

Air Handler Heat Pump System	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit Qty:
Reference:	Unit Designation (Model #):



INDOOR SPECIFICATION	
Indoor Air Flow (High/Low) (CFM)	796/660
Indoor Noise Level (High/Low) (dBA)	52
Dimension (W×D×H)	20-15/32×14-61/64×36-1/32
Package (W×D×H)	520×380×915
Net/Gross Weight	88/95
	39.9/43.1

OUTDOOR SPECIFICATION	
Compressor Type	ROTARY
Compressor Model	KTN210D60UMT3
Refrigerant	R32
Refrigerant Oil Charge(mL)	630
Refrigerant Oil	VG74
Outdoor Air Flow (Max) (CFM)	2100.0
Outdoor Noise Level (dBA)	58
Dimension (W×D×H)	23-5/8×23-5/8×25
Package (W×D×H)	600×600×635
Net/Gross Weight	114/120
	51.5/54.5

EFFICIENCY			
Cooling		Heating	
SEER2	15.0	HSPF2-5	6.9
EER2	9.5	COP	3.20

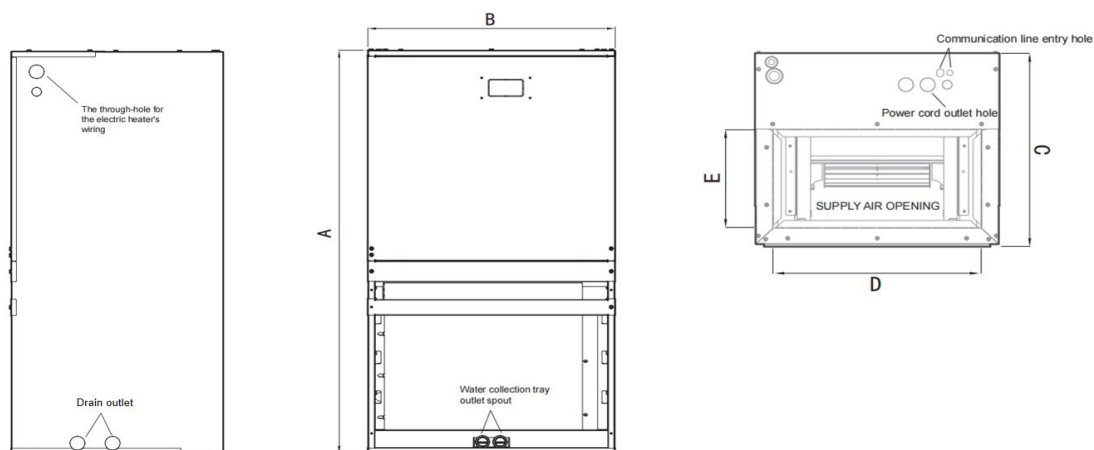
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	23000
Min/Max Capacity	6800~25000
Moisture Removal(L/h)	1.93
Standard Operating Range(*F/*C)	5~131(-15~55)
Rated Cooling Conditions:	
Indoor: 80°F DB/67°F WB	
Outdoor: 95°F DB/75°F WB	

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	26000
2. @ 47°F Min/Max Capacity	9000~28000
3. @ 17°F Rated	13000
4. @ 5°F Rated: Capacity / COP	18500/1.75
5. @ 5°F Max: Capacity	19000
Standard Operating Range(*F/*C)	-4~75(-20~24)
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	208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	1.5
Indoor MOP	3
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	20
Outdoor MOP	25
Communication Wiring	AWG 25×3 Shielded
Compressor RLA	8.4
Outdoor Fan Motor RLA	2.3
Outdoor Fan Motor W	200
Indoor Fan Motor RLA	1.19
Indoor Fan Motor W	100
System Power Input @ Cooling (W)	2421.05263157895(750~2700)
System Power Input @ Heating (W)	2250(660~2600)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

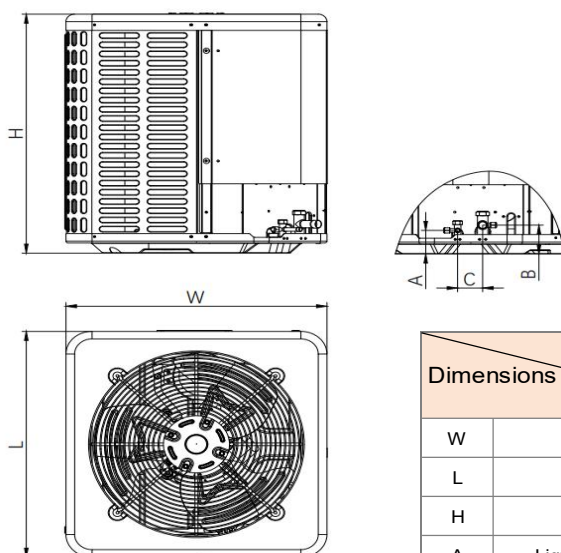
PIPING	
Throttle type(Indoor)	Piston
Throttle type(Outdoor)	Capillary
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	164(50)
Max. Height Difference(ft/m)	82(25)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	75.84(2.15)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.52(48)
Connection Method	Flared

Indoor Unit Dimension



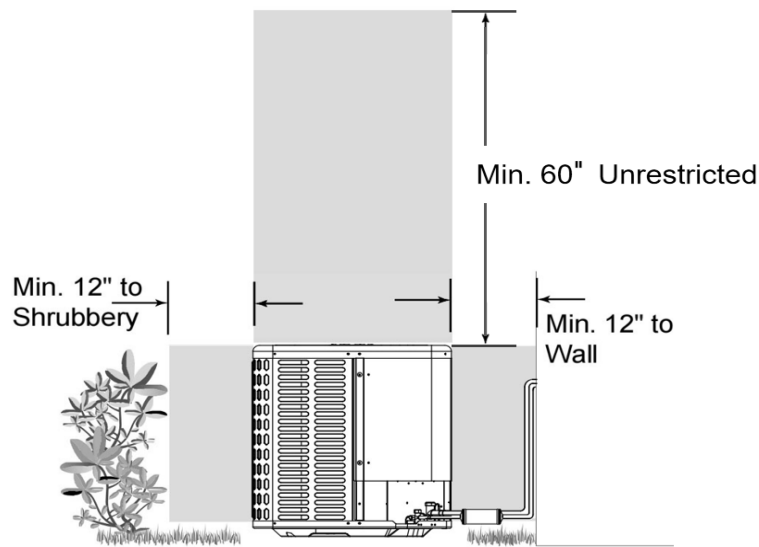
Dimensions		Model	18/24K		24/36K	
			inch	mm	inch	mm
A	Model Height		36-1/32	915	39-9/16	1005
B	Model width		20-15/32	520	22-3/64	560
C	Supply Air Opening width		14-61/64	380	19-3/32	485
D	Return Air Opening Width		17-33/64	445	18-57/64	480
E	Model Depth		9-29/64	240	9-27/32	250

Outdoor Unit Dimension

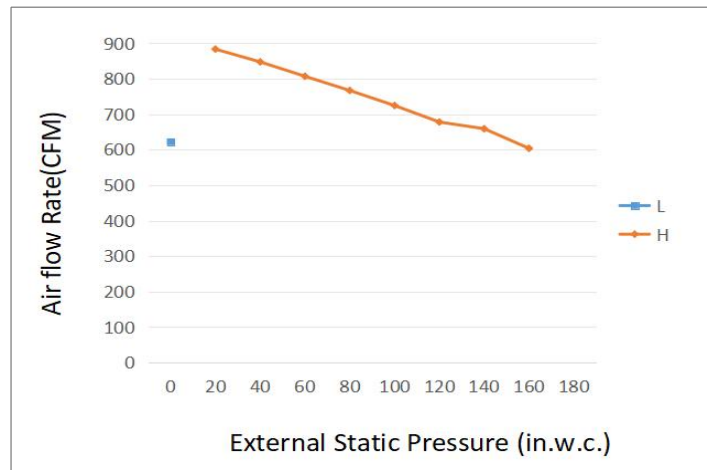


Dimensions		Model	18K/24K		30K/36K	
			inch	mm	inch	mm
W	Model width		23-5/8	600	29-9/64	740
L	Model length		23-5/8	600	29-9/64	740
H	Model height		25	635	25	635
A	Liquid side valve height		2-31/64	63	2-31/64	63
B	Distance between two valves		3-1/32	77	3-1/32	77
C	Gas side valve height		2-9/32	58	2-9/32	58

Installation Instruction For Outdoor Unit



Fan Performance For Indoor Unit



Features

- Front air intake, easy installation
- External static pressure 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:
 - Wired controller with built-in WiFi
 - Third-Party 24V Thermostat
- Adaptive Control System
- Crankcase heater equipped as standard



Performance Capacity Ratings

COOLING PERFORMANCE DATA

OD_Model	ID_Model	Furnace	Brand	ARIREF	ID_Type	Stage	Est_Airfl low	ACHP	IshSVTC																				
BAH32-24-15		CIM32-24-15																											
				ComfortStar		A	High	650	H																				
DB	IWB (°F)	S9					63					67					71												
		72	74	76	78	80	72	74	76	78	80	72	74	76	78	80	72	74	76	78	80								
85	TC ¹	21.90	21.97	22.03	22.10	22.16	23.30	23.37	23.44	23.51	23.58	24.70	24.77	24.85	24.92	25.00	26.20	26.28	26.36	26.44	26.52								
	Sensible ²	18.79	20.56	21.90	21.90	21.90	15.06	16.82	18.59	20.35	22.12	11.24	13.00	14.77	16.53	18.30	7.40	9.16	10.92	12.68	14.45								
	kW	1.75	1.75	1.75	1.76	1.76	1.76	1.76	1.76	1.77	1.77	1.76	1.76	1.76	1.77	1.77	1.77	1.77	1.77	1.78	1.78								
90	TC ¹	21.30	21.36	21.43	21.49	21.56	22.60	22.67	22.74	22.80	22.87	24.10	24.17	24.24	24.32	24.39	25.60	25.68	25.75	25.83	25.91								
	Sensible ²	18.50	20.27	21.30	21.30	21.30	14.74	16.51	18.27	20.04	21.80	10.99	12.75	14.52	16.28	18.05	7.17	8.93	10.69	12.45	14.22								
	kW	1.84	1.84	1.84	1.85	1.85	1.85	1.85	1.85	1.86	1.86	1.85	1.85	1.85	1.86	1.86	1.86	1.86	1.86	1.87	1.87								
95	TC ¹	20.70	20.76	20.82	20.89	20.95	22.00	22.07	22.13	22.20	22.27	23.40	23.47	23.54	23.61	23.68	24.90	24.97	25.05	25.12	25.20								
	Sensible ²	18.22	19.98	20.70	20.70	20.70	14.48	16.24	18.00	19.77	21.54	10.70	12.46	14.23	15.99	17.76	6.90	8.66	10.42	12.18	13.95								
	kW	1.93	1.93	1.93	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.95	1.95	1.95	1.96	1.96	1.96	1.96	1.96	1.97	1.97								
100	TC ¹	20.00	20.06	20.12	20.18	20.24	21.30	21.36	21.43	21.49	21.56	22.70	22.77	22.84	22.90	22.97	24.10	24.17	24.24	24.32	24.39								
	Sensible ²	17.88	19.64	20.00	20.00	20.00	14.16	15.93	17.69	19.46	21.22	10.41	12.17	13.94	15.70	17.47	6.59	8.35	10.11	11.88	13.64								
	kW	2.03	2.03	2.03	2.04	2.04	2.04	2.04	2.04	2.05	2.05	2.05	2.05	2.05	2.06	2.06	2.06	2.06	2.06	2.07	2.07								
105	TC ¹	19.40	19.46	19.52	19.58	19.63	20.70	20.76	20.82	20.89	20.95	22.00	22.07	22.13	22.20	22.27	23.40	23.47	23.54	23.61	23.68								
	Sensible ²	17.60	19.36	19.40	19.40	19.40	13.90	15.66	17.42	19.19	20.70	10.12	11.88	13.65	15.41	17.18	6.32	8.08	9.84	11.61	13.37								
	kW	2.14	2.14	2.14	2.15	2.15	2.15	2.15	2.15	2.16	2.16	2.16	2.16	2.16	2.17	2.17	2.17	2.17	2.17	2.18	2.18								
115	TC ¹	18.00	18.05	18.11	18.16	18.22	19.20	19.26	19.32	19.37	19.43	20.50	20.56	20.62	20.69	20.75	21.80	21.87	21.93	22.00	22.06								
	Sensible ²	16.93	18.00	18.00	18.00	18.00	13.24	15.00	16.76	18.53	19.20	9.51	11.27	13.04	14.80	16.57	5.71	7.47	9.24	11.00	12.77								
	kW	2.05	2.05	2.05	2.06	2.06	2.06	2.06	2.06	2.07	2.07	2.07	2.07	2.07	2.08	2.08	2.08	2.08	2.08	2.09	2.09	2.09							

HEATING PERFORMANCE DATA

Model	Heating		Outdoor conditions (DB)										
	Indoor Conditions DB		5°F -15°C	10°F -12.2°C	17°F -8.3°C	20°F -6.7°C	25°F -3.9°C	32°F 0°C	35°F 1.7°C	40°F 4.4°C	47°F 8.3°C	50°F 10°C	57°F 13.9°C
CWM32-24-15 BAH32-24-15 (208-230V)	60°F (15.6°C)	TC	18.17	19.01	19.85	21.12	22.40	23.67	24.94	26.21	27.55	28.82	30.10
		Input	2.58	2.47	2.49	2.49	2.50	2.50	2.50	2.50	2.51	2.51	2.51
	65°F (18.3°C)	TC	17.64	18.46	19.27	20.51	21.74	22.98	24.22	25.45	26.75	27.99	29.22
		Input	2.64	2.52	2.54	2.55	2.55	2.55	2.55	2.56	2.56	2.56	2.56
	70°F (21.1°C)	TC	17.13	17.92	18.71	19.91	21.11	22.31	23.51	24.71	25.97	27.17	28.37
		Input	2.69	2.57	2.59	2.60	2.60	2.60	2.60	2.61	2.61	2.61	2.62
	75°F (23.9°C)	TC	16.62	17.38	18.15	19.31	20.48	21.64	22.80	23.97	25.19	26.35	27.52
		Input	2.74	2.62	2.65	2.65	2.65	2.65	2.66	2.66	2.66	2.66	2.67