

SUBMITTAL DATA SHEET

Series Name: Cooling Only AHU Series
Model Number: BNG1A24ACN/BNGFA24DH2

Air Handler Heat Pump System

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



INDOOR SPECIFICATION

Indoor Air Flow (Turbo/H/M/L/Si) (CFM)		824.04 / 759.29 / 694.55 / 629.80 / 629.80
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		44/44/42/28/28
Dimension (W×D×H)	inch	17.52 x 21.02 x 45.00
	mm	445.0×534.0×1143.0
Package (W×D×H)	inch	26.57 x 20.87 x 48.62
	mm	675×530×1235
Net/Gross Weight	lbs	105.60/127.43
	kg	47.9/57.8

OUTDOOR SPECIFICATION

Compressor Type		ROTARY
Compressor Model		KTM240D46UKT2
Refrigerant		R454B
Refrigerant Oil Charge(mL)		620
Refrigerant Oil		VG74
Outdoor Air Flow (Max) (CFM)		1,766
Outdoor Noise Level (dBA)		56
Dimension (W×D×H)	inch	35.04 x 13.46 x 26.50
	mm	890×342×673
Package (W×D×H)	inch	39.17 x 15.67 x 29.13
	mm	995×398×740
Net/Gross Weight	lbs	89.29/97.00
	kg	40.5/44

EFFICIENCY

Cooling		Heating	
SEER2	17.0	HSPF2-4	/
EER2	11.0	COP	/

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	24000
Min/Max Capacity	9200~28000
Moisture Removal(L/h)	2
Standard Operating Range(°F/°C)	-13~-122(-25~50)
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	/
2. @ 47°F Min/Max Capacity	/

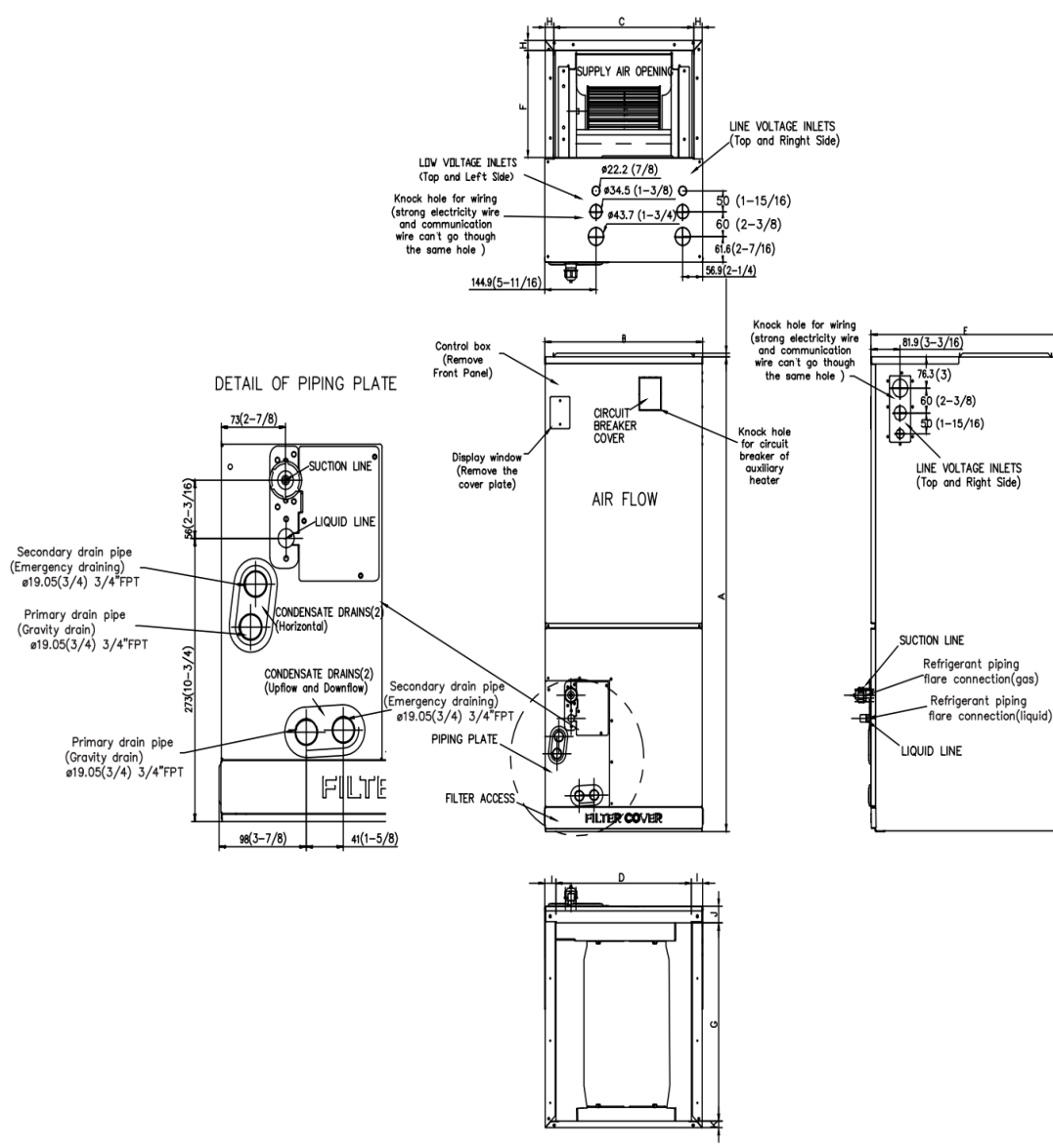
ELECTRICAL

Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	5.5/4.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	19
Outdoor MOP	20
Communication Wiring	AWG 20-2
Compressor RLA	14
Outdoor Fan Motor RLA	0.8
Outdoor Fan Motor W	/
Indoor Fan Motor RLA	3
Indoor Fan Motor W	250
System Power Input @ Cooling (W)	2180(490~2750)
System Power Input @ Heating (W)	0(/)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

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)	164(50)
Max. Height Difference(ft/m)	82(25)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	52.21(1.48)
Additional Charge of Refrigerant((oz/ft)/(g/m)	0.7(65)
Connection Method	Flared

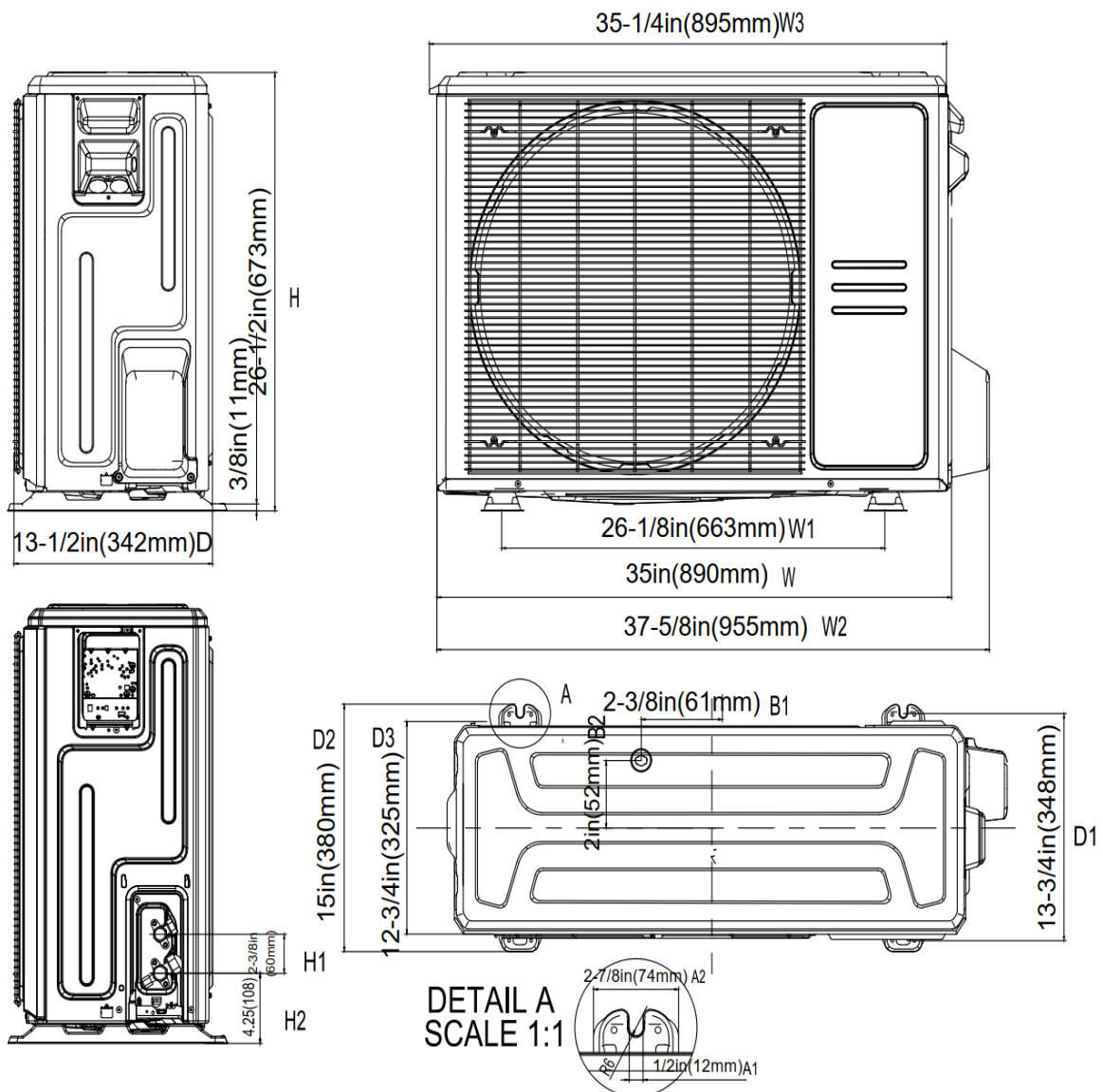
Indoor Unit Dimension



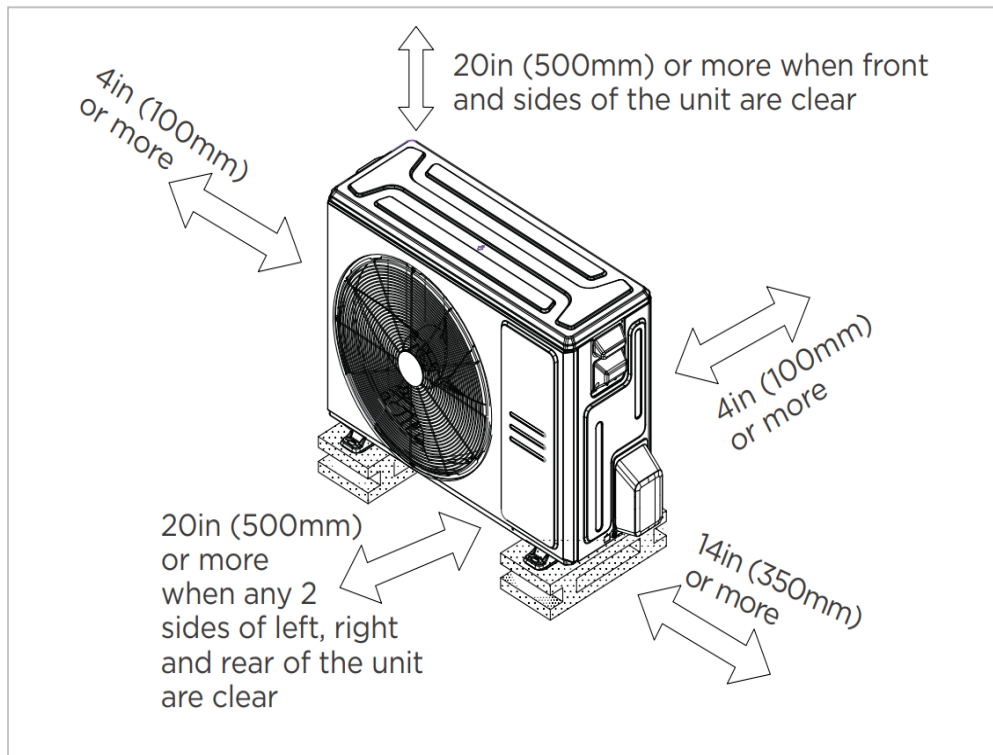
Dimensions	Model	18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622

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

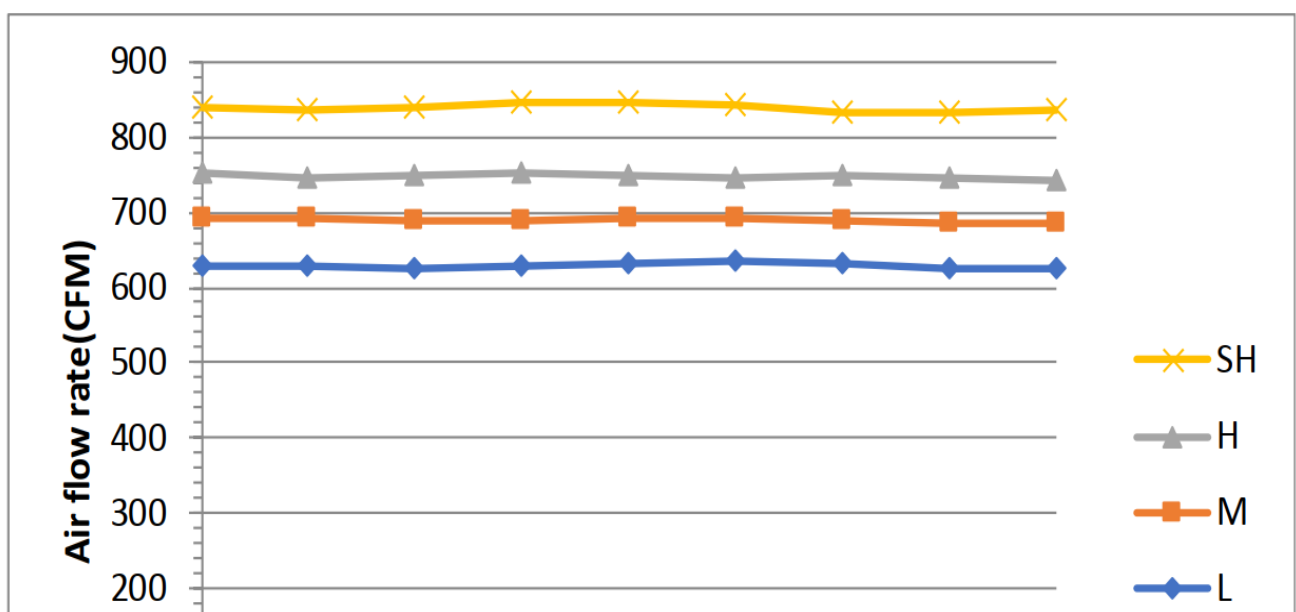


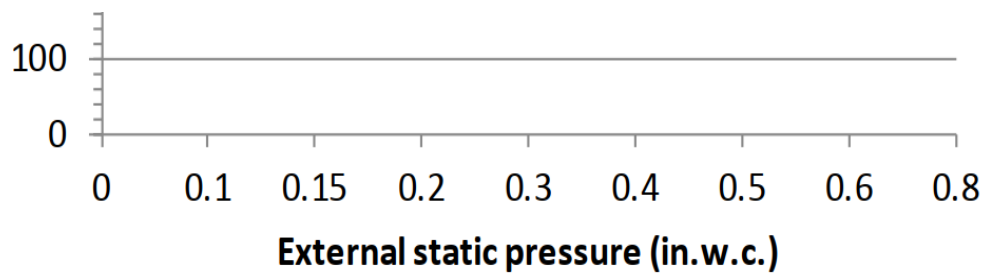
Installation Instruction For Outdoor Unit



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

Fan Performance For Indoor Unit





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