

# SUBMITTAL DATA SHEET

Series Name: Cooling Only AHU Series  
 Model Number: BNG1A18ACN/BNGFA18DH2

## Air Handler Heat Pump System

Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:



## INDOOR SPECIFICATION

<b>Indoor Air Flow (Turbo/H/M/L/Si) (CFM)</b>	618.03 / 576.83 / 529.74 / 488.54 / 488.54	
<b>Indoor Noise Level (Turbo/H/M/L/Si) (dBA)</b>	44/43/41/33/33	
<b>Dimension (W×D×H)</b>	inch	17.52 x 21.02 x 45.00
	mm	445.0×534.0×1143.0
<b>Package (W×D×H)</b>	inch	26.57 x 20.87 x 48.62
	mm	675×530×1235
<b>Net/Gross Weight</b>	lbs	105.82/126.76
	kg	48/57.5

## OUTDOOR SPECIFICATION

<b>Compressor Type</b>	ROTARY	
<b>Compressor Model</b>	KSN140D58UFZ	
<b>Refrigerant</b>	R454B	
<b>Refrigerant Oil Charge(mL)</b>	440	
<b>Refrigerant Oil</b>	VG74	
<b>Outdoor Air Flow (Max) (CFM)</b>	1,413	
<b>Outdoor Noise Level (dBA)</b>	54	
<b>Dimension (W×D×H)</b>	inch	31.69 x 12.99 x 21.81
	mm	805×330×554
<b>Package (W×D×H)</b>	inch	36.02 x 14.57 x 24.21
	mm	915×370×615
<b>Net/Gross Weight</b>	lbs	66.80/73.41
	kg	30.3/33.3

## EFFICIENCY

Cooling		Heating	
<b>SEER2</b>	18.5	<b>HSPF2-4</b>	/
<b>EER2</b>	11.7	<b>COP</b>	/

## PERFORMANCE of Cooling

Cooling (Btu/hr)	
<b>Rated Capacity</b>	18000
<b>Min/Max Capacity</b>	7200~20000
<b>Moisture Removal(L/h)</b>	1.7
<b>Standard Operating Range(℉/°C)</b>	-13~122(-25~50)
Rated Cooling Conditions:	Indoor: 80℉ DB/67℉ WB Outdoor: 95℉ DB/75℉ WB

## PERFORMANCE of Heating

Heating (Btu/hr)	
<b>1. @ 47℉ Rated</b>	/
<b>2. @ 47℉ Min/Max Capacity</b>	/

## ELECTRICAL

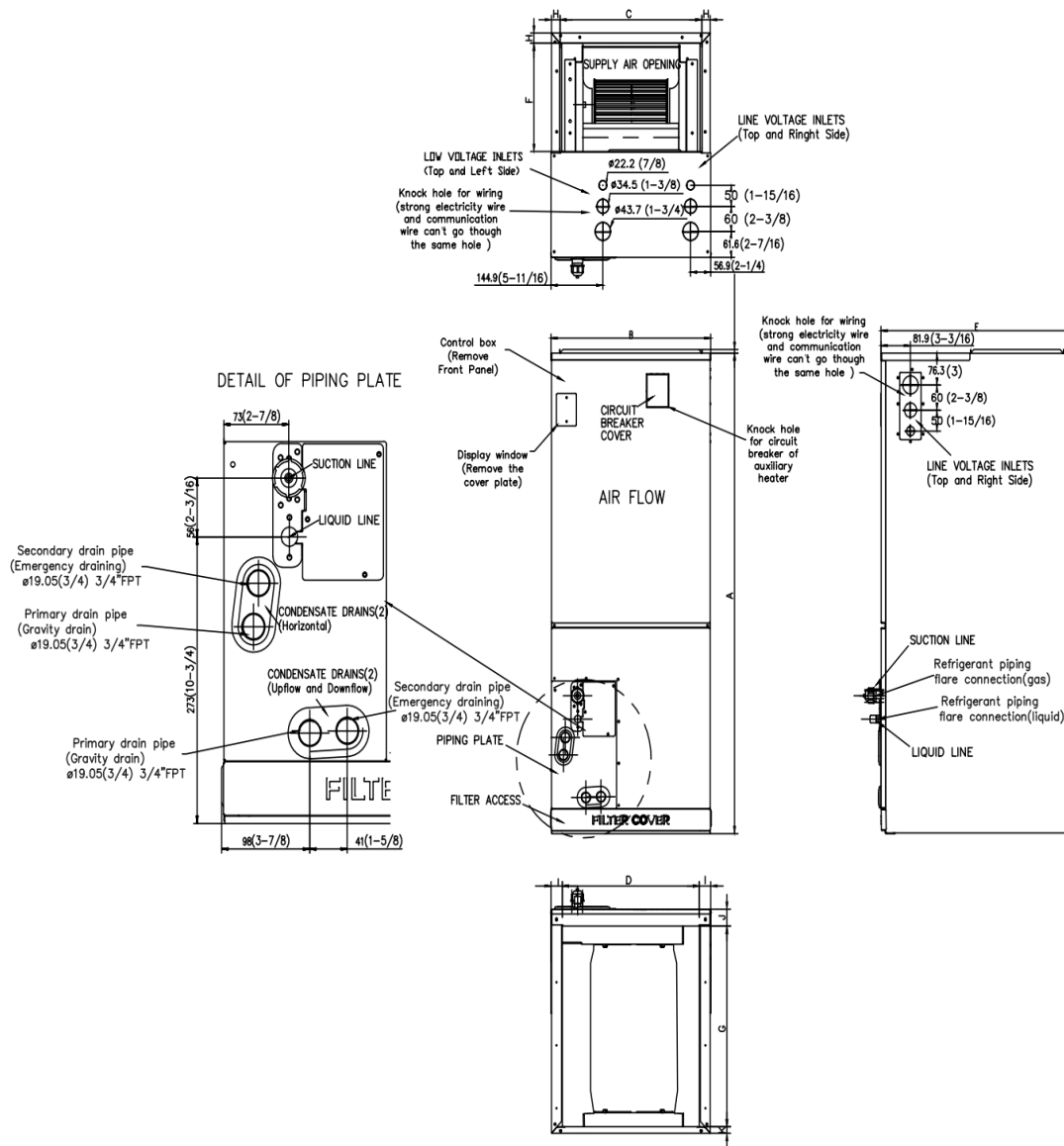
<b>Indoor Power Supply</b>	115/208/230V,60Hz,1Ph
<b>Indoor MCA 115V/(208/230V)</b>	5.5/4.0
<b>Indoor MOP</b>	15
<b>Outdoor Power Supply</b>	208/230V,60Hz,1Ph
<b>Outdoor MCA</b>	16
<b>Outdoor MOP</b>	20
<b>Communication Wiring</b>	AWG 20-2
<b>Compressor RLA</b>	12
<b>Outdoor Fan Motor RLA</b>	0.5
<b>Outdoor Fan Motor W</b>	/
<b>Indoor Fan Motor RLA</b>	2
<b>Indoor Fan Motor W</b>	250
<b>System Power Input @ Cooling (W)</b>	1540(400~1850)
<b>System Power Input @ Heating (W)</b>	/(/)
<b>MCA: Min. circuit amps (A)</b>	<b>MOCP: Max. over current protection (A)</b>
<b>RLA: Rated load amps (A)</b>	<b>W: Fan motor rated output (W)</b>

3. @ 17°F Rated	/
4. @ 5°F Rated: Capacity / COP	///
5. @ 5°F Max: Capacity	/
Standard Operating Range(°F/°C)	-13~75(-25~24)
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

PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	98(30)
Max. Height Difference(ft/m)	66(20)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	65(42.33)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared*

\*The gas valve of the outdoor unit is 5/8", 5/8" to 3/4" flare to flare connector is required for the installation.

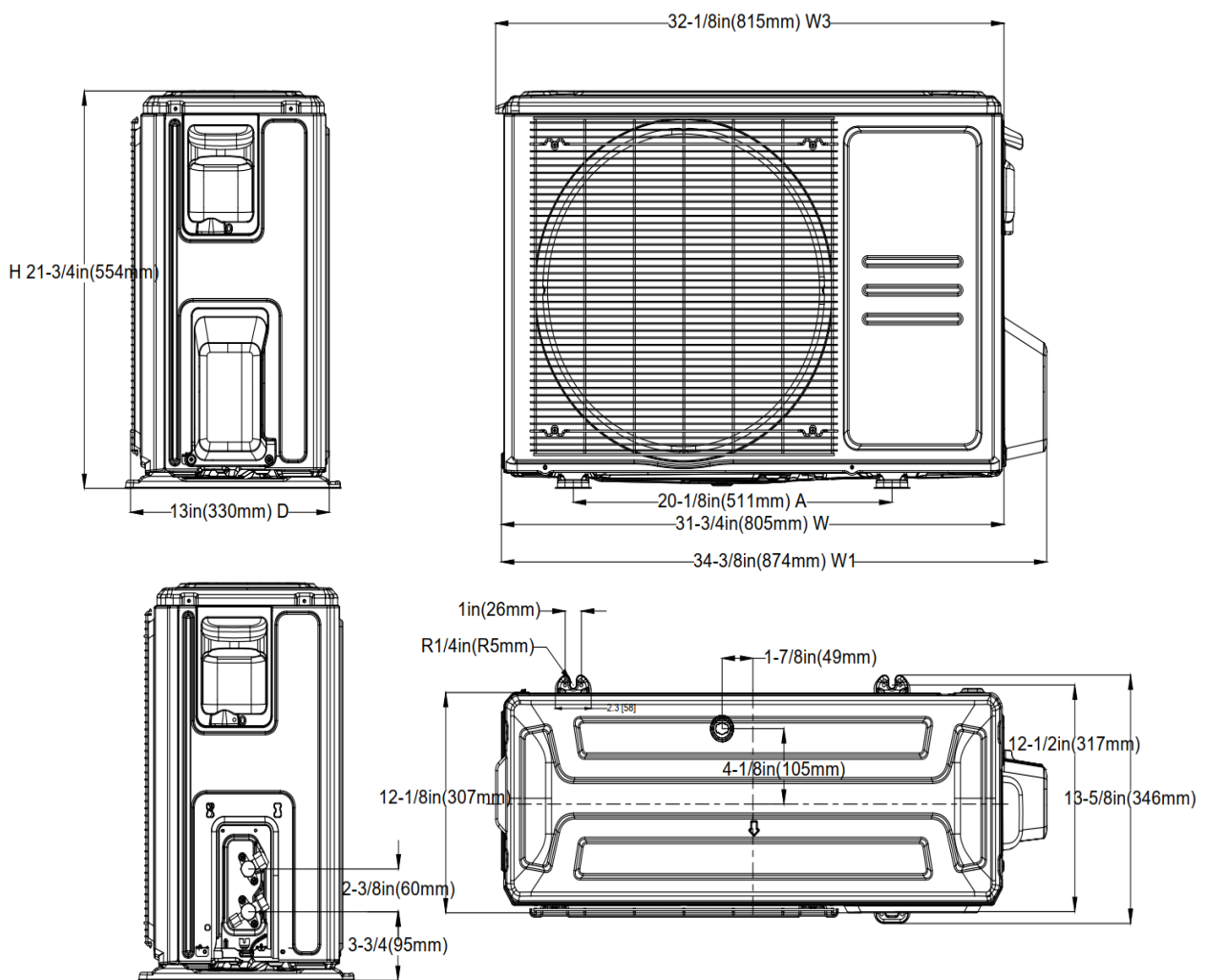
### Indoor Unit Dimension



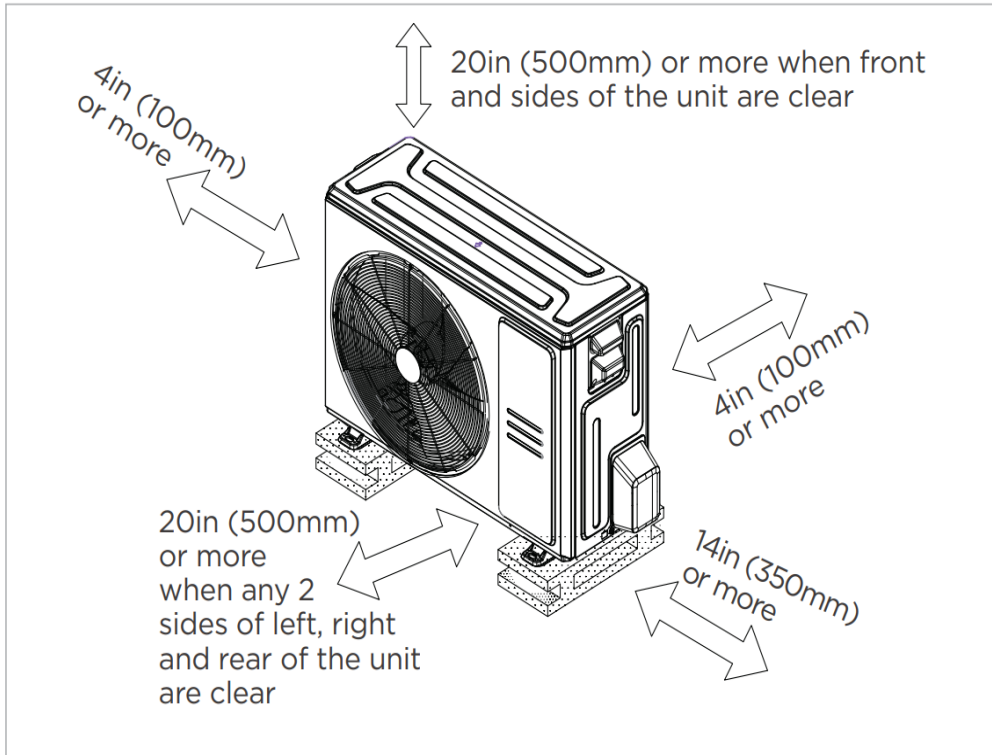
Dimensions	Model	18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622

C	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	5/8	16	3/4	19

### Outdoor Unit Dimension

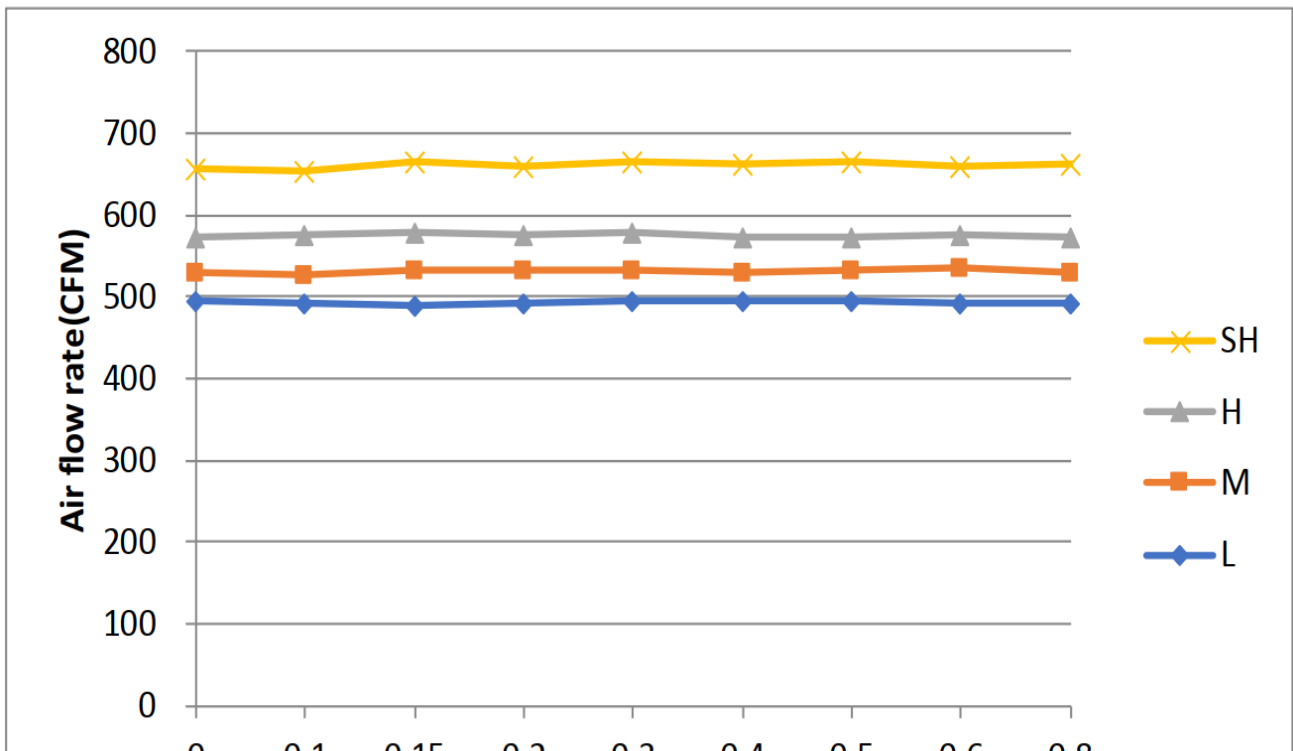


### Installation Instruction For Outdoor Unit



Meets all spatial requirements shown in Installation Clearance Requirements above.

#### Fan Performance For Indoor Unit



0 0.1 0.15 0.2 0.3 0.4 0.5 0.6 0.8

**External static pressure (in.w.c.)**

#### Features

- Multi-position installation: horizontal(left or right), vertical( up or down)
- Aluminum Coil
- Constantly Air Flow system up to 0.80 In.W.G
- 1 inch R4.2 fiberglass free insulation reduces condensation and boosts efficiency(optional)
- Optional Auxiliary heat kit up to 25kW
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller:120N(X6)
  - Two way communication wired controller with built-in WiFi:120N(X6W)
  - Wireless remote controller
  - Third-Party 24V Thermostat
- Adaptive Control System
- Chassis heater and crankcase heater equipped as standard