

# R454b Refrigerant

# SUBMITTAL DATA SHEET

## Air Handler Heat Pump System

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



### INDOOR SPECIFICATION

Dimension (WxDxH)	inch	14-1/2 x 21 x 18
	mm	368 x 533 x 457
Package (WxDxH)	inch	17-1/2 x 25-3/8 x 20-5/8
	mm	445 x 645 x 525
Net/Gross Weight	lbs	42 / 50
	kg	19 / 22.5

### OUTDOOR SPECIFICATION

Compressor Type	ROTARY	
Compressor Model	KSN140D58UFZ	
Refrigerant	R454B	
Refrigerant Oil Charge(mL)	440	
Refrigerant Oil	VG74	
Outdoor Air Flow (Max) (CFM)	1,451	
Outdoor Noise Level (dBA)	56	
Dimension (WxDxH)	inch	31-3/4 x 13 x 21-3/4
	mm	805 x 330 x 554
Package (WxDxH)	inch	36 x 14-9/16 x 24-3/16
	mm	915x370x615
Net/Gross Weight	lbs	77 / 84
	kg	35 / 38

### EFFICIENCY

Cooling		Heating	
SEER2	16	HSPF2-4	8.6
EER2	10.2	COP	3.15

### PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	18,000
Min/Max Capacity	6,500~21,600
Moisture Removal(L/h)	2.35
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	19,000
1. @ 47°F Min/Max Capacity	6,800~22,000
2. @ 17°F Rated	12,200
3. @ 5°F Rated: Capacity / COP	10,800/1.8
3. @ 5°F Max: Capacity	10,800
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

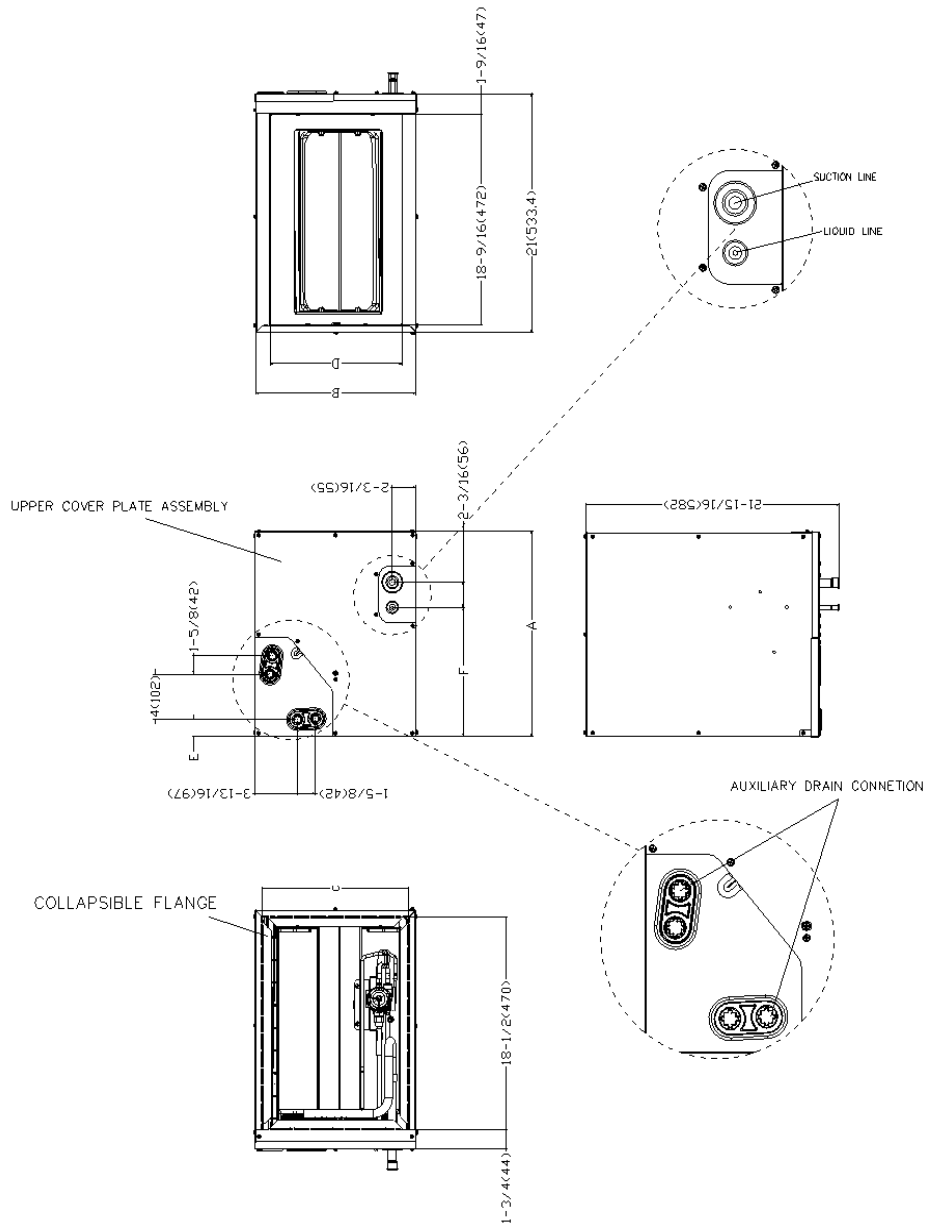
### ELECTRICAL

Indoor Power Supply	24V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	/
Indoor MOP	/
Outdoor Power Supply	208/230,60Hz,1Ph
Outdoor MCA	16.0
Outdoor MOP	20.0
Communication Wiring	AWG 20/2
Compressor RLA	10
Outdoor Fan Motor RLA	0.8
Outdoor Fan Motor W	/
Indoor Fan Motor RLA	/
Indoor Fan Motor W	/
System Power Input @ Cooling (W)	1,765 ( 310 ~ 2,000)
System Power Input @ Heating (W)	1,768 ( 600 ~1,740)
MCA: Min. circuit amps (A)	MOPC: 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)	98 ( 30)
Max. Height Difference(ft/m)	66 ( 20)
Max. Pre-charged Length(ft/m)	25 ( 7.5)
Refrigerant Pre-charged Amount (oz/ft)(g/m)	51 ( 1.45)
Additional Charge of Refrigerant((oz/ft)/(g/m)	0.7 ( 65)
Connection Method	Flared

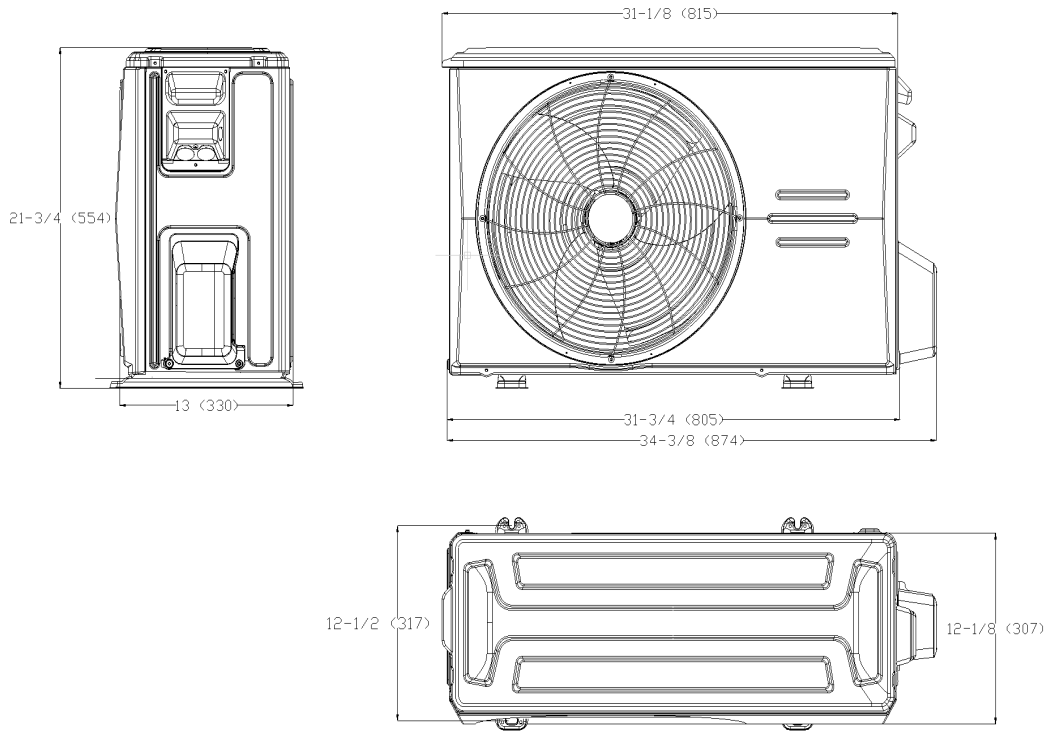
Indoor Unit Dimension



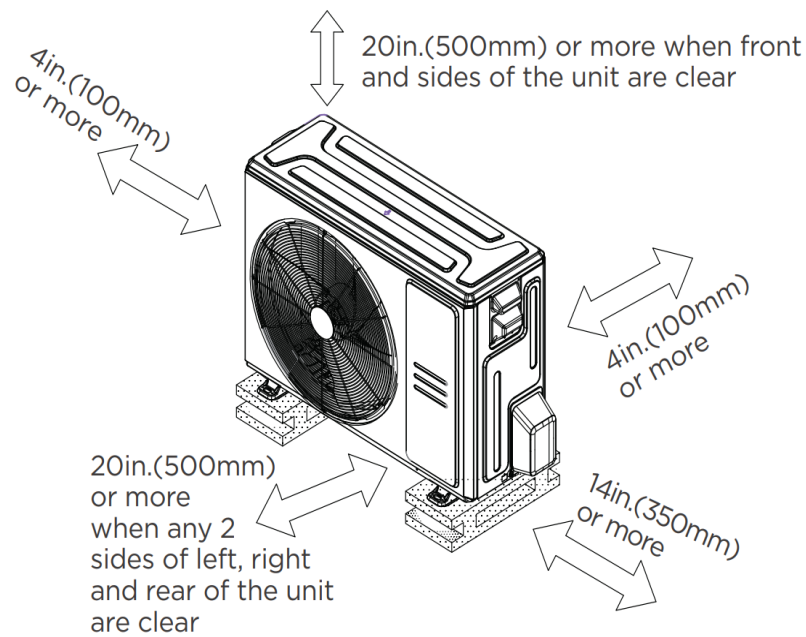
Dimensions		Model(Btu/h)		24-A		36-A		36-B	
		inch	mm	inch	mm	inch	mm		
A	Model Height	18	457	23-5/16	592	23-1/2	599		
B	Model Width	14-1/2	368	14-1/2	368	17-1/2	445		
C	Supply Air Opening Width	13-1/4	336	13-1/4	336	16-3/16	411		
D	Return Air Opening Width	11-15/16	303	11-15/16	303	14-15/16	380		
E	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		
Dimensions		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