



Location: \_\_\_\_\_  
 Engineer: \_\_\_\_\_  
 Submitted to: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_  
 Reference: \_\_\_\_\_

Model Number: AO21-30N2-M1 / AW21-30N2-M1

Approval: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Construction: \_\_\_\_\_  
 Unit #: \_\_\_\_\_  
 Drawing #: \_\_\_\_\_



### INDOOR SPECIFICATION

Indoor Air Flow (Turbo/H/M/L/S) (CFM)	871/648/447/330/330	
Indoor Noise Level (T/H/M/L/S) (dBA)	57/52/45/36/22	
Dimension (W×D×H)	inch	49-5/8 x 11-1/8 x 14-1/4
	mm	1259 x 283 x 362
Package (W×D×H)	inch	52-3/4 x 15-1/8 x 17-3/4
	mm	1340 x 385 x 450
Net/Gross Weight	lbs	43/57
	kg	19.7/25.8

### OUTDOOR SPECIFICATION

Compressor Type	ROTARY	
Refrigerant	R454B	
Factory Charge	670ml	
Refrigerant Oil	VG74	
Outdoor Air Flow (Max) (CFM)	2235.3	
Outdoor Noise Level (dBA)	61.5	
Dimension (W×D×H)	inch	37-1/4 x 16-1/8 x 31-7/8
	mm	946 x 410 x 810
Package (W×D×H)	inch	42-7/8 x 19-5/8 x 34-7/8
	mm	1090 x 500 x 885
Net/Gross Weight	lbs	143/155
	kg	64.8/70.1

### EFFICIENCY

Cooling		Heating	
SEER2	22.3	HSPF2-4	9.0
EER2	12.0	COP	3.03

### PERFORMANCE of Cooling

#### Cooling (Btu/hr)

Rated Capacity	30000
Min/Max Capacity	6800~33900
Moisture Removal	3.6
Standard Operating Range	-13°F~122°F (-25°C~50°C)

Rated Cooling 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 (Min/Max)	30000(12300~32100)
2. @ 17°F Rated	20000
3. @ 5°F Max: Capacity / COP	20000/1.94
Standard Operating Range	-13°F~75°F (-25°C~24°C)

1. Rated Heating Conditions: Indoor: 70°F DB/60°F WB  
 Outdoor: 47°F DB/43°F WB  
 2. Rated Heating Conditions: Indoor: 70°F DB/60°F WB  
 Outdoor: 17°F DB/15°F WB  
 3. Heating Conditions, Compressor Operating at Max. Frequency Indoor: 70°F DB/60°F WB  
 Outdoor: 5°F DB/5°F WB

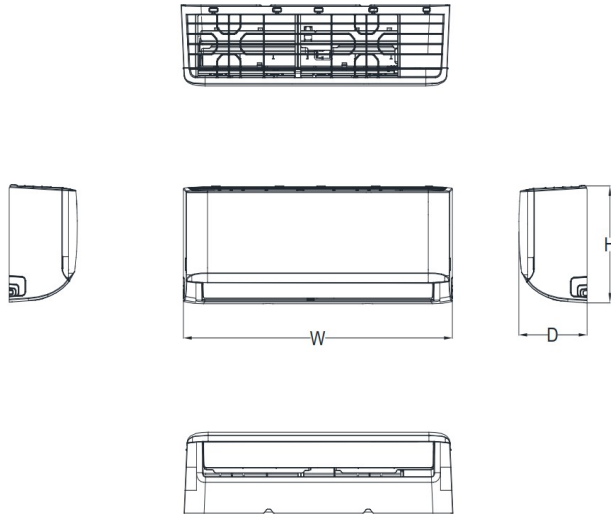
### ELECTRICAL

Power Supply	208/230V,60Hz,1Ph
System MCA	28
Connection Wiring	AWG 14-4
System MOCP	30
Compressor RLA	17.5
Outdoor Fan Motor RLA	1.3
Outdoor Fan Motor W	120
Indoor Fan Motor RLA	0.7
Indoor Fan Motor W	58
System Power Input @ Cooling (W)	2500(700 ~ 3220)
System Power Input @ Heating (W)	2900(755 ~2950)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

### PIPING

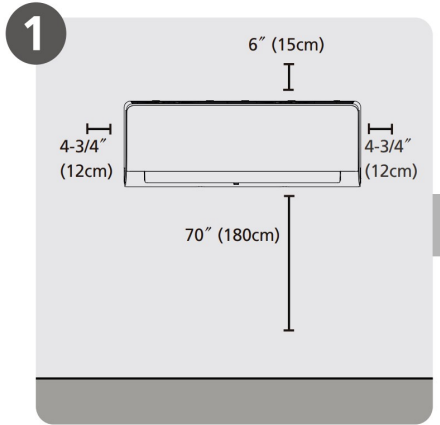
Liquid Size	3/8in (9.52mm)
Gas Size	5/8in (15.9mm)
Drain Size	5/8in (15.88mm)
Max. Piping Length	164ft (50m)
Max. Height Difference	82ft (25m)
Max. Pre-charged Length	24.6ft (7.5m)
Refrigerant Pre-charged Amount	84.66oz (2400g)
Additional Charge of Refrigerant	0.32oz/ft (30g/m)
Connection Method	Flared

## Indoor Unit Dimension

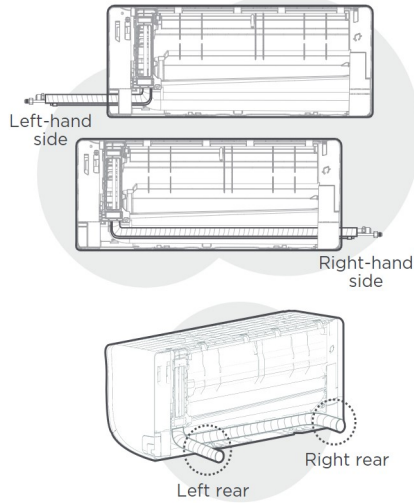


Capacity	Body Code	W(inch/mm)	D(mm/inch)	H(mm/inch)
6K~9K	A	28-3/4in /729mm	7-7/8in /200mm	11-1/2in /292mm
9K~12K	B	31-5/8in /802mm	7-7/8in /200mm	11-5/8in /295mm
18K	C	38-1/4in /971mm	9in/228mm	12-5/8in /321mm
18K~24K	D	42-5/8in /1082mm	9-1/4in/234mm	13-1/4in /337mm
30K~36K	F	49-5/8in /1259mm	11-1/8in/283mm	14-1/4in /362mm

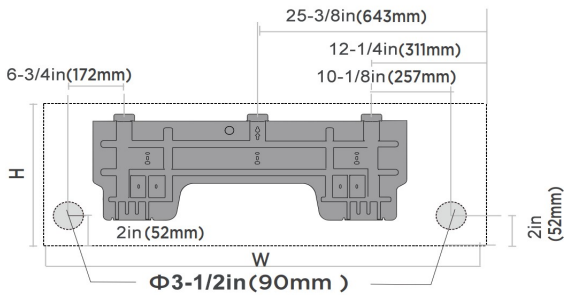
## Installation Instruction



### Select Installation Location



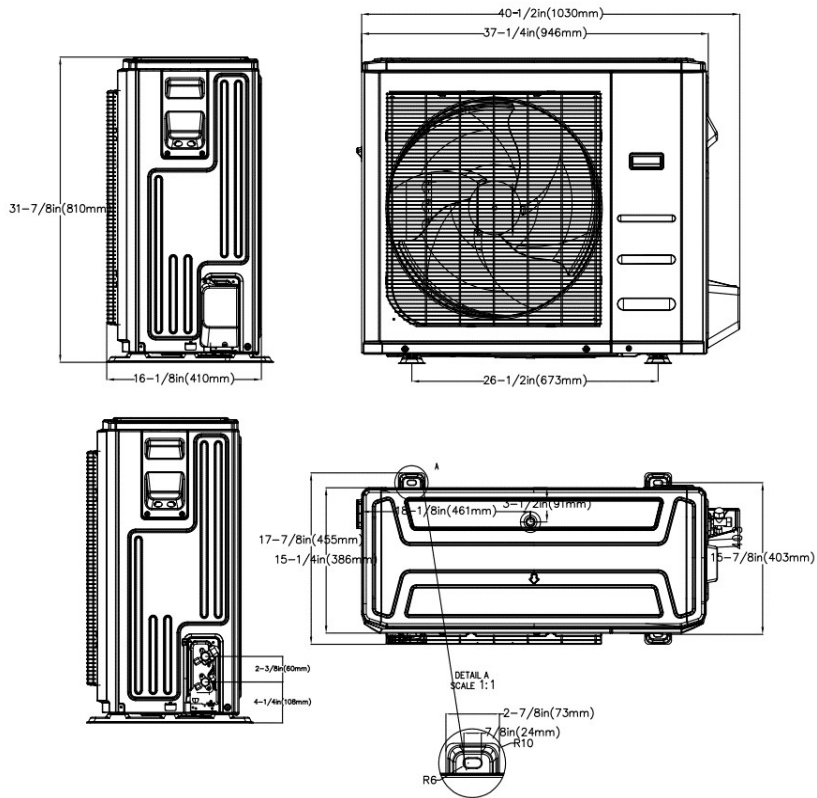
**NOTE:**  
Based on the position of the wall hole relative to the mounting plate, choose the side from which the piping will exit the unit. You have four options for the exit direction of the piping.



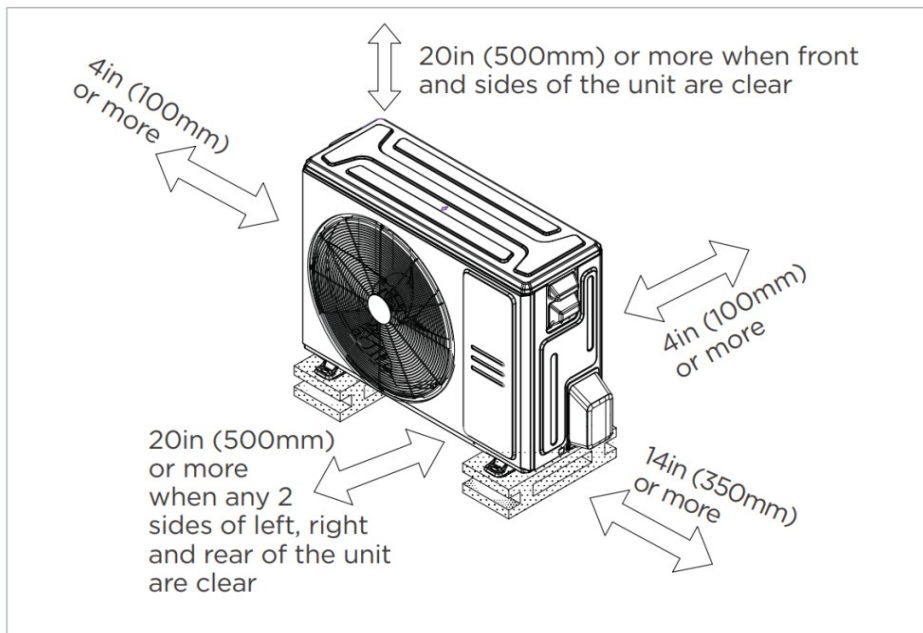
**Indoor unit dimensions(WxH):**  
49-5/8in(1259mm)x14-1/4in(362mm)

**NOTE:**  
When the gas side connective pipe is  $\Phi$  (5/8in)16mm or more, the wall hole should be (3-1/2in)90mm.

## Outdoor Unit Dimension



## Installation Instruction



- Meets all special requirements shown in Installation Clearance Requirements above.

- Indoor unit use TU1 copper coil, better anti corrosion.
- 1~100% stepless adjustable fan speed setting
- WiFi capability: Built-in WiFi modular or wired controller with WiFi function
- OTA function: can upgrade the program version anytime
- Multiple controller options available:
  - Optional two way communication wired controller, programmable:120N(X6)
  - Optional two way communication wired controller, programmable, with built-in WiFi, :120N(X6W)
  - Optional Infrared wired controller: 120L
  - Standard Wireless remote controller RG10
  - Optional 24V interface kit, can connect with Third-Party 24V Thermostat