



SUBMITTAL DATA SHEET

Series Name: DC Inverter Heat Pump AHU Series
 Model Number: AB-MP48AHU-230V1 + AB-SD48HI-230VO

Air Handler Heat Pump System

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



INDOOR SPECIFICATION

Indoor Air Flow (High/Low) (CFM)	1690/750	
Indoor Noise Level (High/Low) (dBA)	53/46	
Dimension (WxDxH)	inch	24-31/64x21-1/32x52-63/64
	mm	622x534x1346
Package (WxDxH)	inch	27-7/8x26-37/64x54-9/64
	mm	708x675x1375
Net/Gross Weight	lbs	165/184
	kg	75/83.5

OUTDOOR SPECIFICATION

Compressor Type	TWIN-ROTARY	
Compressor Model	KTM310D85UMT	
Refrigerant	R32	
Refrigerant Oil Charge(mL)	870	
Refrigerant Oil	VG74	
Outdoor Air Flow (Max) (CFM)	2950.0	
Outdoor Noise Level (dBA)	60	
Dimension (WxDxH)	inch	37-63/64x31-57/64x15-3/4
	mm	965x810x400
Package (WxDxH)	inch	42-1/8x34-41/64x20-43/64
	mm	1070x880x525
Net/Gross Weight	lbs	152/160
	kg	69/72.5

EFFICIENCY

Cooling		Heating	
SEER2	16.5	HSPF2	8.5
EER2	9.0	COP	3.45

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	48000
Min/Max Capacity	16600~49900
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

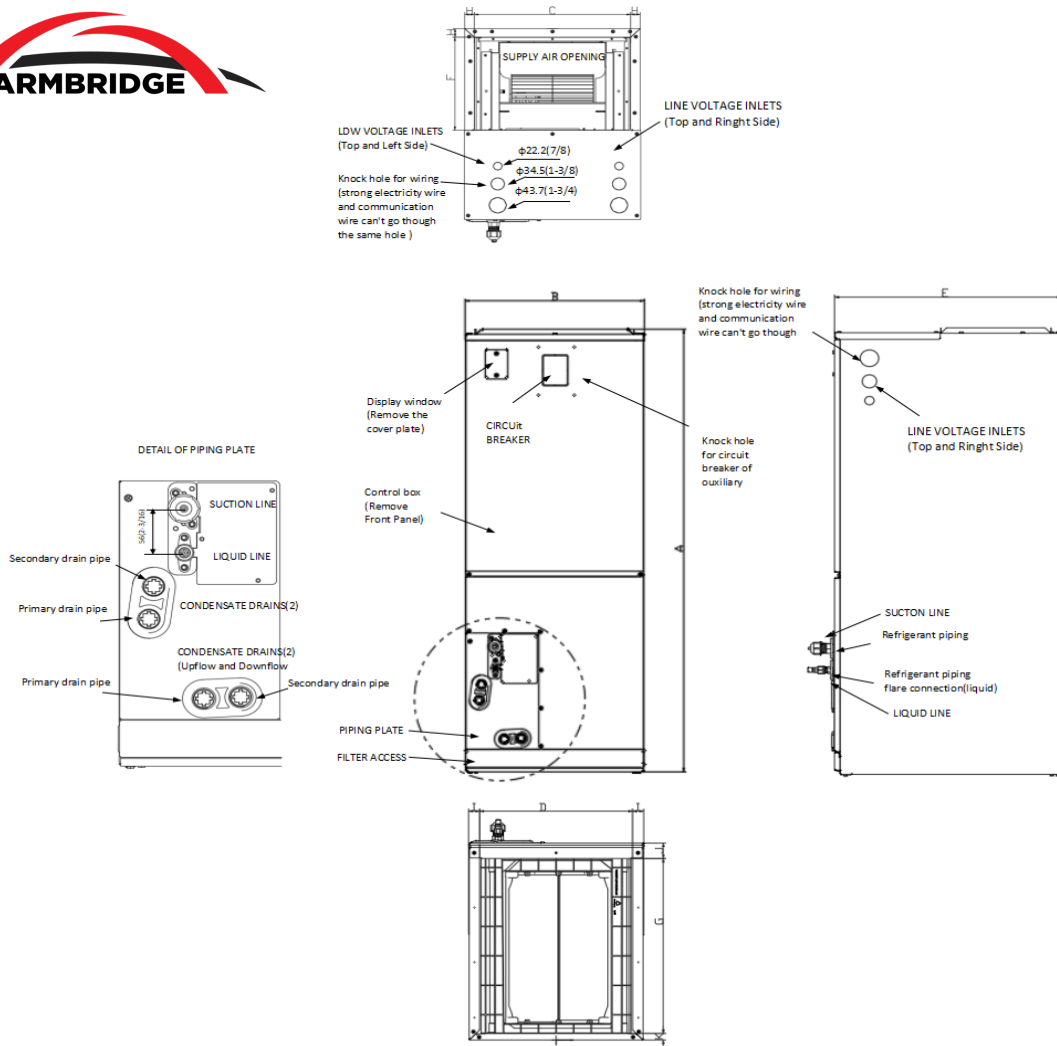
Heating (Btu/hr)	
1. @ 47°F Rated	48000
2. @ 47°F Min/Max Capacity	15300~49500
3. @ 17°F Rated	28600
4. @ 5°F Rated: Capacity	35000
Standard Operating Range(°F/°C)	-4~75(-20~24)
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB Outdoor: 47°F DB/43°F WB
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F 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 (208/230V)	7
Indoor MOP	10
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	37
Outdoor MOP	40
Communication Wiring	AWG 25x3 Shielded
Compressor RLA	5.25
Outdoor Fan Motor RLA	2.5
Outdoor Fan Motor W	150
Indoor Fan Motor RLA	5.4
Indoor Fan Motor W	560
System Power Input @ Cooling (W)	5333(1400 ~ 5350)
System Power Input @ Heating (W)	4100(1025 ~4650)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

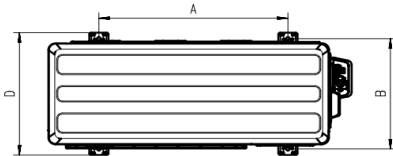
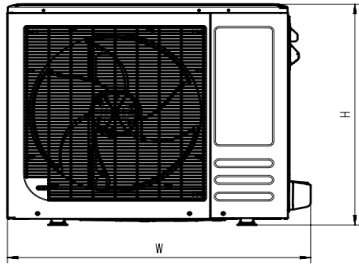
PIPING

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)	105.82(3)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.52(48)
Connection Method	Flared



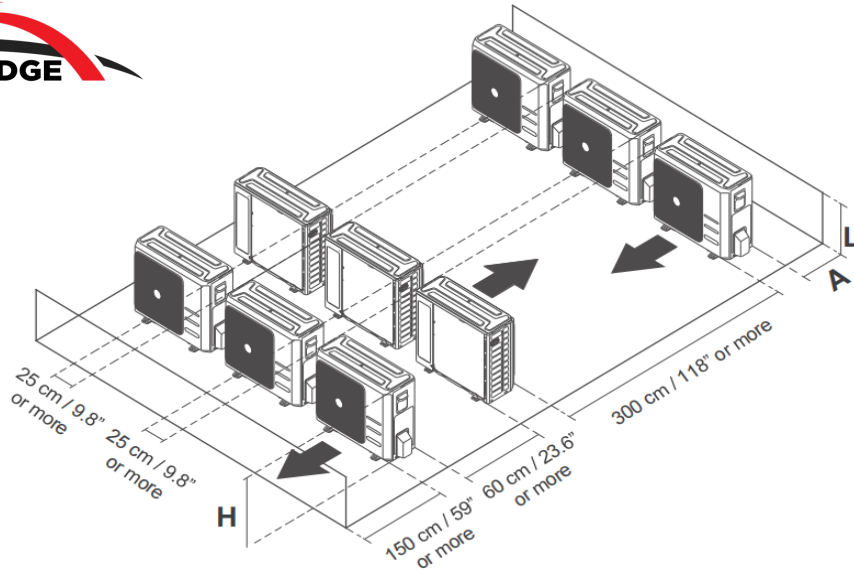
Dimensions	Model	18K/24K		30K/36K		48K/60K	
		inch	mm	inch	mm	inch	mm
A	Model Height	45-3/4	1162	49-49/64	1264	53-47/64	1365
B	Model width	17-41/64	448	21-9/64	537	24-39/64	625
C	Supply Air Opening width	15-5/8	397	19-9/64	486	22-19/32	574
D	Return Air Opening Width	15-25/64	391	18-47/64	476	22-23/64	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

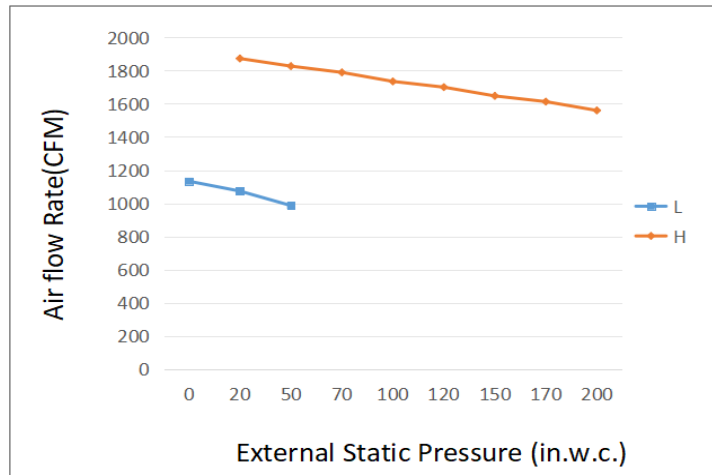


Dimensions		Model		18K/24K		30K/36K/48K/60K	
		inch	mm	inch	mm		
W	Model width	915	36-1/32	965	37-63/64		
H	Model height	650	25-19/32	810	31-57/64		
A	Distance between left and right foot bolts	605	23-13/16	635	25		
B	Distance between front and rear foot bolts	357	14-1/16	405	15-15/16		
D	Model depth	392	15-7/16	448	17-41/64		

Installation Instruction For Outdoor Unit



Fan Performance For Indoor Unit



Features

- High efficiency and energy-saving, SEER2 up to 18.4
- Multi-position installation: horizontal(left or right), vertical(up or down)
- ECM fan motor with constant torque technology
- 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