

# SUBMITTAL - 12,000BTU CEILING CASSETTE - M28

**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 DUA12HICU230X5

Outdoor DMA12HOS28230E8

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

Output (Btu/h)	Min.	Rated	Max.
Cooling	3400	12000	13700
Heating	3600	12000	15300

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

Output (Btu/h)	Min.	Rated	Max.
47°F (8.3°C)	3600	12000	15300
17°F (-8.3°C)	2300	9900	14000
5°F (-15°C)	1700	11300	11500
-22°F (-30°C)	700	5800	5800

### OUTDOOR TEMPERATURE OPERATING RANGE

Cooling	-30 ~ 50 °C	-22 ~ 122 °F
Heating <sup>3</sup>	-30 ~ 24 °C	-22 ~ 75 °F

### LINE SET & REFRIGERANT

Liquid (in.)	1/4"	Gas (in.)	1/2"
Connection Type	Flared		
Pre-Charge Length (ft)	25		
Max. Length (ft)	82		
Max. Height Difference (ft)	32.8		
Refrigerant Type	R410A		
Pre-Charge (oz)	41.62		
Additional Charge per Foot (oz)	0.16		
Oil Type	VG74	Oil Volume (ml)	350
Drain Pipe O.D. (mm)	25		



Images for reference only.

### CERTIFIED

AHRI NO.	
207742509	

### EFFICIENCY RATINGS

SEER2	22.3			
EER2	12.7			
HSPF2 (4)	10.2			
HSPF2 (5)	8			
COP <sup>2</sup>	47°F (8.3°C)	17°F (-8.3°C)	5°F (-15°C)	-22°F (-30°C)
	3.26	2.55	1.89	1.17

### ELECTRICAL

Power Supply	(V/Ph/Hz)	208-230/1/60		
Voltage Range	(V)	187-253		
MCA (A)	15	Max Fuse (ODU) (A)	15	
Power Input (W)	Min.	Rated	Max.	
	Cooling	162	945	1350
Heating	146	1080	1350	
Current (A)	Min.	Rated	Max.	
	Cooling	1.24	4.32	6.18
Heating	1.15	4.99	5.88	

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. 3. System continues to operate below rated outdoor temperature operating range, subject to varying conditions. System has no low temperature cutout. Capacity is not tested outside of the rated temperature range. | 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.)	22.44x22.44x10.24	
	Gross (WxDxH; in.)	26.06x26.06x12.48	
	Net Weight lbs   kg	35.27	16
	Gross Weight lbs   kg	41.01	18.6
Outdoor	Net (WxDxH; in.)	31.69x12.99x21.81	
	Gross (WxDxH; in.)	36.02x14.57x24.21	
	Net Weight lbs   kg	73.63	33.4
	Gross Weight lbs   kg	79.37	36

### 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

RG10B(D1)/BGEFU1 - Remote Controller	

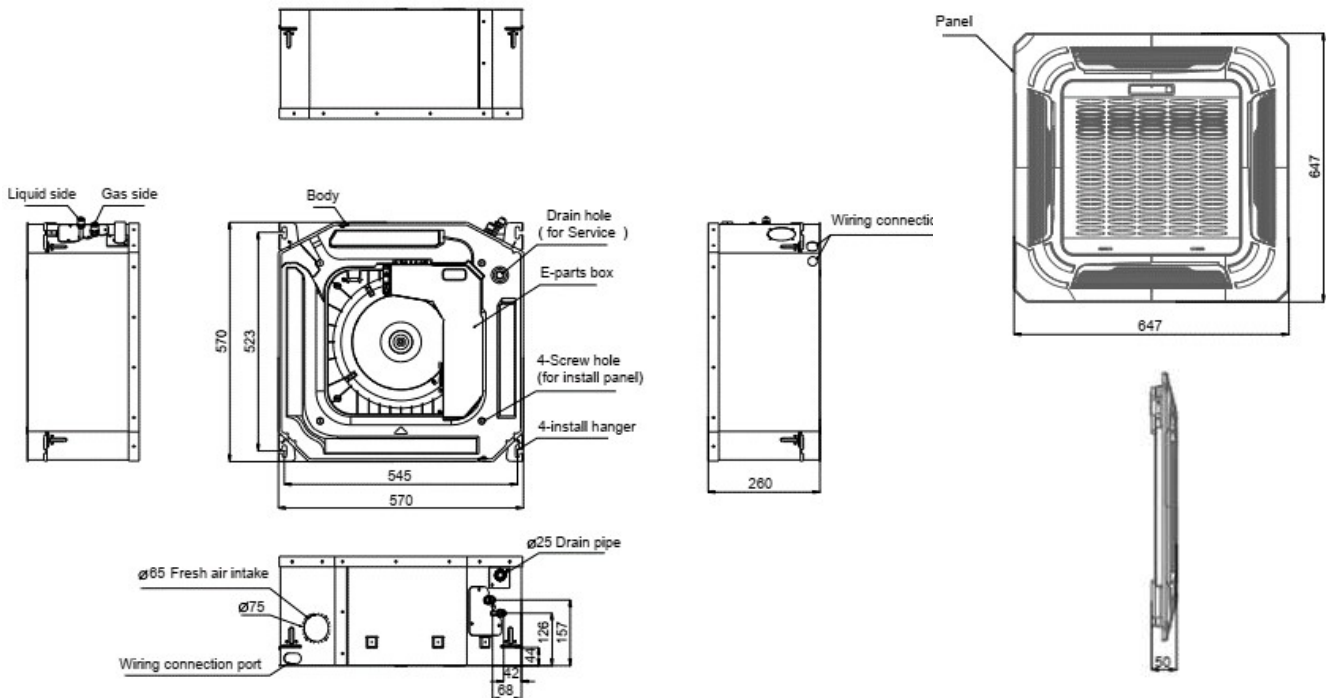
### FAN

Indoor	Turbo	High	Med.	Low
CFM		335	282	241
dB(A)		40.5	35.5	31.5
Indoor ESP Range inWG				
Indoor Moisture Removal (l/h)				1.69
Outdoor Max. CFM				1324
Outdoor Max. dB(A)				52.5

### OPTIONAL ACCESSORIES<sup>4</sup>

CASSETTEGRILL918A - Required	<input type="checkbox"/>
WF-60A1-F - Smart Port	<input type="checkbox"/>
KJR-120L(R1)/EFU1 - Wired Controller	<input type="checkbox"/>
KJR-120N(X6)/BGEF - Wired Controller	<input type="checkbox"/>
KJR-120N(X6W)/BGEF - Wired Controller	<input type="checkbox"/>
24VINTERFACEKITUNIVERSAL	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
	<input type="checkbox"/>
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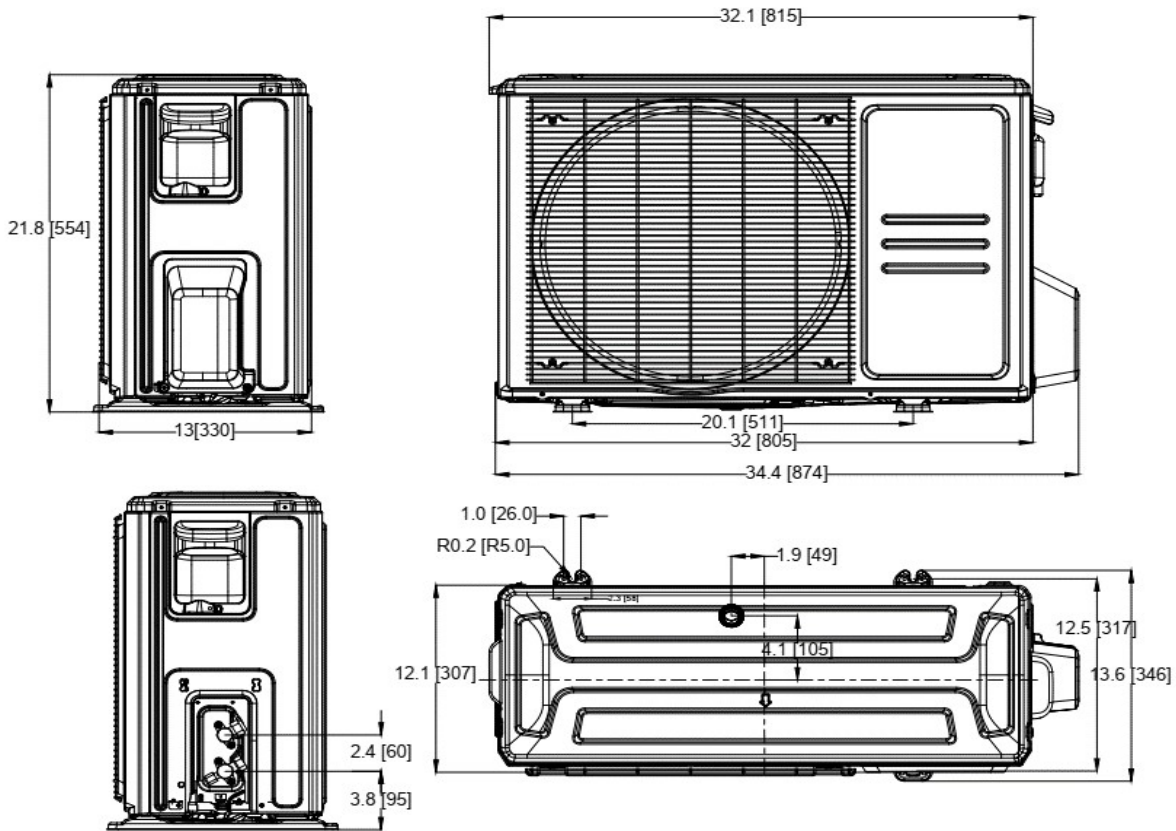
### INDOOR UNIT DRAWING



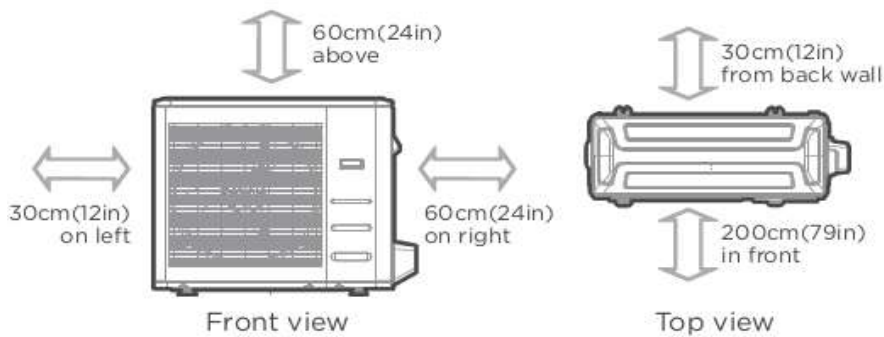
Tag									
inches									
mm									

Drawing dimensions are nominal. Specifications subject to change without notice. 4. Connection of these accessories may require secondary items not listed; refer to full product literature.

**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**