

R454b Refrigerant

SUBMITTAL DATA SHEET

Air Handler Heat Pump System BNG2A24SCN-24ENB

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



INDOOR SPECIFICATION

Dimension (W×D×H)	inch	17-1/2 x 21 x 18
	mm	445 × 533 × 457
Package (W×D×H)	inch	20-1/2x 26-1/8 x 20-7/8
	mm	520 × 665 × 530
Net/Gross Weight	lbs	42 / 50
	kg	19 / 22.5

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)		60
Dimension (W×D×H)	inch	35 x 13-1/2 x 26-1/2
	mm	890 × 342 × 673
Package (W×D×H)	inch	39-1/8 x 15-5/8 x 29-1/8
	mm	995 × 398 × 740
Net/Gross Weight	lbs	102 / 109
	kg	46.4 / 49.5

EFFICIENCY

Cooling		Heating	
SEER2	16	HSPF2-4	9.0
EER2	10	COP	3.2

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	24,000
Min/Max Capacity	7,900~27,600
Moisture Removal(L/h)	2.89
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	25,000
2. @ 47°F Min/Max Capacity	6,500~30,000
3. @ 17°F Rated	19,700
4. @ 5°F Rated: Capacity / COP	21,000/1.8
5. @ 5°F Max: Capacity	21,000
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	
Indoor: 70°F DB/60°F WB	
Operating at Max. Frequency	
Outdoor: 5°F DB/5°F WB	

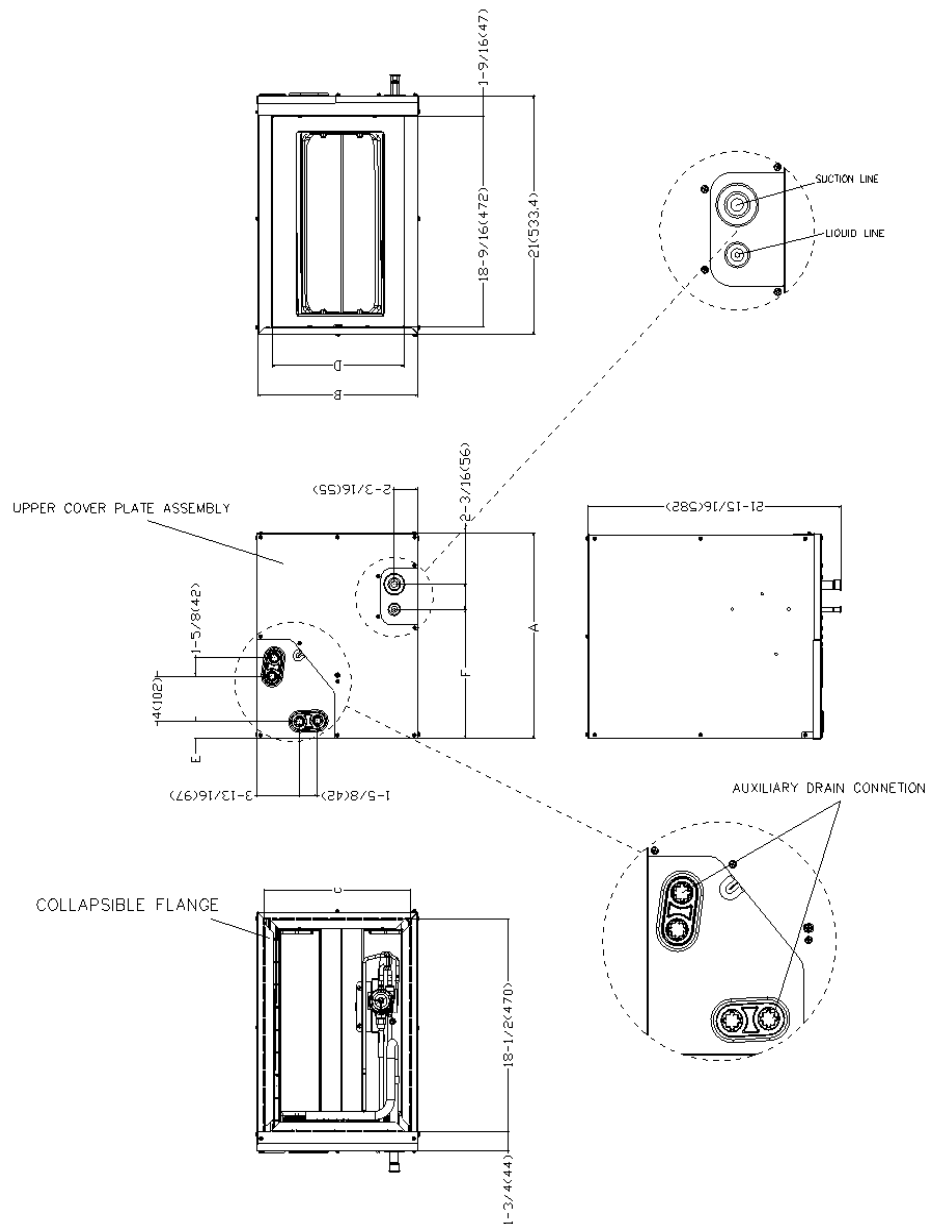
ELECTRICAL

Indoor Power Supply	24V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	/
Indoor MOP	/
Outdoor Power Supply	208/230,60Hz,1Ph
Outdoor MCA	19.0
Outdoor MOP	20.0
Communication Wiring	AWG 20/2
Compressor RLA	14
Outdoor Fan Motor RLA	1
Outdoor Fan Motor W	/
Indoor Fan Motor RLA	/
Indoor Fan Motor W	/
System Power Input @ Cooling (W)	2,400 (680 ~ 2,890)
System Power Input @ Heating (W)	2,290 (330 ~2,900)
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	3/8" (9.52mm)
Gas Size	3/4" (19mm)
Max. Piping Length(ft/m)	164 (50)
Max. Height Difference(ft/m)	82 (25)
Max. Pre-charged Length(ft/m)	25 (7.5)
Refrigerant Pre-charged Amount(oz/kg)	74 (2.1)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7 (65)
Connection Method	Flared

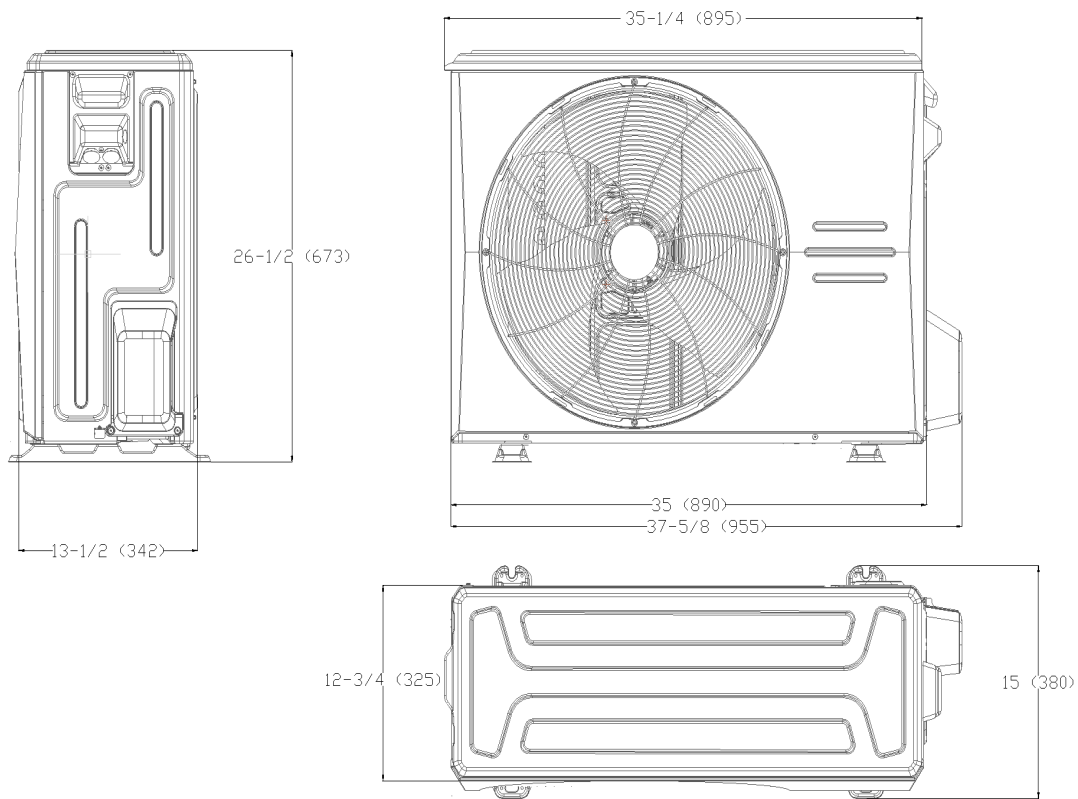
Indoor Unit Dimension



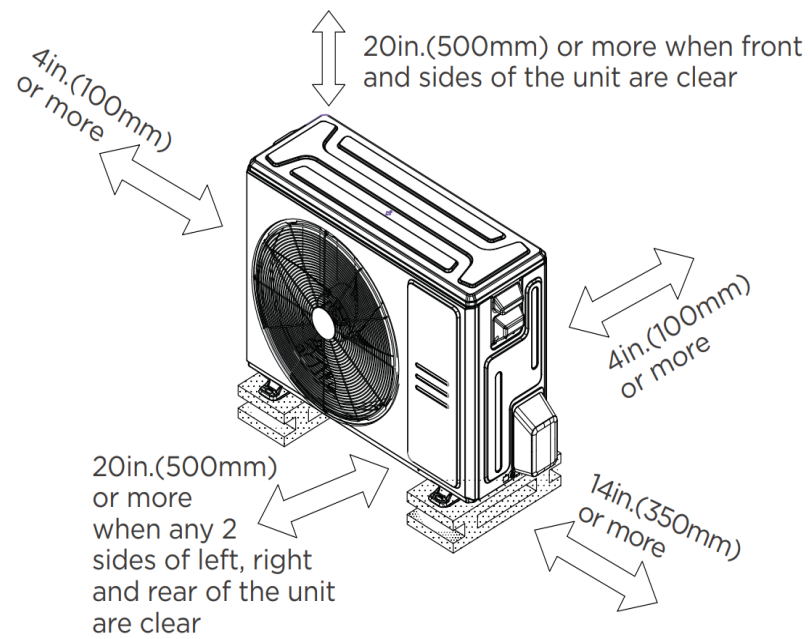
Model(Btu/h)		24-A		36-A		36-B	
		inch	mm	inch	mm	inch	mm
A	Model Height	18	457	23-5/16	592	23-1/2	599
B	Model Width	14-1/2	368	14-1/2	368	17-1/2	445
C	Supply Air Opening Width	13-1/4	336	13-1/4	336	16-3/16	411
D	Return Air Opening Width	11-15/16	303	11-15/16	303	14-15/16	380
E	Condensate Drains Height	1-7/16	38	1-7/16	38	1-7/16	38
F	Liquid Line Height	11-3/8	290	17-15/16	455	16-3/8	417
Model(Btu/h)		24-B		36-C			
		inch	mm	inch	mm		
A	Model Height	18	457	24	611		
B	Model Width	17-1/2	445	21	534		
C	Supply Air Opening Width	16-3/16	411	19-3/4	502		
D	Return Air Opening Width	14-15/16	380	18-7/16	468		
E	Condensate Drains Height	1-7/16	38	2-3/16	55		
F	Liquid Line Height	11-3/8	290	17-1/2	445		

Outdoor Unit Dimension

Unit: inch(mm)



Installation Instruction For Outdoor Unit



Features

- Multi-position installation: horizontal(left or right), vertical(up or down)
- Aluminum Coil
- R454B refrigerant sensor
- Easy Maintenance
- Multiple control options available:
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Third-Party 24V Thermostat