



SUBMITTAL DATA

Job Name	The Melt - Davis CA
For	
Sold To	
Prepared For	
Customer PO#	
Prepared By	John Quinly
Date	8/19/2024

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Job Information		Technical Data Sheet
Job Name	The Melt - Davis CA	
Date	8/19/2024	
Submitted By	John Quinly	
Software Version	12.74	
Unit Tag	RTU-1	



Unit Overview					
Model Number	Voltage V/Hz/Phase	Design Cooling Capacity Btu/hr	AHRI 340/360 Standard Efficiency		ASHRAE 90.1-2022 Compliant
			EER	IEER	
DPSH10B	208/60/3	127170	12.0	20.0	ASHRAE 90.1-2022 compliant

Unit	
Model Number:	DPSH10B
Model Type:	Heat Pump
Heat Type:	Electric
Energy Recovery:	None
Application:	Variable Air Volume, Single Zone (Mixed Air or 100% OA)
Controls:	Microtech
Outside Air:	0-100% Economizer with Drybulb Control
Altitude:	0 ft
Approval	cETLus

Physical			
Dimensions and Weight			
Length	Height	Width	Weight*
101.6 in	85.9 in	73.4 in	2676 lb
Construction			
Exterior	Insulation and Liners	Air Opening Location	
		Return	Supply
Painted Galvanized Steel	1" Injected Foam, R-7, Galvanized Steel Liner	Bottom	Bottom

Note: R32 Rebel unit weights are approximate. An update with firm data is coming in July, 2024.

Electrical			
Unit FLA	MCA	MROPD	SCCR
110.5 A	133.5 A	150 A	10 kAIC
Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.		

Return/Outside/Exhaust Air		
Outside Air Option		
Type	Damper Pressure Drop	Exhaust Air Type
90.1 and California Title 24 Compliant Economizer	0.13 inH ₂ O	Barometric Relief

Filter Section

Physical				
Type	Quantity / Size	Face Area	Face Velocity	Air Pressure Drop
COMBO RACK - 2" MERV8 filters from factory & blank 4" rack	6 / 18 in x 24 in x 2 in	18.0 ft ²	222.2 ft/min	0.10

DX Cooling Coil

Physical							
Coil Type	Refrigerant Type	Fins per Inch	Rows	Face Area	Face Velocity	Air Pressure drop	Drain Pan Material
Cu Tube/ Al Fin	R32	15	4	15.4 ft ²	259.2 ft/min	0.48 inH ₂ O	Stainless Steel
Cooling Performance							
Capacity			Indoor Air Temperature				
Total Btu/hr	Sensible Btu/hr	Moisture Removal lb/h	Entering		Leaving		
			Dry Bulb °F	Wet Bulb °F	Dry Bulb °F	Wet Bulb °F	Dewpoint °F
127170	126558	12.9	82.6	64.8	52.1	53.6	53.6
Condensate Connection Size: 3/4 in. Male NPT							

Heating Performance				
Total Capacity Btu/hr	Refrigerant Type	Indoor Air Temperature Dry Bulb		
		Entering °F	Leaving °F	Ambient Air Temperature °F
90770	R32	60.0	80.8	31.5

Fan Section

Fan				
Type	Fan Wheel Diameter	Fan Series	Fan Isolation	
SWSI AF	14 in	Series II	None	
Performance				
Airflow	Total Static Pressure	Fan Speed	Brake Horsepower	Altitude
4000 CFM	1.7 inH ₂ O	1113 rpm	1.56 HP	0 ft
Motor				Drive
Type	Horsepower	Efficiency	FLA	Type
ECM Motor	2.3	Premium	10.9 A	Direct Drive

Electric Heat Section

Physical				Electrical
Application Airflow	Minimum Airflow @ 100% Htg Capacity	Size	Control	FLA A
4000 CFM	1617 CFM	18 kW	4 Stages	50.0
Performance				
Capacity Btu/hr	Air Temperature			Air Pressure Drop
	Entering °F	Leaving °F		inH ₂ O
61434	60.0	74.2		0.23

Unit Discharge Conditions

Air Temperature				
Motor Heat Btu/hr	Moisture Removal lb/h	Unit Leaving Dry Bulb °F	Unit Leaving Wet Bulb °F	Unit Leaving Dewpoint °F
4551	12.9	53.2	54.0	53.6
Minimum Airflows				
Notes: Refer to fan curve for applicability of approximate airflows				

Condensing Section

Compressor							
Type	Quantity		Refrigerant Charge lb	Total Power	Capacity Control		Compressor Isolation
Inverter Scroll	1		16.7	9.30 kW	Mod Control with Inverter Compressor		Rubber in Shear
Compressor Amps:							
Compressor 1				42.0 A			
Condenser Coil							
Type			Fins per Inch		Fin Material		
Copper Tube - Aluminum Fin			23		Aluminum		
Condenser Fan Motors							
Number of Motors				Full Load Current (Total)			
2				4.0 A			
AHRI 340/360 Certified Data at AHRI 340/360 Standard Conditions							
Net Capacity	EER	IEER	Heat Net Capacity at 47°F	COP at 47°F	Heat Net Capacity at 17°F	COP at 17°F	COP at 5°F
122508 Btu/hr	12.0	20.0	108637 Btu/hr	4	75694 Btu/hr	3	Pending

Internal Pressure Drop Calculation

External Static Pressure:	0.80 inH ₂ O
Filter:	0.10 inH ₂ O
Outside Air:	0.13 inH ₂ O
DX Coil:	0.48 inH ₂ O
Electric Heat:	0.23 inH ₂ O
Total Static Pressure:	1.73 inH ₂ O

Sound

Sound Power (db)								
Frequency	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
Inlet	73	75	83	80	83	82	79	74
Discharge	73	75	83	80	83	82	79	74
Radiated	85	85	81	78	76	71	68	60

Options

Unit	
Smoke Detectors:	Return Air Smoke Detector
Electrical	
Field Connection:	Single Disconnect
Powered Receptacle:	Field powered 115V GFI outlet

Factory Installed Sensors

Leaving Coil/Entering Fan Temperature Sensor
Duct High Limit Switch
Return Air Temperature Sensor
Discharge Air Temperature sensor – Wired in unit, mounted in supply duct
Outside Air Temperature Sensor
Dirty Filter On/Off Switch
Supply Fan Air Proving Via Modbus

Warranty

Parts:	Standard One Year
Compressor:	Additional Four Year, Five Year Total

Specials

Unit	
Specials Description:	

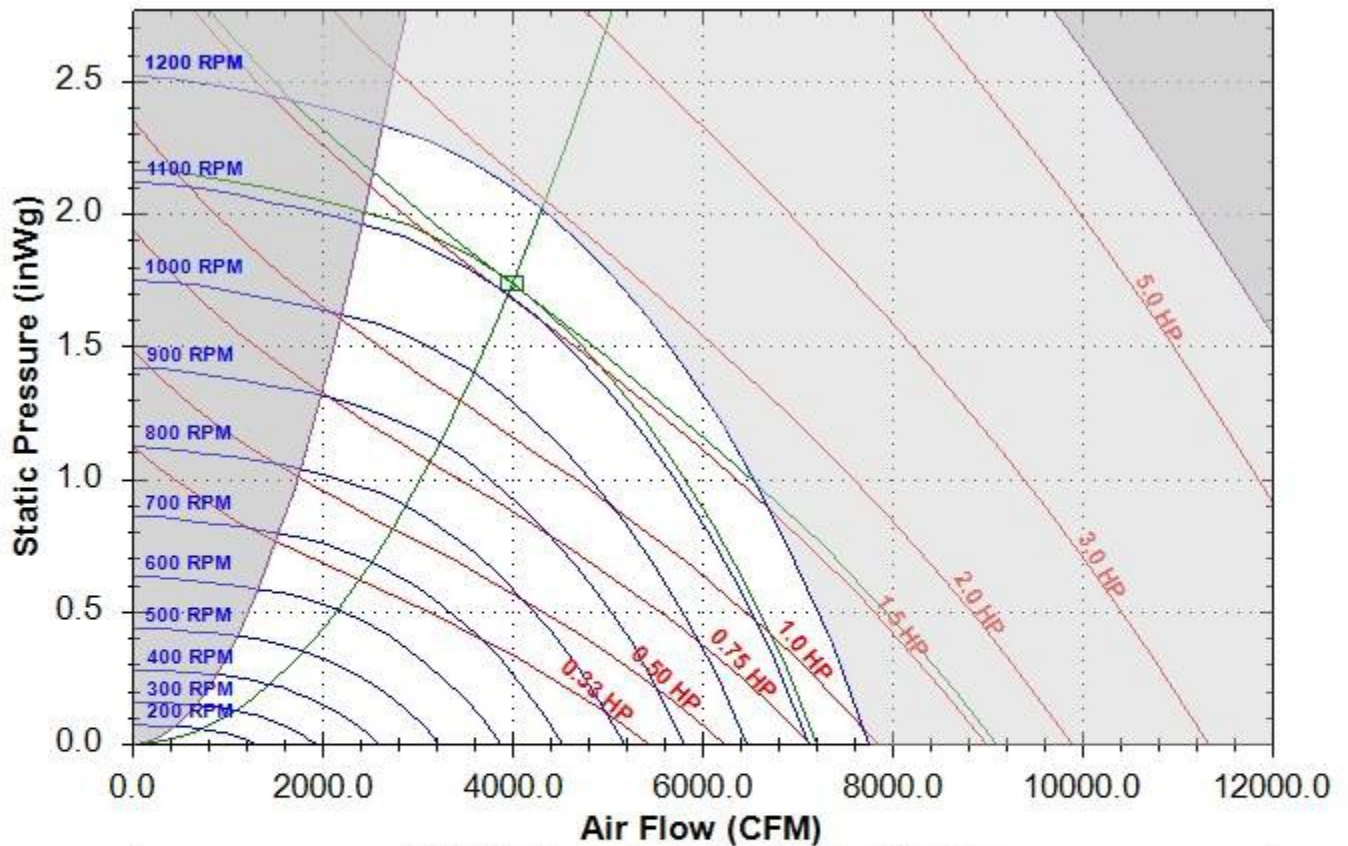
Notes

Forklift slots to remove unit from a truck bed. The fork lift slots are not to be used to place unit on a roof curb. Unit is to be lifted onto curb per IOM instructions.

Accessories

Mandatory	
Part Number	Description
910278050	Space Sensor with Set Point Adj. Humidity and CO2
Optional	
Part Number	Description
910374358	24" Roof Curb, No ERW, Size 007-017

Daikin Fan Selection



22.0 SWSI - Plenum Supply Fan at Standard Conditions

Base Tag	RTU-1				Date	Aug-19-2024		
Job Name	The Melt - Davis CA				Time	3:06 PM		
Air Volume	4000	CFM			Fan Speed	1113	RPM	
Total Static	1.73	inWg			Max Speed	1200	RPM	
Brake Horsepower	1.56	HP			Efficiency	70	%	
Unit Sound Power	63hz	125hz	250hz	500hz	1000hz	2000hz	4000hz	8000hz
Inlet Sound Power	73	75	83	80	83	82	79	74
Outlet Sound Power	73	75	83	80	83	82	79	74
Radiated Sound Power	85	85	81	78	76	71	68	60

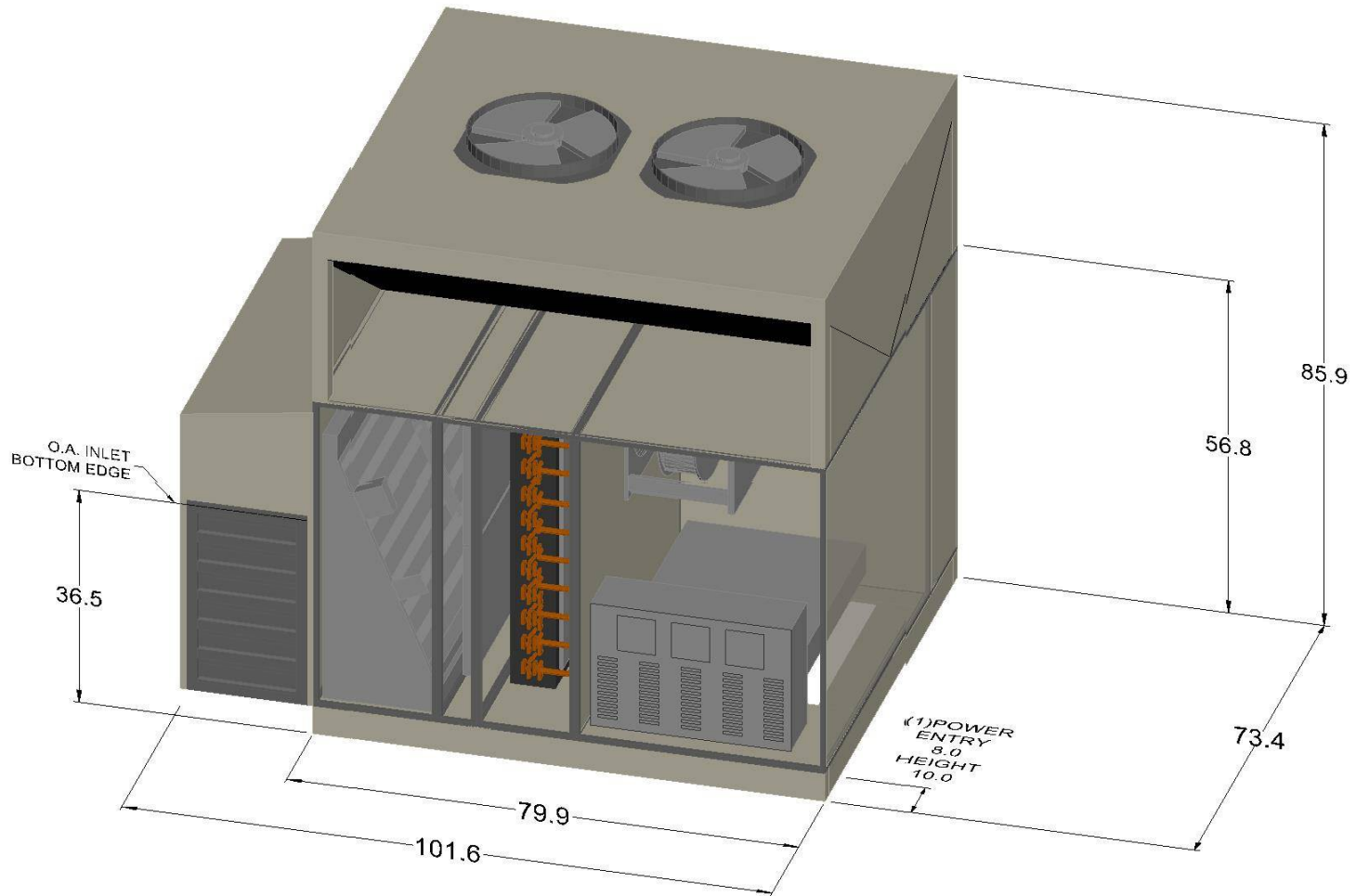


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The Melt - Davis CA

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8/19/2024



RTU-1

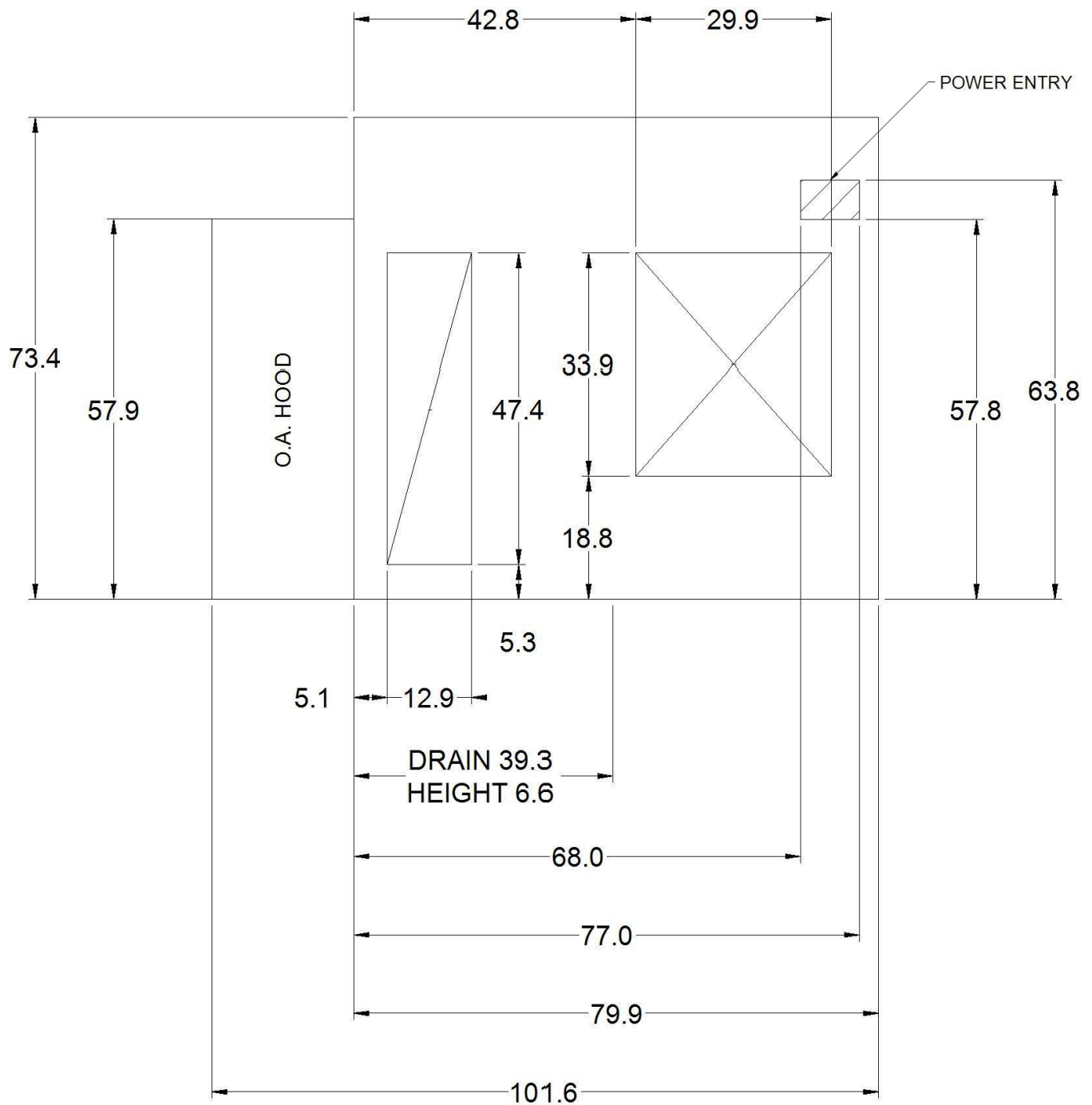
Rebel Drawings

Notes:

(1) Recommended location for optional field cut side power connection.

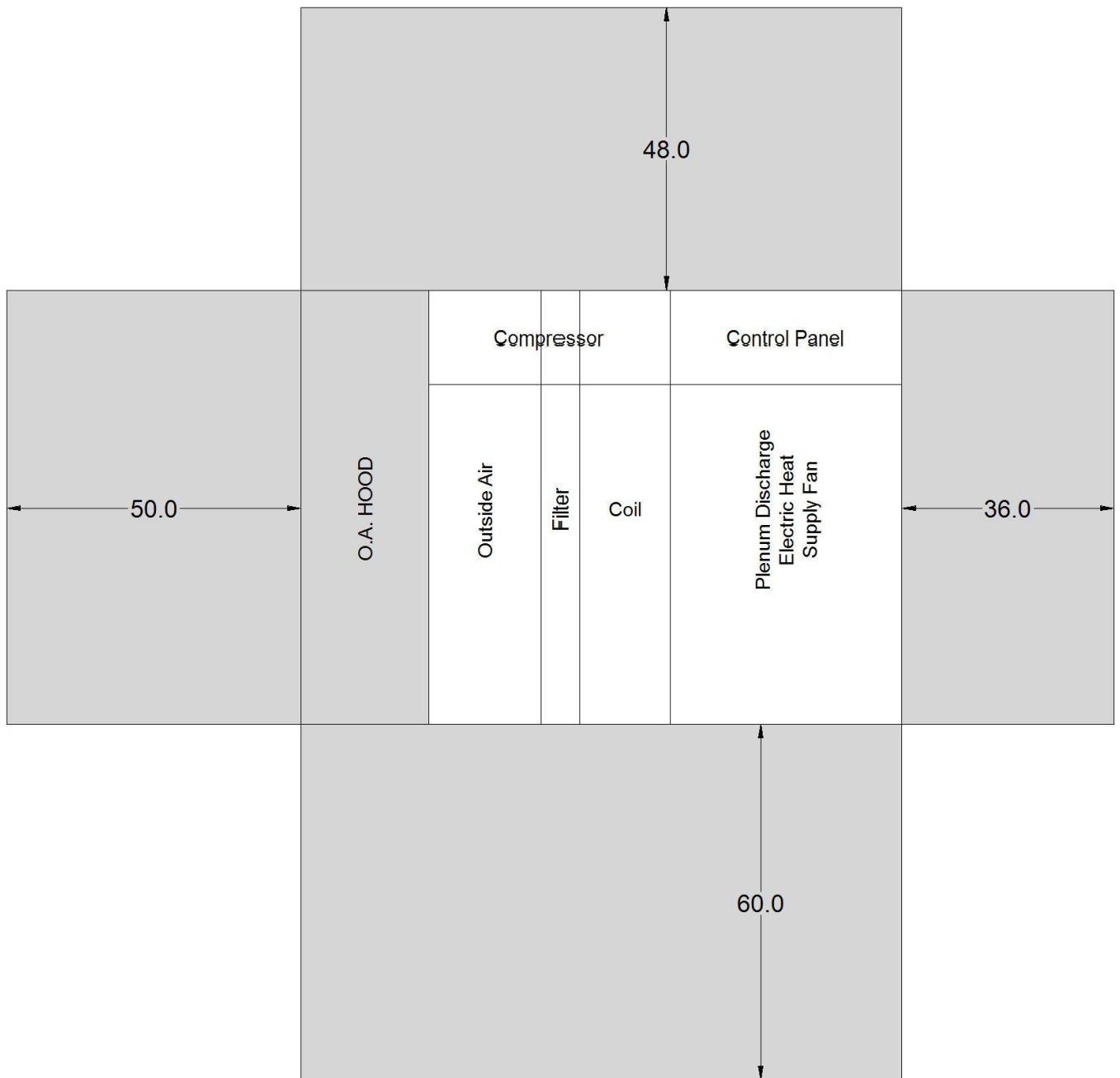
	Unit Tag: RTU-1			Sales Office: Daikin TMI LLC			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.74
Product: Rebel	Project Name: The Melt - Davis CA			Sales Engineer:			
Model: DPSH10B	Aug. 19, 2024	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: in [mm]	

No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.



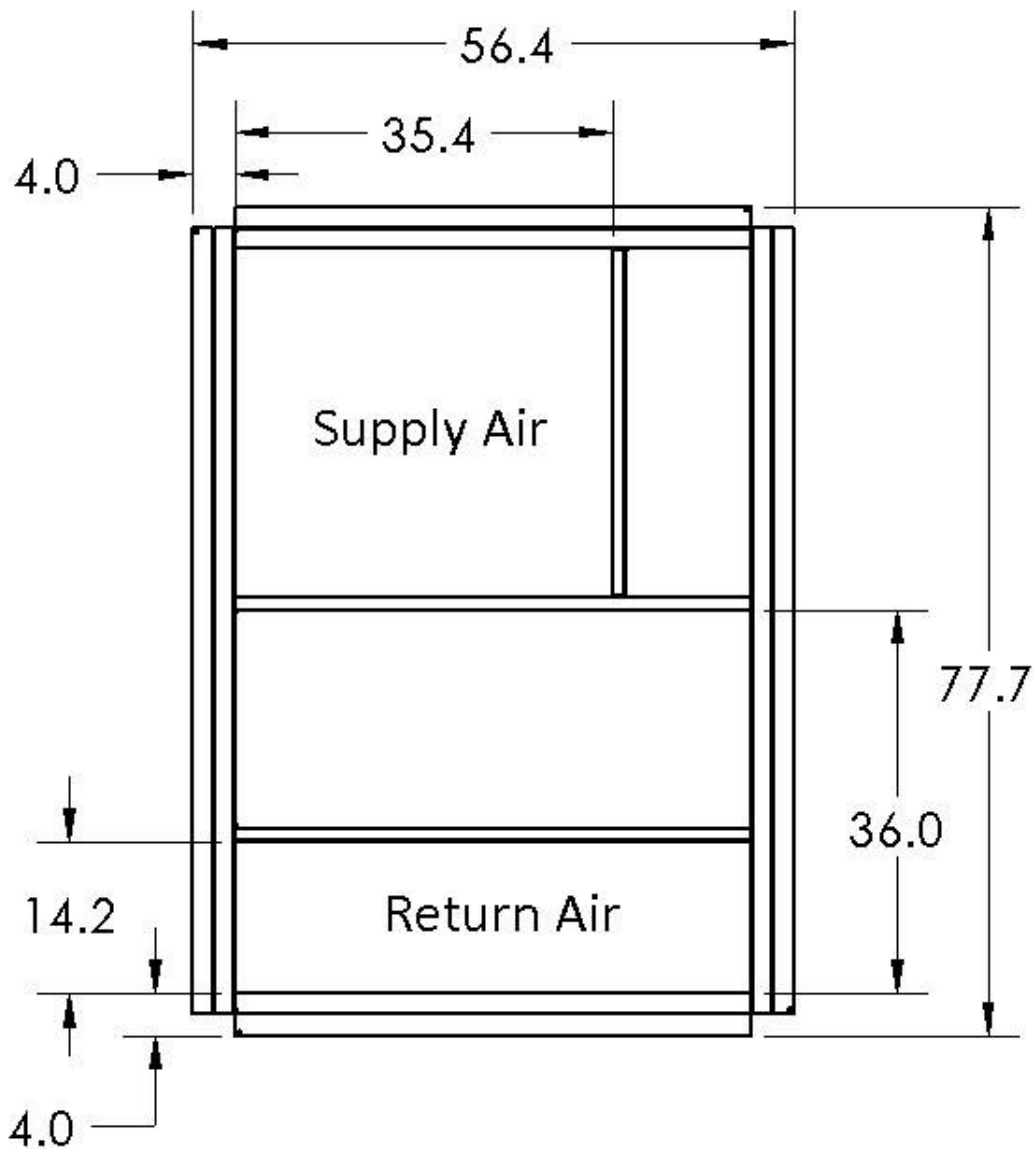
PLAN VIEW - OPENINGS & OVERALL

		Unit Tag: RTU-1			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.74		
Product: Rebel		Project Name: The Melt - Davis CA					
Model: DPSH10B		Sales Office: Daikin TMI LLC					
Sales Engineer: SalesEngineer		Aug. 19, 2024	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in [mm]
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PLAN VIEW - CG, CORNER WEIGHTS, SERVICE CLEARANCE

Unit Tag: RTU-1		 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.74	
Product: Rebel	Project Name: The Melt - Davis CA		
Model: DPSH10B	Sales Office: Daikin TMI LLC		
Sales Engineer: SalesEngineer	Aug. 19, 2024	Ver/Rev:	Sheet 1 of 1
		Scale: NTS	Tolerance: +/-0.25" Dwg Units: in [mm]
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**Curb View**

Unit Tag: RTU-1

Product: Rebel

Project Name: The Melt - Davis CA

Model: DPSH10B

Sales Office: Daikin TMI LLC

Sales Engineer:

Aug. 19, 2024

Ver/Rev:

Sheet 1 of 1

Scale: NTS

Tolerance: +/-0.25"

Dwg Units: in [mm]

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