

R454b Refrigerant

SUBMITTAL DATA SHEET



Series Name: 4-Way Cassette Energy Star Series
Model Number: MCDHU-H12B-2A/ MO1ES-H12B-2A

4-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)	418 / 365 / 306 / 194 / 147
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	46 / 42 / 39 / 27 / 24
Dimension (W×D×H)	inch 22-1/2 x 22-1/2 x 9-5/8
	mm 570 x 570 x 245
Package (W×D×H)	inch 28-1/8 x 25-1/4 x 11-5/8
	mm 715 x 640 x 295
Net/Gross Weight	lbs 35/42
	kg 16/19

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 63 / 68
	kg 28.2 / 30.7

EFFICIENCY

Cooling		Heating	
SEER2	21.1	HSPF2-4	10.4
EER2	12.5	COP	3.55

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	12,000
Min/Max Capacity	3,700~14,000
Moisture Removal(L/h)	1.10
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	4,700~15,000
2. @ 17°F Rated	8,500
3. @ 5°F Rated: Capacity / COP	8,400/2.4
3. @ 5°F Max: Capacity	8,400
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

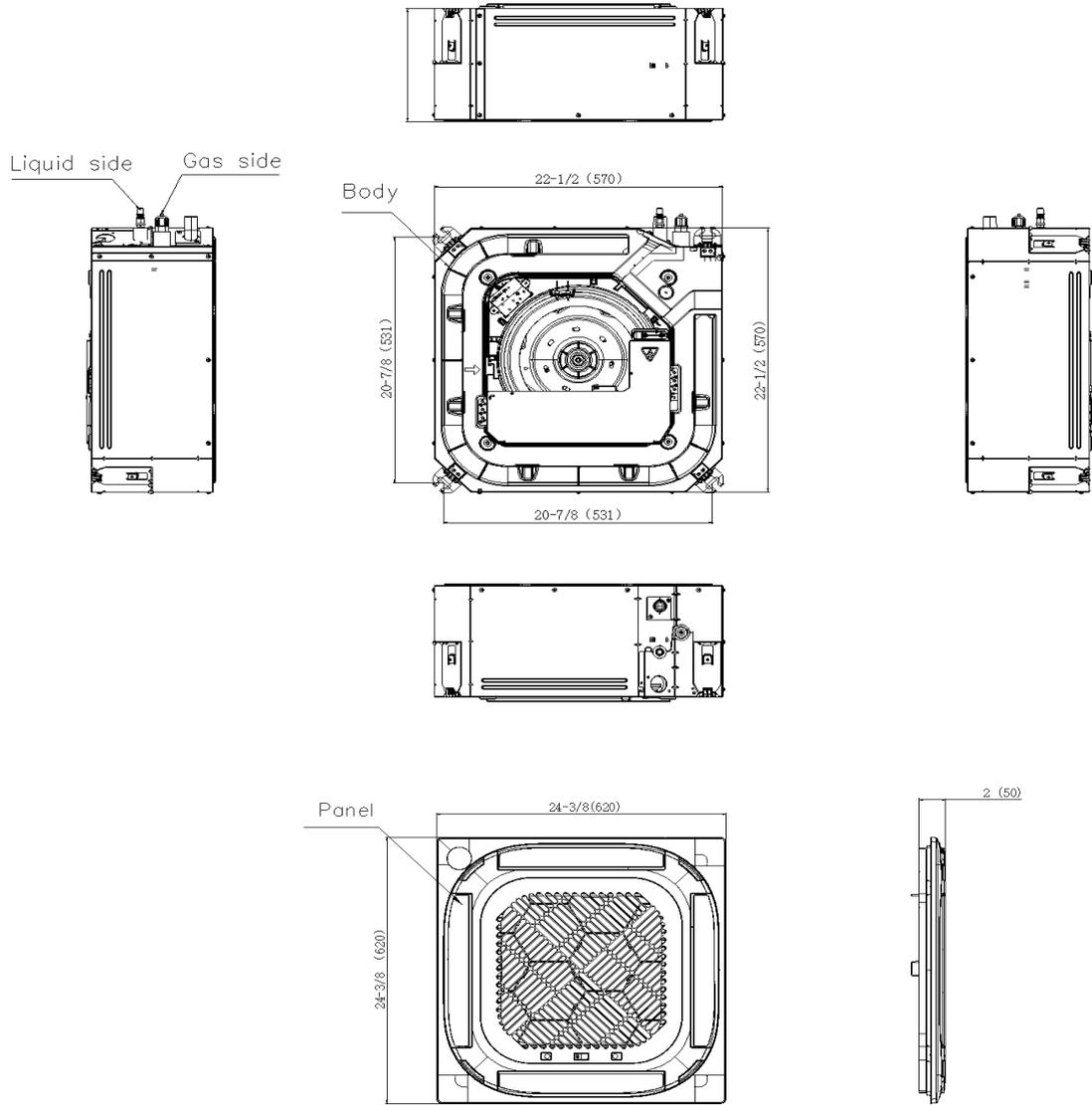
Power Supply	208/230V,60Hz,1Ph
System MCA	12.0
Connection Wiring	AWG 14/4
System MOCP	15.0
Compressor RLA	7.3
Outdoor Fan Motor RLA	0.6
Outdoor Fan Motor W	34
Indoor Fan Motor RLA	0.9
Indoor Fan Motor W	45
System Power Input @ Cooling (W)	968 (220 ~ 1,160)
System Power Input @ Heating (W)	991 (270 ~ 1,200)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

PIPING

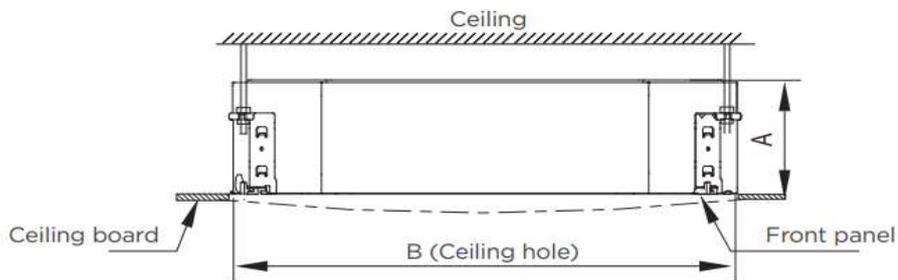
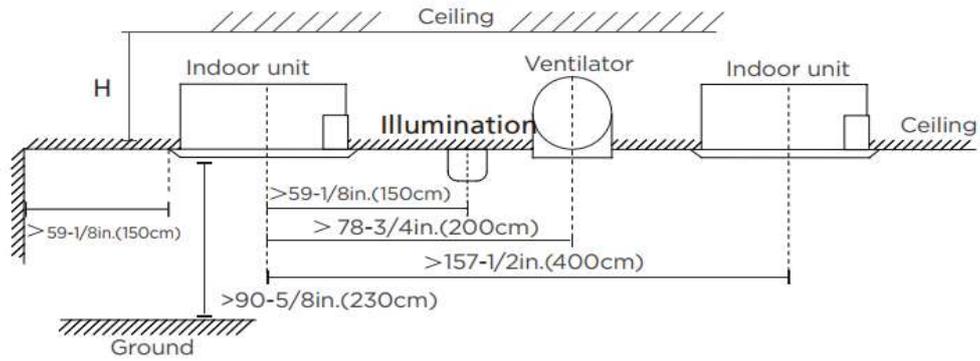
Throttle type(Indoor)	N/A
Throttle type(Outdoor)	EXV
Liquid Size	1/4" (6.35mm)
Gas Size	3/8" (9.52mm)
Max. Piping Length(ft/m)	82 (25)
Max. Height Difference(ft/m)	49 (15)
Max. Pre-charged Length(ft/m)	25 (7.5)
Refrigerant Pre-charged Amount(oz/kg)	32 (0.92)
Additional Charge of Refrigerant((oz/ft)/(g/m)	0.16 (15)
Connection Method	Flared

Indoor Unit Dimension

Unit: inch (mm)



Installation Instruction

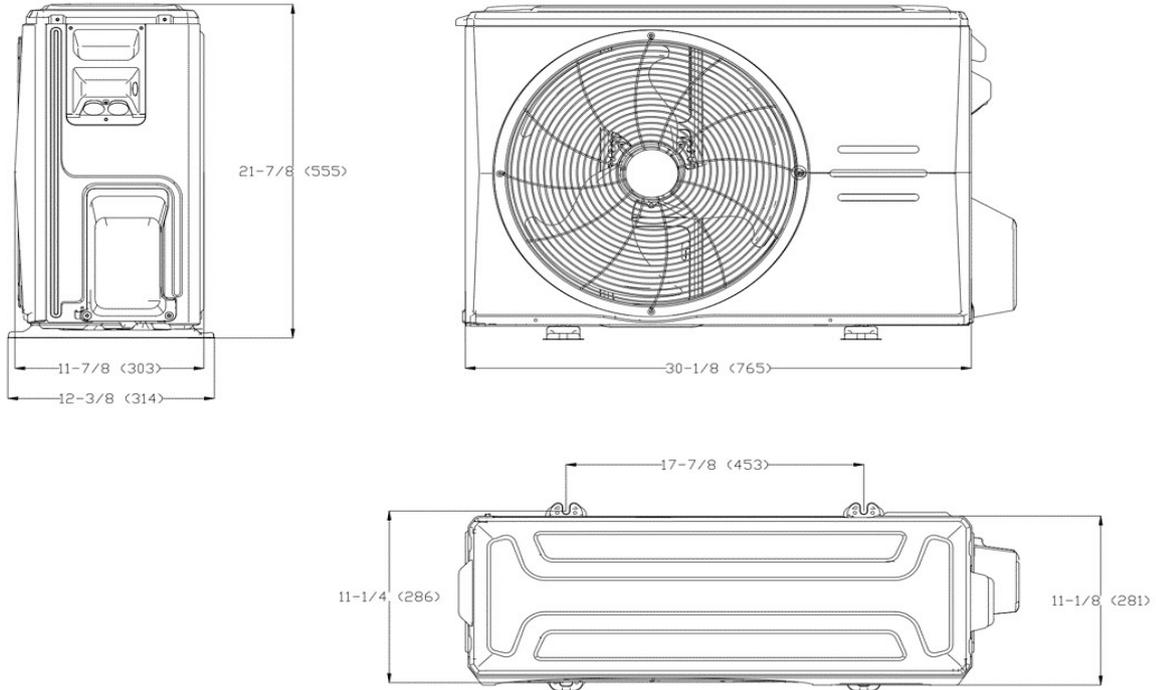


Distance from ceiling relative to height of indoor unit

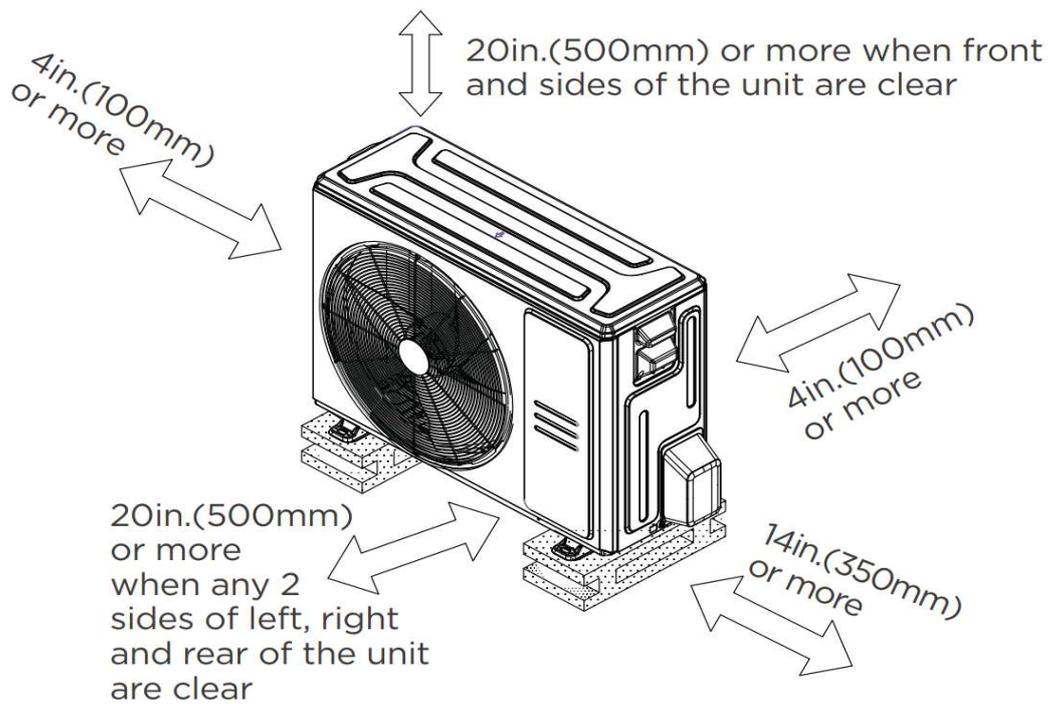
MODEL	Length of A	Length of H	Length of B
9K/12K/18K	9-5/8 in.(245mm)	$> 10\text{-}3/4\text{in. (275mm)}$	23-5/8 in.(600mm)
24K	8 in.(205mm)	9 in.(230mm)	35-3/8 in.(900mm)
36K	9-5/8 in.(245mm)	10-3/4 in.(271mm)	
48K	11-1/4 in.(287mm)	12-1/4 in.(313mm)	

Outdoor Unit Dimension

Unit: inch (mm)



Installation Instruction



FEATURES

- 360° Air Flow
- Remote on-off and alarm ports
- Refrigerant leakage detection sensor(Optional)
- Humidity sensor
- Built-in pump
- 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.