



SUBMITTAL DATA SHEET

Series Name: DC Inverter Heat Pump AHU Series
 Model Number: AB-MP18AHU-230VI + AB-SD18HI-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)		650/420
Indoor Noise Level (High/Low) (dBA)		38.5/34
Dimension (WxDxH)	inch	17-33/64x21-1/32x45
	mm	445x534x1143
Package (WxDxH)	inch	20-55/64x26-37/64x46-17/64
	mm	530x675x1175
Net/Gross Weight	lbs	114/127
	kg	51.5/57.5

OUTDOOR SPECIFICATION		
Compressor Type		ROTARY
Compressor Model		KSN140D33UFZ3
Refrigerant		R32
Refrigerant Oil Charge(mL)		420
Refrigerant Oil		VG74
Outdoor Air Flow (Max) (CFM)		2000.0
Outdoor Noise Level (dBA)		54
Dimension (WxDxH)	inch	36-1/32x25-19/32x13-37/64
	mm	915x650x345
Package (WxDxH)	inch	40-5/32x28-15/16x17-1/8
	mm	1020x735x435
Net/Gross Weight	lbs	84/92
	kg	38/41.5

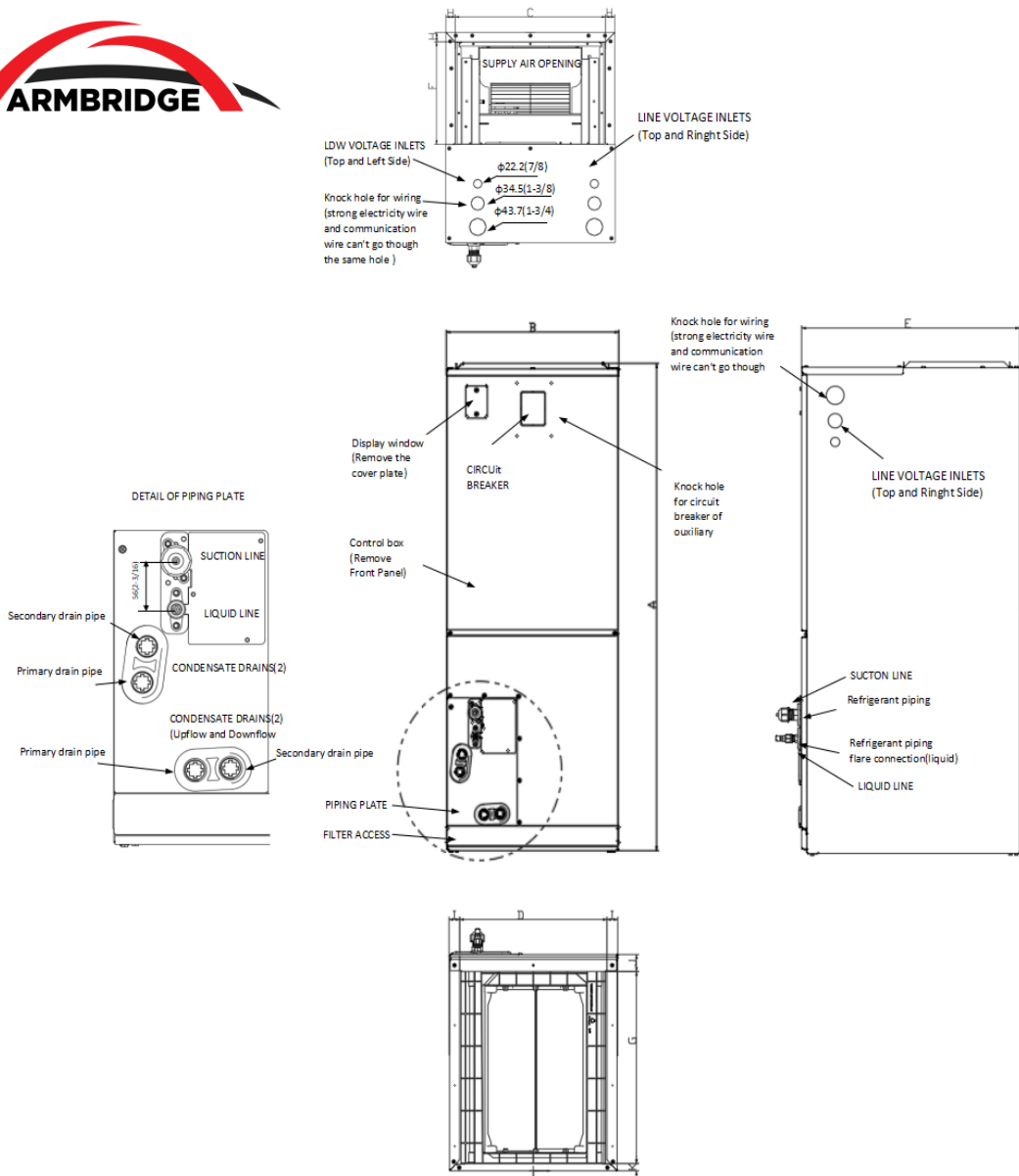
EFFICIENCY			
Cooling		Heating	
SEER2	18.4	HSPF2	8.60
EER2	11.5	COP	3.85

PERFORMANCE of Cooling	
Cooling (Btu/hr)	
Rated Capacity	1565
Min/Max Capacity	400 ~ 1900
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	1450
1. @ 47°F Min/Max Capacity	340 ~1650
2. @ 17°F Rated	2.77
3. @ 5°F Rated: Capacity	14500
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

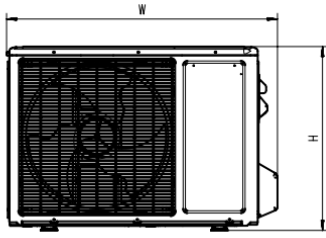
ELECTRICAL	
Indoor Power Supply	208/230V,60Hz,1Ph
Indoor MCA (208/230V)	3.5
Indoor MOP	6
Outdoor Power Supply	208/230V,60Hz,1Ph
Outdoor MCA	16
Outdoor MOP	20
Communication Wiring	AWG 25x3 Shielded
Compressor RLA	6.8
Outdoor Fan Motor RLA	2
Outdoor Fan Motor W	75
Indoor Fan Motor RLA	2.6
Indoor Fan Motor W	249
System Power Input @ Cooling (W)	1565(400 ~ 1900)
System Power Input @ Heating (W)	1450(340 ~ 1650)
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)	98.4(30)
Max. Height Difference(ft/m)	65.6(20)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	56.44(1.6)
Additional Charge of Refrigerant(oz/ft)/(g/m')	0.52(48)
Connection Method	Flared

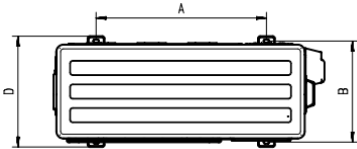


Dimensions	Model	18K/24K		30K/36K		48K/60K	
		inch	mm	inch	mm	inch	mm
A	Model Height	45-3/4	1162	49-49/64	1264	53-47/64	1365
B	Model width	17-41/64	448	21-9/64	537	24-39/64	625
C	Supply Air Opening width	15-5/8	397	19-9/64	486	22-19/32	574
D	Return Air Opening Width	15-25/64	391	18-47/64	476	22-23/64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

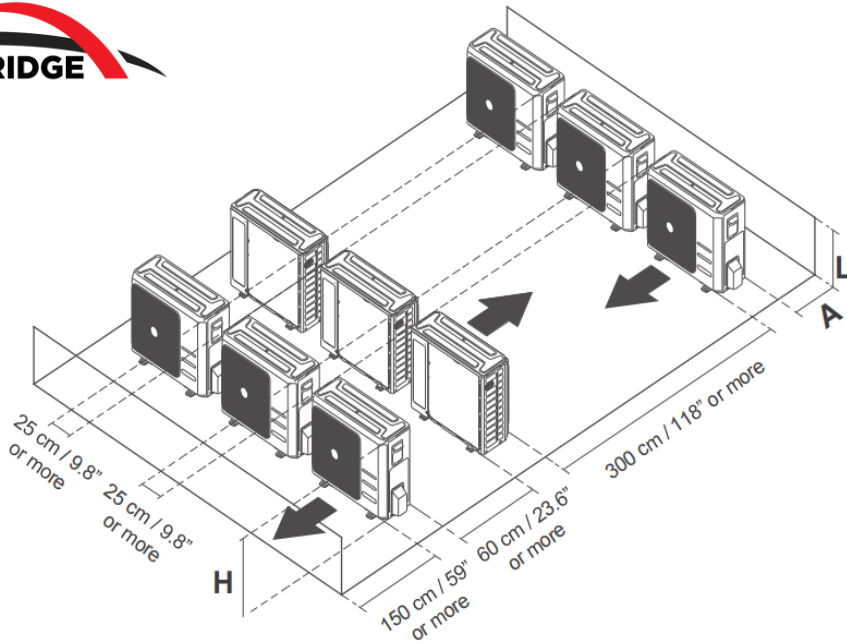
Outdoor Unit Dimension



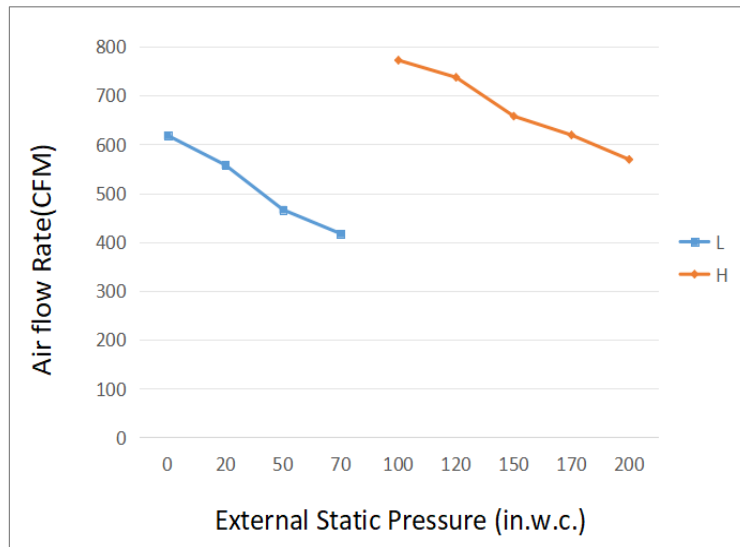
Dimensions		Model		18K/24K		30K/36K/48K/60K	
		inch	mm	inch	mm		
W	Model width	915	36-1/32	965	37-63/64		
H	Model height	650	25-19/32	810	31-57/64		
A	Distance between left and right foot bolts	605	23-13/16	635	25		
B	Distance between front and rear foot bolts	357	14-1/16	405	15-15/16		
D	Model depth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