



4-Way Ceiling Heat Pump System

Indoor Model: SAK-12-CT1/220V	Outdoor Model: SAK-12-CT2/220V
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:



INDOOR SPECIFICATION

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 (WxDxH)	inch	22.44 x 22.44 x 9.65
	mm	570.0x570.0x245.0
Package (WxDxH)	inch	28.15 x 25.20 x 11.61
	mm	715x640x295
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 (WxDxH)	inch	30.12 x 11.93 x 21.85
	mm	765.0x303.0x555.0
Package (WxDxH)	inch	34.92 x 13.27 x 24.02
	mm	887x337x610
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

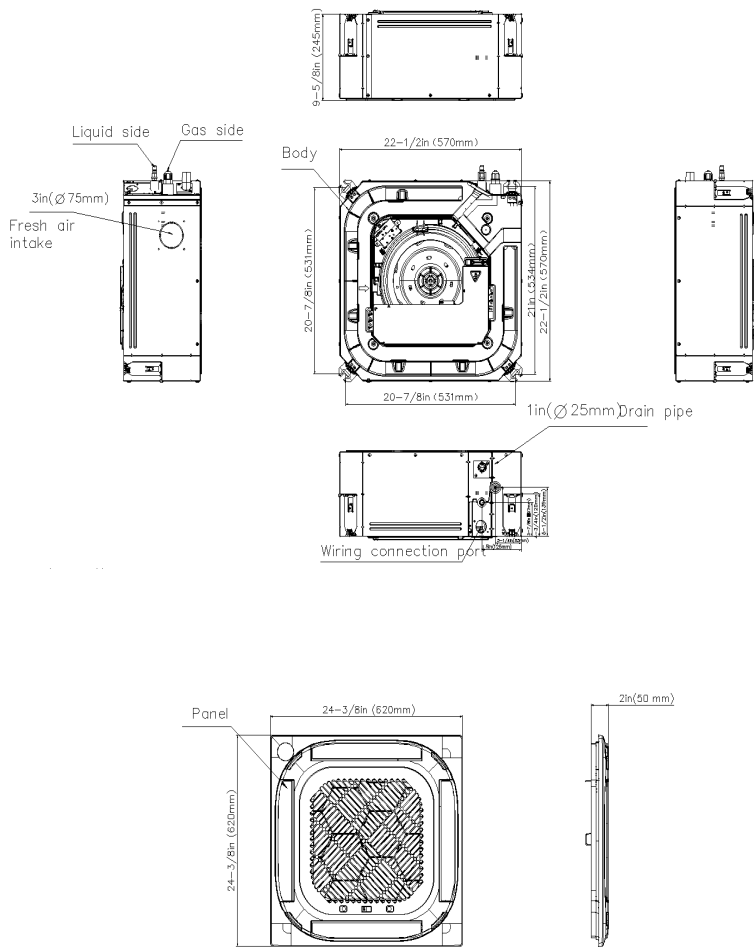
ELECTRICAL

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)

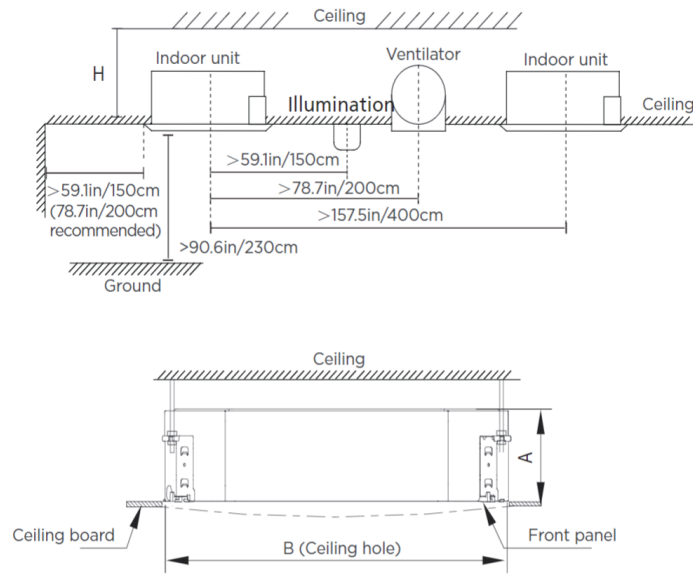
PIPING

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



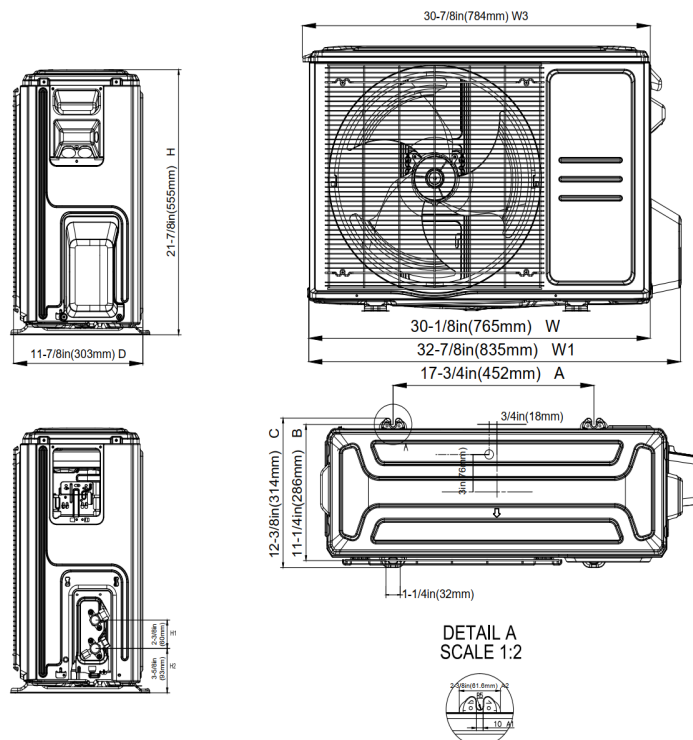
Installation Instruction



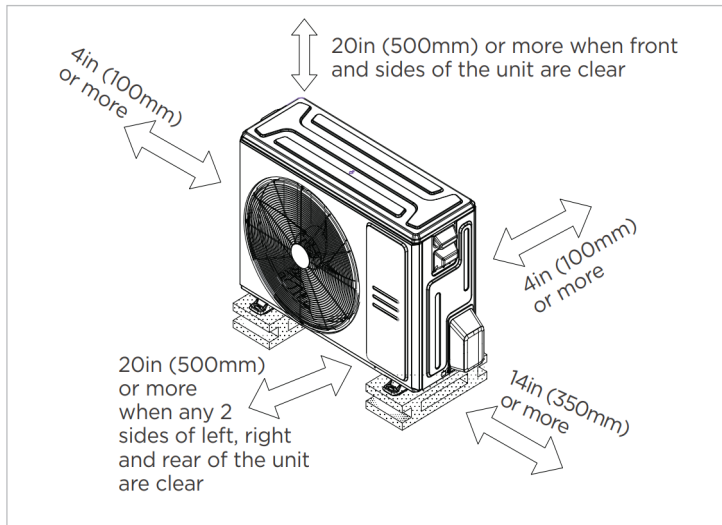
Distance from ceiling relative to height of indoor unit

MODEL	Length of A	Length of H	Length of B
9K/12K/18K	9.6in (245mm)	>10.8in (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:
 - Two way communication wired controller:120N(X6)
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Infrared wired controller: 120L
 - Wireless remote controller
 - Third-Party 24V Thermostat*

*24V interface is required.