

4 Way Cassette Premium Series



Indoor Unit : NDHAS4CBB-12
Outdoor model: NDHAS22BA-12-O

4-Way Cassette 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)	417.9 / 364.9 / 306.1 / 194.2 / 147.2
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	46/42.0/38.5/26.5/24.0
Dimension (W×D×H)	inch 22.44 x 22.44 x 9.65 mm 570.0×570.0×245.0
Package (W×D×H)	inch 28.15 x 25.20 x 11.61 mm 715×640×295
Net/Gross Weight	lbs 35.27/41.89 kg 16.0/19.0

OUTDOOR SPECIFICATION

Compressor Type	ROTARY
Compressor Model	KSK103D33UEZ3
Refrigerant	R454B
Refrigerant Oil Charge(mL)	310
Refrigerant Oil	VG74
Outdoor Air Flow (Max) (CFM)	1236.1
Outdoor Noise Level (dBA)	54.5
Dimension (W×D×H)	inch 30.12 x 11.93 x 21.85 mm 765.0×303.0×555.0
Package (W×D×H)	inch 34.92 x 13.27 x 24.02 mm 887×337×610
Net/Gross Weight	lbs 62.17/67.68 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 12000
Min/Max Capacity 3700~14000
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 12000
1. @ 47°F Min/Max Capacity 4700~15000
2. @ 17°F Rated 8500
3. @ 5°F Rated: Capacity / COP 8400/2.40
3. @ 5°F Max: Capacity 8400
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

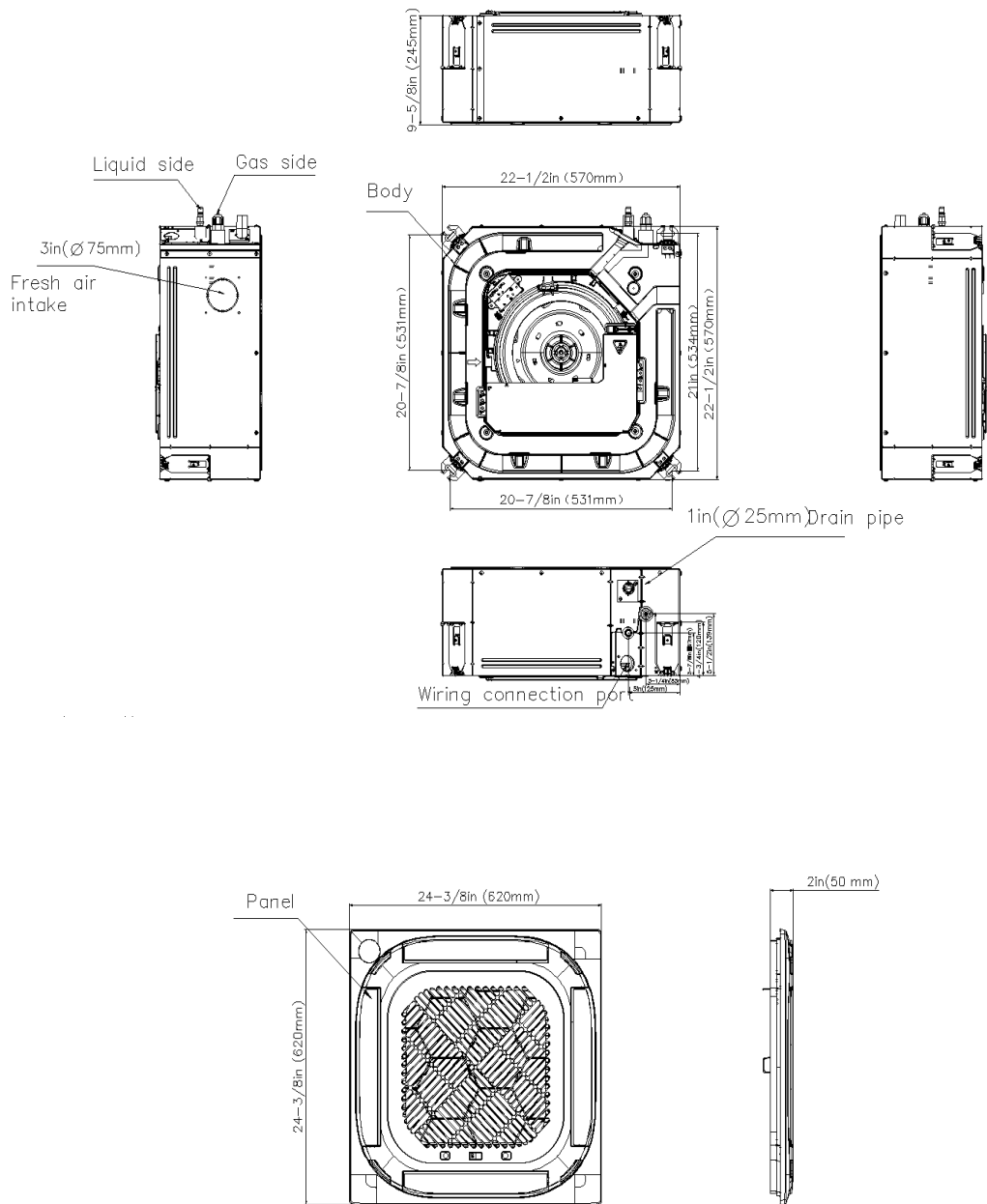
ELECTRICAL

Power Supply	208/230V,60Hz,1Ph
System MCA	12.00
Connection Wiring	14#x4
System MOCP	15
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 ~ 1160)
System Power Input @ Heating (W)	991(270 ~1200)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

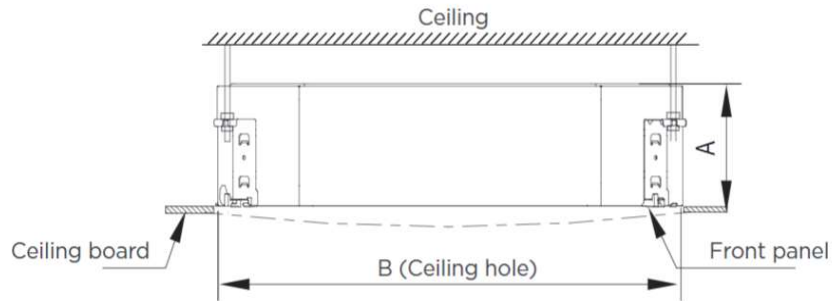
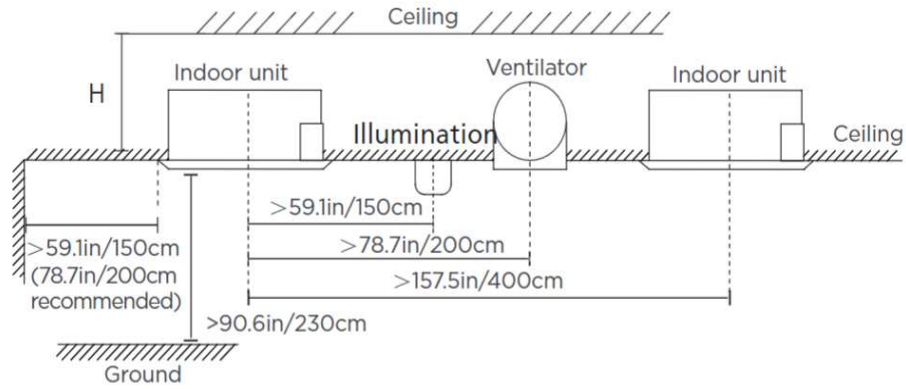
PIPING

Throttle type(Indoor)	N/A
Throttle type(Outdoor)	EXV
Liquid Size	6.35mm(1/4in)
Gas Size	9.52mm(3/8in)
Max. Piping Length(ft/m)	82.00(25)
Max. Height Difference(ft/m)	49.20(15)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	32.45(0.92)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.16(15)
Connection Method	Flared

Indoor Unit Dimension



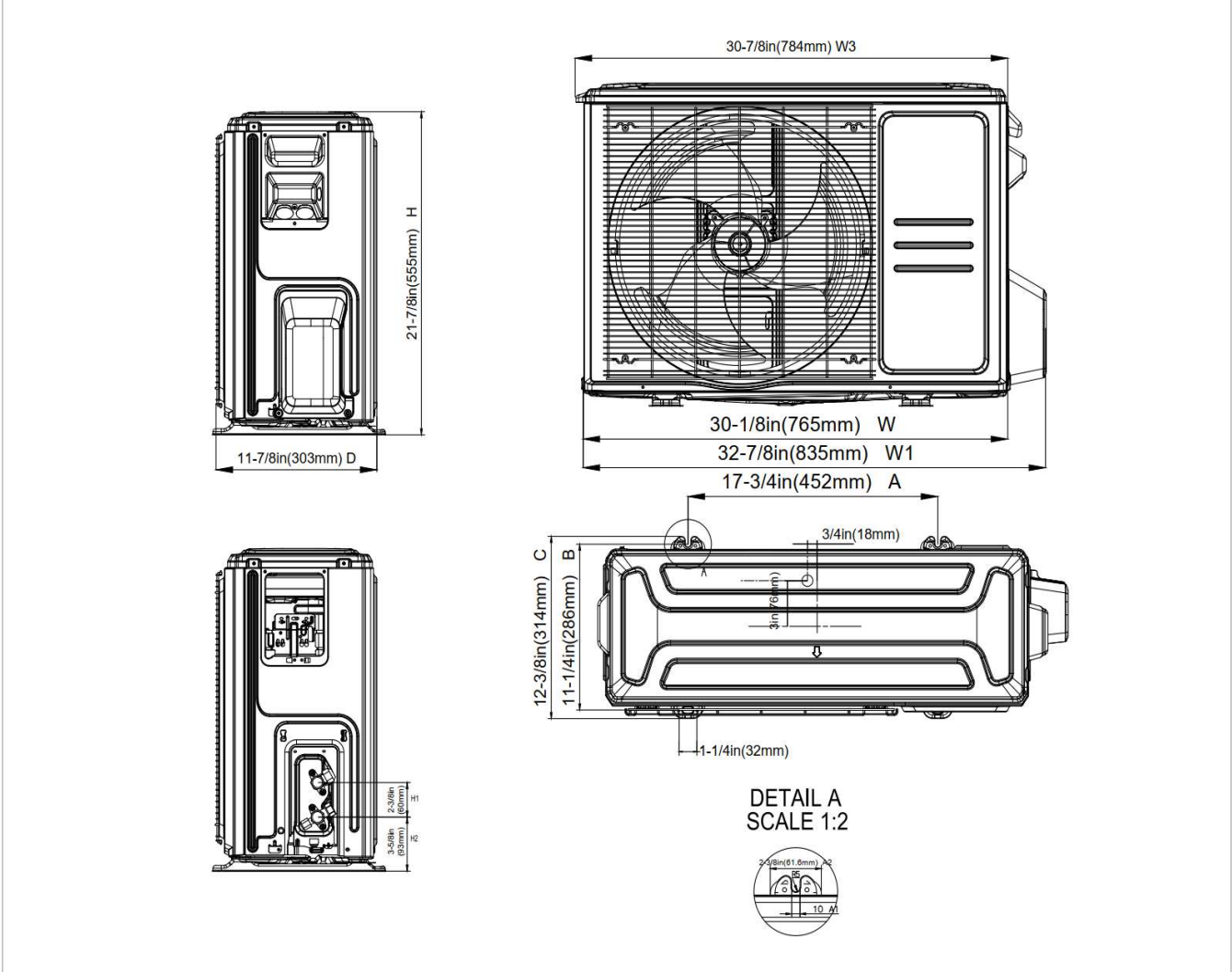
Installation Instruction



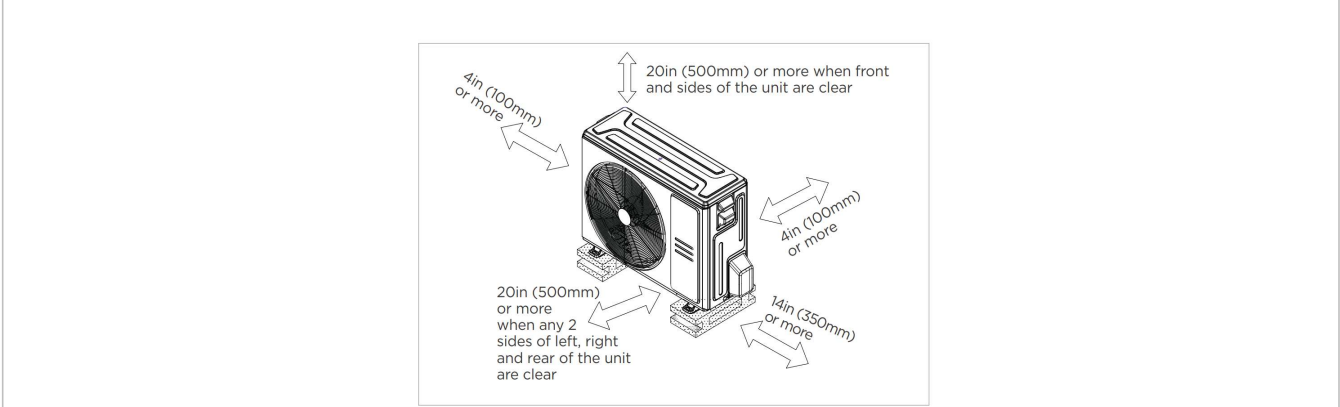
Distance from ceiling relative to height of indoor unit

MODEL	Length of A	Length of H	Length of B
9K/12K/18K	9.6in (245mm)	$>10.8\text{in}$ (275mm)	23.6in (600mm)
24K	8.03in (205mm)	9.06in (230mm)	35.4in (900mm)
36K	9.65in (245mm)	10.7in (271mm)	
48K	11.3in (287mm)	12.3in (313mm)	

Outdoor Unit Dimension



Installation Instruction



☒ Meets all spatial requirements shown in Installation Clearance Requirements above.

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 WiFi
- OTA(by using WiFi dongle)
- 2-pin connector(HA/HB) for programmable wired controller
- Multiple control options available:
 - Infrared wired controller: 120L
 - Wireless remote controller
 - Third-Party 24V Thermostat*

*24V interface is required.