

Submittal Data Sheet

Panasonic

Series Name: Regular Heat AHU Series
 Model Number: CS-HM18BAHU/CU-M18BAHU

AIR HANDLER HEAT PUMP SYSTEM

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



INDOOR SPECIFICATION

Indoor Air Flow	618.03 / 576.83 / 529.74 / 488.54	
Indoor Noise Level (Turbo/H/M/L)	44/43/41/33/N/A	
Dimension (WxDxH)	inch	21.02 x 17.52 x 45.00
	mm	534.0x445.0x1143.0
Package (WxDxH)	inch	26.57 x 20.87 x 48.62
	mm	675x530x1235
Net/Gross	lbs	105.82/126.76
Weight	kg	48/57.5

OUTDOOR SPECIFICATION

Compressor Type	ROTARY	
Compressor Model	KSN140D58UFZ	
Refrigerant	R454B	
Refrigerant Oil Charge(mL)	440	
Refrigerant Oil	VG74	
Outdoor Air Flow (Max) (CFM)	1450.9	
Outdoor Noise Level (dBA)	55	
Dimension (WxDxH)	inch	31.69 x 12.99 x 21.81
	mm	805.0x330.0x554.0
Package (WxDxH)	inch	36.02 x 14.57 x 24.21
	mm	915x370x615
Net/Gross	lbs	77.16/83.77
Weight	kg	35/38

EFFICIENCY

Cooling		Heating	
SEER2	18.8	HSPF2-4	9.1
EER2	11.0	COP	3.15

PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	18000
Min/Max Capacity	5350-20000
Moisture Removal(L/h)	1.71
Standard Operating Range(°F)	-13~122(-25~50)
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	18000
2. @ 47°F Min/Max Capacity	5600-19000

ELECTRICAL

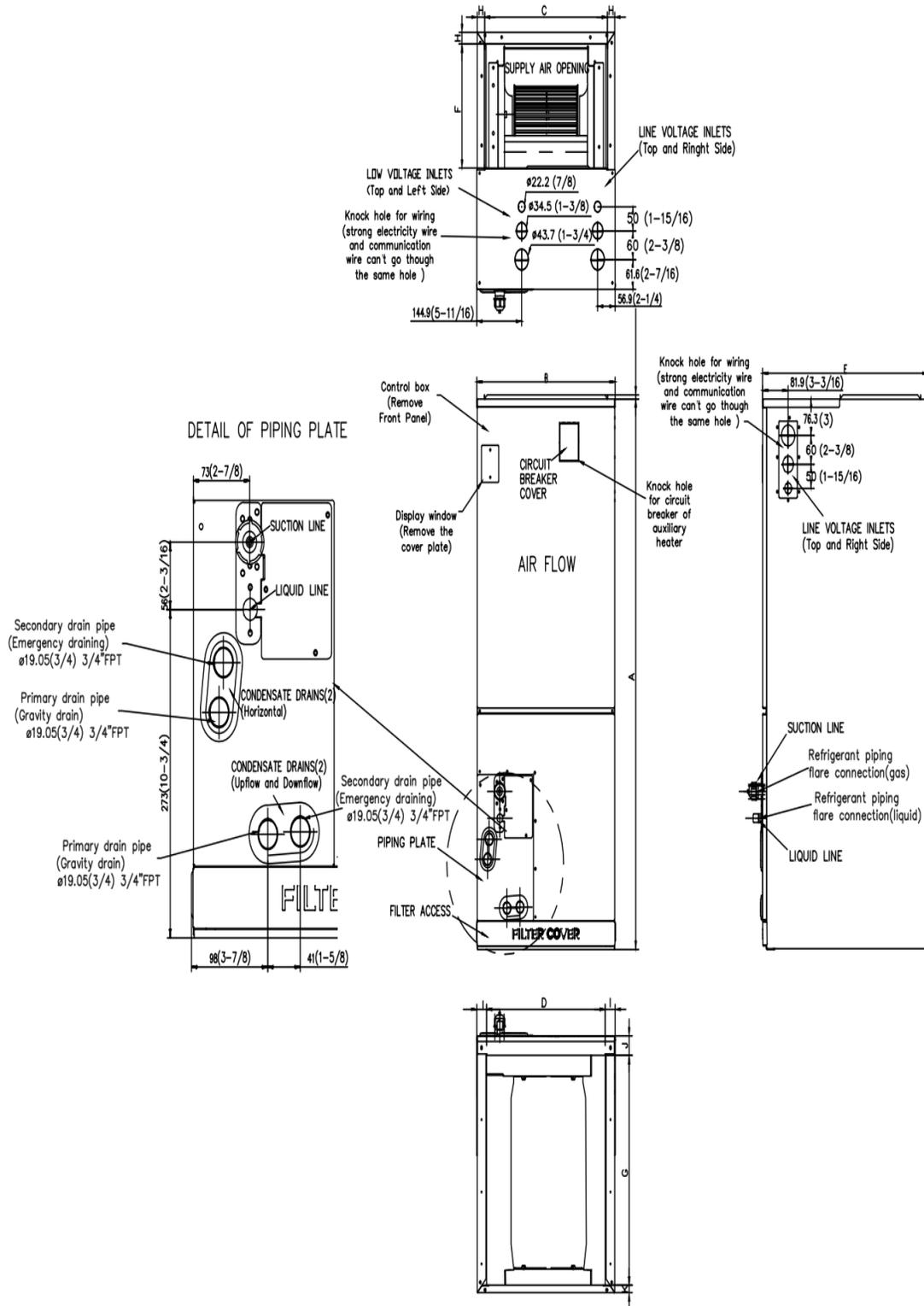
Indoor Power Supply	115/208/230V,60Hz,1Ph	
Indoor MCA 115V/(208/230V)	5.5/4.0	
Indoor MOP	15	
Outdoor Power Supply	208/230V,60Hz,1Ph	
Outdoor MCA	16	
Outdoor MOP	20	
Communication Wiring	AWG 20-2	
Compressor RLA	10	
Outdoor Fan Motor RLA	0.8	
Outdoor Fan Motor W	34	
Indoor Fan Motor RLA	2	
Indoor Fan Motor W	250	
System Power Input @ Cooling (W)	1635(400 ~ 1900)	
System Power Input @ Heating (W)	1675(340 ~ 1650)	
MCA: Min. circuit amps (A)	CP: Max. over current protector	
RLA: Rated load amps (A)	W: Fan motor rated output (W)	

3. @ 17°F Rated	12600
4. @ 5°F Rated: Capacity / COI	11200/2
5. @ 5°F Max: Capacity	11200
Standard Operating Range(°F)	-13~75(-25~24)
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 Operating at Max. Frequency	Indoor: 70°F DB/60°F WB Outdoor: 5°F DB/5°F WB

PIPING	
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
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	51.15(1.45)
onal Charge of Refrigerant((oz/ft)/	0.7(65)
Connection Method	Flared*

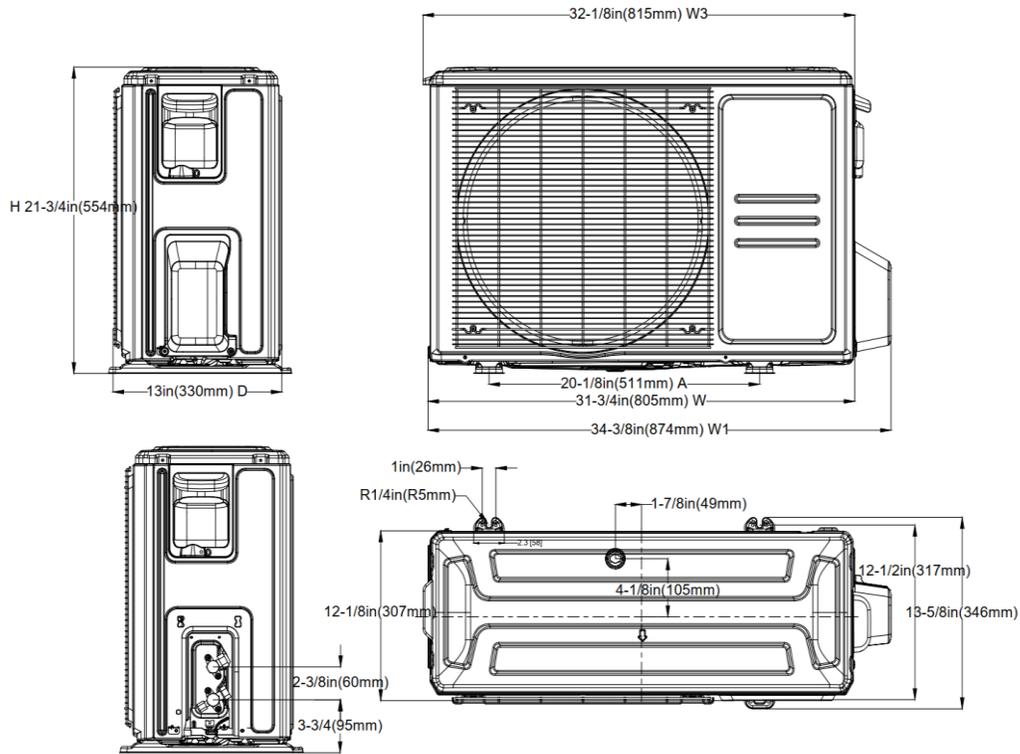
*The gas valve of the outdoor unit is 5/8", 5/8" to 3/4" flare to flare connector is required for the installation.

INDOOR UNIT DIMENSIONS

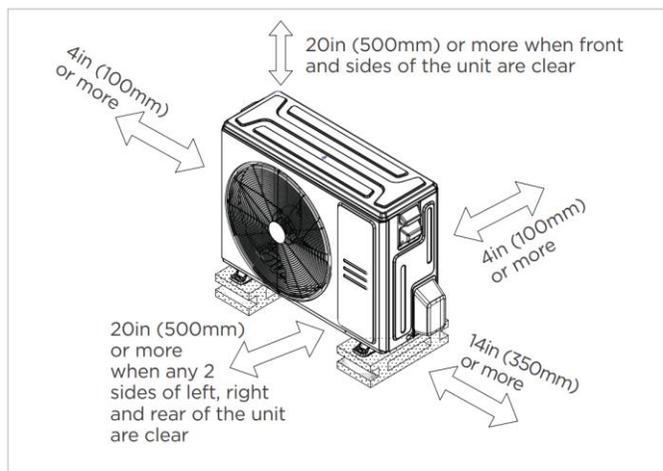


Dimensions \ Model		18k/24k		30k/36k		48k/60k	
		inch	mm	inch	mm	inch	mm
A	Model Height	45	1143	49	1245	53	1346
B	Model Width	17-1/2	445	21	534	24-1/2	622
C	Supply Air Opening Width	15-5/8	397	19-1/8	486	22-5/8	575
D	Return Air Opening Width	15-1/8	384	18-5/8	473	22-1/8	562
E	Model Depth	21	534	21	534	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
H	Supply Air Opening Clearance	15/16	24	15/16	24	15/16	24
I	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

OUTDOOR UNIT DIMENSIONS

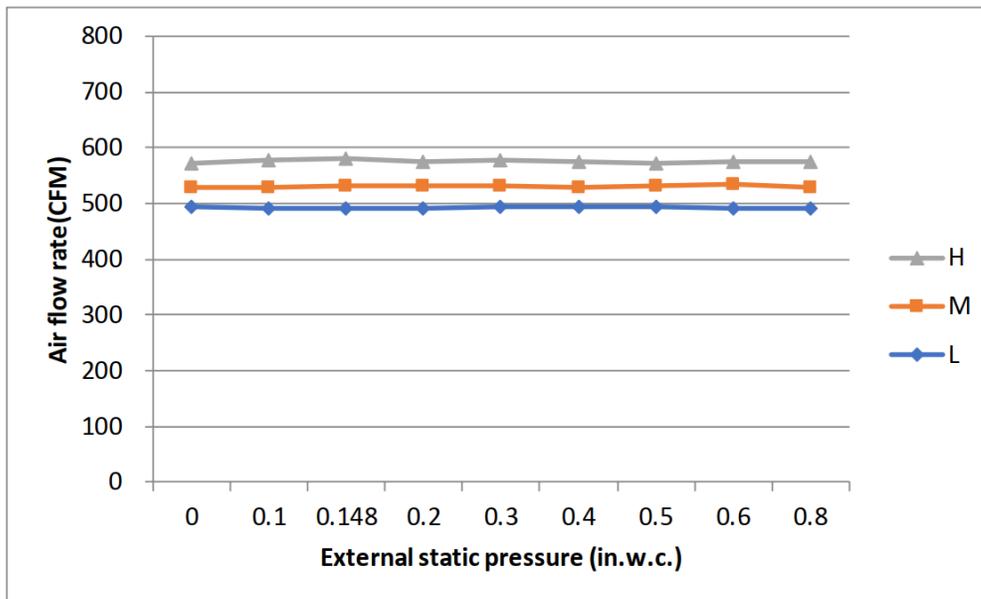


INSTALLATION INSTRUCTIONS FOR OUTDOOR UNIT



Meets all spatial requirements shown in Installation Clearance Requirements above.

FAN PERFORMANCE FOR INDOOR UNIT



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)
 - Two way communication wired controller with built-in WiFi:120N(X6W)
 - Wireless remote controller
 - Third-Party 24V Thermostat
- Adaptive Control System
- High efficiency up to 18.8 SEER2, 11 EER2, 9.7 HSPF2
- Chassis heater and crankcase heater equipped as standard