

SUBMITTAL DATA SHEET

Air Handler Heat Pump System BNG2DH18

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



INDOOR SPECIFICATION

Indoor Air Flow (Turbo/H/M/L/Si) (CFM)	618.03 / 576.83 / 529.74 / 488.54 / N/A	
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)	44/43/41/33/N/A	
Dimension (W×D×H)	inch	17.52 x21.02 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	105.82/126.76
	kg	48/57.5

OUTDOOR SPECIFICATION

Compressor Type	ROTARY	
Compressor Model	KSN140D58UFZ	
Refrigerant	R454B	
Refrigerant Oil Charge(mL)	440	
Refrigerant Oil	VG74	
Outdoor Air Flow (Max) (CFM)	1450.9	
Outdoor Noise Level (dBA)	55	
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	77.16/83.77
	kg	35/38

EFFICIENCY

Cooling		Heating	
SEER2	18.8	HSPF2-4	9.1
EER2	11.0	COP	3.15

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	18000
Min/Max Capacity	5350~20000
Moisture Removal(L/h)	1.71
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	18000
2. @ 47°F Min/Max Capacity	5600~19000
3. @ 17°F Rated	12600
4. @ 5°F Rated: Capacity / COP	11200/2
5. @ 5°F Max: Capacity	11200
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)	5.5/4.0
Indoor MOP	15
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	16
Outdoor MOP	20
Communication Wiring	AWG 20-2
Compressor RLA	10
Outdoor Fan Motor RLA	0.8
Outdoor Fan Motor W	34
Indoor Fan Motor RLA	2
Indoor Fan Motor W	250
System Power Input @ Cooling (W)	1635(400 ~ 1900)
System Power Input @ Heating (W)	1675(340 ~1650)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

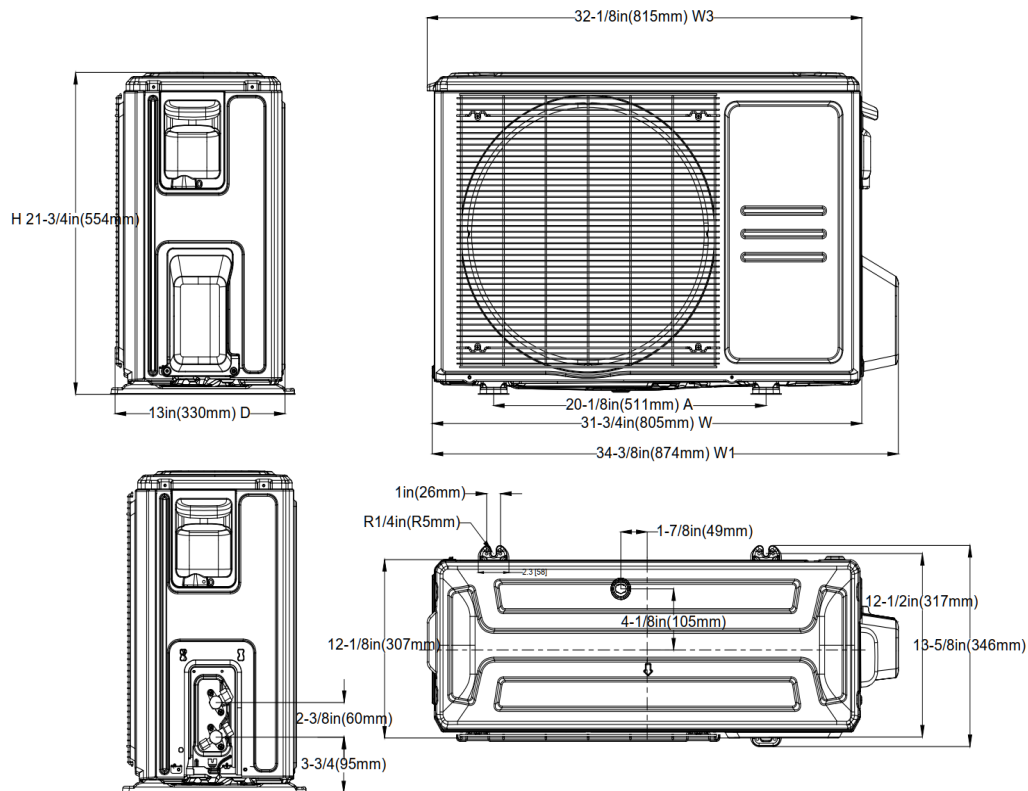
PIPING

Throttle type (Indoor)	EXV
Throttle type (Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	98.4(30)
Max. Height Difference(ft/m)	65.6(20)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	51.15(1.45)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared*

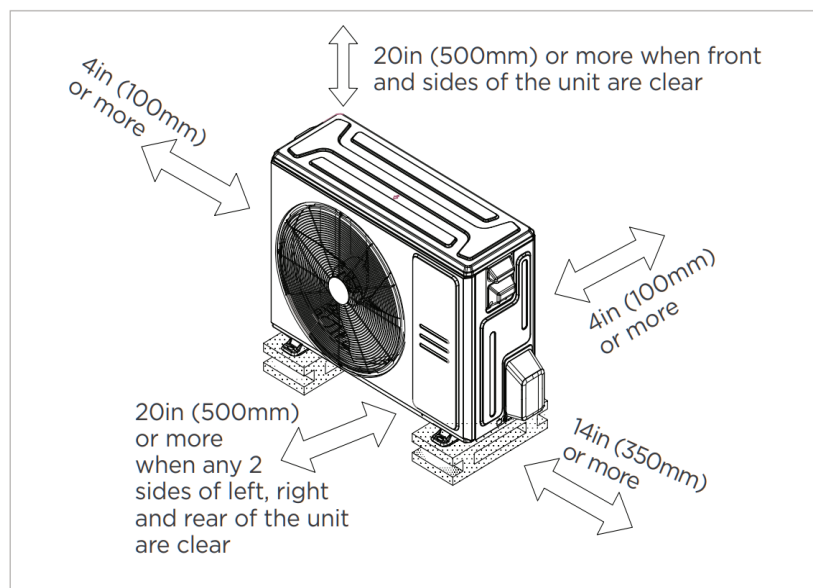
*The gas valve of the outdoor unit is 5/8", 5/8" to 3/4" flare to flare connector is required for the installation.

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

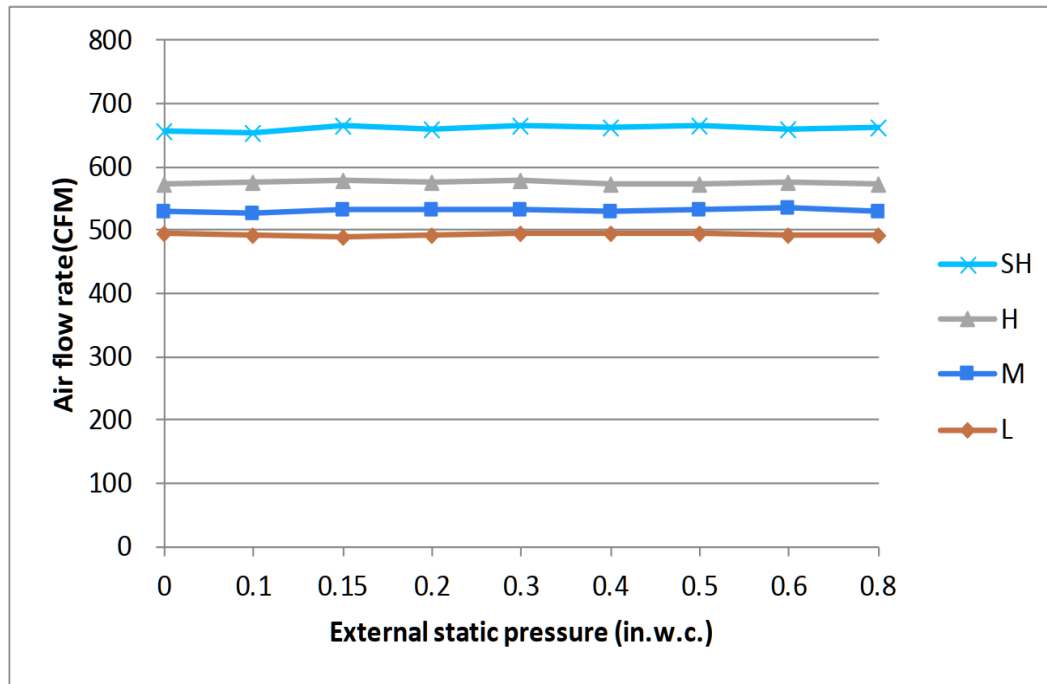


Installation Instruction For Outdoor Unit



☒ 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
- High efficiency up to 18.8 SEER2, 11 EER2, 9.7 HSPF2
- Chassis heater and crankcase heater equipped as standard