## Submittal Data Sheet

Series Name: Hyper Heat AHU Series Model Number: <u>CS-HM24BAHU/CU-HM24BAHU</u>



AIR HANDLER HEAT PUMP SYSTEM	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:



INDOOD CDECIFICATION					
INDOOR SPECIFICATION					
Indoor Air Flow		824.0 / 759.3 / 694.5 / 629.8 /			
Indoor Noise Level (Turbo/H/M/L/		N\A/44/42/28/N\A			
Dimension	inch	21.02 x 17.52 x 45.00			
(W×D×H)	mm	534.0×445.0×1143.0			
Package	inch	26.57 x 20.87 x 48.62			
(W×D×H)	mm	675×530×1235			
Net/Gross	lbs	105.60/127.43			
Weight	kg	47.9/57.8			

OUTDOOR SPECIFICATION					
Compressor Type		ROTARY			
Compressor Model		KTM240D46UKT2			
Refrigerant		R454B			
Refrigerant Oil Charge(mL)		620			
Refrigerant Oil		VG74			
Outdoor Air Flow (Max) (CFM)		1765.7			
Outdoor Noise Level (dBA)		60			
Dimension	inch	35.04 x 13.46 x 26.50			
(W×D×H)	mm	890.0×342.0×673.0			
Package	inch	39.17 x 15.67 x 29.13			
(W×D×H)	mm	995×398×740			
Net/Gross	lbs	102.29/109.13			
Weight	kg	46.4/49.5			

EFFICIENCY					
Cooling		Heating			
SEER2	18.3	HSPF2-4	10.0		
EER2	11.7	COP	3.33		

PERFORMANCE of Cooling					
Cooling (Btu/hr)					
Rated Capacity 23000					
Min/Max Capacity 7200~27000					
Moisture Removal(L/h) 2.05					
Standard Operating Range(°F	-22~122(-30 <b>~</b> 50)				
Rated Cooling Conditions: Indoor: 80°F DB/67°F WE					
Outdoor: 95°F DB/75°F WB					

PERFORMANCE of Heating					
Heating (Btu/hr)					
1. @ 47°F Rated 24000					

ELECTRICAL				
Indoor Power Supply	115/208/230V,60Hz,1Ph			
Indoor MCA 115V/(208/230V)	5.5/4.0			
Indoor MOP	15			
Outdoor Power Supply	208/230V,60Hz,1Ph			
Outdoor MCA	19			
Outdoor MOP	20			
Communication Wiring	AWG 20-2			
Compressor RLA	14			
Outdoor Fan Motor RLA	1			
Outdoor Fan Motor W	80			
Indoor Fan Motor RLA	3			
Indoor Fan Motor W	250			
System Power Input @ Cooling (W)	1965(530 ~ 2870)			
System Power Input @ Heating (W)				
MCA: Min. circuit amps (A)	MOCP: Max. over current			
RLA: Rated load amps (A)	protection (A) W: Fan motor rated output (W)			

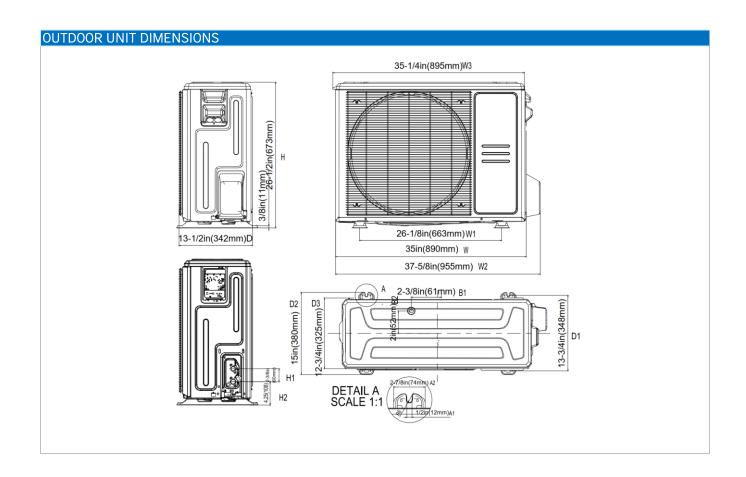
2. @ 47°F Min/Max Capacity	7100~30000		
3. @ 17°F Rated	20000		
4. @ 5°F Rated: Capacity / COI	21600/1.87		
5. @ 5°F Max: Capacity	21600		
Standard Operating Range(°F	-22~75(-30 <b>~</b> 24)		
1. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB		
	Outdoor: 47°F DB/43°F WB		
2. Rated Heating Conditions:	Indoor: 70°F DB/60°F WB		
	Outdoor: 17°F DB/15°F WB		
3. Heating Conditions, Compre	Indoor: 70°F DB/60°F WB		
Operating at Max. Frequency	Outdoor: 5°F DB/5°F WB		

00~30000 20000	PIPING	
600/1.87	Throttle type(Indoor)	EXV
21600	Throttle type(Outdoor)	EXV
5(-30 <b>~</b> 24)	Liquid Size	9.52mm(3/8in)
DB/60°F WB	Gas Size	19mm(3/4in)
F DB/43°F WB	Max. Piping Length(ft/m)	164(50)
DB/60°F WB	Max. Height Difference(ft/m)	82(25)
F DB/15°F WB	Max. Pre-charged Length(ft/m)	24.6(7.5)
)B/60°F WB	Refrigerant Pre-charged Amount(oz/kg)	74.08(2.1)
DB/5°F WB	Amount(oz/ka) Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
	Connection Method	Flared

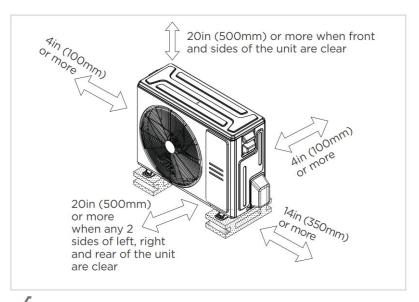
## INDOOR UNIT DIMENSIONS LINE VOLTAGE INLETS (Top and Ringht Side) LOW VOLTAGE INLETS ø22.2 (7/8) (Top and Left Side) Ø Ø34.5 (1−3/8) O-Knock hole for wiring 50 (1-15/16) (strong electricity wire and communication wire can't go though the same hole ) Ø43.7 (1−3/4)<del>(</del> 60 (2-3/8) 4 61.6(2-7/16) 56.9(2-1/4) Â 144.9(5-11/16) Knock hole for wiring (strong electricity wire and communication wire can't go though 81.9(3-3/16) Control box (Remove Front Panel) 76.3(3) DETAIL OF PIPING PLATE the same hole ) 60 (2-3/8) CIRCUIT BREAKER COVER 73(2-7/8) 50 (1–15/16) Knock hole for circuit breaker of auxiliary heater Display window (Remove the cover plate) -suction line LINE VOLTAGE INLETS (Top and Right Side) AIR FLOW LIQUID LINE Secondary drain pipe (Emergency draining) -ø19.05(3/4) 3/4"FPT CONDENSATE DRAINS(2) (Horizontal) Primary drain pipe (Gravity drain) ø19.05(3/4) 3/4"FPT SUCTION LINE Refrigerant piping flare connection(gas) CONDENSATE DRAINS(2) Secondary drain pipe (Upflow and Downflow) Refrigerant piping flare connection(liquid) (Emergency draining) ø19.05(3/4) 3/4"FPT PIPING PLATE Primary drain pipe LIQUID LINE (Gravity drain) ø19.05(3/4) 3/4"FPT FILTER ACCESS FILTER COVER 98(3-7/8) 41(1-5/8)

	Model	18k/24k		30k/36k		48k/60k	
Dimensions		inch	mm	inch	mm	inch	mm
А	Model Height	45	1143	49	1245	53	1346
В	Model Width	17-1/2	445	21	534	24-1/2	622
С	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
Е	Model Depth	21	534	21	534	21	534
F	Supply Air Opening Depth	10-1/4	260	10-1/4	260	10-1/4	260
G	Return Air Opening Depth	18-3/4	476	18-3/4	476	18-3/4	476
Н	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
1	Return Air Opening Side Clearance	1-1/4	32	1-1/4	32	1-1/8	28
J	Return Air Opening Front Clearance	1-1/2	38	1-5/8	41	1-5/8	41
K	Return Air Opening Back Clearance	5/8	16	5/8	16	3/4	19

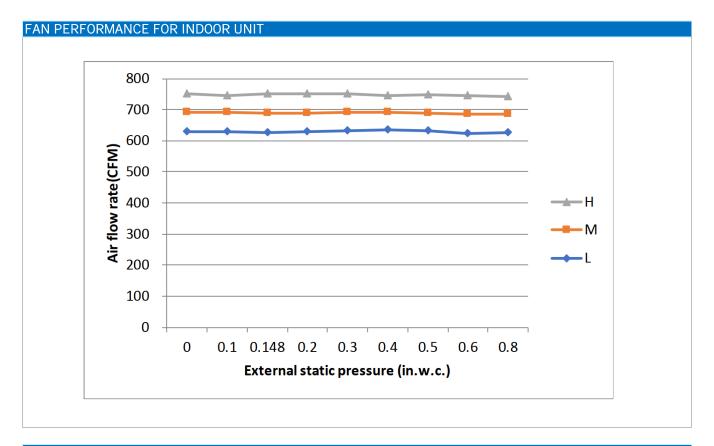
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Meets all spatial requirements shown in Installation Clearance Requirements above.



## **FEATURES**

- Multi-position installation: horizontal(left or right), vertical( up or down)
- Aluminum Coil
- Constantly Air Flow system 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 25kW
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller:120N(X6)
  - o Two way communication wired controller with built-in WiFi:120N(X6W)
  - o Wireless remote controller
  - o Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 19 SEER2, 12.5 EER2, 10.3 HSPF2
- 100% heat output at -4F\*
- Chassis heater and crankcase heater equipped as standard
- \* For 36K model, rated cooling capacity/heating capacity at -4F=100%