



SUBMITTAL DATA

for

MWSU-Popplewell Hall 1st Floor

Prepared by

Kevyn Gordon

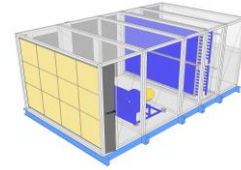
4/27/2017

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Technical Data Sheet for AHU-1st Floor

Job Information		Technical Data Sheet
Job Name	MWSU-Popplewell Hall 1st Floor	
Date	April 27 2017	
Submitted By	KLG	
Software Version	11.21	
Unit Tag	AHU-1st Floor	



Unit Overview

Model Number	Supply					
	Air Volume cfm	Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH039GBGM	18385	3.00	4.42	72*	100*	174

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

Unit

Model Number:	CAH039GBGM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	Standard G90 Galvanized Steel (unpainted)		
Liner:	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

Panel Filter		Component: 1		Length: 12 in		Shipping Section: 1	
Type	Efficiency	Face Velocity	Face Area	Air Volume	Filter Loading		
Pleated	MERV 8	454 ft/min	40.5 ft²	18385 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	4	24 in	24 in	2 in	
			8	20 in	24 in	2 in	
Door							
Location		Drive Side Door Width		Opp. Drv. Side Door Width		Opening	
Both sides		8 in		8 in		Outward	

Access Section		Component: 2		Length: 28 in		Shipping Section: 1	
Air Pressure Drop							
0.00 inWc							
Door							
Location		Width		Opening		Light	
Drive side		24 in		Outward		Incandescent marine light kit and switch only	
Special Options							
Tread Plate Floor Liner							
Tread plate installed							

Technical Data Sheet for AHU-1st Floor

Supply Fan		Component: 3			Length: 44 in			Shipping Section: 2	
Fan Performance									
Air Volume*	Static Pressure			Brake Horsepower*	Speed		Fan Circuit		
	External	Total	Cabinet		Operating	Maximum	MOP	MCA	
9193 cfm	3.00 inWc	4.42 inWc	0.00 inWc	11.59 BHP	3171 rpm	3650 rpm	50.0 A	39.4 A	
Fan Data									
Fan Type	Blade Type / Class	Quantity of Fans	Wheel Diameter	Material Type	Number of Blades	Discharge	Motor Location		
Centrifugal - Plenum	Airfoil / 2	2	18.25 in	Aluminium	9	Axial	Behind Fan		
Motor Data									
Power	Electrical Supply	Speed	Efficiency	Enclosure	Frame Size	Supplier	Number of Poles	Lock Rotor Current*	Full Load Current*
15.0 HP	460/60/3 V/Hz/Phase	3500 rpm	Premium	ODP	215 T frame	Generic	2	141.2 A	17.5 A
Fan Options									
Isolator Type:		Spring							
Door									
Location			Width			Opening			
Drive side			30 in			Outward			
Notes									
* after a unit label denotes the data for an individual fan.									

Access Section		Component: 4		Length: 28 in		Shipping Section: 3	
Air Pressure Drop							
0.00 inWc							
Door							
Location		Width		Opening		Light	
Drive side		20 in		Outward		Incandescent marine light kit and switch only	
Special Options							
Tread Plate Floor Liner							
Tread plate installed							

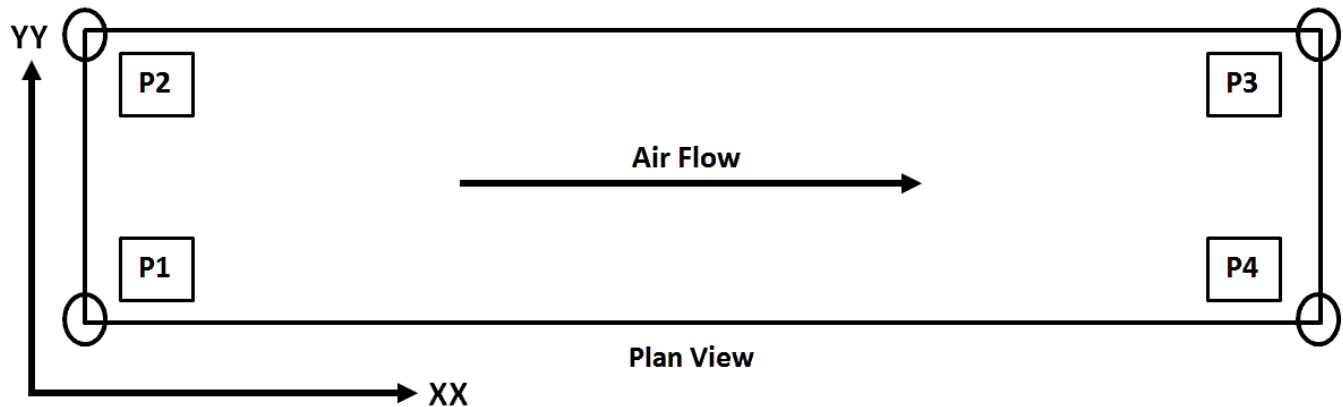
Technical Data Sheet for AHU-1st Floor

Direct Expansion Coil		Component: 5			Length: 28 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)	
5EJ0906B	549246 Btu/hr	430583 Btu/hr	2		6	9	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					
18385 cfm	73.6 °F	61.2 °F	52.2 °F	50.5 °F	0.80 insWg	30 in	87 in	36.25 ft²	507 ft/min
Fluid			Sub-Cooled Refrigerant Liquid Temp.	Suction Vapor Superheat Temp. at Coil Outlet		Design Saturated Condensing Temp.		Refrigerant Weight	
Suction Temp.	Refrigerant								
42.7 °F		R410a		110.0 °F		8.0 °F		110.0 °F	
Connection							Min. Fin Surface Temp.	Min. Tube Wall Surface Temp.	
Type	Liquid	Quantity	Suction Size	Location	Material				
OD Sweat	2-1.13 in	2	2-1.63 in	Opp 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									
Panel									
Location			Width			Opening			
Removable panels			- in			Outward			
Plenum Section		Component: 6			Length: 34 in		Shipping Section: 5		
Opening Location			Opening Size			Air Pressure Drop			
End upper			30.00" x 96.00"			0.02 inWc			
Door									
Location		Width			Opening		Light		
Drive side		26 in			Outward		Incandescent marine light kit and switch only		
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:	84	76	74	79	77	65	57	51	
Unit Discharge:	88	79	80	90	89	83	83	72	
Unit Return:	90	85	91	99	87	86	89	79	

Technical Data Sheet for AHU-1st Floor

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	40	757	203	203	176	176	19	50	39
2	44	1403	402	402	299	299	19	50	34
3	28	528	132	132	132	132	14	50	39
4	28	1416	340	368	368	340	14	52	39
5	34	620	155	155	155	155	17	50	39
Entire Unit	174	4724	1130	1157	1233	1204	90	51	37



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

AHRI Certification



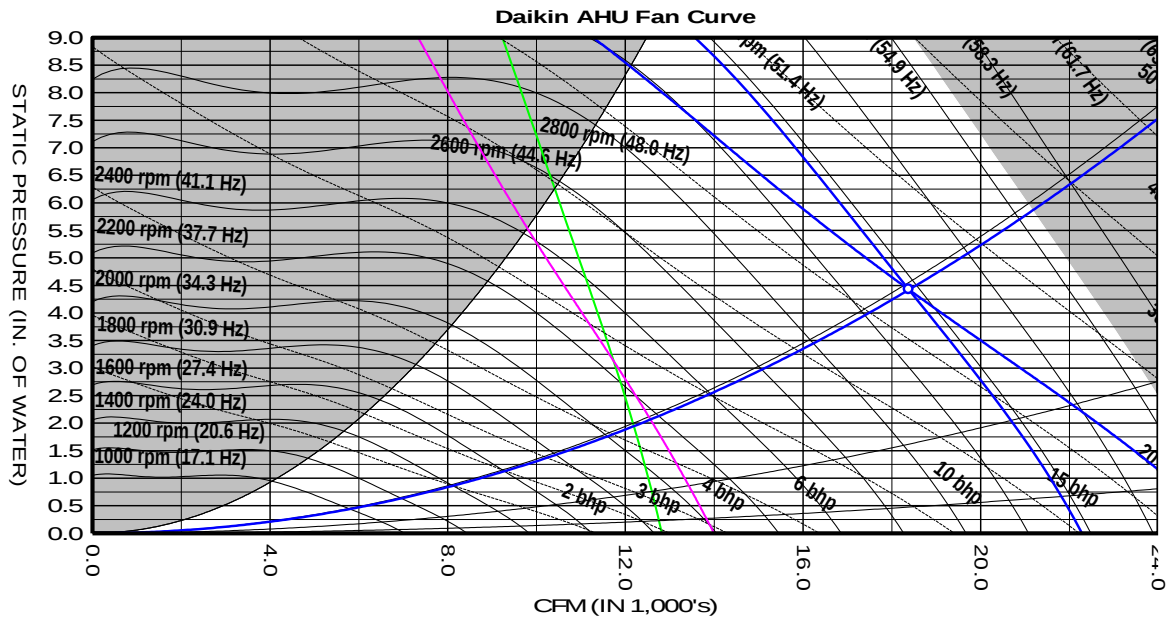
Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on AHRI Standard 430.

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.

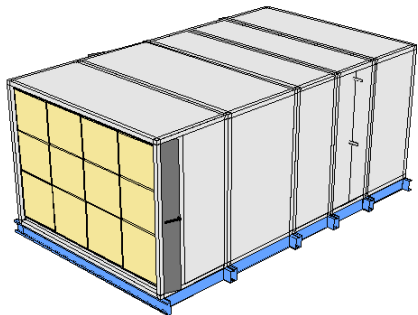
Fan Curve for AHU-1st Floor



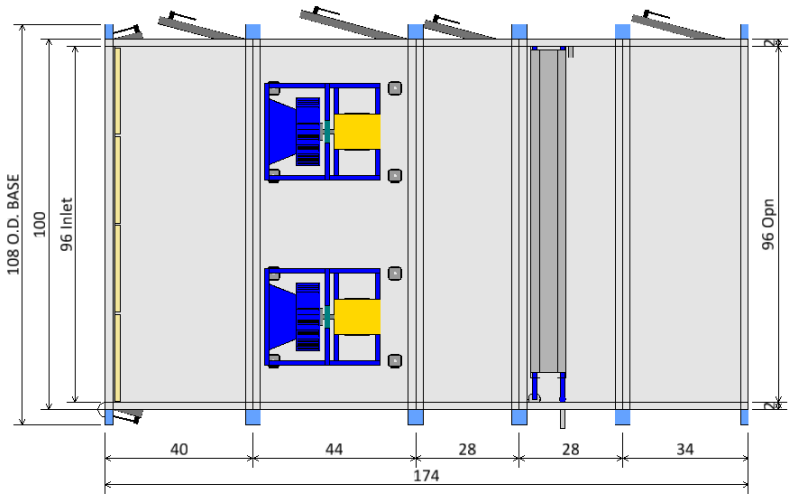
AF 18 DD PLENUM 9BL (100% Width) 1x2 Supply Fan at Standard Conditions					
Air volume	18385	cfm	Fan speed	3171	rpm
Total static	4.42	insWg	Max speed	3650	rpm
Brake horsepower	23.2	bhp	Efficiency	55.2	%
Approx VFD Setting	54.4	Hz	Motor Speed	3500	rpm
Redundancy	67.4	%			
Unit tagging	AHU-1st Floor		Date	April-27-2017	
Job name	MVSU-Popplewell Hall 1st Floor		Time	07:43	



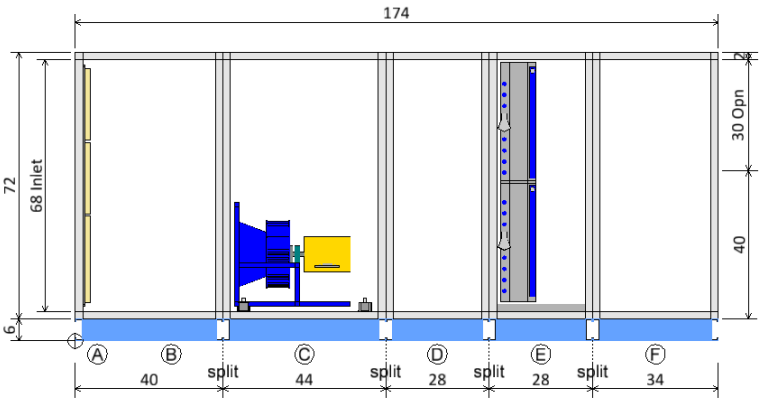
Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on AHRI Standard 430.



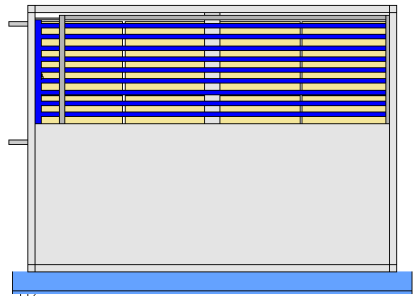
ISOMETRIC VIEW



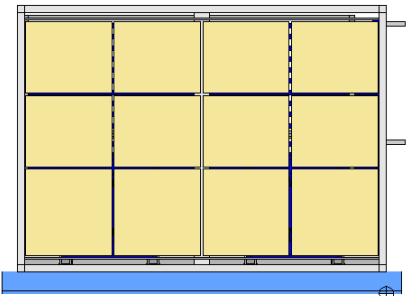
PLAN VIEW



ELEVATION VIEW



REAR END VIEW



FRONT END VIEW

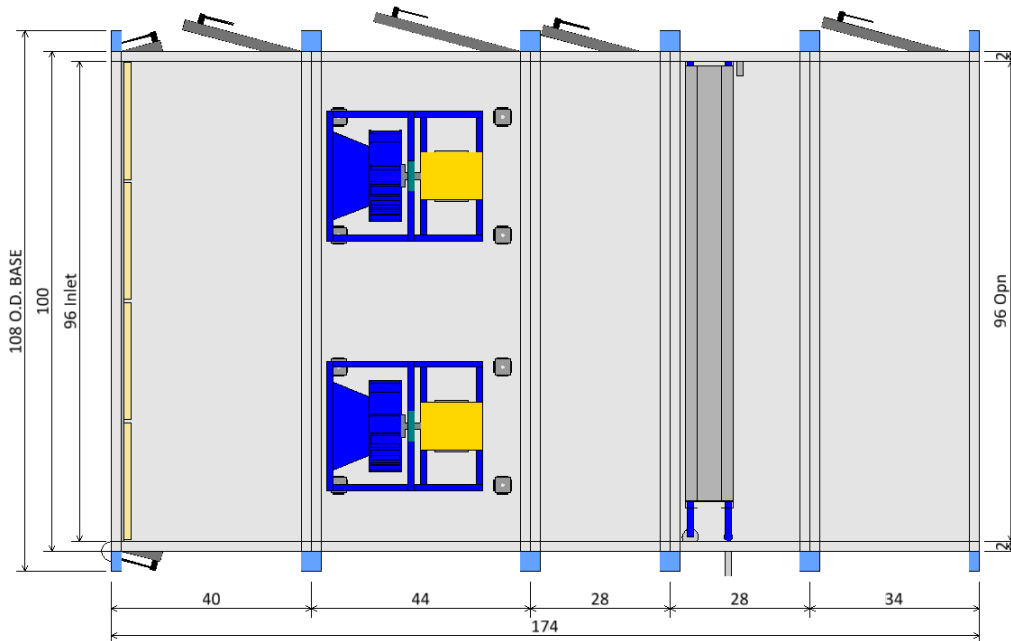
Plan/Elevation	Unit Tag: AHU-1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH039GBGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Job Number: MWSU-1st Floor
Job Name: MWSU-1st Floor

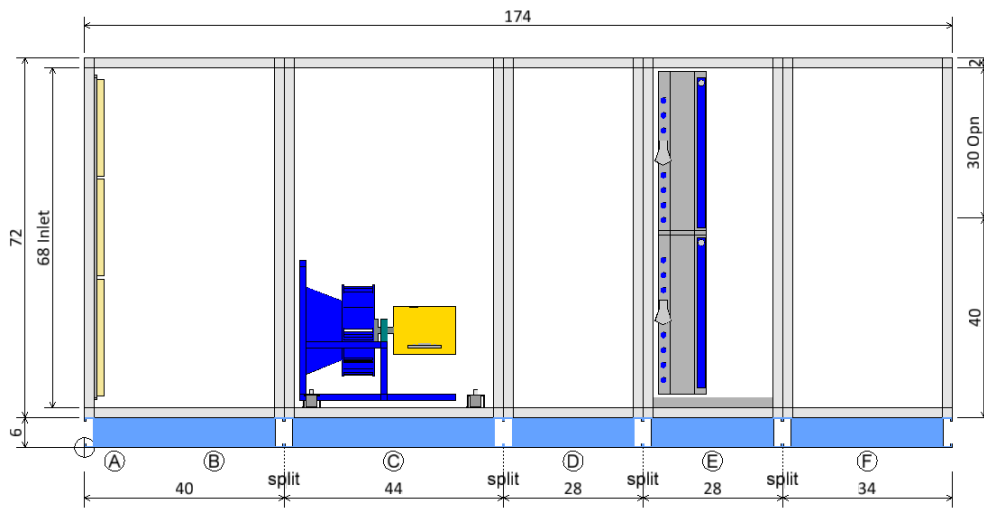
Date: 0 of 25

Prepared Date:

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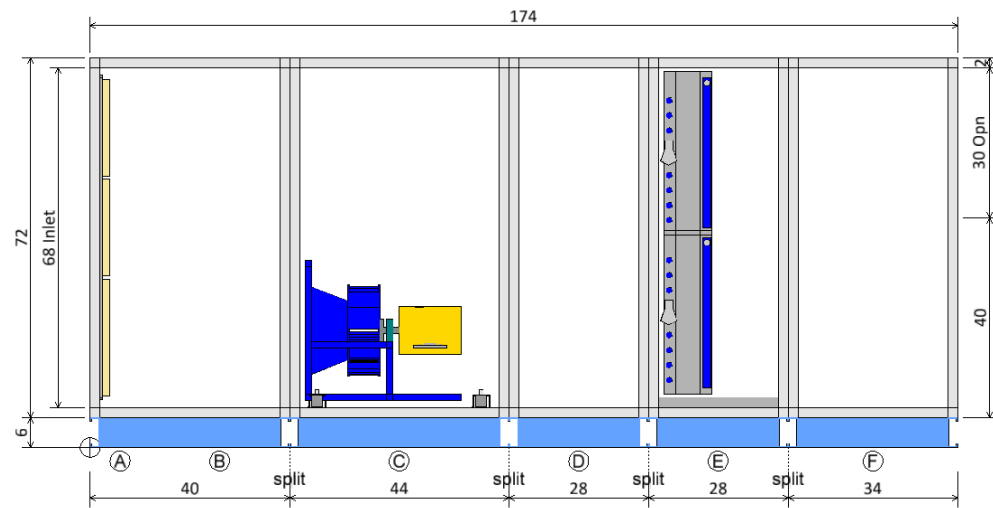
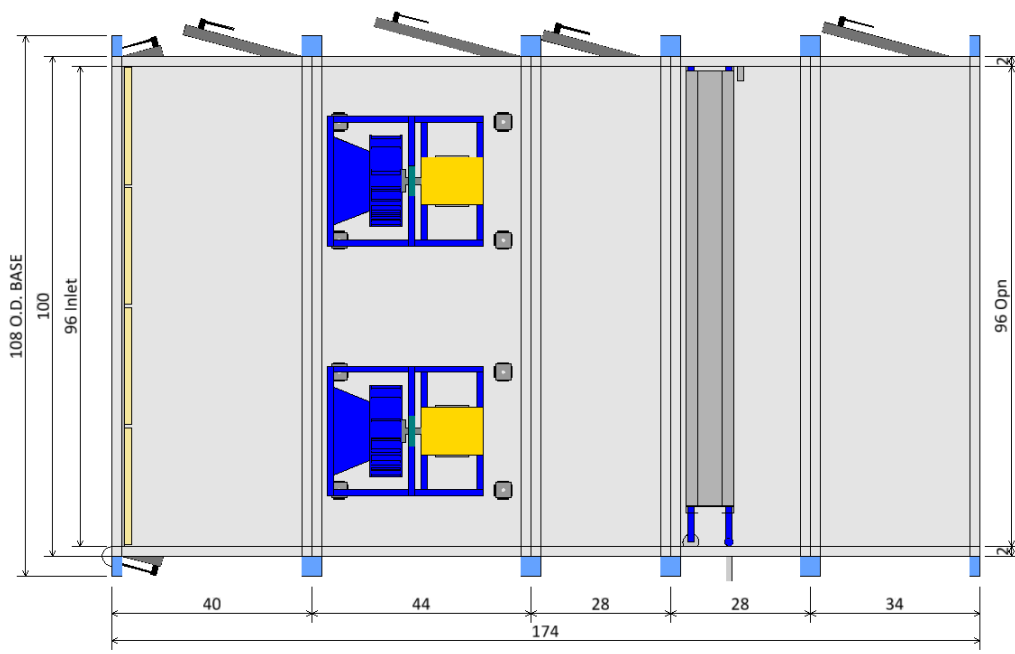
PLAN VIEW



ELEVATION VIEW

Component Key	
A	Panel Filter
	Filter Type: Pleated (MERV 8)
	Right Door (WxH): 8 ins x 68 ins
B	Access Section
	Left Door (WxH): 24 ins x 64 ins
C	Supply Fan
	Fan Type: Centrifugal - Plenum
	Fan Size (Class): 18 (2)
	Air Flowrate: 9192.5 cfm
	T.S.P: 4.4 insWg
D	Access Section
	Left Door (WxH): 20 ins x 68 ins
E	DX Coil
	Coil Model: 5EJ0906B
	Total Capacity: 549246.0 Btu/hr
F	Plenum Section
	Opening Location: End upper
	Opening Size: 30 ins x 96 ins
	Left Door (WxH): 26 ins x 68 ins

Plan/Elevation - No Ends	Unit Tag: AHU-1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH039GBGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



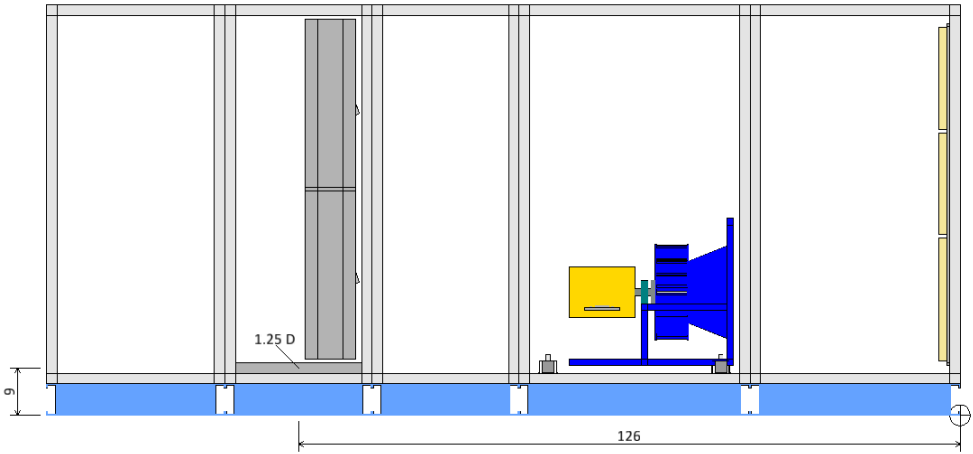
Component Key					
Type	X	Y	Z	Wid	Hgt
Ⓐ Panel Filter Opening	0.00	2.00	8.00	96.00	68.00
Ⓔ Plenum Section Opening	174.00	2.00	46.00	96.00	30.00

Note: Dimensions are measured from the origin point.

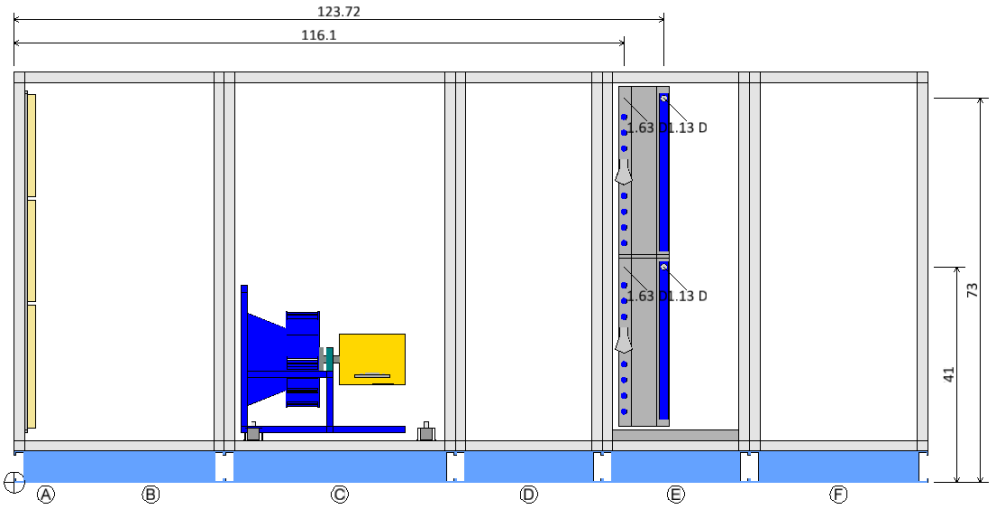
Opening/Damper Connections		Unit Tag: AHU-1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler		Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH039GBGM		Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Coil and Drain Connections				
Type	X	Y	Z	Diam
DX Coil	126.00	102.90	9.00	1.25
Condensate drain conn:	116.10	-7.00	41.00	2- 1.63
DX suction:	123.72	-7.00	41.00	2- 1.13
DX liquid conn:	116.10	-7.00	73.00	2- 1.63
DX suction:	123.72	-7.00	73.00	2- 1.13
DX liquid conn:				

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Coil and Drain Connections		Unit Tag: AHU-1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler		Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH039GBGM		Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for RCS -1st Floor

Job Information		Technical Data Sheet
Job Name	MWSU-Popplewell Hall 1st Floor	
Date	4/27/2017	
Submitted By	Kevyn Gordon	
Software Version	04.71	
Unit Tag	RCS -1st Floor	



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
RCS062D	460/60/3	552366	64.1	10.8	14.1	2013 Compliant

Unit		
Model Number:	RCS062D	
Type:	Applied	
Approval:	ETL - USA	
Refrigerant Type:	No. of Refrigerant Circuits	Refrigerant Weight
R410A	2	24.4 lb

Condensing Section				
Temperature		Altitude	Refrigeration Effect	Power
Suction	Ambient			
40.7 °F	105.0 °F	0 ft	552366 Btu/hr	64.1 kW

Compressor			
Quantity	Type	Capacity Control	Compressor Isolation
4	Scroll	4 steps	Resilient
Full Load Current:			
Compressor Circuit 1	23.1 A		
Compressor Circuit 2	23.1 A		
Compressor Circuit 3	23.1 A		
Compressor Circuit 4	23.1 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	100	95	93	92	89	85	81

Technical Data Sheet for RCS -1st Floor

Physical

Dimensions and Weight			
Length	Height	Width	Operating Weight
80.0 in	73.0 in	99.0 in	2578 lb
Connections			
Connection	Connection Sizes		
Suction Line Circuit	(2) 2.12 in.		
Liquid Line Circuit	(2) 0.88 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	125 A	Thru-the-door disconnect switch	112.0 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	
Isolation Valves Per Circuit:	Refrigeration Service Valves
Hot Gas Bypass:	HGBP Tee (See Accessory Tab)
Condenser Coil Options:	Condenser with built in hail protection, vandal grd
Electrical	
Field Connection	Thru-the-door disconnect switch
Wiring Options	Sealtite conduit
GFI Receptacle	Field powered
Unit Control	
Temperature Controls:	No temp control, 115 V transformer
Low Ambient Control:	Fantrol, Low ambient control to 45 degrees

Warranty

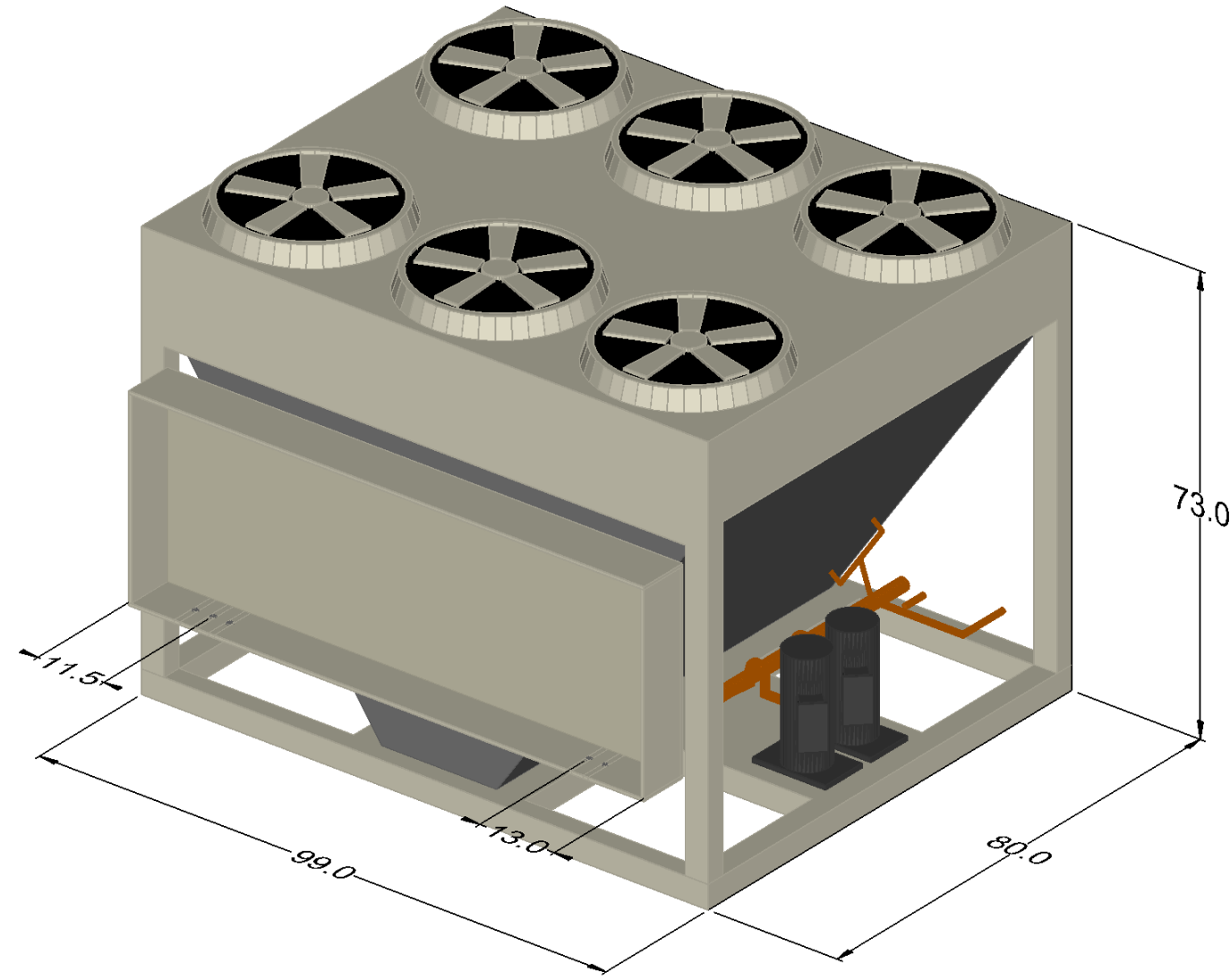
Parts:	Standard one year parts
Compressor:	Extended four year compressor, five year total

Job Number: MWSU-Donnell Hall 1st Floor
Job Name: 1 of 25

Prepared Date: 4/27/2017
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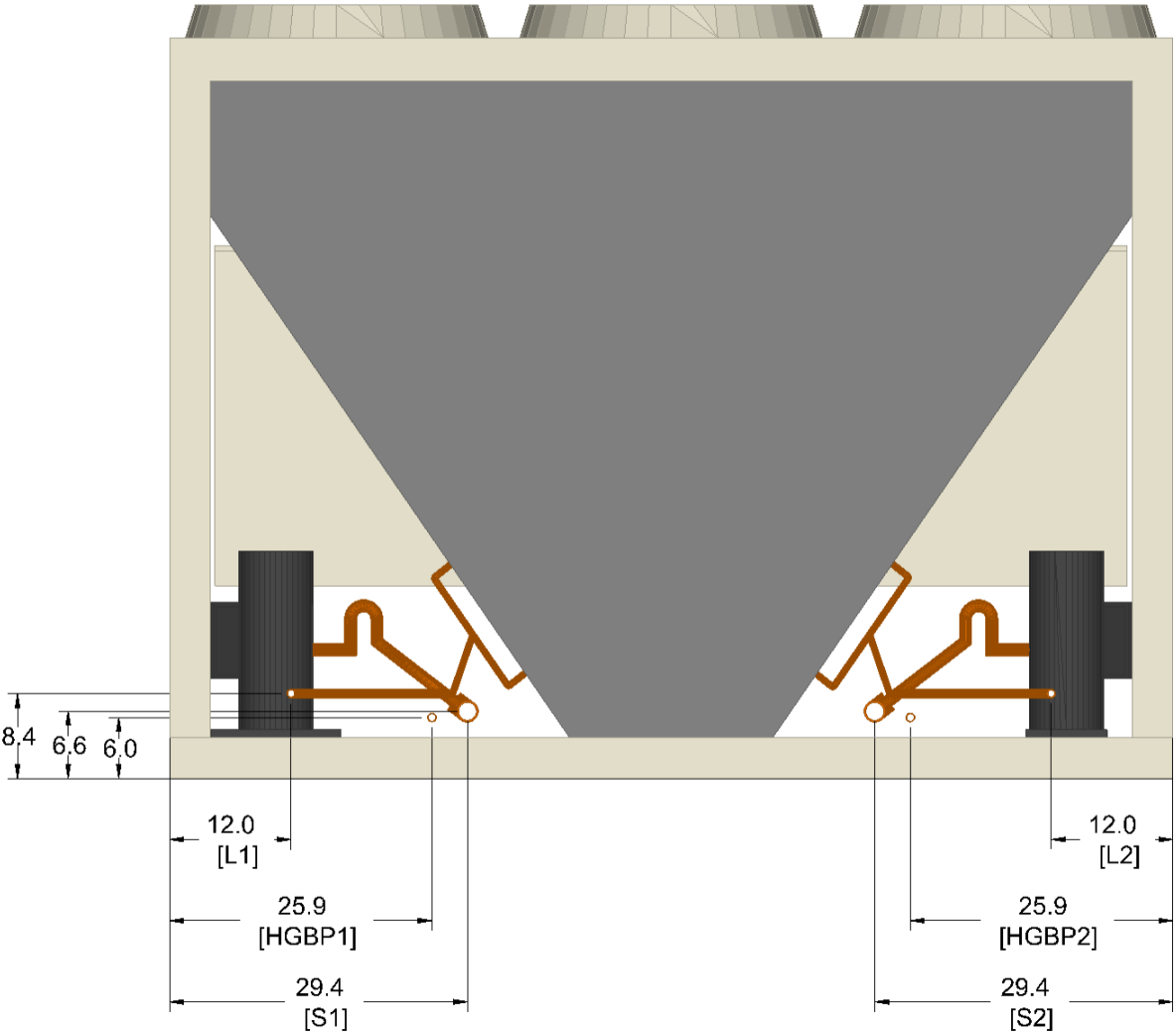
Product Drawing	Unit Tag: RCS -1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (Kansas)			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 04.71
Product:	Project Name: MWSU-Popplewell Hall 1st			Sales Engineer:			
Model: RCS062D	Apr. 27, 2017	Ver/Rev:	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.



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.

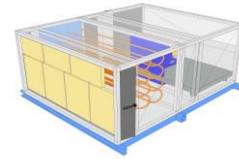
Job Number: 1404270
Job Name: MM/SIL_Donnelwell Hall 1st Floor
Date: 17 of 25
Prepared Date:
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1/27/2017



ELEVATION VIEW - PIPE CONNECTION DETAILS

Technical Data Sheet for AHU-1st Floor Heat

Job Information		Technical Data Sheet
Job Name	MWSU-Popplewell Hall 1st Floor	
Date	April 27 2017	
Submitted By	KLG	
Software Version	11.21	
Unit Tag	AHU-1st Floor Heat	



Unit Overview

Model Number	Air Volume cfm	Supply				
		Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH017GVGM	8500	2.00	3.11	42*	84*	106

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

Unit

Model Number:	CAH017GVGM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	Standard G90 Galvanized Steel (unpainted)		
Liner:	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

Panel Filter		Component: 1		Length: 12 in		Shipping Section: 1	
Type	Efficiency	Face Velocity		Face Area		Air Volume	
Pleated	MERV 8	467 ft/min		18.2 ft²		8500 cfm	
Air Pressure Drop			Number of Filters	Height	Width	Depth	Filter Loading
Clean Air	Mean Air	Dirty Air					
0.21 inWc	0.60 inWc	1.00 inWc	4	24 in	20 in	2 in	Side
			3	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	

Electric Heater		Component: 2		Length: 34 in		Shipping Section: 1		
Voltage	Control Type	Temperature Control	Control Signal	Pressure Drop	kW	Steps	Disconnect	Delta T
480	Vernier SCR	No	0 - 10V	0.04	130	N/A	Yes	48.3

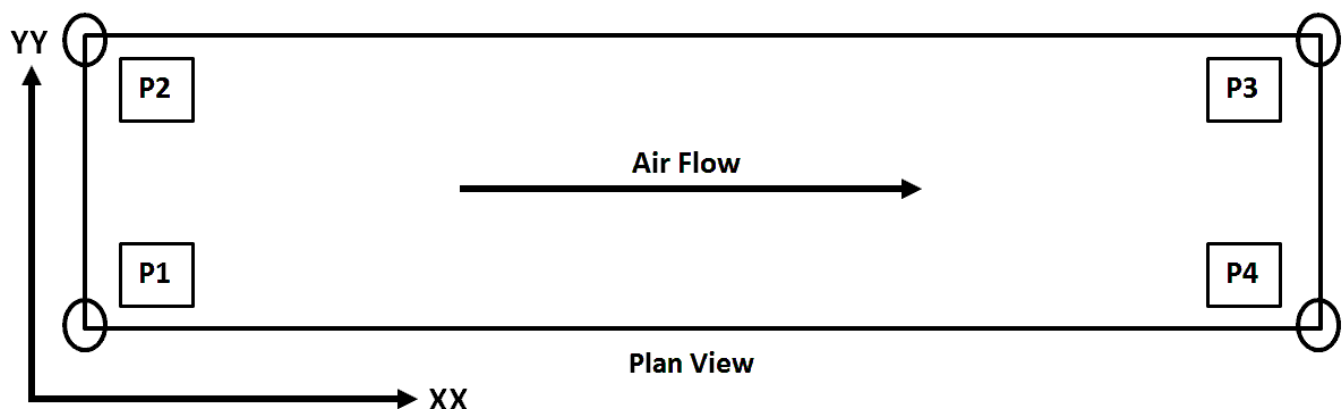
Access Section	Component: 3	Length: 16 in	Shipping Section: 2
Air Pressure Drop			
0.00 inWc			
Door			
Location	Width	Opening	
Drive side	12 in	Outward	

Technical Data Sheet for AHU-1st Floor Heat

Supply Fan		Component: 4			Length: 44 in		Shipping Section: 2		
Fan Performance									
Air Volume	Static Pressure			Brake Horsepower	Speed		Outlet Velocity		
	External	Total	Cabinet		Operating	Maximum			
8500 cfm	2.00 inWc	3.11 inWc	0.00 inWc	8.06 BHP	2845 rpm	3650 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	18.25 in	Aluminium	9	End, single opening	Behind Fan		
Motor Data									
Power	Electrical Supply	Speed	Efficiency	Enclosure	Frame Size	Supplier	Number of Poles	Lock Rotor Current	Full Load Current
10.0 HP	460/60/3 V/Hz/Phase	3500 rpm	Premium	ODP	213 T frame	Generic	2	94.1 A	12 A
Fan Options									
Isolator Type:		Spring							
Door									
Location			Width			Opening			
Drive side			30 in			Outward			

Unit Sound Power (dB)								
Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	80	72	69	74	72	61	53	51
Unit Discharge:	90	82	85	95	94	89	91	82
Unit Return:	86	81	86	94	83	82	86	75

Shipping Section Details									
Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	46	1238	267	267	352	352	26	42	23
2	60	900	218	218	231	231	31	42	21
Entire Unit	106	2138	590	590	479	479	48	42	22



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

AHRI Certification



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

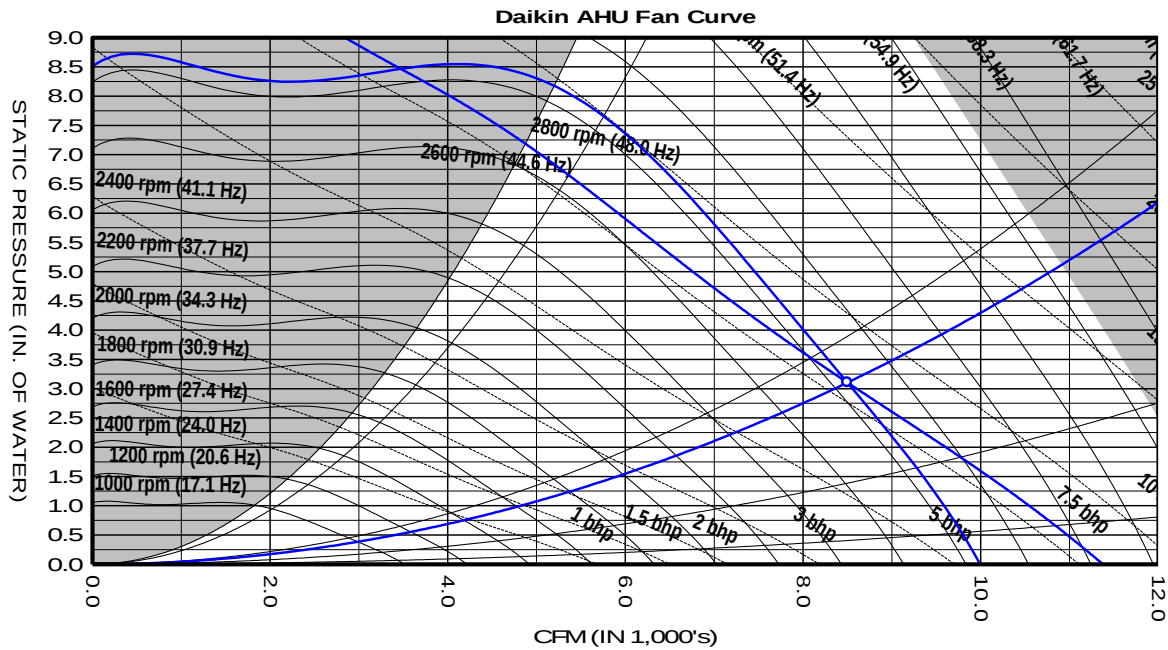
Technical Data Sheet for AHU-1st Floor Heat

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.

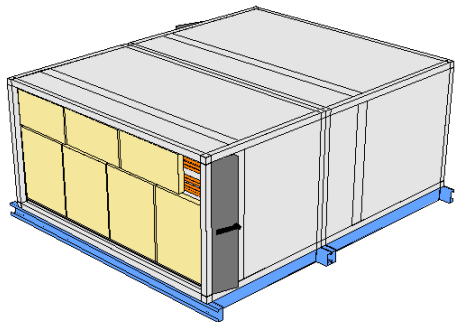
Fan Curve for AHU-1st Floor Heat



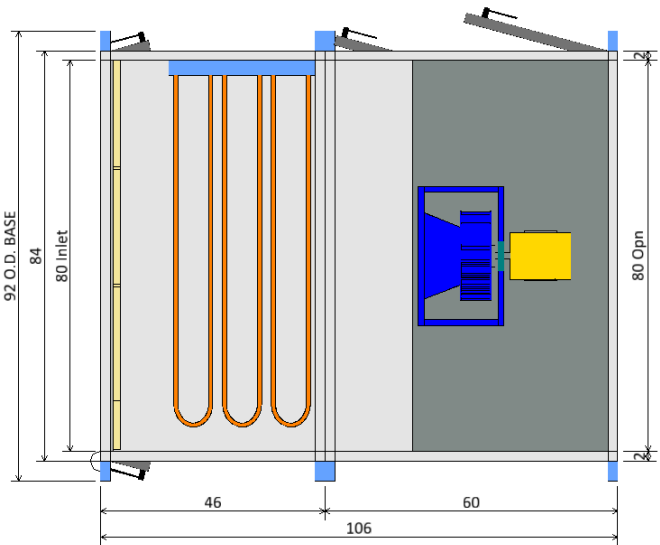
AF 18 DD PLENUM 9BL (100% Width) 1x1 Supply Fan at Standard Conditions					
Air volume	8500	cfm	Fan speed	2845	rpm
Total static	3.11	insWg	Max speed	3650	rpm
Brake horsepower	8.1	bhp	Efficiency	51.5	%
Approx VFD Setting	48.8	Hz	Motor Speed	3500	rpm
Unit tagging	AHU-1st Floor Heat		Date	April-27-2017	
Job name	MVSU-Popplewell Hall 1st Floor		Time	07:43	



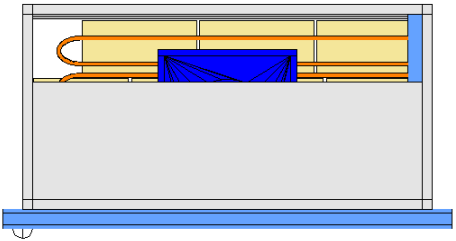
Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on AHRI Standard 430.



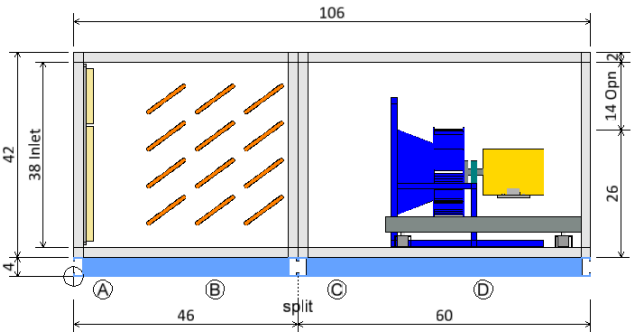
ISOMETRIC VIEW



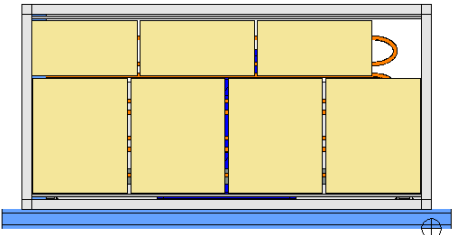
PLAN VIEW



REAR END VIEW



ELEVATION VIEW

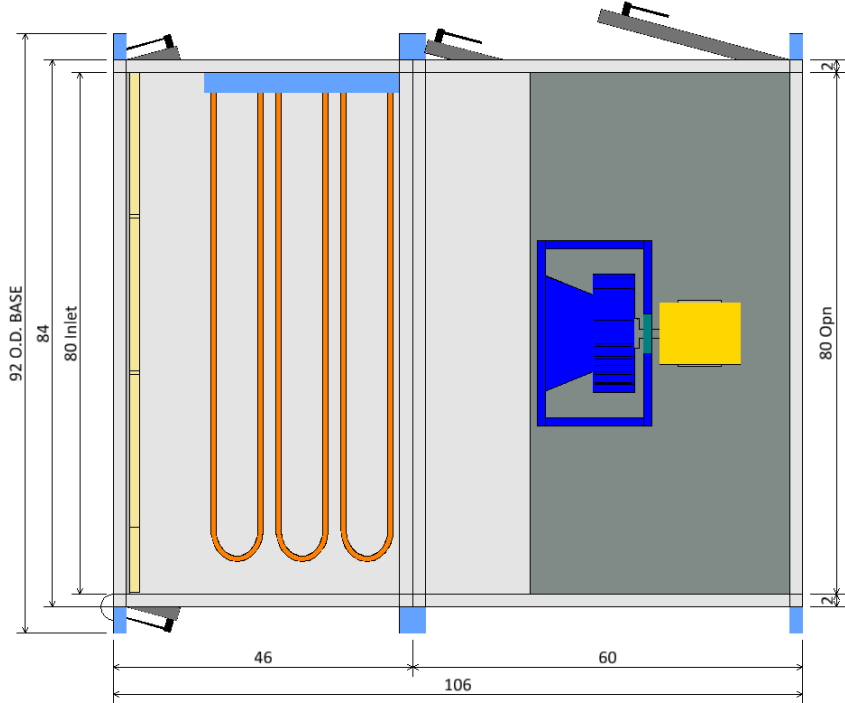


FRONT END VIEW

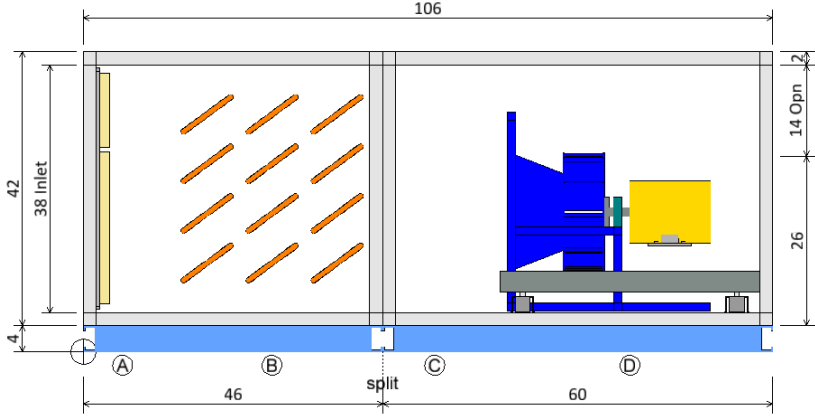


Plan/Elevation	Unit Tag: AHU-1st Floor Heat			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH017GVGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Job Number: MWSU-Donnell Hall 1st Floor
Job Name: MWSU-Donnell Hall 1st Floor
Date: 7/27/2017
Prepared Date: 7/27/2017
www.DaikinApplied.com



PLAN VIEW



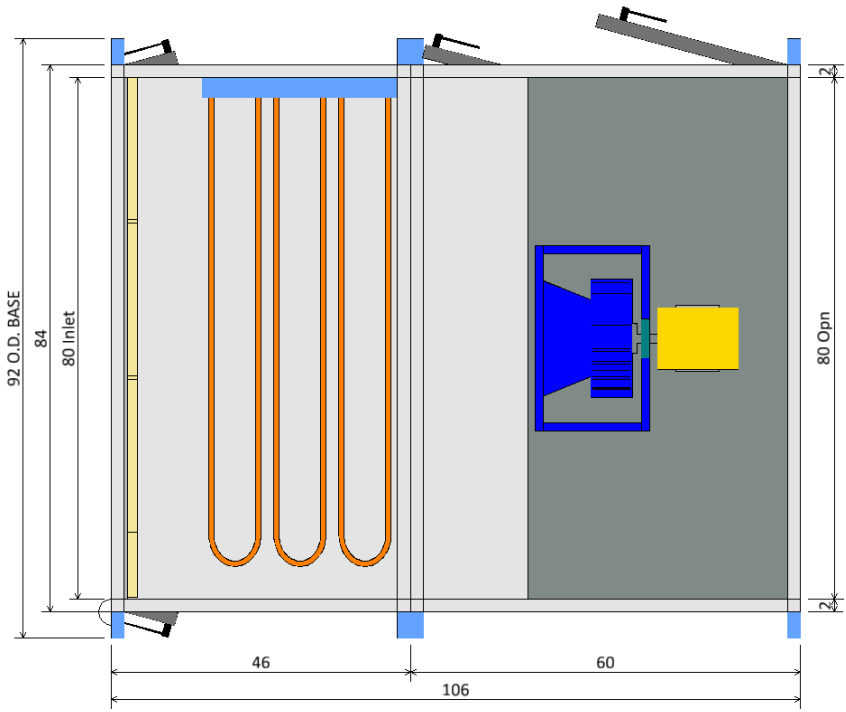
ELEVATION VIEW

Component Key	
A	Panel Filter
	Filter Type: Pleated (MERV 8)
	Right Door (WxH): 8 ins x 38 ins
B	Left Door (WxH): 8 ins x 38 ins
	Electric Heater
	Voltage: 480
C	Control Type: Vernier SCR
	Total Capacity: 130.00 kW
	Access Section
D	Left Door (WxH): 12 ins x 38 ins
	Supply Fan
	Fan Type: Centrifugal - Plenum
E	Fan Size (Class): 18 (2)
	Air Flowrate: 8500.0 cfm
	T.S.P.: 3.1 insWg
F	Motor Power: 10.0 HP
	Left Door (WxH): 30 ins x 38 ins

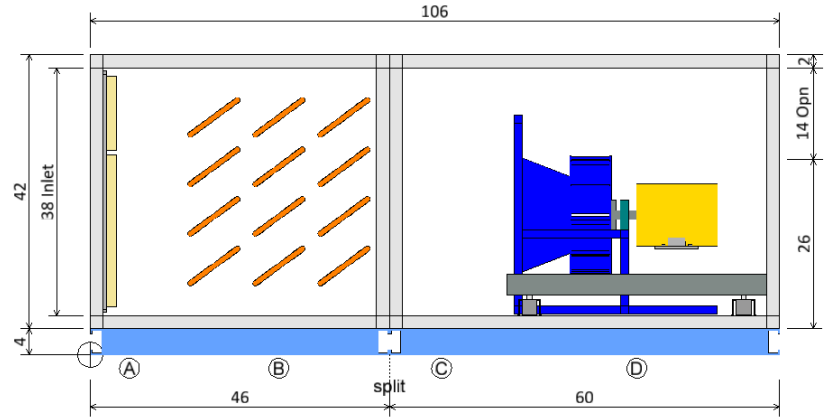
Plan/Elevation - No Ends	Unit Tag: AHU-1st Floor Heat			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH017GVGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Component Key						
	Type	X	Y	Z	Wid	Hgt
Ⓐ	Panel Filter Opening	0.00	2.00	6.00	80.00	38.00
Ⓓ	Supply Fan Fan Discharge	106.00	2.00	30.00	80.00	14.00

Note: Dimensions are measured from the origin point.



PLAN VIEW

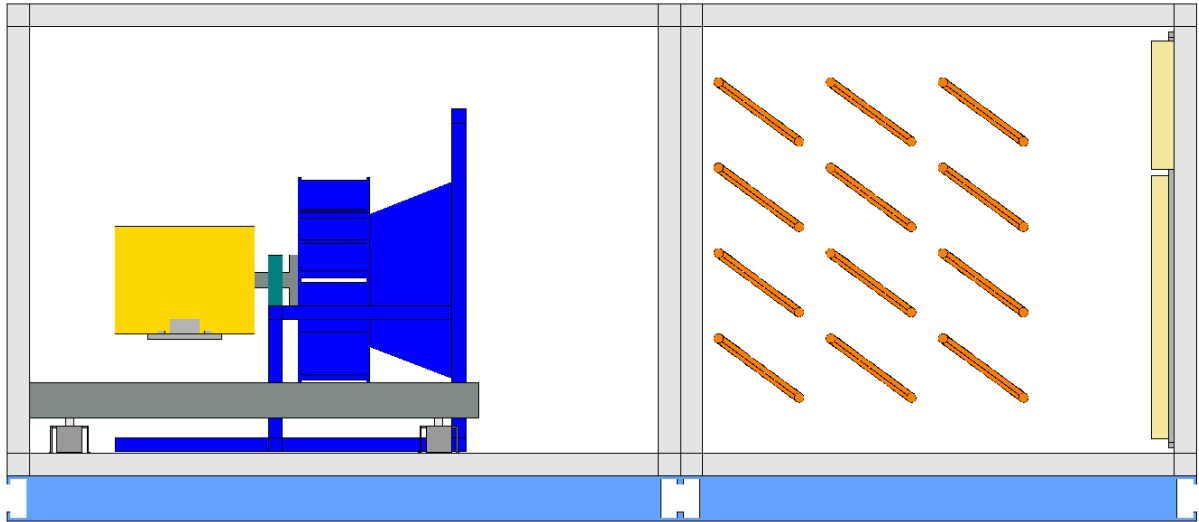


ELEVATION VIEW

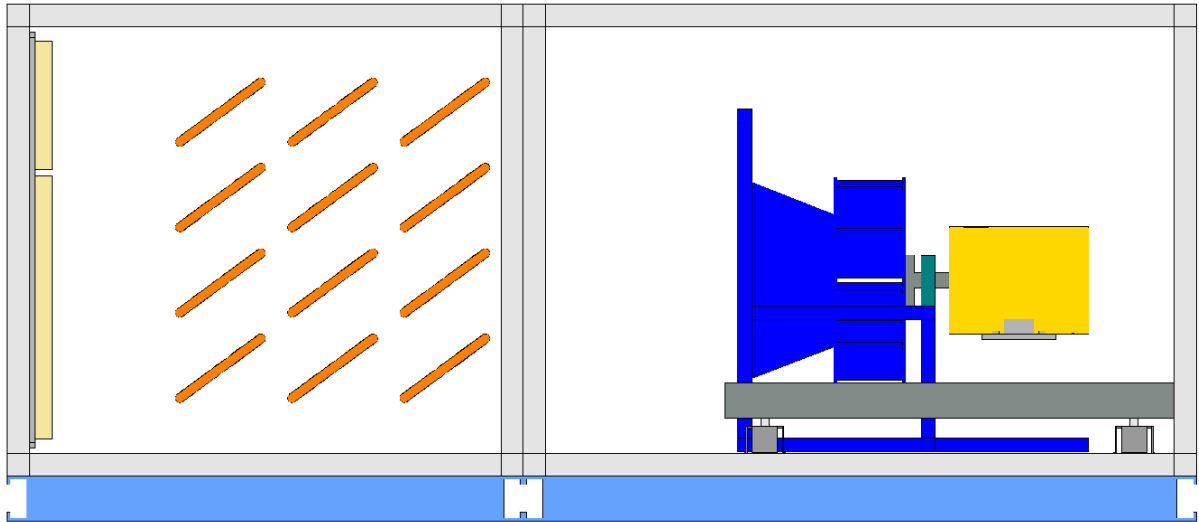
Opening/Damper Connections	Unit Tag: AHU-1st Floor Heat			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH017GVGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Coil and Drain Connections

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW

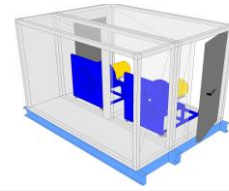


RIGHT ELEVATION VIEW

Coil and Drain Connections	Unit Tag: AHU-1st Floor Heat			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH017GVGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Technical Data Sheet for RF-1st Floor

Job Information		Technical Data Sheet
Job Name	MWSU-Popplewell Hall 1st Floor	
Date	April 27 2017	
Submitted By	KLG	
Software Version	11.21	
Unit Tag	RF-1st Floor	



Unit Overview

Model Number	Supply					
	Air Volume cfm	Static Pressure		External Dimensions		
		External inWc	Total inWc	Height in	Width in	Length in
CAH025GVGM	15685	3.00	3.00	56*	88*	68

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

Unit

Model Number:	CAH025GVGM		
Approval:	ETL Listed / ETL Listed to Canadian Safety Standards (ETL Label / ETLc Label)		
Outer Panel:	Standard G90 Galvanized Steel (unpainted)		
Liner:	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

Access Section	Component: 1	Length: 24 in	Shipping Section: 1
Air Pressure Drop			
0.00 inWc			
Panel			
Location	Width	Opening	
Removable panels	- in	Outward	

Technical Data Sheet for RF-1st Floor

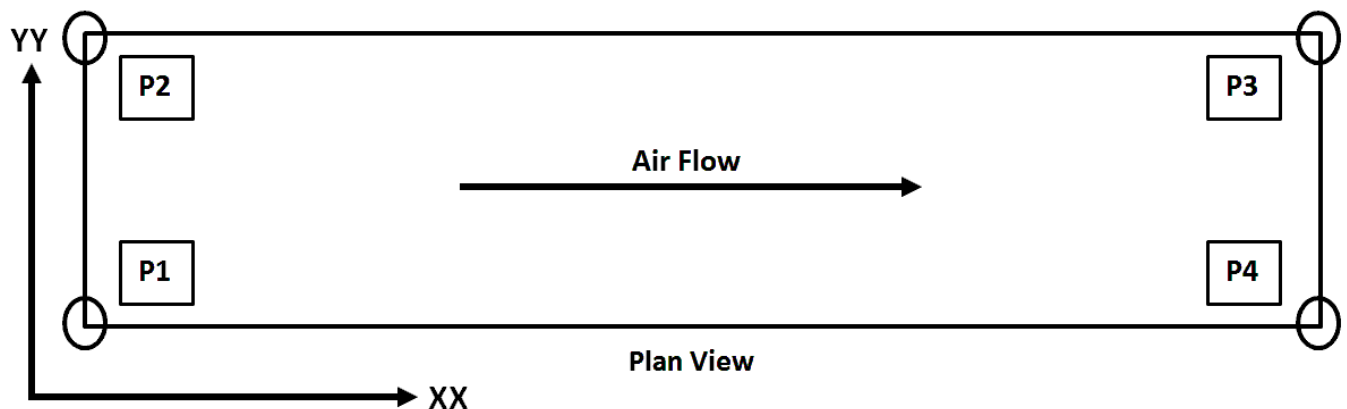
Supply Fan		Component: 2			Length: 44 in		Shipping Section: 2		
Fan Performance									
Air Volume*	Static Pressure			Brake	Speed		Fan Circuit		
	External	Total	Cabinet	Horsepower*	Operating	Maximum	MOP	MCA	
7843 cfm	3.00 inWc	3.00 inWc	0.00 inWc	6.87 BHP	2675 rpm	3650 rpm	35.0 A	27.0 A	
Fan Data									
Fan Type	Blade Type / Class	Quantity of Fans	Wheel Diameter	Material Type	Number of Blades	Discharge	Motor Location		
Centrifugal - Plenum	Airfoil / 2	2	18.25 in	Aluminium	9	Axial	Behind Fan		
Motor Data									
Power	Electrical Supply	Speed	Efficiency	Enclosure	Frame Size	Supplier	Number of Poles	Lock Rotor Current*	Full Load Current*
10.0 HP	460/60/3 V/Hz/Phase	3500 rpm	Premium	ODP	213 T frame	Generic	2	94.1 A	12 A
Fan Options									
Block Off Plate:		Yes			Isolator Type:		Spring		
Door									
Location		Drive Side Door Width		Opp. Drv. Side Door Width		Opening		Light	
Both sides		26 in		26 in		Outward		Incandescent marine light kit and switch only	
Notes									
* after a unit label denotes the data for an individual fan.									

Unit Sound Power (dB)

Type	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Radiated:	80	73	70	75	73	61	54	51
Unit Discharge:	90	83	86	96	95	89	92	83
Unit Return:	88	83	88	96	85	84	87	77

Shipping Section Details

Section	Length in	Weight lb	Corner Weights (lb)				Center of Gravity (in)		
			P1	P2	P3	P4	XX	YY	ZZ
1	24	351	88	88	88	88	12	44	31
2	44	1250	360	360	265	265	19	44	27
Entire Unit	68	1601	378	378	423	423	36	44	28



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

Technical Data Sheet for RF-1st Floor

AHRI Certification



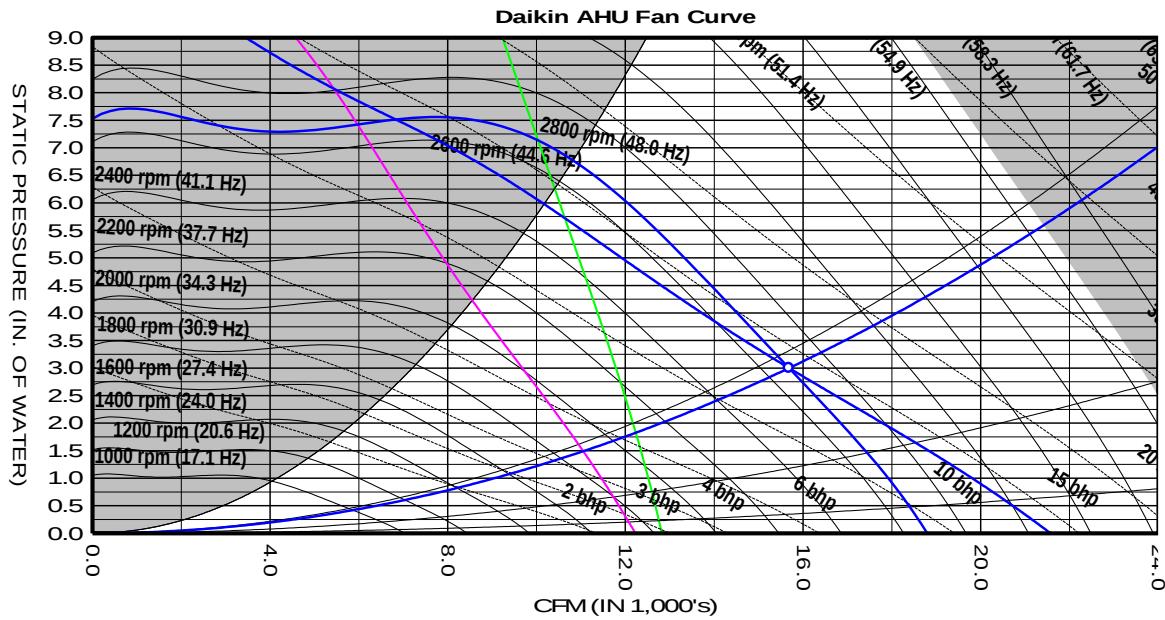
Supply fan performance is certified in accordance with the Central Station Air-Handling Unit Certification Program, which is based on AHRI Standard 430.

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.

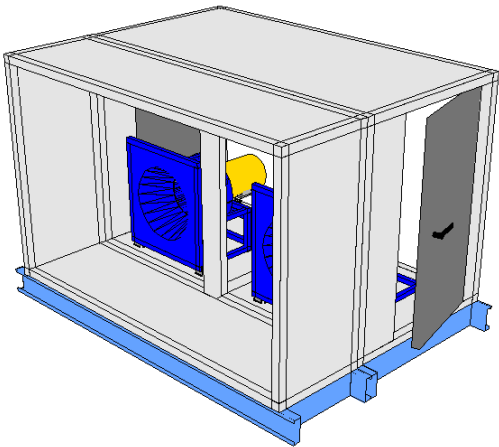
Fan Curve for RF-1st Floor



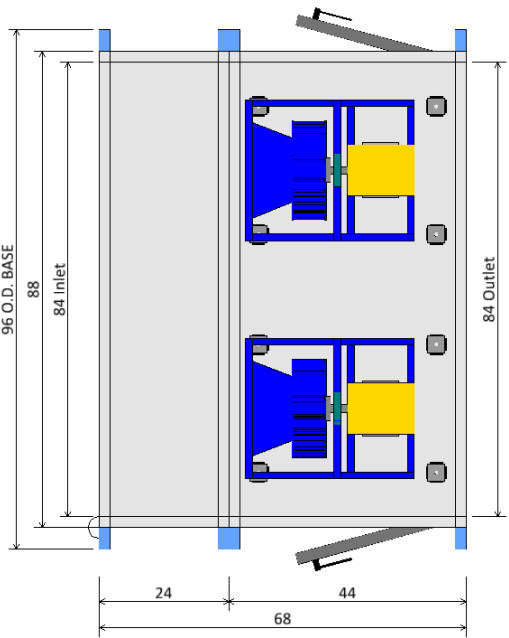
AF 18 DD PLENUM 9BL (100% Width) 1x2 Supply Fan at Standard Conditions					
Air volume	15685	cfm	Fan speed	2675	rpm
Total static	3.00	insWg	Max speed	3650	rpm
Brake horsepower	13.7	bhp	Efficiency	53.9	%
Approx VFD Setting	45.9	Hz	Motor Speed	3500	rpm
Redundancy	70.4	%			
Unit tagging	RF-1st Floor		Date	April-27-2017	
Job name	MVSU-Popplewell Hall 1st Floor		Time	07:43	



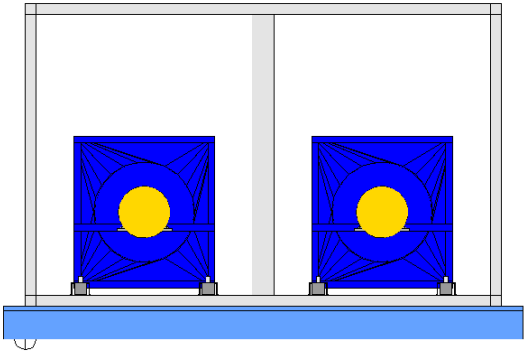
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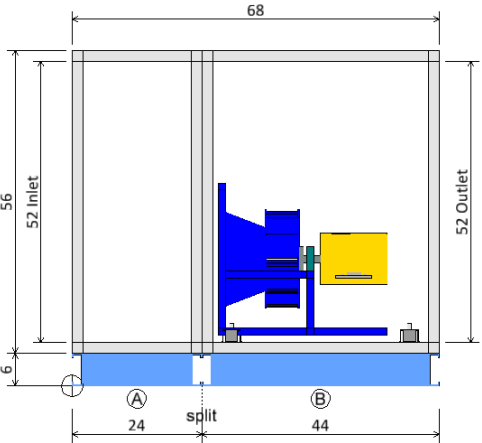
ISOMETRIC VIEW



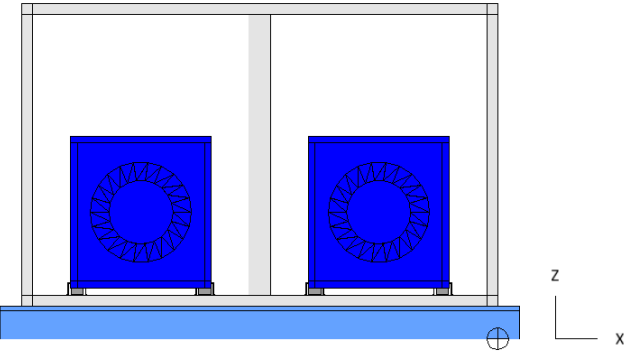
PLAN VIEW



REAR END VIEW



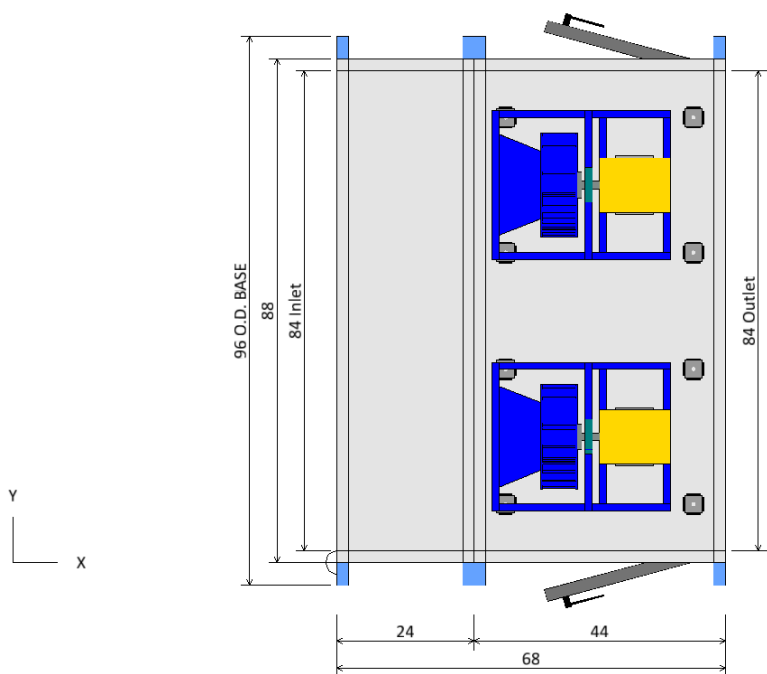
ELEVATION VIEW



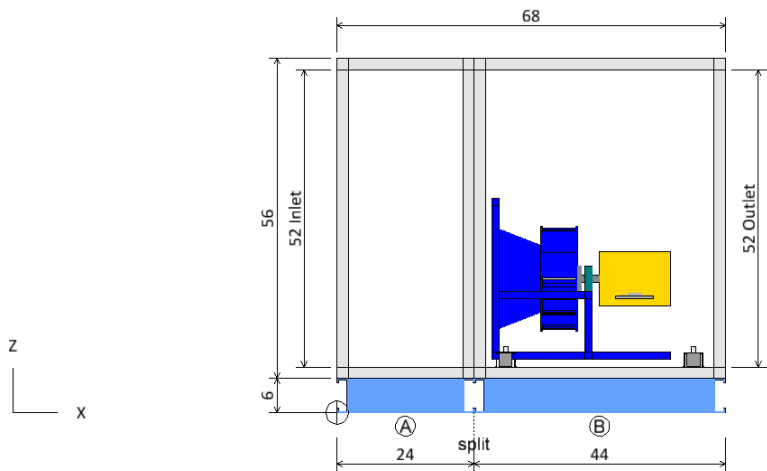
FRONT END VIEW



Plan/Elevation	Unit Tag: RF-1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH025GVGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	



PLAN VIEW



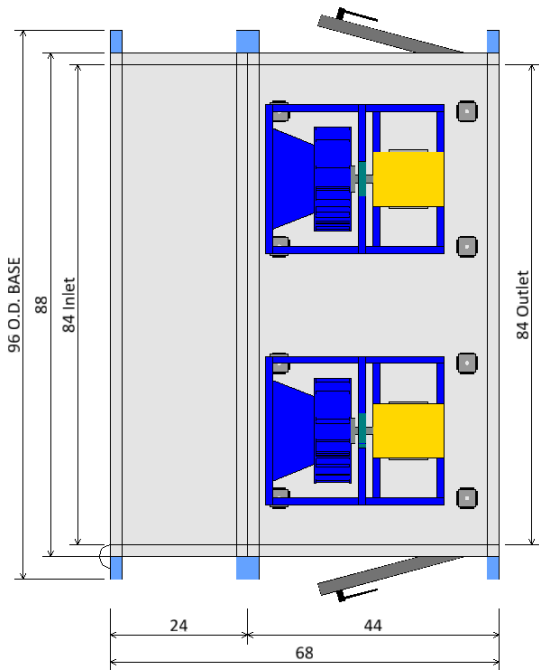
ELEVATION VIEW

Plan/Elevation - No Ends	Unit Tag: RF-1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH025GVGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

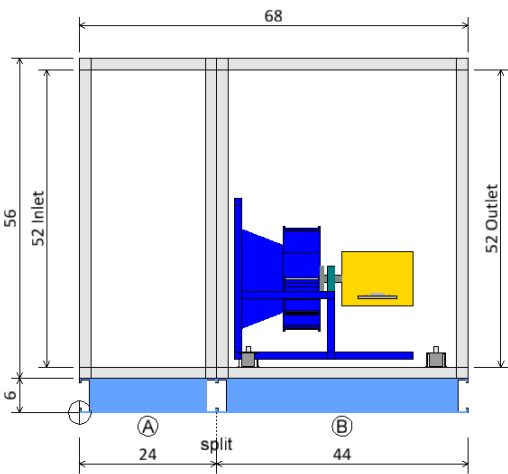
Component Key	
(A)	Access Section
	Supply Fan
	Fan Type: Centrifugal - Plenum
	Fan Size (Class): 18 (2)
	Air Flowrate: 7842.5 cfm
(B)	T.S.P.: 3.0 insWg
	Motor Power: 10.0 HP
	Right Door (WxH): 26 ins x 52 ins
	Left Door (WxH): 26 ins x 46 ins

Component Key						
	Type	X	Y	Z	Wid	Hgt
Ⓐ	Access Section Opening	0.00	2.00	8.00	84.00	52.00
Ⓑ	Supply Fan Fan Discharge	68.00	2.00	8.00	84.00	52.00

Note: Dimensions are measured from the origin point.



PLAN VIEW

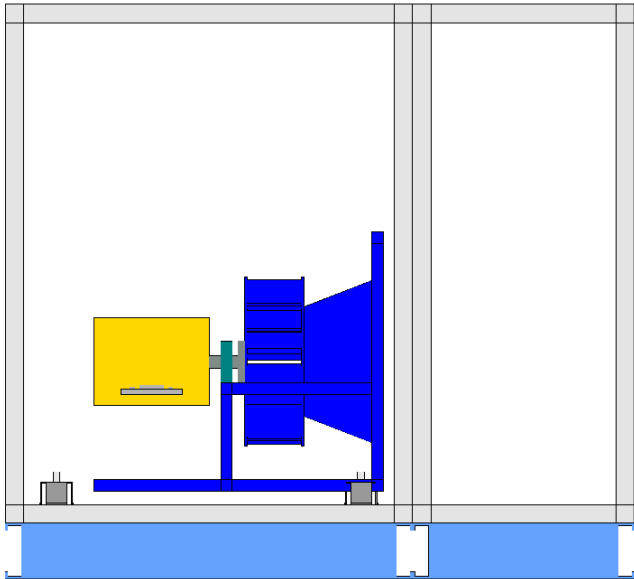


ELEVATION VIEW

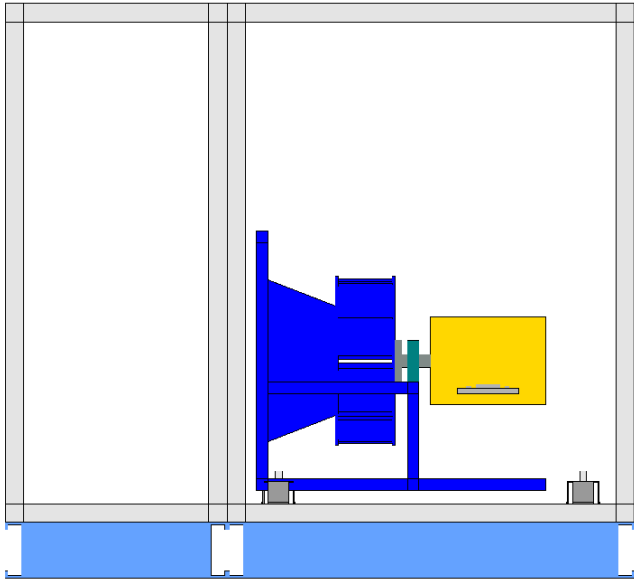
Opening/Damper Connections	Unit Tag: RF-1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG)			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler	Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH025GVGM	Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	

Coil and Drain Connections

Note: Dimensions are measured from the origin point.



LEFT ELEVATION VIEW



RIGHT ELEVATION VIEW

Coil and Drain Connections		Unit Tag: RF-1st Floor			Sales Office: Thermal Mechanics, Inc. - KC (KansasKLG			 13600 Industrial Park Blvd, Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 11.21
Product: Vision Air Handler		Project Name: MWSU-Popplewell Hall 1st Floor			Sales Engineer:			
Model: CAH025GVGM		Apr. 27, 2017	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/-0.25"	Dwg Units: in	