

SUBMITTAL DATA SHEET

Series Name: EntrySeries
Model Number: BNG1A24DH0 / BNG1A24SCN

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 / -
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		49/46/44/40/N/A
Dimension (W×D×H)	inch	17.52 x 21.02 x 45.00
	mm	534.0×445.0×1143.0
Package (W×D×H)	inch	26.57 x 20.87 x 48.62
	mm	675×530×1235
Net/Gross Weight	lbs	105/127
	kg	47.7/57.4

OUTDOOR SPECIFICATION

Compressor Type		TWIN-ROTARY
Compressor Model		KTM240D46UKT2
Refrigerant		R454B
Refrigerant Oil Charge(mL)		620
Refrigerant Oil		VG74
Outdoor Air Flow (Max) (CFM)		1451.0
Outdoor Noise Level (dBA)		53
Dimension (W×D×H)	inch	31.69 x 12.99 x 21.81
	mm	805.0×330.0×554.0
Package (W×D×H)	inch	36.02 x 14.57 x 24.21
	mm	915×370×615
Net/Gross Weight	lbs	79.37/85.54
	kg	36/38.8

EFFICIENCY

Cooling		Heating	
SEER2	16.4	HSPF2-4	8.7
EER2	8.0	COP	3.00

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	23000
Min/Max Capacity	7,300~23,500
Moisture Removal(L/h)	2.2
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	23000
2. @ 47°F Min/Max Capacity	8100~25400
3. @ 17°F Rated	17100
4. @ 5°F Rated: Capacity / COP	16300/1.78
5. @ 5°F Max: Capacity	16300
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

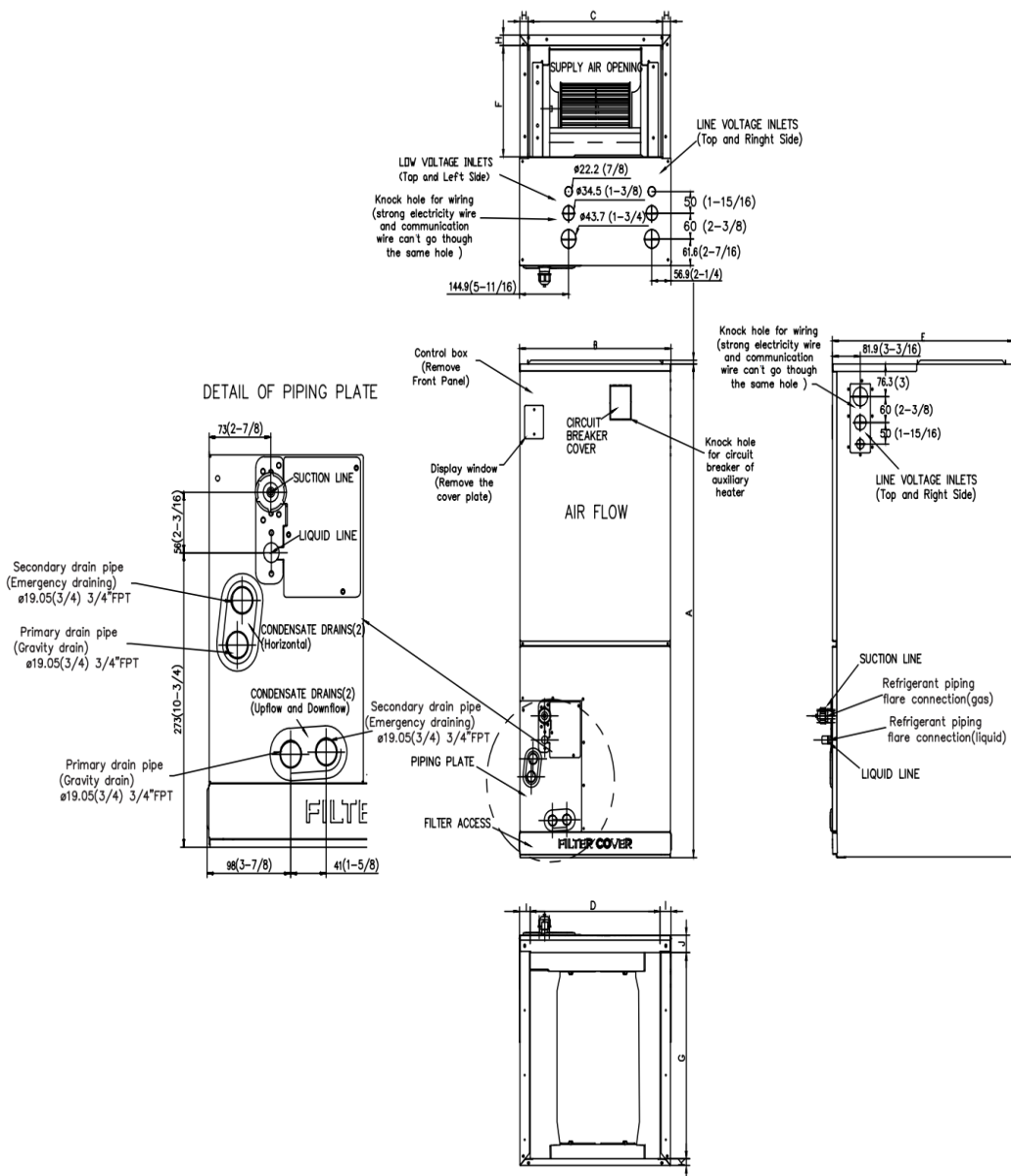
ELECTRICAL

Indoor Power Supply	115/208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	4.4/3
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	20
Outdoor MOP	25
Communication Wiring	AWG 20-2
Compressor RLA	15
Outdoor Fan Motor RLA	1
Outdoor Fan Motor W	34
Indoor Fan Motor RLA	4.4/3.0
Indoor Fan Motor W	250
System Power Input @ Cooling (W)	2875(540 ~ 3,264)
System Power Input @ Heating (W)	2250(525 ~2600)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

PIPING

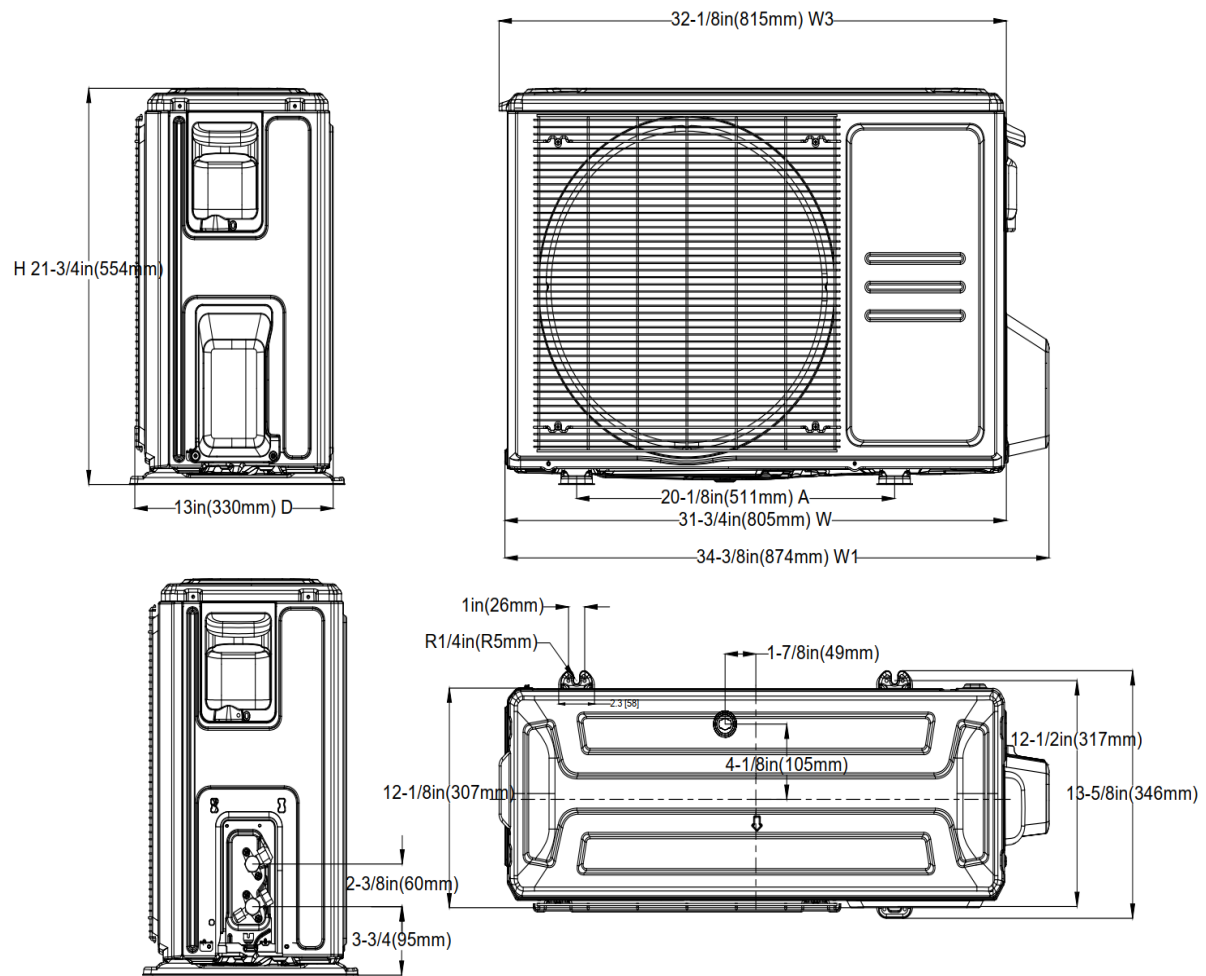
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	164(50)
Max. Height Difference(ft/m)	82(25)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	67.18(1.9)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared*

*The gas valve of the outdoor unit is 1/2", 1/2" to 3/4" flare to flare connector is required for the installation.

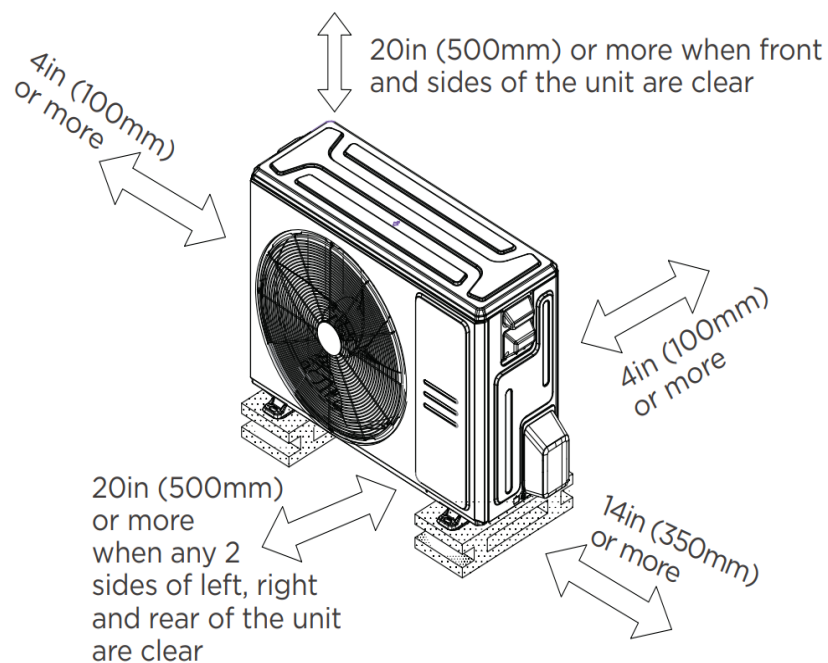


Dimensions \ Model		18/24/30k		36/48/60k	
		inch	mm	inch	mm
A	Model Height	45	1143	49	1245
B	Model Width	17-1/2	445	21	534
C	Supply Air Opening Width	15-5/8	397	19-1/8	486
D	Return Air Opening Width	15-1/8	384	18-5/8	473
E	Model Depth	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476
H	Supply Air Opening Clearance	15/16	24	15/16	24
I	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	5/8	16

Outdoor Unit Dimension



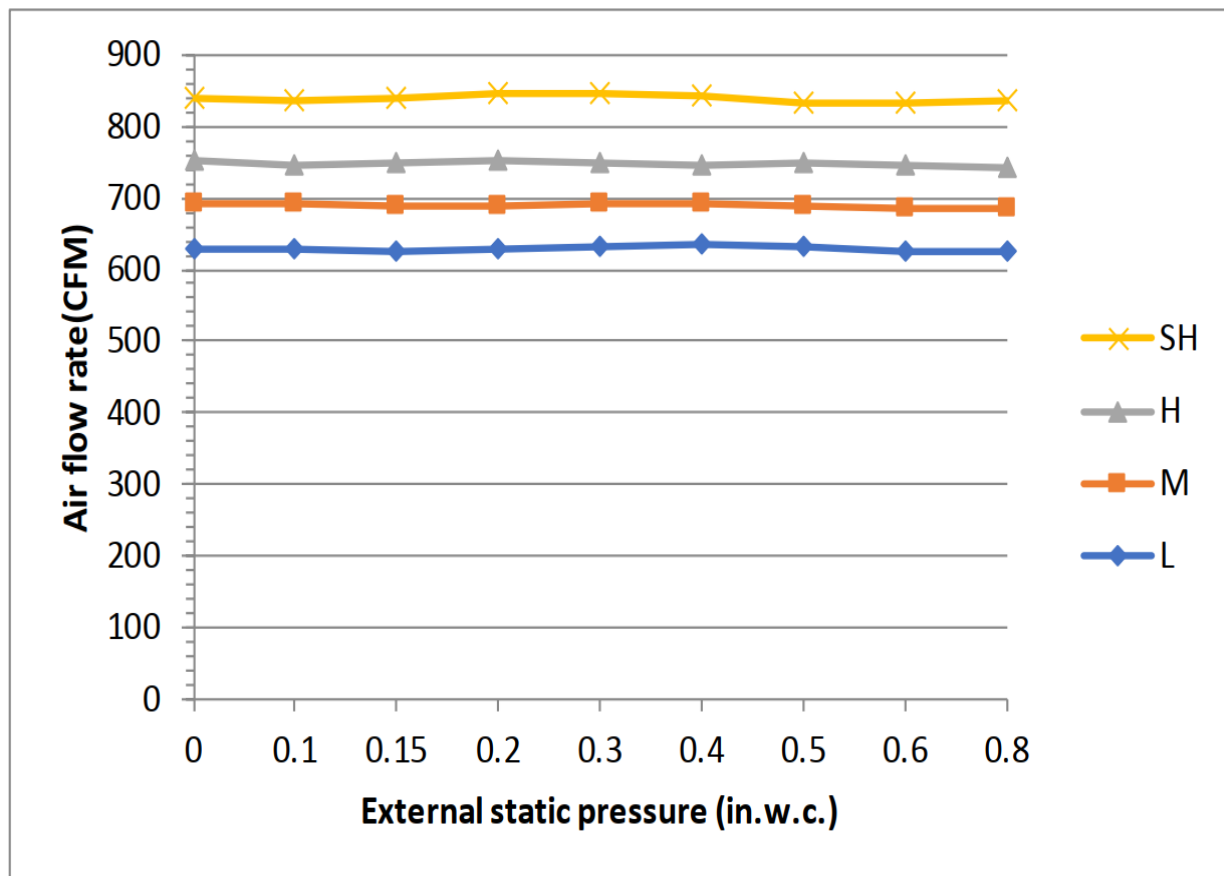
Installation Instruction For Outdoor Unit





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 20kW
- 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

