

SUBMITTAL DATA SHEET

Series Name: Star Pro Series
Model Number: BAH32-30-15 (308) / LUC32-30-15 (302)

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)	1100/600
Indoor Noise Level (High/Low) (dBA)	40/36
Dimension (W×D×H)	inch 21-1/32×21-1/32×49-7/32
	mm 534×534×1245
Package (W×D×H)	inch 24-13/32×26-37/64×50-13/64
	mm 620×675×1275
Net/Gross Weight	lbs 142/157
	kg 64.5/71

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)	inch 29-9/64×29-9/64×25
	mm 740×740×635
Package (W×D×H)	inch 30-5/16×30-5/16×26-3/16
	mm 770×770×665
Net/Gross Weight	lbs 140/148
	kg 63.5/67

EFFICIENCY			
Cooling		Heating	
SEER2	15.0	HSPF2-4	8.5
EER2	10.2	COP	3.50

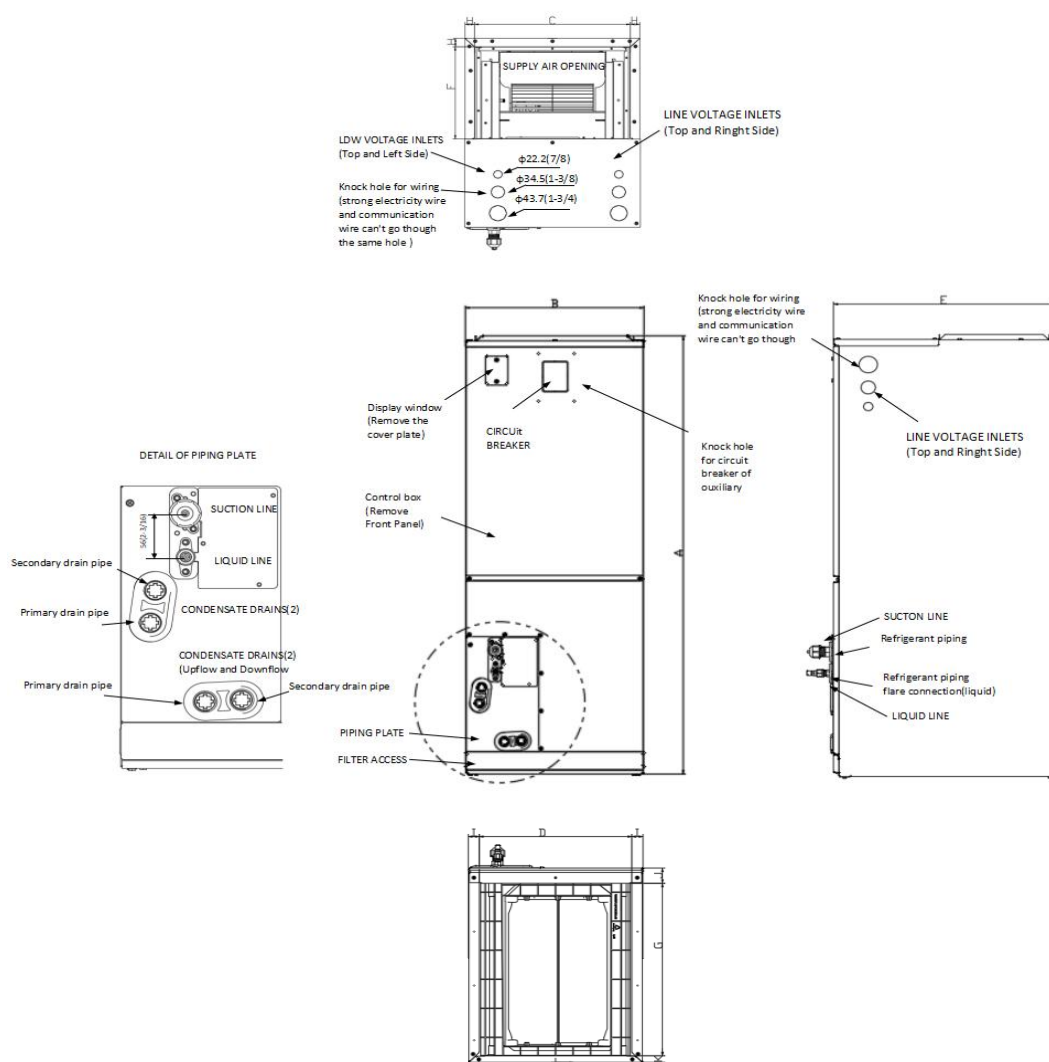
PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	30000
Min/Max Capacity	9800~32000
Moisture Removal(L/h)	3.1
Standard Operating Range(°F/°C)	5~131(-15~55)
Rated Cooling Conditions: Indoor: 80°F DB/67°F WB Outdoor: 95°F DB/75°F WB	

PERFORMANCE of Heating	
Heating (Btu/hr)	
1. @ 47°F Rated	31000
2. @ 47°F Min/Max Capacity	11500~34000
3. @ 17°F Rated	16000
4. @ 5°F Rated: Capacity / COP	20000/1.9
5. @ 5°F Max: Capacity	23000
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 Operating at Max. Frequency Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB	

ELECTRICAL	
Indoor Power Supply	208/230V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	2.9
Indoor MOP	3
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	22.5
Outdoor MOP	25
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)	2950(400~3200)
System Power Input @ Heating (W)	2700(550~3250)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

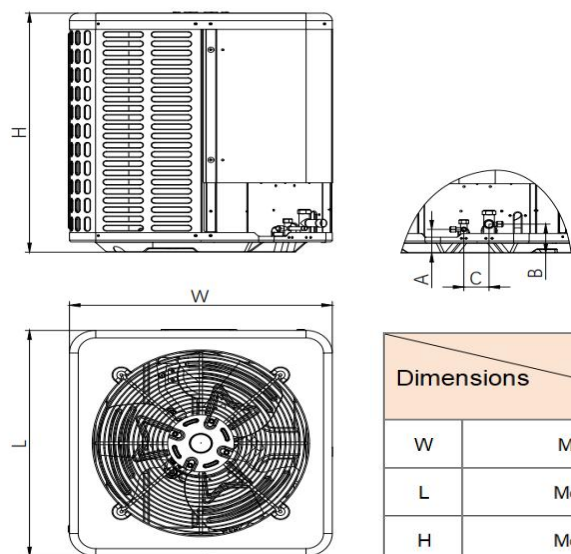
PIPING	
Throttle type(Indoor)	Piston
Throttle type(Outdoor)	Capillary
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	164(50)
Max. Height Difference(ft/m)	82(25)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	102.29(2.9)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.52(48)
Connection Method	Flared

Indoor Unit Dimension



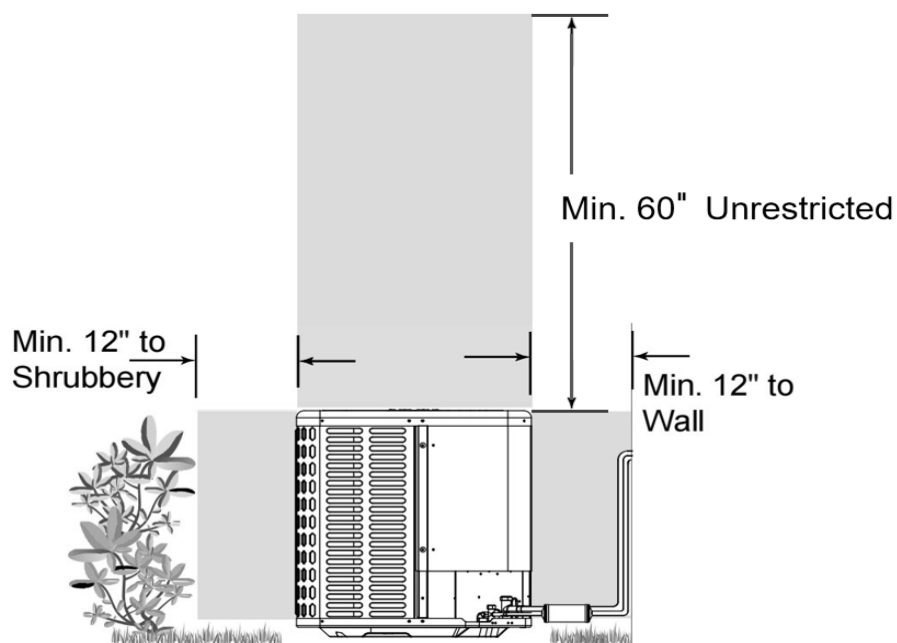
Dimensions		Model		18K/24K		30K/36K		48K/60K	
				inch	mm	inch	mm	inch	mm
A	Model Height			45-3/4	1162	49-49/64	1264	53-47/64	1365
B	Model width			17-41/64	448	21-9/64	537	24-39/64	625
C	Supply Air Opening width			15-5/8	397	19-9/64	486	22-19/32	574
D	Return Air Opening Width			15-25/64	391	18-47/64	476	22-23/64	568
E	Model Depth			21-7/64	536	21-7/64	536	21-7/64	536
F	Supply Air Opening Depth			10-9/32	261	10-9/32	261	10-9/32	261
G	Return Air Opening Depth			18-23/32	475.5	18-23/32	475.5	18-23/32	475.5
H	Supply Air Opening Clearance			15/16	24	15/16	24	15/16	24
I	Return Air Opening Side Clearance			1-1/8	28.5	1-1/8	28.5	1-1/8	28.5
J	Return Air Opening Front Clearance			1-21/32	42	1-21/32	42	1-21/32	42
K	Return Air Opening Back Clearance			45/64	18	45/64	18	45/64	18

Outdoor Unit Dimension

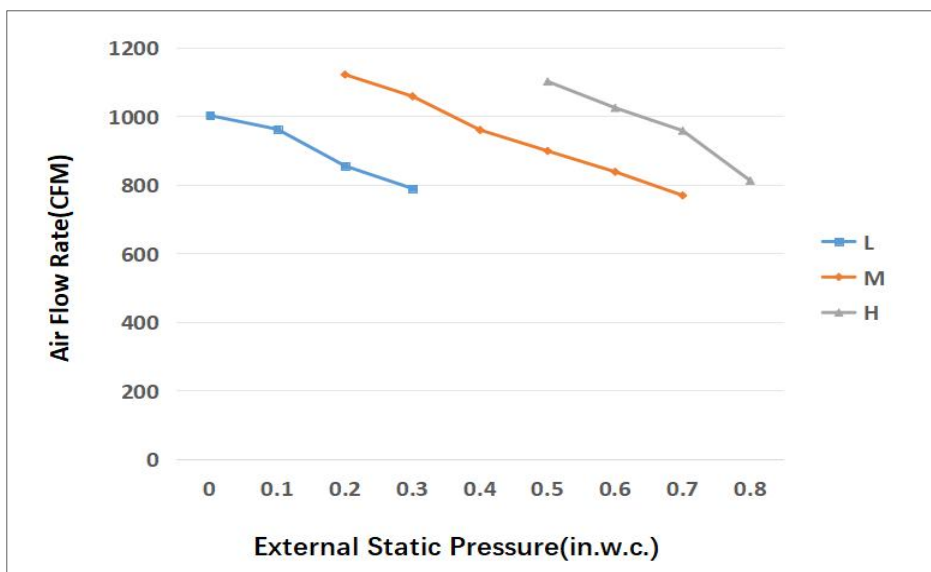


Dimensions \ Model		18K/24K		30K/36K		48K/60K	
		inch	mm	inch	mm	inch	mm
W	Model width	23-5/8	600	29-9/64	740	29-9/64	740
L	Model length	23-5/8	600	29-9/64	740	29-9/64	740
H	Model height	25	635	25	635	32-7/8	835
A	Liquid side valve height	2-31/64	63	2-31/64	63	2-31/64	63
B	Distance between two valves	3-1/32	77	3-1/32	77	3-1/32	77
C	Gas side valve height	2-9/32	58	2-9/32	58	2-9/32	58

Installation Instruction For Outdoor Unit



Fan Performance For Indoor Unit



Features

- Multi-position installation: horizontal(left or right), vertical(up or down)
- 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



OD_Model	ID_Model	Furnace	Brand	ARIREF	ID_Type	Stage	Est_Airf_low	ACHP	IsHSVTC															
BAH32~30~15	LUC32~30~15		ComfortStar		A	High	1100	H																
OUTDOOR	IDB (°F)	59					63					67					71							
DB	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	28.40	28.49	28.57	28.66	28.74	30.30	30.39	30.48	30.57	30.67	32.20	32.30	32.39	32.49	32.59	34.30	34.40	34.51	34.61	34.71			
	Sensible ²	23.99	26.20	28.40	28.40	28.40	19.36	21.56	23.77	25.97	28.18	14.61	16.81	19.02	21.22	23.43	9.86	12.06	14.26	16.47	18.67			
	kW	2.06	2.06	2.07	2.07	2.07	2.07	2.07	2.08	2.08	2.08	2.08	2.08	2.08	2.09	2.09	2.09	2.09	2.09	2.10	2.10	2.10		
90	TC ¹	27.40	27.48	27.56	27.65	27.73	29.10	29.19	29.27	29.36	29.45	30.90	30.99	31.09	31.18	31.27	32.80	32.90	33.00	33.10	33.20			
	Sensible ²	22.90	24.97	27.04	27.40	27.40	18.48	20.55	22.62	24.70	26.77	14.01	16.08	18.15	20.22	22.30	9.49	11.56	13.62	15.70	17.77			
	kW	2.19	2.19	2.19	2.20	2.20	2.20	2.20	2.20	2.21	2.21	2.20	2.20	2.20	2.21	2.21	2.21	2.21	2.21	2.22	2.22	2.22		
95	TC ¹	26.60	26.68	26.76	26.84	26.92	28.40	28.49	28.57	28.66	28.74	30.10	30.19	30.28	30.37	30.46	32.00	32.10	32.19	32.29	32.39			
	Sensible ²	22.51	24.58	26.60	26.60	26.60	18.16	20.23	22.31	24.38	26.45	13.66	15.73	17.80	19.88	21.95	9.17	11.24	13.31	15.38	17.46			
	kW	2.31	2.31	2.31	2.32	2.32	2.31	2.31	2.31	2.32	2.32	2.32	2.32	2.32	2.33	2.33	2.33	2.33	2.33	2.34	2.34	2.34		
100	TC ¹	25.90	25.98	26.06	26.13	26.21	27.60	27.68	27.77	27.85	27.93	29.30	29.39	29.48	29.56	29.65	31.10	31.19	31.29	31.38	31.47			
	Sensible ²	22.17	24.24	25.90	25.90	25.90	17.80	19.87	21.94	24.02	26.09	13.33	15.40	17.47	19.54	21.62	8.81	10.88	12.95	15.02	17.10			
	kW	2.42	2.42	2.42	2.43	2.43	2.43	2.43	2.43	2.44	2.44	2.44	2.44	2.44	2.45	2.45	2.45	2.45	2.45	2.46	2.46	2.46		
105	TC ¹	25.10	25.18	25.25	25.33	25.40	26.70	26.78	26.86	26.94	27.02	28.40	28.49	28.57	28.66	28.74	30.20	30.29	30.38	30.47	30.56			
	Sensible ²	21.78	23.85	25.10	25.10	25.10	17.39	19.46	21.54	23.61	25.69	12.95	15.02	17.09	19.16	21.24	8.47	10.54	12.61	14.68	16.76			
	kW	2.55	2.55	2.56	2.56	2.56	2.56	2.56	2.57	2.57	2.57	2.57	2.57	2.57	2.58	2.58	2.58	2.58	2.58	2.59	2.59	2.59		
115	TC ¹	24.30	24.37	24.45	24.52	24.59	25.90	25.98	26.06	26.13	26.21	27.50	27.58	27.67	27.75	27.83	29.30	29.39	29.48	29.56	29.65			
	Sensible ²	21.39	23.46	24.30	24.30	24.30	17.03	19.10	21.18	23.25	25.33	12.58	14.65	16.72	18.79	20.87	8.12	10.19	12.26	14.33	16.41			
	k																							

Model	Heating		Outdoor conditions (DB)										
	Indoor Conditions DB		5°F	10°F	17°F	20°F	25°F	32°F	35°F	40°F	47°F	50°F	57°F
			-15°C	-12.2°C	-8.3°C	-6.7°C	-3.9°C	0°C	1.7°C	4.4°C	8.3°C	10°C	13.9°C
LUC32-30-15 BAH32-30-15 (208-230V)	60°F	TC	21.20	22.94	24.69	26.32	27.95	29.59	31.22	32.86	34.49	36.12	37.76
	(15.6°C)	Input	2.82	2.73	2.67	2.64	2.60	2.58	2.54	2.55	2.60	2.54	2.48
	65°F	TC	20.58	22.27	23.97	25.55	27.14	28.73	30.31	31.90	33.49	35.07	36.66
	(18.3°C)	Input	2.90	2.82	2.74	2.71	2.67	2.64	2.62	2.61	2.66	2.59	2.54
	70°F	TC	19.98	21.63	23.27	24.81	26.35	27.89	29.43	30.97	32.51	34.05	35.59
	(21.1°C)	Input	2.99	2.89	2.81	2.78	2.75	2.72	2.67	2.69	2.69	2.66	2.59
	75°F	TC	19.30	20.11	20.81	21.31	21.60	22.18	22.57	26.40	31.09	31.59	32.57
	(23.9°C)	Input	3.09	2.98	2.89	2.88	2.83	2.79	2.77	2.76	2.82	2.74	2.68