

SUBMITTAL – 3 TON COLD CLIMATE HEAT PUMP WITH AIR HANDLING UNIT

Job Name:

Location:

Submitted To:

Submitted By:

Reference:

Submitted For:

Reference ☐

Approval ☐

Construction ☐

Date:

Unit #:

Drawing #:

MODELS

OUTDOOR MOE31U-36HFN1-M

INDOOR MVC-36HWFN1-M



AHRI CERTIFICATION

211257308

COOLING CAPACITY

Output (Btu/h)	Min.	Rated	Max.
Cooling	13000	36000	47400
Heating	11000	40000	57200

HEATING CAPACITY

Output (Btu/h)	Min.	Rated	Max.
47°F (8.3°C)	11000	40000	57200
5°F (-15°C)	12560	34400	36876

TEMPERATURE OPERATING RANGE

Indoor Cooling	60 ~ 90 °F	16 ~ 32 °C
Indoor Heating	32 ~ 86 °F	0 ~ 30 °C
Outdoor Cooling	5 ~ 122 °F	-15 ~ 50 °C
Outdoor Heating	-22 ~ 75 °F	-30 ~ 24 °C

REFRIGERANT PIPE DATA

Liquid (in.)	3/8"	Gas (in.)	3/4"
Design Pressure (PSIG)	550 / 340		
Connection Method (Indoor)	Braze		
Connection Method (Outdoor)	Flared		
Pre-Charge Length	25 (ft)		
Max. Length	50 (m)	164 (ft)	
Max. Height Difference	25.0 (m)	82.0 (ft)	
Refrigerant Type (oz)	R410A	134.04	
Refrigerant Pre-charge	7.5 (m)	25 (ft)	
Additional Charge per	65 g/m	3.5 oz / 5 ft	



Diagrams are provided for reference only.

EFFICIENCY RATINGS

SEER 2	16.2
EER 2	10.0
HSPF2-4 (Btu/W)	9.5
HSPF2-5 (Btu/W)	7.8
COP	At 47°F (8.3°C) 3.4
	At 5°F (-15°C) 2.0

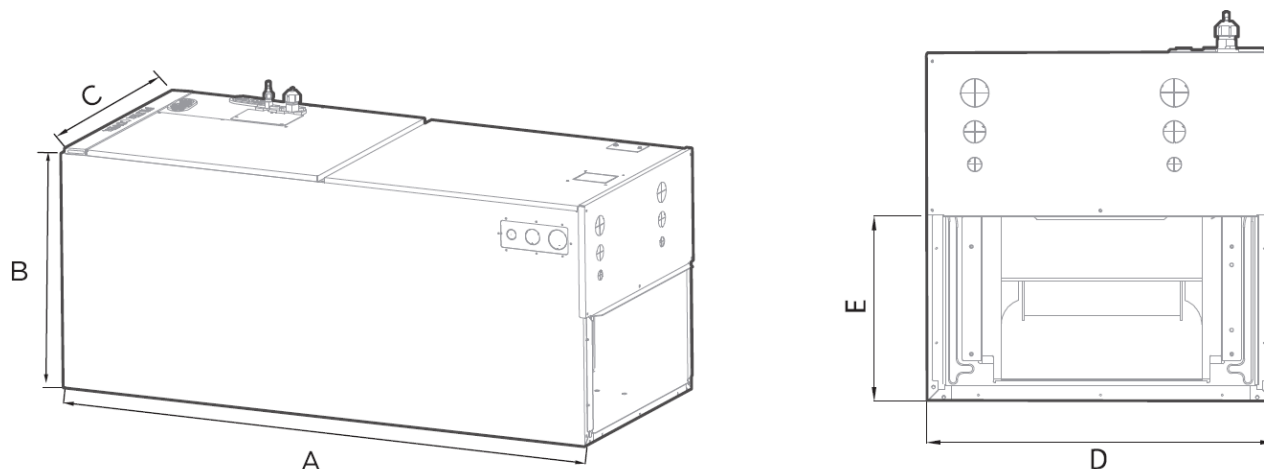
POWER & ELECTRICAL SUPPLY

Power Supply		(V/Ph/Hz)	208-230 / 1 / 60
Voltage Range		(V)	187-253
MCA (A)	41.0	MOP (A)	50.0
Power Input (W)		Max	
Cooling		3673 (462~5700)	
Heating		3448 (593~5700)	
Current (A)			
Cooling		15.9 (3.53~25)	
Heating		15 (4.34~25)	

DIMENSIONS			
Indoor	Net (WxDxH; in.)	21.02 x 21.02 x 49.02	
	Gross (WxDxH; in.)	25.2 x 24.4 x 54.3	
	Net Weight lbs kg	129.2	155.6
	Gross Weight lbs kg	58.6	70.6
Outdoor	Net (WxDxH; in.)	37.2 x 16.1 x 31.9	
	Gross (WxDxH; in.)	42.9 x 19.7 x 34.9	
	Net Weight lbs kg	151.7	161.2
	Gross Weight lbs kg	68.8	73.1
FEATURES			
Rotary Inverter Compressor			✓
AIRFLOW & NOISE LEVEL			
Outdoor Airflow (Max) (CFM)			4500
Outdoor Noise Level [dB(A)]			64.0
Dehumidification			3.49

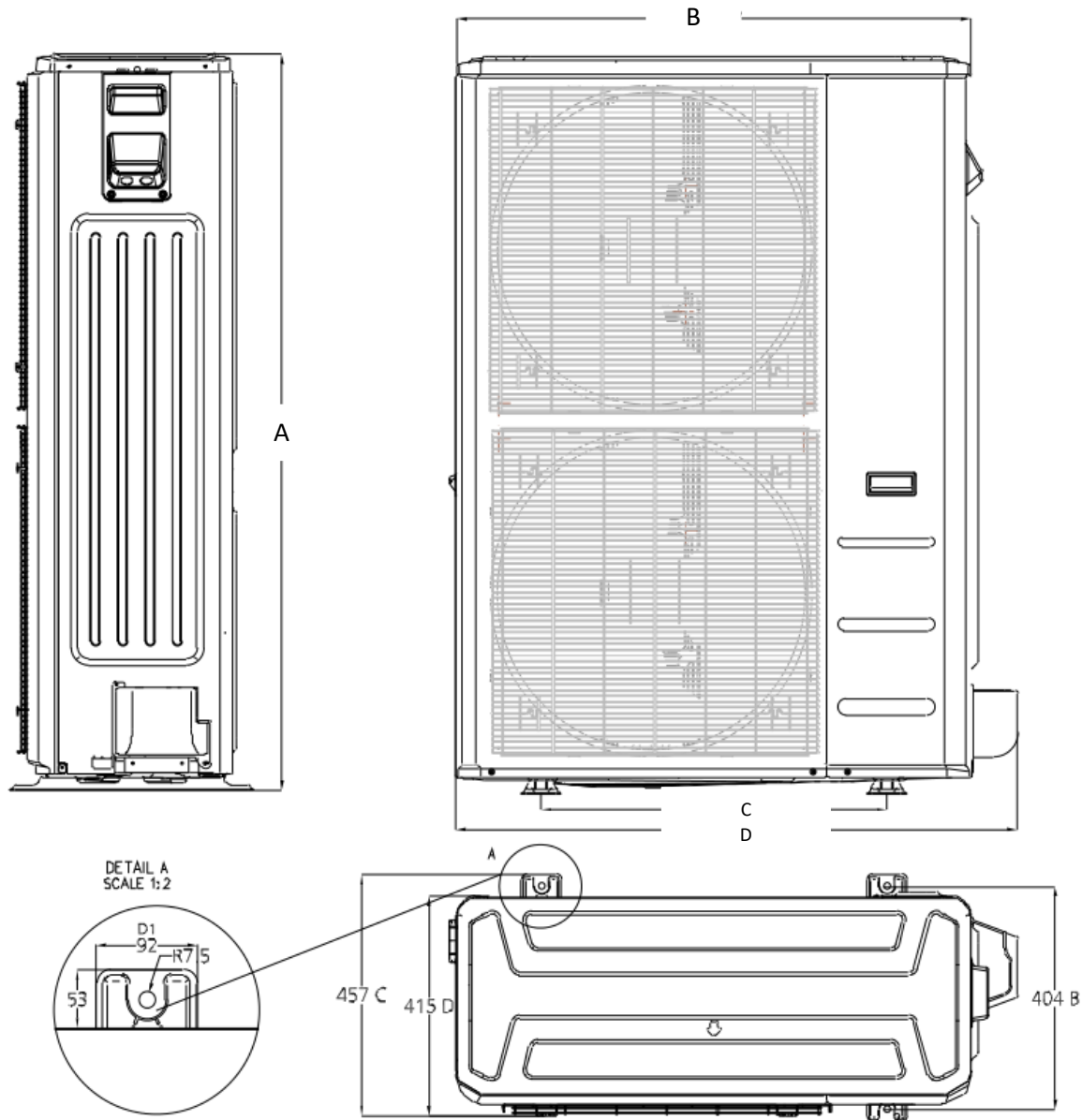
INDOOR UNIT DATA	
Refrigerant Control	EEV
IRV (inch ³)	106.9
Airflow (SCFM)	960
Pressure Drop (Pa)	65.1
(in.wc.)	0.26
OUTDOOR UNIT DATA	
Compressor Type	EAPQ420D1UMUA
Model	ROTARY
Capacity (Btu/h)	44015
Input (W)	2765
Rated current (RLA) (A)	32
Refrigerant oil/oil charge	POE 670ml
Refrigerant Control	EEV
Outdoor fan motor	
Qty	1
Input (W)	126.0
RLA (A)	1.2
Speed (r/min)	850 / 750 / 650
Accessories	
Adaptor for welding (3/4")	1
Adaptor for welding (3/8")	1

INDOOR UNIT



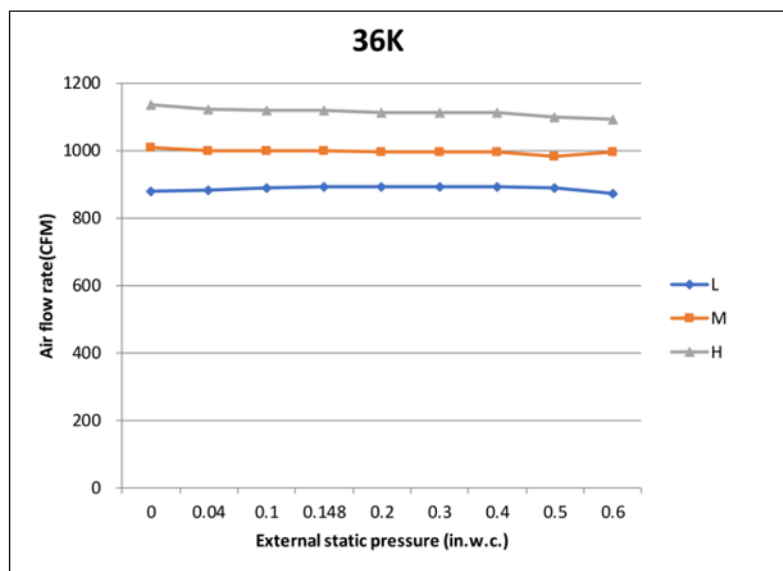
MODEL	Unit	Dimensions (mm)					Drain hole	
		A	B	C	D	E	L1	L2
30k-48k	mm	1245	533	534	490	260	Main drain	Over-flow drain
	inch	49	21	21-1/50	19-5/16	10-1/4		

OUTDOOR UNIT

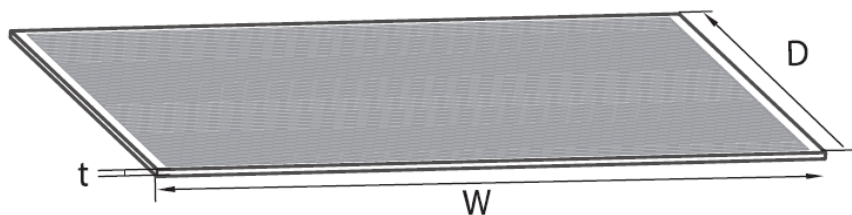


Dimensions	inch	mm
A	51.7	1313
B	35.7	952
C	25.0	634
D	42.7	1045

FAN PERFORMANCE



RECOMMENDED SIZE OF FILTER



MODEL	Unit	Dimensions (mm)		
		W	D	t
30k-48k	mm	495.3	508	25.4
	inch	20	20	1