

# Submittal Data Sheet

CS-HM60BAAU4 -- Indoor A-Coil

CU-HM48BAHU -- Outdoor Extreme Heat Pump

# Panasonic

## Dual Fuel Heat Pump System

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



## INDOOR SPECIFICATION

ESP(in.W.G)		-
Indoor Noise Level (Turbo/H/M/L/Si) (dBA)		-
Dimension (W×D×H)	inch	24-1/2 x 21 x 28
	mm	622 × 533 × 711
Package (W×D×H)	inch	27-3/4 x 26-1/8 x 30-3/8
	mm	705 × 665 × 770
Net/Gross Weight	lbs	81 / 92
	kg	36.8 / 41.9

## OUTDOOR SPECIFICATION

Compressor Type		ROTARY
Compressor Model		MTH550UKPC8FU
Refrigerant		R454B
Refrigerant Oil Charge(mL)		1800
Refrigerant Oil		HAF68D1C
Outdoor Air Flow (Max) (CFM)		3,037
Outdoor Noise Level (dBA)		65
Dimension (W×D×H)	inch	38-9/16 x 16-3/8 x 38-3/8
	mm	980 × 415 × 975
Package (W×D×H)	inch	45-1/16 x 19-11/16 x 42-1/2
	mm	1145 × 500 × 1080
Net/Gross Weight	lbs	201 / 232
	kg	91.2 / 105.4

## EFFICIENCY

Cooling		Heating	
SEER2	14.5	HSPF2-4	8.4
EER2	10	COP	3.15

## PERFORMANCE of Cooling

Cooling (Btu/hr)	
Rated Capacity	45,000
Min/Max Capacity	15500-47000
Moisture Removal(L/h)	6.7
Standard Operating Range(°F/°C)	-22~122(-30~50)
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	50,000
1. @ 47°F Min/Max Capacity	16000-52000
2. @ 17°F Rated	34,400
3. @ 5°F Rated: Capacity / COP	42000/1.85
3. @ 5°F Max: Capacity	42,000
Standard Operating Range(°F/°C)	-22~75(-30~24)
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

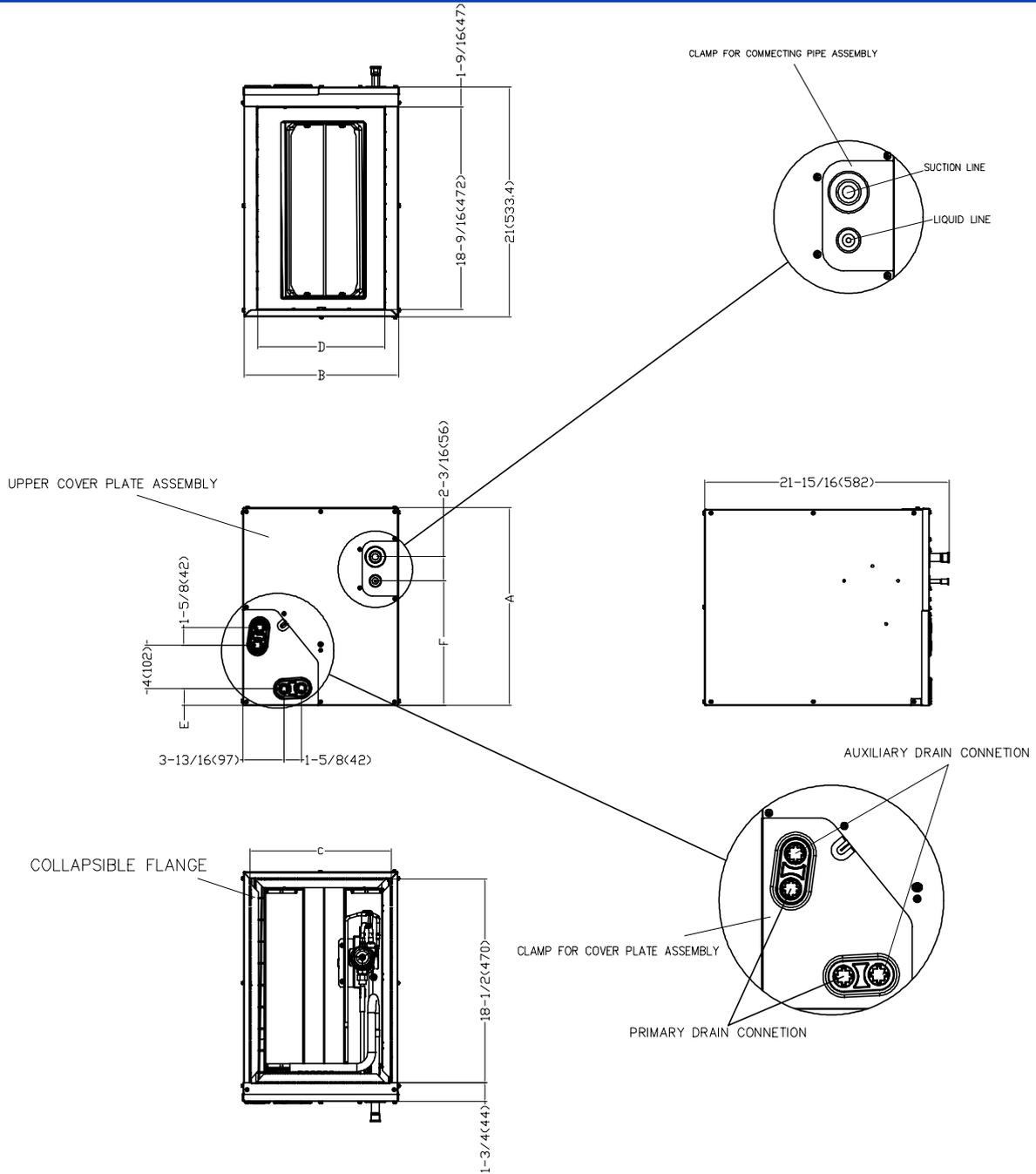
## ELECTRICAL

Indoor Power Supply	24V,60Hz,1Ph
Indoor MCA 115V/(208/230V)	/
Indoor MOP	/
Outdoor Power Supply	208/230,60Hz,1Ph
Outdoor MCA	38
Outdoor MOP	40
Communication Wiring	AWG 20-2
Compressor RLA	28
Outdoor Fan Motor RLA	2
Outdoor Fan Motor W	/
Indoor Fan Motor RLA	/
Indoor Fan Motor W	/
System Power Input @ Cooling (W)	4500(1400-5030)
System Power Input @ Heating (W)	4650(1200-5300)
MCA: Min. circuit amps (A)	MOCP: Max. over current protection (A)
RLA: Rated load amps (A)	W: Fan motor rated output (W)

## PIPING

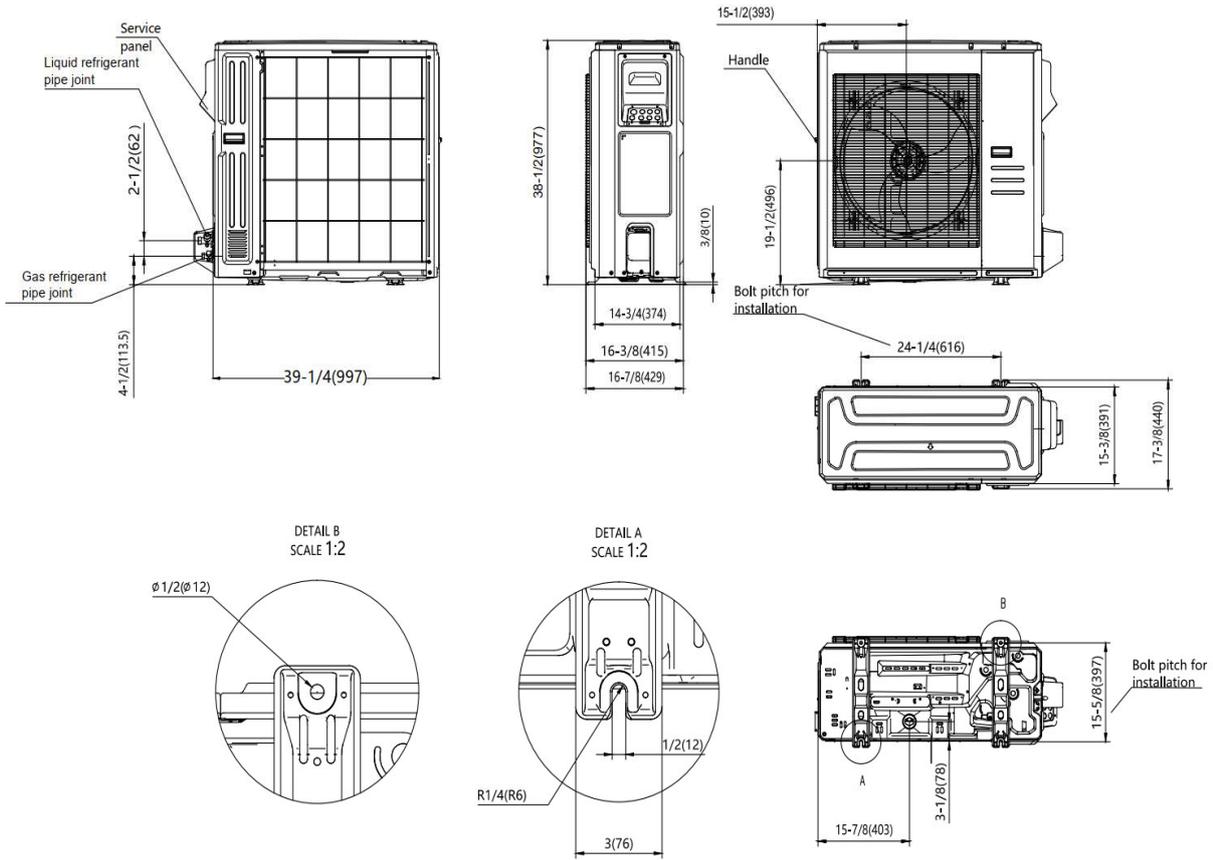
Throttle type(Indoor)	EXV
Throttle type(Outdoor)	EXV
Liquid Size	9.52mm(3/8in)
Gas Size	19mm(3/4in)
Max. Piping Length(ft/m)	246(75)
Max. Height Difference(ft/m)	98.4(30)
Max. Pre-charged Length(ft/m)	24.6(7.5)
Refrigerant Pre-charged Amount(oz/kg)	134.04(3.8)
Additional Charge of Refrigerant((oz/ft)/(g/m))	0.7(65)
Connection Method	Flared

# Indoor Unit Dimension

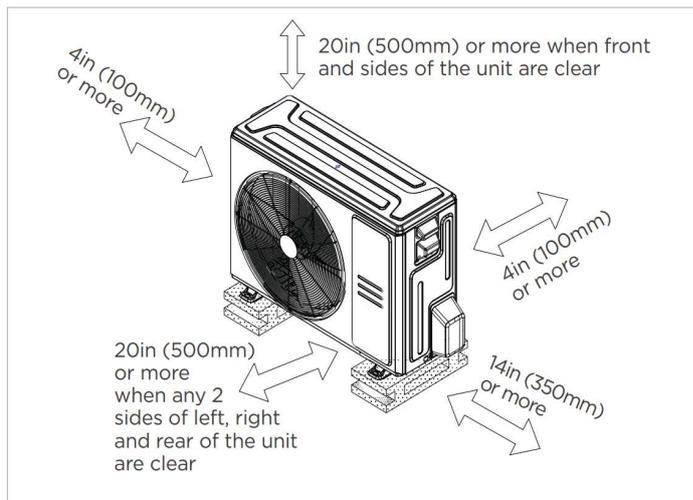


Model		CS-HM24BAAU2		CS-HM24BAAU1		CS-HM36BAAU1		CS-HM36BAAU2		CS-HM36BAAU3		CS-HM60BAAU4	
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm
A	Model Height	18	457	18	457	23- <sup>5</sup> / <sub>16</sub>	592	23- <sup>9</sup> / <sub>16</sub>	599	24	611	28	711
B	Model Width	17- <sup>1</sup> / <sub>2</sub>	445	14- <sup>1</sup> / <sub>2</sub>	368	14- <sup>1</sup> / <sub>2</sub>	368	17- <sup>1</sup> / <sub>2</sub>	445	21	534	24- <sup>1</sup> / <sub>2</sub>	622
C	Supply Air Opening Width	16- <sup>3</sup> / <sub>16</sub>	411	13- <sup>1</sup> / <sub>4</sub>	336	13- <sup>1</sup> / <sub>4</sub>	336	16- <sup>3</sup> / <sub>16</sub>	411	19- <sup>3</sup> / <sub>4</sub>	502	23- <sup>1</sup> / <sub>4</sub>	591
D	Return Air Opening Width	14- <sup>15</sup> / <sub>16</sub>	380	11- <sup>15</sup> / <sub>16</sub>	303	11- <sup>15</sup> / <sub>16</sub>	303	14- <sup>15</sup> / <sub>16</sub>	380	19- <sup>1</sup> / <sub>2</sub>	498	23- <sup>1</sup> / <sub>8</sub>	587
E	Condensate Drains Height	1- <sup>7</sup> / <sub>16</sub>	1- <sup>7</sup> / <sub>16</sub>	1- <sup>7</sup> / <sub>16</sub>	38	1- <sup>7</sup> / <sub>16</sub>	38	1- <sup>7</sup> / <sub>16</sub>	38	2- <sup>3</sup> / <sub>16</sub>	55	2- <sup>3</sup> / <sub>16</sub>	55
F	Liquid Line Height	11- <sup>3</sup> / <sub>8</sub>	290	11- <sup>3</sup> / <sub>8</sub>	290	17- <sup>15</sup> / <sub>16</sub>	455	16- <sup>3</sup> / <sub>8</sub>	417	17- <sup>1</sup> / <sub>2</sub>	445	21- <sup>7</sup> / <sub>16</sub>	545

## Outdoor Unit Dimension



## Installation Instruction For Outdoor Unit



Meets all spatial requirements shown in Installation Clearance Requirements above.

## Features

- Multi-position installation: horizontal(left or right), vertical( up or down)
- Aluminum Coil
- R454B refrigerant sensor
- Easy Maintenance
- Multiple control options available:
  - Two way communication wired controller with built-in WiFi:120N(X6W)
  - Third-Party 24V Thermostat