



4-Way Ceiling Heat Pump System

Indoor Model: SAK-48-CT1/220V	Outdoor Model: SAK-48-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)	236.1 / 1124.2 / 1018.3 / 800.5 / 688.7	
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	56.0/52.5/50.0/42.5/38.50	
Dimension (WxDxH)	inch	32.68 x 32.68 x 11.30
	mm	830.0x830.0x287.0
Package (WxDxH)	inch	35.83 x 35.83 x 12.99
	mm	910x910x330
Net/Gross Weight	lbs	64.59/76.06
	kg	29.3/34.5

OUTDOOR SPECIFICATION

Compressor Type	ROTARY	
Compressor Model	KTQ420D1UMU	
Refrigerant	R454B	
Refrigerant Oil Charge(mL)	1400	
Refrigerant Oil	3700	
Outdoor Air Flow (Max) (CFM)	4237.9	
Outdoor Noise Level (dBA)	62.5	
Dimension (WxDxH)	inch	37.48 x 16.34 x 52.48
	mm	952.0x415.0x1333.0
Package (WxDxH)	inch	43.11 x 19.49 x 57.48
	mm	1095x495x1460
Net/Gross Weight	lbs	208.78/239.86
	kg	94.7/108.8

EFFICIENCY

Cooling		Heating	
SEER2	19	HSPF2-4	9.9
EER2	9.5	COP	2.96

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	48000
Min/Max Capacity	10600-50400
Moisture Removal(L/h)	6.27
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	50000
1. @ 47°F Min/Max Capacity	19900-61700
2. @ 17°F Rated	36600
3. @ 5°F Rated: Capacity / COP	40500/2.11
3. @ 5°F Max: Capacity	40500
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

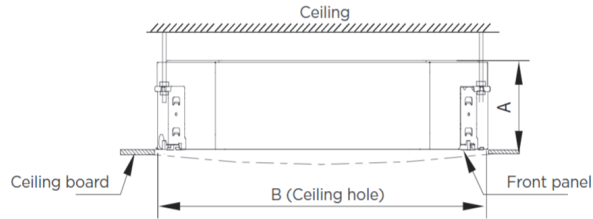
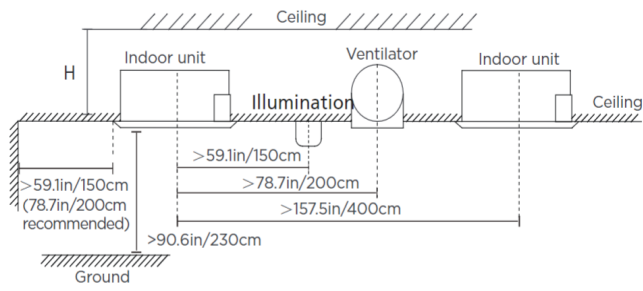
ELECTRICAL

Power Supply	208/230V,60Hz,1Ph
System MCA	39.00
Connection Wiring	14#x2
System MOCP	40
Compressor RLA	24.0
Outdoor Fan Motor RLA	1.2
Outdoor Fan Motor W	85
Indoor Fan Motor RLA	1.0
Indoor Fan Motor W	125
System Power Input @ Cooling (W)	5053(800 ~ 5320)
System Power Input @ Heating (W)	4950(1140 ~5940)
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	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	246.00(75)
Max. Height Difference(ft/m)	98.40(30)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	126.99(3.60)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.32(30)
Connection Method	Flared

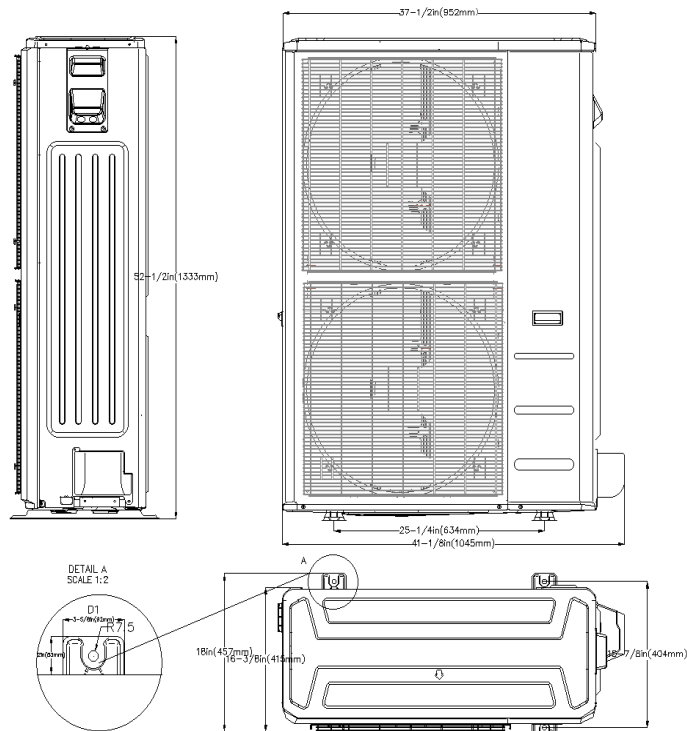
Installation Instruction



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)	

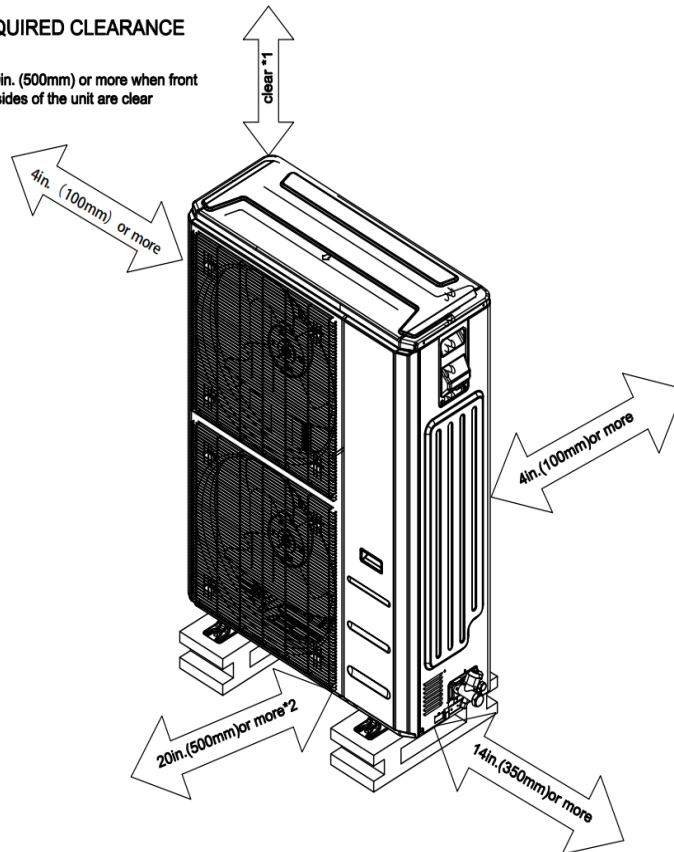
Outdoor Unit Dimension



Installation Instruction

REQUIRED CLEARANCE

*1 20in. (500mm) or more when front and sides of the unit are clear



*2 When any 2 sides of left, right and rear of the unit are clear

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.