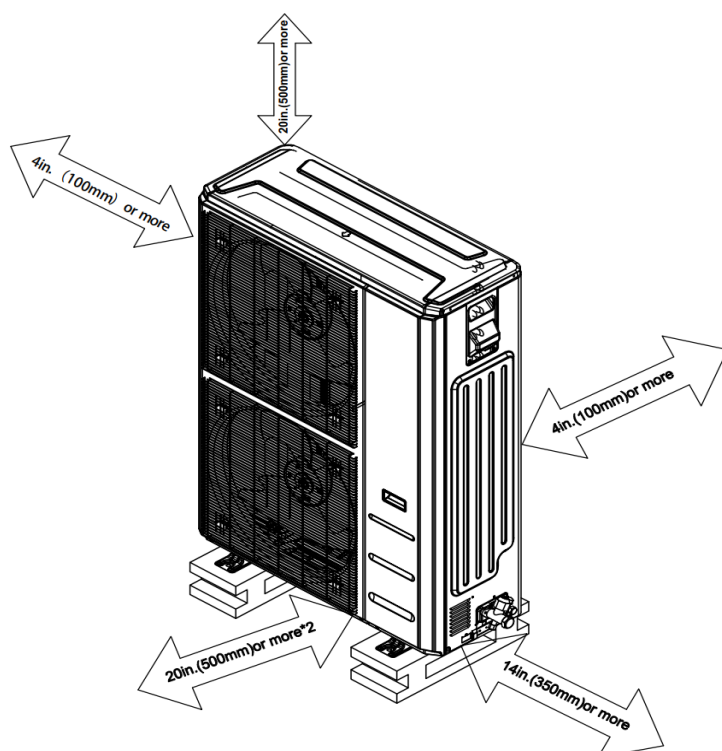


Outdoor Unit Dimension

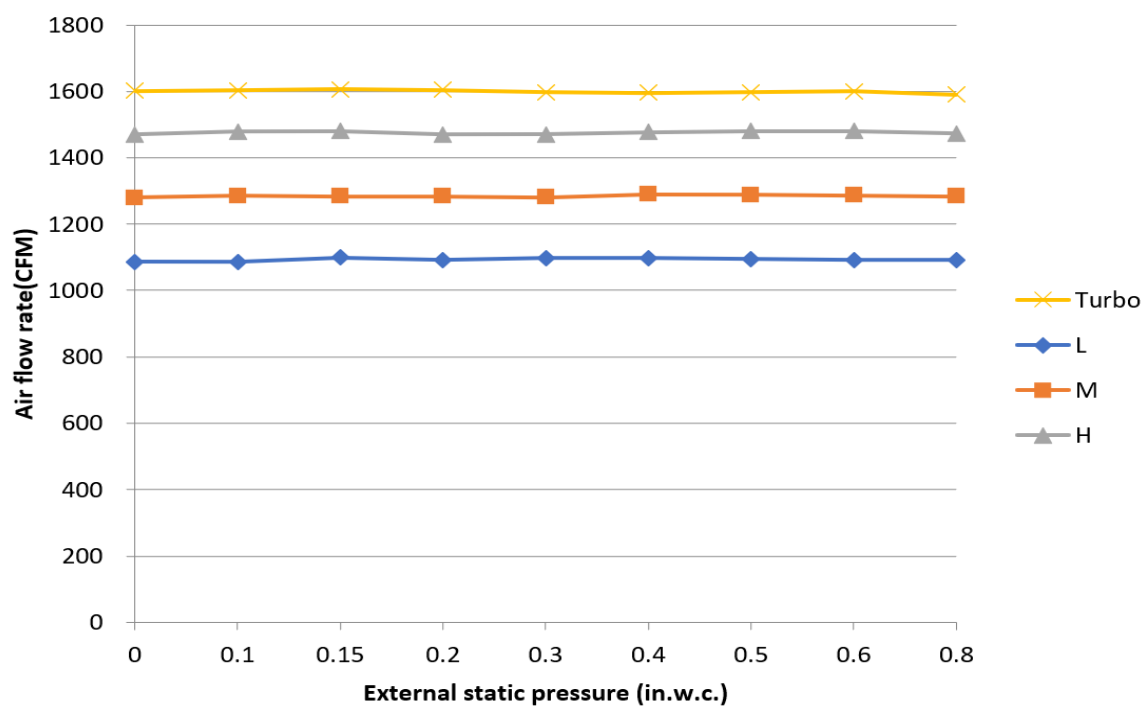
Unit:inch(mm)



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