

## SUBMITTAL - 48,000BTU MULTI-POSITION AHU

**Job Name:** \_\_\_\_\_  
**Location:** \_\_\_\_\_  
**Engineer:** \_\_\_\_\_  
**Submitted By:** \_\_\_\_\_  
**Submitted To:** \_\_\_\_\_

**Submitted For:** \_\_\_\_\_ **Approval**   
**Reference**  **Construction**   
**Date:** \_\_\_\_\_  
**Unit Tag:** \_\_\_\_\_  
**Drawing No.:** \_\_\_\_\_

### WARRANTY

Standard 10 Years Parts & Compressor  
 Terms & Conditions Apply.

### TYPE

Air Source Heat Pump   
 Cold Climate Air Source Heat Pump

### MODELS

Indoor	FMA48HIAHUU230X7
Outdoor	DMA48HOS20230E7

### CAPACITY RANGE<sup>1</sup>

Output (Btu/h)	Min.	Rated	Max.
Cooling	13500	47000	48000
Heating	11000	50000	55000

### HEATING PERFORMANCE<sup>2</sup>

Output (Btu/h)	Min.	Rated	Max.
47°F (8.3°C)	11000	50000	55000
17°F (-8.3°C)	16000	36000	48000
5°F (-15°C)	14300	46000	46000
-22°F (-30°C)	14100	24500	24500

### OUTDOOR TEMPERATURE OPERATING RANGE

Cooling	-15 ~ 50 °C	5 ~ 122 °F
Heating	-30 ~ 24 °C	-22 ~ 75 °F

### LINE SET & REFRIGERANT

Liquid (in.)	3/8"	Gas (in.)	3/4"
Connection Type	Flared		
Pre-Charge Length (ft)	25		
Maximum Length (ft)	213.25		
Maximum Height Difference (ft)	98.42		
Refrigerant Type	R410A		
Pre-Charge (oz)	169.31		
Additional Charge per Foot (oz)	0.69		
Oil Type	VG74	Oil Volume (ml)	1460±15
Drain Connection (inches)	3/4"		



Images for reference only.

### CERTIFIED

AHRI NO.	
207706562	

### EFFICIENCY RATINGS

SEER2	15.6			
EER2	8.2			
HSPF2 (4)	9.4			
HSPF2 (5)	7.7			
COP <sup>2</sup>	47°F	17°F	5°F	-22°F
	(8.3°C)	(-8.3°C)	(-15°C)	(-30°C)
	3.16	2.36	1.9	1.37

### ELECTRICAL

Power Supply	(V/Ph/Hz)	208-230/1/60		
Voltage Range	(V)	187-253		
MCA (A)	40	Max Fuse (ODU) (A)	50	
Power Input (W)	Min.	Rated	Max.	
	Cooling	815	5731	5700
Heating	830	4652	5700	
Current (A)	Min.	Rated	Max.	
	Cooling	3.54	24.95	25.3
Heating	3.6	21	26	

1. Cooling Capacity Conditions: Indoor Temperature @ 80°F (26.7°C) DB; 67°F (19.4°C) WB with Outdoor Temperature @ 95°F (35°C) DB; 75°F (23.9°C) WB. Heating Capacity Conditions: Indoor Temperature @ 70°F (21.1°C) DB; 60°F (15.6°C) WB with Outdoor Temperature @ 47°F (8.3°C) DB; 43°F (6.1°C) WB. Line Set @ 25ft (7.5m); Height Difference @ 0ft (0m). 2. COP for all temperatures is @ rated output except when rated output is not given. In that case, COP is @ max. output. | Master Group is not responsible for the accuracy and validity of any changes made to this document without the written authorization of Master Group. Specifications subject to change without notice.

### DIMENSIONS & WEIGHTS

Indoor	Net (WxDxH; in.)	21.02x21.02x49.02	
	Gross (WxDxH; in.)	24.41x26.57x52.56	
	Net Weight lbs   kg	130.51	59.2
	Gross Weight lbs   kg	156.31	70.9
Outdoor	Net (WxDxH; in.)	37.48x16.34x52.48	
	Gross (WxDxH; in.)	43.11x19.49x58.27	
	Net Weight lbs   kg	220.24	99.9
	Gross Weight lbs   kg	248.9	112.9

### KEY FEATURES

Rotary Inverter Compressor	<input checked="" type="checkbox"/>
Twin Rotary Inverter Compressor	<input type="checkbox"/>
Base Pan Heater	<input checked="" type="checkbox"/>
Crankcase Heater	<input checked="" type="checkbox"/>

### INCLUDED ACCESSORIES

RG10A(D2S)/BGEFU1 - Remote Controller
KJR-120N(X6W)/BGEF V1.2 - Wired Controller
Adaptor for welding(3/8")
Adaptor for welding(3/4")

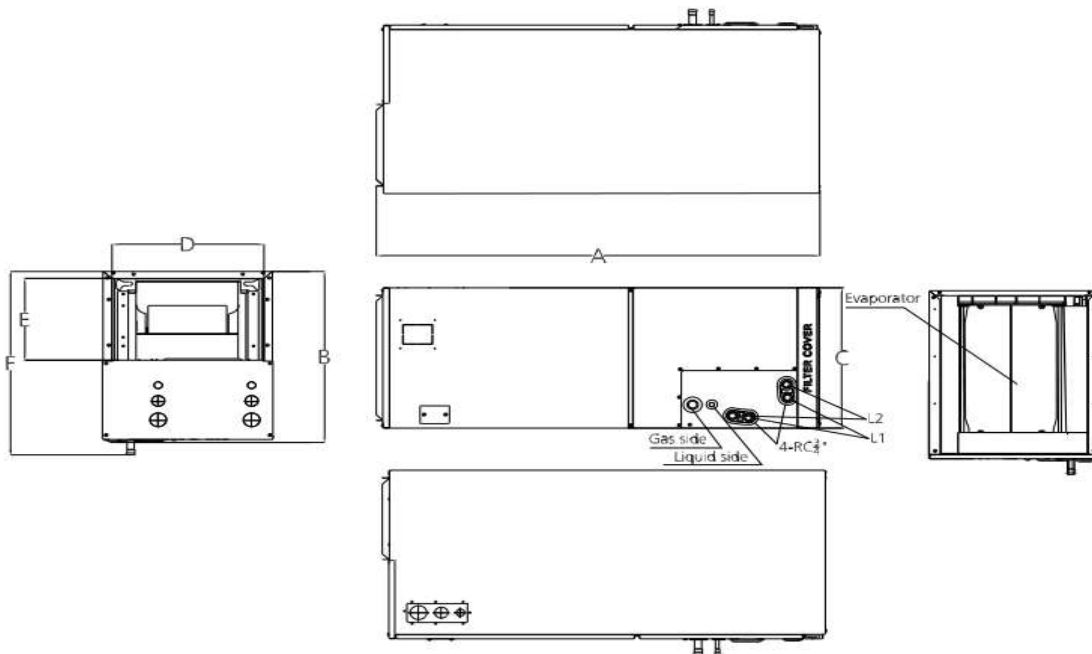
### INDOOR UNIT DRAWING

### FAN

Indoor	Turbo	High	Med.	Low
CFM	1470	1282	1094	905
dB(A)		50	47	43.5
Indoor ESP Range inWG				0-0.80
Indoor Moisture Removal (l/h)				4.96
Outdoor Max. CFM				4412
Outdoor Max. dB(A)				64

### OPTIONAL ACCESSORIES

EAH-10B(UL) - 10kW Electric Heater Kit	<input type="checkbox"/>
EAH-15B(UL) - 15kW Electric Heater Kit	<input type="checkbox"/>
EAH-20B(UL) - 20kW Electric Heater Kit	<input type="checkbox"/>
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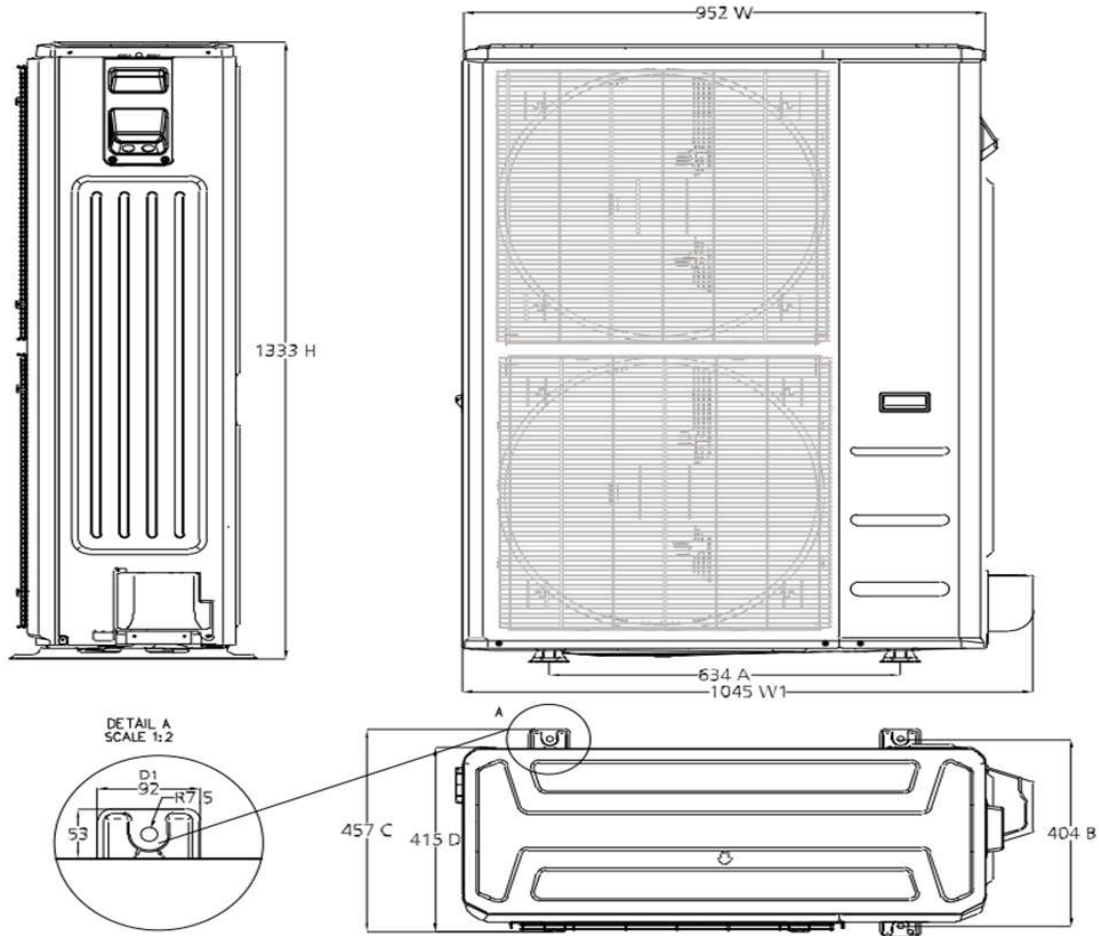


Dimensions D and E are air outlet dimensions.

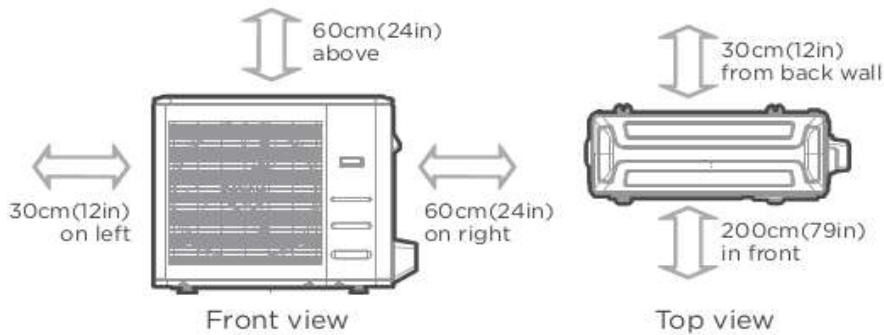
Tag	A	B	C	D	E	F		L1	L2
inches	49	21	21	19-5/16	10-1/4	23		Main Drain	Overflow Drain
mm	1245	534	534	490	260	585			

Drawing dimensions are nominal. Specifications subject to change without notice.

**OUTDOOR UNIT DRAWING**



**OUTDOOR UNIT CLEARANCES**



Note: Outdoor units must be elevated 12-24in. (30.5-61cm) above the surface below in heating applications to allow for snow clearance and defrost runoff. Follow local best-practices and guidelines.

Diagrams for reference only.

**NOTES**