

R454b Refrigerant

SUBMITTAL DATA SHEET



Series Name: One Way Cassette Energy Star Series
 Model Number: MCAHU-H12B-2A/MO1ES-H12B-2A

One Way Cassette Heat Pump System

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



INDOOR SPECIFICATION

Indoor Air Flow (Turbo/H/M/L/Si) (CFM)	353 / 312 / 283 / 247 / 177	
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	43 / 43 / 37.5 / 26 / 22	
Dimension (W×D×H)	inch	50-1/4 x 13-1/4 x 9
	mm	1278 x 335 x 228
Package (W×D×H)	inch	57-5/8 x 22-1/2 x 22-5/8
	mm	1463 x 571 x 575
Net/Gross Weight	lbs	45 / 82
	kg	20.5 / 37.4

OUTDOOR SPECIFICATION

Compressor Type	ROTARY	
Compressor Model	KSK103D33UEZ3	
Refrigerant	R454B	
Refrigerant Oil Charge(mL)	310	
Refrigerant Oil	VG74	
Outdoor Air Flow (Max) (CFM)	1,236	
Outdoor Noise Level (dBA)	54.5	
Dimension (W×D×H)	inch	30-1/8 x 11-7/8 x 21-7/8
	mm	765 x 303 x 555
Package (W×D×H)	inch	34-7/8 x 13-1/4 x 24
	mm	887 x 337 x 610
Net/Gross Weight	lbs	62 / 68
	kg	28.2 / 30.7

EFFICIENCY

Cooling		Heating	
SEER2	22.1	HSPF2-4	10.0
EER2	12.3	COP	3.40

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	12,000
Min/Max Capacity	3,900~13,800
Moisture Removal(L/h)	1.54
Standard Operating Range(°F/°C)	-13~122 (-25~50)
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	12,000
1. @ 47°F Min/Max Capacity	4,700~15,300
2. @ 17°F Rated	8,600
3. @ 5°F Rated: Capacity / COP	8,600 / 2.48
3. @ 5°F Max: Capacity	8,600
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

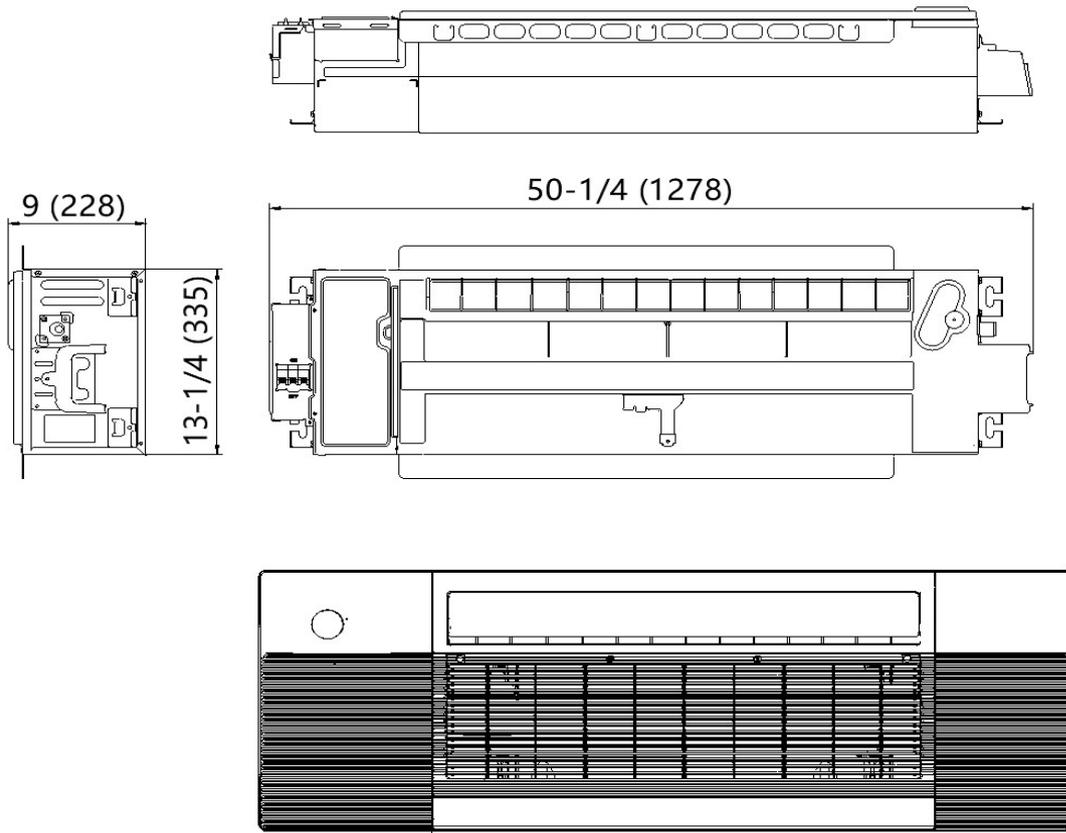
Power Supply	208 / 230 V,60 Hz,1 Ph	
System MCA	12.0	
Connection Wiring	AWG 14/4	
System MOCP	15.0	
Compressor RLA	7.3	
Outdoor Fan Motor RLA	0.6	
Outdoor Fan Motor W	34	
Indoor Fan Motor RLA	1	
Indoor Fan Motor W	30	
System Power Input @ Cooling (W)	976 (220~1,180)	
System Power Input @ Heating (W)	1,034 (275~1,310)	
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
Liquid Size	1/4" (6.35 mm)
Gas Size	3/8" (9.52 mm)
Max. Piping Length(ft/m)	82 (25)
Max. Height Difference(ft/m)	49 (15)
Max. Pre-charged Length(ft/m)	25 (7.5)
Refrigerant Pre-charged Amount(oz/kg)	32 (0.92)
Additional Charge of Refrigerant(oz/ft)/(g/m)	0.16 (15)
Connection Method	Flared

Indoor Unit Dimension

Unit: inch (mm)

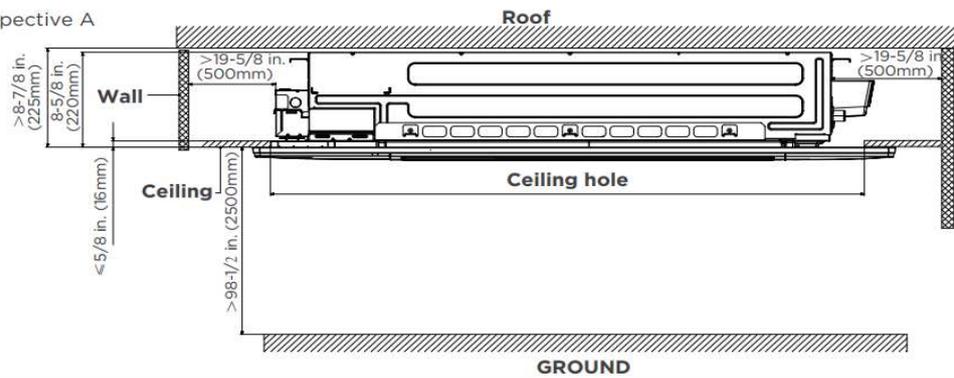


Installation Instruction

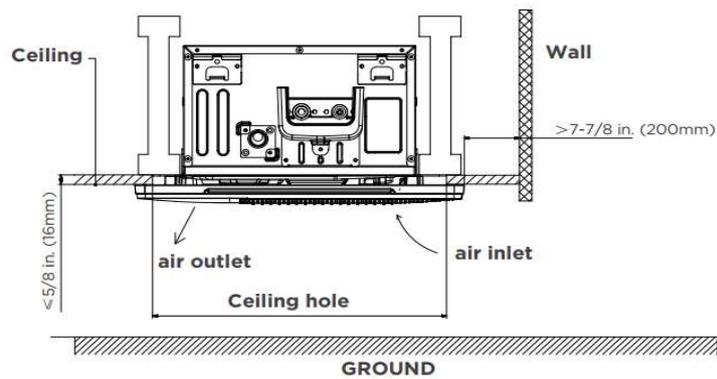
Installation place

(unit: inch/mm)

Perspective A

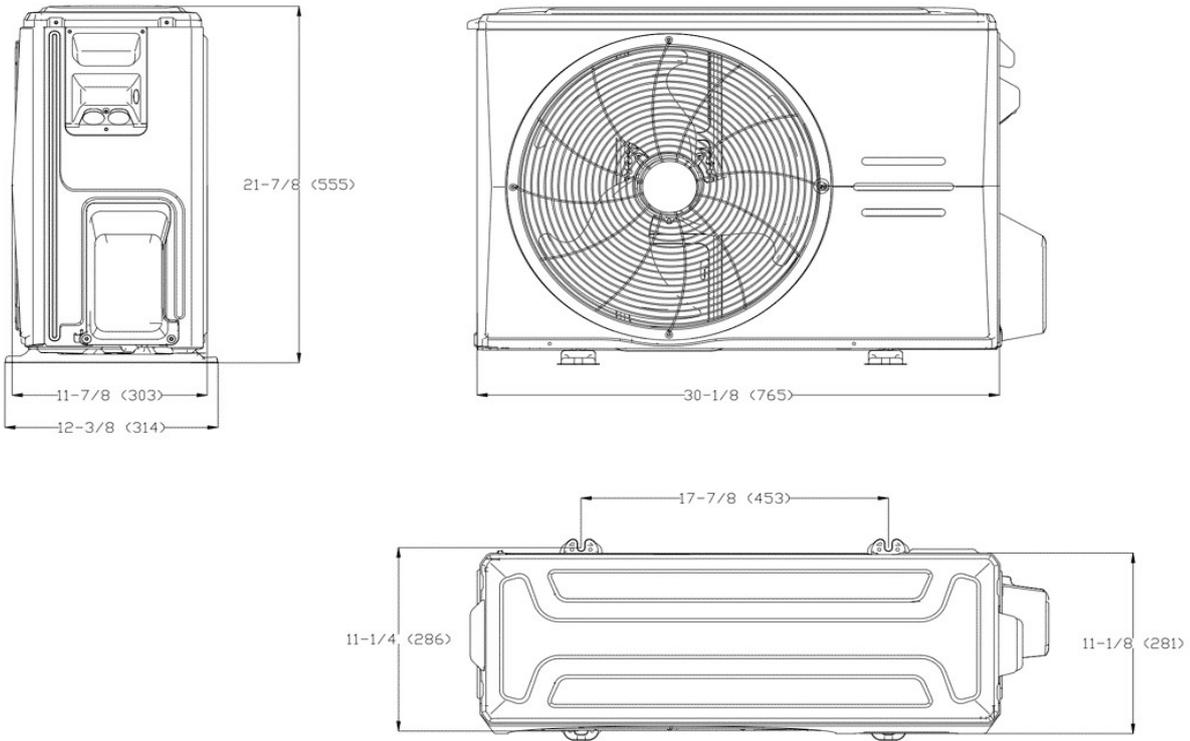


Perspective B

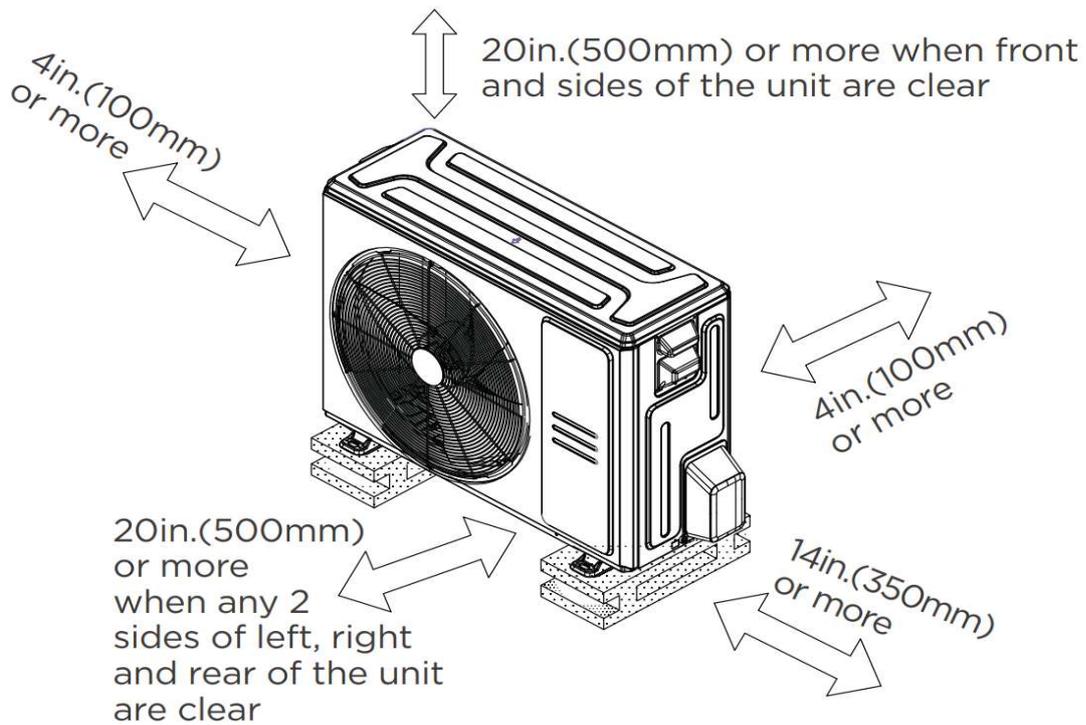


Outdoor Unit Dimension

Unit: inch (mm)



Installation Instruction



FEATURES

- Designed to fit between both I-joist spacing and traditional joist spacing
- Elevation panel
- Refrigerant leakage detection sensor(Optional)
- Humidity sensor
- Built-in pump
- Built-in circuit breaker
- 1~100% fan speed setting
- WiFi capability: through WiFi dongle or wired controller with built-in Wi-Fi
- OTA(by using WiFi dongle)
- 2-pin connector(HA/HB) for programmable wired controller
- Multiple control options available:
 - Two-way communication wired controller with built-in Wi-Fi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat*

*24V interface is required.