



SUBMITTAL DATA

for

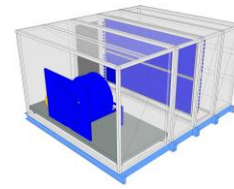
MWSU - AHU Replacements

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Technical Data Sheet for Potter AHU-B

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Potter AHU-B	



Unit Overview						
Model Number	Supply					
	Air Volume cfm	Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH047GBDM	23680	3.50	5.42	74*	116*	142

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH047GBDM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Construction:	High pressure low leakage construction		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Inline horizontal	Drive (Handling) Location:	Left
Base:	6" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Technical Data Sheet for Potter AHU-B

Supply Fan		Component: 1			Length: 54 in		Shipping Section: 1		
Fan Performance									
Air Volume	Static Pressure			Brake Horsepower	Speed		Outlet Velocity		
	External	Total	Cabinet		Operating	Maximum			
23680 cfm	3.50 inWc	5.42 inWc	0.00 inWc	28.71 BHP	1287 rpm	1465 rpm	0 ft/min		
Fan Data									
Fan Type	Blade Type / Class	Quantity of Fans	Wheel Diameter	Material Type	Number of Blades	Discharge	Motor Location		
Centrifugal - Plenum	Airfoil / 2	1	36.50 in	Steel	9	Axial	To Side of Fan		
Motor Data									
Power	Electrical Supply	Speed	Efficiency	Enclosure	Frame Size	Supplier	Number of Poles	Lock Rotor Current	Full Load Current
30.0 HP	460/60/3 V/Hz/Phase	1750 rpm	Premium	ODP	286 T frame	Generic	4	222.20 A	36.00 A
Fan Options									
Isolator Type:		Spring							
Drive Package Data*									
Fan Sheave	Motor Sheave		Belt	Number of Belts		Actual Drive S.F.		Bearing Type	
2B5V90	2B5V66		5VX1060	2		1.31		Standard - L50 (200K)	
*Daikin Applied reserves the right to provide a different but equivalent drive package									
VFD/Starter/Disconnect Data									
Selection Type:		VFD			Vendor:		Daikin Applied		
Voltage:		460 v			Height x Width x Depth:		19.92 in x 10.33 in x 10.16 in		
Mounting:		Door Side			Enclosure:		NEMA 1		
VFD Quantity:		1							
Panel									
Location			Width			Opening			
Removable panels			- in			Outward			
Access Section		Component: 2			Length: 30 in		Shipping Section: 2		
Air Pressure Drop									
0.00 inWc									
Door									
Location			Width			Opening			
Drive side			26 in			Outward			

Technical Data Sheet for Potter AHU-B

Direct Expansion Coil		Component: 3			Length: 28 in		Shipping Section: 3				
Coil Model	Total Capacity	Sensible Capacity	Number of Coils		Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)			
5EJ1106C	911716 Btu/hr	628463 Btu/hr	2		6	11	0.625 in	1.50 in x 1.299 in			
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity		
	Entering		Leaving								
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb							
23680 cfm	80.0 °F	67.0 °F	55.7 °F	54.6 °F	1.68 insWg	30 in	103 in	42.92 ft²	552 ft/min		
Fluid			Sub-Cooled Refrigerant Liquid Temp.		Suction Vapor Superheat Temp. at Coil Outlet		Design Saturated Condensing Temp.		Total Refrigerant Weight		
Suction Temp.		Refrigerant									
44.0 °F		R407c		110.0 °F		8.0 °F		110.0 °F		138.00 lb	
Connection [Data Per Coil]								Min. Fin Surface Temp.		Min. Tube Wall Surface Temp.	
Type	Liquid [Qty - Size]	Suction [Qty - Size]		Location	Material						
OD Sweat	2-1.38 in	2-2.13 in		Drive side	Copper tube		32.0 °F		32.0 °F		
Material						Drain Pan		Drain Side			
Fin	Tube		Header		Case						
Aluminum .0075 in	Copper .020 in		Copper		Galv. steel		Stainless steel		Drive side		
AHRI 410 Certification											
Coil is NOT certified by AHRI											

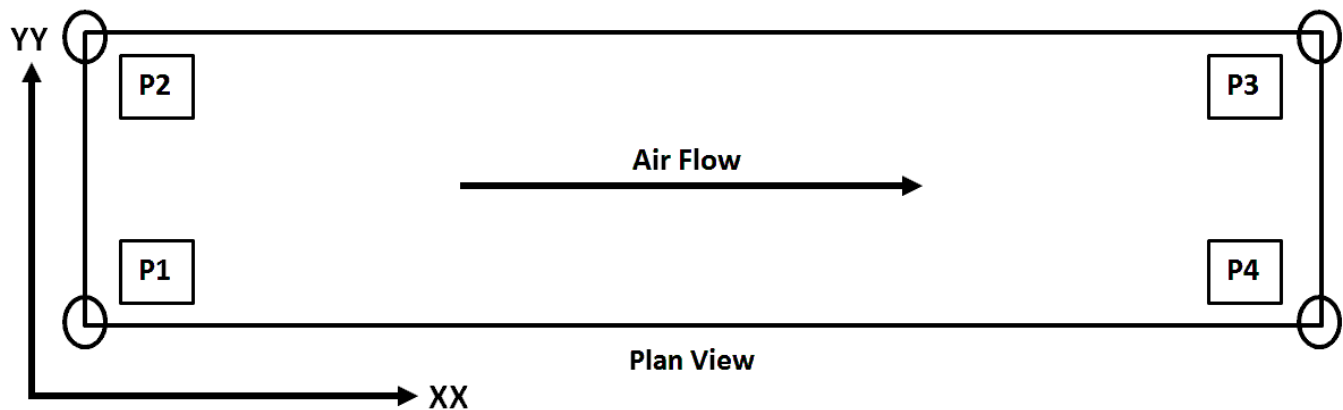
Plenum Section	Component: 4	Length: 30 in		Shipping Section: 4
Opening Location	Opening Size		Air Pressure Drop	
Top	22.00" x 112.00"		0.24 inWc	
Door				
Location	Width		Opening	
Drive side	22 in		Outward	

Unit Sound Power (dB)								
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	82	80	84	73	66	58	46	51
Unit Discharge:	86	83	91	85	78	76	70	61
Unit Return:	89	89	102	87	84	84	78	73

Technical Data Sheet for Potter AHU-B

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	54	2884	1008	640	434	802	23	43	31
2	30	567	124	124	159	159	17	58	29
3	28	1728	518	543	346	321	11	60	36
4	30	712	178	178	178	178	15	58	32
Entire Unit	142	5891	1845	1503	1100	1443	61	51	32



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Supply Fan	Cabinet	-
Access Section	Access Section	-
DX Coil	DX Coil	1.68 insWg
Plenum Section	Plenum Section	0.24 insWg
External Static	External Static	3.50 insWg
Total Supply Static		5.42 insWg

AHRI Certification



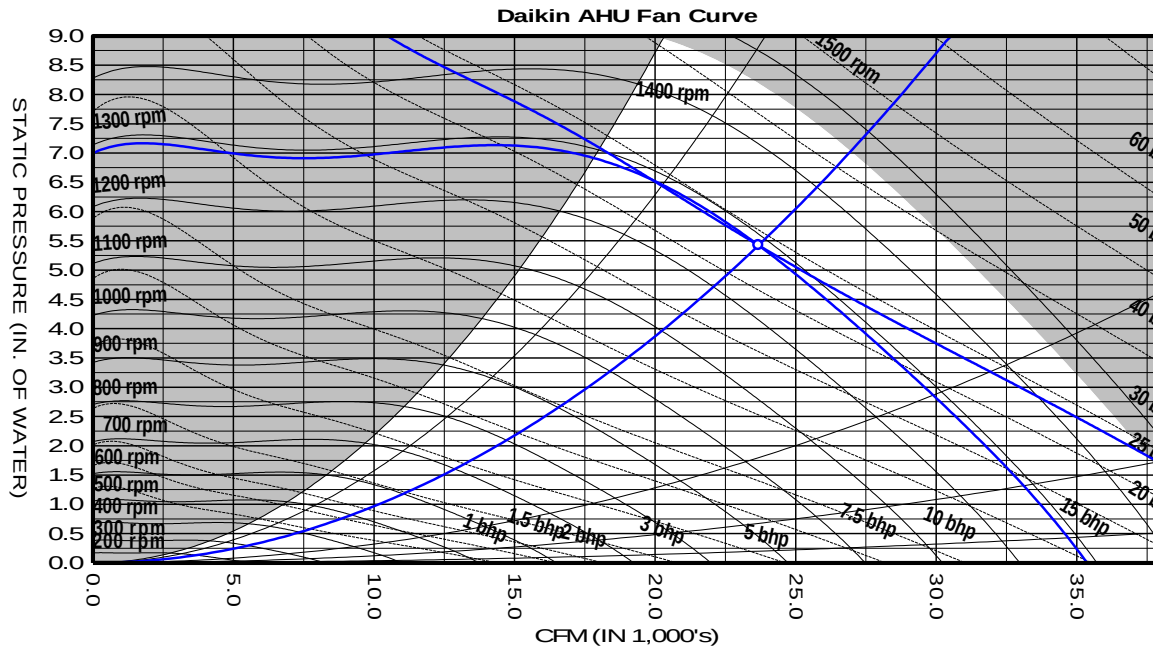
Certified in accordance with the AHRI Central Station Air-Handling Unit Certification Program, which is based on AHRI Standards 430/431. Certified units may be found in the AHRI Directory at www.ahridirectory.org.

Notes

Standard

1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.

Fan Curve for Potter AHU-B



36.5" Airfoil Plenum Supply Fan at Standard Conditions					
Air volume	23680	cfm	Fan speed	1287	rpm
Total static	5.42	insWg	Max speed	1465	rpm
Brake horsepower	28.7	bhp	Efficiency	70.4	%
Unit tagging			Date		
Potter AHU-B			September-27-2020		
Job name			Time		
MWSU - AHU Replacements			15:10		



Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on AHRI Standard 430.

Drawing for Potter AHU-B

Job Number:

G2H0RG

Job Name:

MWSU - AHU Replacements

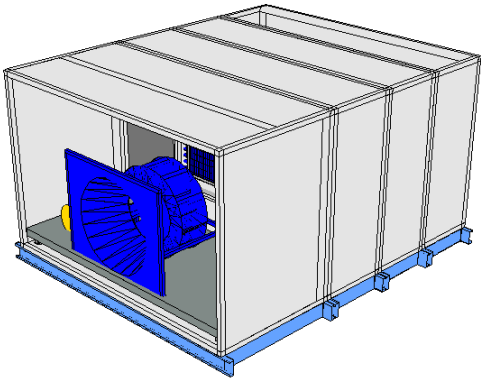
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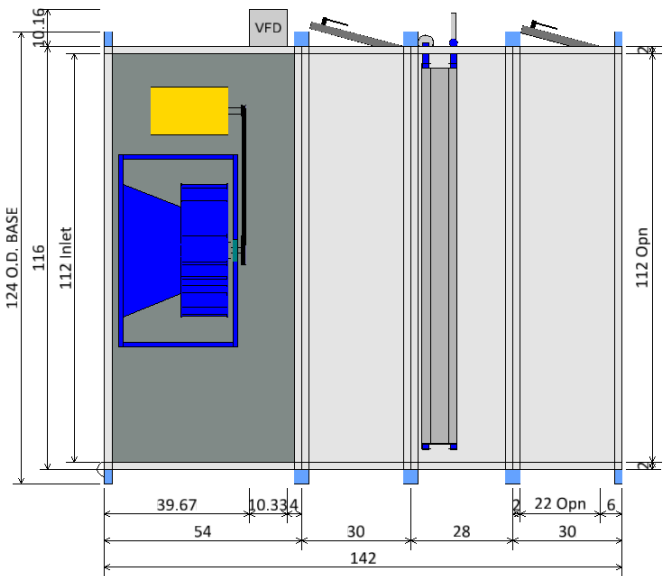
Prepared Date:

9/27/2020

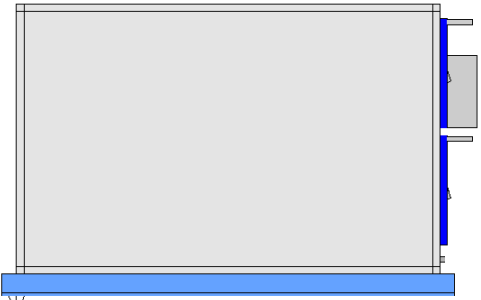
www.DaikinApplied.com



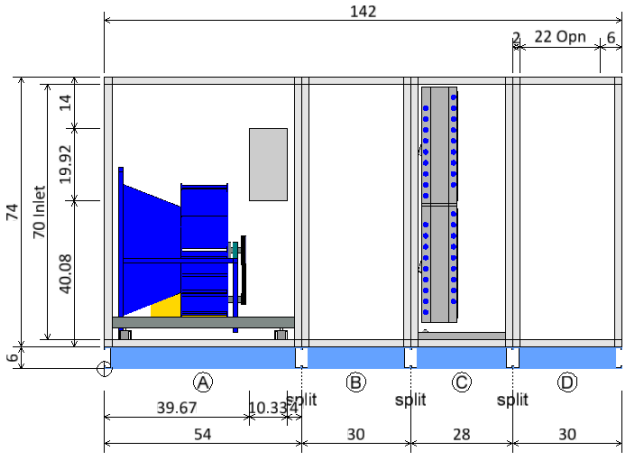
ISOMETRIC VIEW



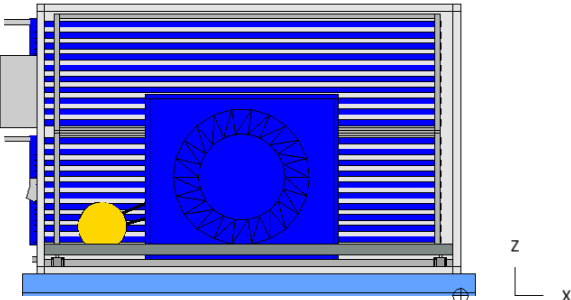
PLAN VIEW



REAR END VIEW

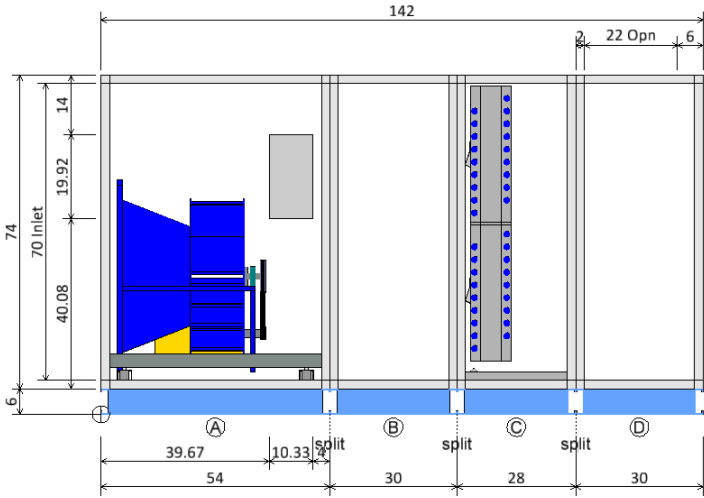
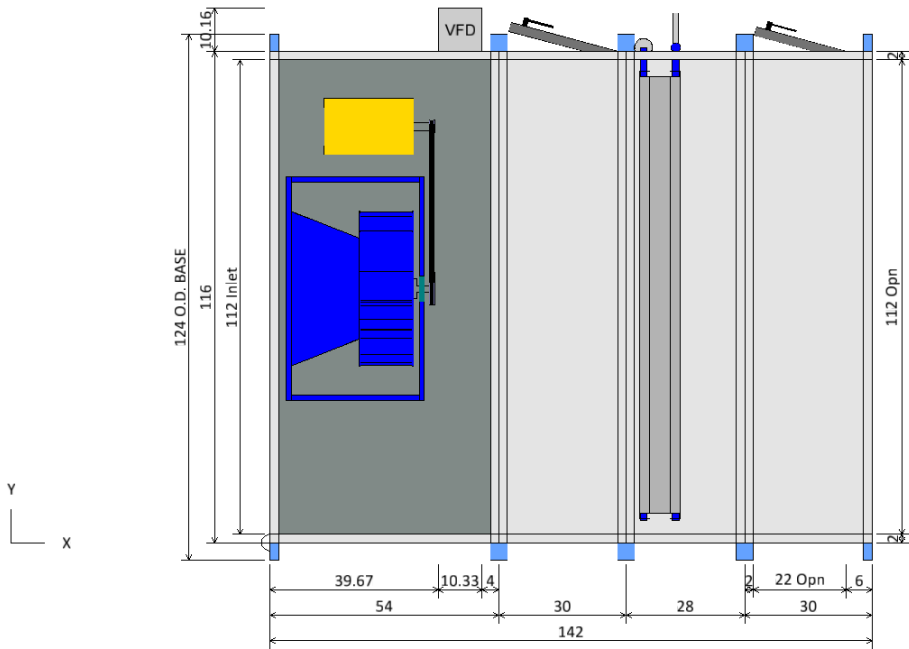


ELEVATION VIEW



FRONT END VIEW

Plan/Elevation	Unit Tag: Potter AHU-B			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH047GBDM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



Component Key	
Supply Fan	Fan Type: Centrifugal - Plenum
	Fan Size (Class): 36 (2)
	Air Flowrate: 23680.0 cfm
	T.S.P: 5.4 insWg
	Motor Power: 30.0 HP
Access Section	VFD door swing: 10.33 ins
	Left Door (WxH): 26 ins x 66 ins
DX Coil	Coil Model: 5EJ1106C
	Total Capacity: 911716.0 Btu/hr
Plenum Section	Opening Location: Top
	Opening Size: 22 ins x 112 ins
	Left Door (WxH): 22 ins x 48 ins

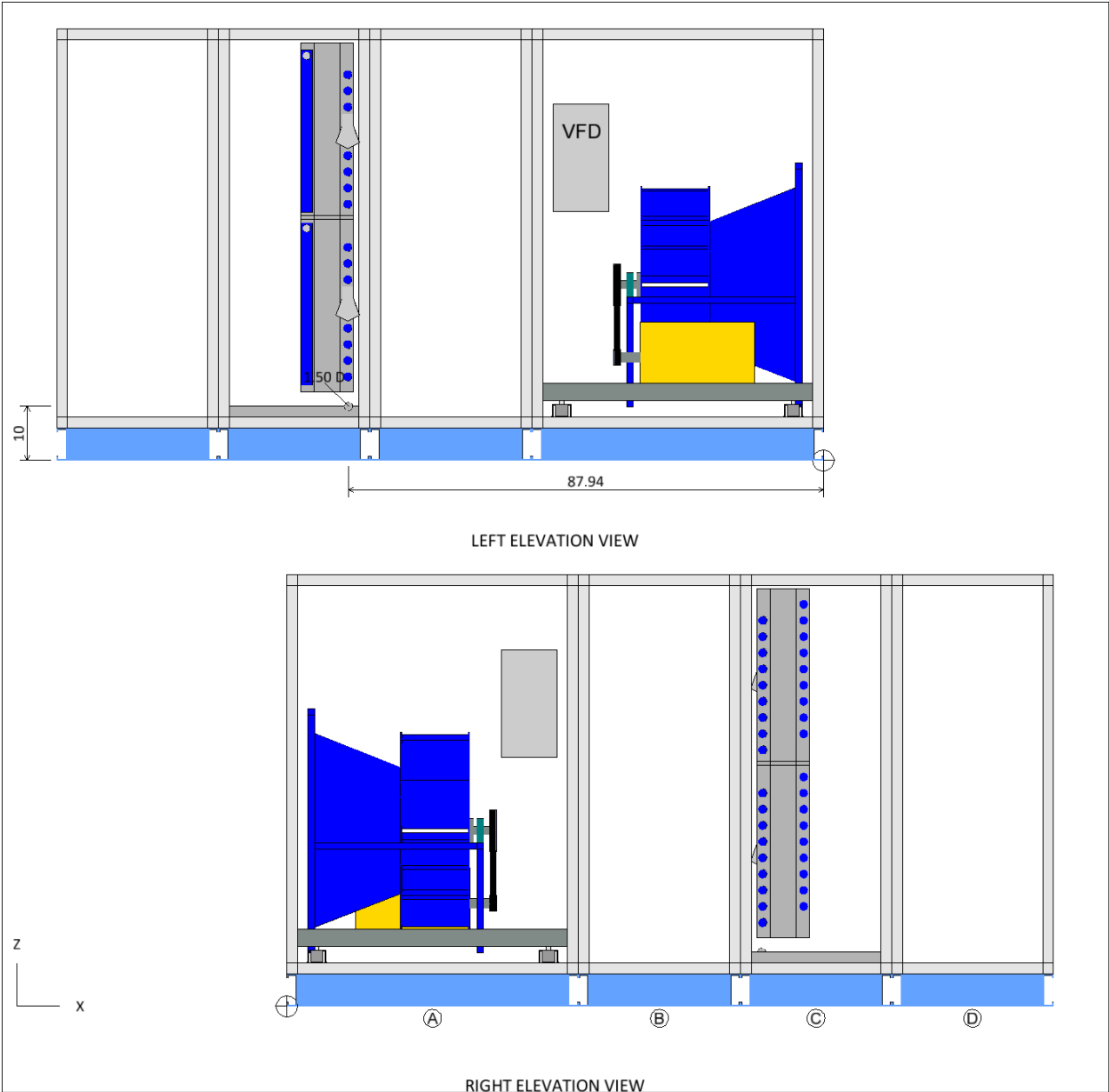
Plan/Elevation - No Ends	Unit Tag: Potter AHU-B	Sales Office: Daikin TMI LLC (Kansas City)
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements	Sales Engineer:
Model: CAH047GBDM	Sept. 27, 2020	Ver/Rev: Sheet: 1 of 1
	Scale: NTS	Tolerance: +/-0.25"
	Dwg Units: in	

13600 Industrial Park Blvd, Minneapolis, MN 55441
www.DaikinApplied.com Software Version: 12.32

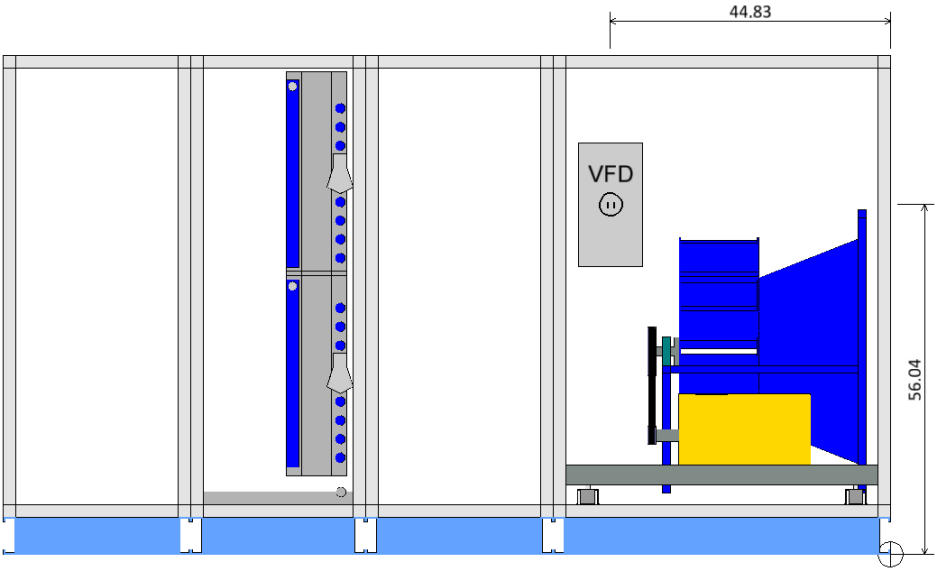
13600 Industrial Park Blvd, Minneapolis, MN 55441
www.DaikinApplied.com Software Version: 12.32

Coil and Drain Connections					
Type	X	Y	Z	Diam	
DX Coil	87.94	119.40	10.00	1.50	
Condensate drain conn:	TBD	TBD	TBD	2- 2.13	
DX suction:	TBD	TBD	TBD	2- 1.38	
DX liquid conn:	TBD	TBD	TBD	2- 2.13	
DX suction:	TBD	TBD	TBD	2- 2.13	
DX liquid conn:	TBD	TBD	TBD	2- 1.38	

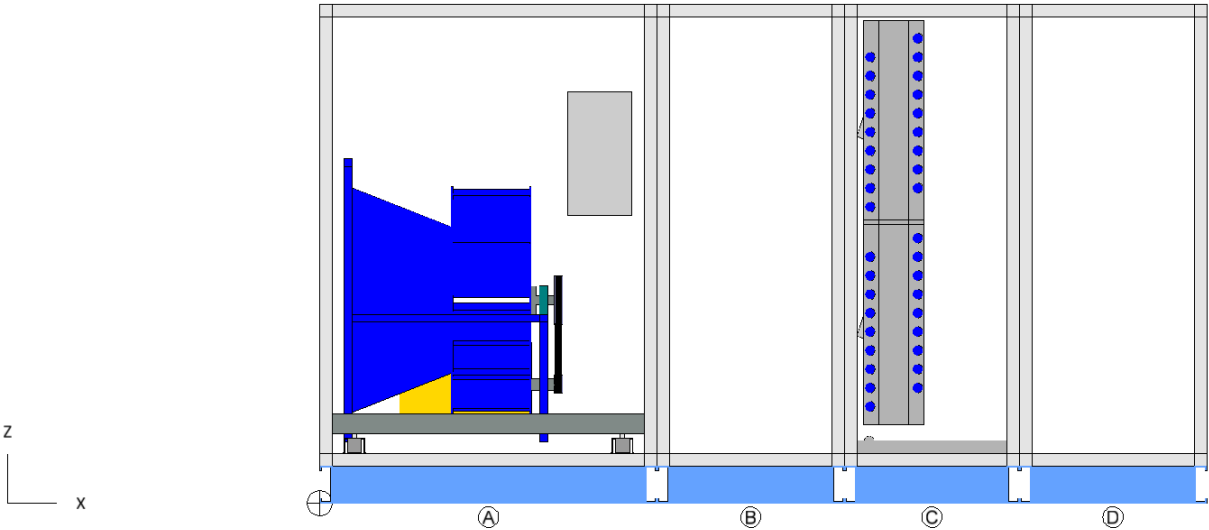
Note: Dimensions are measured from the origin point.



Coil and Drain Connections		Unit Tag: Potter AHU-B			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH047GBDM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



LEFT ELEVATION VIEW

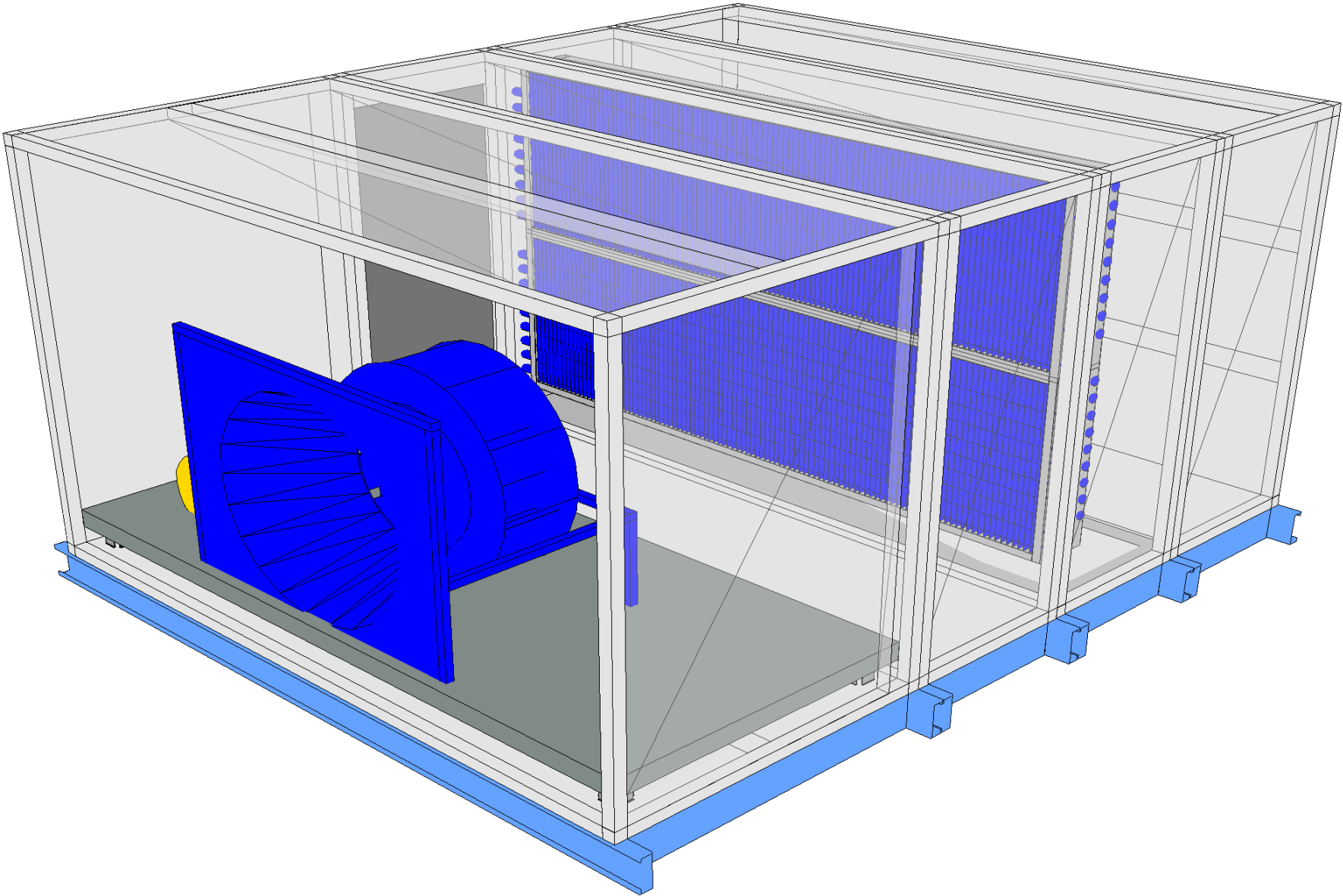


RIGHT ELEVATION VIEW

Component Key						
	Type	X	Y	Z	Volts	Phase
(A)	Supply Fan Fan	44.83	116.00	56.04	460	3

Note: Dimensions are measured from the origin point.

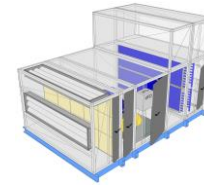
Electrical Connections		Unit Tag: Potter AHU-B			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH047GBDM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



Product Drawing	Unit Tag: Potter AHU-B			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH047GBDM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for Potter AHU-208

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Potter AHU-208	



Unit Overview						
Model Number	Air Volume cfm	Supply				
		Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH038GMDM	19565	3.75	5.72	66*	108*	168

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH038GMDM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Construction:	High pressure low leakage construction		
Max. Design Leakage:	No more than 1% of Supply Air Volume at design static pressure up to +/-8" wc		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Multizone	Drive (Handling) Location:	Right
Base:	6" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Mixing Box		Component: 1		Length: 32 in		Shipping Section: 1							
Portion	Damper			Blade Action	Rated CFM	Air Pressure Drop	Quantity						
	Size (length x width)		Location					Type					
	Overall	Opening											
Outside Air	24 in x 104 in	20 in x 94 in	End	UltraSeal Low Leak	Parallel	19565 cfm	0.18 insWg	1					
Return Air	24 in x 104 in	20 in x 94 in	Top	UltraSeal Low Leak	Parallel	19565 cfm		1					
Filter Data													
Type		Efficiency		Face Velocity		Face Area		Air Volume	Filter Loading				
Pleated		MERV 8		475 ft/min		41.2 ft²		19565 cfm	Side				
Air Pressure Drop				Number of Filters		Height		Width		Depth			
Clean Air		Mean Air										Dirty Air	
0.21 inWc		0.61 inWc		1.00 inWc		3		20 in		24 in		2 in	
						12		20 in		20 in		2 in	
Door													
Location				Width				Opening					
Drive side				8 in				Outward					

Technical Data Sheet for Potter AHU-208

Manual Component		Component: 2		Length: 18 in		Shipping Section: 2			
Pressure Drop									
0.00 inWc									
Door									
Location			Width			Opening			
Drive side			14 in			Outward			
Supply Fan		Component: 3			Length: 48 in		Shipping Section: 3		
Fan Performance									
Air Volume	Static Pressure			Brake Horsepower	Speed		Outlet Velocity		
	External	Total	Cabinet		Operating	Maximum			
19565 cfm	3.75 inWc	5.72 inWc	0.00 inWc	26.11 BHP	1721 rpm	1783 rpm	0 ft/min		
Fan Data									
Fan Type	Blade Type / Class	Quantity of Fans	Wheel Diameter	Material Type	Number of Blades	Discharge	Motor Location		
Centrifugal - Plenum	Airfoil / 2	1	30.00 in	Steel	9	Axial	To Side of Fan		
Motor Data									
Power	Electrical Supply	Speed	Efficiency	Enclosure	Frame Size	Supplier	Number of Poles	Lock Rotor Current	Full Load Current
30.0 HP	460/60/3 V/Hz/Phase	1750 rpm	Premium	ODP	286 T frame	Generic	4	222.20 A	36.00 A
Fan Options									
Isolator Type:		Spring							
Drive Package Data*									
Fan Sheave	Motor Sheave		Belt		Number of Belts		Actual Drive S.F.		Bearing Type
2B5V94	2B5V94		BX97		2		1.30		Standard - L50 (200K)
*Daikin Applied reserves the right to provide a different but equivalent drive package									
VFD/Starter/Disconnect Data									
Selection Type:		VFD			Vendor:		Daikin Applied		
Voltage:		460 v			Height x Width x Depth:		15.56 in x 12.74 in x 8.56 in		
Mounting:		Door Side			Enclosure:		NEMA 1		
VFD Quantity:		1							
Door									
Location			Width			Opening			
Drive side			30 in			Outward			

Technical Data Sheet for Potter AHU-208

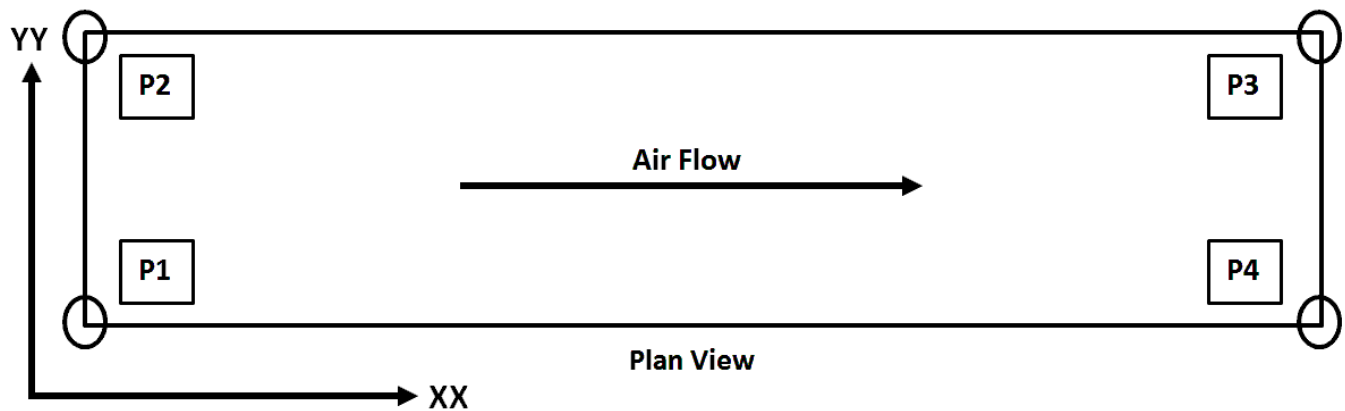
Two Deck Multizone		Component: 4		Length: 70 in		Shipping Section: 4 & 5 & 6 & 7					
Discharge Location		Number of Zones		Multizone APD*		Damper Type		Actuation			
Horizontal / Horizontal		0		1.59 inWc		None / None		-			
* Note: Includes coil, balance plate & diffuser											
Note : Cabinet height for multizone extends 40 inches above ‘External cabinet height’ referenced above.											
Cold Deck Coil											
Coil Model	Total Capacity	Sensible Capacity	Number of Coils		Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)			
5EJ1006C	843704 Btu/hr	555829 Btu/hr	2		6	10	0.625 in	1.50 in x 1.299 in			
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity		
	Entering		Leaving								
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb							
19565 cfm	80.0 °F	67.0 °F	54.0 °F	52.8 °F	1.57 inWc	27 in	95 in	35.63 ft²	549 ft/min		
Fluid			Sub-Cooled Refrigerant Liquid Temp.		Suction Vapor Superheat Temp. at Coil Outlet		Design Saturated Condensing Temp.		Total Refrigerant Weight		
Suction Temp.		Refrigerant									
44.0 °F		R410a		110.0 °F		8.0 °F		110.0 °F		- lb	
Connection [Data Per Coil]							Min. Fin Surface Temp.		Min. Tube Wall Surface Temp.		
Type	Liquid [Qty - Size]	Suction [Qty - Size]	Location		Material						
OD Sweat	2-1.13 in	2-1.63 in	Drive side		Copper tube		32.0 °F		- °F		
Material						Drain Pan		Drain Side			
Fin	Tube	Header	Case								
Aluminum .0075 in	Copper .020 in	Copper		Galv. steel		Stainless steel		Drive side			
AHRI 410 Certification											
Coil is NOT certified by AHRI											
Future Hot Deck Coil(70 ins)											
Number of Coils					Number of Rows						
1					1						
Coil Air Pressure Drop		Finned Height		Finned Width		Face Area		Face Velocity			
- inWc		30 in		92 in		19.17 ft²		1021 ft/min			
Connection Location					Connection Material						
Drive side					Carbon steel						
Coil Model			Drain Pan			Drain Pan Side					
Future Coil (Not Supplied)			-			-					
AHRI 410 Certification											
Coil is NOT certified by AHRI											
Door											
Location			Width			Opening					
Drive side			16 in			Outward					

Unit Sound Power (dB)								
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	86	83	90	75	71	60	48	51
Unit Discharge:	96	93	100	96	93	88	86	80
Unit Return:	86	83	100	80	77	74	70	69

Technical Data Sheet for Potter AHU-208

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	32	847	198	198	225	225	17	54	31
2	18	462	99	99	131	131	10	54	24
3	48	2173	840	437	247	650	20	34	28
4	34	495	108	108	140	140	19	54	26
5	36	1664	532	511	300	321	13	53	32
6	34	310	67	67	89	89	19	54	26
7	36	409	121	118	98	101	16	53	26
Entire Unit	168	6360	1661	1234	1534	1961	92	47	37



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Mixing Box	Filter	0.21 insWg
Mixing Box	Mixing Box	0.17 insWg
Manual Section	Manual Section	-
Supply Fan	Cabinet	-
Access Section	Access Section	-
DX Coil	DX Coil	1.57 insWg
Access Section	Access Section	-
Hot Water Coil	Hot Water Coil	0.20 insWg
External Static	External Static	3.75 insWg
Total Supply Static		5.72 insWg

AHRI Certification

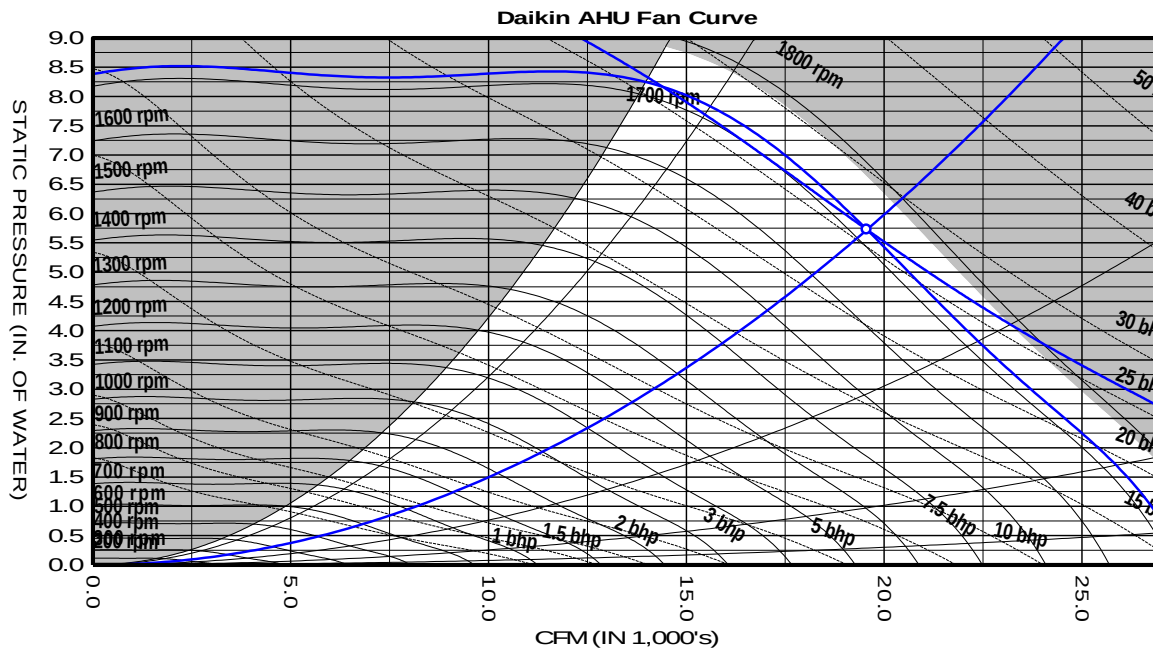


Certified in accordance with the AHRI Central Station Air-Handling Unit Certification Program, which is based on AHRI Standards 430/431. Certified units may be found in the AHRI Directory at www.ahridirectory.org.

Technical Data Sheet for Potter AHU-208

Notes
Important
1. This unit may not meet ASHRAE Standard 90.1 - 2007 fan motor power limitations for the year and system selected. If that code applies, alternate fan selections may be required.
2. The designer and installer must ensure compliance with applicable codes. A component supplier cannot determine the brake horsepower ("BHP") for other motors in the air handling system.
3. Before approving this unit, determine whether ASHRAE Standard 90.1 - 2007 has been adopted in the specific jurisdiction or contract specifications in which the unit will be installed.

Fan Curve for Potter AHU-208



30.0" Airfoil Plenum Supply Fan at Standard Conditions					
Air volume	19565	cfm	Fan speed	1721	rpm
Total static	5.72	insWg	Max speed	1783	rpm
Brake horsepower	26.1	bhp	Efficiency	67.5	%
Unit tagging			Date		
Potter AHU-208			September-27-2020		
Job name			Time		
MWSU - AHU Replacements			15:10		



Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on AHRI Standard 430.

Drawing for Potter AHU-208

Job Number:

G2H0RG

Job Name:

MWSU - AHU Replacements

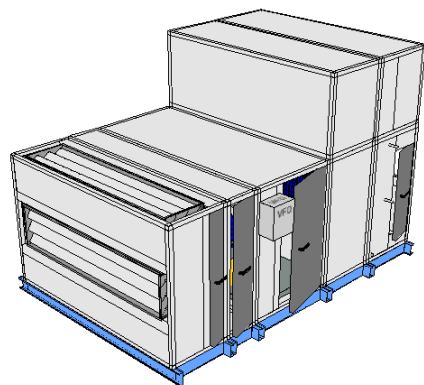
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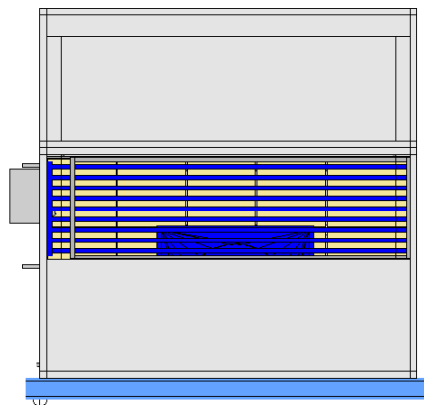
Prepared Date:

9/27/2020

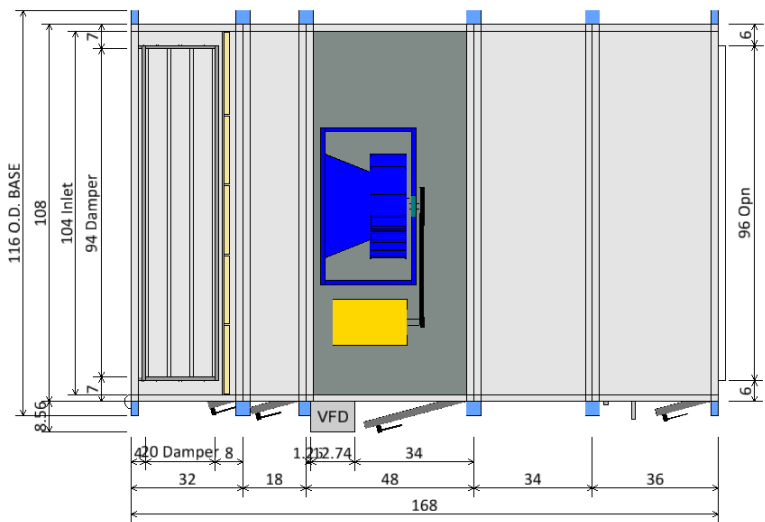
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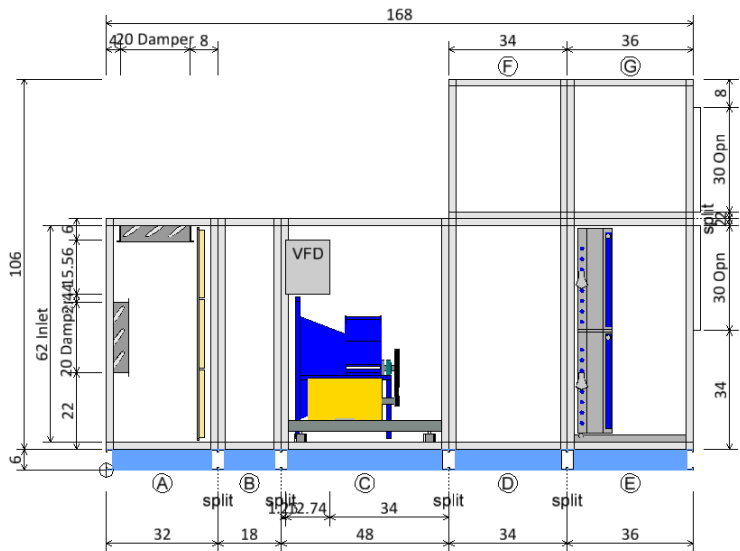
ISOMETRIC VIEW



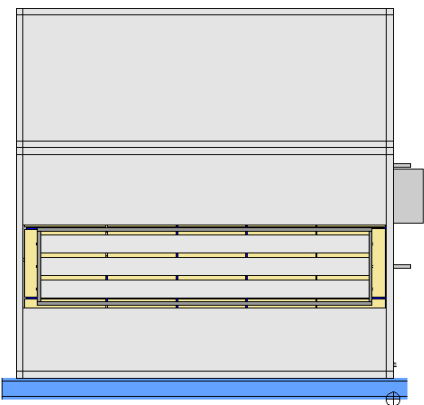
REAR END VIEW



PLAN VIEW



ELEVATION VIEW

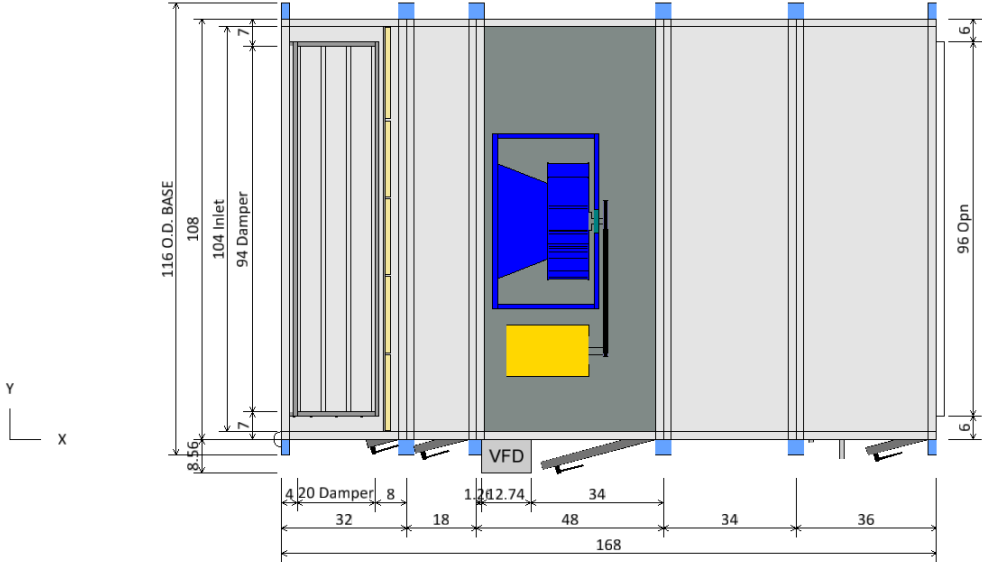


FRONT END VIEW

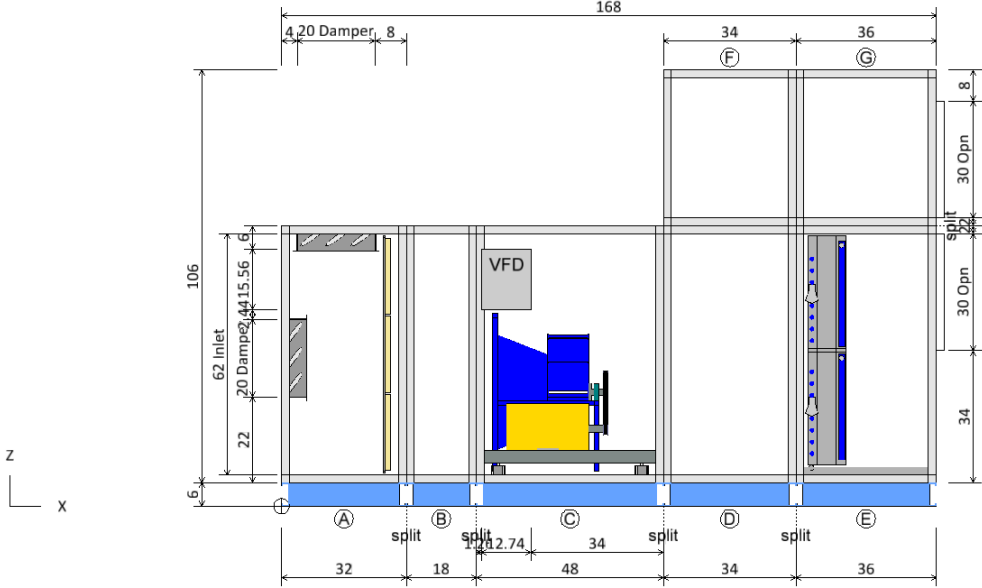
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Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:		
Model: CAH038GMDM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in



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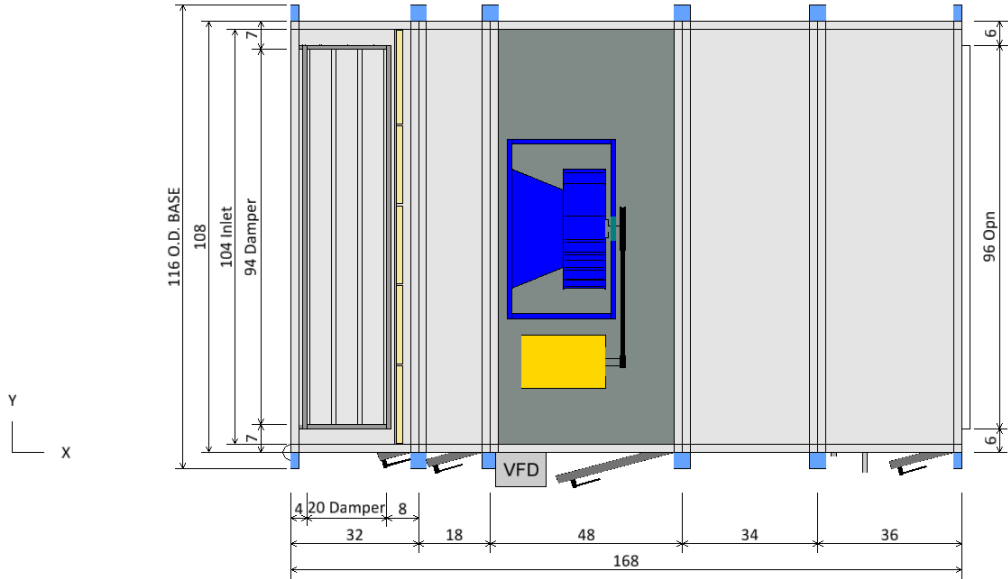
PLAN VIEW



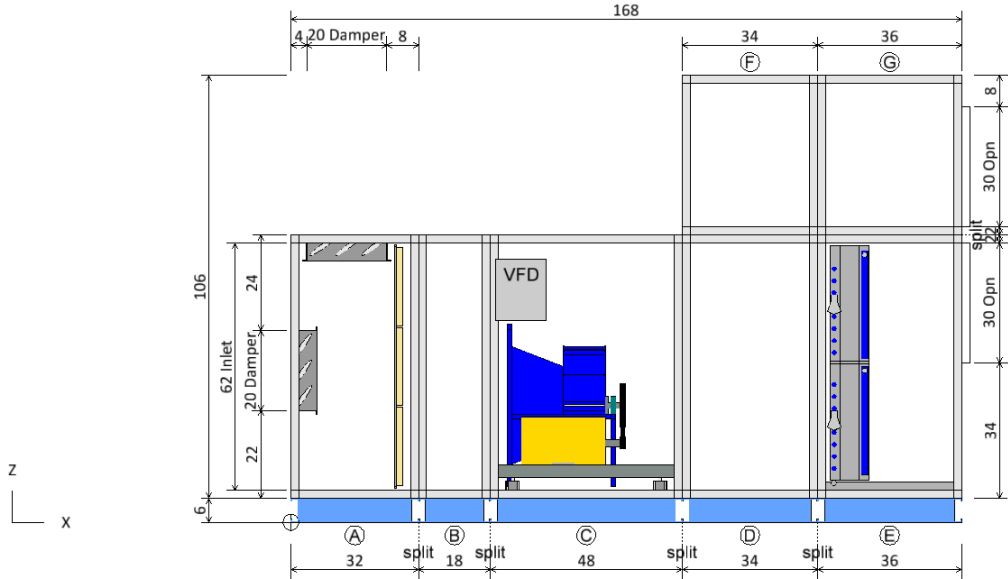
ELEVATION VIEW

Component Key	
(A)	Mixing Box Filter Type: PerfectPleat HC M8 Right Door (WxH): 8 ins x 62 ins
(B)	Manual Section Right Door (WxH): 14 ins x 62 ins
(C)	Supply Fan Fan Type: Centrifugal - Plenum Fan Size (Class): 30 (2) Air Flowrate: 19565.0 cfm T.S.P: 5.7 insWg Motor Power: 30.0 HP VFD door swing: 12.74 ins Right Door (WxH): 30 ins x 62 ins
(D)	Access Section
(E)	DX Coil Coil Model: 5EJ1006C Total Capacity: 843704.0 Btu/hr Right Door (WxH): 16 ins x 48 ins
(F)	Access Section
(G)	Hot Water Coil Coil Model: 5WH0001C Total Capacity: 0.0 Btu/hr

Plan/Elevation - No Ends	Unit Tag: Potter AHU-208			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH038GMDM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



PLAN VIEW

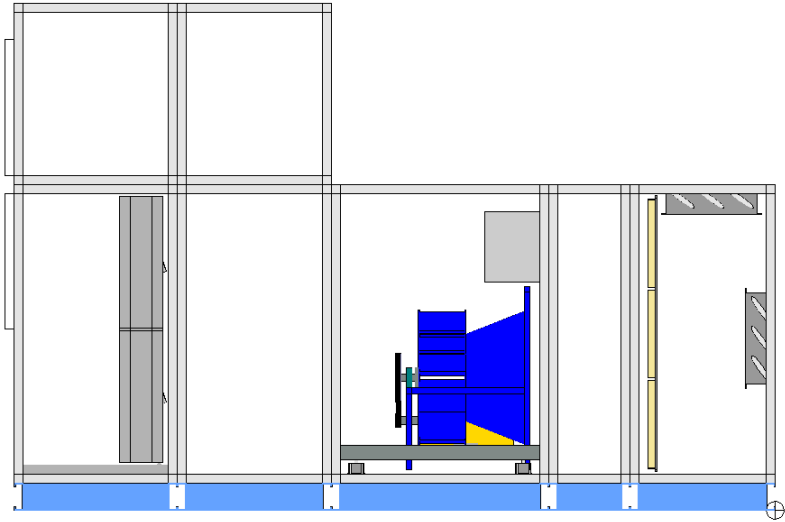


ELEVATION VIEW

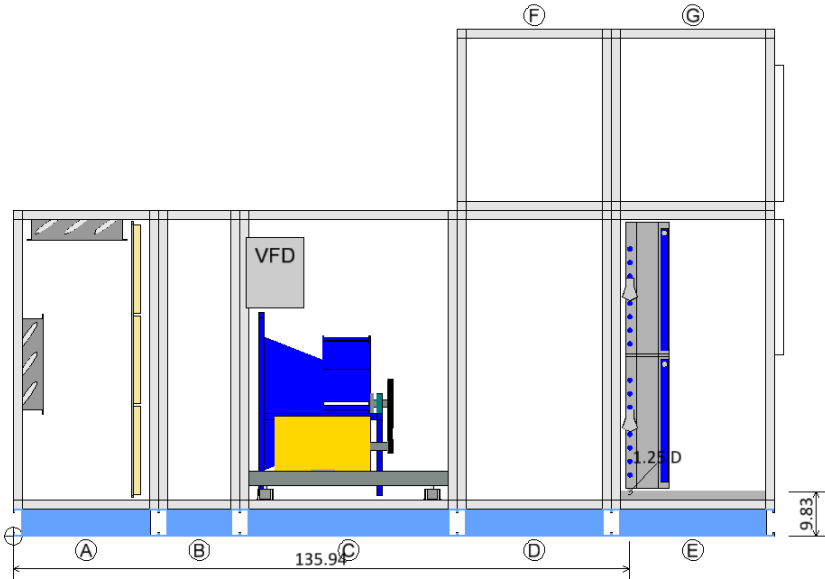
Component Key						
Type	X	Y	Z	Wid	Hgt	
(A) Mixing Box	0.00	7.00	28.00	94.00	20.00	
(A) Outside air damper	4.00	7.00	72.00	94.00	20.00	
(E) DX Coil	168.00	2.00	40.00	104.00	30.00	
(E) MZ cold deck output	168.00	2.00	74.00	104.00	30.00	
(G) Hot Water Coil	168.00	2.00	74.00	104.00	30.00	
(G) MZ hot deck output	168.00	2.00	74.00	104.00	30.00	

Note: Dimensions are measured from the origin point.

Opening/Damper Connections		Unit Tag: Potter AHU-208			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH038GMDM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

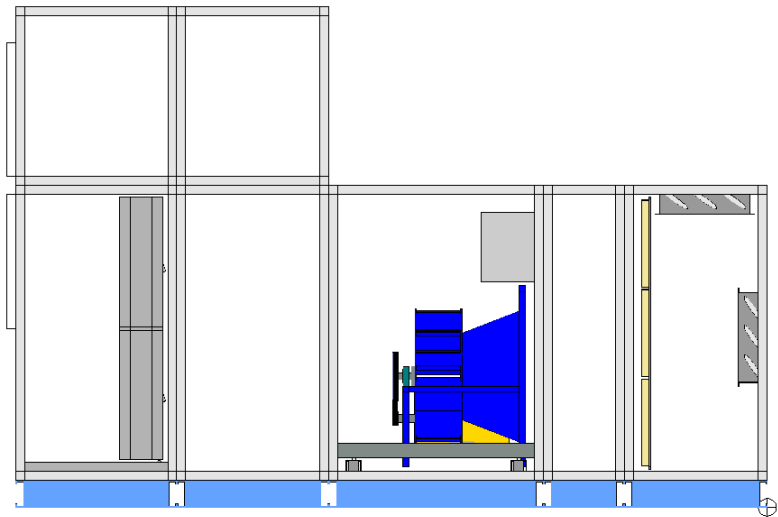
Coil and Drain Connections					
	Type	X	Y	Z	Diam
E	DX Coil				
	Condensate drain conn:	135.94	-2.90	9.83	1.25
	DX suction:	TBD	TBD	TBD	2- 1.63
	DX liquid conn:	TBD	TBD	TBD	2- 1.13
	DX suction:	TBD	TBD	TBD	2- 1.63
	DX liquid conn:	TBD	TBD	TBD	2- 1.13

Note: Dimensions are measured from the origin point.

Coil and Drain Connections		Unit Tag: Potter AHU-208			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH038GMDM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

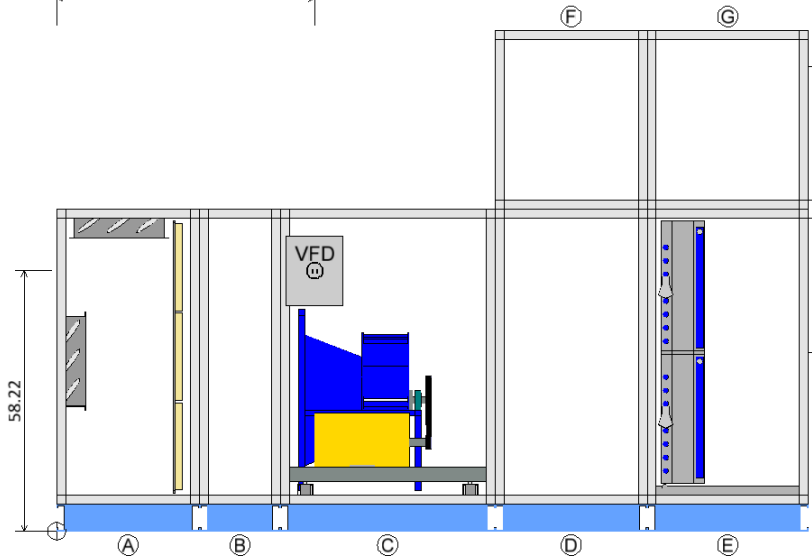
Component Key						
	Type	X	Y	Z	Volts	Phase
©	Supply Fan Fan	57.63	0.00	58.22	460	3

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW

57.63



RIGHT ELEVATION VIEW

Electrical Connections

Product: Vision Air Handler

Model: CAH038GMDM

Unit Tag: Potter AHU-208

Project Name: MWSU - AHU Replacements

Sept. 27, 2020

Ver/Rev:

Sheet: 1 of 1

Sales Office: Daikin TMI LLC (Kansas City)

Sales Engineer:

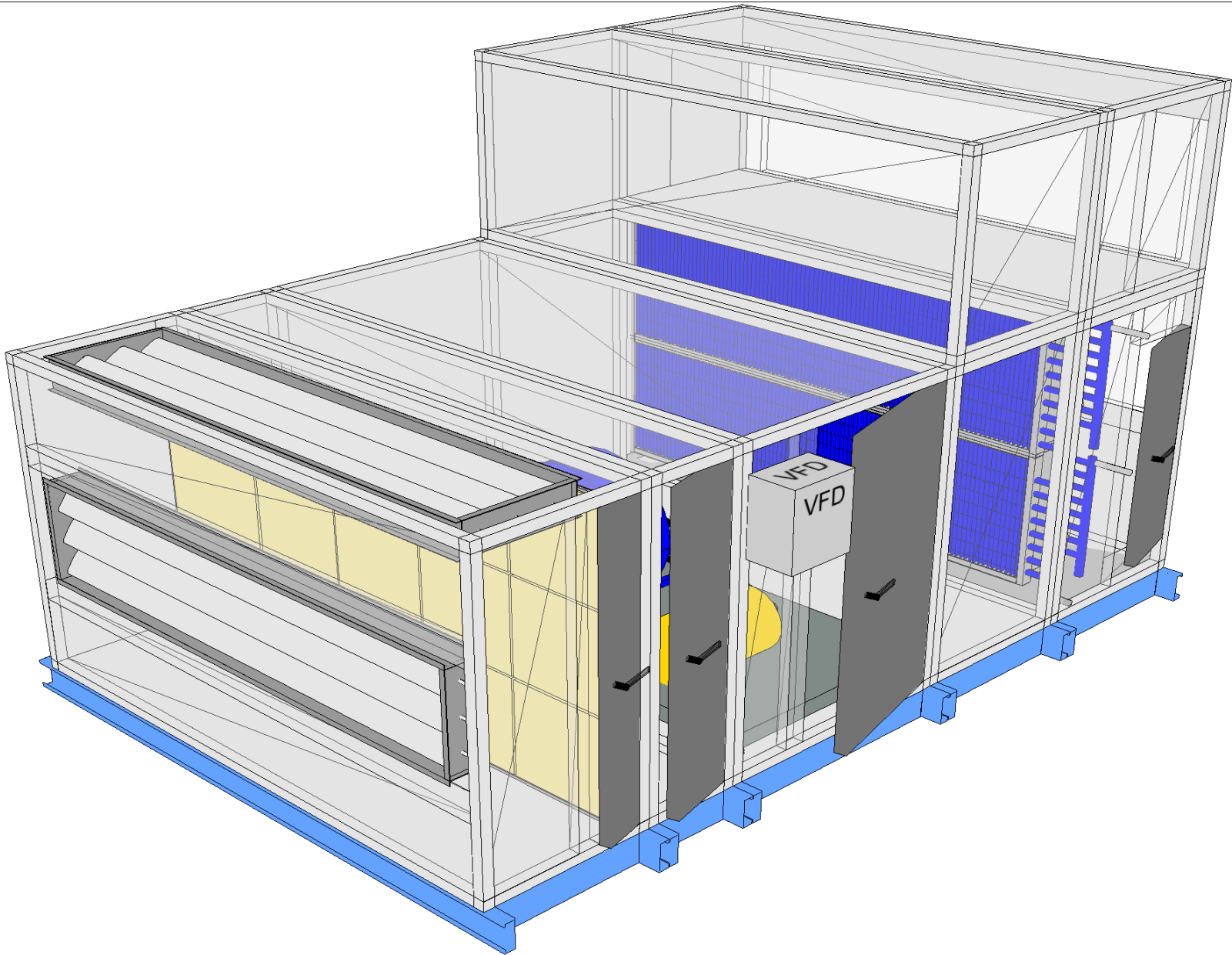
Scale: NTS

Tolerance: +/-0.25"

Dwg Units: in



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Product Drawing	Unit Tag: Potter AHU-208			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH038GMDM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for Potter ACCU-208

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	9/27/2020	
Submitted By	Jim Root	
Software Version	07.81	
Unit Tag	Potter ACCU-208	



Unit Overview						
Model Number	Voltage V/Hz/Phase	Total Refrigeration Effect Btu/hr	Total Unit Power kW	EER AHRI Conditions	IEER AHRI Conditions	ASHRAE 90.1
RCS080D	460/60/3	830814	78.6	10.7	15.3	2013 Compliant

Unit		
Model Number:	RCS080D	
Type:	Applied	
Approval:	ETL - USA	
Refrigerant Type:	No. of Refrigerant Circuits	Refrigerant Weight
R410A	2	34.8 lb

Condensing Section				
Temperature		Altitude	Refrigeration Effect	Power
Suction	Ambient			
44.0 °F	95.0 °F	0 ft	830814 Btu/hr	78.6 kW

Compressor			
Quantity	Type	Capacity Control	Compressor Isolation
6	Scroll	6 steps	Resilient
Full Load Current:			
Compressor 1	19.2 A		
Compressor 2	19.2 A		
Compressor 3	19.2 A		
Compressor 4	19.2 A		
Compressor 5	19.2 A		
Compressor 6	19.2 A		

Condenser					
Type	Coil		Fans	Fan Motors	
	Number of Rows	Fins per Inch	Condenser Fan Type	Quantity	Full Load Current
Aluminum tube micro channel	1	18	Standard	6	2.10 A

Sound							
Casing Radiated Sound Power (db)							
63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
0	96	93	91	91	87	84	83

Technical Data Sheet for Potter ACCU-208

Physical

Dimensions and Weight			
Length	Height	Width	Operating Weight
103.0 in	97.0 in	99.0 in	3556 lb
Connections			
Connection	Connection Sizes		
Suction Line Circuit	(2) 2.62 in.		
Liquid Line Circuit	(2) 1.12 in.		
Hot Gas Bypass Circuit	(2) 0.88 in.		

Electrical

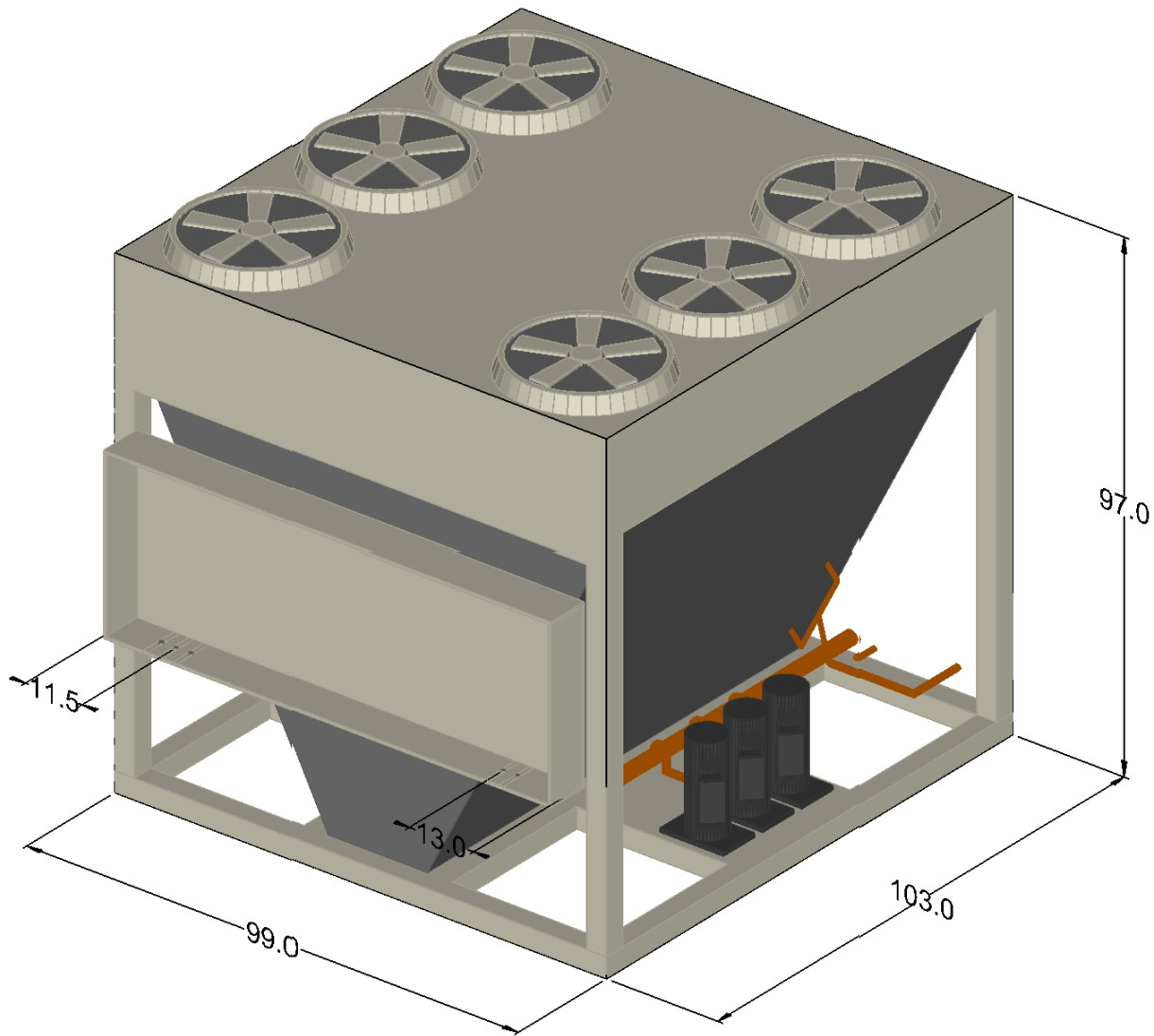
Voltage	MROPD	Field Power Connection	MCA	SCCR	Field Outlet Connection
460/60/3 V/Hz/Phase	150 A	Thru-the-door disconnect switch	133.9 A	10 kAIC	115V, 20 amp service
Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.				

Options

Unit	
Hot Gas Bypass:	HGBP Tee (See Accessory Tab)
Condenser Coil Options:	Condenser with built in hail protection
Electrical	
Field Connection	Thru-the-door disconnect switch
Wiring Options	Sealtite conduit
GFI Receptacle	Field powered
Unit Control	
Temperature Controls:	No temp control, 24 V transformer
Low Ambient Control:	Fantrol, Low ambient control to 45 degrees

Warranty

Parts:	Standard one year parts
Compressor:	Extended four year compressor, five year total



Product Drawing

Product:

Model: RCS080D

Unit Tag: Potter ACCU-208

Project Name: MWSU - AHU

Sept. 27, 2020

Ver/Rev:

Sheet: 1 of 1

Sales Office: Daikin TMI LLC (Kansas City)

Sales Engineer:

Scale: NTS

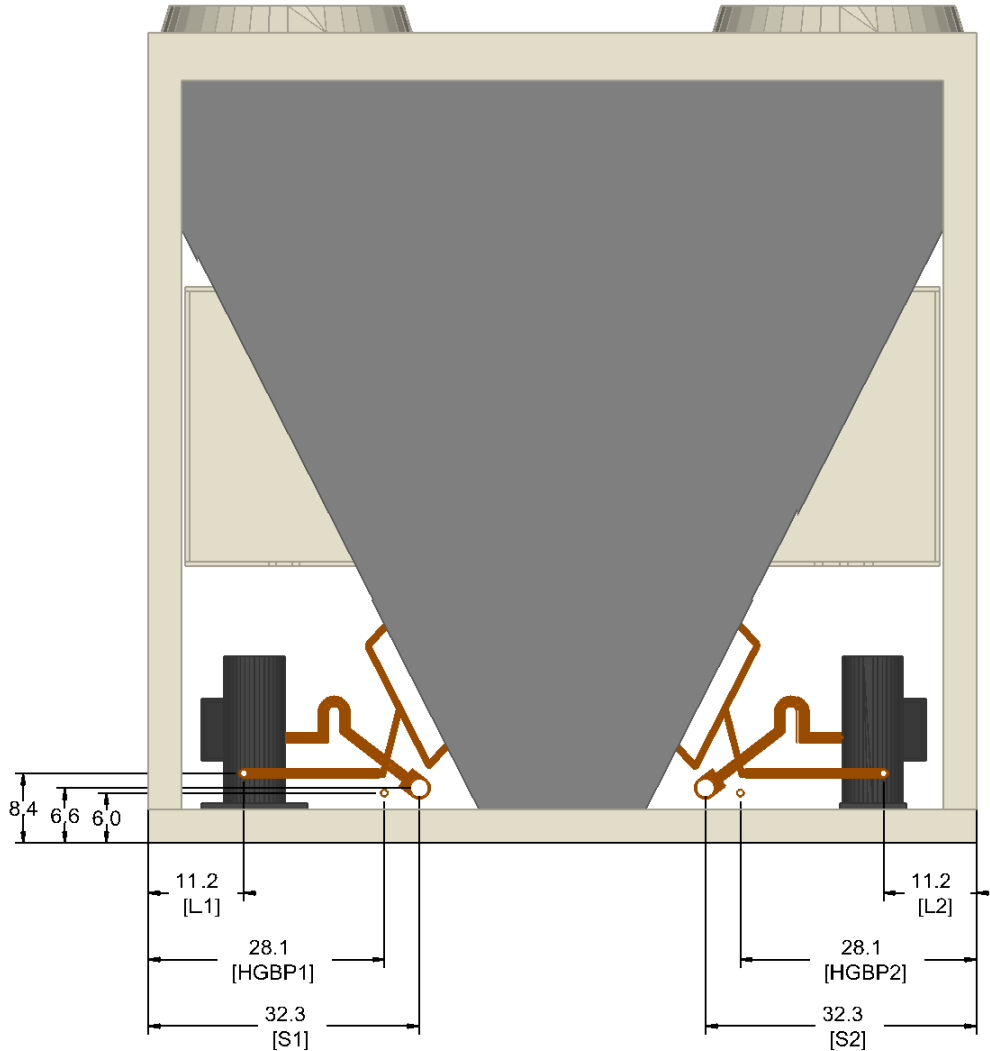
Tolerance: +/- 0.25"

Dwg Units: in [mm]



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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.

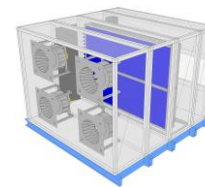


ELEVATION VIEW - PIPE CONNECTION DETAILS

Product Drawing		Unit Tag: Potter ACCU-208			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.81
Product:		Project Name: MWSU - AHU			Sales Engineer:			
Model: RCS080D		Sept. 27, 2020	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.								

Technical Data Sheet for Popplewell AHU-C

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Popplewell AHU-C	



Unit Overview						
Model Number	Air Volume cfm	Supply				
		Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH041GBCM	18950	3.50	5.06	76*	100*	104

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH041GBCM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Inline horizontal	Drive (Handling) Location:	Left
Base:	6" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Supply Fan Array		Component: 1			Length: 30 in		Shipping Section: 1		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
4738 cfm	3.50 inWc	5.06 inWc	0.00 inWc	5.53 BHP	2515 rpm	2600 rpm	87.6 %	40.0 A	34.0 A
Fan Data									
Fan Type		Blade Type / Class	Quantity of Fans	Wheel Diameter		Number of Blades	Discharge	Motor Location	
ECM / 2x2 : 4		Airfoil / N/A	4	17.71 in		5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply		Speed	Control Signal		Supplier	Lock Rotor Current*	Full Load Current*	
8.00 A	460/60/3 V/Hz/Phase		2600 rpm	0-10V		EBM-Papst	8.00 A	8.00 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive				Vendor:		Daikin Applied	
Auxiliary Control:		Disconnect w/ motor starter				Voltage:		460 v	
Disconnect Type:		Fused				Height x Width x Depth:		23.60 in x 15.75 in x 10.76 in	
Mounting:		Drive Side				Enclosure:		NEMA 3R	
Panel									
Location			Width				Opening		
Removable panels			- in				Outward		
Notes									

* after a unit label denotes the data for an individual fan.

Technical Data Sheet for Popplewell AHU-C

Access Section	Component: 2	Length: 26 in	Shipping Section: 2
Air Pressure Drop			
0.00 inWc			
Door			
Location	Width	Opening	
Drive side	22 in	Outward	
Special Options			
Tread Plate Floor Liner			
Tread plate installed			

Direct Expansion Coil		Component: 3			Length: 28 in		Shipping Section: 3			
Coil Model	Total Capacity	Sensible Capacity	Number of Coils		Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)		
5EJ1006C	832059 Btu/hr	545028 Btu/hr	2		6	10	0.625 in	1.50 in x 1.299 in		
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity	
	Entering		Leaving							
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb						
18950 cfm	80.0 °F	67.0 °F	53.7 °F	52.6 °F	1.46 insWg	30 in	87 in	36.25 ft²	523 ft/min	
Fluid			Sub-Cooled Refrigerant Liquid Temp.		Suction Vapor Superheat Temp. at Coil Outlet		Design Saturated Condensing Temp.		Total Refrigerant Weight	
Suction Temp.		Refrigerant								
44.0 °F		R410a		110.0 °F		8.0 °F		110.0 °F		112.00 lb
Connection [Data Per Coil]							Min. Fin Surface Temp.		Min. Tube Wall Surface Temp.	
Type	Liquid [Qty - Size]	Suction [Qty - Size]	Location		Material					
OD Sweat	2-1.13 in	2-1.63 in	Drive side		Copper tube		32.0 °F		32.0 °F	
Material						Drain Pan		Drain Side		
Fin	Tube		Header		Case					
Aluminum .0075 in	Copper .020 in		Copper		Galv. steel		Stainless steel		Drive side	
AHRI 410 Certification										
Coil is NOT certified by AHRI										

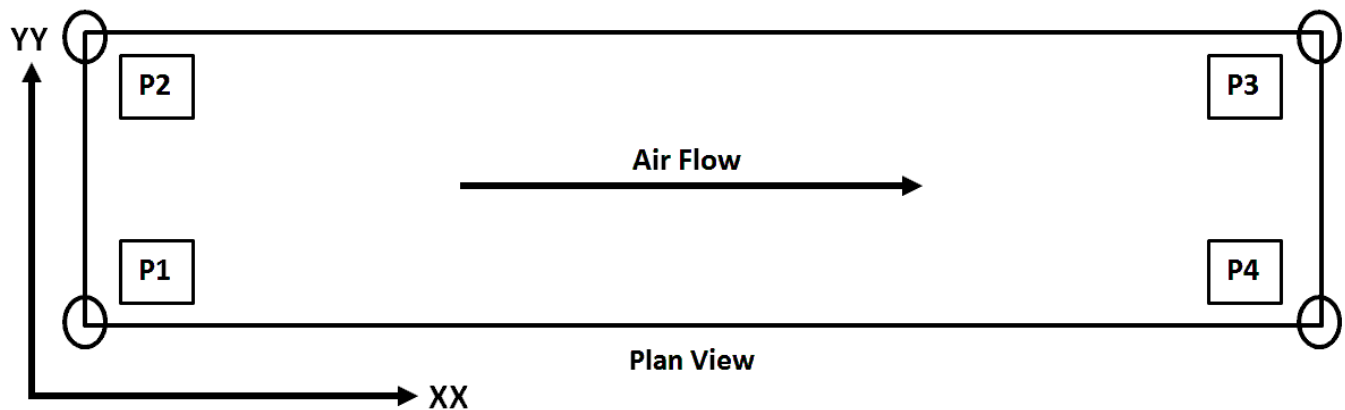
Plenum Section		Component: 4		Length: 20 in		Shipping Section: 4					
Air Pressure Drop											
0.10 inWc											
Custom Openings											
Custom Opening		Location		Width		Height		Rainhood w/Screen			
1		End		96 in		22 in		None			
Door											
Location				Width				Opening			
Drive side				16 in				Outward			

Unit Sound Power (dB)								
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	81	82	86	74	75	65	48	51
Unit Discharge:	85	85	95	86	87	83	74	69
Unit Return:	89	92	97	90	87	86	81	80

Technical Data Sheet for Popplewell AHU-C

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	30	1204	331	350	271	253	13	52	35
2	26	523	121	121	141	141	14	50	27
3	28	1444	436	460	286	262	11	52	37
4	20	532	133	133	133	133	10	50	30
Entire Unit	104	3703	942	983	910	868	50	51	34



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Supply Fan	Cabinet	-
Access Section	Access Section	-
DX Coil	DX Coil	1.46 insWg
Plenum Section	Plenum Section	0.10 insWg
External Static	External Static	3.50 insWg
Total Supply Static		5.06 insWg

AHRI Certification

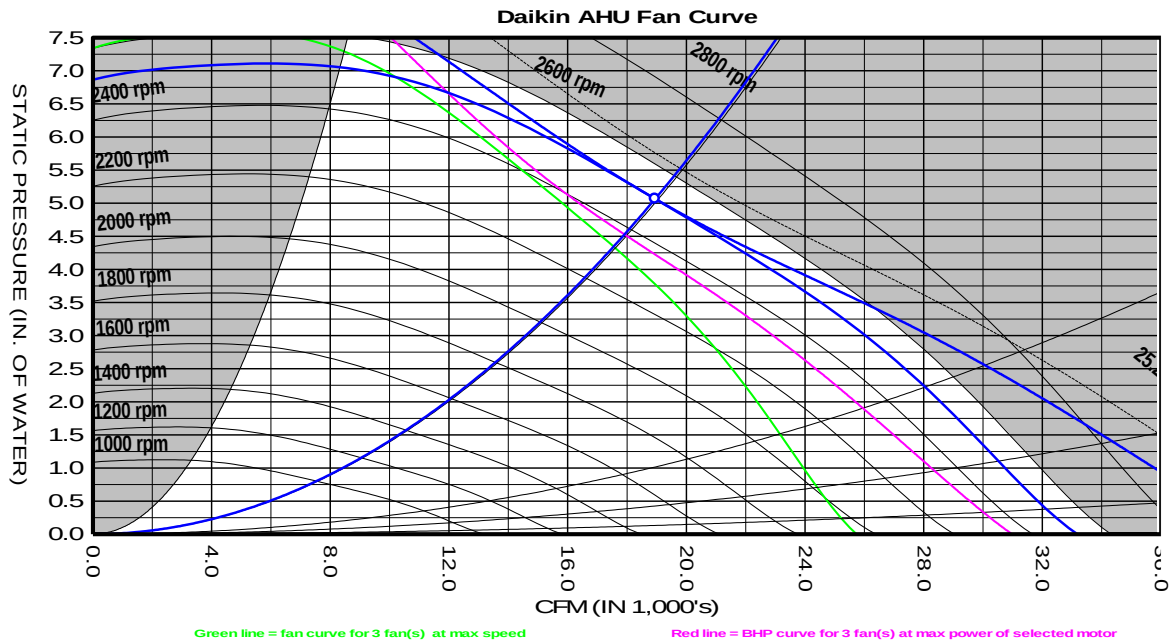
The air-handler is selected outside of the scope of AHRI Standard 430/431

Notes

Standard

1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.

Fan Curve for Popplewell AHU-C



EBM450-RPII 2x2 (4 Fans) Supply Fan at Standard Conditions					
Air volume	18950	cfm	Fan speed	2515	rpm
Total static	5.06	insWg	Max speed	2600	rpm
Brake horsepower	22.1	bhp	Efficiency	68.3	%
Redundancy	87.6	%	Motor Speed	2600	rpm
Unit tagging	Popplewell AHU-C		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Drawing for Poplewell AHU-C

Job Number:

G2H0RG

Job Name:

MWSU - AHU Replacements

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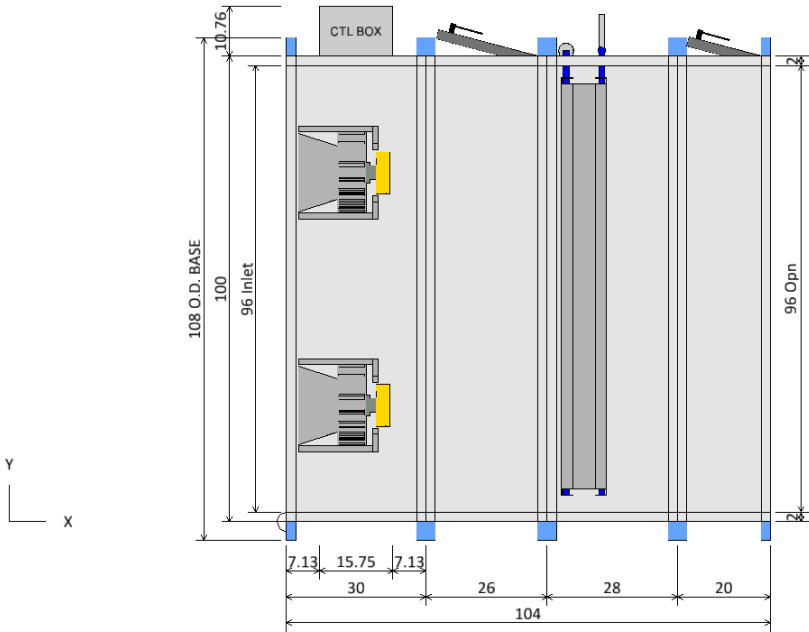
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Prepared Date:

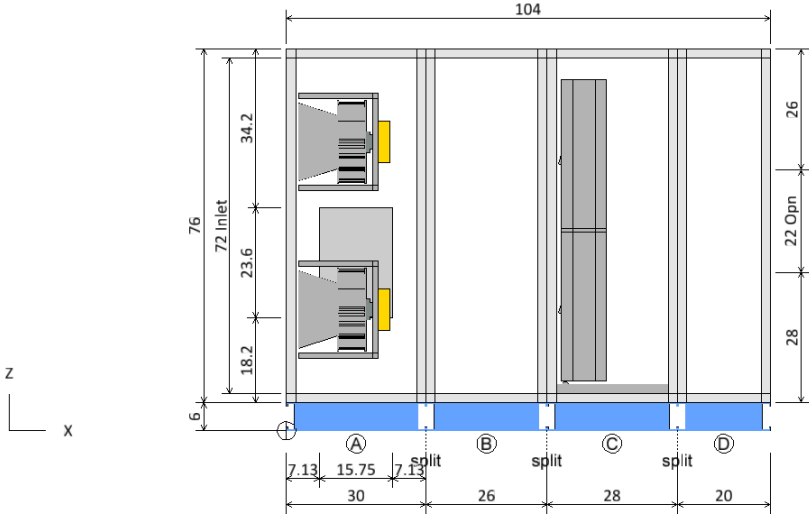
9/27/2020

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All opening dimensions have a 1" mounting flange along the inner edge. The actual airflow area of the opening is 2" smaller in each dimension.



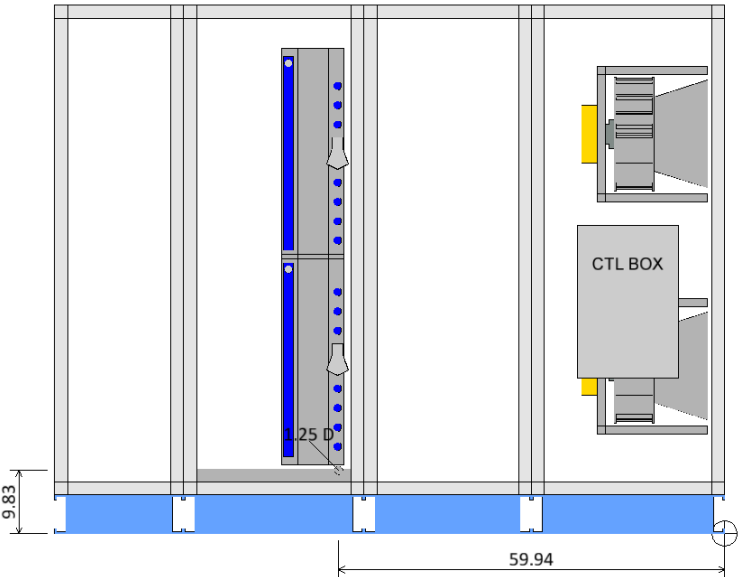
PLAN VIEW



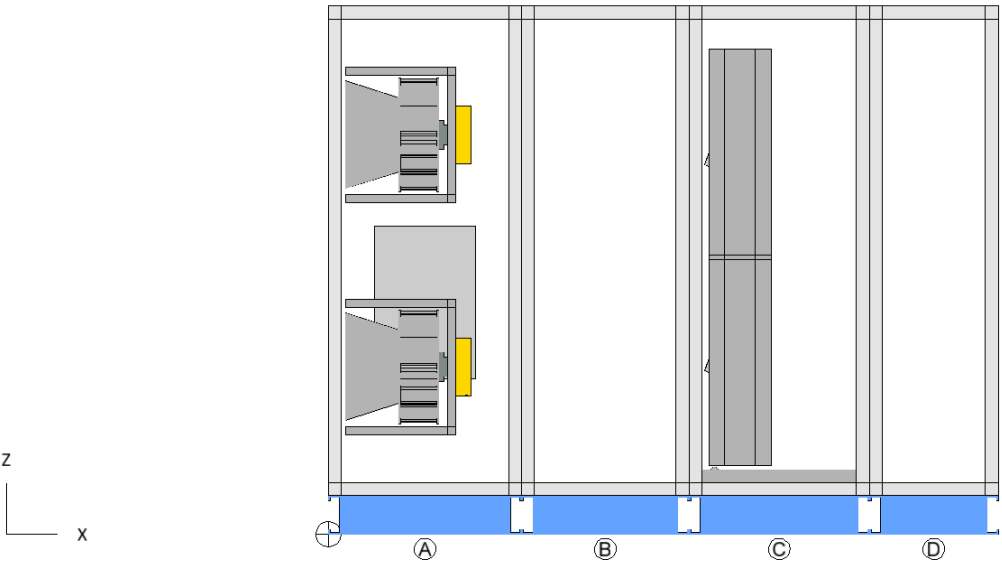
ELEVATION VIEW

Component Key	
Supply Fan	
Fan Type:	Centrifugal - Plenum
Fan Size (Class):	450 (2)
① Air Flowrate:	4737.5 cfm
T.S.P:	5.1 insWg
Motor Power:	6.3 HP
Control box door swing:	15.75 ins
② Access Section	
Left Door (WxH):	22 ins x 68 ins
③ DX Coil	
Coil Model:	5EJ1006C
Total Capacity:	832059.0 Btu/hr
④ Plenum Section	
Left Door (WxH):	16 ins x 68 ins

Plan/Elevation - No Ends		Unit Tag: Popplewell AHU-C			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH041GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	
All opening dimensions have a 1" mounting flange along the inner edge. The actual airflow area of the opening is 2" smaller in each dimension.								



LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Coil and Drain Connections					
	Type	X	Y	Z	Diam
C	DX Coil				
	Condensate drain conn:	59.94	102.90	9.83	1.25
	DX suction:	TBD	TBD	TBD	2- 1.63
	DX liquid conn:	TBD	TBD	TBD	2- 1.13
	DX suction:	TBD	TBD	TBD	2- 1.63
	DX liquid conn:	TBD	TBD	TBD	2- 1.13

Note: Dimensions are measured from the origin point.

Coil and Drain Connections		Unit Tag: Popplewell AHU-C			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH041GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	
All opening dimensions have a 1" mounting flange along the inner edge. The actual airflow area of the opening is 2" smaller in each dimension.								

Note: Dimensions are measured from the origin point.

Product Drawing		Unit Tag: Popplewell AHU-C		Sales Office: Daikin TMI LLC (Kansas City)		 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements		Sales Engineer:		
Model: CAH041GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS Tolerance: +/-0.25" Dwg Units: in	
All opening dimensions have a 1" mounting flange along the inner edge. The actual airflow area of the opening is 2" smaller in each dimension.						

Technical Data Sheet for Popplewell ACCU-C

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	9/27/2020	
Submitted By	Jim Root	
Software Version	07.81	
Unit Tag	Popplewell ACCU-C	



Unit Overview						
Model Number	Voltage V/Hz/Phase	Total Refrigeration Effect Btu/hr	Total Unit Power kW	EER AHRI Conditions	IEER AHRI Conditions	ASHRAE 90.1
RCS080D	460/60/3	830814	78.6	10.7	15.3	2013 Compliant

Unit		
Model Number:	RCS080D	
Type:	Applied	
Approval:	ETL - USA	
Refrigerant Type:	No. of Refrigerant Circuits	Refrigerant Weight
R410A	2	34.8 lb

Condensing Section				
Temperature		Altitude	Refrigeration Effect	Power
Suction	Ambient			
44.0 °F	95.0 °F	0 ft	830814 Btu/hr	78.6 kW

Compressor			
Quantity	Type	Capacity Control	Compressor Isolation
6	Scroll	6 steps	Resilient
Full Load Current:			
Compressor 1	19.2 A		
Compressor 2	19.2 A		
Compressor 3	19.2 A		
Compressor 4	19.2 A		
Compressor 5	19.2 A		
Compressor 6	19.2 A		

Condenser					
Coil			Fans	Fan Motors	
Type	Number of Rows	Fins per Inch	Condenser Fan Type	Quantity	Full Load Current
Aluminum tube micro channel	1	18	Standard	6	2.10 A

Sound							
Casing Radiated Sound Power (db)							
63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
0	96	93	91	91	87	84	83

Technical Data Sheet for Popplewell ACCU-C

Physical

Dimensions and Weight			
Length	Height	Width	Operating Weight
103.0 in	97.0 in	99.0 in	3556 lb
Connections			
Connection	Connection Sizes		
Suction Line Circuit	(2) 2.62 in.		
Liquid Line Circuit	(2) 1.12 in.		
Hot Gas Bypass Circuit	(2) 0.88 in.		

Electrical

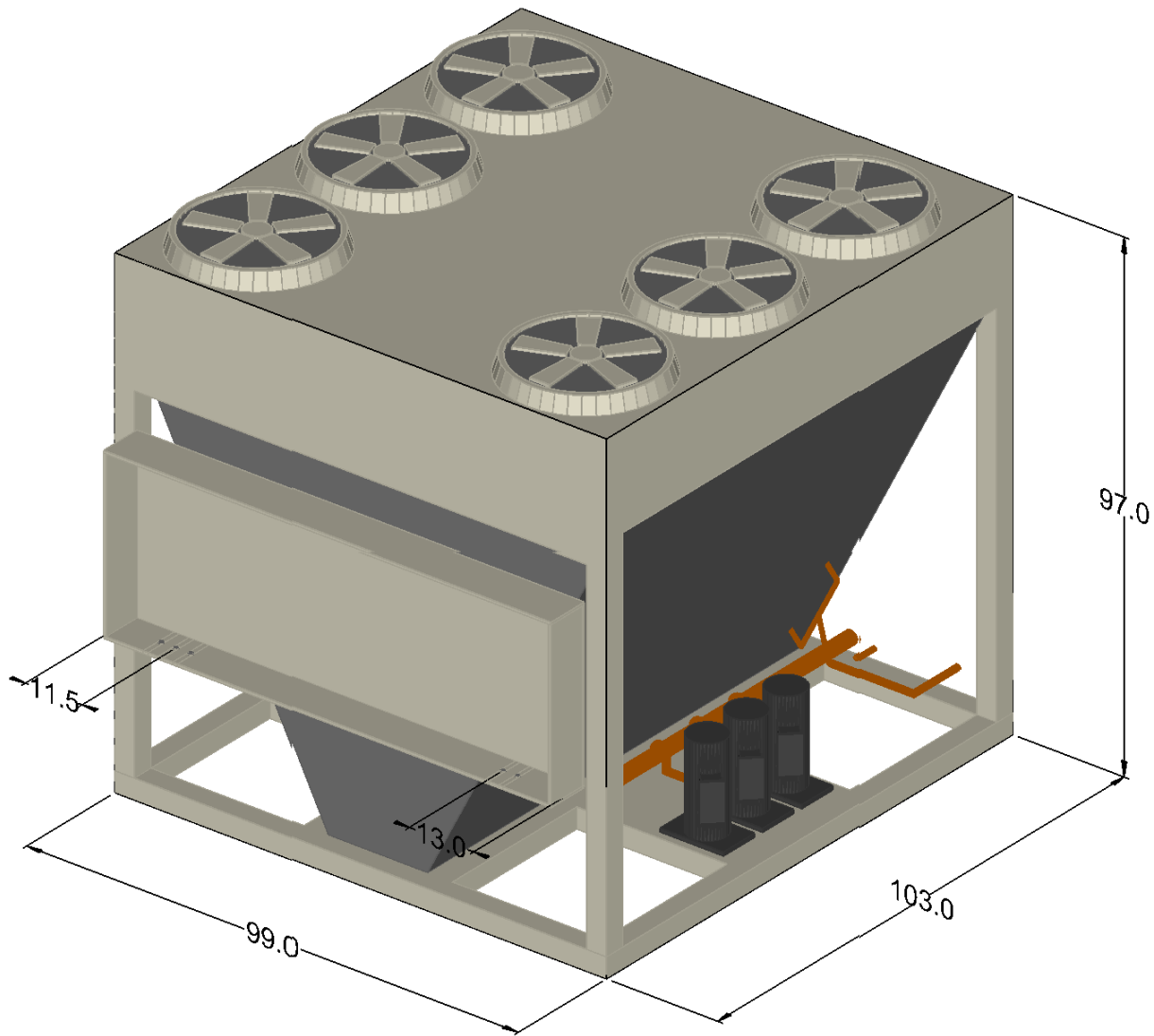
Voltage	MROPD	Field Power Connection	MCA	SCCR	Field Outlet Connection
460/60/3 V/Hz/Phase	150 A	Thru-the-door disconnect switch	133.9 A	10 kAIC	115V, 20 amp service
Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.				

Options

Unit	
Hot Gas Bypass:	HGBP Tee (See Accessory Tab)
Condenser Coil Options:	Condenser with built in hail protection
Electrical	
Field Connection	Thru-the-door disconnect switch
Wiring Options	Sealtite conduit
GFI Receptacle	Field powered
Unit Control	
Temperature Controls:	No temp control, 24 V transformer
Low Ambient Control:	Fantrol, Low ambient control to 45 degrees

Warranty

Parts:	Standard one year parts
Compressor:	Extended four year compressor, five year total



Product Drawing

Product:

Model: RCS080D

Unit Tag: Popplewell ACCU-C

Project Name: MWSU - AHU

Sept. 27, 2020

Ver/Rev:

Sheet: 1 of 1

Sales Office: Daikin TMI LLC (Kansas City)

Sales Engineer:

Scale: NTS

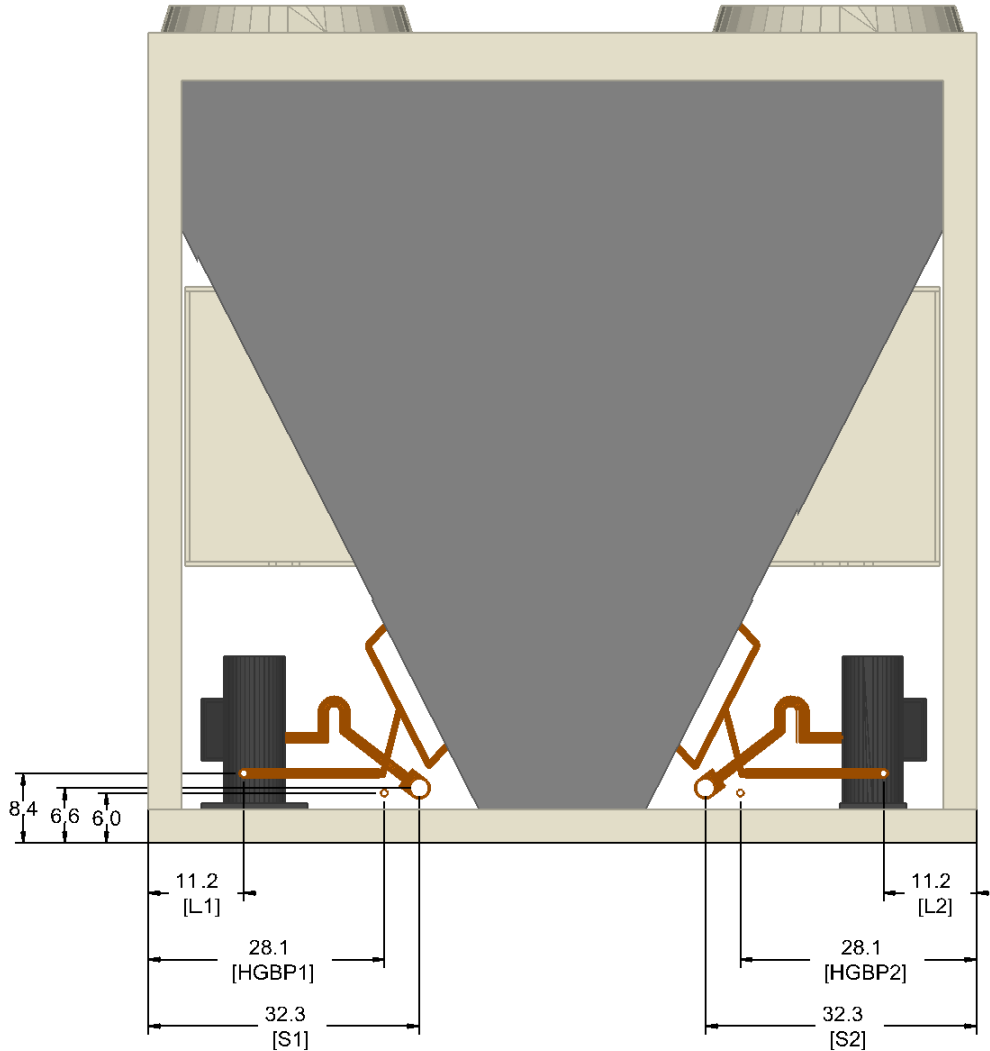
Tolerance: +/- 0.25"

Dwg Units: in [mm]



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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.

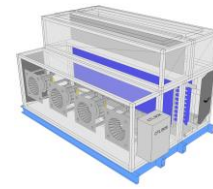


ELEVATION VIEW - PIPE CONNECTION DETAILS

Product Drawing		Unit Tag: Popplewell ACCU-C			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.81
Product:		Project Name: MWSU - AHU			Sales Engineer:			
Model: RCS080D		Sept. 27, 2020	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.								

Technical Data Sheet for Blum AHU-A

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Blum AHU-A	



Unit Overview						
Model Number	Air Volume cfm	Supply				
		Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH026GMCM	13170	2.00	2.90	44*	118*	82

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH026GMCM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Multizone	Drive (Handling) Location:	Right
Base:	6" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Supply Fan Array		Component: 1		Length: 24 in		Shipping Section: 1			
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
3293 cfm	2.00 inWc	2.90 inWc	0.00 inWc	2.37 BHP	3046 rpm	3230 rpm	85.2 %	20.0 A	17.4 A
Fan Data									
Fan Type		Blade Type / Class		Quantity of Fans	Wheel Diameter	Number of Blades	Discharge	Motor Location	
ECM / 1x4 : 4		Airfoil / N/A		4	13.98 in	5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply		Speed	Control Signal	Supplier	Lock Rotor Current*	Full Load Current*		
4.10 A	460/60/3 V/Hz/Phase		3230 rpm	0-10V	EBM-Papst	4.10 A	4.10 A		
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive				Vendor:		Daikin Applied	
Auxiliary Control:		Disconnect w/ motor starter				Voltage:		460 v	
Disconnect Type:		Fused				Height x Width x Depth:		23.60 in x 15.75 in x 10.76 in	
Mounting:		Drive Side				Enclosure:		NEMA 3R	
Door									
Location			Width			Opening			
Non-drive side			20 in			Outward			
Notes									

* after a unit label denotes the data for an individual fan.

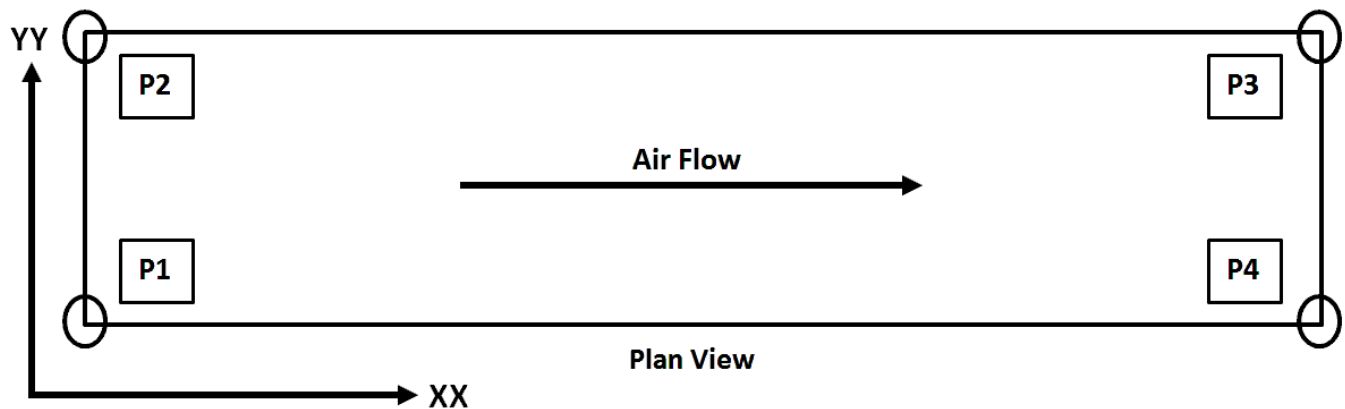
Technical Data Sheet for Blum AHU-A

Two Deck Multizone		Component: 2		Length: 58 in		Shipping Section: 1 & 2 & 4 & 3			
Discharge Location		Number of Zones		Multizone APD*		Damper Type		Actuation	
Vertical / Vertical		0		0.90 inWc		None / None		-	
* Note: Includes coil, balance plate & diffuser									
Note : Cabinet height for multizone extends 24 inches above ‘External cabinet height’ referenced above.									
Cold Deck Coil									
Coil Model	Total Capacity	Sensible Capacity	Number of Coils	Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)		
5WS1006B	527315 Btu/hr	364685 Btu/hr	1	6	10	0.625 in	1.50 in x 1.299 in		
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity
	Entering		Leaving						
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb					
13170 cfm	80.0 °F	67.0 °F	54.7 °F	54.0 °F	0.86 inWc	33 in	105 in	24.06 ft²	547 ft/min
Water		Flow Rate		Pressure Drop	Velocity		Volume	Weight	
Entering	Leaving								
45.0 °F	55.0 °F	105.50 gpm		18.70 ftHd		5.10 ft/s		18.0 gal	158.00 lb
Connection [Data Per Coil]					Min. Fin Surface Temp.	Min. Tube Wall Surface Temp.	Fouling Factor		
Type	Size	Location	Material						
Threaded	2.50 in	Drive side	Carbon steel						
					45.0 °F		45.0 °F		0.000
Material						Drain Pan		Drain Side	
Fin	Tube	Header	Case						
Aluminum .0075 in	Copper .020 in	Copper	Galv. steel			Stainless steel		Drive side	
AHRI 410 Certification									
	Certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at www.ahridirectory.org								
Future Hot Deck Coil(58 ins)									
Number of Coils				Number of Rows					
1				1					
Coil Air Pressure Drop		Finned Height		Finned Width		Face Area		Face Velocity	
- inWc		18 in		102 in		12.75 ft²		1033 ft/min	
Connection Location				Connection Material					
Drive side				Carbon steel					
Coil Model		Drain Pan				Drain Pan Side			
Future Coil (Not Supplied)		-				-			
AHRI 410 Certification									
Coil is NOT certified by AHRI									
Door									
Location		Width				Opening			
Drive side		20 in				Outward			
Unit Sound Power (dB)									
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
Radiated:	64	58	77	55	49	44	46	51	
Unit Discharge:	65	66	95	73	70	69	74	69	
Unit Return:	72	68	90	76	71	72	74	70	

Technical Data Sheet for Blum AHU-A

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	24	915	244	263	213	195	11	61	21
2	22	369	83	83	102	102	12	59	18
3	36	1351	423	408	252	267	14	58	23
4	28	310	147	142	86	91	11	58	18
5	30	233	50	50	66	66	17	59	18
Entire Unit	82	3178	837	835	829	831	41	59	30



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Supply Fan	Cabinet	-
Access Section	Access Section	-
Chilled Water coil	Chilled Water coil	0.86 insWg
Access Section	Access Section	-
Hot Water Coil	Hot Water Coil	0.10 insWg
External Static	External Static	2.00 insWg
Total Supply Static		2.90 insWg

AHRI Certification

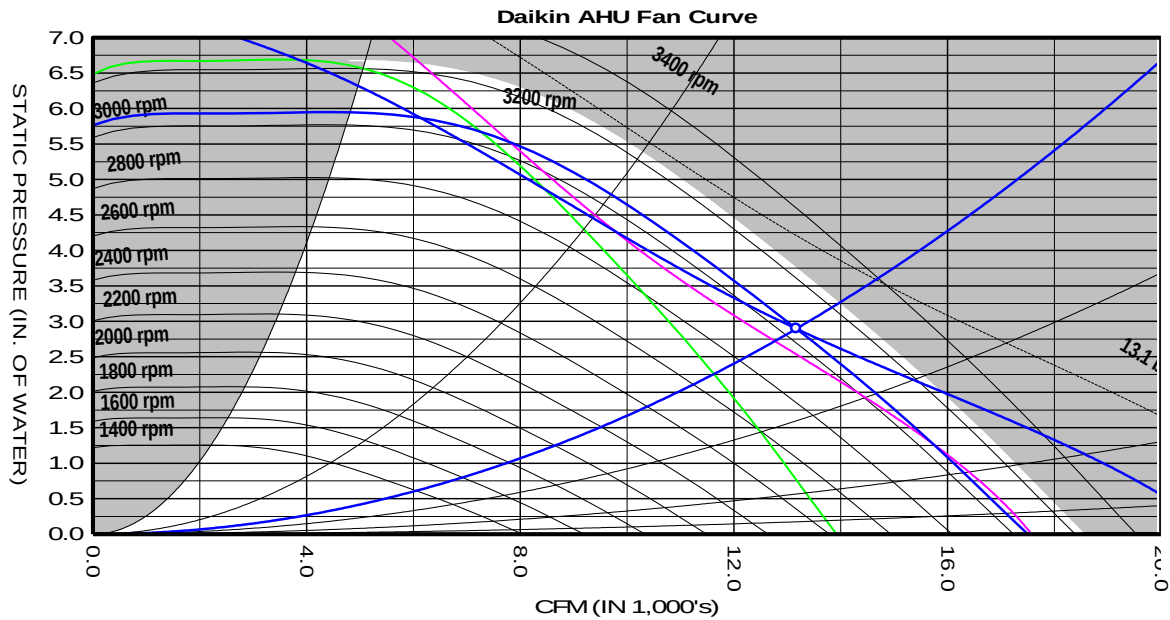
The air-handler is selected outside of the scope of AHRI Standard 430/431

Notes

Standard

1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.

Fan Curve for Blum AHU-A



EBM355-RPII 1x4 (4 Fans) Supply Fan at Standard Conditions					
Air volume	13170	cfm	Fan speed	3046	rpm
Total static	2.90	insWg	Max speed	3230	rpm
Brake horsepower	9.5	bhp	Efficiency	63.3	%
Redundancy	85.2	%	Motor Speed	3230	rpm
Unit tagging	Blum AHU-A		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Drawing for Blum AHU-A

Job Number:

G2H0RG

Page

Job Name:

MWSU - AHU Replacements

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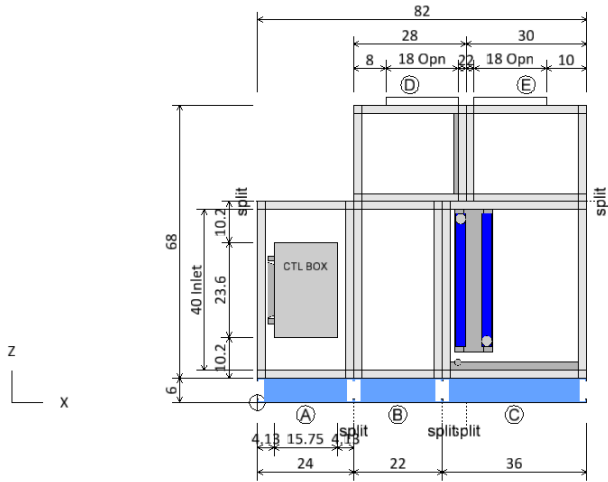
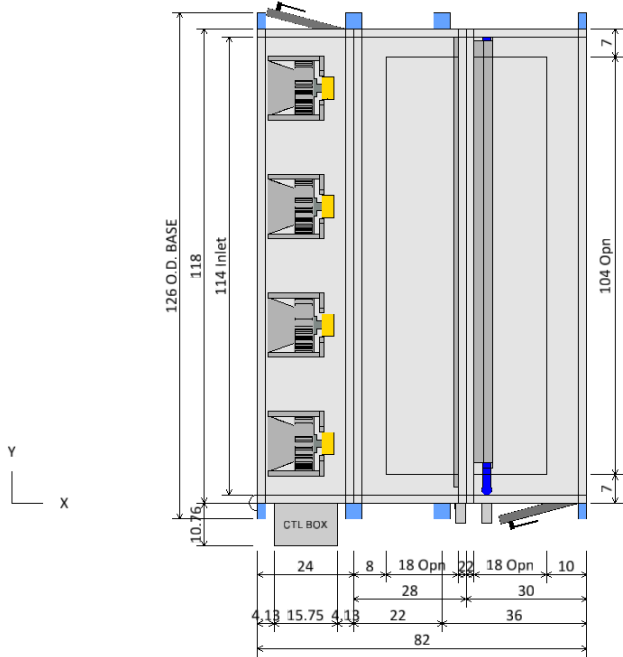
Prepared Date:

9/27/2020

www.DaikinApplied.com

FRONT END VIEW				ELEVATION VIEW			REAR END VIEW	
Plan/Elevation		Unit Tag: Blum AHU-A			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH026GMCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

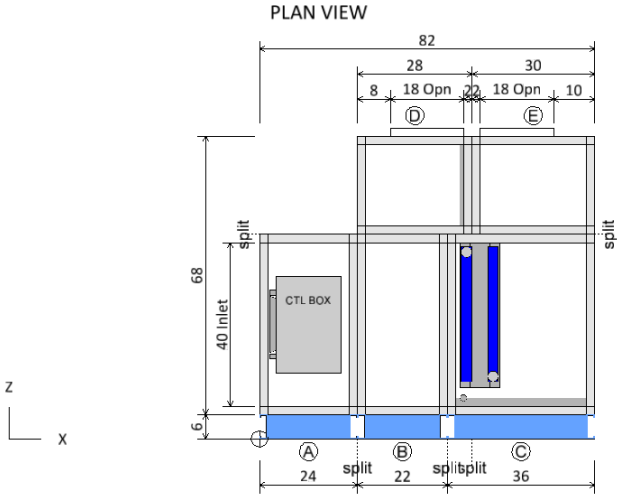
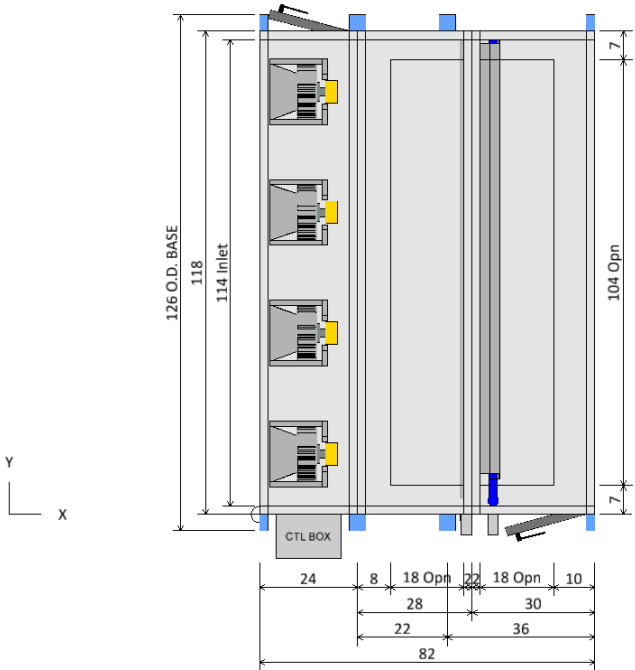
Component Key	
A	Supply Fan
	Fan Type: Centrifugal - Plenum
	Fan Size (Class): 355 (2)
	Air Flowrate: 3292.5 cfm
	T.S.P: 2.9 insWg
	Motor Power: 3.3 HP
B	Control box door swing: 15.75 ins
	Left Door (WxH): 20 ins x 40 ins
Access Section	
C	Chilled Water coil
	Coil Model: 5WS1006B
	Total Capacity: 527315.0 Btu/hr
	Right Door (WxH): 20 ins x 32 ins
D	Hot Water Coil
	Coil Model: 5WH0001C
	Total Capacity: 0.0 Btu/hr
Access Section	



Plan/Elevation - No Ends		Unit Tag: Blum AHU-A			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH026GMCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key						
	Type	X	Y	Z	Wid	Hgt
Ⓐ	Supply Fan Opening	0.00	2.00	8.00	114.00	40.00
Ⓓ	Hot Water Coil MZ hot deck output	32.00	2.00	74.00	114.00	18.00

Note: Dimensions are measured from the origin point.



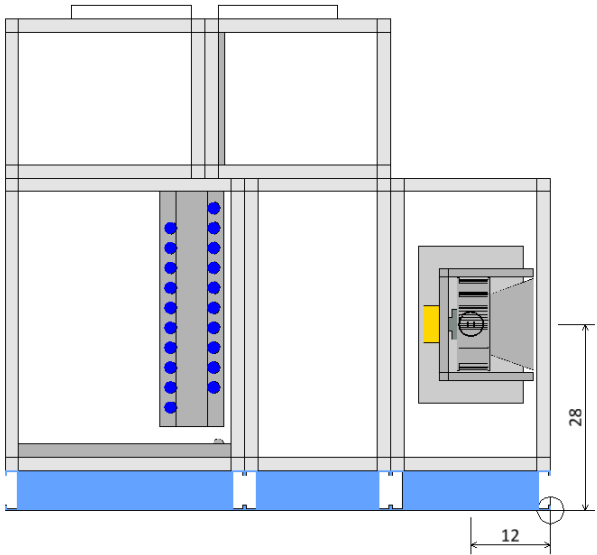
ELEVATION VIEW

Opening/Damper Connections	Unit Tag: Blum AHU-A	Sales Office: Daikin TMI LLC (Kansas City)	 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32			
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements	Sales Engineer:				
Model: CAH026GMCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in

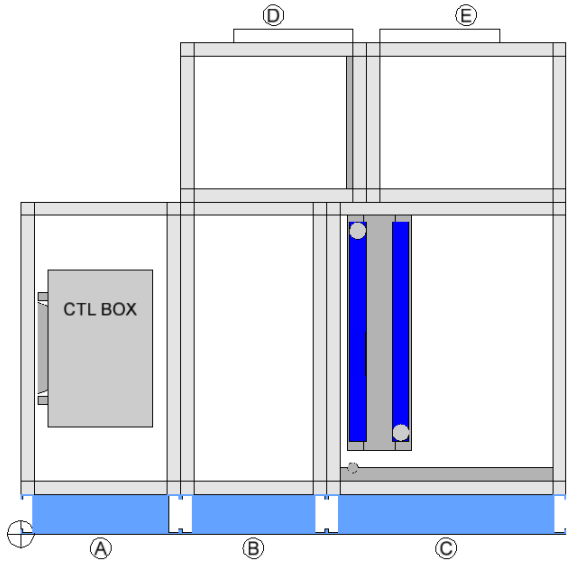
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Component Key						
	Type	X	Y	Z	Volts	Phase
Ⓐ	Supply Fan Fan	12.00	118.00	28.00	460	3

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Electrical Connections

Product: Vision Air Handler

Model: CAH026GMCM

Unit Tag: Blum AHU-A

Project Name: MWSU - AHU Replacements

Sept. 27, 2020

Ver/Rev:

Sheet: 1 of 1

Sales Office: Daikin TMI LLC (Kansas City)

Sales Engineer:

Scale: NTS

Tolerance: +/-0.25"

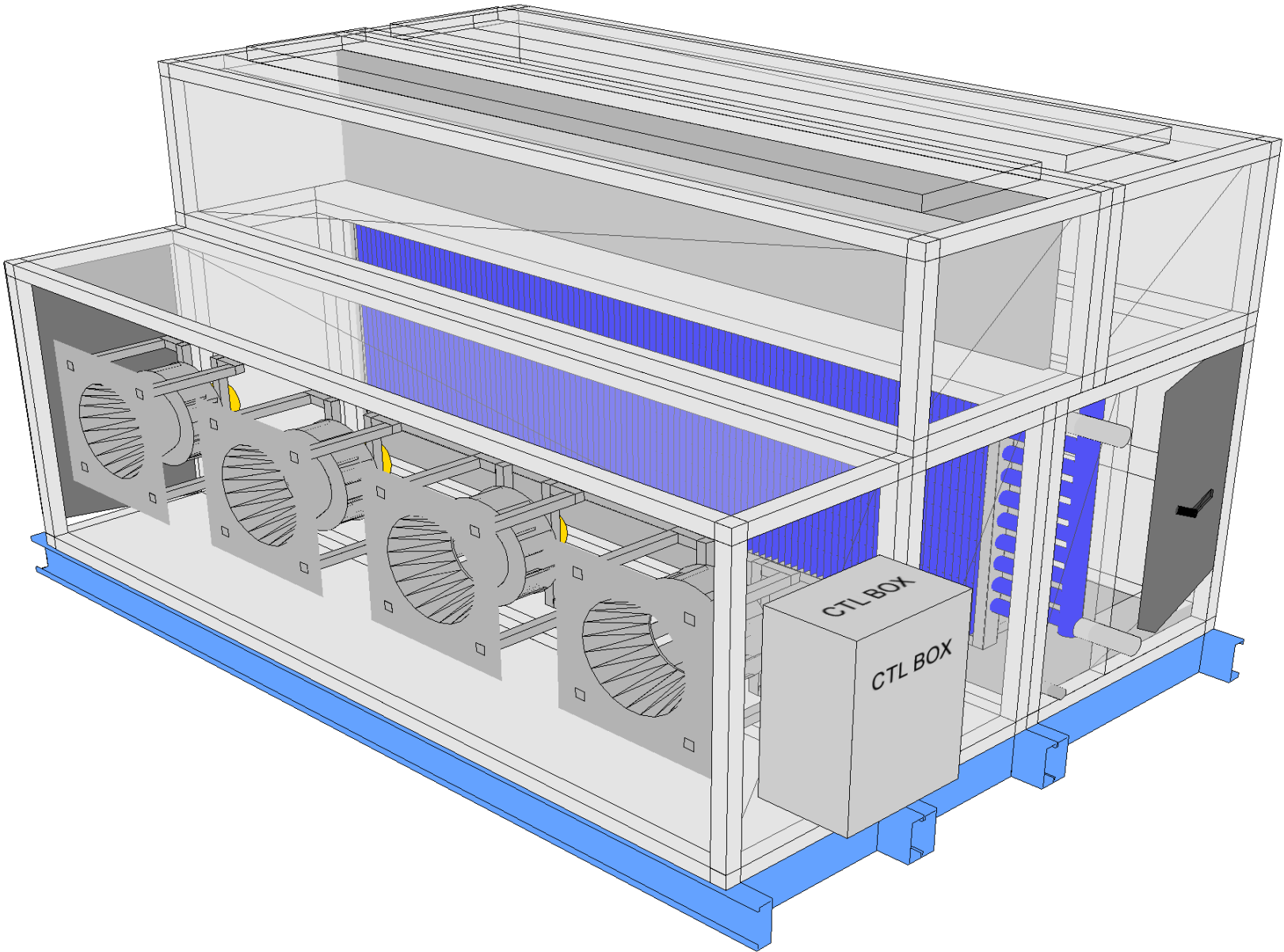
Dwg Units: in



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www.DaikinApplied.com

Software Version: 12.32



Product Drawing	Unit Tag: Blum AHU-A			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH026GMCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for Blum AHU-C

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Blum AHU-C	



Unit Overview						
Model Number	Air Volume cfm	Supply				
		Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH028GBCM	13170	2.00	3.24	60*	90*	102

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH028GBCM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Inline horizontal	Drive (Handling) Location:	Left
Base:	6" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Supply Fan Array		Component: 1			Length: 24 in		Shipping Section: 1		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
3293 cfm	2.00 inWc	3.24 inWc	0.00 inWc	2.60 BHP	3121 rpm	3230 rpm	83.6 %	20.0 A	17.4 A
Fan Data									
Fan Type		Blade Type / Class		Quantity of Fans	Wheel Diameter	Number of Blades	Discharge	Motor Location	
ECM / 2x2 : 4		Airfoil / N/A		4	13.98 in	5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply		Speed	Control Signal		Supplier	Lock Rotor Current*	Full Load Current*	
4.10 A	460/60/3 V/Hz/Phase		3230 rpm	0-10V		EBM-Papst	4.10 A	4.10 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive				Vendor:		Daikin Applied	
Auxiliary Control:		Disconnect w/ motor starter				Voltage:		460 v	
Disconnect Type:		Fused				Height x Width x Depth:		23.60 in x 15.75 in x 10.76 in	
Mounting:		Drive Side				Enclosure:		NEMA 3R	
Panel									
Location			Width				Opening		
Removable panels			- in				Outward		
Notes									

* after a unit label denotes the data for an individual fan.

Technical Data Sheet for Blum AHU-C

Access Section	Component: 2	Length: 24 in	Shipping Section: 2
Air Pressure Drop			
0.00 inWc			
Door			
Location	Width		Opening
Drive side	20 in		Outward

Chilled Water Coil		Component: 3			Length: 28 in		Shipping Section: 3		
Coil Model	Total Capacity	Sensible Capacity	Number of Coils		Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)	
5WL1105C	540694 Btu/hr	374934 Btu/hr	2		5	11	0.625 in	1.50 in x 1.299 in	
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity
	Entering		Leaving						
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb					
13170 cfm	80.0 °F	67.0 °F	54.0 °F	53.6 °F	1.11 inWc	24 in	77 in	25.67 ft²	513 ft/min
Water		Flow Rate		Pressure Drop	Velocity	Volume	Weight		
Entering	Leaving								
45.0 °F	55.3 °F	105.50 gpm		12.30 ftHd	4.70 ft/s	17.0 gal	149.00 lb		
Connection [Data Per Coil]					Min. Fin Surface Temp.	Min. Tube Wall Surface Temp.	Fouling Factor		
Type	Size	Location	Material						
Threaded	2.00 in	Drive side	Carbon steel		45.0 °F	45.0 °F	0.000		
Material						Drain Pan	Drain Side		
Fin	Tube	Header		Case					
Aluminum .0075 in	Copper .020 in	Copper		Galv. steel	Stainless steel	Drive side			

AHRI 410 Certification



Certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at www.ahridirectory.org

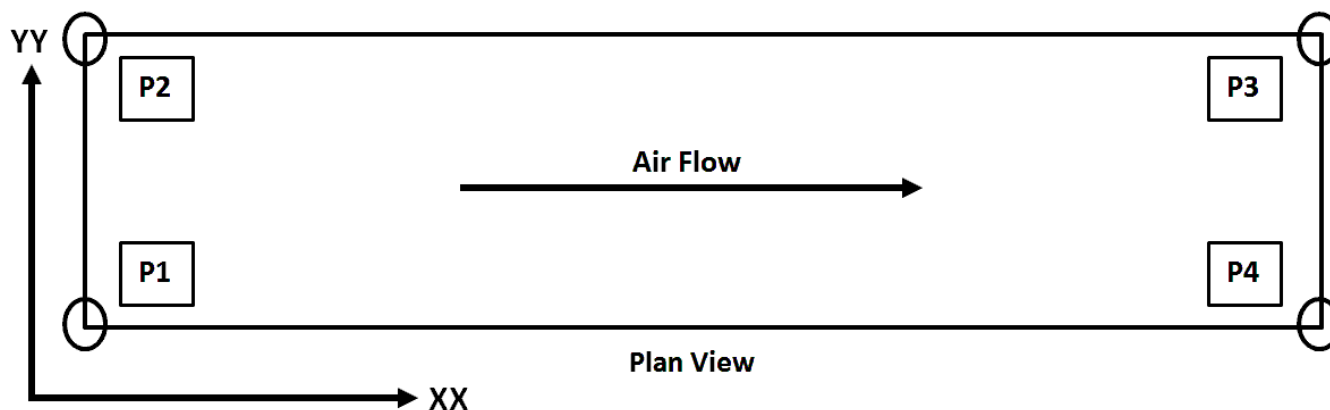
Plenum Section	Component: 4	Length: 26 in	Shipping Section: 4
Opening Location	Opening Size		Air Pressure Drop
Top	22.00" x 86.00"		0.13 inWc
Door			
Location	Width		Opening
Drive side	18 in		Outward

Unit Sound Power (dB)								
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	64	57	79	55	49	44	46	51
Unit Discharge:	64	58	88	64	60	59	62	55
Unit Return:	72	67	90	76	71	72	74	69

Technical Data Sheet for Blum AHU-C

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	24	861	231	249	200	181	11	47	27
2	24	347	78	78	95	95	13	45	26
3	28	1168	354	374	230	210	11	47	30
4	26	400	100	100	100	100	13	45	28
Entire Unit	102	2776	751	789	637	599	45	46	28



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Supply Fan	Cabinet	-
Access Section	Access Section	-
Chilled Water coil	Chilled Water coil	1.11 insWg
Plenum Section	Plenum Section	0.13 insWg
External Static	External Static	2.00 insWg
Total Supply Static		3.24 insWg

AHRI Certification

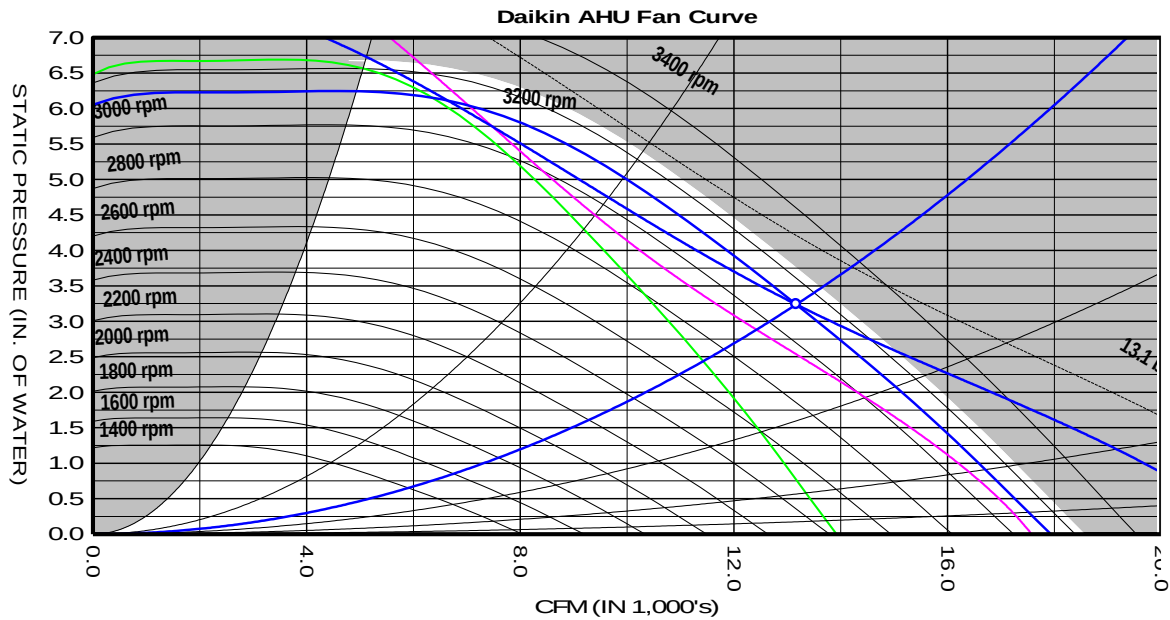
The air-handler is selected outside of the scope of AHRI Standard 430/431

Notes

Standard

1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.

Fan Curve for Blum AHU-C



EBM355-RPII 2x2 (4 Fans) Supply Fan at Standard Conditions					
Air volume	13170	cfm	Fan speed	3121	rpm
Total static	3.24	insWg	Max speed	3230	rpm
Brake horsepower	10.4	bhp	Efficiency	64.4	%
Redundancy	83.6	%	Motor Speed	3230	rpm
Unit tagging	Blum AHU-C		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Drawing for Blum AHU-C

Job Number:

G2H0RG

Page

Job Name:

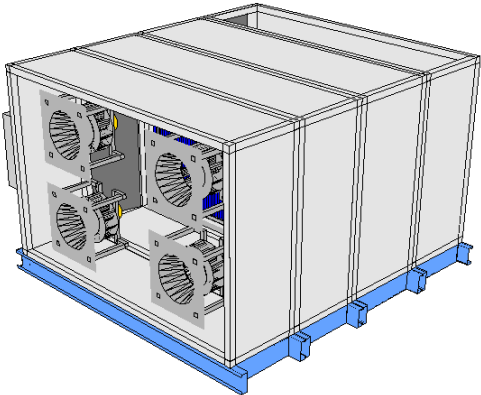
MWSU - AHU Replacements

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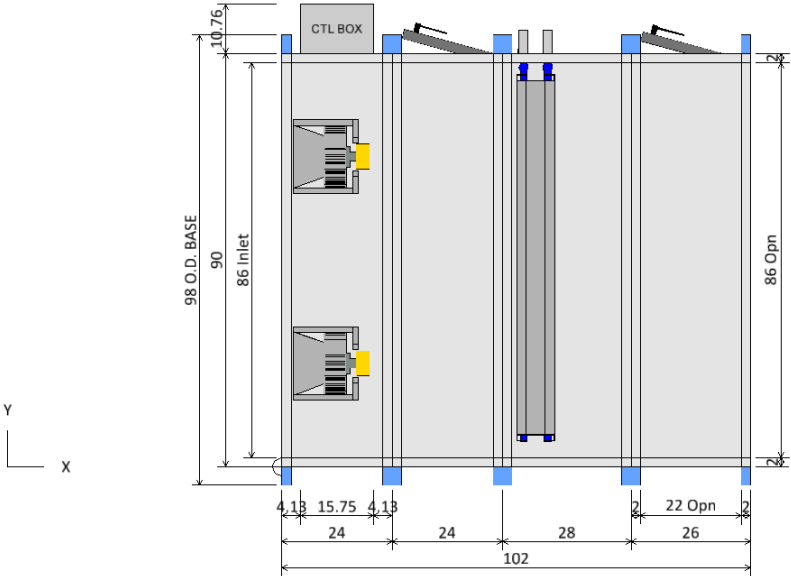
Prepared Date:

9/27/2020

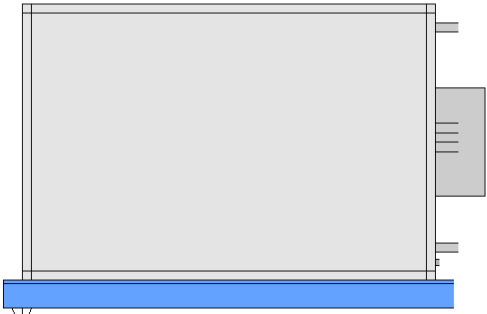
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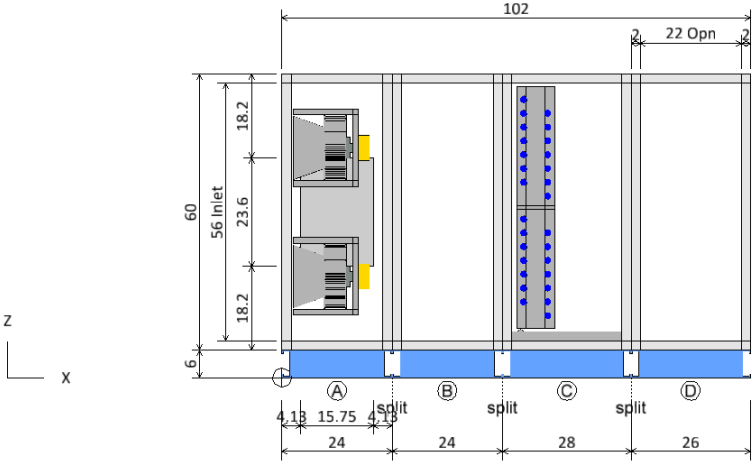
ISOMETRIC VIEW



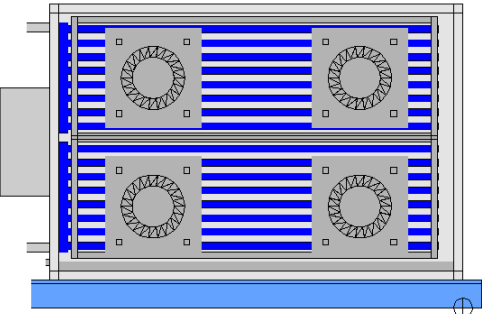
PLAN VIEW



REAR END VIEW

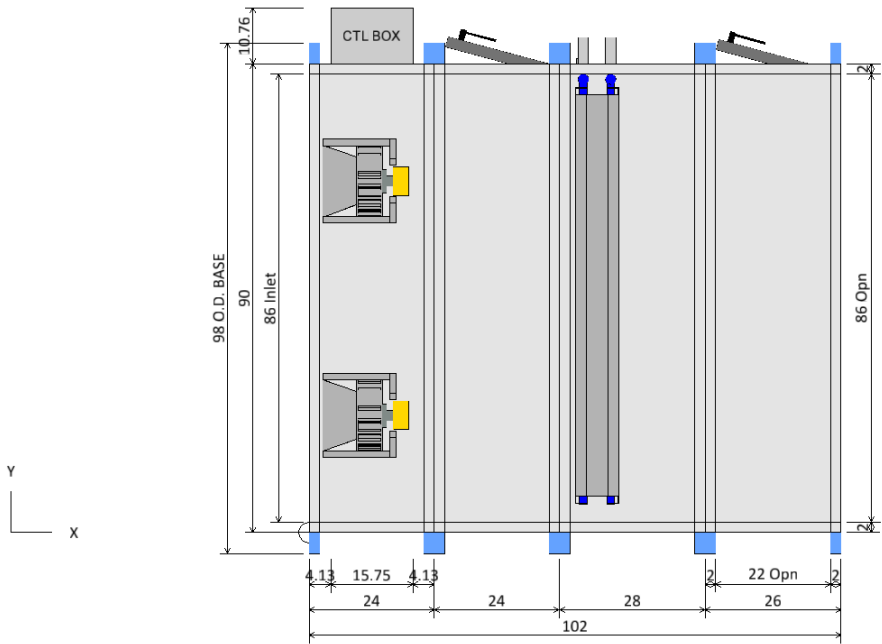


ELEVATION VIEW

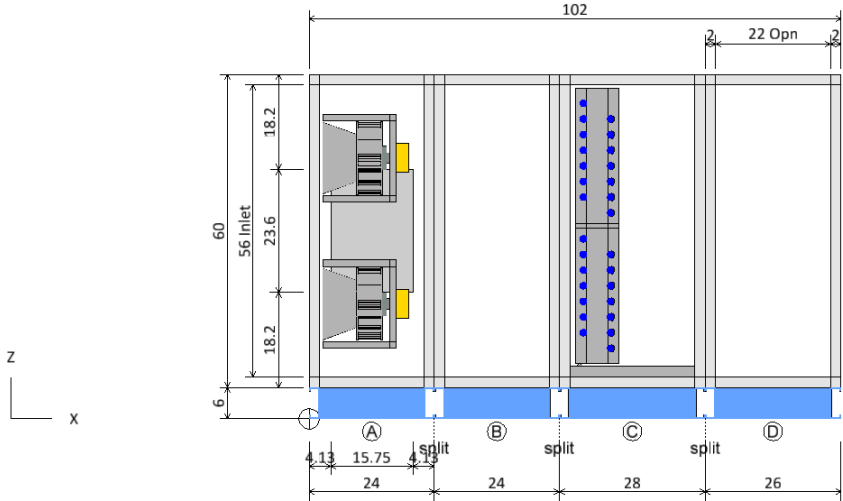


FRONT END VIEW

Plan/Elevation		Unit Tag: Blum AHU-C			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH028GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



PLAN VIEW



ELEVATION VIEW

Component Key

Supply Fan	
Fan Type:	Centrifugal - Plenum
Fan Size (Class):	355 (2)
① Air Flowrate:	3292.5 cfm
T.S.P.:	3.2 insWg
Motor Power:	3.3 HP
Control box door swing:	15.75 ins
Access Section	
② Left Door (WxH):	20 ins x 56 ins
Chilled Water coil	
③ Coil Model:	5WL1105C
Total Capacity:	540694.0 Btu/hr
Plenum Section	
④ Opening Location:	Top
Opening Size:	22 ins x 86 ins
Left Door (WxH):	18 ins x 56 ins

Plan/Elevation - No Ends

Product: Vision Air Handler

Model: CAH028GBCM

Unit Tag: Blum AHU-C

Project Name: MWSU - AHU Replacements

Sept. 27, 2020

Ver/Rev:

Sheet: 1 of 1

Sales Office: Daikin TMI LLC (Kansas City)

Sales Engineer:

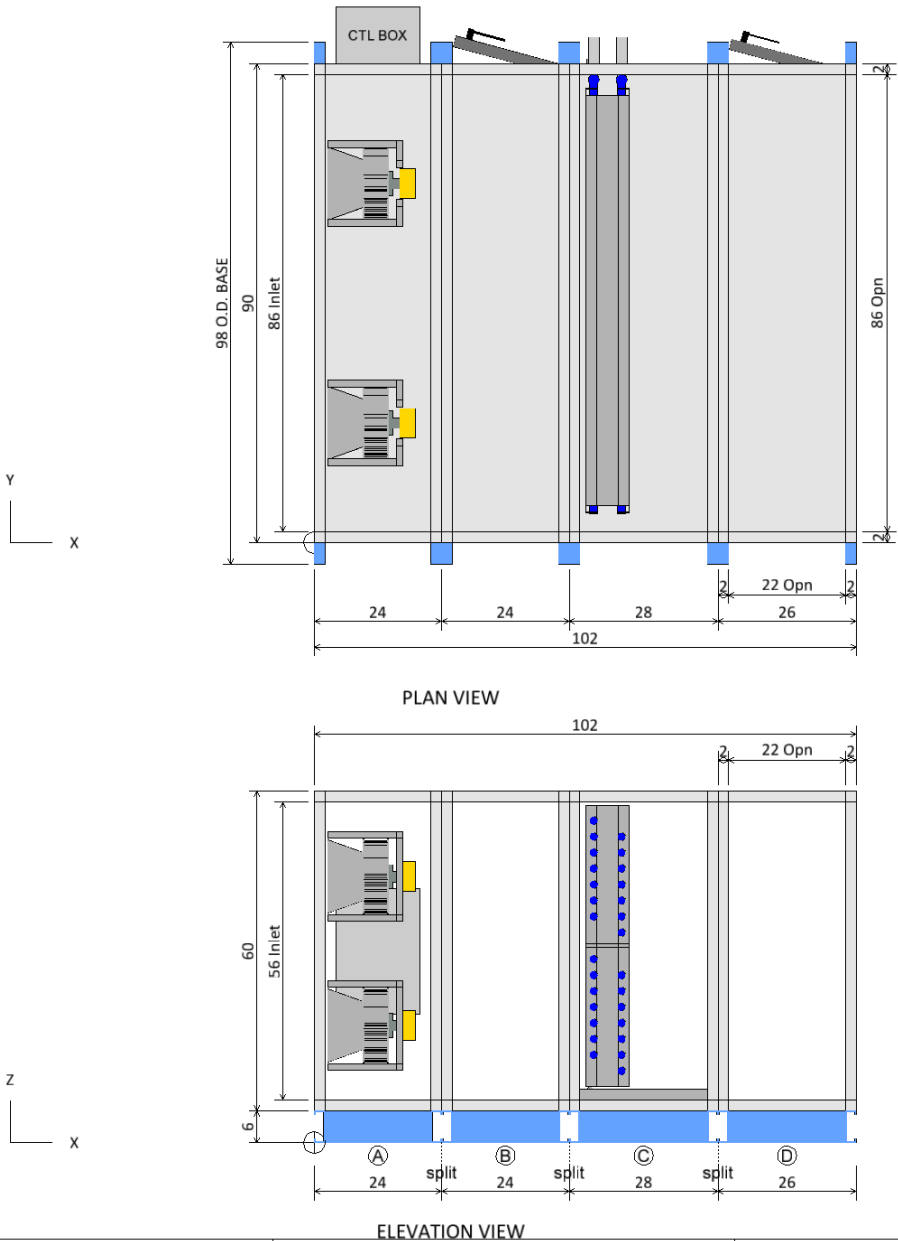
Scale: NTS

Tolerance: +/-0.25"

Dwg Units: in



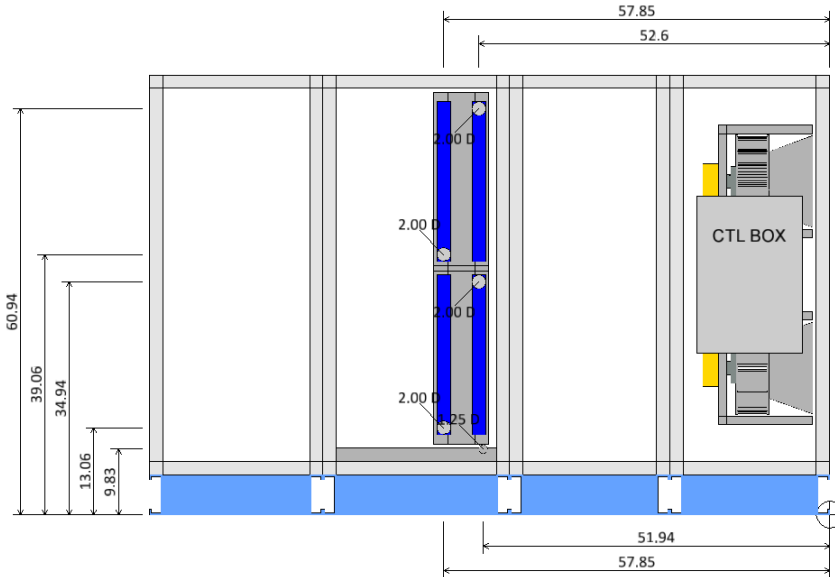
13600 Industrial Park Blvd, Minneapolis, MN 55441
www.DaikinApplied.com Software Version: 12.32



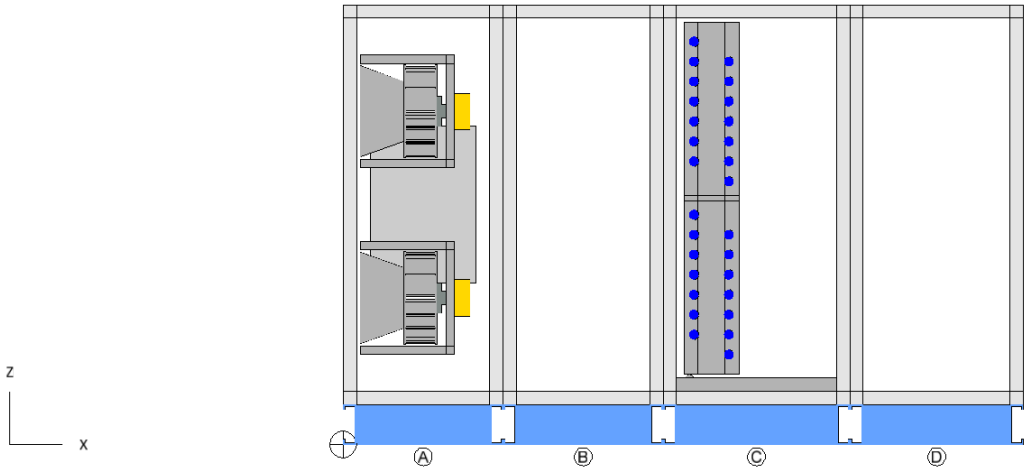
Component Key						
	Type	X	Y	Z	Wid	Hgt
Ⓐ	Supply Fan Opening	0.00	2.00	8.00	86.00	56.00
Ⓓ	Plenum Section Opening	78.00	2.00	66.00	86.00	22.00

Note: Dimensions are measured from the origin point.

Opening/Damper Connections		Unit Tag: Blum AHU-C			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH028GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

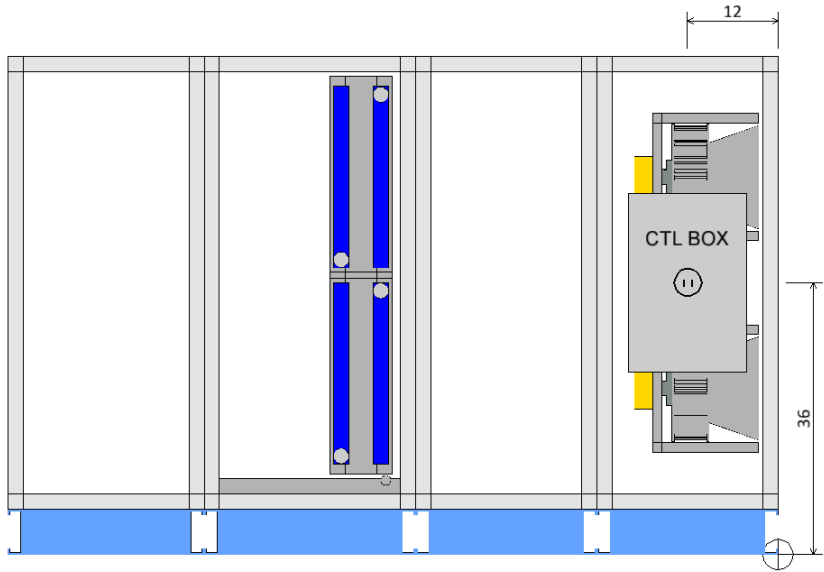
Coil and Drain Connections					
Type	X	Y	Z	Diam	
Chilled Water coil	51.94	92.90	9.83	1.25	
Condensate drain conn:	57.85	93.00	13.06	2.00	
Cold water inlet:	52.60	93.00	34.94	2.00	
Cold water outlet:	57.85	93.00	39.06	2.00	
Cold water inlet:	52.60	93.00	60.94	2.00	

Note: Dimensions are measured from the origin point.

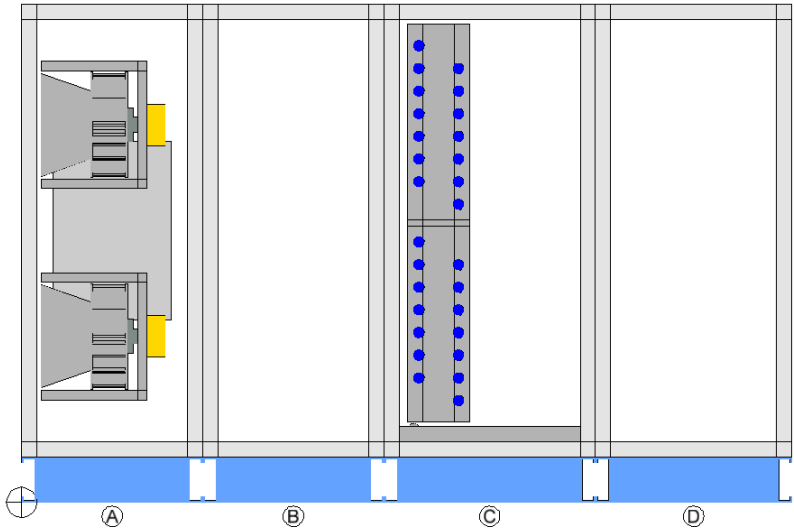
Coil and Drain Connections		Unit Tag: Blum AHU-C			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH028GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key						
	Type	X	Y	Z	Volts	Phase
Ⓐ	Supply Fan Fan	12.00	90.00	36.00	460	3

Note: Dimensions are measured from the origin point.

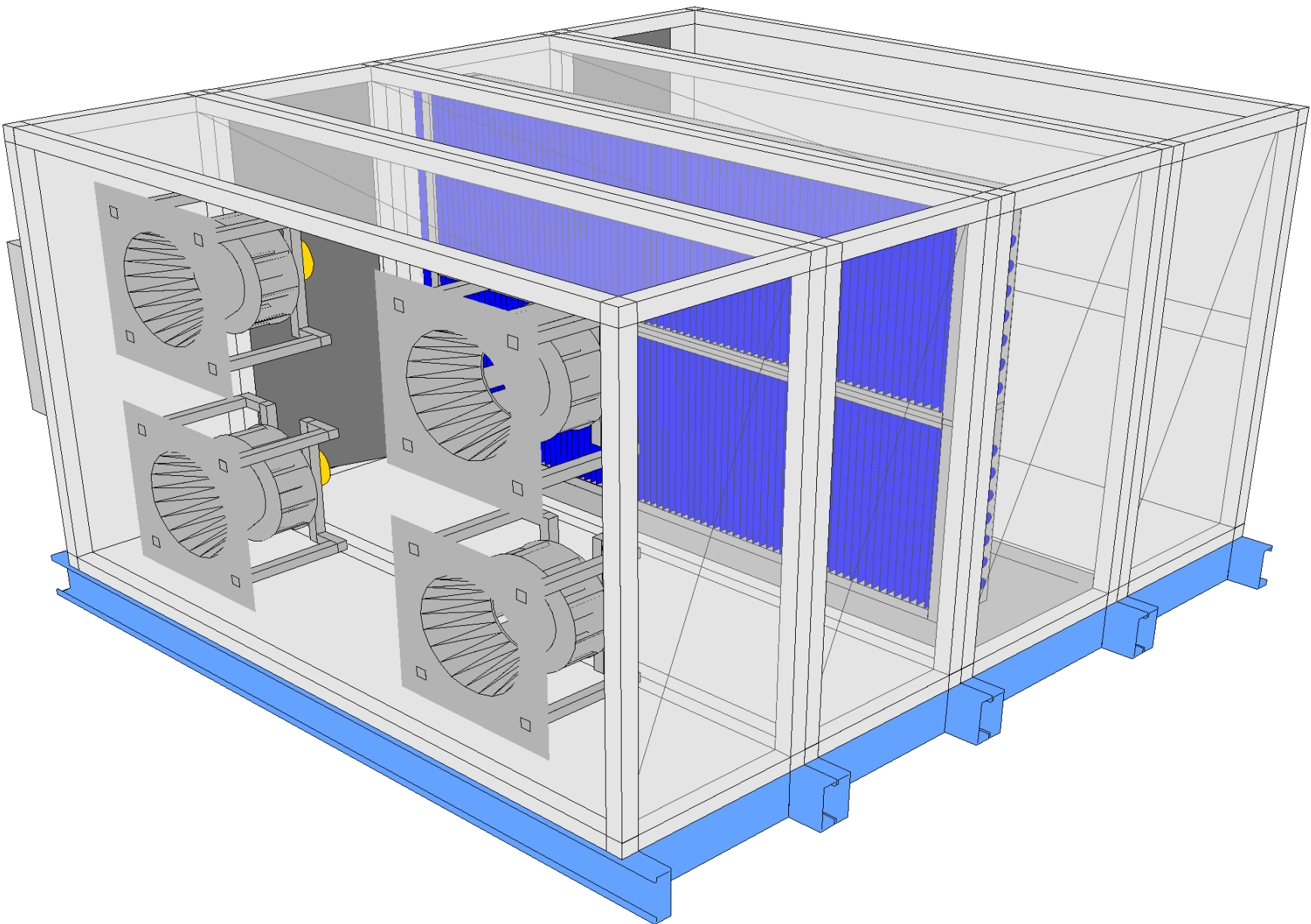


LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Electrical Connections		Unit Tag: Blum AHU-C			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH028GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



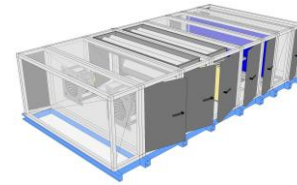
Product Drawing	Unit Tag: Blum AHU-C			Sales Office: Daikin TMI LLC (Kansas City)		
	Product: Vision Air Handler			Sales Engineer:		
	Model: CAH028GBCM			Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in
	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1			



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Technical Data Sheet for Blum AHU-E

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Blum AHU-E	



Unit Overview												
Model Number	Supply						Return/Exhaust					
	Air Volume cfm	Static Pressure		External Dimensions			Air Volume cfm	Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in		External inWc	Total inWc	Height in	Width in	Length in
CAH018GBCM	9550	2.00	3.73	42*	90*	108	6650	0.75	0.82	42*	90*	76

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH018GBCM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Inline horizontal	Drive (Handling) Location:	Left
Base:	4" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Plenum Section	Component: 1	Length: 20 in	Shipping Section: 1
Opening Location	Opening Size		Air Pressure Drop
Bottom	16.00" x 86.00"		0.03 inWc
Door			
Location	Width		Opening
Drive side	16 in		Outward

Technical Data Sheet for Blum AHU-E

Return/Exhaust Fan Array			Component: 2		Length: 30 in		Shipping Section: 2		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
3325 cfm	0.75 inWc	0.82 inWc	0.00 inWc	1.01 BHP	2550 rpm	3230 rpm	59.6 %	15.0 A	6.8 A
Fan Data									
Fan Type		Blade Type / Class		Quantity of Fans	Wheel Diameter	Number of Blades	Discharge	Motor Location	
ECM / 1x2 : 2		Airfoil / N/A		2	13.98 in	5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply		Speed	Control Signal		Supplier	Lock Rotor Current*	Full Load Current*	
3.00 A	460/60/3 V/Hz/Phase		2870 rpm	0-10V		EBM-Papst	3.00 A	3.00 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive			Vendor:		Daikin Applied		
Auxiliary Control:		Disconnect w/ motor starter			Voltage:		460 v		
Disconnect Type:		Fused			Height x Width x Depth:		15.75 in x 11.81 in x 10.76 in		
Mounting:		Drive Side			Enclosure:		NEMA 3R		
Door									
Location			Width			Opening			
Non-drive side			26 in			Outward			
Notes									
* after a unit label denotes the data for an individual fan.									

Economizer		Component: 3		Length: 56 in		Shipping Section: 3 & 4		
Portion	Damper				Blade Action	Rated CFM	Air Pressure Drop	Quantity
	Size (length x width)		Location	Type				
	Overall	Opening						
Outside Air	22 in x 86 in	18 in x 76 in	Top	UltraSeal Low Leak	Parallel	9550 cfm	0.08 inWc	1
Return Air	22 in x 86 in	18 in x 76 in	Internal	UltraSeal Low Leak	Parallel	6650 cfm	0.04 inWc	1
Exhaust Air	22 in x 86 in	18 in x 76 in	Top	UltraSeal Low Leak	Parallel	6650 cfm	0.04 inWc	1
Filter Data								
Type	Efficiency		Face Velocity	Face Area	Air Volume		Filter Loading	
Pleated	MERV 8		491 ft/min	19.5 ft²	9550 cfm		Side	
Air Pressure Drop			Number of Filters	Height	Width	Depth		
Clean Air	Mean Air	Dirty Air						
0.22 inWc	0.61 inWc	1.00 inWc	2	24 in	24 in	2 in		
			2	24 in	20 in	2 in		
			3	12 in	24 in	2 in		
Mixing Chamber Door								
Location		Drive Side Door Width		Opp. Drv. Side Door Width		Opening		
Both sides		26 in		26 in		Outward		
Return Chamber Door								
Location		Drive Side Door Width		Opp. Drv. Side Door Width		Opening		
Both sides		22 in		22 in		Outward		

Technical Data Sheet for Blum AHU-E

Supply Fan Array		Component: 4			Length: 24 in		Shipping Section: 5		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
3183 cfm	2.00 inWc	3.73 inWc	0.00 inWc	2.82 BHP	3169 rpm	3230 rpm	76.5 %	15.0 A	13.3 A
Fan Data									
Fan Type		Blade Type / Class		Quantity of Fans	Wheel Diameter	Number of Blades	Discharge	Motor Location	
ECM / 1x3 : 3		Airfoil / N/A		3	13.98 in	5	Axial	Behind Fan	
Motor Data									
Power*		Electrical Supply		Speed	Control Signal	Supplier	Lock Rotor Current*	Full Load Current*	
4.10 A		460/60/3 V/Hz/Phase		3230 rpm	0-10V	EBM-Papst	4.10 A	4.10 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive				Vendor:		Daikin Applied	
Auxiliary Control:		Disconnect w/ motor starter				Voltage:		460 v	
Disconnect Type:		Fused				Height x Width x Depth:		23.60 in x 15.75 in x 10.76 in	
Mounting:		Drive Side				Enclosure:		NEMA 3R	
Door									
Location				Width			Opening		
Non-drive side				20 in			Outward		
Notes									
* after a unit label denotes the data for an individual fan.									

Access Section	Component: 5	Length: 18 in	Shipping Section: 6
Air Pressure Drop			
0.00 inWc			
Door			
Location	Drive Side Door Width	Opp. Drv. Side Door Width	Opening
Both sides	14 in	14 in	Outward

Technical Data Sheet for Blum AHU-E

Chilled Water Coil		Component: 6		Length: 20 in		Shipping Section: 7							
Coil Model	Total Capacity	Sensible Capacity	Number of Coils	Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)						
5WL1105C	387865 Btu/hr	269917 Btu/hr	1	5	11	0.625 in	1.50 in x 1.299 in						
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity				
	Entering		Leaving										
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb									
9550 cfm	80.0 °F	67.0 °F	54.2 °F	53.8 °F	1.20 inWc	33 in	77 in	17.65 ft²	541 ft/min				
Water		Flow Rate		Pressure Drop		Velocity		Volume		Weight			
Entering	Leaving												
45.0 °F		55.1 °F		76.50 gpm		14.10 ftHd		5.00 ft/s		12.0 gal		103.00 lb	
Connection [Data Per Coil]						Min. Fin Surface Temp.		Min. Tube Wall Surface Temp.		Fouling Factor			
Type	Size		Location		Material								
Threaded		2.50 in		Drive side		Carbon steel		45.0 °F		45.0 °F		0.000	
Material						Drain Pan		Drain Side					
Fin		Tube		Header		Case							
Aluminum .0075 in		Copper .020 in		Copper		Galv. steel		Stainless steel		Drive side			
AHRI 410 Certification													
Certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at www.ahridirectory.org													

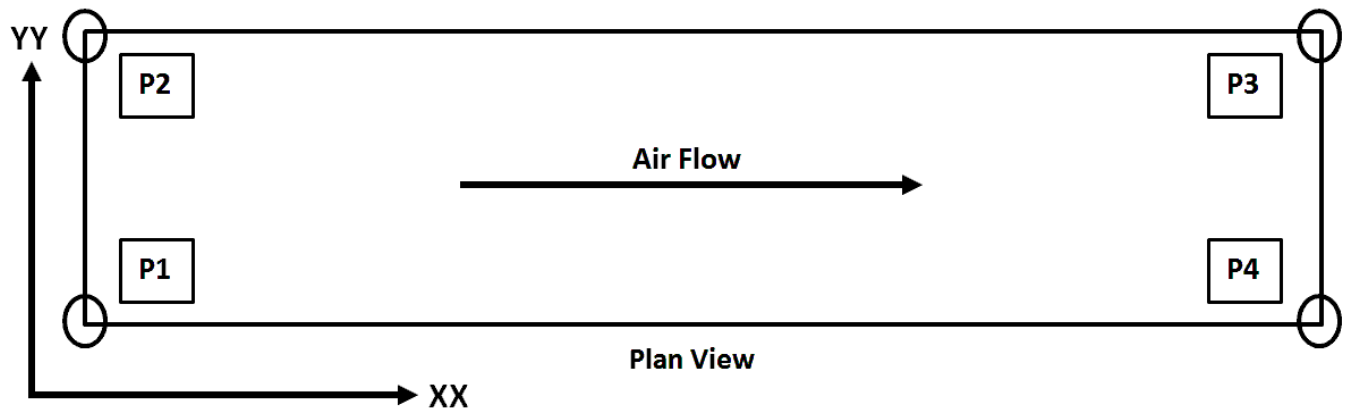
Plenum Section		Component: 7		Length: 16 in		Shipping Section: 8	
Opening Location		Opening Size		Air Pressure Drop			
Top		12.00" x 86.00"		0.23 inWc			
Door							
Location		Drive Side Door Width		Opp. Drv. Side Door Width		Opening	
Both sides		12 in		12 in		Outward	
Special Options							
Tread Plate Floor Liner							
Tread plate installed							

Unit Sound Power (dB)								
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	64	57	79	57	49	43	46	51
Unit Discharge:	64	57	86	62	57	57	60	51
Unit Return:	64	60	81	71	62	62	66	66

Technical Data Sheet for Blum AHU-E

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	20	310	70	70	85	85	11	45	19
2	30	616	175	164	133	144	13	43	19
3	26	332	75	75	91	91	14	45	19
4	30	510	120	120	135	135	16	45	21
5	24	676	196	178	142	160	11	43	19
6	18	271	60	60	75	75	10	45	18
7	20	789	214	227	180	167	9	47	21
8	16	284	71	71	71	71	8	45	17
Entire Unit	184	3788	861	846	1032	1048	101	45	19



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Economizer Mixing/Outside Air	Filter	0.22 insWg
Economizer Mixing/Outside Air	Damper	0.08 insWg
Supply Fan	Cabinet	-
Access Section	Access Section	-
Chilled Water coil	Chilled Water coil	1.20 insWg
Plenum Section	Plenum Section	0.23 insWg
External Static	External Static	2.00 insWg
Total Supply Static		3.73 insWg

Exhaust Static Pressure Drop

Component	Option	Static Pressure Drop
Plenum Section	Plenum Section	0.03 insWg
Return Fan	Cabinet	-
Economizer Return/Exhaust	Damper	0.04 insWg
External Static	External Static	0.75 insWg
Total Return/Exhaust Static		0.82 insWg

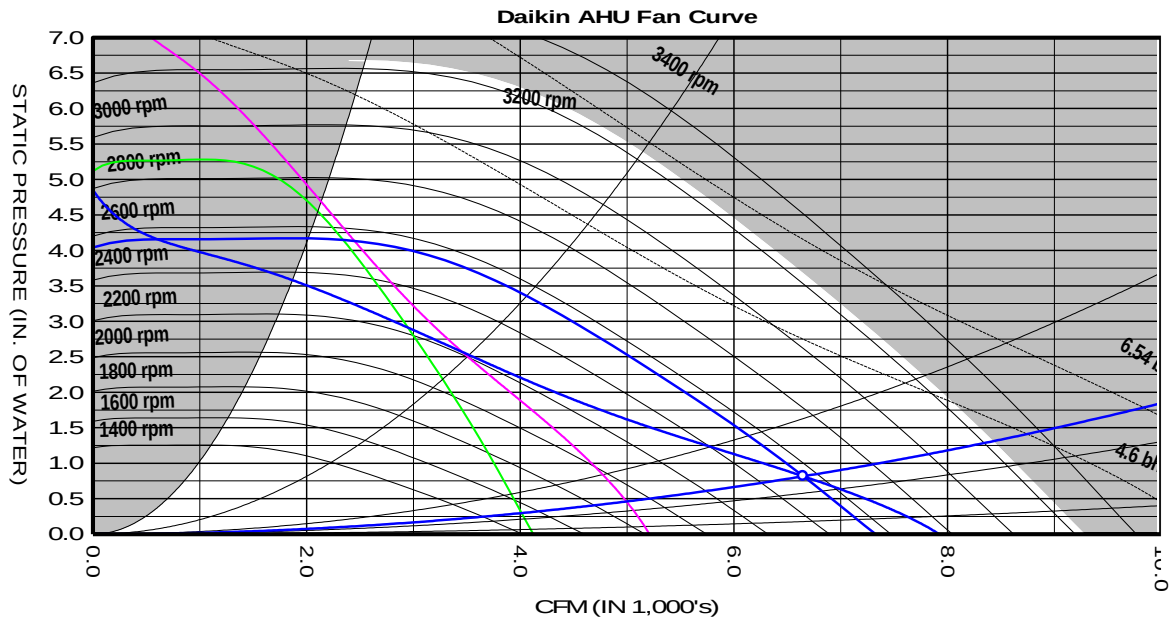
AHRI Certification

The air-handler is selected outside of the scope of AHRI Standard 430/431

Technical Data Sheet for Blum AHU-E

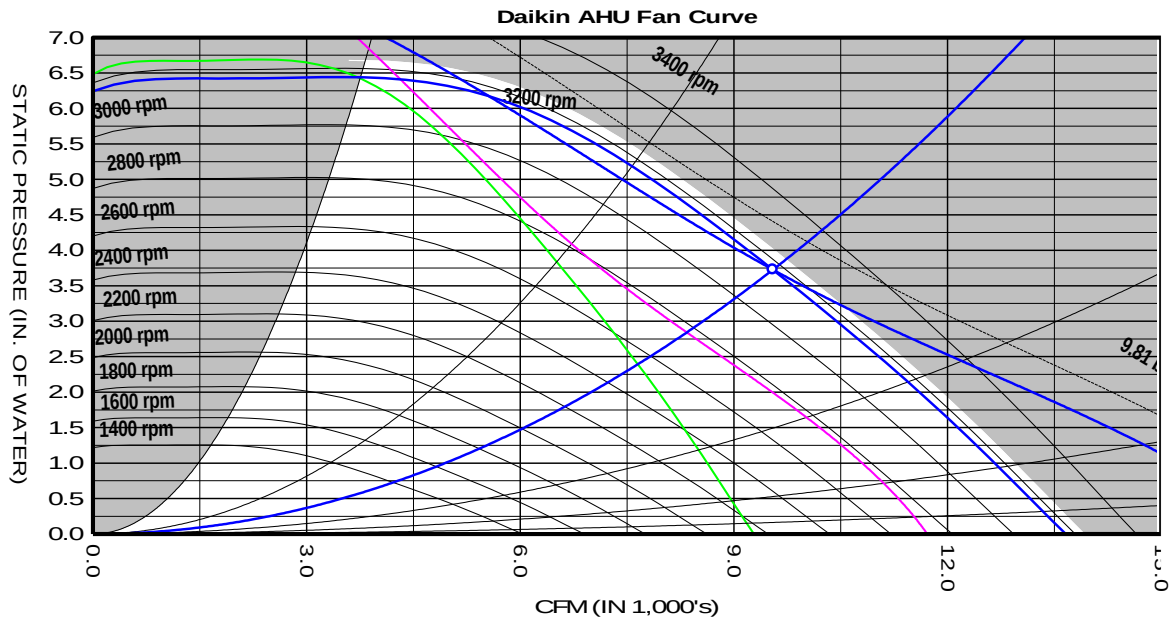
Notes	
Standard	
1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.	

Fan Curve for Blum AHU-E



EBM355-RPII 1x2 (2 Fans) Ret/Exh Fan at Standard Conditions					
Air volume	6650	cfm	Fan speed	2550	rpm
Total static	0.82	insWg	Max speed	3230	rpm
Brake horsepower	2.0	bhp	Efficiency	42.2	%
Redundancy	59.6	%	Motor Speed	2870	rpm
Unit tagging	Blum AHU-E		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Fan Curve for Blum AHU-E



EBM355-RPII 1x3 (3 Fans) Supply Fan at Standard Conditions					
Air volume	9550	cfm	Fan speed	3169	rpm
Total static	3.73	insWg	Max speed	3230	rpm
Brake horsepower	8.4	bhp	Efficiency	66.3	%
Redundancy	76.5	%	Motor Speed	3230	rpm
Unit tagging	Blum AHU-E			Date	September-27-2020
Job name	MWSU - AHU Replacements			Time	15:10

Drawing for Blum AHU-E

Job Number:

G2H0RG

Page

Job Name:

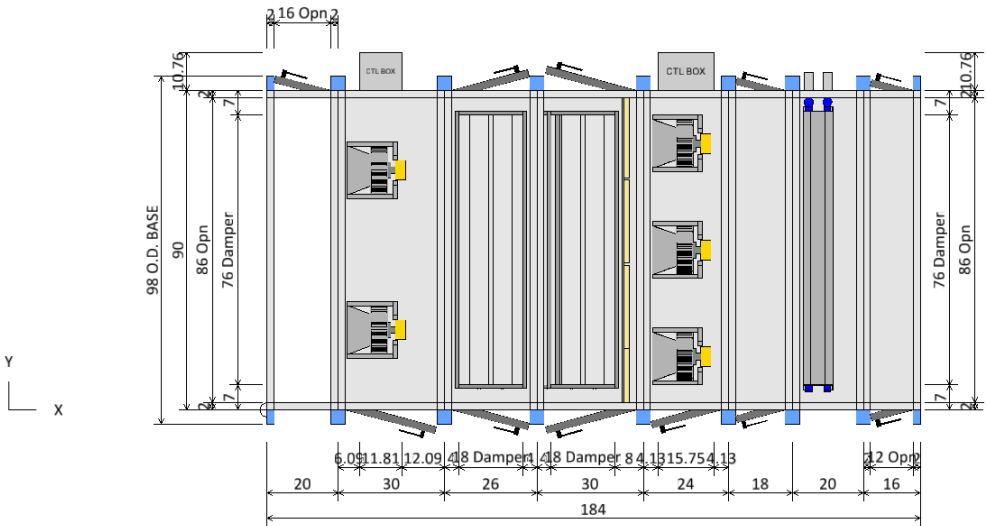
MWSU - AHU Replacements

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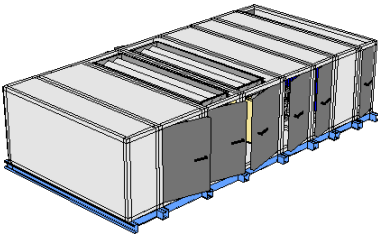
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9/27/2020

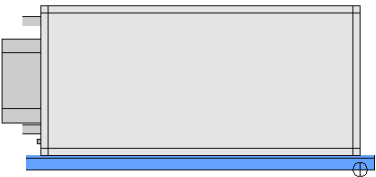
www.DaikinApplied.com



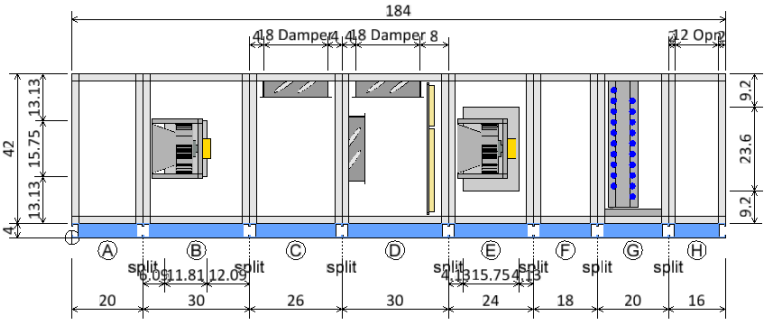
PLAN VIEW



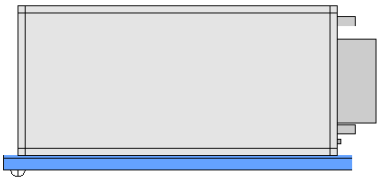
ISOMETRIC VIEW



FRONT END VIEW

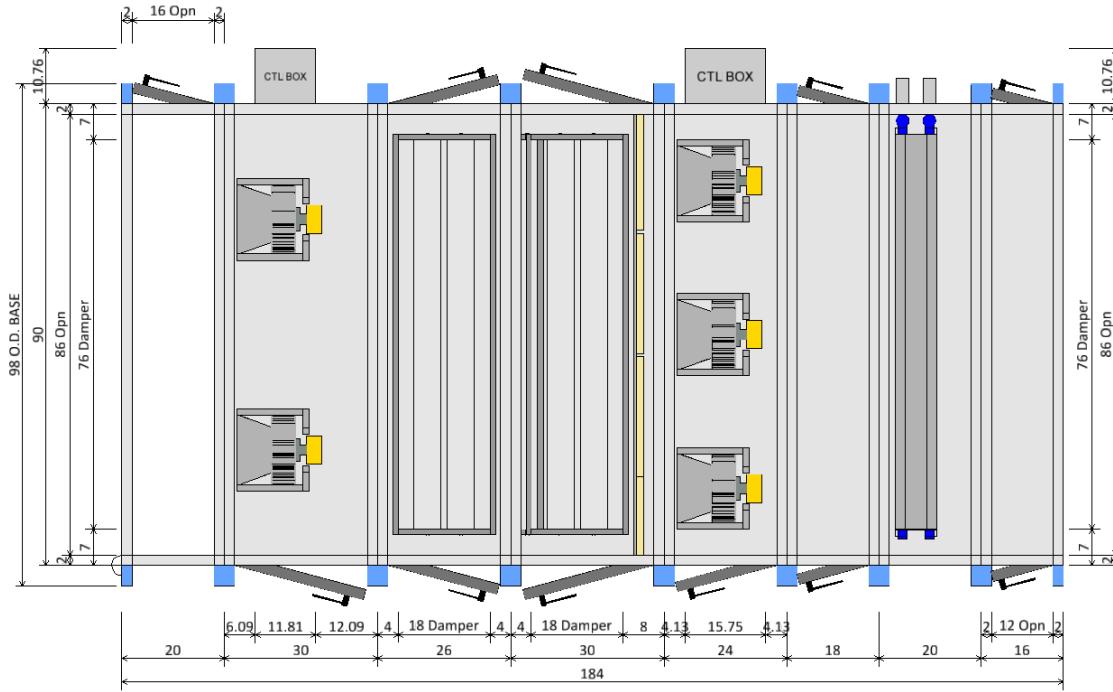


ELEVATION VIEW

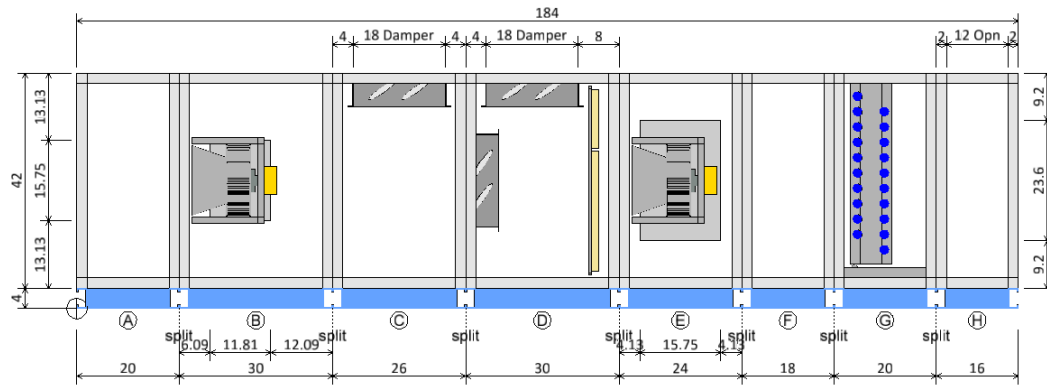


REAR END VIEW

Plan/Elevation	Unit Tag: Blum AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



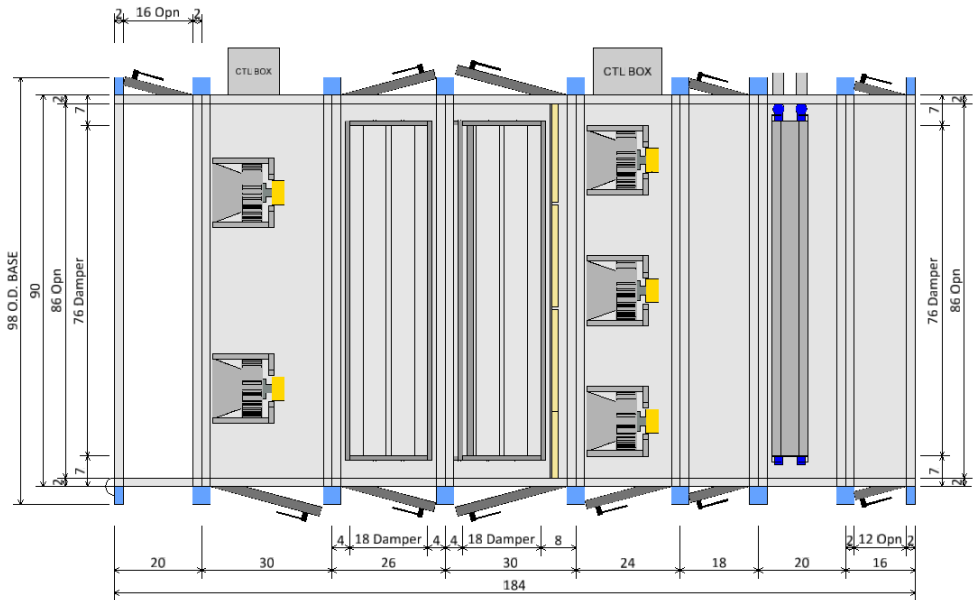
PLAN VIEW



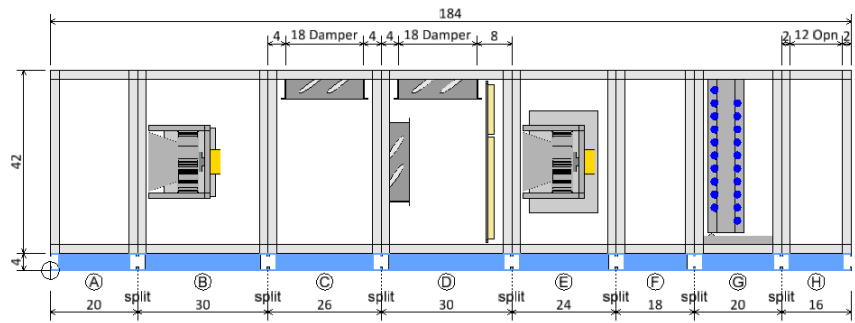
ELEVATION VIEW

Component Key	
A	Plenum Section
	Opening Location: Bottom
	Opening Size: 16 ins x 86 ins
	Left Door (WxH): 16 ins x 38 ins
B	Return Fan
	Fan Type: Centrifugal - Plenum
	Fan Size (Class): 355 (2)
	Air Flowrate: 3325.0 cfm
	T.S.P.: 0.8 insWg
	Motor Power: 2.3 HP
C	Economizer Return/Exhaust
	Right Door (WxH): 22 ins x 38 ins
	Left Door (WxH): 22 ins x 38 ins
D	Economizer Mixing/Outside Air
	Filter Type: PerfectPleat HC M8
	Right Door (WxH): 26 ins x 38 ins
	Left Door (WxH): 26 ins x 38 ins
E	Supply Fan
	Fan Type: Centrifugal - Plenum
	Fan Size (Class): 355 (2)
	Air Flowrate: 3183.3 cfm
	T.S.P.: 3.7 insWg
	Motor Power: 3.3 HP
F	Access Section
	Right Door (WxH): 14 ins x 38 ins
	Left Door (WxH): 14 ins x 38 ins
G	Chilled Water coil
	Coil Model: 5WL1105C
H	Plenum Section
	Opening Location: Top
	Opening Size: 12 ins x 86 ins
	Right Door (WxH): 12 ins x 38 ins
	Left Door (WxH): 12 ins x 38 ins

Plan/Elevation - No Ends	Unit Tag: Blum AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



PLAN VIEW



ELEVATION VIEW

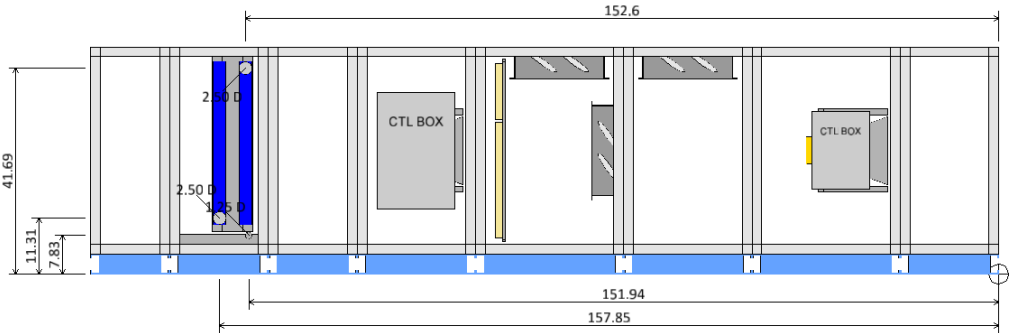
Component Key					
Type	X	Y	Z	Wid	Hgt
Ⓐ Plenum Section Opening	2.00	2.00	4.00	86.00	16.00
Ⓒ Economizer Return/Exhaust Exhaust air damper	54.00	7.00	46.00	76.00	18.00
Ⓓ Economizer Mixing/Outside Air Outside air damper	80.00	7.00	46.00	76.00	18.00
Ⓗ Plenum Section Opening	170.00	2.00	46.00	86.00	12.00

Note: Dimensions are measured from the origin point.

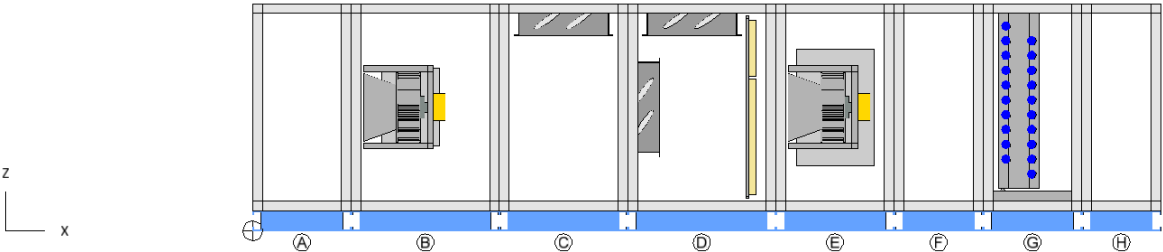
Opening/Damper Connections		Unit Tag: Blum AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Coil and Drain Connections					
	Type	X	Y	Z	Diam
G	Chilled Water coil	151.94	92.90	7.83	1.25
	Condensate drain conn:	157.85	93.00	11.31	2.50
	Cold water inlet:	152.60	93.00	41.69	2.50
	Cold water outlet:				

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW

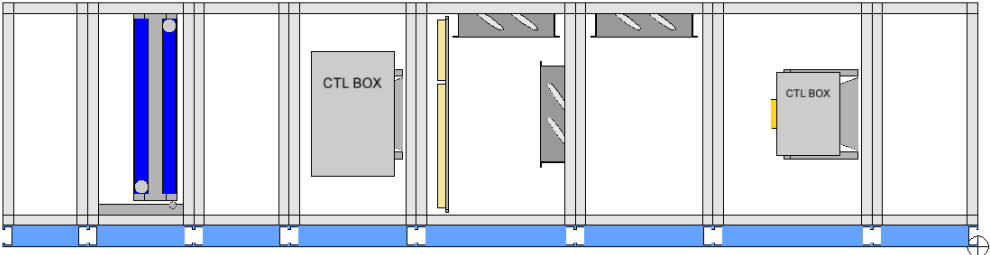


RIGHT ELEVATION VIEW

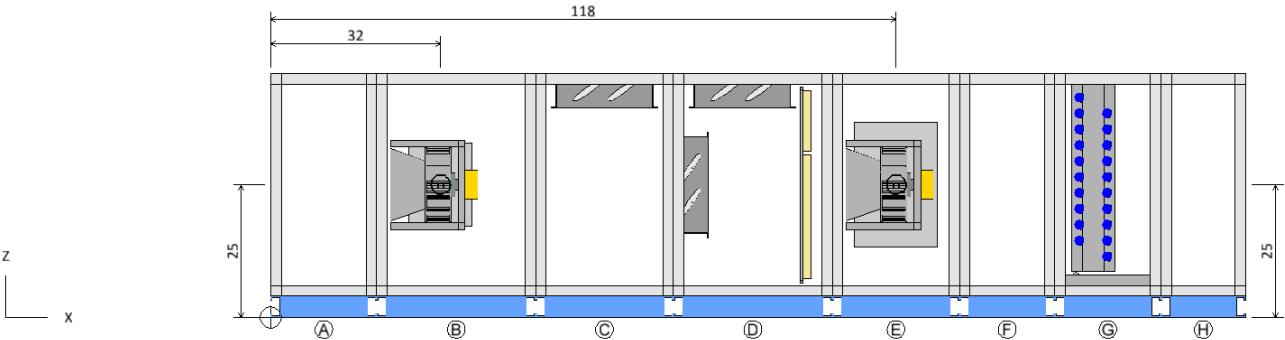
Coil and Drain Connections		Unit Tag: Blum AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key						
	Type	X	Y	Z	Volts	Phase
Ⓑ	Return Fan Fan	32.00	0.00	25.00	460	3
Ⓔ	Supply Fan Fan	118.00	0.00	25.00	460	3

Note: Dimensions are measured from the origin point.

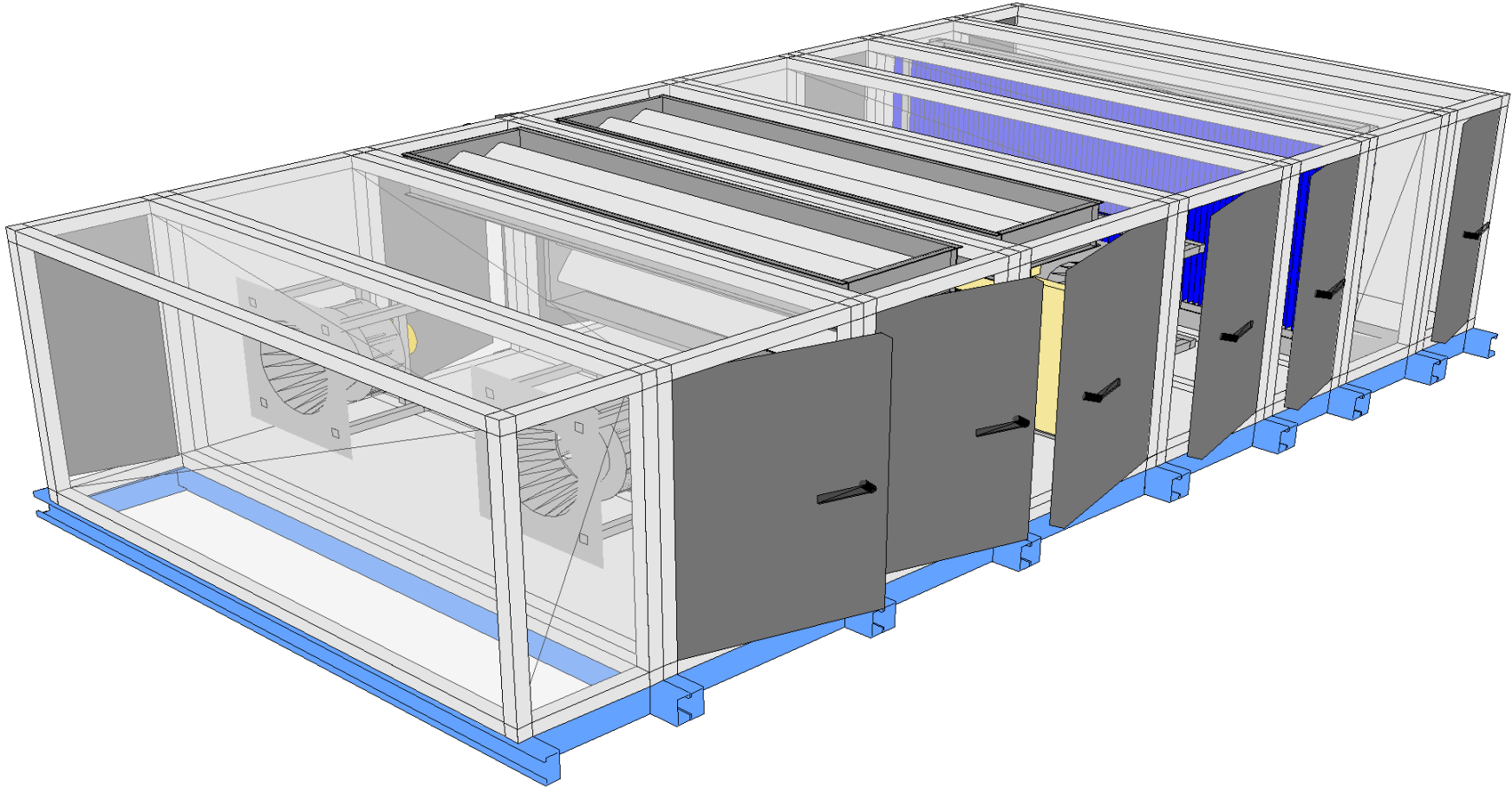


LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Electrical Connections		Unit Tag: Blum AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



Product Drawing	Unit Tag: Blum AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for Blum AHU-F

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Blum AHU-F	



Unit Overview												
Model Number	Supply						Return/Exhaust					
	Air Volume cfm	Static Pressure		External Dimensions			Air Volume cfm	Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in		External inWc	Total inWc	Height in	Width in	Length in
CAH018GBCM	8650	2.00	3.41	42*	90*	108	6000	0.75	0.80	42*	90*	76

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH018GBCM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Inline horizontal	Drive (Handling) Location:	Right
Base:	4" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Plenum Section	Component: 1	Length: 20 in	Shipping Section: 1
Opening Location	Opening Size		Air Pressure Drop
Bottom	16.00" x 86.00"		0.02 inWc
Door			
Location	Width		Opening
Drive side	16 in		Outward

Technical Data Sheet for Blum AHU-F

Return/Exhaust Fan Array		Component: 2			Length: 30 in		Shipping Section: 2		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
3000 cfm	0.75 inWc	0.80 inWc	0.00 inWc	0.82 BHP	2342 rpm	3230 rpm	65.6 %	15.0 A	6.8 A
Fan Data									
Fan Type		Blade Type / Class		Quantity of Fans	Wheel Diameter	Number of Blades		Discharge	Motor Location
ECM / 1x2 : 2		Airfoil / N/A		2	13.98 in	5		Axial	Behind Fan
Motor Data									
Power*	Electrical Supply		Speed	Control Signal		Supplier	Lock Rotor Current*	Full Load Current*	
3.00 A	460/60/3 V/Hz/Phase		2870 rpm	0-10V		EBM-Papst	3.00 A	3.00 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive				Vendor:		Daikin Applied	
Auxiliary Control:		Disconnect w/ motor starter				Voltage:		460 v	
Disconnect Type:		Fused				Height x Width x Depth:		15.75 in x 11.81 in x 10.76 in	
Mounting:		Drive Side				Enclosure:		NEMA 3R	
Door									
Location			Width			Opening			
Non-drive side			26 in			Outward			
Notes									
* after a unit label denotes the data for an individual fan.									

Economizer		Component: 3			Length: 56 in		Shipping Section: 3 & 4	
Portion	Damper				Blade Action	Rated CFM	Air Pressure Drop	Quantity
	Size (length x width)		Location	Type				
	Overall	Opening						
Outside Air	22 in x 86 in	18 in x 76 in	Top	UltraSeal Low Leak	Parallel	8650 cfm	0.06 inWc	1
Return Air	20 in x 86 in	16 in x 76 in	Internal	UltraSeal Low Leak	Parallel	6000 cfm	0.04 inWc	1
Exhaust Air	22 in x 86 in	18 in x 76 in	Top	UltraSeal Low Leak	Parallel	6000 cfm	0.03 inWc	1
Filter Data								
Type	Efficiency		Face Velocity		Face Area	Air Volume		Filter Loading
Pleated	MERV 8		445 ft/min		19.5 ft²	8650 cfm		Side
Air Pressure Drop				Number of Filters	Height	Width	Depth	
Clean Air	Mean Air	Dirty Air						
0.20 inWc	0.60 inWc	1.00 inWc	2	24 in	24 in	2 in		
			2	24 in	20 in	2 in		
			3	12 in	24 in	2 in		
Mixing Chamber Door								
Location		Drive Side Door Width			Opp. Drv. Side Door Width		Opening	
Both sides		26 in			26 in		Outward	
Return Chamber Door								
Location		Drive Side Door Width			Opp. Drv. Side Door Width		Opening	
Both sides		22 in			22 in		Outward	

Technical Data Sheet for Blum AHU-F

Supply Fan Array		Component: 4			Length: 24 in		Shipping Section: 5		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
2883 cfm	2.00 inWc	3.41 inWc	0.00 inWc	2.31 BHP	2953 rpm	3230 rpm	82.8 %	15.0 A	13.3 A
Fan Data									
Fan Type		Blade Type / Class	Quantity of Fans	Wheel Diameter		Number of Blades	Discharge	Motor Location	
ECM / 1x3 : 3		Airfoil / N/A	3	13.98 in		5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply	Speed		Control Signal		Supplier	Lock Rotor Current*	Full Load Current*	
4.10 A	460/60/3 V/Hz/Phase	3230 rpm		0-10V		EBM-Papst	4.10 A	4.10 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive				Vendor:		Daikin Applied	
Auxiliary Control:		Disconnect w/ motor starter				Voltage:		460 v	
Disconnect Type:		Fused				Height x Width x Depth:		23.60 in x 15.75 in x 10.76 in	
Mounting:		Drive Side				Enclosure:		NEMA 3R	
Door									
Location			Width			Opening			
Non-drive side			20 in			Outward			
Notes									
* after a unit label denotes the data for an individual fan.									

Access Section	Component: 5	Length: 18 in	Shipping Section: 6
Air Pressure Drop			
0.00 inWc			
Door			
Location	Drive Side Door Width	Opp. Drv. Side Door Width	Opening
Both sides	14 in	14 in	Outward

Technical Data Sheet for Blum AHU-F

Chilled Water Coil		Component: 6		Length: 20 in		Shipping Section: 7			
Coil Model	Total Capacity	Sensible Capacity	Number of Coils		Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)	
5WL1005C	347560 Btu/hr	242127 Btu/hr	1		5	10	0.625 in	1.50 in x 1.299 in	
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity
	Entering		Leaving						
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb					
8650 cfm	80.0 °F	67.0 °F	54.4 °F	53.9 °F	0.97 inWc	33 in	77 in	17.65 ft²	490 ft/min
Water		Flow Rate		Pressure Drop	Velocity	Volume		Weight	
Entering	Leaving								
45.0 °F	55.0 °F	69.30 gpm		11.80 ftHd	4.50 ft/s	12.0 gal		103.00 lb	
Connection [Data Per Coil]					Min. Fin Surface Temp.	Min. Tube Wall Surface Temp.	Fouling Factor		
Type	Size	Location	Material						
Threaded	2.50 in	Drive side	Carbon steel				45.0 °F	45.0 °F	0.000
Material						Drain Pan	Drain Side		
Fin	Tube	Header		Case					
Aluminum .0075 in	Copper .020 in	Copper		Galv. steel		Stainless steel		Drive side	
AHRI 410 Certification									
Certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at www.ahridirectory.org									

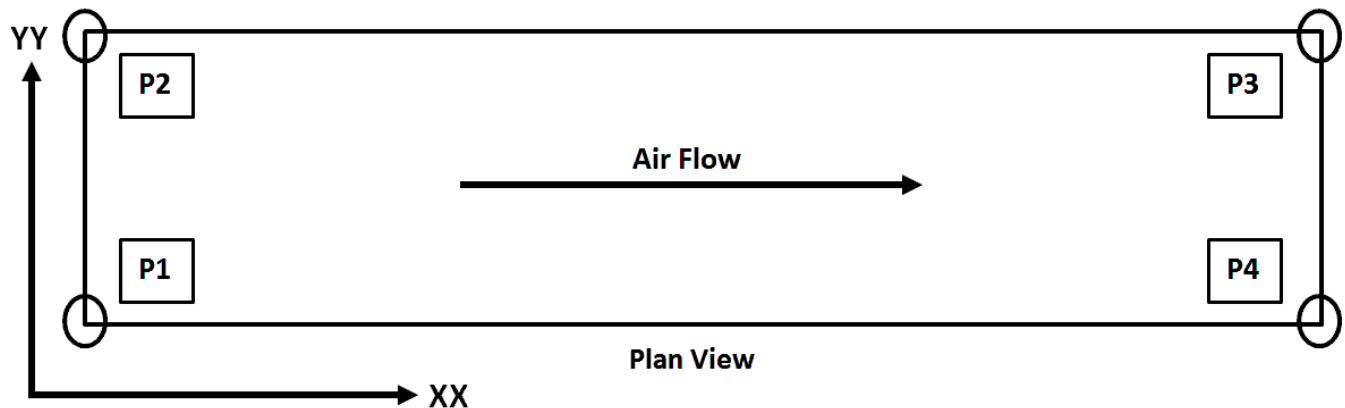
Plenum Section		Component: 7		Length: 16 in		Shipping Section: 8	
Opening Location		Opening Size			Air Pressure Drop		
Top		12.00" x 86.00"			0.19 inWc		
Door							
Location		Drive Side Door Width		Opp. Drv. Side Door Width		Opening	
Both sides		12 in		12 in		Outward	
Special Options							
Tread Plate Floor Liner							
Tread plate installed							

Unit Sound Power (dB)								
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	64	58	77	56	48	43	46	51
Unit Discharge:	64	58	83	62	58	57	59	51
Unit Return:	64	59	80	70	61	61	65	65

Technical Data Sheet for Blum AHU-F

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	20	310	70	70	85	85	11	45	19
2	30	616	164	175	144	133	13	47	19
3	26	332	75	75	91	91	14	45	19
4	30	502	118	118	133	133	16	45	21
5	24	676	178	196	160	142	11	47	19
6	18	271	60	60	75	75	10	45	18
7	20	777	223	210	165	178	9	43	21
8	16	284	71	71	71	71	8	45	17
Entire Unit	184	3768	843	859	1041	1025	101	45	19



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Economizer Mixing/Outside Air	Filter	0.20 insWg
Economizer Mixing/Outside Air	Damper	0.06 insWg
Supply Fan	Cabinet	-
Access Section	Access Section	-
Chilled Water coil	Chilled Water coil	0.97 insWg
Plenum Section	Plenum Section	0.19 insWg
External Static	External Static	2.00 insWg
Total Supply Static		3.41 insWg

Exhaust Static Pressure Drop

Component	Option	Static Pressure Drop
Plenum Section	Plenum Section	0.02 insWg
Return Fan	Cabinet	-
Economizer Return/Exhaust	Damper	0.03 insWg
External Static	External Static	0.75 insWg
Total Return/Exhaust Static		0.80 insWg

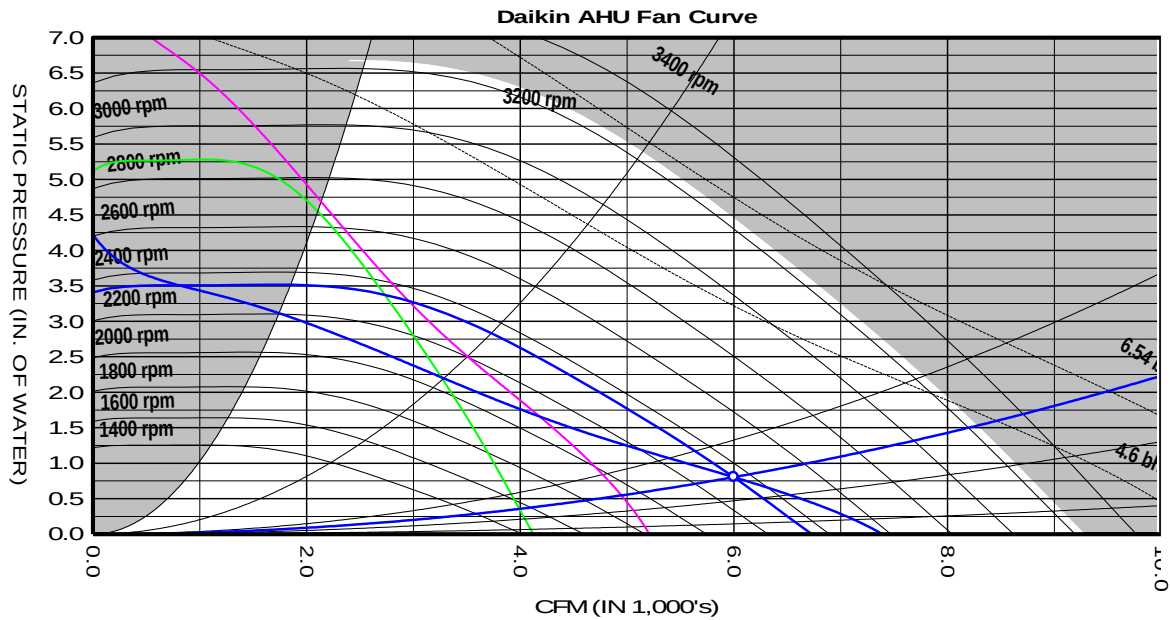
AHRI Certification

The air-handler is selected outside of the scope of AHRI Standard 430/431

Technical Data Sheet for Blum AHU-F

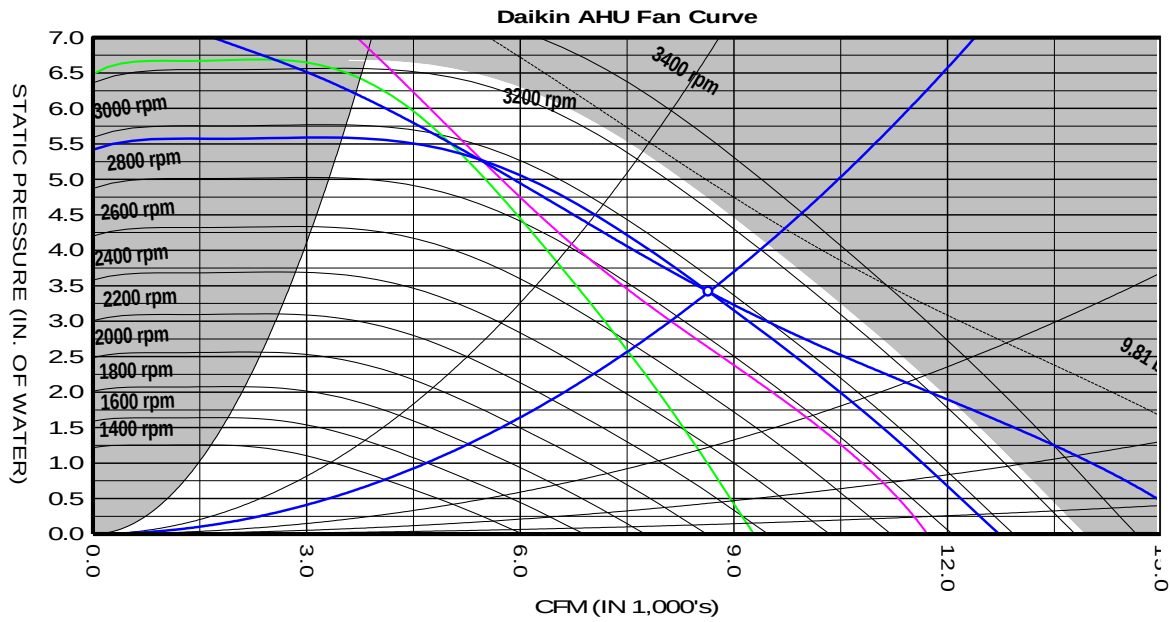
Notes	
Standard	
1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.	

Fan Curve for Blum AHU-F



EBM355-RPII 1x2 (2 Fans) Ret/Exh Fan at Standard Conditions					
Air volume	6000	cfm	Fan speed	2342	rpm
Total static	0.80	insWg	Max speed	3230	rpm
Brake horsepower	1.6	bhp	Efficiency	46.2	%
Redundancy	65.6	%	Motor Speed	2870	rpm
Unit tagging	Blum AHU-F		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Fan Curve for Blum AHU-F



EBM355-RPII 1x3 (3 Fans) Supply Fan at Standard Conditions					
Air volume	8650	cfm	Fan speed	2953	rpm
Total static	3.41	insWg	Max speed	3230	rpm
Brake horsepower	6.9	bhp	Efficiency	67.1	%
Redundancy	82.8	%	Motor Speed	3230	rpm
Unit tagging	Blum AHU-F		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Drawing for Blum AHU-F

Job Number:

G2H0RG

Job Name:

MWSU - AHU Replacements

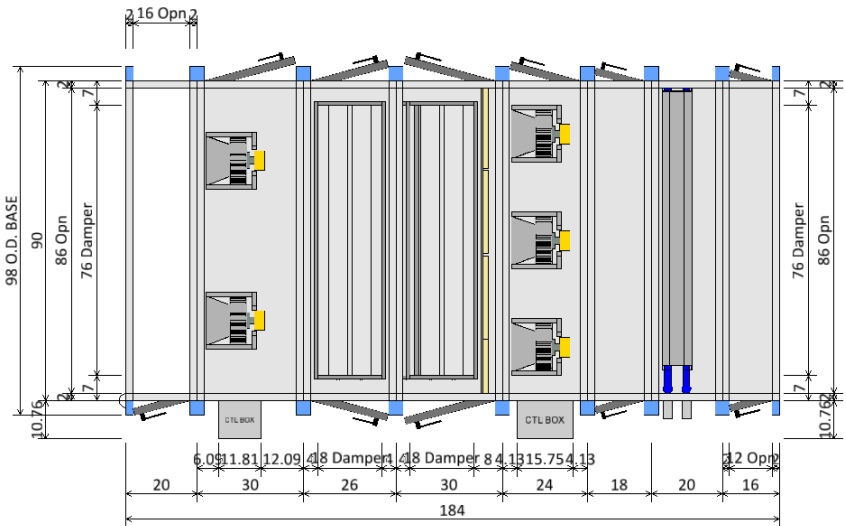
Page

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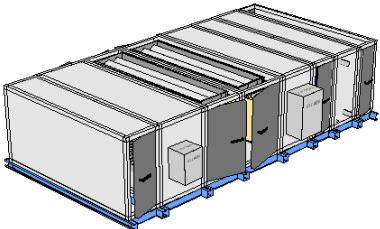
Prepared Date:

9/27/2020

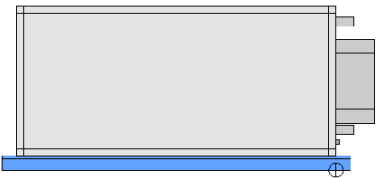
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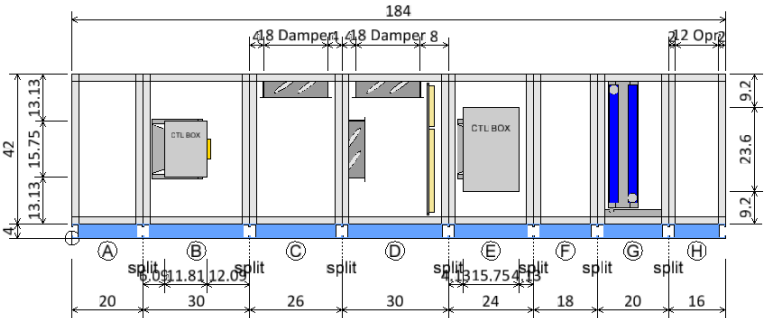
PLAN VIEW



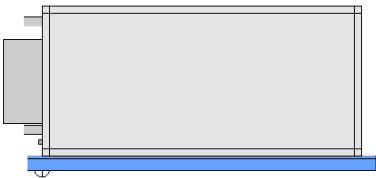
ISOMETRIC VIEW



FRONT END VIEW

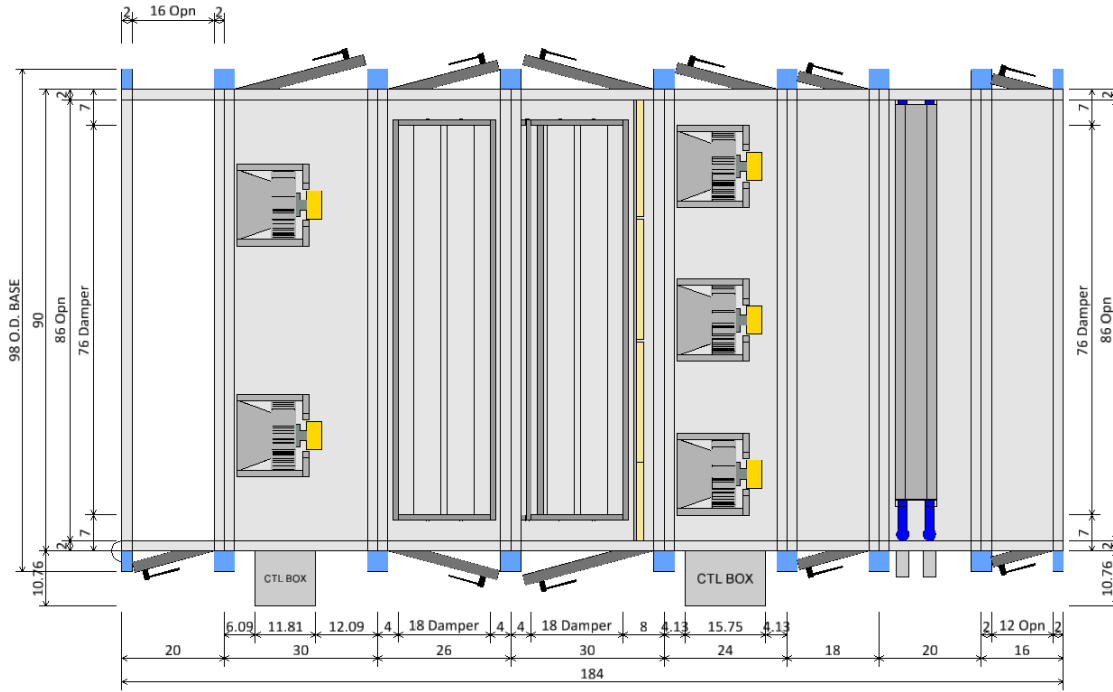


ELEVATION VIEW

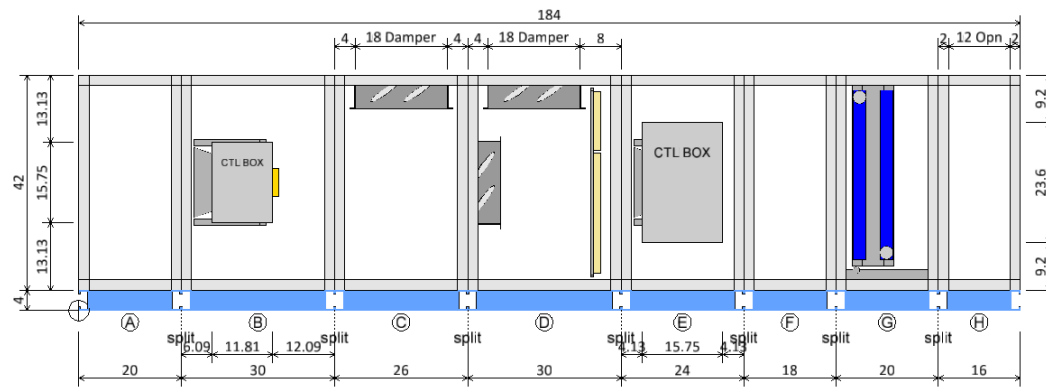


REAR END VIEW

Plan/Elevation	Unit Tag: Blum AHU-F			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



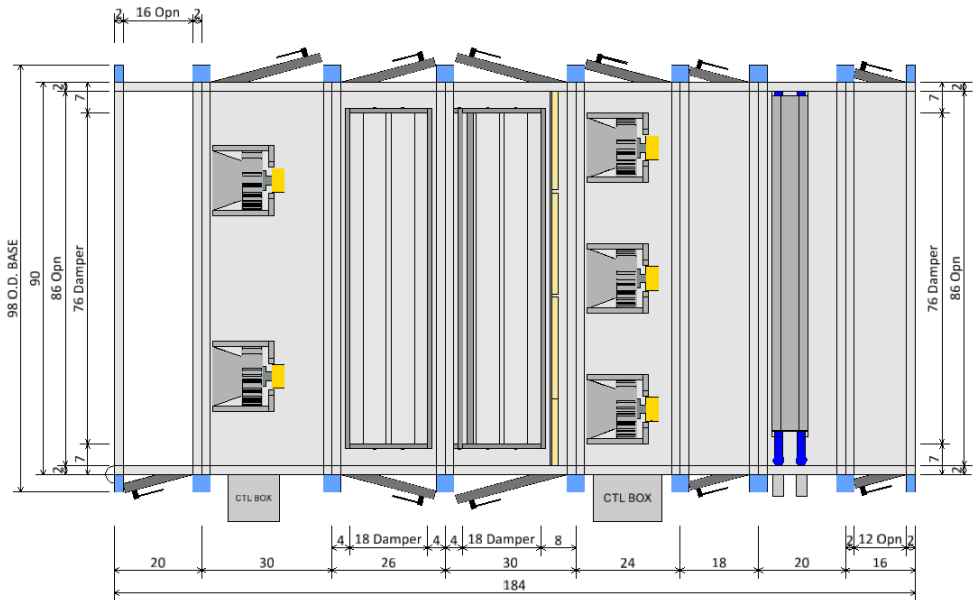
PLAN VIEW



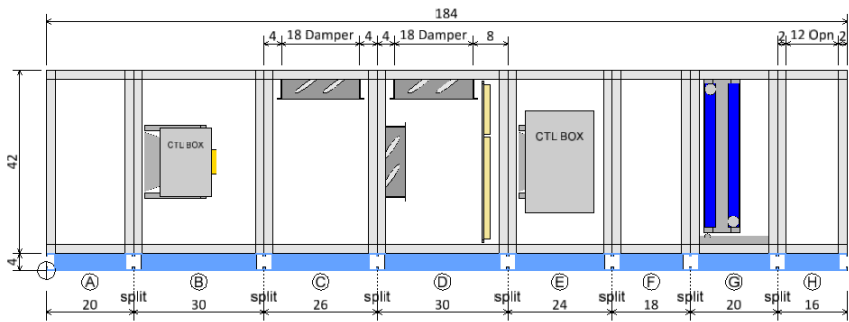
ELEVATION VIEW

Component Key	
A	Plenum Section
	Opening Location: Bottom
	Opening Size: 16 ins x 86 ins
	Right Door (WxH): 16 ins x 38 ins
B	Return Fan
	Fan Type: Centrifugal - Plenum
	Fan Size (Class): 355 (2)
	Air Flowrate: 3000.0 cfm
	T.S.P.: 0.8 insWg
	Motor Power: 2.3 HP
C	Economizer Return/Exhaust
	Right Door (WxH): 22 ins x 38 ins
	Left Door (WxH): 22 ins x 38 ins
D	Economizer Mixing/Outside Air
	Filter Type: PerfectPleat HC M8
	Right Door (WxH): 26 ins x 38 ins
	Left Door (WxH): 26 ins x 38 ins
E	Supply Fan
	Fan Type: Centrifugal - Plenum
	Fan Size (Class): 355 (2)
	Air Flowrate: 2883.3 cfm
	T.S.P.: 3.4 insWg
	Motor Power: 3.3 HP
F	Access Section
	Right Door (WxH): 14 ins x 38 ins
	Left Door (WxH): 14 ins x 38 ins
G	Chilled Water coil
	Coil Model: 5WL1005C
H	Plenum Section
	Opening Location: Top
	Opening Size: 12 ins x 86 ins
	Right Door (WxH): 12 ins x 38 ins
	Left Door (WxH): 12 ins x 38 ins

Plan/Elevation - No Ends	Unit Tag: Blum AHU-F			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



PLAN VIEW



ELEVATION VIEW

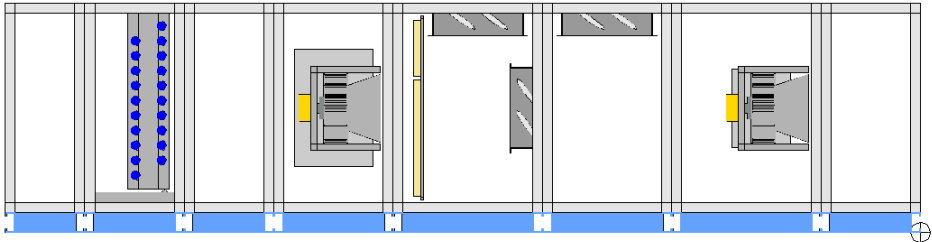
Component Key					
Type	X	Y	Z	Wid	Hgt
Ⓐ Plenum Section Opening	2.00	2.00	4.00	86.00	16.00
Ⓒ Economizer Return/Exhaust Exhaust air damper	54.00	7.00	46.00	76.00	18.00
Ⓓ Economizer Mixing/Outside Air Outside air damper	80.00	7.00	46.00	76.00	18.00
Ⓗ Plenum Section Opening	170.00	2.00	46.00	86.00	12.00

Note: Dimensions are measured from the origin point.

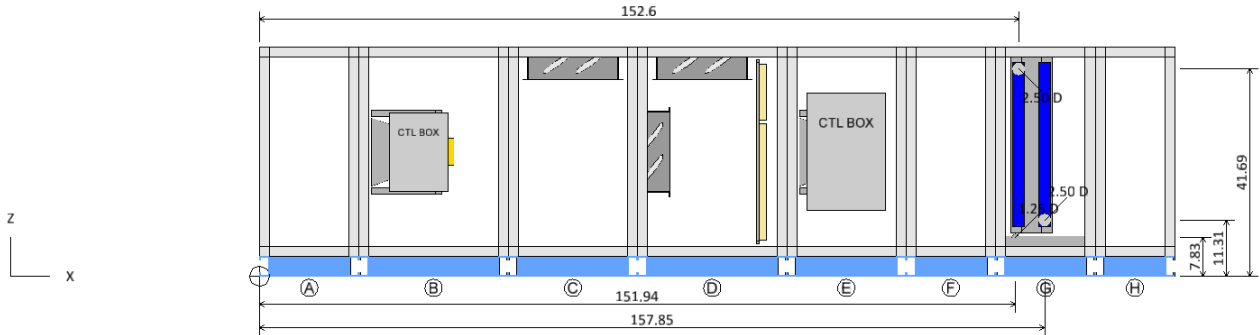
Opening/Damper Connections		Unit Tag: Blum AHU-F			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Coil and Drain Connections					
	Type	X	Y	Z	Diam
G	Chilled Water coil	151.94	-2.90	7.83	1.25
	Condensate drain conn:	157.85	-7.00	11.31	2.50
	Cold water inlet:	152.60	-7.00	41.69	2.50

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW

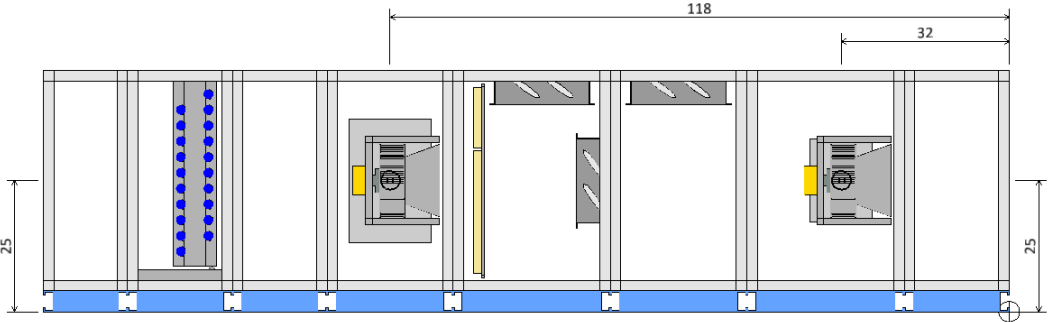


RIGHT ELEVATION VIEW

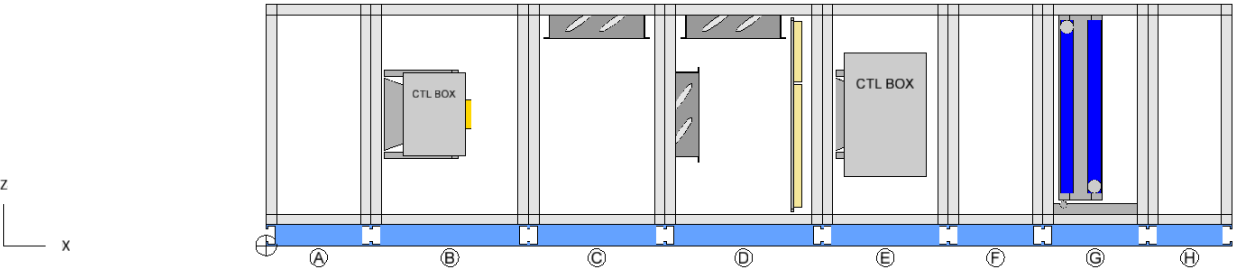
Coil and Drain Connections		Unit Tag: Blum AHU-F			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key						
	Type	X	Y	Z	Volts	Phase
Ⓑ	Return Fan Fan	32.00	90.00	25.00	460	3
Ⓔ	Supply Fan Fan	118.00	90.00	25.00	460	3

Note: Dimensions are measured from the origin point.

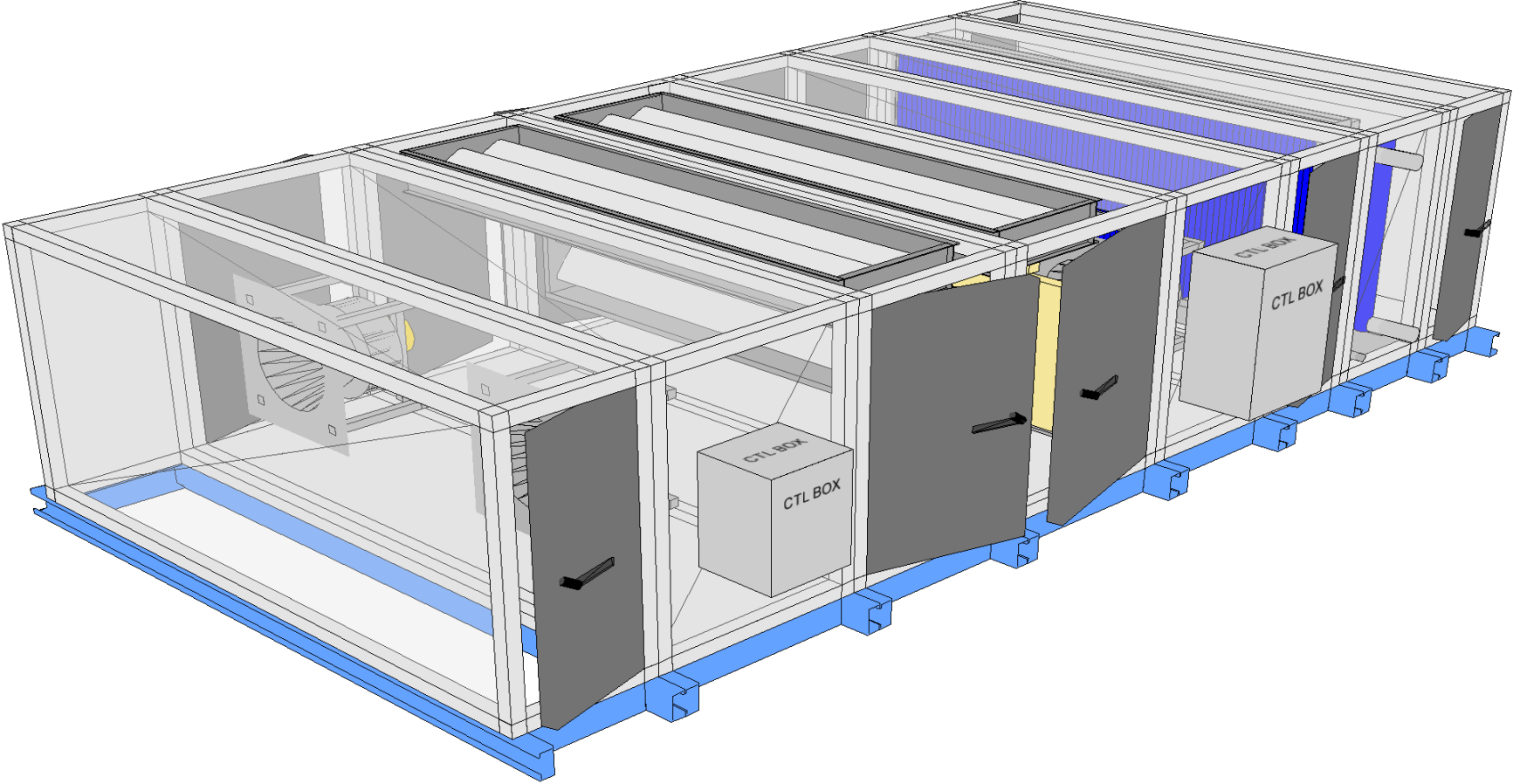


LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Electrical Connections		Unit Tag: Blum AHU-F			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



Job Number: G2H0RG
Job Name: MWSU - AHU Replacements
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Prepared Date: 9/27/2020
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Product Drawing	Unit Tag: Blum AHU-F			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH018GBCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for Blum AHU-G

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Blum AHU-G	



Unit Overview						
Model Number	Air Volume cfm	Supply				
		Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH013GBCM	6000	2.00	3.52	46*	62*	88

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH013GBCM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Inline horizontal	Drive (Handling) Location:	Right
Base:	4" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Panel Filter		Component: 1		Length: 12 in		Shipping Section: 1	
Type	Efficiency	Face Velocity	Face Area	Air Volume	Filter Loading		
Pleated	MERV 8	457 ft/min	13.1 ft²	6000 cfm	Side		
Air Pressure Drop			Number of Filters	Height	Width	Depth	
Clean Air	Mean Air	Dirty Air					
0.20 inWc	0.60 inWc	1.00 inWc	2	24 in	24 in	2 in	
			1	24 in	12 in	2 in	
			2	12 in	24 in	2 in	
Door							
Location		Drive Side Door Width		Opp. Drv. Side Door Width		Opening	
Both sides		8 in		8 in		Outward	

Technical Data Sheet for Blum AHU-G

Supply Fan Array		Component: 2			Length: 24 in		Shipping Section: 2		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
3000 cfm	2.00 inWc	3.52 inWc	0.00 inWc	2.49 BHP	3033 rpm	3230 rpm	65.7 %	15.0 A	9.2 A
Fan Data									
Fan Type		Blade Type / Class		Quantity of Fans	Wheel Diameter	Number of Blades	Discharge	Motor Location	
ECM / 1x2 : 2		Airfoil / N/A		2	13.98 in	5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply		Speed	Control Signal		Supplier	Lock Rotor Current*	Full Load Current*	
4.10 A	460/60/3 V/Hz/Phase		3230 rpm	0-10V		EBM-Papst	4.10 A	4.10 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive				Vendor:		Daikin Applied	
Auxiliary Control:		Disconnect w/ motor starter				Voltage:		460 v	
Disconnect Type:		Fused				Height x Width x Depth:		15.75 in x 11.81 in x 10.76 in	
Mounting:		Drive Side				Enclosure:		NEMA 3R	
Door									
Location			Width			Opening			
Non-drive side			20 in			Outward			
Notes									
* after a unit label denotes the data for an individual fan.									

Access Section	Component: 3	Length: 18 in	Shipping Section: 3
Air Pressure Drop			
0.00 inWc			
Door			
Location	Drive Side Door Width	Opp. Drv. Side Door Width	Opening
Both sides	14 in	14 in	Outward

Technical Data Sheet for Blum AHU-G

Chilled Water Coil		Component: 4			Length: 20 in		Shipping Section: 4		
Coil Model	Total Capacity	Sensible Capacity	Number of Coils		Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)	
5WH1105C	247039 Btu/hr	171219 Btu/hr	1		5	11	0.625 in	1.50 in x 1.299 in	
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity
	Entering		Leaving						
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb					
6000 cfm	80.0 °F	67.0 °F	53.9 °F	53.6 °F	1.03 inWc	36 in	49 in	12.25 ft²	490 ft/min
Water		Flow Rate		Pressure Drop	Velocity	Volume		Weight	
Entering	Leaving								
45.0 °F	55.3 °F	48.00 gpm		14.40 ftHd	4.30 ft/s	9.0 gal		77.00 lb	
Connection [Data Per Coil]					Min. Fin Surface Temp.	Min. Tube Wall Surface Temp.	Fouling Factor		
Type	Size	Location	Material						
Threaded	1.50 in	Drive side	Carbon steel		45.0 °F	45.0 °F	0.000		
Material						Drain Pan	Drain Side		
Fin	Tube	Header		Case					
Aluminum .0075 in	Copper .020 in	Copper		Galv. steel		Stainless steel		Drive side	
AHRI 410 Certification									
 AHRI CERTIFIED www.ahridirectory.org Air-Cooling and Air-Heating Coils AHRI Standard 410 Certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at www.ahridirectory.org									

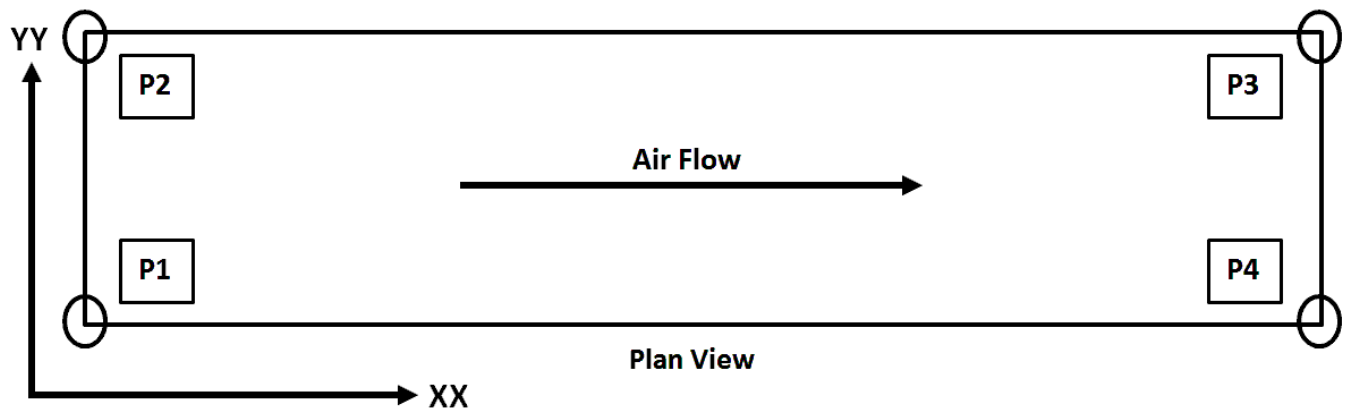
Plenum Section		Component: 5		Length: 14 in		Shipping Section: 5	
Opening Location		Opening Size			Air Pressure Drop		
Top		10.00" x 58.00"			0.28 inWc		
Door							
Location		Drive Side Door Width		Opp. Drv. Side Door Width		Opening	
Both sides		10 in		10 in		Outward	
Special Options							
Tread Plate Floor Liner							
Tread plate installed							

Unit Sound Power (dB)								
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	64	54	73	51	45	41	46	51
Unit Discharge:	64	54	82	61	56	56	58	51
Unit Return:	67	63	86	71	66	67	69	63

Technical Data Sheet for Blum AHU-G

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	12	222	49	49	62	62	7	31	22
2	24	483	126	138	115	104	11	32	22
3	18	202	44	44	57	57	10	31	21
4	20	579	169	155	120	135	9	29	23
5	14	208	52	52	52	52	7	31	20
Entire Unit	88	1694	422	419	425	428	44	31	22



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Panel Filter	Panel Filter	0.20 insWg
Supply Fan	Cabinet	-
Access Section	Access Section	-
Chilled Water coil	Chilled Water coil	1.03 insWg
Plenum Section	Plenum Section	0.28 insWg
External Static	External Static	2.00 insWg
Total Supply Static		3.52 insWg

AHRI Certification

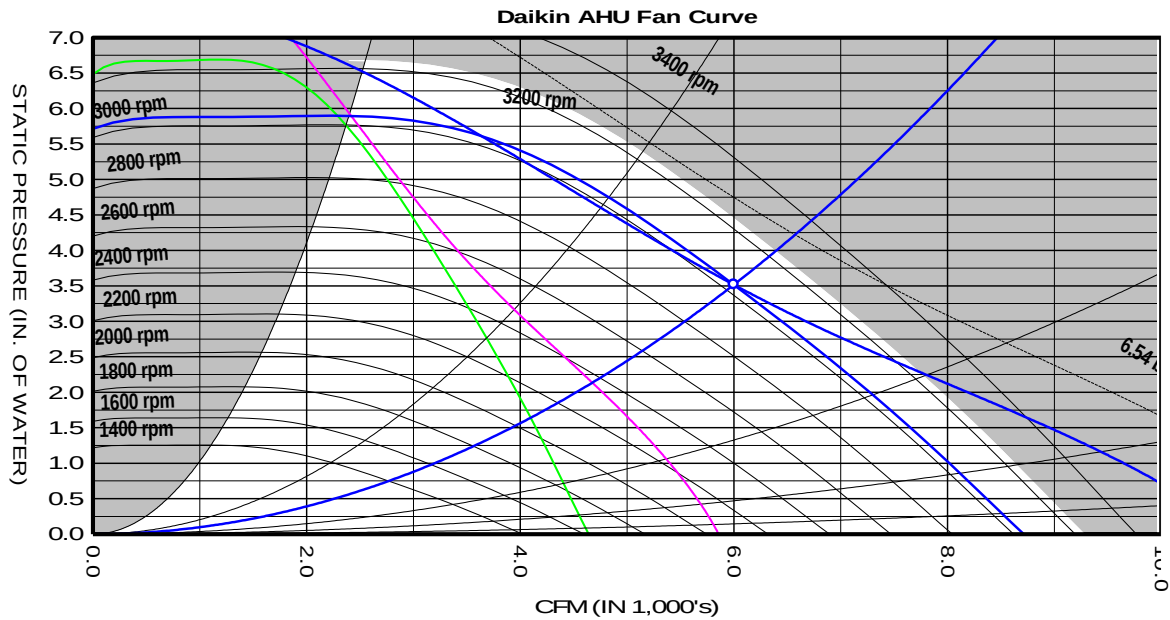
The air-handler is selected outside of the scope of AHRI Standard 430/431

Notes

Standard

1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.

Fan Curve for Blum AHU-G



EBM355-RPII 1x2 (2 Fans) Supply Fan at Standard Conditions					
Air volume	6000	cfm	Fan speed	3033	rpm
Total static	3.52	insWg	Max speed	3230	rpm
Brake horsepower	5.0	bhp	Efficiency	66.7	%
Redundancy	65.7	%	Motor Speed	3230	rpm
Unit tagging	Blum AHU-G		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Drawing for Blum AHU-G

Job Number:

G2H0RG

Page

Job Name:

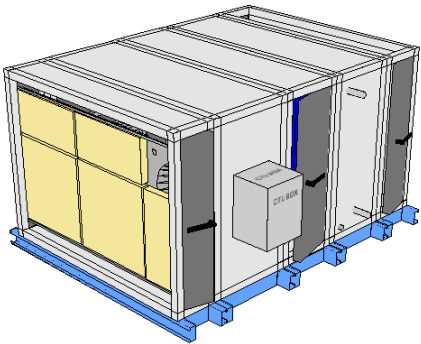
MWSU - AHU Replacements

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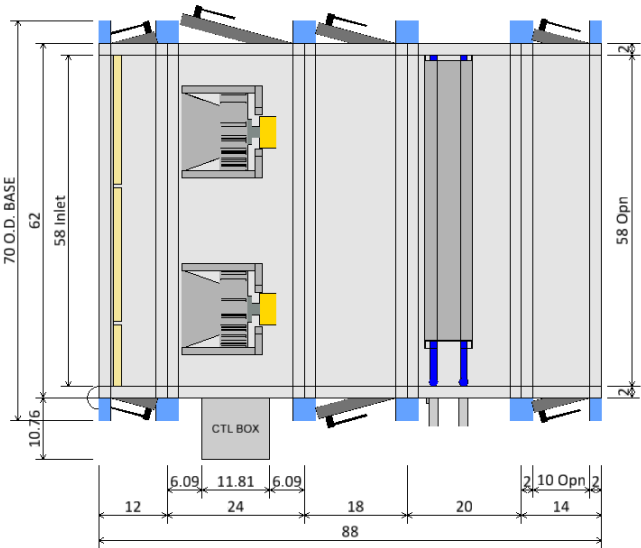
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9/27/2020

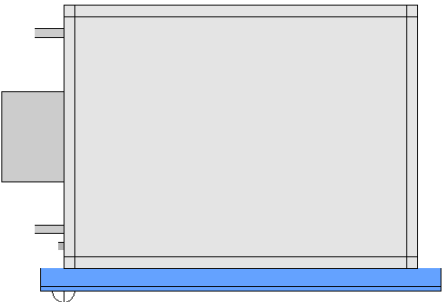
www.DaikinApplied.com



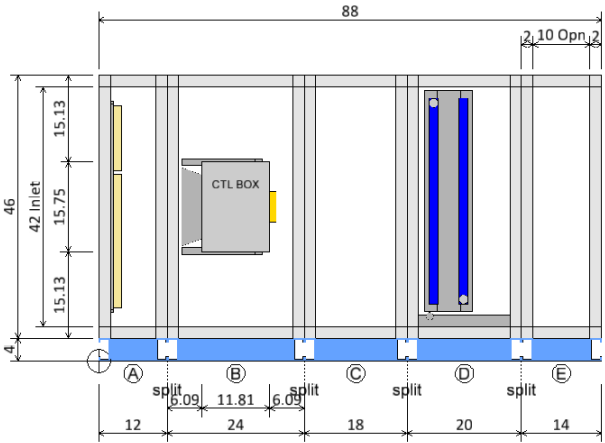
ISOMETRIC VIEW



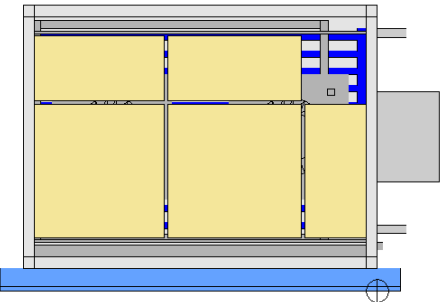
PLAN VIEW



REAR END VIEW

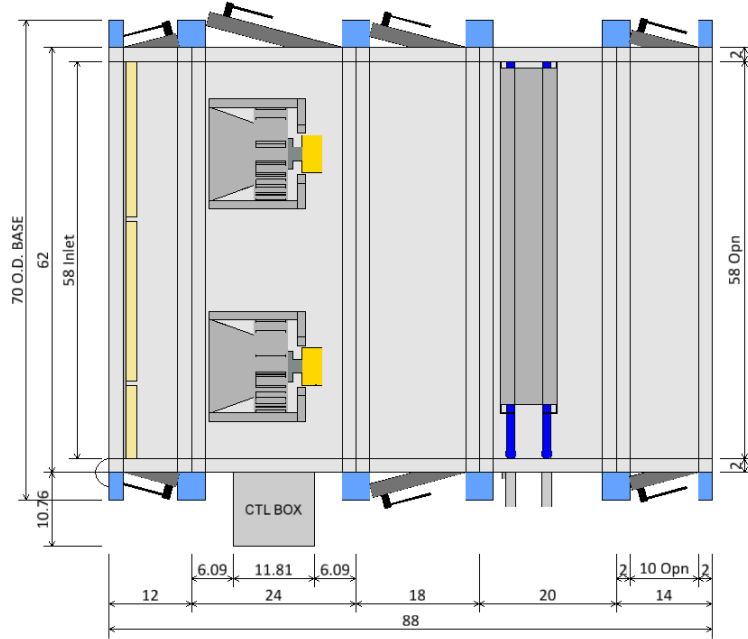


ELEVATION VIEW

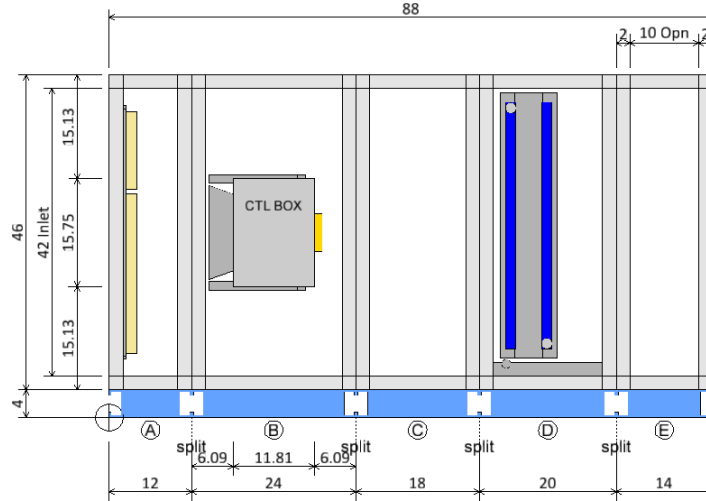


FRONT END VIEW

Plan/Elevation	Unit Tag: Blum AHU-G			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GBCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



PLAN VIEW



ELEVATION VIEW

Component Key

A	Panel Filter	Pleated (MERV 8)
	Filter Type:	
	Right Door (WxH):	8 ins x 42 ins
B	Left Door (WxH):	8 ins x 42 ins
	Supply Fan	
	Fan Type:	Centrifugal - Plenum
C	Fan Size (Class):	355 (2)
	Air Flowrate:	3000.0 cfm
	T.S.P.:	3.5 insWg
D	Motor Power:	3.3 HP
	Control box door swing:	11.81 ins
	Left Door (WxH):	20 ins x 42 ins
E	Access Section	
	Right Door (WxH):	14 ins x 42 ins
	Left Door (WxH):	14 ins x 42 ins
F	Chilled Water coil	
	Coil Model:	5WH1105C
	Total Capacity:	247039.0 Btu/hr
G	Plenum Section	
	Opening Location:	Top
	Opening Size:	10 ins x 58 ins
H	Right Door (WxH):	10 ins x 42 ins
	Left Door (WxH):	10 ins x 42 ins

Plan/Elevation - No Ends

Product: Vision Air Handler

Model: CAH013GBCM

Unit Tag: Blum AHU-G

Project Name: MWSU - AHU Replacements

Sept. 27, 2020

Ver/Rev:

Sheet: 1 of 1

Sales Office: Daikin TMI LLC (Kansas City)

Sales Engineer:

Scale: NTS

Tolerance: +/-0.25"

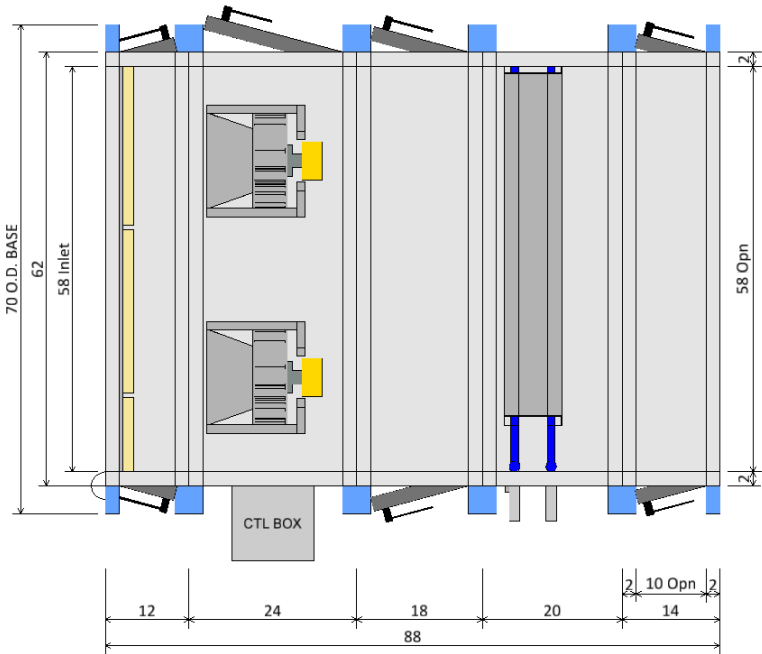
Dwg Units: in



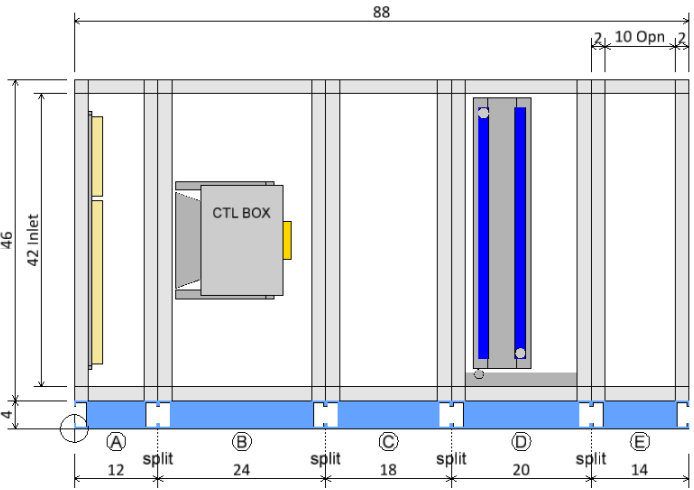
13600 Industrial Park Blvd, Minneapolis, MN 55441

www.DaikinApplied.com

Software Version: 12.32



PLAN VIEW

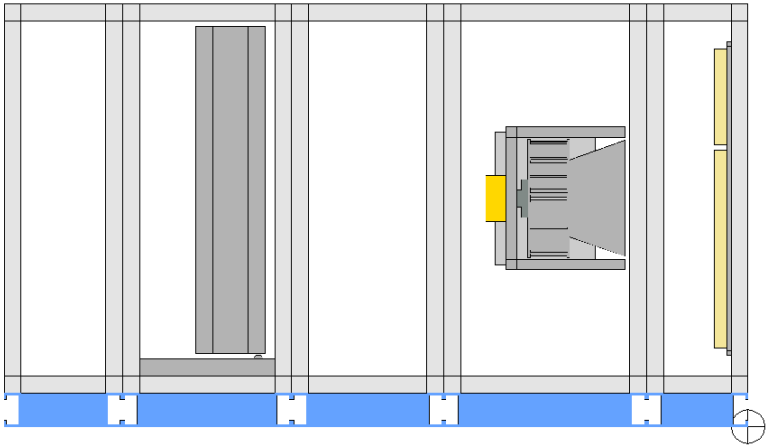


ELEVATION VIEW

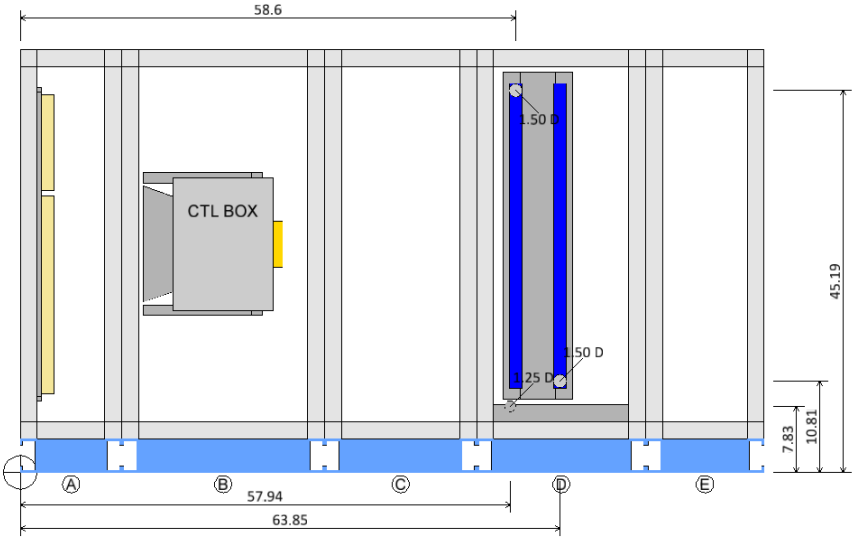
Component Key						
	Type	X	Y	Z	Wid	Hgt
(A)	Panel Filter Opening	0.00	2.00	6.00	58.00	42.00
(E)	Plenum Section Opening	76.00	2.00	50.00	58.00	10.00

Note: Dimensions are measured from the origin point.

Opening/Damper Connections		Unit Tag: Blum AHU-G			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

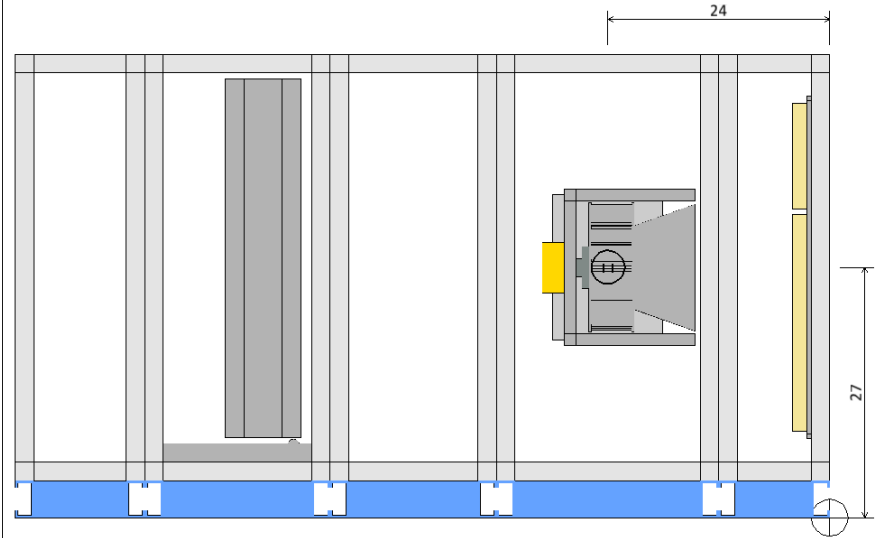
Coil and Drain Connections					
	Type	X	Y	Z	Diam
①	Chilled Water coil	57.94	-2.90	7.83	1.25
	Condensate drain conn:	63.85	-7.00	10.81	1.50
	Cold water inlet:				
	Cold water outlet:	58.60	-7.00	45.19	1.50

Note: Dimensions are measured from the origin point.

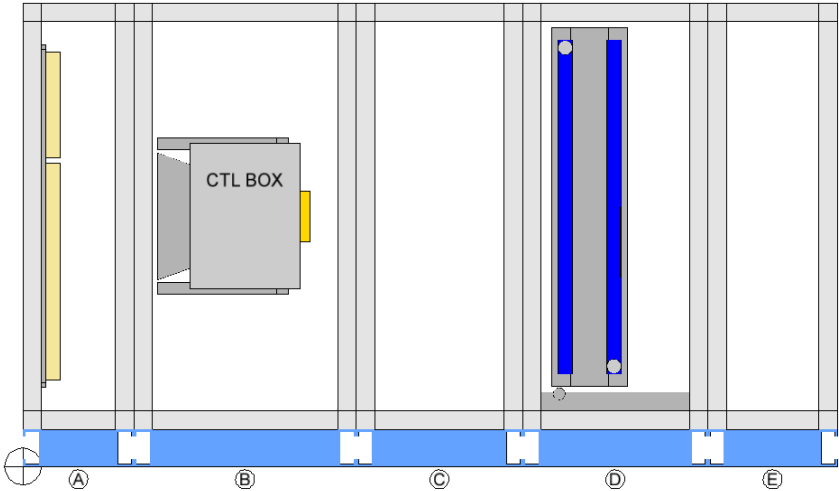
Coil and Drain Connections		Unit Tag: Blum AHU-G			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key						
	Type	X	Y	Z	Volts	Phase
Ⓑ	Supply Fan Fan	24.00	62.00	27.00	460	3

Note: Dimensions are measured from the origin point.

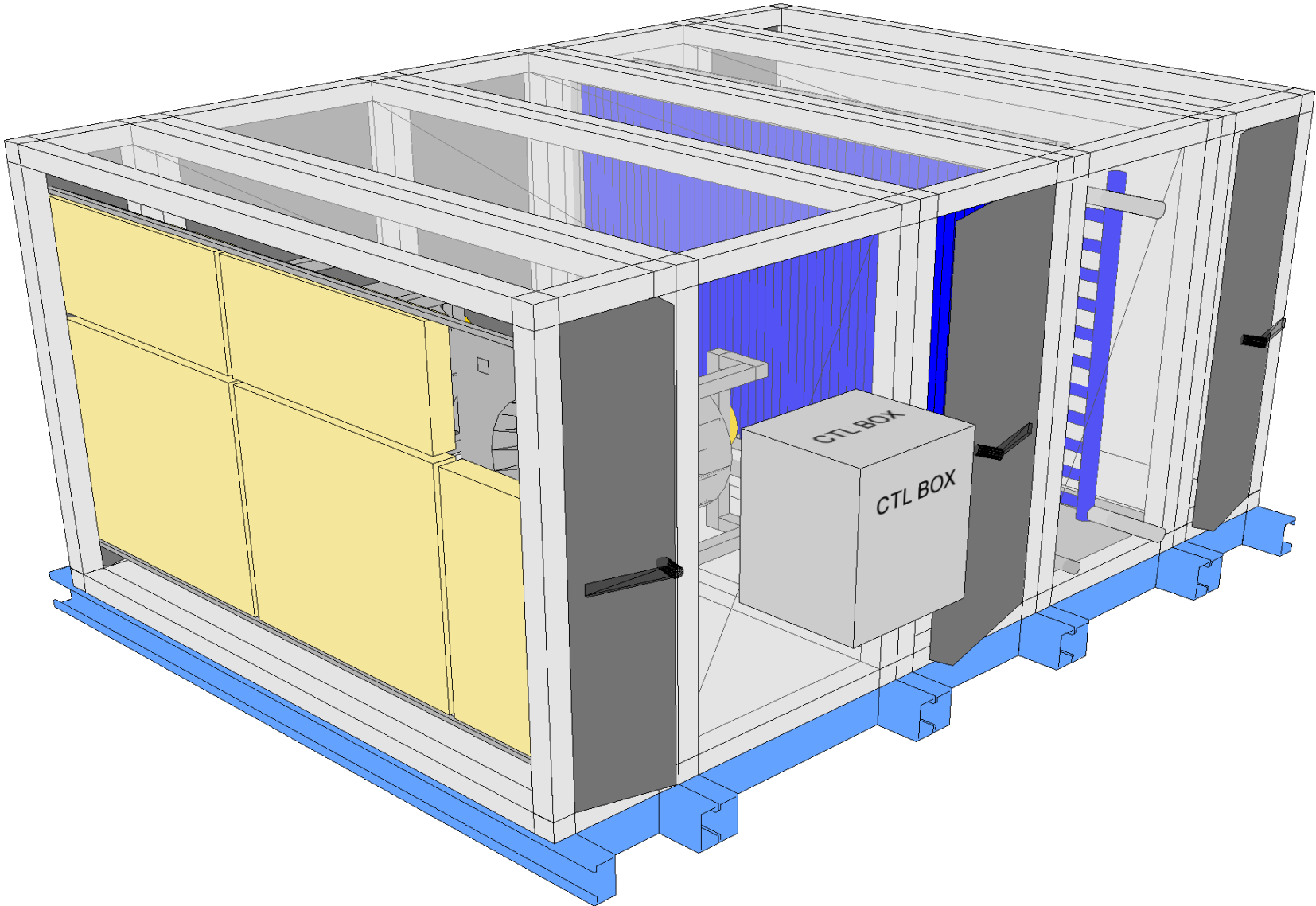


LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

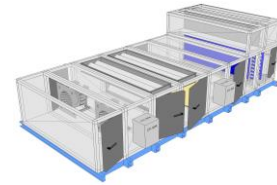
Electrical Connections		Unit Tag: Blum AHU-G			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GBCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



Product Drawing	Unit Tag: Blum AHU-G			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GBCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for Looney AHU-Athletics

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Looney AHU-Athletics	



Unit Overview												
Model Number	Supply						Return/Exhaust					
	Air Volume cfm	Static Pressure		External Dimensions			Air Volume cfm	Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in		External inWc	Total inWc	Height in	Width in	Length in
CAH013GMCM	6740	0.50	2.29	34*	86*	126	6740	0.38	0.44	34*	86*	72

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH013GMCM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Multizone	Drive (Handling) Location:	Right
Base:	4" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Plenum Section	Component: 1	Length: 22 in	Shipping Section: 1
Opening Location	Opening Size		Air Pressure Drop
Top	18.00" x 82.00"		0.03 inWc
Door			
Location	Width		Opening
Drive side	18 in		Outward

Technical Data Sheet for Looney AHU-Athletics

Return/Exhaust Fan Array			Component: 2		Length: 24 in		Shipping Section: 2		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
3370 cfm	0.38 inWc	0.44 inWc	0.00 inWc	0.82 BHP	2477 rpm	3230 rpm	59.6 %	15.0 A	6.8 A
Fan Data									
Fan Type		Blade Type / Class		Quantity of Fans	Wheel Diameter	Number of Blades	Discharge	Motor Location	
ECM / 1x2 : 2		Airfoil / N/A		2	13.98 in	5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply		Speed	Control Signal	Supplier	Lock Rotor Current*	Full Load Current*		
3.00 A	460/60/3 V/Hz/Phase		2870 rpm	0-10V	EBM-Papst	3.00 A	3.00 A		
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive			Vendor:		Daikin Applied		
Auxiliary Control:		Disconnect w/ motor starter			Voltage:		460 v		
Disconnect Type:		Fused			Height x Width x Depth:		15.75 in x 11.81 in x 10.76 in		
Mounting:		Drive Side			Enclosure:		NEMA 3R		
Door									
Location			Width			Opening			
Non-drive side			20 in			Outward			
Notes									
* after a unit label denotes the data for an individual fan.									

Economizer		Component: 3		Length: 56 in		Shipping Section: 3 & 4		
Portion	Damper				Blade Action	Rated CFM	Air Pressure Drop	Quantity
	Size (length x width)		Location	Type				
	Overall	Opening						
Outside Air	22 in x 82 in	18 in x 72 in	Top	UltraSeal Low Leak	Parallel	6740 cfm	0.04 inWc	1
Return Air	18 in x 82 in	14 in x 72 in	Internal	UltraSeal Low Leak	Parallel	6740 cfm	0.07 inWc	1
Exhaust Air	22 in x 82 in	18 in x 72 in	Top	UltraSeal Low Leak	Parallel	6740 cfm	0.04 inWc	1
Filter Data								
Type	Efficiency		Face Velocity		Face Area	Air Volume		Filter Loading
Pleated	MERV 8		507 ft/min		13.3 ft²	6740 cfm		Side
Air Pressure Drop				Number of Filters	Height	Width	Depth	
Clean Air	Mean Air	Dirty Air						
0.23 inWc	0.62 inWc	1.00 inWc	1	24 in	24 in	2 in		
			3	24 in	20 in	2 in		
Mixing Chamber Door								
Location			Width			Opening		
Drive side			26 in			Outward		
Return Chamber Door								
Location			Width			Opening		
Drive side			22 in			Outward		

Technical Data Sheet for Looney AHU-Athletics

Supply Fan Array		Component: 4			Length: 24 in		Shipping Section: 5		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
3370 cfm	0.50 inWc	2.29 inWc	0.00 inWc	2.03 BHP	2950 rpm	3230 rpm	62.7 %	15.0 A	9.2 A
Fan Data									
Fan Type		Blade Type / Class		Quantity of Fans	Wheel Diameter	Number of Blades	Discharge	Motor Location	
ECM / 1x2 : 2		Airfoil / N/A		2	13.98 in	5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply		Speed	Control Signal		Supplier	Lock Rotor Current*	Full Load Current*	
4.10 A	460/60/3 V/Hz/Phase		3230 rpm	0-10V		EBM-Papst	4.10 A	4.10 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive				Vendor:		Daikin Applied	
Auxiliary Control:		Disconnect w/ motor starter				Voltage:		460 v	
Disconnect Type:		Fused				Height x Width x Depth:		15.75 in x 11.81 in x 10.76 in	
Mounting:		Drive Side				Enclosure:		NEMA 3R	
Door									
Location			Width			Opening			
Non-drive side			20 in			Outward			
Notes									
* after a unit label denotes the data for an individual fan.									

Access Section	Component: 5	Length: 24 in	Shipping Section: 6
Air Pressure Drop			
0.00 inWc			
Door			
Location	Width		Opening
Drive side	20 in		Outward

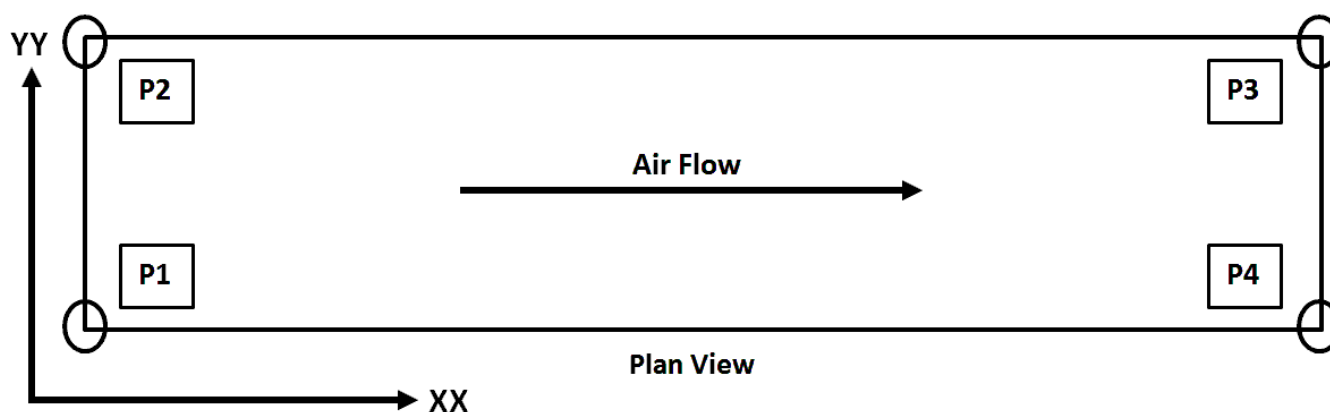
Technical Data Sheet for Looney AHU-Athletics

Two Deck Multizone		Component: 6		Length: 48 in		Shipping Section: 6 & 7 & 9 & 8			
Discharge Location		Number of Zones		Multizone APD*		Damper Type		Actuation	
Vertical / Vertical		0		1.49 inWc		None / None		-	
* Note: Includes coil, balance plate & diffuser									
Note : Cabinet height for multizone extends 20 inches above ‘External cabinet height’ referenced above.									
Cold Deck Coil									
Coil Model	Total Capacity	Sensible Capacity	Number of Coils	Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)		
5EJ1204C	242709 Btu/hr	169643 Btu/hr	1	4	12	0.625 in	1.50 in x 1.299 in		
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity
	Entering		Leaving						
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb					
6740 cfm	80.0 °F	67.0 °F	57.0 °F	55.5 °F	1.20 inWc	24 in	73 in	12.17 ft²	554 ft/min
Fluid			Sub-Cooled Refrigerant Liquid Temp.		Suction Vapor Superheat Temp. at Coil Outlet		Design Saturated Condensing Temp.		Total Refrigerant Weight
Suction Temp.		Refrigerant							
44.0 °F		R410a		110.0 °F		8.0 °F		110.0 °F	
Connection [Data Per Coil]							Min. Fin Surface Temp.	Min. Tube Wall Surface Temp.	
Type	Liquid [Qty - Size]	Suction [Qty - Size]	Location		Material				
OD Sweat	2-0.88 in	2-1.63 in		Drive side		Copper tube	32.0 °F		- °F
Material						Drain Pan		Drain Side	
Fin	Tube		Header		Case				
Aluminum .0075 in	Copper .020 in		Copper		Galv. steel		Stainless steel		Drive side
AHRI 410 Certification									
Coil is NOT certified by AHRI									
Future Hot Deck Coil(48 ins)									
Number of Coils				Number of Rows					
1				1					
Coil Air Pressure Drop		Finned Height		Finned Width		Face Area		Face Velocity	
- inWc		15 in		70 in		7.29 ft²		924 ft/min	
Connection Location				Connection Material					
Drive side				Carbon steel					
Coil Model			Drain Pan			Drain Pan Side			
Future Coil (Not Supplied)			-			-			
AHRI 410 Certification									
Coil is NOT certified by AHRI									
Door									
Location			Width			Opening			
Drive side			14 in			Outward			
Unit Sound Power (dB)									
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
Radiated:	64	57	75	55	47	42	46	51	
Unit Discharge:	64	65	92	71	68	67	72	67	
Unit Return:	64	57	76	66	57	57	61	61	

Technical Data Sheet for Looney AHU-Athletics

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	22	285	64	64	78	78	12	43	16
2	24	545	140	151	132	121	11	45	15
3	26	309	70	70	84	84	14	43	16
4	30	467	110	110	124	124	16	43	18
5	24	553	143	154	134	122	11	45	15
6	24	279	63	63	77	77	13	43	16
7	18	230	51	51	64	64	10	43	15
8	30	676	196	188	142	150	13	42	17
9	24	225	97	93	62	67	10	42	14
10	24	163	35	35	47	47	14	43	14
Entire Unit	198	3732	839	849	1073	1063	111	43	20



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Economizer Mixing/Outside Air	Filter	0.23 insWg
Economizer Mixing/Outside Air	Damper	0.07 insWg
Supply Fan	Cabinet	-
Access Section	Access Section	-
Access Section	Access Section	-
DX Coil	DX Coil	1.20 insWg
Access Section	Access Section	-
Hot Water Coil	Hot Water Coil	0.20 insWg
External Static	External Static	0.50 insWg
Total Supply Static		2.29 insWg

Exhaust Static Pressure Drop

Component	Option	Static Pressure Drop
Plenum Section	Plenum Section	0.03 insWg
Return Fan	Cabinet	-
Economizer Return/Exhaust	Damper	0.04 insWg
External Static	External Static	0.38 insWg
Total Return/Exhaust Static		0.44 insWg

Technical Data Sheet for Looney AHU-Athletics

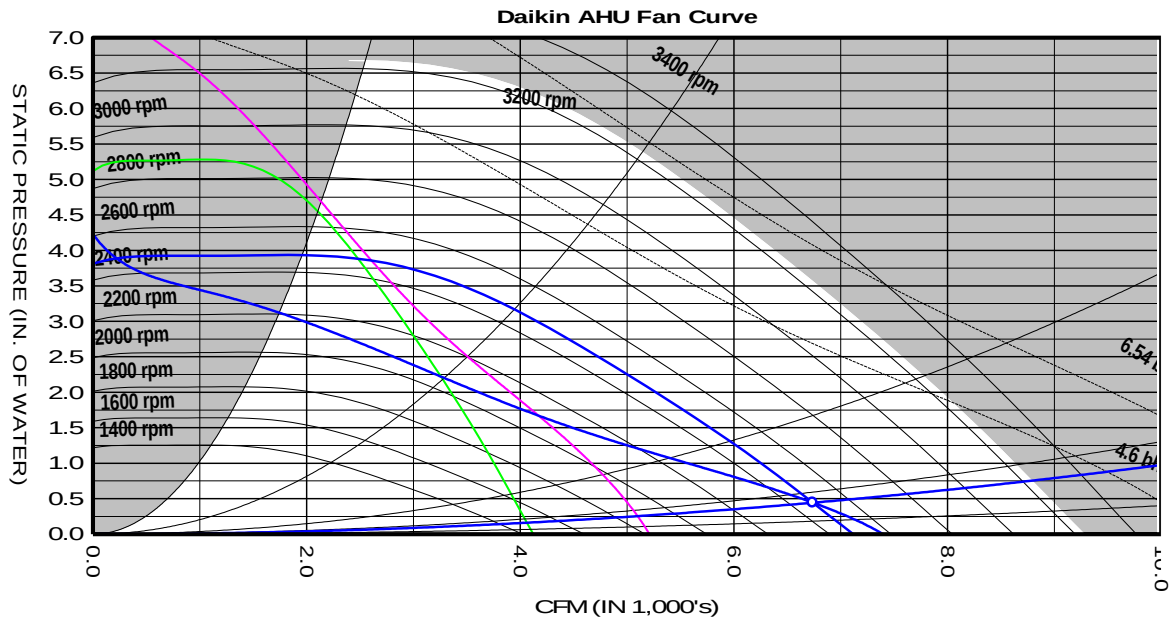
AHRI Certification

The air-handler is selected outside of the scope of AHRI Standard 430/431

Notes

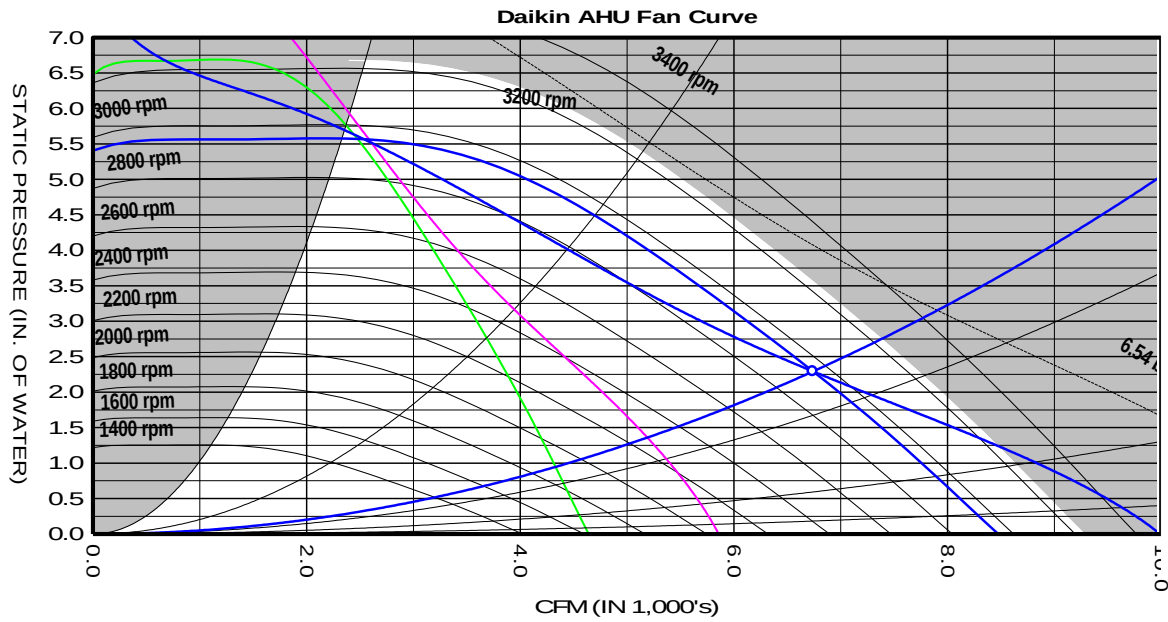
Standard
1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.

Fan Curve for Looney AHU-Athletics



EBM355-RPII 1x2 (2 Fans) Ret/Exh Fan at Standard Conditions					
Air volume	6740	cfm	Fan speed	2477	rpm
Total static	0.44	insWg	Max speed	3230	rpm
Brake horsepower	1.6	bhp	Efficiency	28.5	%
Redundancy	59.6	%	Motor Speed	2870	rpm
Unit tagging	Looney AHU-Athletics		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Fan Curve for Looney AHU-Athletics



EBM355-RPII 1x2 (2 Fans) Supply Fan at Standard Conditions					
Air volume	6740	cfm	Fan speed	2950	rpm
Total static	2.29	insWg	Max speed	3230	rpm
Brake horsepower	4.1	bhp	Efficiency	59.9	%
Redundancy	62.7	%	Motor Speed	3230	rpm
Unit tagging	Looney AHU-Athletics		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Drawing for Looney AHU-Athletics

Job Number:

G2H0RG

Job Name:

MWSU - AHU Replacements

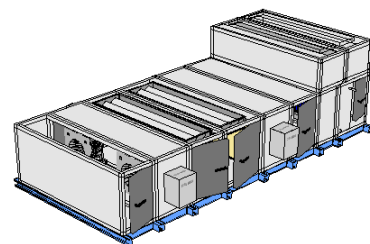
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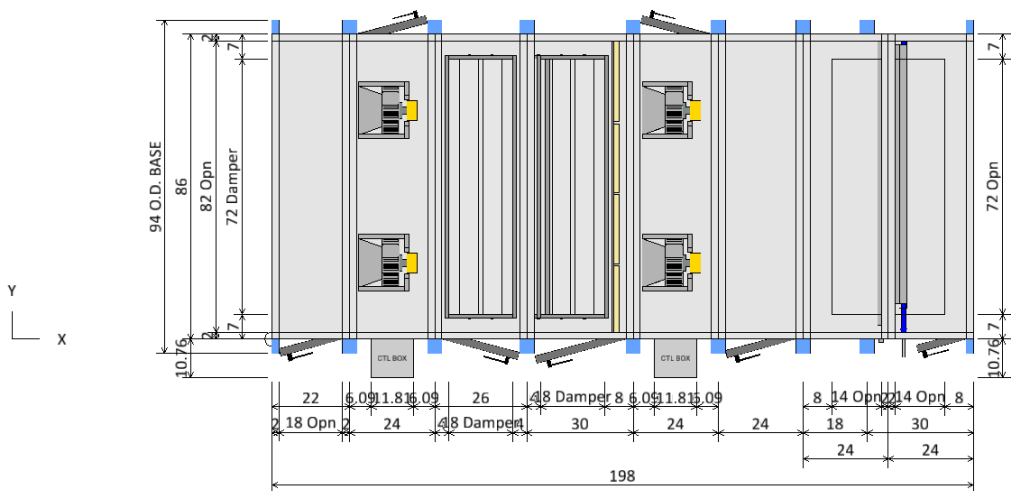
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9/27/2020

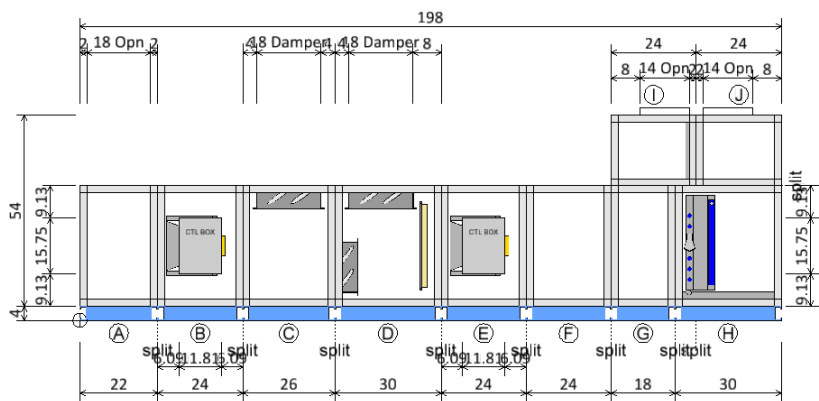
www.DaikinApplied.com



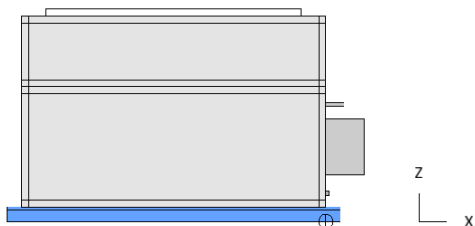
ISOMETRIC VIEW



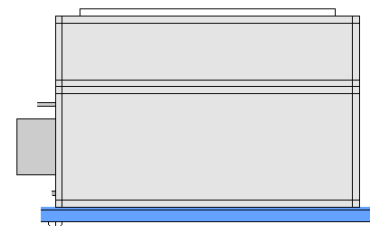
PLAN VIEW



ELEVATION VIEW



FRONT END VIEW



REAR END VIEW

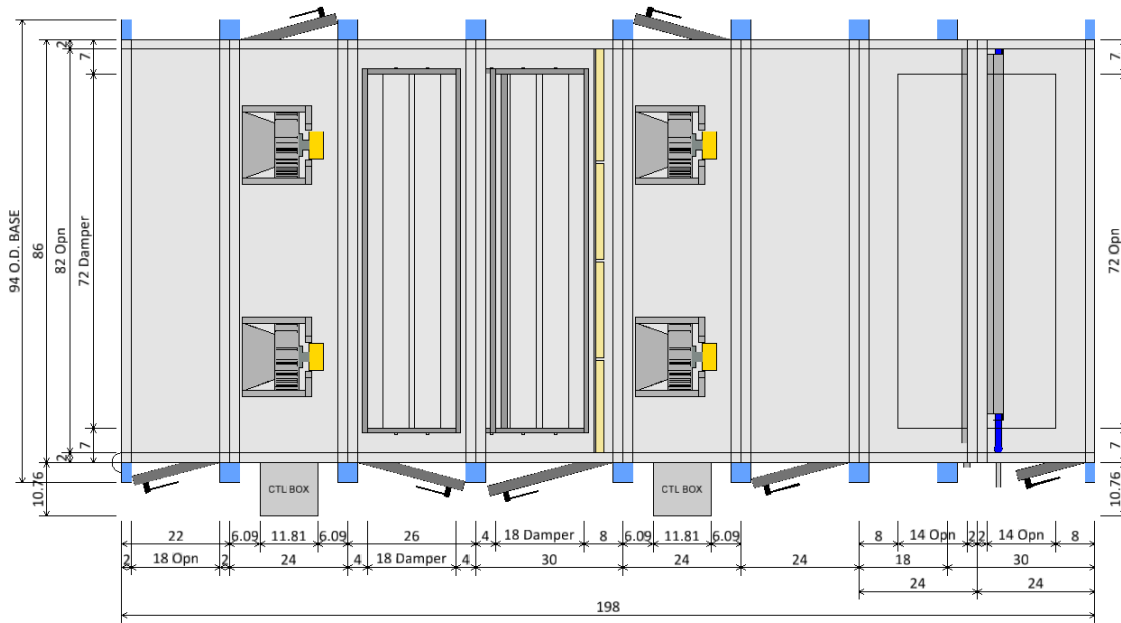
FRONT END VIEW		ELEVATION VIEW			REAR END VIEW	
Plan/Elevation		Unit Tag: Looney AHU-Athletics		Sales Office: Daikin TMI LLC (Kansas City)		 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements		Sales Engineer:		
Model: CAH013GMCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS Tolerance: +/-0.25" Dwg Units: in	

Job Number: G2HORC
Job Name: MWSU - AHU Replacements

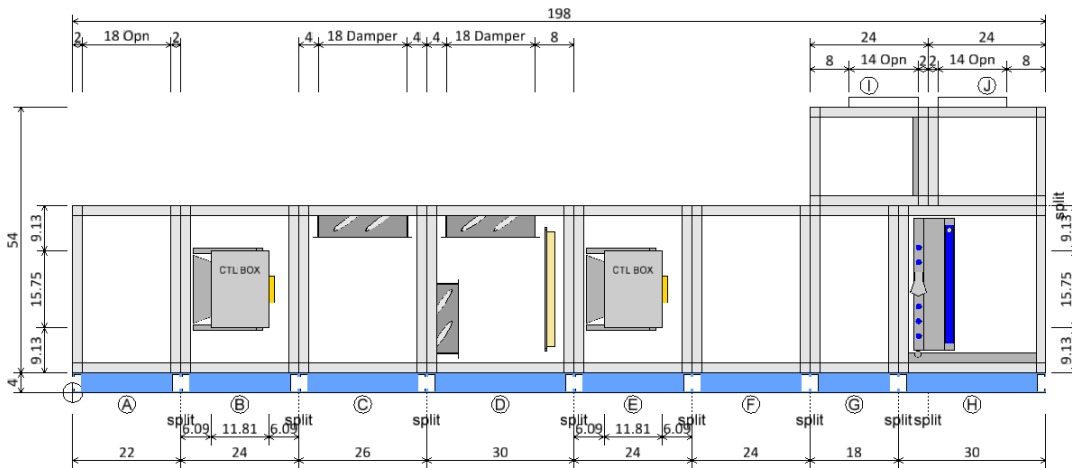
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Prepared Date:

9/27/2020
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PLAN VIEW



ELEVATION VIEW

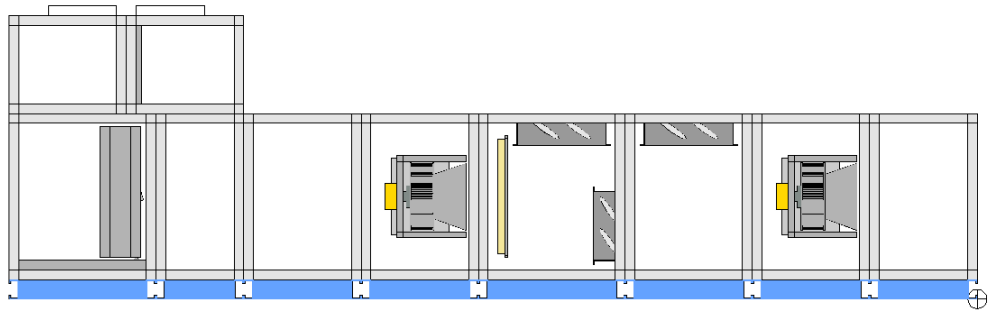
Component Key	
Plenum Section	
Opening Location:	Top
Opening Size:	18 ins x 82 ins
Right Door (WxH):	18 ins x 30 ins
Return Fan	
Fan Type:	Centrifugal - Plenum
Fan Size (Class):	355 (2)
Air Flowrate:	3370.0 cfm
T.S.P:	0.4 insWg
Motor Power:	2.3 HP
Control box door swing:	11.81 ins
Left Door (WxH):	20 ins x 30 ins
Economizer Return/Exhaust	
Right Door (WxH):	22 ins x 30 ins
Economizer Mixing/Outside Air	
Filter Type:	PerfectPleat HC M8
Right Door (WxH):	26 ins x 30 ins
Supply Fan	
Fan Type:	Centrifugal - Plenum
Fan Size (Class):	355 (2)
Air Flowrate:	3370.0 cfm
T.S.P:	2.3 insWg
Motor Power:	3.3 HP
Control box door swing:	11.81 ins
Left Door (WxH):	20 ins x 30 ins
Access Section	
Right Door (WxH):	20 ins x 30 ins
Access Section	
DX Coil	
Coil Model:	5EJ1204C
Total Capacity:	242709.0 Btu/hr
Right Door (WxH):	14 ins x 24 ins
Hot Water Coil	
Coil Model:	5WH0001C
Total Capacity:	0.0 Btu/hr
Access Section	

Plan/Elevation - No Ends	Unit Tag: Looney AHU-Athletics			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GMCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

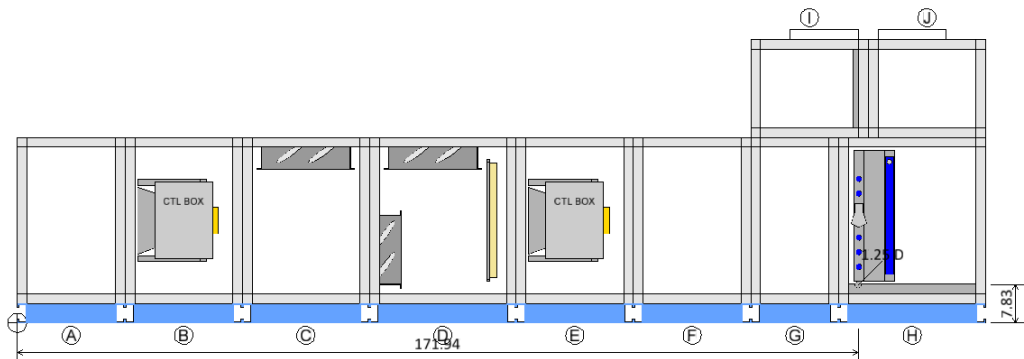
13600 Industrial Park Blvd, Minneapolis, MN 55441
www.DaikinApplied.com Software Version: 12.32

Coil and Drain Connections					
	Type	X	Y	Z	Diam
Ⓗ	DX Coil				
	Condensate drain conn:	171.94	-2.90	7.83	1.25
	DX suction:	TBD	TBD	TBD	2- 1.63
	DX liquid conn:	TBD	TBD	TBD	2- 0.88

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW

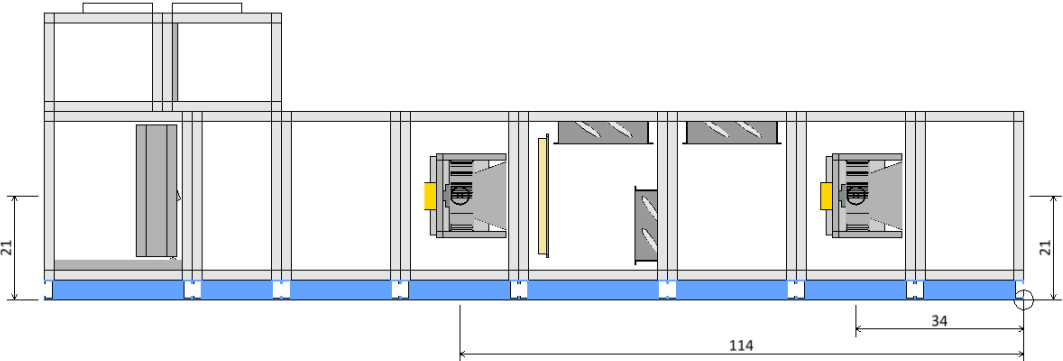


RIGHT ELEVATION VIEW

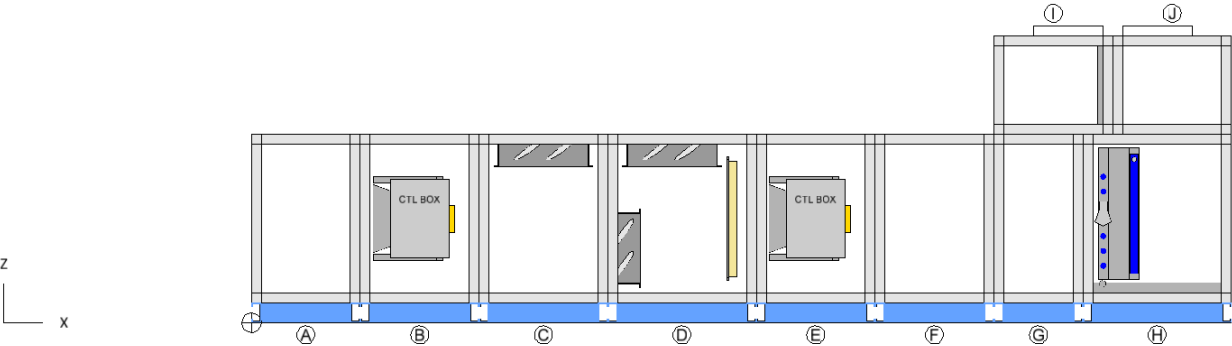
Coil and Drain Connections		Unit Tag: Looney AHU-Athletics			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GMCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key						
	Type	X	Y	Z	Volts	Phase
Ⓑ	Return Fan Fan	34.00	86.00	21.00	460	3
Ⓔ	Supply Fan Fan	114.00	86.00	21.00	460	3

Note: Dimensions are measured from the origin point.

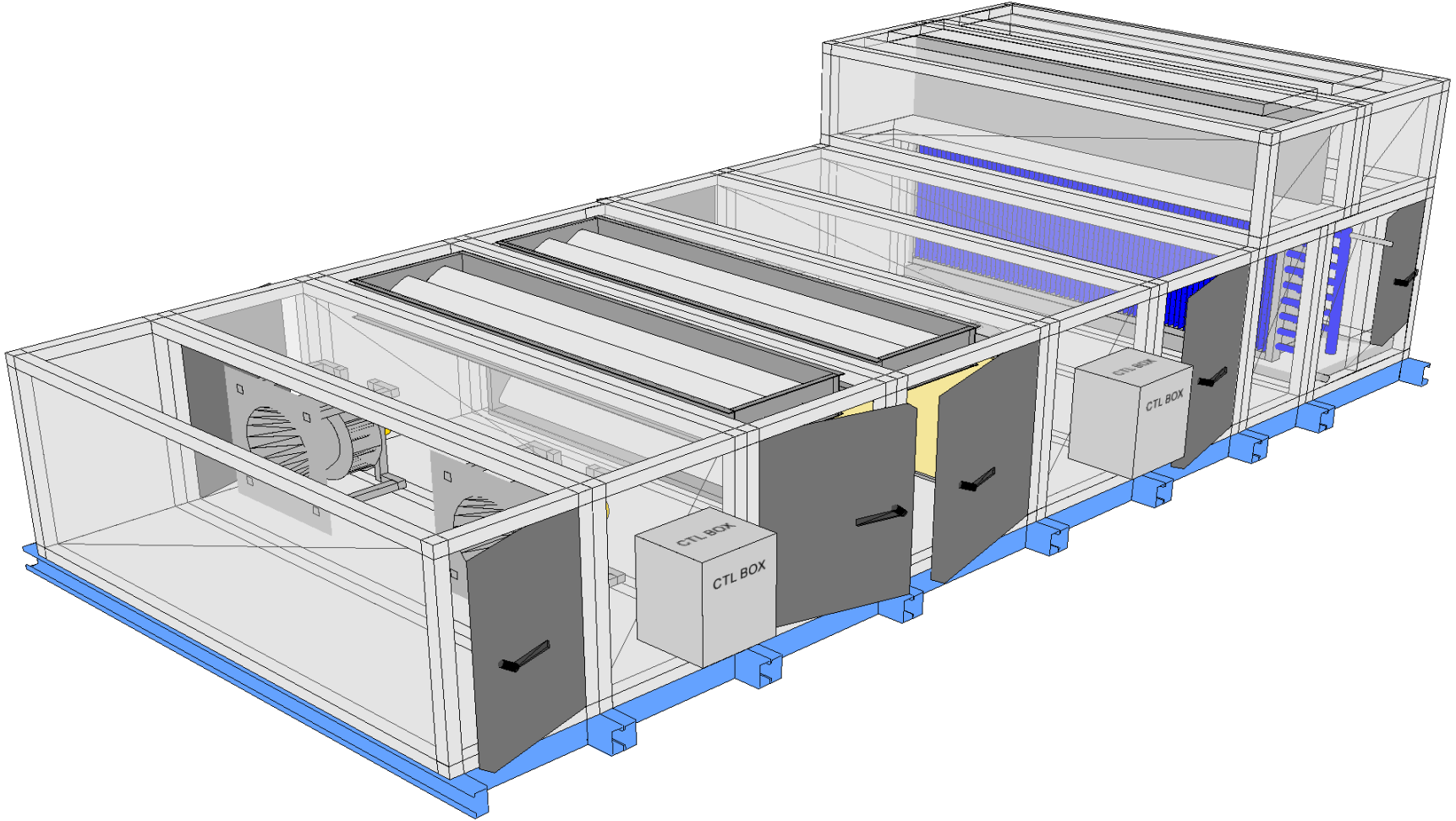


LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Electrical Connections	Unit Tag: Looney AHU-Athletics			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GMCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



Product Drawing	Unit Tag: Looney AHU-Athletics			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH013GMCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for Looney ACCU-Athletics

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	9/27/2020	
Submitted By	Jim Root	
Software Version	07.81	
Unit Tag	Looney ACCU-Athletics	



Unit Overview						
Model Number	Voltage V/Hz/Phase	Total Refrigeration Effect Btu/hr	Total Unit Power kW	EER AHRI Conditions	IEER AHRI Conditions	ASHRAE 90.1
RCS020D	460/60/3	247998	20.6	12.3	14.8	2013 Compliant

Unit		
Model Number:	RCS020D	
Type:	Applied	
Approval:	ETL - USA	
Refrigerant Type:	No. of Refrigerant Circuits	Refrigerant Weight
R410A	2	18.5 lb

Condensing Section				
Temperature		Altitude	Refrigeration Effect	Power
Suction	Ambient			
44.0 °F	95.0 °F	0 ft	247998 Btu/hr	20.6 kW

Compressor			
Quantity	Type	Capacity Control	Compressor Isolation
3	Scroll	4 steps	Resilient
Full Load Current:			
Compressor 1	19.2 A		
Compressor 2	8.6 A		
Compressor 4	8.6 A		

Condenser					
Type	Coil		Fans	Fan Motors	
	Number of Rows	Fins per Inch	Condenser Fan Type	Quantity	Full Load Current
Aluminum tube micro channel	1	18	Standard	2	2.10 A

Sound							
Casing Radiated Sound Power (db)							
63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
0	91	88	86	86	82	80	79

Technical Data Sheet for Looney ACCU-Athletics

Physical

Dimensions and Weight			
Length	Height	Width	Operating Weight
58.0 in	55.5 in	99.0 in	1891 lb
Connections			
Connection	Connection Sizes		
Suction Line Circuit	(2) 1.38 in.		
Liquid Line Circuit	(2) 0.62 in.		
Hot Gas Bypass Circuit	(2) 0.88 in.		

Electrical

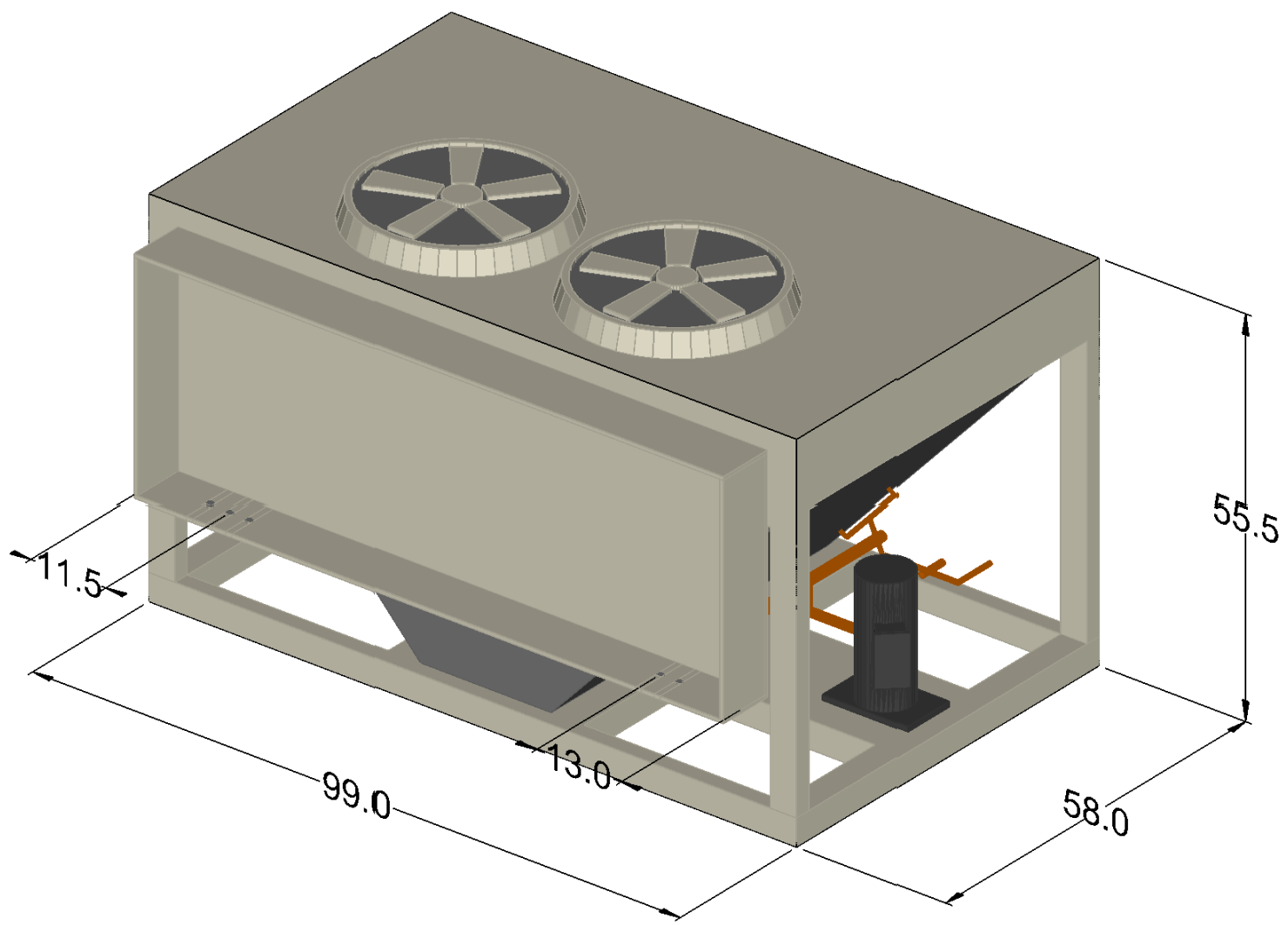
Voltage	MROPD	Field Power Connection	MCA	SCCR	Field Outlet Connection
460/60/3 V/Hz/Phase	60 A	Thru-the-door disconnect switch	46.0 A	10 kAIC	115V, 20 amp service
Note:	Use only copper supply wires with ampacity based on 75° C conductor rating. Connections to terminals must be made with copper lugs and copper wire.				

Options

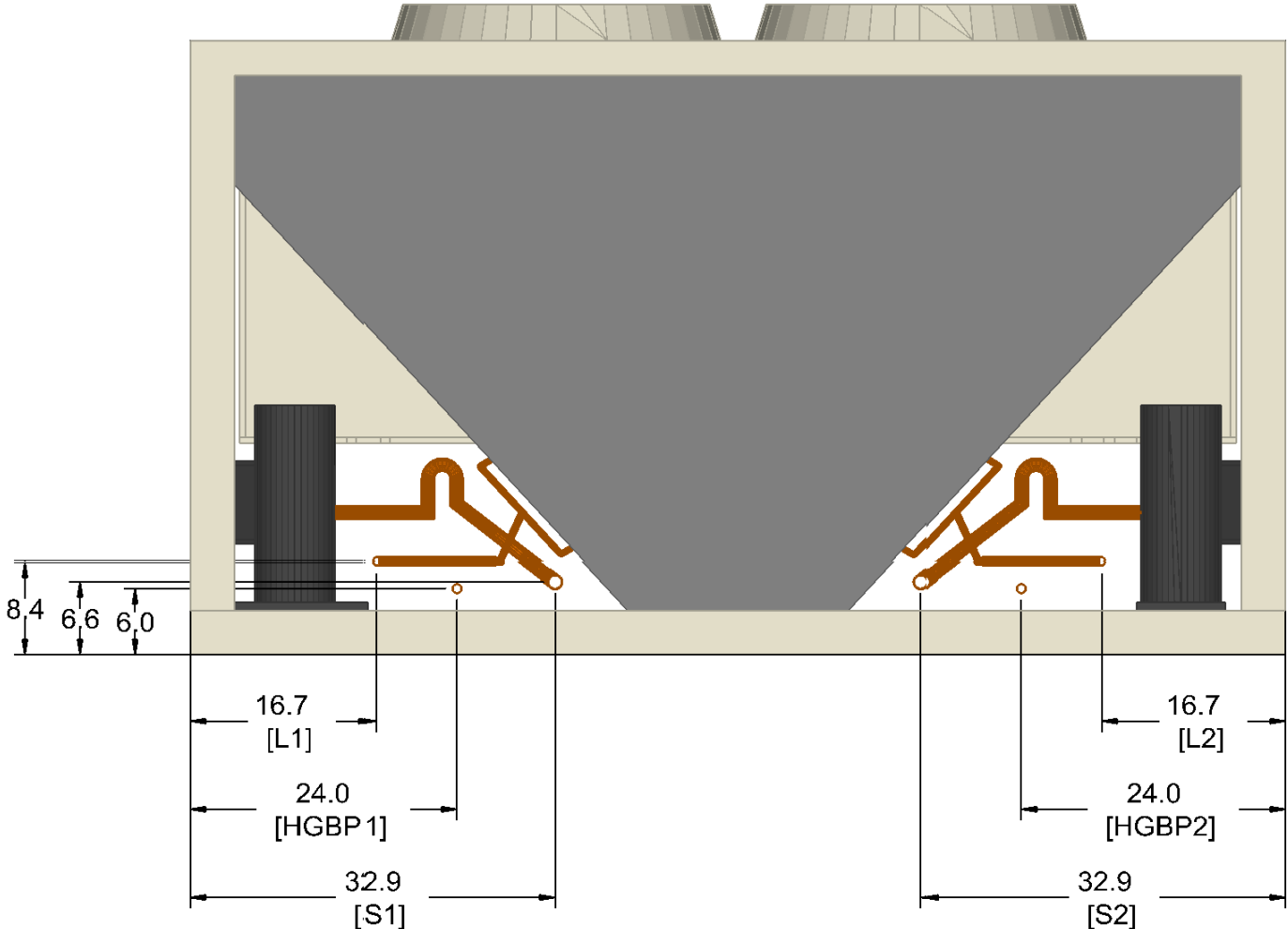
Unit	
Hot Gas Bypass:	HGBP Tee (See Accessory Tab)
Condenser Coil Options:	Condenser with built in hail protection
Electrical	
Field Connection	Thru-the-door disconnect switch
Wiring Options	Sealtite conduit
GFI Receptacle	Field powered
Unit Control	
Temperature Controls:	No temp control, 24 V transformer
Low Ambient Control:	Fantrol, Low ambient control to 45 degrees

Warranty

Parts:	Standard one year parts
Compressor:	Extended four year compressor, five year total



Product Drawing		Unit Tag: Looney ACCU-Athletics			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.81
Product:		Project Name: MWSU - AHU			Sales Engineer:			
Model: RCS020D		Sept. 27, 2020	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.								



ELEVATION VIEW - PIPE CONNECTION DETAILS

Product Drawing		Unit Tag: Looney ACCU-Athletics			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 07.81
Product:		Project Name: MWSU - AHU			Sales Engineer:			
Model: RCS020D		Sept. 27, 2020	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.								

Technical Data Sheet for Looney AHU-E

Job Information		Technical Data Sheet
Job Name	MWSU - AHU Replacements	
Date	September 27 2020	
Submitted By	JR	
Software Version	12.32	
Unit Tag	Looney AHU-E	



Unit Overview						
Model Number	Air Volume cfm	Supply				
		Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH008GMCM	4170	1.50	2.76	36*	54*	108

*Not including base rails, coil connectors, drain connectors and control boxes.

Unit			
Model Number:	CAH008GMCM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	24 gauge G90 Galvanized Steel (unpainted)		
Liner:	24 gauge Galvanized Steel (unless noted per section)		
Insulation:	R-13 Injected Foam		
Unit Configuration:	Multizone	Drive (Handling) Location:	Left
Base:	4" formed channel	Wall Thickness:	2 in
Altitude:	0 ft	Parts Warranty:	Standard One Year

Mixing Box		Component: 1		Length: 24 in		Shipping Section: 1			
Portion	Damper			Blade Action	Rated CFM	Air Pressure Drop	Quantity		
	Size (length x width)		Location					Type	
	Overall	Opening							
Outside Air	16 in x 50 in	12 in x 40 in	Top	UltraSeal Low Leak	Parallel	4170 cfm	0.12 insWg	1	
Return Air	16 in x 50 in	12 in x 40 in	Bottom	UltraSeal Low Leak	Parallel	4170 cfm		1	
Filter Data									
Type		Efficiency		Face Velocity		Air Volume		Filter Loading	
Pleated		MERV 8		549 ft/min		4170 cfm		Side	
Air Pressure Drop				Number of Filters		Height		Width	Depth
Clean Air	Mean Air	Dirty Air							
0.26 inWc		0.63 inWc		2		24 in		24 in	2 in
Door									
Location			Width			Opening			
Drive side			20 in			Outward			

Technical Data Sheet for Looney AHU-E

Supply Fan Array			Component: 2		Length: 30 in		Shipping Section: 2		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Redundancy(N-1)	Fan Circuit	
	External	Total	Cabinet	Horsepower*	Operating	Maximum		MOP	MCA
4170 cfm	1.50 inWc	2.76 inWc	0.00 inWc	2.66 BHP	1978 rpm	2600 rpm	0.0 %	15.0 A	5.6 A
Fan Data									
Fan Type		Blade Type / Class	Quantity of Fans	Wheel Diameter		Number of Blades	Discharge	Motor Location	
ECM / 1x1 : 1		Airfoil / N/A	1	17.71 in		5	Axial	Behind Fan	
Motor Data									
Power*	Electrical Supply		Speed	Control Signal		Supplier	Lock Rotor Current*	Full Load Current*	
4.50 A	460/60/3 V/Hz/Phase		2140 rpm	0-10V		EBM-Papst	4.50 A	4.50 A	
Fan Options									
Isolator Type:		Rigid							
VFD/Starter/Disconnect Data									
Selection Type:		Integrated Drive			Vendor:		Daikin Applied		
Auxiliary Control:		Disconnect w/ motor starter			Voltage:		460 v		
Disconnect Type:		Fused			Height x Width x Depth:		15.75 in x 11.81 in x 10.76 in		
Mounting:		Drive Side			Enclosure:		NEMA 3R		
Panel									
Location			Width			Opening			
Removable panels			- in			Outward			
Notes									
* after a unit label denotes the data for an individual fan.									

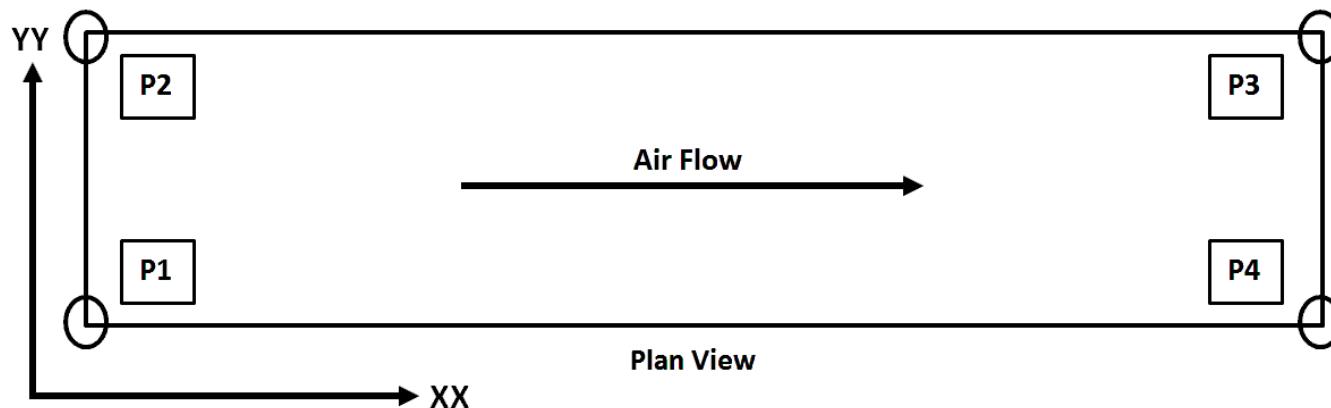
Technical Data Sheet for Looney AHU-E

Two Deck Multizone		Component: 3		Length: 54 in		Shipping Section: 2 & 3 & 5 & 4			
Discharge Location		Number of Zones		Multizone APD*		Damper Type		Actuation	
Vertical / Vertical		0		0.88 inWc		None / None		-	
* Note: Includes coil, balance plate & diffuser									
Note : Cabinet height for multizone extends 20 inches above ‘External cabinet height’ referenced above.									
Cold Deck Coil									
Coil Model	Total Capacity	Sensible Capacity	Number of Coils	Number of Rows	Fins per Inch	Tube Diameter	Tube Spacing (Face x Row)		
5WH1006B	160984 Btu/hr	113020 Btu/hr	1	6	10	0.625 in	1.50 in x 1.299 in		
Air Volume	Air Temperature				Coil Air Pressure Drop	Finned Height	Finned Length	Face Area	Face Velocity
	Entering		Leaving						
	Dry Bulb	Wet Bulb	Dry Bulb	Wet Bulb					
4170 cfm	80.0 °F	67.0 °F	55.2 °F	54.5 °F	0.84 inWc	27 in	41 in	7.69 ft²	542 ft/min
Water		Flow Rate		Pressure Drop	Velocity	Volume		Weight	
Entering	Leaving								
45.0 °F	55.1 °F	32.00 gpm		10.60 ftHd	3.80 ft/s	6.0 gal		58.00 lb	
Connection [Data Per Coil]					Min. Fin Surface Temp.	Min. Tube Wall Surface Temp.	Fouling Factor		
Type	Size	Location	Material						
Threaded	1.50 in	Drive side	Carbon steel						
Material						Drain Pan		Drain Side	
Fin	Tube	Header	Case						
Aluminum .0075 in	Copper .020 in	Copper	Galv. steel	Stainless steel	Drive side				
AHRI 410 Certification									
	Certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at www.ahridirectory.org								
Future Hot Deck Coil(54 ins)									
Number of Coils				Number of Rows					
1				1					
Coil Air Pressure Drop		Finned Height		Finned Width		Face Area		Face Velocity	
- inWc		15 in		38 in		3.96 ft²		1053 ft/min	
Connection Location				Connection Material					
Drive side				Carbon steel					
Coil Model		Drain Pan				Drain Pan Side			
Future Coil (Not Supplied)		-				-			
AHRI 410 Certification									
Coil is NOT certified by AHRI									
Door									
Location		Width				Opening			
Drive side		20 in				Outward			
Unit Sound Power (dB)									
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	
Radiated:	71	78	68	63	68	53	46	51	
Unit Discharge:	81	88	86	84	90	81	78	72	
Unit Return:	75	81	76	73	71	69	66	61	

Technical Data Sheet for Looney AHU-E

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	24	288	67	67	77	77	13	27	19
2	30	376	92	102	96	86	15	29	17
3	18	160	35	35	45	45	10	27	17
4	36	570	164	176	121	109	14	28	18
5	24	160	61	66	47	42	10	28	14
6	30	132	29	29	37	37	17	27	14
Entire Unit	108	1686	375	403	495	468	60	28	24



NOTE: Special components aren't included in the corner weights and center of gravity data.

Supply Static Pressure Drop

Component	Option	Static Pressure Drop
Mixing Box	Filter	0.26 insWg
Mixing Box	Mixing Box	0.12 insWg
Supply Fan	Cabinet	-
Access Section	Access Section	-
Chilled Water coil	Chilled Water coil	0.84 insWg
Access Section	Access Section	-
Hot Water Coil	Hot Water Coil	0.20 insWg
External Static	External Static	1.50 insWg
Total Supply Static		2.76 insWg

AHRI Certification

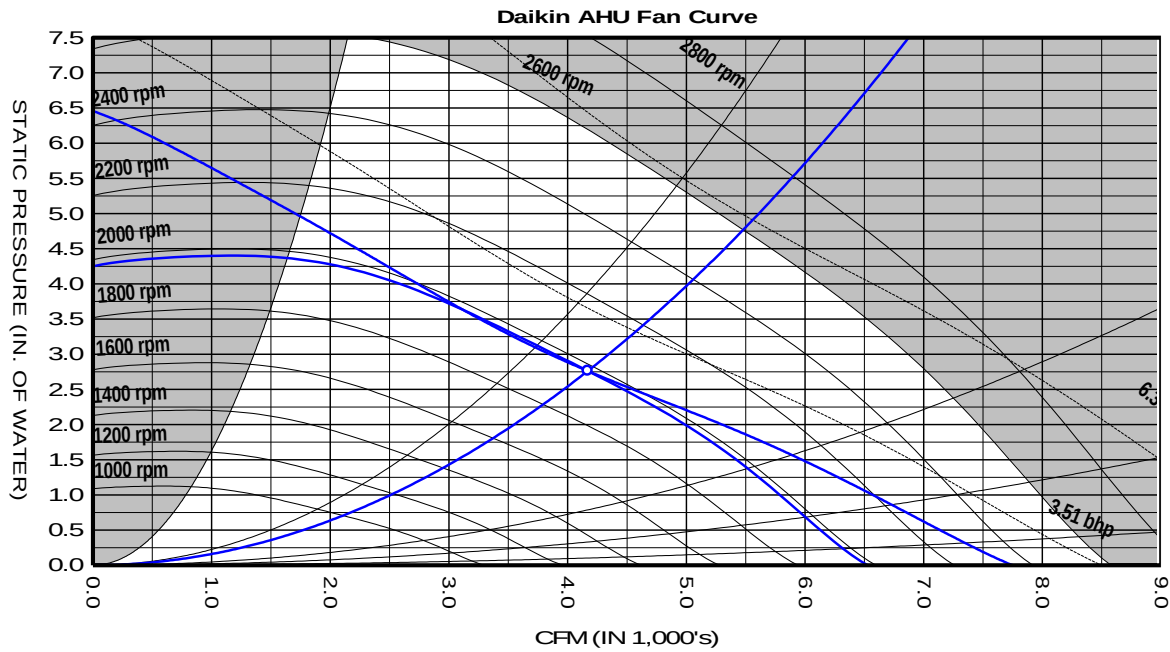
The air-handler is selected outside of the scope of AHRI Standard 430/431

Notes

Standard

1. As a standalone component, unit meets or exceeds requirements of ASHRAE 90.1 - 2007. The approving authority is responsible for compliance of multi - component building systems.

Fan Curve for Looney AHU-E



EBM450-RPII 1x1 (1 Fans) Supply Fan at Standard Conditions					
Air volume	4170	cfm	Fan speed	1978	rpm
Total static	2.76	insWg	Max speed	2600	rpm
Brake horsepower	2.7	bhp	Efficiency	68.1	%
Redundancy	0.0	%	Motor Speed	2140	rpm
Unit tagging	Looney AHU-E		Date	September-27-2020	
Job name	MWSU - AHU Replacements		Time	15:10	

Drawing for Looney AHU-E

Job Number:

G2H0RG

Page

Job Name:

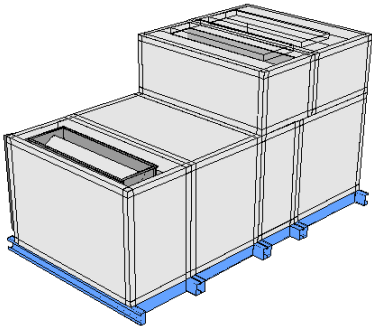
MWSU - AHU Replacements

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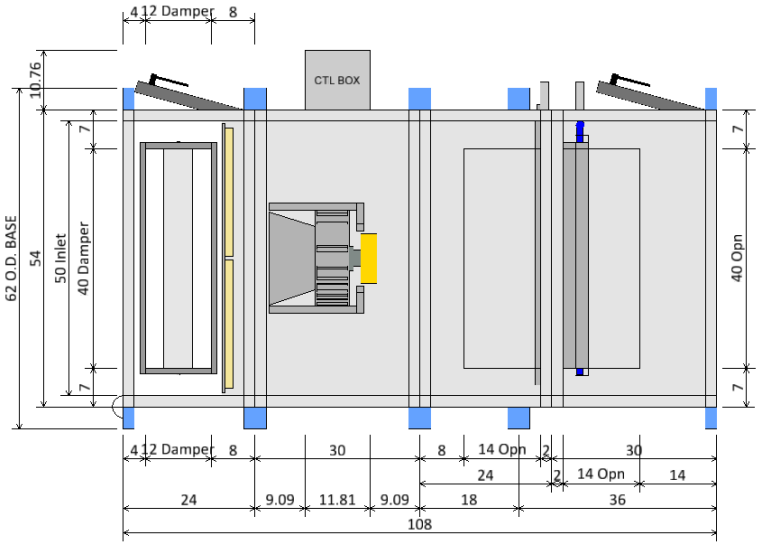
Prepared Date:

9/27/2020

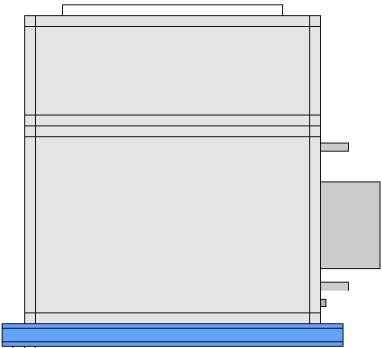
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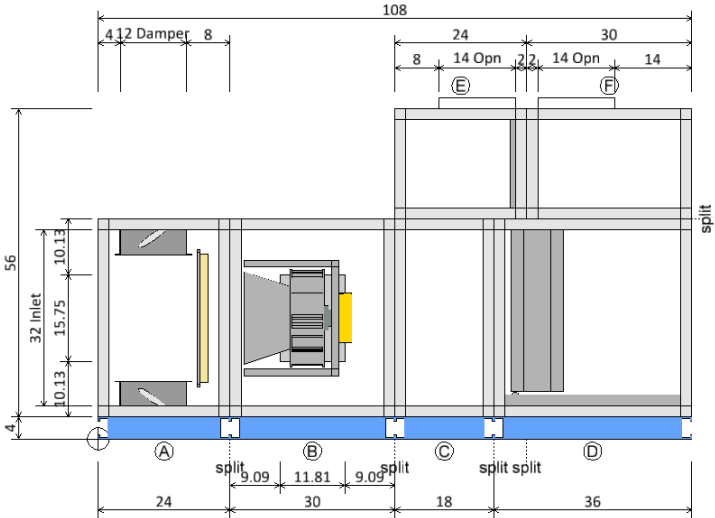
ISOMETRIC VIEW



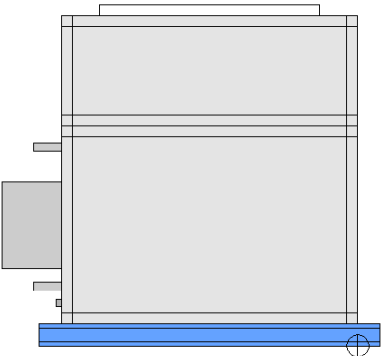
PLAN VIEW



REAR END VIEW



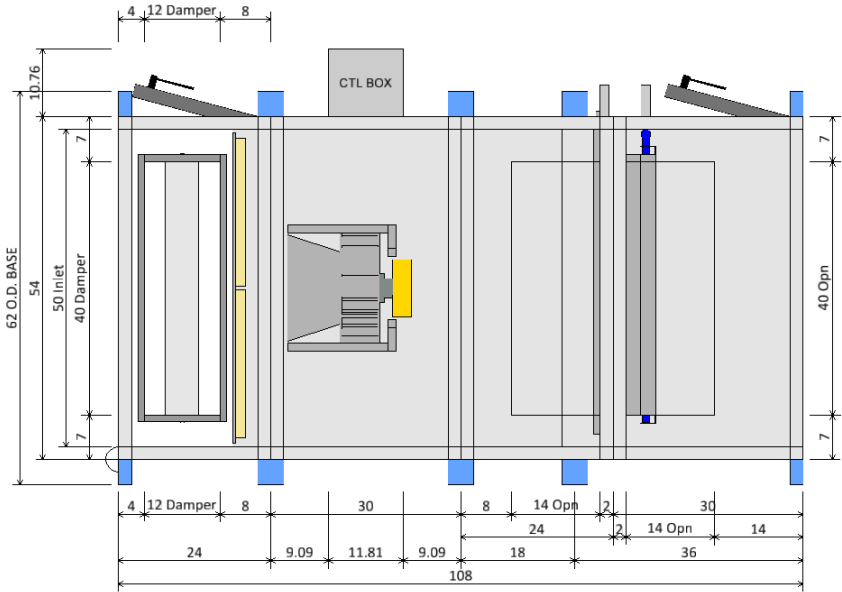
ELEVATION VIEW



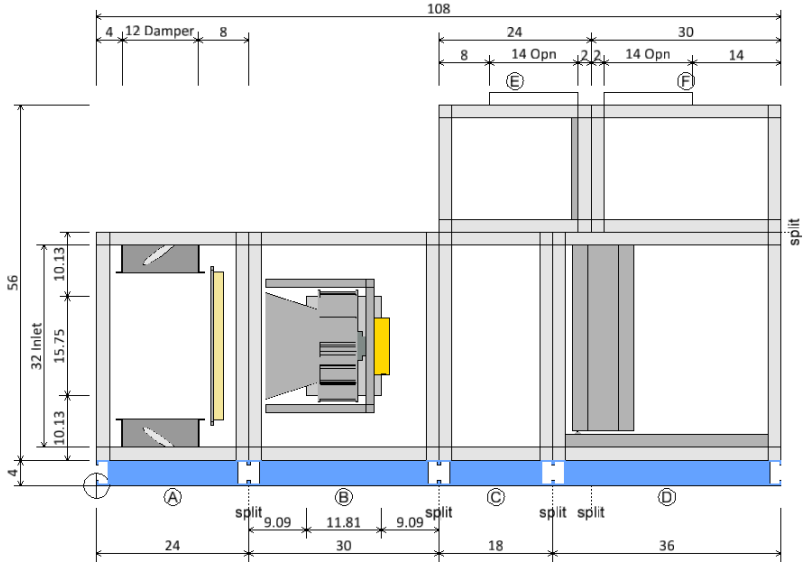
FRONT END VIEW

Plan/Elevation	Unit Tag: Looney AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH008GMCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key	
(A) Mixing Box	
Filter Type:	PerfectPleat HC M8
Left Door (WxH):	20 ins x 32 ins
Supply Fan	
Fan Type:	Centrifugal - Plenum
Fan Size (Class):	450 (2)
(B) Air Flowrate:	4170.0 cfm
T.S.P.:	2.8 insWg
Motor Power:	3.5 HP
Control box door swing:	11.81 ins
(C) Access Section	
Chilled Water coil	
(D) Coil Model:	5WH1006B
Total Capacity:	160984.0 Btu/hr
Left Door (WxH):	20 ins x 26 ins
Hot Water Coil	
(E) Coil Model:	5WH0001C
Total Capacity:	148296.0 Btu/hr
(F) Access Section	

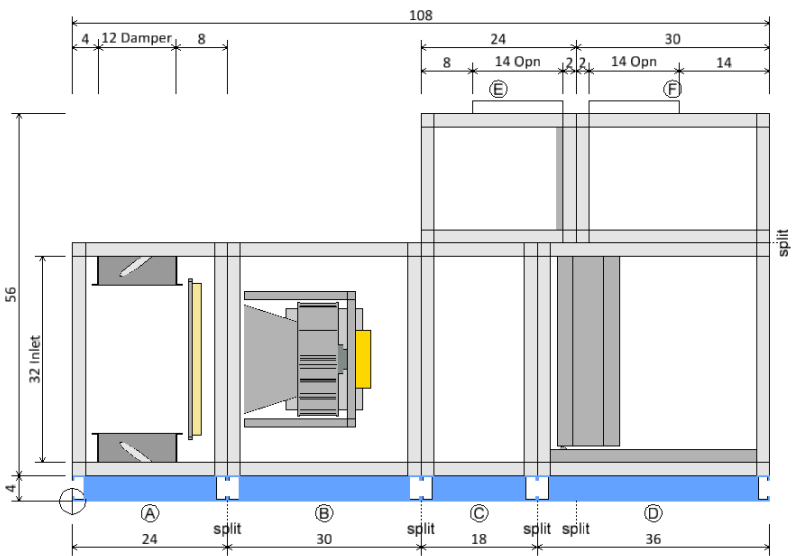
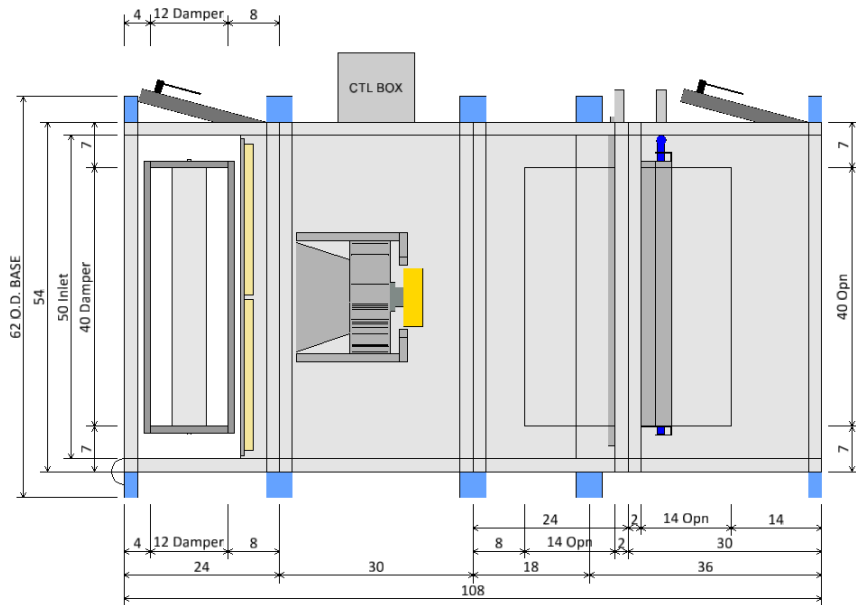


PLAN VIEW



ELEVATION VIEW

Plan/Elevation - No Ends		Unit Tag: Looney AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH008GMCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



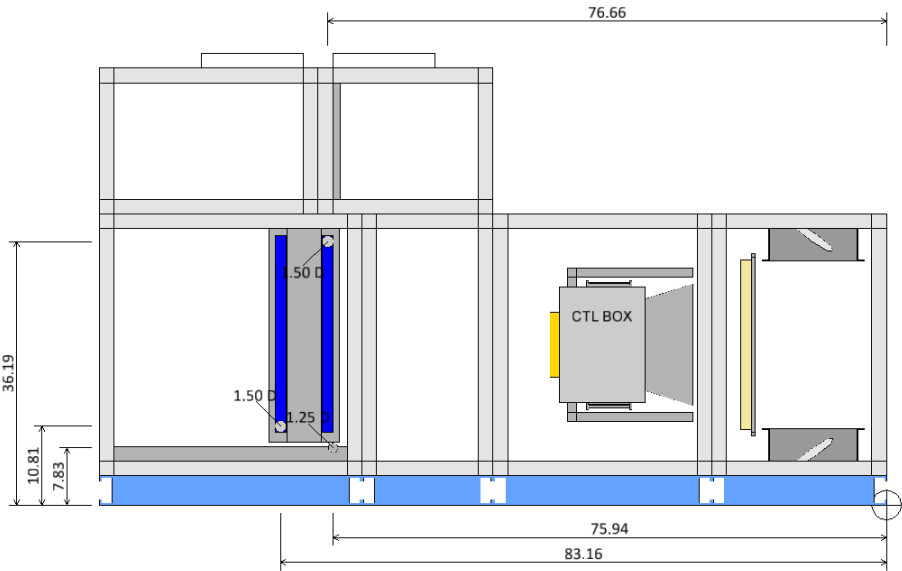
Component Key						
Type	X	Y	Z	Wid	Hgt	
Ⓐ Mixing Box						
Ⓐ Outside air damper	4.00	7.00	40.00	40.00	12.00	
Ⓐ Return air damper	4.00	7.00	4.00	40.00	12.00	
Ⓔ Hot Water Coil						
Ⓔ MZ hot deck output	62.00	2.00	60.00	50.00	14.00	

Note: Dimensions are measured from the origin point.

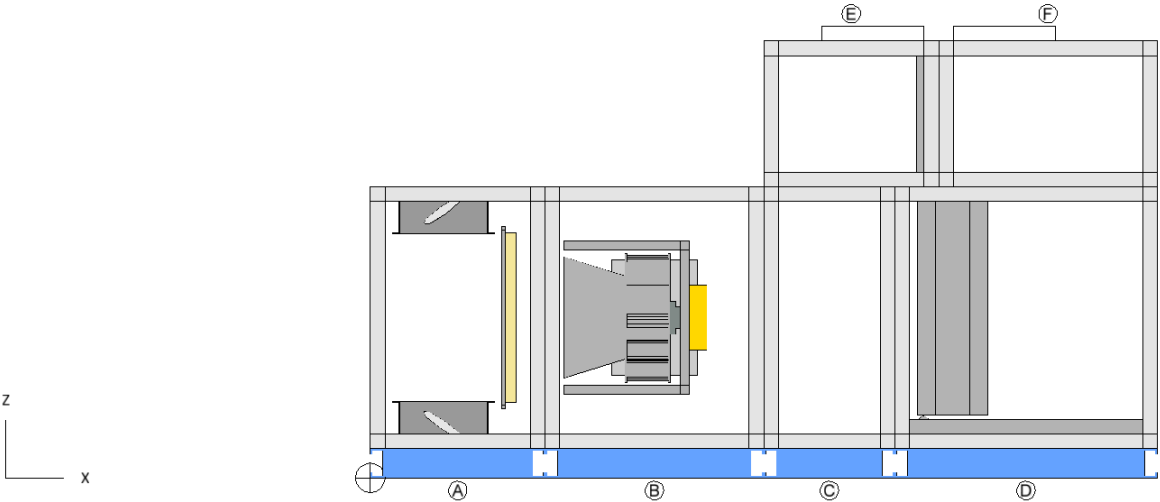
Opening/Damper Connections		Unit Tag: Looney AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH008GMCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Coil and Drain Connections					
	Type	X	Y	Z	Diam
D	Chilled Water coil	75.94	56.90	7.83	1.25
	Condensate drain conn:	83.16	57.00	10.81	1.50
	Cold water inlet:	76.66	57.00	36.19	1.50

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW

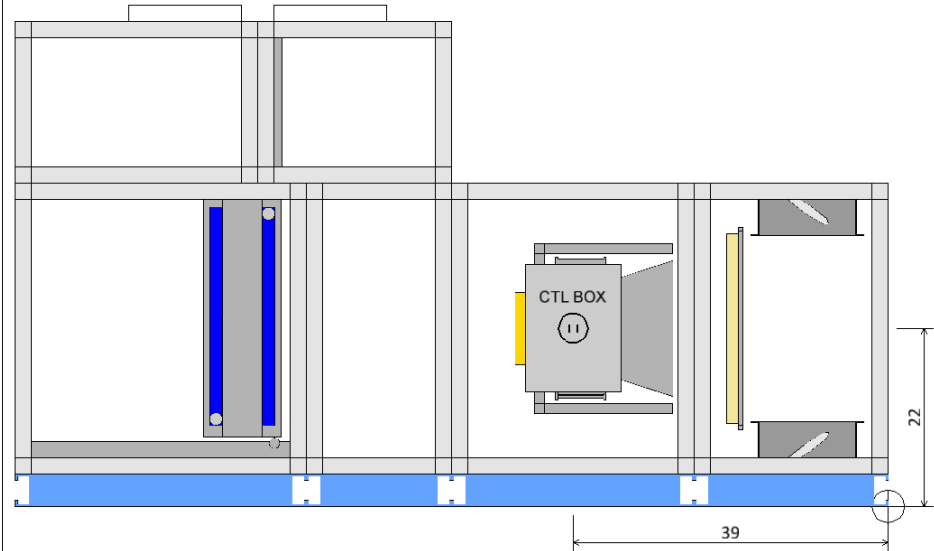


RIGHT ELEVATION VIEW

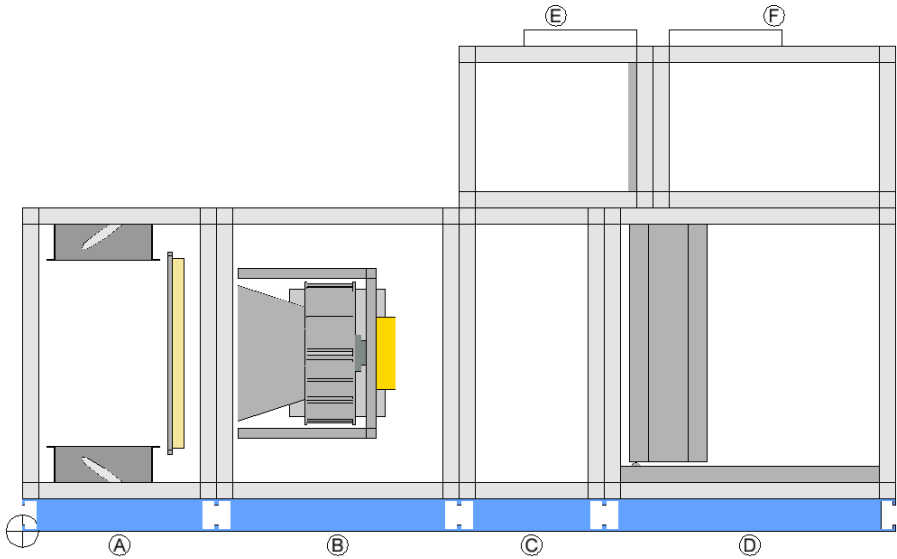
Coil and Drain Connections		Unit Tag: Looney AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH008GMCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key						
	Type	X	Y	Z	Volts	Phase
Ⓑ	Supply Fan Fan	39.00	54.00	22.00	460	3

Note: Dimensions are measured from the origin point.

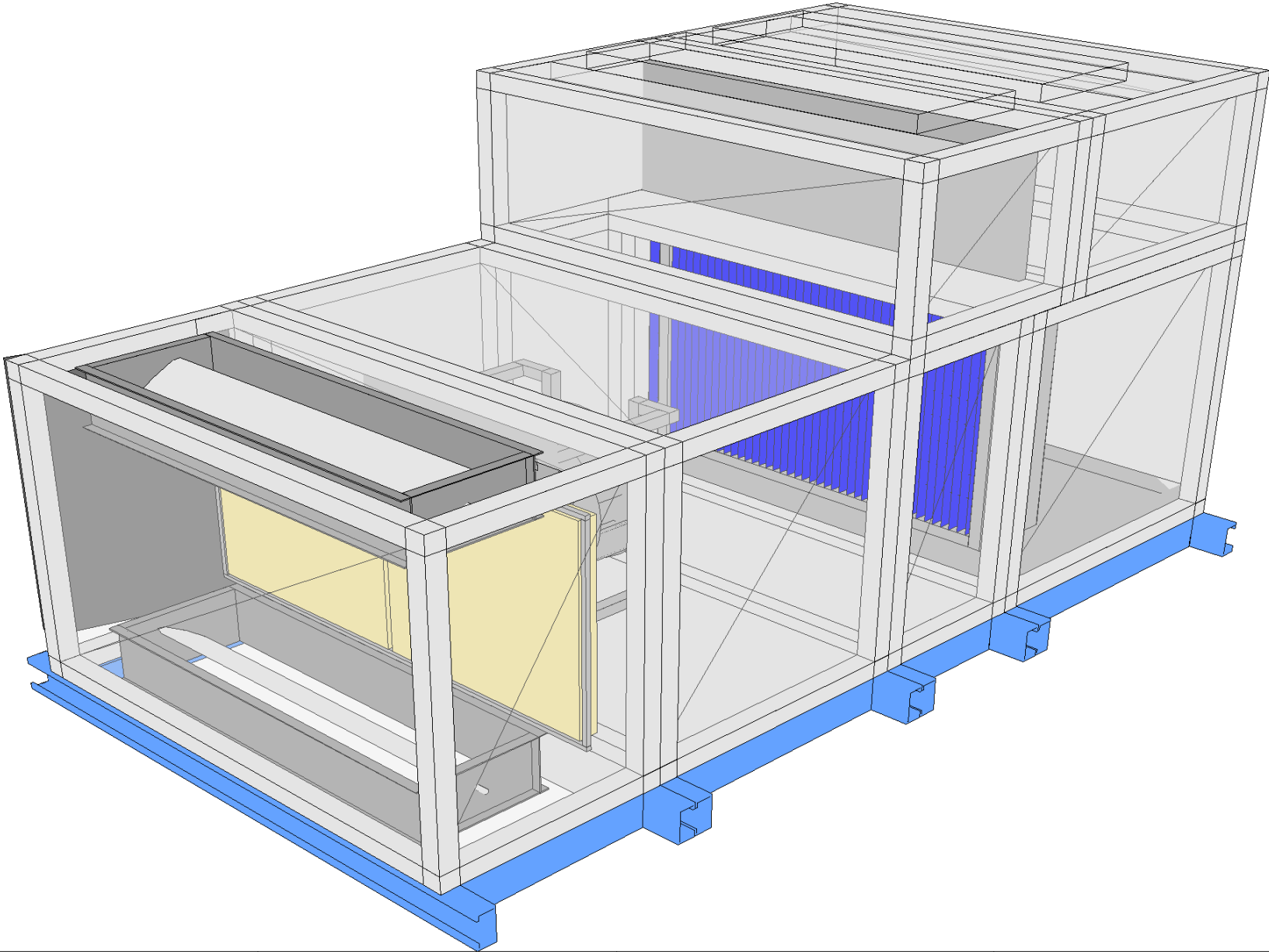


LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Electrical Connections	Unit Tag: Looney AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler	Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH008GMCM	Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



Product Drawing		Unit Tag: Looney AHU-E			Sales Office: Daikin TMI LLC (Kansas City)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 12.32
Product: Vision Air Handler		Project Name: MWSU - AHU Replacements			Sales Engineer:			
Model: CAH008GMCM		Sept. 27, 2020	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Drawing for Looney AHU-E

Job Number:

G2H0RG

Page

Job Name:

MWSU - AHU Replacements

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Prepared Date:

9/27/2020

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Submittal Data Sheet

10 Ton AC, Two-Stage, 11.2 EER, 13.5 IEER, 460V 60Hz
DX11TA1204

STANDARD FEATURES

- Two-Stage energy-efficient compressor
- Quiet operating top discharge
- High-efficiency copper tube / aluminum fin coil
- Brass liquid and suction service valves
- High and Low pressure switches
- Factory installed filter drier
- Complies with ASHRAE 90.1-2016
- AHRI Certified
- ETL Listed

CABINET FEATURES

- Innovative sound control top design
- Steel louver coil guard protects the coil from damage and adds strength to unit
- Bottom pan rails elevate unit above slab
- Heavy-gauge galvanized steel cabinet
- Attractive Nickel Gray powder paint finish
- When properly anchored, meets the 2010 Florida Building Code unit integrity requirements for hurricane-type winds (Anchor bracket kits available)





Submittal Data Sheet
10 Ton AC, Two-Stage, 11.2 EER, 13.5 IEER, 460V 60Hz
DX11TA1204

PERFORMANCE			
* VALUES SHOWN ARE FOR AHRI RATED HIGH SALES VOLUME TESTED COMBINATION (HSVTC)			
Outdoor Unit Model No.	DX11TA1204	Outdoor Unit Name:	10 Ton AC, Two-Stage, 11.2 EER, 13.5 IEER, 460V 60Hz
Rated Cooling Conditions:	Indoor ("F DB/WB): 80 / 67 Ambient ("F DB/WB): 95 / 75	Rated Heating Conditions:	Indoor ("F DB/WB): / Ambient ("F DB/WB): /
Max/Min Cooling Capacity (Btu/hr):		Max/Min Heating Capacity (Btu/hr):	
* Rated Cooling Capacity (Btu/hr):	120,000	* Rated Heating Capacity (Btu/hr):	
* EER:	11.20	* Heating COP:	
* SEER:		* HSPF:	

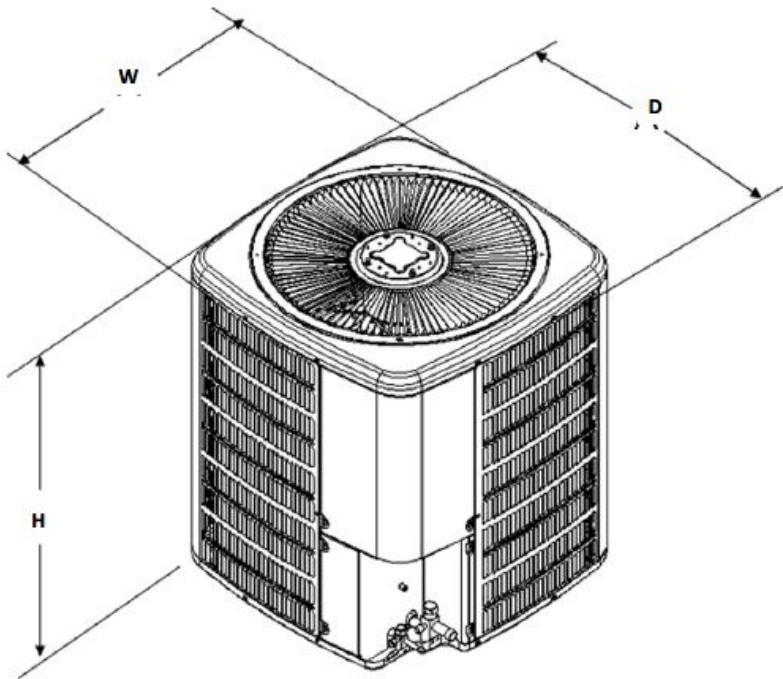
OUTDOOR UNIT DETAILS			
Power Supply (V/Hz/Ph):	460 / 60 / 3	Compressor Type:	Two Stage
Min. Circuit Amps MCA (A):	22.0	Airflow Rate (High) (CFM):	
Max Overcurrent Protection (MOP) (A):	35	Suction Valve Connection Size (inch):	1-1/8
Max Starting Current MSC(A):		Liquid Valve Connection Size (inch):	5/8
Rated Load Amps RLA(A):	12.0	Sound Pressure (High) (dBA):	84
Refrigerant Type:	R-410A	Cooling Operation Range ("F DB):	65 - 115
Holding Refrigerant Charge (ozs):	55	Heating Operation Range ("F WB):	-
Additional Charge (lb/ft):		Max. Pipe Length (Vertical) (ft):	50
Pre-charge Piping (Length) (ft):	15	Min. Cooling Range w/Baffle ("F DB):	55
Max. Pipe Length (Total) (ft):	74	Min. Heating Range w/Baffle ("F DB):	
Net Weight (lb):	340	Gross Weight (lb):	340
Dimensions (HxWxD) (in):	41-1/2 x 35-1/2 x 35-1/2		



Submittal Data Sheet

10 Ton AC, Two-Stage, 11.2 EER, 13.5 IEER, 460V 60Hz
DX11TA1204

DIMENSIONAL DRAWING



11 EER MODELS	DIMENSIONS		
	W"	D"	H"
DX11TA0903A*	35½"	35½"	41½"
DX11TA0904A*	35½"	35½"	41½"
DX11TA1203A*	35½"	35½"	41½"
DX11TA1204A*	35½"	35½"	41½"