

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)	1160/930
Indoor Noise Level (High/Low) (dBA)	52
Dimension (W×D×H)	22-3/64×19-3/32×39-9/16
	560×485×1005
Package (W×D×H)	24-21/64×21-9/64×42-53/64
	620×538×1085
Net/Gross Weight	88/95
	39.9/43.1

OUTDOOR SPECIFICATION	
Compressor Type	TWIN-ROTARY
Compressor Model	KTM240D57UMT
Refrigerant	R32
Refrigerant Oil Charge(mL)	670
Refrigerant Oil	VG74
Outdoor Air Flow (Max) (CFM)	2800.0
Outdoor Noise Level (dBA)	59
Dimension (W×D×H)	29-9/64×29-9/64×25
	740×740×635
Package (W×D×H)	30-5/16×30-5/16×26-3/16
	770×770×665
Net/Gross Weight	140/148
	63.5/67

EFFICIENCY			
Cooling		Heating	
SEER2	15.0	HSPF2-5	6.9
EER2	9.0	COP	3.40

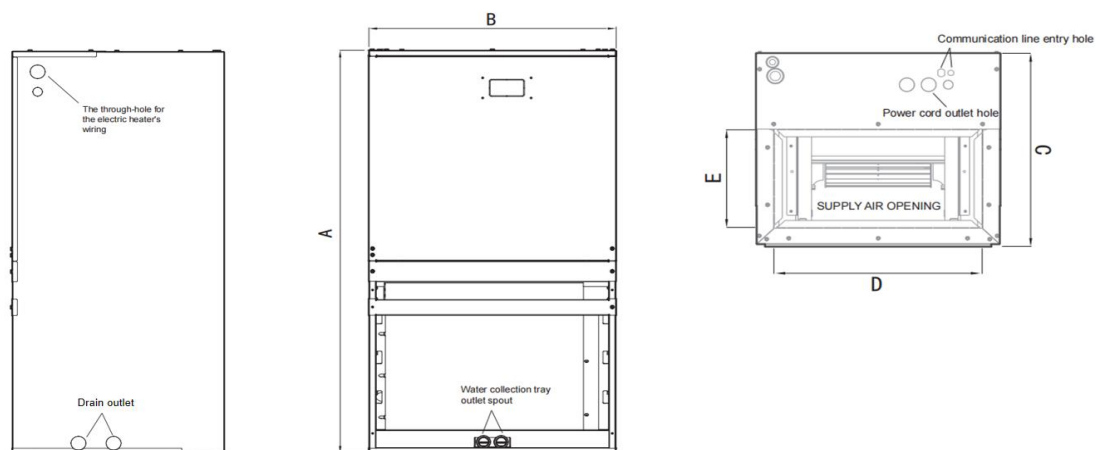
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	34200
Min/Max Capacity	13000~38000
Moisture Removal(L/h)	3.4
Standard Operating Range(*F/*C)	5~131(-15~55)
Rated Cooling Conditions:	
Indoor: 80°F DB/67°F WB	
Outdoor: 95°F DB/75°F WB	

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	36000
2. @ 47°F Min/Max Capacity	11000~39000
3. @ 17°F Rated	17500
4. @ 5°F Rated: Capacity / COP	23000/1.8
5. @ 5°F Max: Capacity	26000
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)	2.8
Indoor MOP	3
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	25
Outdoor MOP	30
Communication Wiring	AWG 25×3 Shielded
Compressor RLA	9.45
Outdoor Fan Motor RLA	2.3
Outdoor Fan Motor W	200
Indoor Fan Motor RLA	2.23
Indoor Fan Motor W	220
System Power Input @ Cooling (W)	3800(460~3600)
System Power Input @ Heating (W)	3200(600~3600)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

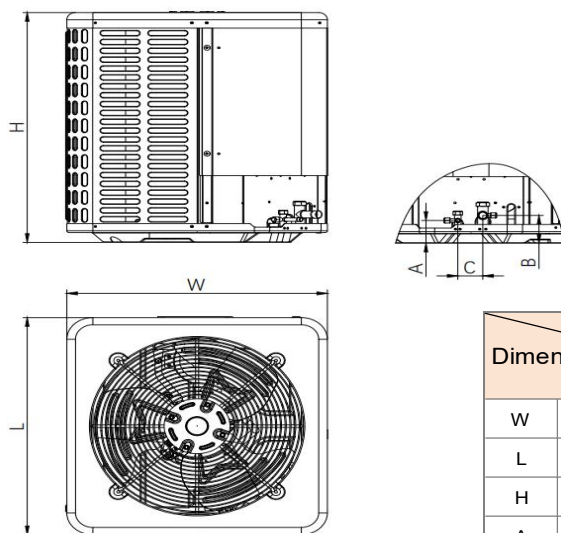
PIPING	
Throttle type(Indoor)	Piston
Throttle type(Outdoor)	Capillary
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	246(75)
Max. Height Difference(ft/m)	98.4(30)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	102.29(2.9)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.52(48)
Connection Method	Flared

Indoor Unit Dimension



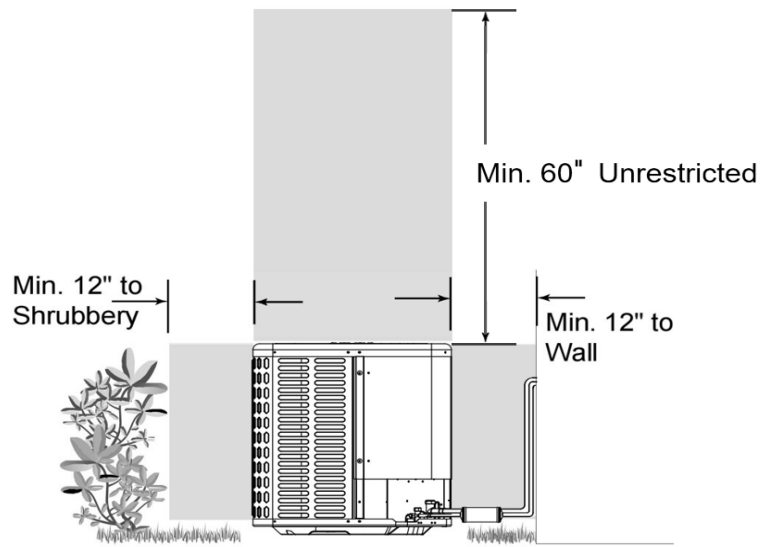
Dimensions \ Model		18/24K		24/36K	
		inch	mm	inch	mm
A	Model Height	36-1/32	915	39-9/16	1005
B	Model width	20-15/32	520	22-3/64	560
C	Supply Air Opening width	14-61/64	380	19-3/32	485
D	Return Air Opening Width	17-33/64	445	18-57/64	480
E	Model Depth	9-29/64	240	9-27/32	250

Outdoor Unit Dimension

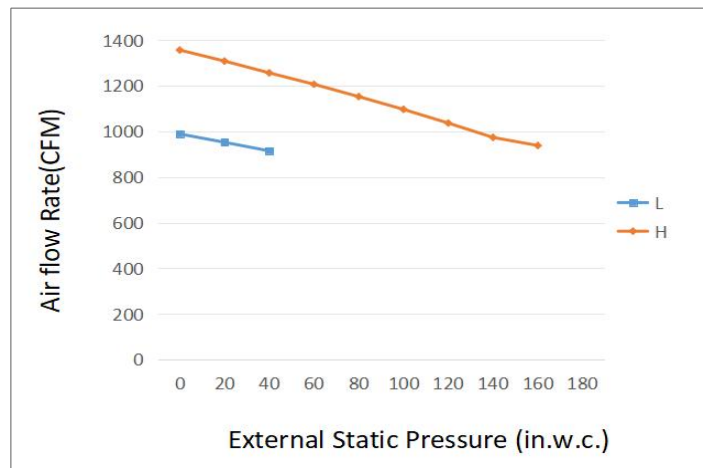


Dimensions \ Model		18K/24K		30K/36K	
		inch	mm	inch	mm
W	Model width	23-5/8	600	29-9/64	740
L	Model length	23-5/8	600	29-9/64	740
H	Model height	25	635	25	635
A	Liquid side valve height	2-31/64	63	2-31/64	63
B	Distance between two valves	3-1/32	77	3-1/32	77
C	Gas side valve height	2-9/32	58	2-9/32	58

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

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Air Conditioning & Heating Products

Performance Capacity Ratings

COOLING PERFORMANCE DATA

OD_Model	ID_Model	Furnace	Brand	ARIREF	ID_Type	Stage	Est_Airfl low	ACHP	IShSVTC												
BAH32-36-15	CWM32-36-15		ComfotStar		A	High	1000	H													
OUTDOOR DB	IWB(°F)	59					63					67					71				
	IDB (°F)	72	74	76	78	80	72	74	76	78	80	72	74	76	78	80	72	74	76	78	80
85	TC ¹	32.50	32.60	32.70	32.79	32.89	34.60	34.70	34.81	34.91	35.02	36.80	36.91	37.02	37.13	37.24	39.00	39.12	39.23	39.35	39.47
	Sensible ²	27.61	30.17	32.50	32.50	32.50	22.21	24.77	27.32	29.88	32.44	16.72	19.27	21.83	24.38	26.94	11.13	13.68	16.24	18.79	21.35
	kW	2.67	2.67	2.68	2.68	2.68	2.68	2.68	2.69	2.69	2.69	2.68	2.68	2.69	2.69	2.69	2.69	2.69	2.70	2.70	2.70
90	TC ¹	31.60	31.69	31.79	31.89	31.98	33.70	33.80	33.90	34.00	34.11	35.80	35.91	36.02	36.12	36.23	38.00	38.11	38.23	38.34	38.46
	Sensible ²	27.18	29.73	31.60	31.60	31.60	21.80	24.36	26.91	29.47	32.04	16.30	18.85	21.41	23.96	26.53	10.73	13.29	15.84	18.39	20.95
	kW	2.81	2.81	2.82	2.82	2.82	2.82	2.82	2.83	2.83	2.83	2.83	2.83	2.84	2.84	2.84	2.84	2.84	2.85	2.85	2.85
95	TC ¹	30.70	30.79	30.88	30.98	31.07	32.70	32.80	32.90	33.00	33.09	34.80	34.90	35.01	35.11	35.22	37.00	37.11	37.22	37.33	37.45
	Sensible ²	26.74	29.30	30.70	30.70	30.70	21.35	23.90	26.46	29.02	31.58	15.88	18.43	20.99	23.55	26.11	10.35	12.90	15.45	18.01	20.57
	kW	2.95	2.95	2.96	2.96	2.96	2.96	2.96	2.97	2.97	2.97	2.97	2.97	2.98	2.98	2.98	2.99	2.99	3.00	3.00	3.00
100	TC ¹	29.80	29.89	29.98	30.07	30.16	31.70	31.80	31.89	31.99	32.08	33.80	33.90	34.00	34.11	34.21	35.90	36.01	36.12	36.22	36.33
	Sensible ²	26.31	28.87	29.80	29.80	29.80	20.90	23.46	26.02	28.58	31.14	15.46	18.02	20.57	23.13	25.69	9.92	12.47	15.03	17.59	20.15
	kW	3.10	3.10	3.11	3.11	3.11	3.11	3.11	3.12	3.12	3.12	3.13	3.13	3.14	3.14	3.14	3.15	3.15	3.16	3.16	3.16
105	TC ¹	28.80	28.89	28.97	29.06	29.15	30.70	30.79	30.88	30.98	31.07	32.70	32.80	32.90	33.00	33.09	34.80	34.90	35.01	35.11	35.22
	Sensible ²	25.83	28.39	28.80	28.80	28.80	20.46	23.01	25.57	28.13	30.69	15.01	17.56	20.12	22.68	25.24	9.50	12.05	14.61	17.16	19.72
	kW	3.09	3.09	3.10	3.10	3.10	3.11	3.11	3.11	3.12	3.12	3.12	3.12	3.13	3.13	3.13	3.14	3.14	3.14	3.15	3.15
115	TC ¹	26.70	26.78	26.86	26.94	27.02	28.50	28.59	28.67	28.76	28.84	30.40	30.49	30.58	30.67	30.77	32.40	32.50	32.59	32.69	32.79
	Sensible ²	24.84	26.70	26.70	26.70	26.70	19.48	22.04	24.60	27.16	28.50	14.06	16.62	19.18	21.74	24.30	8.58	11.13	13.69	16.25	18.81
	kW	2.98	2.99	2.99	2.99	2.99	3.00	3.00	3.00	3.00	3.01	3.01	3.01	3.02	3.02	3.02	3.03	3.03	3.03	3.04	3.04

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
CWM32-36-15 BAH32-36-15 (208-230V)	60°F (15.6°C)	TC	27.04	29.37	31.69	32.83	33.98	35.13	36.27	37.42	38.34	39.49	40.63
		Input	3.41	3.38	3.34	3.31	3.28	3.25	3.21	3.18	3.15	3.21	3.28
	65°F (18.3°C)	TC	26.25	28.51	30.77	31.88	32.99	34.10	35.22	36.33	37.22	38.34	39.45
		Input	3.48	3.45	3.41	3.38	3.34	3.31	3.28	3.25	3.21	3.28	3.34
	70°F (21.1°C)	TC	25.49	27.68	29.87	30.95	32.03	33.11	34.19	35.27	36.14	37.22	38.30
		Input	3.55	3.52	3.48	3.45	3.41	3.38	3.35	3.31	3.28	3.35	3.41
	75°F (23.9°C)	TC	24.73	26.85	28.97	30.02	31.07	32.12	33.16	34.21	35.06	36.10	37.15
		Input	3.62	3.59	3.55	3.52	3.48	3.45	3.41	3.38	3.35	3.41	3.48