



## SUBMITTAL DATA

Job Name	Augustana Lutheran Church
For	CH-1 Scroll AGZ-F R32
Sold To	CH-1 Screw AWV R513a
Prepared For	
Customer PO#	
Prepared By	Bill Roan
Date	11/21/2023

Job Information	Technical Data Sheet
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<b>Job Name</b>	Augustana Lutheran Church
<b>Date</b>	11/21/2023
<b>Submitted By</b>	Bill Roan
<b>Software Version</b>	14.60
<b>Unit Tag</b>	CH-1 Scroll



Image may not represent ordered unit

Unit Overview
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Model Number	Capacity ton	Voltage	Unit Starter Type	ASHRAE 90.1	LEED Enhanced Refrigerant Management Credit
AGZ008F	128.5	208 v / 60 Hz / 3 Ph	Across the Line	'07, '10, '13, '16 & '19	Pass

Unit
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<b>Unit Type</b>	<b>Platform</b>	<b>Unit Revision</b>
Air-Cooled Scroll Compressor Chiller	Packaged	00
<b>Display</b>	<b>Tubing</b>	
Door Mounted Display	High Stage Relief Valve	
<b>Refrigerant Type</b>	<b>Refrigerant Weight</b>	
R32	100 lb (per unit)	
<b>Approval</b>		
ETL/cETL, AHRI & ASHRAE 90.1		

Evaporator	
<b>Water Volume:</b>	12.8 gal
<b>Connection Hand:</b>	Universal, 1-Pass, Grooved, Standard Head
<b>Connection Size:</b>	4.0 in
<b>Insulation:</b>	Single Layer Insulation to Suction at each Compressor

Entering Fluid Temperature	Leaving Fluid Temperature	Fluid Type	Fluid Flow	Fluid Flow Min / Max	Pressure Drop	Pressure Drop Min / Max	Fouling Factor
54.00 °F	44.00 °F	Water	307.4 gpm	168.0/ 528.0 gpm	9.40 ft H <sub>2</sub> O	3.30 / 25.4 ft H <sub>2</sub> O	0.000100 °F.ft <sup>2</sup> .h/Btu

Note: Evaporator Pressure Drop does not include a strainer. Minimum flow is based on a Constant Flow Pumping System Type.

Condenser	
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<b>Coil Fins:</b>	MicroChannel		
<b>Guards:</b>	Condenser Coil Louvers & Base Frame Wire Grilles		
<b>Design Ambient Air Temperature</b>	<b>Altitude</b>	<b>Fan Diameter</b>	<b>Minimum Design Ambient Temperature</b>
95.0 °F	5400 ft	31.5 in	32.0 °F

## Unit Performance

Design			
Capacity	Input Power	Efficiency (EER)	IPLV.IP (EER)*
128.5 ton	159.5 kW	9.668 Btu/W.h	14.86 Btu/W.h

Performance Points rated at AHRI Ambient Relief										
Point #	% Load	Unit			Evaporator				Condenser	
		Capacity ton	Input Power kW	Efficiency (EER) Btu/W.h	Fluid Flow gpm	Pressure Drop ft H <sub>2</sub> O	Entering Fluid °F	Leaving Fluid °F	Ambient Air °F	Altitude ft
1	100.0	128.5	159.5	9.668	307.4	9.40	54.00	44.00	95.0	5400
2	75.0	96.35	94.60	12.22	307.4	9.40	51.50	44.00	80.0	5400
3	50.0	64.24	50.57	15.24	307.4	9.40	49.00	44.00	65.0	5400
4	25.0	32.12	25.01	15.41	307.4	9.40	46.50	44.00	55.0	5400

Performance Points rated at AHRI Standard Conditions				
Point #	% Load	Capacity ton	Input Power kW	Efficiency (EER) Btu/W.h
1	100	132.3	153.9	10.31
2	75	99.19	91.32	13.03
3	50	66.13	48.82	16.25
4	25	33.06	24.15	16.43

\* IPLV reflects AHRI standard rating conditions with water and does not change with user defined conditions

## Sound (without insulation)

Sound Pressure (at 30 feet)								
63 Hz dB	125 Hz dB	250 Hz dB	500 Hz dB	1 kHz dB	2 kHz dB	4 kHz dB	8 kHz dB	Overall dBA
47	54	57	64	62	68	57	53	71

Sound Power								
63 Hz dB	125 Hz dB	250 Hz dB	500 Hz dB	1 kHz dB	2 kHz dB	4 kHz dB	8 kHz dB	Overall dBA
74	81	84	91	89	95	84	80	98

Octave band is non 'A' weighted and overall readings are 'A' weighted. Sound data rated in accordance with AHRI Standard-370.

## Physical

Unit				
Length*	Height	Width*	Shipping Weight*	Operating Weight*
170 in	99 in	88 in	7012 lb	7126 lb

\* Shipping and operating weights are based on 'worst case' unit configuration variations but do not include the weights of any Options or Accessories. Contact Chiller Applications for additional information.

## Electrical

### Unit Electrical Data

Voltage	Starter Type	Fan Motor Quantity	FLA Fan Motors (each)
208 v / 60 Hz / 3 Ph	Across the Line	8	3.3 A
<b>Power Connection Type:</b>	65 KAIC SCCR with Single Point Disconnect Switch		
<b>Short Circuit Current Rating:</b>	65KA kA		
<b>Phase Voltage:</b>	Phase & Under/Over Voltage Protection with LED		

### Multipoint Power Connection

	Circuit #	
	1	2
<b>Minimum Circuit Ampacity (MCA):</b>	360 A	304 A
<b>Recommended Overcurrent Protection Size:</b>	431 A	375 A
<b>Maximum Overcurrent Protection Size(MOCP):</b>	500 A	400 A
<b>Lug Connection Size:</b>	(2) #2 AWG - 500MCM	(2) #2 AWG - 500MCM

### Compressor Electrical Data

Compressor Type	Compressor Quantity		Starter Type	
Scroll	4		Across the Line	
<b>Circuit #:</b>	1		2	
<b>Compressor #:</b>	1	3	2	4
<b>Rated Load Amps (RLA):</b>	65 A	43 A	65 A	65 A
<b>Inrush Current:</b>	389 A	263 A	389 A	389 A

## Options

### Electrical

**Water Flow Indicator:** Included

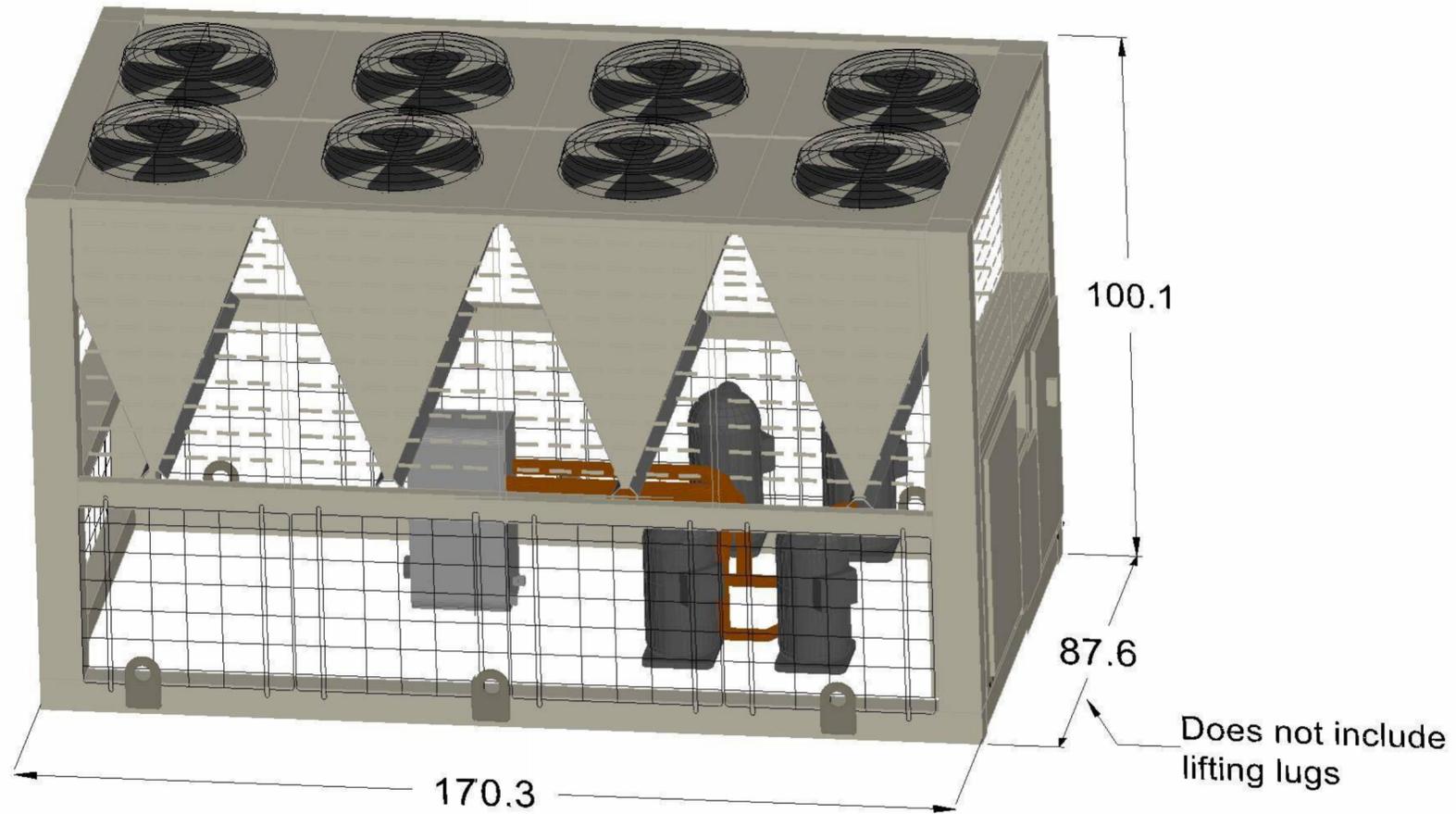
## Warranty

<b>Unit Startup</b>	Domestic
<b>Standard Warranty:</b>	1st Year Entire Unit Parts only

## AHRI Certification



Certified in accordance with the AHRI Air-Cooled Water-Chilling Packages Certification Program, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI). Certified units may be found in the AHRI Directory at [www.ahridirectory.org](http://www.ahridirectory.org).

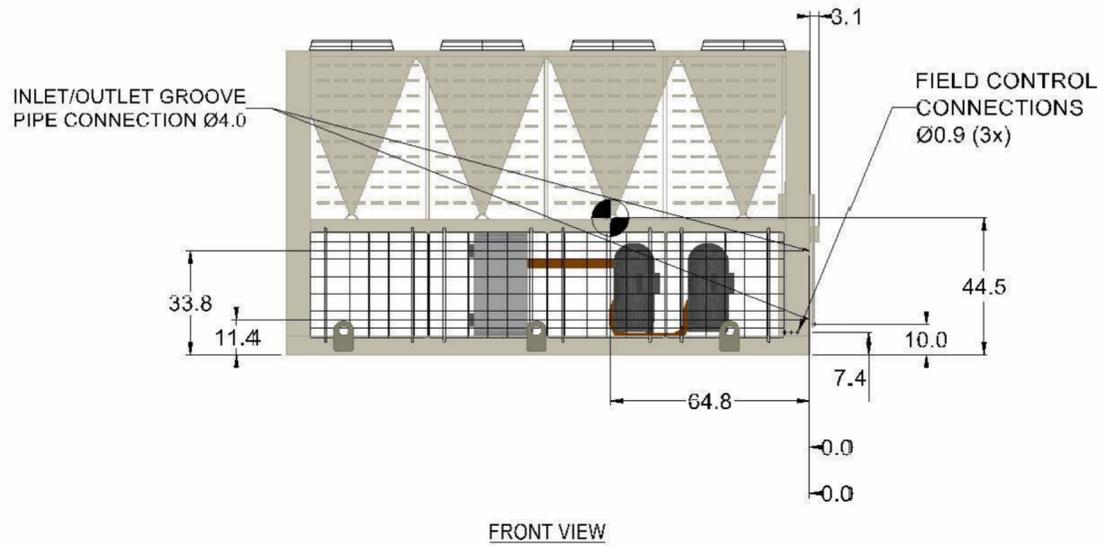
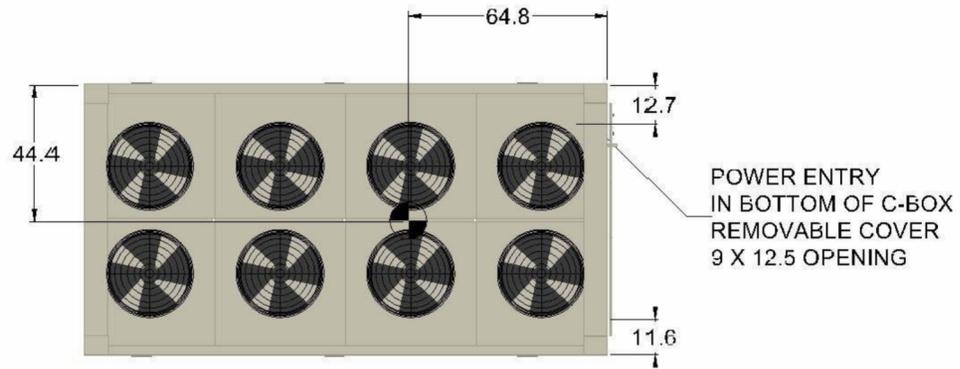


NOTE: A water strainer must be installed at the inlet of the evaporator to protect it from damage. Please refer to the IOM for additional details.

<b>Trailblazer® Air-Cooled Scroll</b>	Unit Tag: CH-1 Scroll			Sales Office: Long Building Technologies			 13600 Industrial Park Blvd. Minneapolis, MN 55441 <a href="http://www.DaikinApplied.com">www.DaikinApplied.com</a> Software Version: 14.60
Product: Trailblazer® Air-Cooled Scroll	Project Name: Augustana Lutheran			Sales Engineer: Bill Roan			
Model: AGZ008F	Nov. 21, 2023	Ver/Rev:	Sheet: 1 of 1	Scale: NTS	Tolerance: +/- 0.25"	Dwg Units: (in)	

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.

TOP VIEW



**Trailblazer® Air-Cooled Scroll**

Unit Tag: CH-1 Scroll

Sales Office: Long Building Technologies

Product: Trailblazer® Air-Cooled Scroll

Project Name: Augustana Lutheran

Sales Engineer: Bill Roan

Model: AGZ008F

Nov. 21, 2023

Ver/Rev:

Sheet: 1 of 1

Scale: NTS

Tolerance: +/- 0.25"

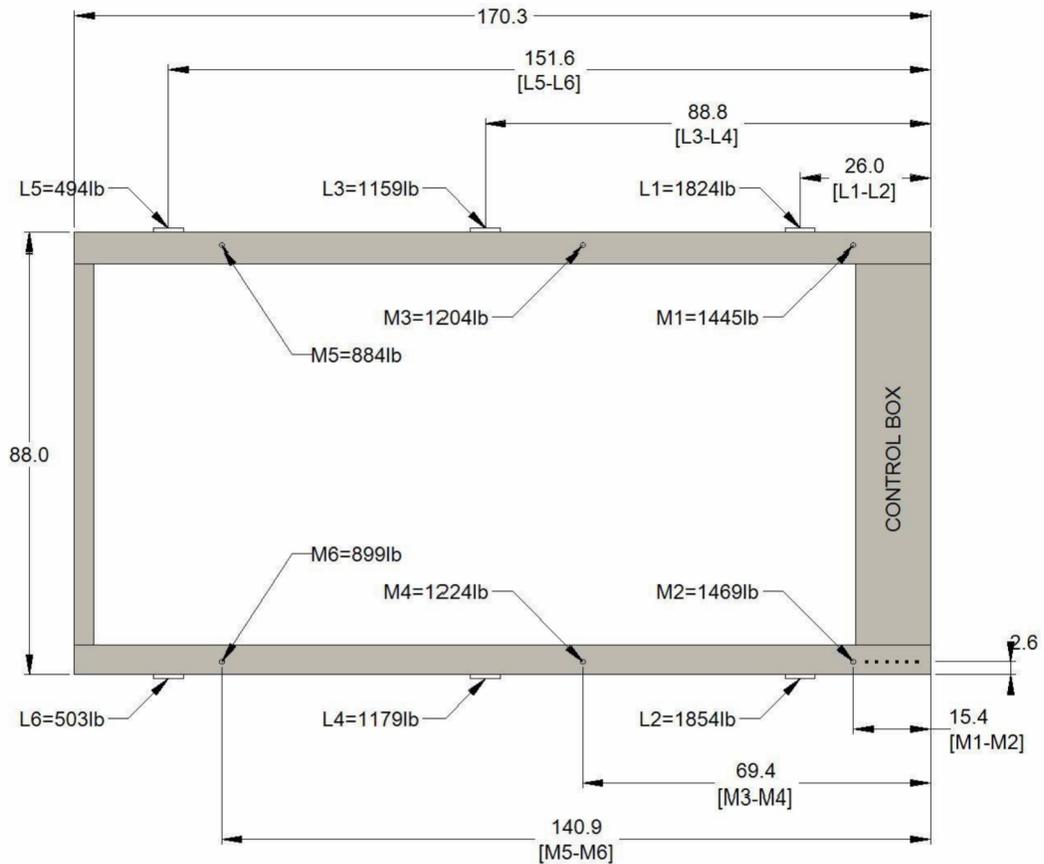
Dwg Units: (in)

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13600 Industrial Park Blvd. Minneapolis, MN 55441  
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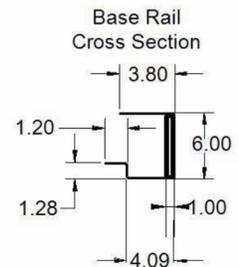
Mounting and Lifting

BASE FRAME TOP VIEW



NOTES:

- 1) L = LIFTING WEIGHT
- 2) M = MOUNTING LOAD
- 3) UNIT SHIPPING WEIGHT = 7012lb
- 4) UNIT OPERATING WEIGHT = 7126lb
- 5) MOUNTING HOLE SIZE = .75"
- 6) MOUNTING HOLES ONLY ON BOTTOM OF BASE
- 7) UNIT WIDTH DIMENSION DOES NOT INCLUDE 1 INCH THICKNESS OF THE LIFTING LUG ASSEMBLIES ON BOTH SIDES, WHICH MAY BE REMOVED AFTER INSTALLATION BUT MUST BE RETAINED FOR FUTURE LIFTING / UNIT REMOVAL



Trailblazer® Air-Cooled Scroll

Unit Tag: CH-1 Scroll

Product: Trailblazer® Air-Cooled

Project Name: Augustana Lutheran

Model: AGZ008F

Sales Office: Long Building

Sales Engineer: Bill Roan

Nov. 21, 2023

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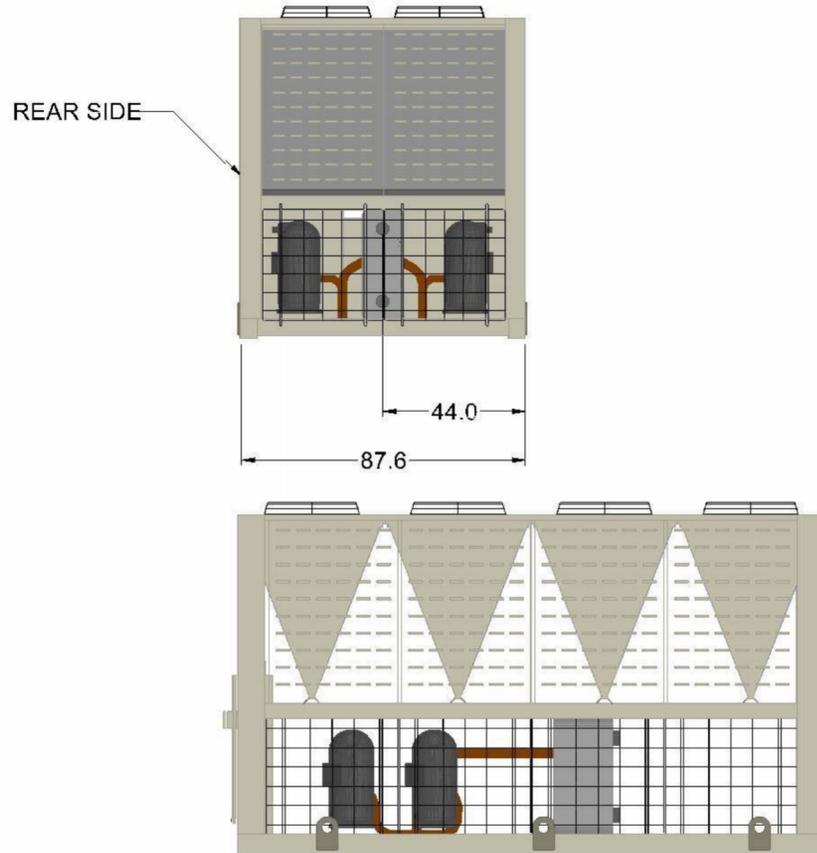
Scale: NTS

Tolerance: +/-0.25"

Dwg Units: (in)

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LEFT VIEW

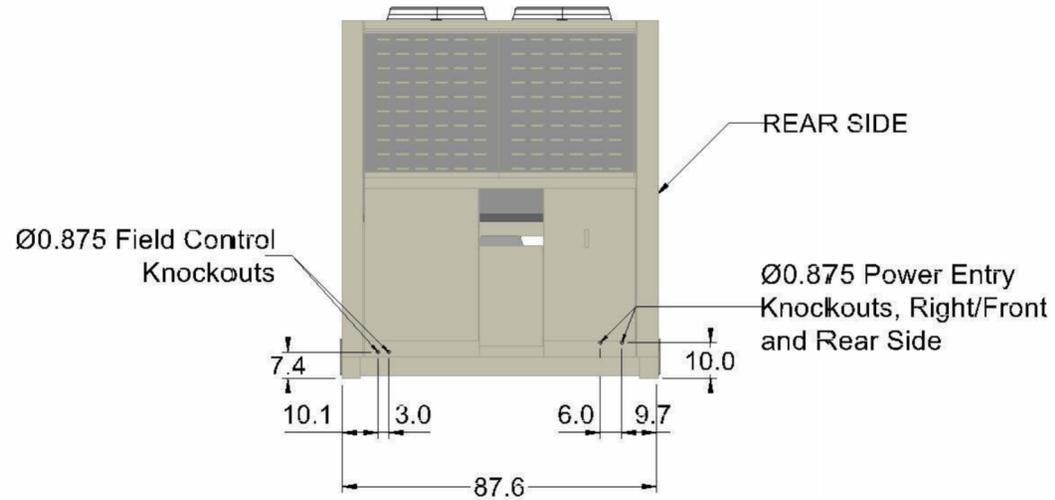


REAR VIEW

<b>Trailblazer® Air-Cooled Scroll</b>	Unit Tag: CH-1 Scroll	Sales Office: Long Building Technologies			 13600 Industrial Park Blvd. Minneapolis, MN 55441 <a href="http://www.DaikinApplied.com">www.DaikinApplied.com</a> Software Version: 14.60
Product: Trailblazer® Air-Cooled Scroll	Project Name: Augustana Lutheran	Sales Engineer: Bill Roan			
Model: AGZ008F	Nov. 21, 2023	Ver/Rev:	Sheet: 1 of 1	Scale: NTS   Tolerance: +/- 0.25"   Dwg Units: (in)	

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Right VIEW



Trailblazer® Air-Cooled Scroll

Unit Tag: CH-1 Scroll

Sales Office: Long Building Technologies

Product: Trailblazer® Air-Cooled Scroll

Project Name: Augustana Lutheran

Sales Engineer: Bill Roan

Model: AGZ008F

Nov. 21, 2023

Ver/Rev:

Sheet: 1 of 1

Scale: NTS

Tolerance: +/- 0.25"

Dwg Units: (in)

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# AGZ-F Close Spacing Performance

### Case 1 - Wall on One Side

For 4-6 fans: Use 4 ft minimum clearance from any solid height wall taller than unit.

For 8 fans: Use 6 ft minimum clearance from any solid height wall taller than unit. Refer to Case 4 for partial open wall.

For 10-14: Use 8 ft minimum clearance from any solid height wall taller than unit. Refer to Case 4 for partial open wall.

### Case 2 - Two Units Side by Side - % Capacity Reduction & Power Increase for Different Spacing between Units.

Distance Between 2 Units # of Fans	4 Feet		5 Feet		6 Feet		8 Feet	
	% -Cap. Reduct. Unit	% Power Increase Unit						
4	0	0	0	0	0	0	0	0
6	1.0%	1.5%	0.5%	0.7%	0	0	0	0
8	2.0%	3.0%	1.2%	1.7%	0.5%	0.7%	0	0
10	2.5%	3.6%	2.0%	3.0%	1.4%	2.0%	0.7%	1.0%
12	NR	NR	NR	NR	2.5%	3.5%	2.0%	3.0%
14	NR	NR	NR	NR	3.0%	4.0%	2.5%	3.5%

Note (1): Distance between can only be reduced if the 8Ft (2.4) clearance is on the outside of the two units for Coil removal.

Note (2): NR=Not recommended due to air recirculation and elevated condenser pressure and elevated power input.

### Case 3 - Three Units Side by Side - For Outside Units on each side of the middle Unit - See Case 2 above.

% Capacity Reduction & Power Increase for Different Spacing for the middle Unit with a unit on each side.

Distance Between 2 Units # of Fans	4 Feet		5 Feet		6 Feet		8 Feet	
	% -Cap. Reduct. Unit	% Power Increase Unit						
4	1.0%	2.0%	0	0	0	0	0	0
6	NR	NR	1.0%	2.0%	0	0	0	0
8	NR	NR	NR	NR	2.0%	3.0%	1.4%	2.1%
10	NR	NR	NR	NR	3.0%	4.5%	2.0%	3.0%
12	NR	NR	NR	NR	4.0%	6.0%	3.0%	4.5%
14	NR	NR	NR	NR	5.0%	7.5%	4.0%	6.0%

Note (3): One Side of the middle Unit must have 8ft (2.4) clearance for Coil Removal.

Note (4): The center unit of 3 units located side by side is affected by the hot discharge from units on each side. Cool ambient air must come from the air space at unit ends.

<b>Product Drawing</b>		Unit Tag: CH-1 Scroll		 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version:14.60			
Product: Trailblazer® Air-Cooled		Project Name: Augustana Lutheran Church					
Model: AGZ008F		Sales Office: Long Building Technologies					
Sales Engineer: Bill Roan	Nov. 21, 2023	Ver/Rev:	Sheet 1 of 3	Scale: NTS	Tolerance: +/-1.0"	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.							

# AGZ-F Close Spacing Performance

## Case 4 Open Screening Walls - % open Wall area vs. Distance in Ft. from Unit

% Open Wall Area		0%	10%	20%	30%	40%	50%
# of Fans	Distance from Wall						
4	Ft	5.0	4.4	4.0	4.0	4.0	4.0
6	Ft	6.0	5.4	4.8	4.0	4.0	4.0
8	Ft	6.5	5.9	5.4	4.5	4.0	4.0
10	Ft	7.0	6.4	5.8	5.2	4.6	4.0
12	Ft	8.0	7.4	6.8	6.2	5.6	5.0
14	Ft	8.0	7.4	6.8	6.2	5.6	5.0

Note (1): One Side of the Unit must have 8ft (2.4) clearance for Coil Removal

## Case 5 Pit/Solid Wall Installation - % Full Load Capacity Reduction

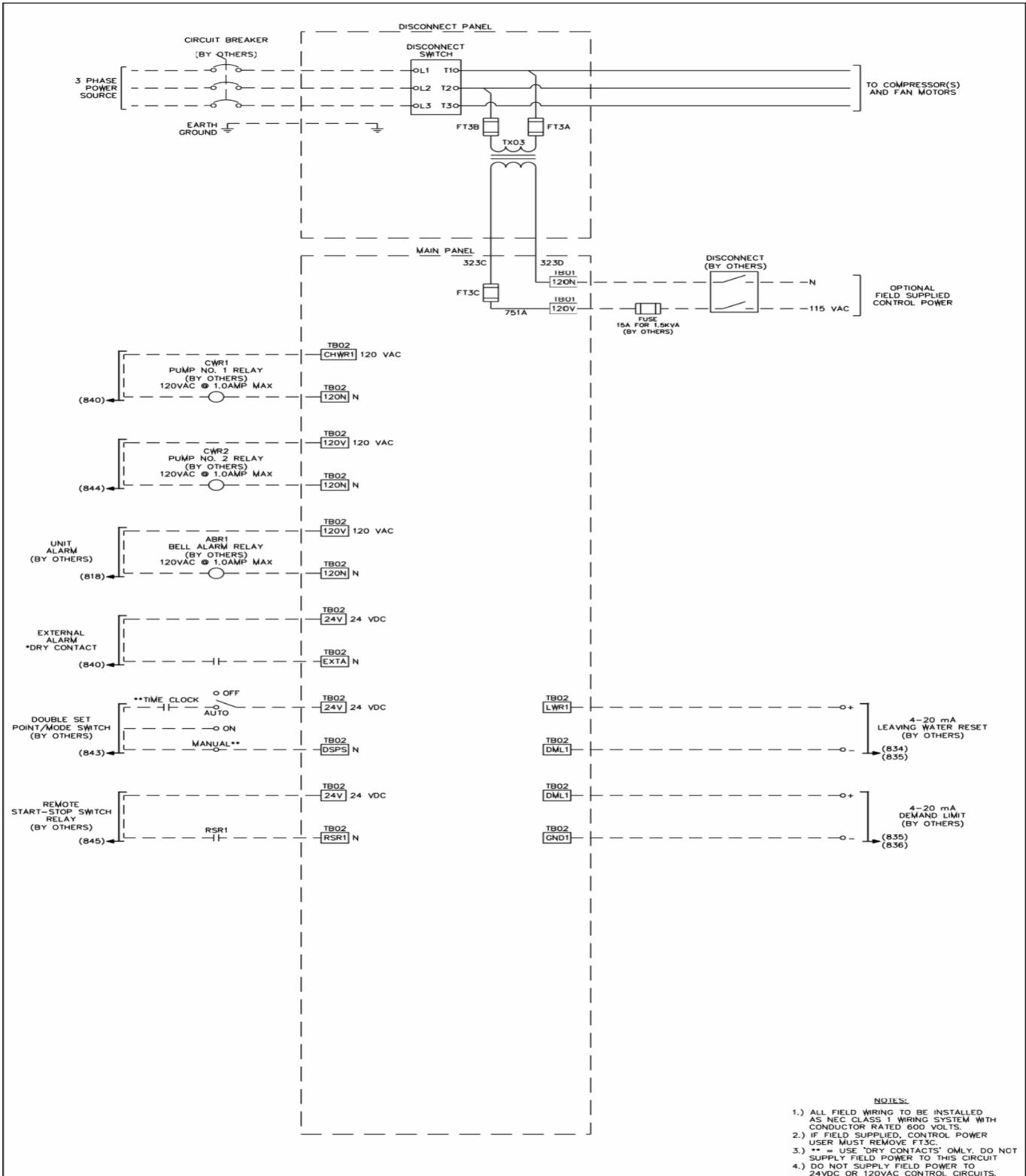
Height of Wall (ft)		Up to 8	10	12	13	14
# of Fans	Distance from Wall					
4	4 Ft	0.0%	1.4%	6.0%	Not Allowed	
	5 Ft	0.0%	0.8%	3.2%	6.0%	
	6 Ft	0.0%	0.0%	0.8%	1.6%	3.0%
6-8	< 5 Ft	Not Allowed				
	5 Ft	0.5%	1.5%	6.0%		
	6 Ft	0.0%	0.8%	3.2%	6.0%	
	8 Ft	0.0%	0.0%	0.9%	1.6%	3.0%
10	< 6 Ft	Not Allowed				
	6 Ft	0.5%	1.5%	6.0%		
	8 Ft	0.0%	0.8%	3.3%	6.0%	
	10 Ft	0.0%	0.0%	0.8%	1.6%	3.0%
12-14	< 6 Ft	Not Allowed				
	6 Ft	0.8%	1.8%	7.2%		
	8 Ft	0.0%	1.0%	4.0%	7.2%	
	10 Ft	0.0%	0.0%	1.0%	1.9%	3.6%

# AGZ-F Close Spacing Performance

## Case 5 Pit/Solid Wall Installation - % Full Load Power Increase

Height of Wall (ft)		Up to 8	10	12	13	14
# of Fans	Distance from Wall					
4	4 Ft	0.6%	2.0%	9.0%	Not Allowed	
	5 Ft	0.3%	1.2%	4.8%	9.0%	
	6 Ft	0.0%	0.0%	1.2%	2.5%	4.5%
6-8	< 5 Ft	Not Allowed				
	5 Ft	0.7%	2.1%	9.0%		
	6 Ft	0.4%	1.2%	4.8%	9.0%	
	8 Ft	0.0%	0.0%	1.2%	2.4%	4.5%
10	< 6 Ft	Not Allowed				
	6 Ft	0.6%	2.1%	9.0%		
	8 Ft	0.4%	1.2%	4.7%	9.0%	
	10 Ft	0.0%	0.0%	1.2%	2.4%	4.6%
12-14	< 6 Ft	Not Allowed				
	6 Ft	0.7%	2.5%	10.8%		
	8 Ft	0.5%	1.4%	5.6%	10.8%	
	10 Ft	0.0%	0.0%	1.4%	2.9%	5.5%

# AGZ-F Single-Point Connection Field Wiring Diagram



- NOTES:**
- 1.) ALL FIELD WIRING TO BE INSTALLED AS NEC CLASS 1 WIRING SYSTEM WITH CONDUCTOR RATED 600 VOLTS.
  - 2.) IF FIELD SUPPLIED, CONTROL POWER USER MUST REMOVE FT3C.
  - 3.) \*\* = USE 'DRY CONTACTS' ONLY. DO NOT SUPPLY FIELD POWER TO THIS CIRCUIT
  - 4.) DO NOT SUPPLY FIELD POWER TO 24VDC OR 120VAC CONTROL CIRCUITS.

<b>Field Wiring Diagram</b>		Unit Tag: CH-1 Scroll		 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 14.60		
Product: Trailblazer® Air-Cooled		Project Name: Augustana Lutheran				
Model :AGZ008F Single-Point Connection		Sales Office: Long Building		Scale: N/A	Tolerance: N/A	Dwg Units: N/A
Sales Engineer: Bill Roan		Nov. 21, 2023	Ver/Rev:	Sheet 1 of 1		

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# Trailblazer® Air-Cooled ScrollAGZ-F Service Clearance

Recommended Minimum Clearances			Distance "C"	Unit Operation	Service Clearance	
# of	Coil Side "A"	Distance "B"	ft. (m)	Opposite End	Opposite End	Coil Removal
Fans	ft. (m)	ft. (m)	Operational/Service	ft. (m)	ft. (m)	Service area
4-14	4 (1.2) / 8 (2.4)	8 (2.4)	4 (1.2) / 8 (2.4)	4 (1.2)	4 (1.2)	Either Side

**Note (1): One Side for Compressor removal and the other side for Compressor/Coil removal**

**Note (1): One Side for Compressor removal and the other side for Compressor/Coil removal.**

**Coil Side "A"** This is the dimension from the side of the unit for air clearance to coil and for service access to the compressors and major components - See Note (1) above.

**Distance "B"** This is the dimension between two units mounted side by side  
Clearance to the opposite side of the units must be also this distance or greater.  
Provide air space at each end of unit also equal to this distance or use partially open wall.

**Distance "C"** This is the dimension from the side of the unit to a enclosure wall  
If wall height exceeds the unit height - more distance or open wall must be provided  
Provide air space at each end of unit also equal to this distance or use partially open wall.

**Opposite End** Service access is required to both ends of the unit.  
Safety codes require a minimum of 4 ft clearance at the control box end  
End opposite the control box requires clearance for access to unit components

<b>Product Drawing</b>	Unit Tag: CH-1 Scroll			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 14.60		
Product: Trailblazer® Air-Cooled	Project Name: Augustana Lutheran					
Model: AGZ008F	Sales Office: Long Building			Scale: NTS	Tolerance: +/-1.0"	Dwg Units: in [mm]
Sales Engineer: Bill Roan	Nov. 21, 2023	Ver/Rev:	Sheet 1 of 1			
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 Information		Technical Data Sheet
Job Name	Augustana Lutheran Church	
Date	11/21/2023	
Submitted By	Bill Roan	
Software Version	14.60	
Unit Tag	CH-1B Screw	
FPA#	AUTO_R513A_REFR	



Image may not represent ordered unit

Unit Overview					
Model Number	Capacity ton	Voltage	Unit Starter Type	ASHRAE 90.1	LEED Enhanced Refrigerant Management Credit
AWV010B	129.0	460 V / 60 Hz / 3 Ph	VFD	'07, '10, '13, '16 & '19	Pass

Unit		
Unit Type	Air-Cooled Screw Compressor Chiller	Platform
		Packaged
Unit Revision		OD
Head Pressure	AC Fan Motors / Fantrol (32°F Min.)	Tubing
		No Liquid Solenoid Valves & No Suction Shut-off Valves
Display	On Controller only	
Compressor	DBN	Refrigerant Economizer
		None
Refrigerant Type	R513A	Refrigerant Weight
		238 lb (per unit)
Approval	ETL/cETL, AHRI & ASHRAE 90.1	

Evaporator							
Evaporator Model:	PP1000A0206						
Water Volume:	20.2 gal						
Connection Hand:	Universal Connection - Facing out back						
Connection Size:	6.0 in						
Insulation:	Single Layer Insulation on Evaporator						
Entering Fluid Temperature	Leaving Fluid Temperature	Fluid Type	Fluid Flow	Fluid Flow Min / Max	Pressure Drop	Pressure Drop Min / Max	Fouling Factor
52.40 °F	44.00 °F	Water	367.0 gpm	197.0/ 660.0 gpm	5.80 ft H <sub>2</sub> O	2.00 / 17.9 ft H <sub>2</sub> O	0.000100 °F.ft <sup>2</sup> .h/Btu

Note: Evaporator Pressure Drop does not include a strainer. Minimum flow is based on a Variable Flow Pumping System Type and applies to part load conditions only.

Condenser			
Number of Fans:	10		
Coil Fins:	MicroChannel		
Guards:	Condenser Coil Louvers & Base Frame Wire Grilles		
Design Ambient Air Temperature	Altitude	Fan Diameter	Minimum Design Ambient Temperature
95.0 °F	5400 ft	31.5 in	32.0 °F

## Unit Performance

Design												
Capacity			Input Power				Efficiency (EER)			IPLV.IP (EER)*		
129.0 ton			159.1 kW				9.730 Btu/W.h			16.26 Btu/W.h		
Performance Points rated at AHRI Ambient Relief												
Unit							Evaporator				Condenser	
Point #	% Load	Capacity ton	Input Power kW	Efficiency (EER) Btu/W.h	Refrigerant Economizer Status #1; #2	Compressor RPS #1; #2	Fluid Flow gpm	Pressure Drop ft H <sub>2</sub> O	Entering Fluid °F	Leaving Fluid °F	Ambient Air °F	Altitude ft
1	100.0	129.0	159.1	9.730	N/A	78; 69	367.0	5.80	52.40	44.00	95.0	5400
2	75.0	96.75	90.60	12.81	N/A	54; 43	367.0	5.80	50.30	44.00	80.0	5400
3	50.0	64.50	43.48	17.80	N/A	28; 25	367.0	5.80	48.20	44.00	65.0	5400
4	25.0	32.25	19.49	19.86	N/A	23	367.0	5.80	46.10	44.00	55.0	5400

\* IPLV reflects AHRI standard rating conditions with water and may change with user defined conditions due to AWV product optimized configurability.

## Sound Data (Internal Discharge Compressor Muffler)

Sound Pressure (at 30 feet)																								
% Load	63 Hz db	125 Hz db	250 Hz db	500 Hz db	1 kHz db	2 kHz db	4 kHz db	8 kHz db	Overall dBA															
100	76	72	69	66	63	55	49	44	68															
75	75	72	67	65	61	53	48	43	66															
50	75	71	65	63	60	51	46	41	65															
25	72	68	62	60	57	48	43	38	62															
Sound Power																								
% Load	63 Hz db	125 Hz db	250 Hz db	500 Hz db	1 kHz db	2 kHz db	4 kHz db	8 kHz db	Overall dBA															
100	103	100	96	93	90	82	76	71	95															
75	102	99	94	92	88	80	75	70	93															
50	102	98	92	90	87	78	73	68	92															
25	99	95	89	87	84	75	70	65	89															
One-third Octave Band Sound Power																								
% Load	50 Hz	63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz	1 kHz	1.25 kHz	1.6 kHz	2 kHz	2.5 kHz	3.15 kHz	4 kHz	5 kHz	6.3 kHz	8 kHz	10 kHz
100	99	99	97	95	95	94	90	93	92	89	88	87	85	85	86	79	77	75	73	71	71	69	64	61
75	99	98	96	94	94	93	90	90	87	88	87	84	84	84	83	77	75	74	71	70	69	68	62	59
50	98	97	95	93	94	91	88	89	86	87	86	83	83	82	81	75	73	72	70	68	68	67	61	58
25	95	94	92	90	91	88	85	85	83	84	83	80	80	79	77	72	70	69	67	65	64	63	58	55

Octave band is non 'A' weighted and overall readings are 'A' weighted. Sound data rated in accordance with AHRI Standard-370.

## Physical

Unit				
Length*	Height	Width*	Shipping Weight*	Operating Weight*
217 in	100 in	88 in	12567 lb	12736 lb

\*Shipping and Operating Weights are based on 'worst case' unit configuration variations and include the below listed Option weights but do not include the weights of any Accessories. Contact Chiller Applications for additional information.

Option Weights	
Louvers:	726 lb
Total:	726 lb

Note: Option weights shown may be 'worst case' and should not be used to calculate unit weight without the option present.

## Electrical

Unit Electrical Data				
Voltage	Starter Type	Fan Motor Quantity	LRA Fan Motor (each)	FLA Fan Motors (each)
460 V / 60 Hz / 3 Ph	VFD	10	10.5 A	3.3 A
<b>Power Connection Type:</b>	Single Point Disconnect Switch with Circuit Protection			
<b>Short Circuit Current Rating:</b>	10 kA			
<b>Box Size Code:</b>	T			
<b>Phase Voltage:</b>	None (PVM included as part of Solid State / VFD)			
Single Point Power Connection				
<b>Minimum Circuit Ampacity (MCA):</b>	282 A			
<b>Recommended Overcurrent Protection Size:</b>	350 A			
<b>Maximum Overcurrent Protection Size(MOCP):</b>	400 A			
<b>Lug Connection Size:</b>	(2) 3/0-250MCM			
Compressor Electrical Data				
Compressor Type	Compressor Quantity		Starter Type	
Screw	2		VFD	
	Compressor #			
	1		2	
<b>Rated Load Amps (RLA):</b>	124 A		86 A	
<b>Inrush Current:</b>	124 A		86 A	

*Note: Power wiring connections to the chiller may be done with either copper or aluminum wiring. Wire should be sized per NEC and/or local codes. Wire sizing and wire count must fit in the power connection lug sizing listed above. Please contact your local sales office for more information.*

## Options

Electrical	
<b>Water Flow Indicator:</b>	Thermal Dispersion Type

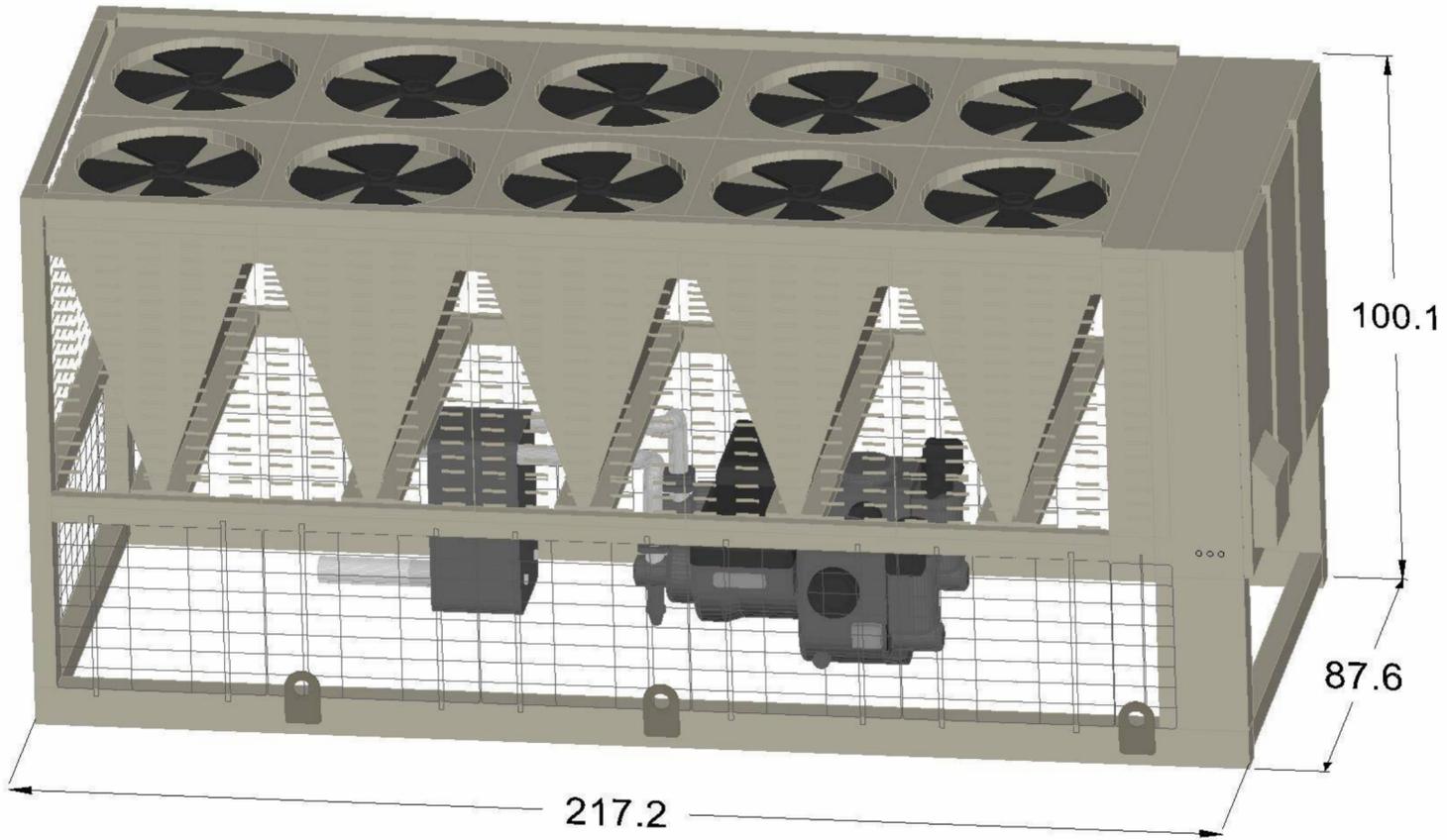
## Warranty

<b>Unit Startup:</b>	Domestic
<b>Standard Warranty:</b>	1st Year Entire Unit Parts & Labor

## AHRI Certification



Certified in accordance with the AHRI Air-Cooled Water-Chilling Packages Certification Program, which is based on AHRI Standard 550/590 (I-P) and AHRI Standard 551/591 (SI). Certified units may be found in the AHRI Directory at [www.ahridirectory.org](http://www.ahridirectory.org).

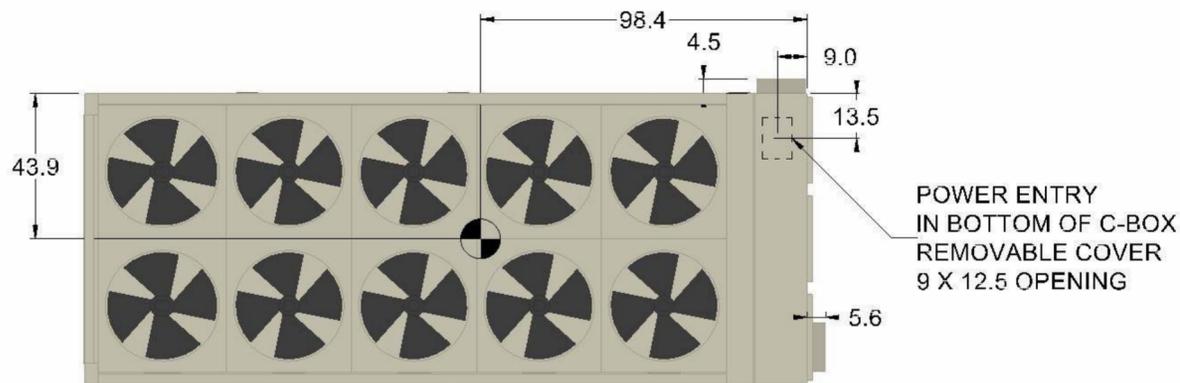


NOTE: A water strainer must be installed at the inlet of the evaporator to protect it from damage. Please refer to the IOM for additional details.

<b>Pathfinder® Variable Speed Screw</b>	Unit Tag: CH-1B Screw	Sales Office: Long Building Technologies			 13600 Industrial Park Blvd. Minneapolis, MN 55441 <a href="http://www.DaikinApplied.com">www.DaikinApplied.com</a> Software Version: 14.60
Product: Pathfinder® Variable Speed Screw	Project Name: Augustana Lutheran	Sales Engineer: Bill Roan			
Model: AWW010B	Nov. 21, 2023	Ver/Rev:	Sheet: 1 of 1	Scale: NTS   Tolerance: +/- 0.25"   Dwg Units: (in)	

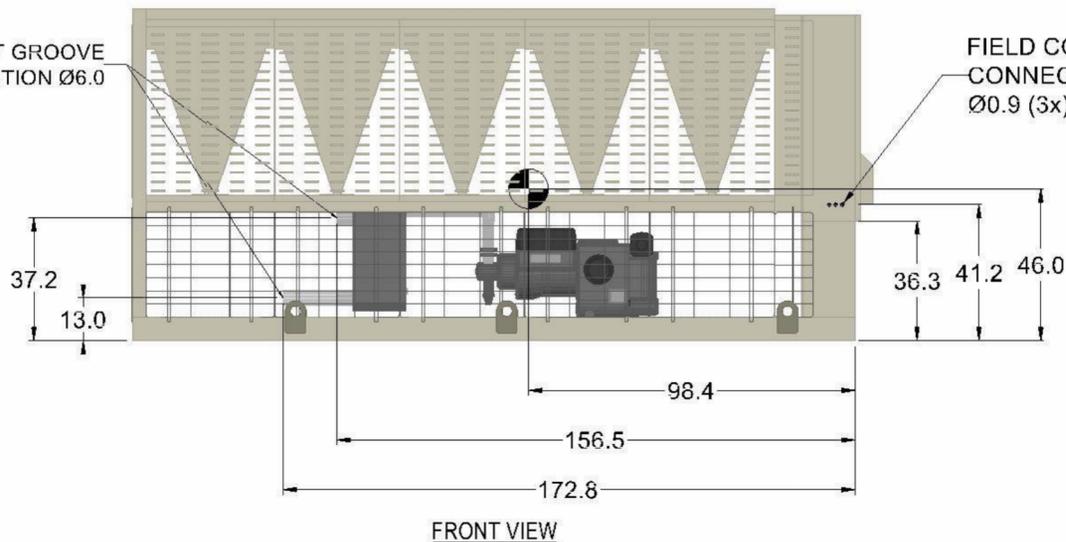
No change to this drawing may be made unless approved in writing by Daikin Applied. Purchaser must determine that the equipment is fit and sufficient for the job specifications.

TOP VIEW



INLET/OUTLET GROOVE  
PIPE CONNECTION Ø6.0

FIELD CONTROL  
CONNECTIONS  
Ø0.9 (3x)



FRONT VIEW

**Pathfinder® Variable Speed Screw**

Unit Tag: CH-1B Screw

Sales Office: Long Building Technologies

Product: Pathfinder® Variable Speed Screw

Project Name: Augustana Lutheran

Sales Engineer: Bill Roan

Model: AWW010B

Nov. 21, 2023

Ver/Rev:

Sheet: 1 of 1

Scale: NTS

Tolerance: +/- 0.25"

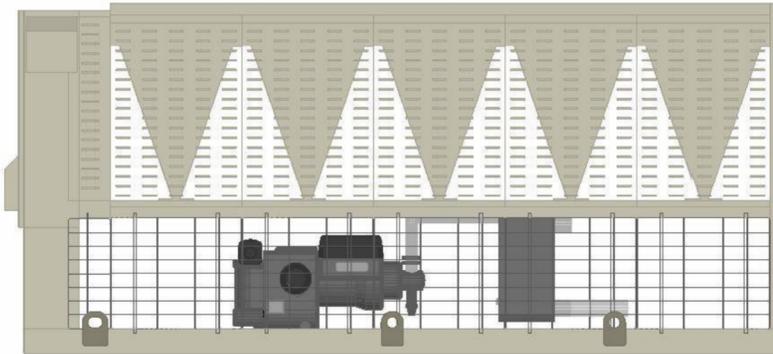
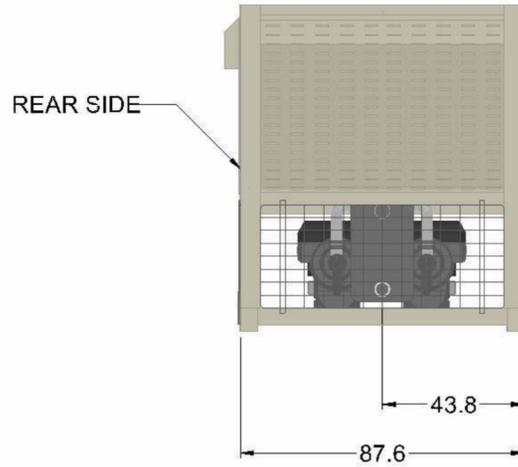
Dwg Units: (in)



13600 Industrial Park Blvd. Minneapolis, MN 55441  
www.DaikinApplied.com Software Version: 14.60

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LEFT VIEW



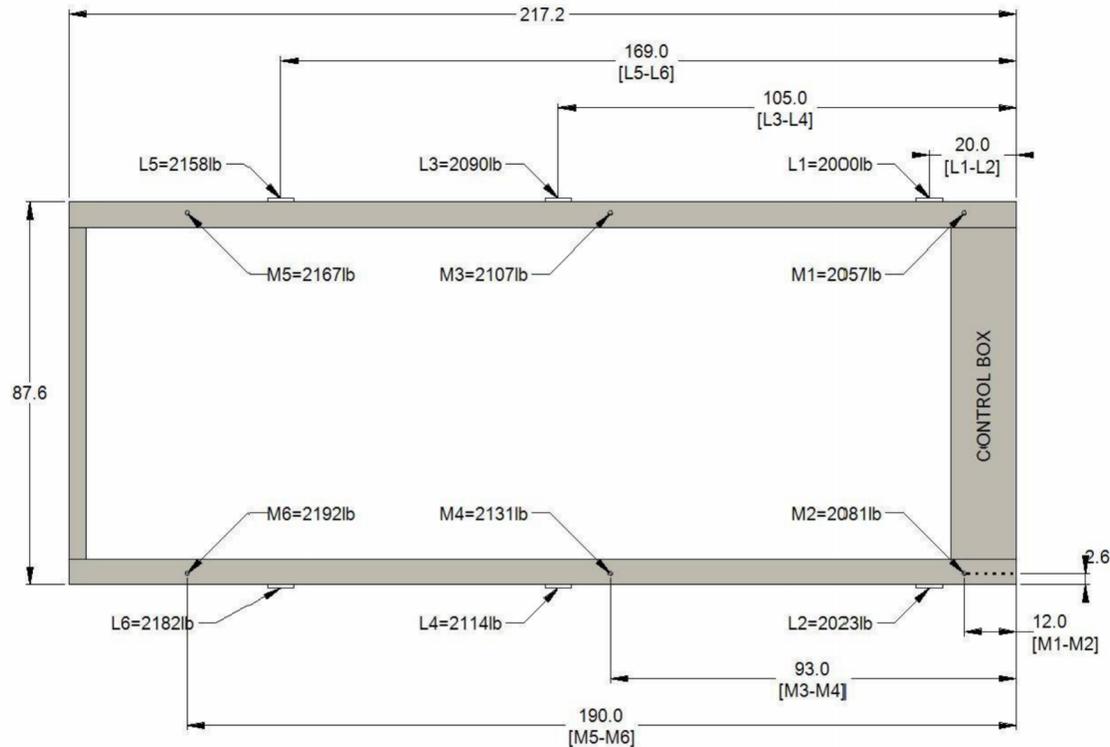
REAR VIEW

<b>Pathfinder® Variable Speed Screw</b>	Unit Tag: CH-1B Screw	Sales Office: Long Building Technologies			 13600 Industrial Park Blvd. Minneapolis, MN 55441 <a href="http://www.DaikinApplied.com">www.DaikinApplied.com</a> Software Version: 14.60
Product: Pathfinder® Variable Speed Screw	Project Name: Augustana Lutheran	Sales Engineer: Bill Roan			
Model: AWW010B	Nov. 21, 2023	Ver/Rev:	Sheet: 1 of 1	Scale: NTS   Tolerance: +/- 0.25"   Dwg Units: (in)	

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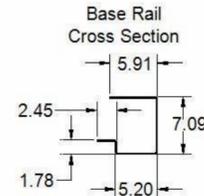
Mounting and Lifting

BASE FRAME TOP VIEW



NOTES:

- 1) L = LIFTING WEIGHT
- 2) M = MOUNTING LOAD
- 3) UNIT SHIPPING WEIGHT = 12567lb
- 4) UNIT OPERATING WEIGHT = 12736lb
- 5) MOUNTING HOLE SIZE = .75"
- 6) MOUNTING HOLES ONLY ON BOTTOM OF BASE
- 7) UNIT WIDTH DIMENSION DOES NOT INCLUDE 1 INCH THICKNESS OF THE LIFTING LUG ASSEMBLIES ON BOTH SIDES, WHICH MAY BE REMOVED AFTER INSTALLATION BUT MUST BE RETAINED FOR FUTURE LIFTING / UNIT REMOVAL



Pathfinder® Variable Speed Screw

Unit Tag: CH-1B Screw

Sales Office: Long Building Technologies

Product: Pathfinder® Variable Speed Screw

Project Name: Augustana Lutheran

Sales Engineer: Bill Roan

Model: AWW010B

Nov. 21, 2023

Ver/Rev:

Sheet: 1 of 1

Scale: NTS

Tolerance: +/- 0.25"

Dwg Units: (in)



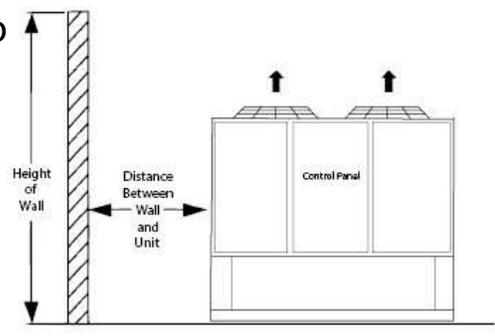
13600 Industrial Park Blvd. Minneapolis, MN 55441  
www.DaikinApplied.com Software Version: 14.60

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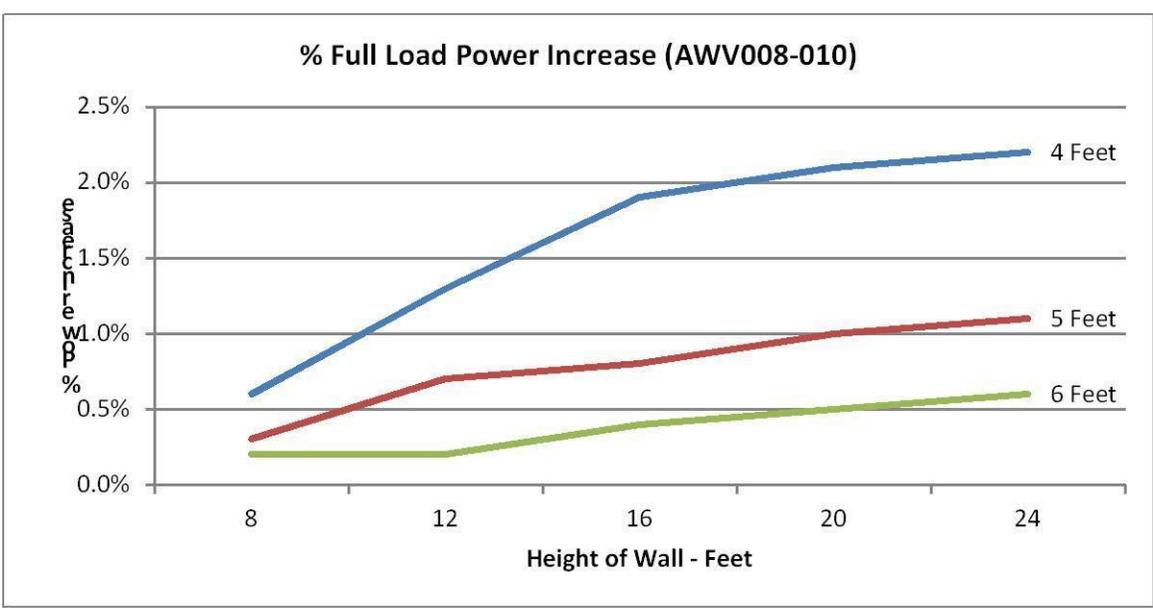
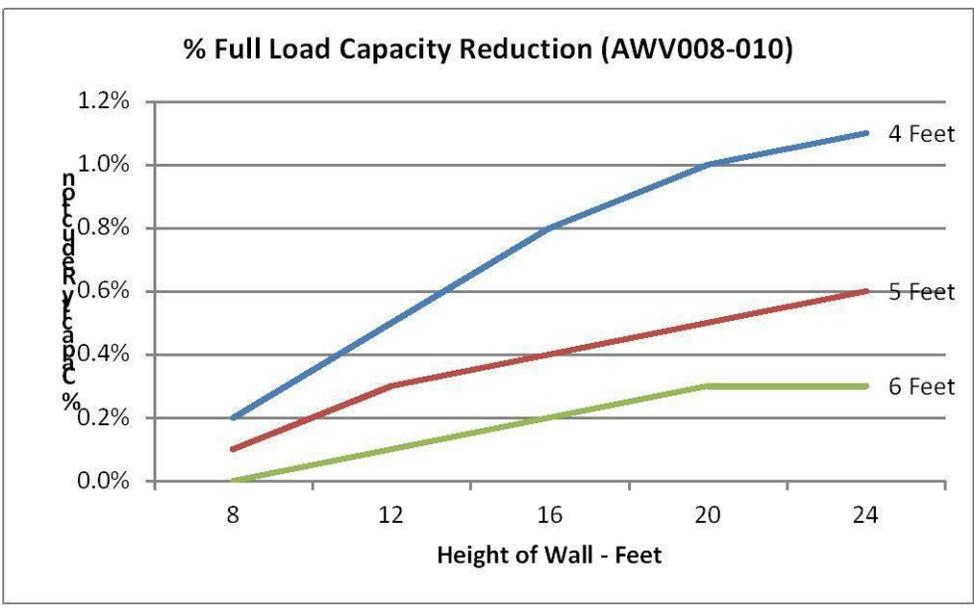
# Pathfinder® Variable Speed ScrewAWV Clo

## Case 1: Building or Wall on One Side of Unit

For all models, maintain a 4 feet minimum from a wall of any height; however, performance may be affected at this distance due to air recirculation and elevated condenser pressure.



## Case 1- Full Load Power Increase and Capacity Reduction

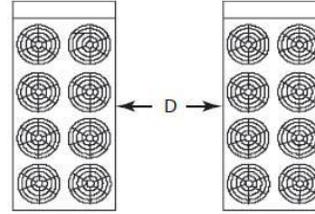


<b>Product Drawing</b>	Unit Tag: CH-1B Screw				13600 Industrial Park Blvd. Minneapolis, MN 55441				
Product: Pathfinder® Variable Speed	Project Name: Augustana Lutheran				www.DaikinApplied.com Software Version: 14.60				
Model: AWV010BAWV-A	Sales Office: Long Building			Nov. 21, 2023	Ver/Rev:	Sheet 1 of 1	Scale: NTS	Tolerance: +/-1.0"	Dwg Units: in [mm]
Sales Engineer: Bill Roan									

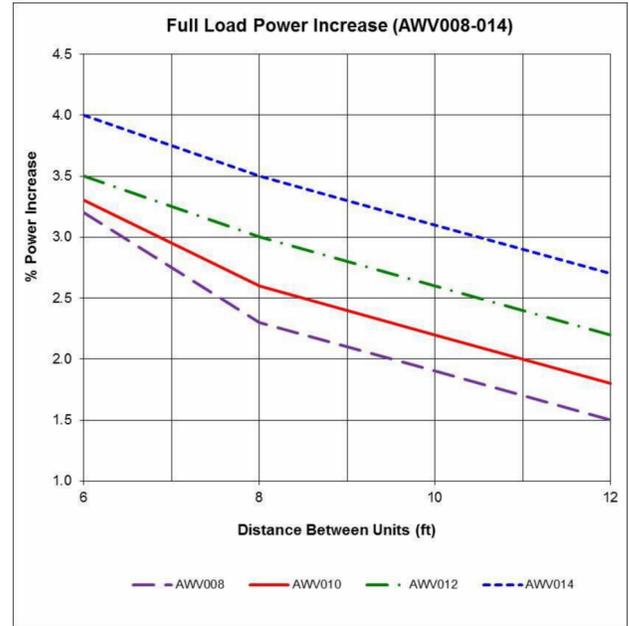
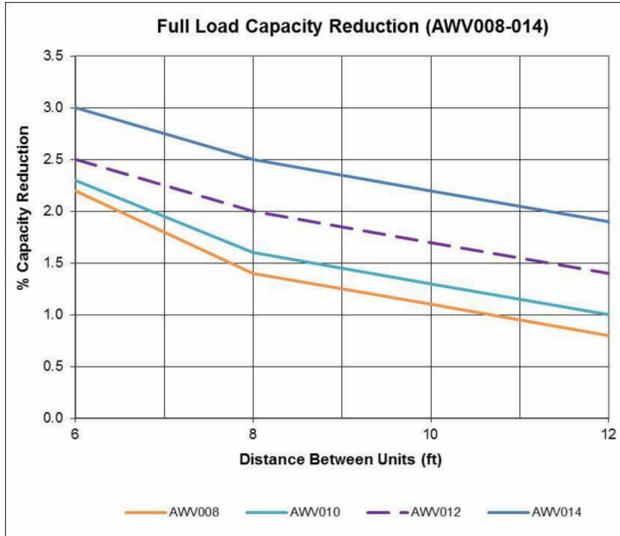
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### Case 2: Two Units, Side-by-Side

For all models, there must be a minimum of 6 feet between two units placed side-by-side; however, performance may be affected at this distance due to air recirculation and elevated condenser pressure.

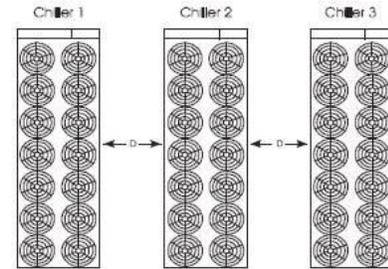


#### Case 2 - Full Load Capacity Reduction and Power Increase

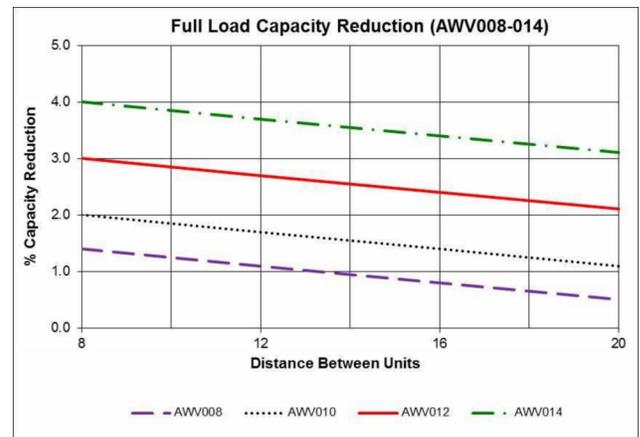
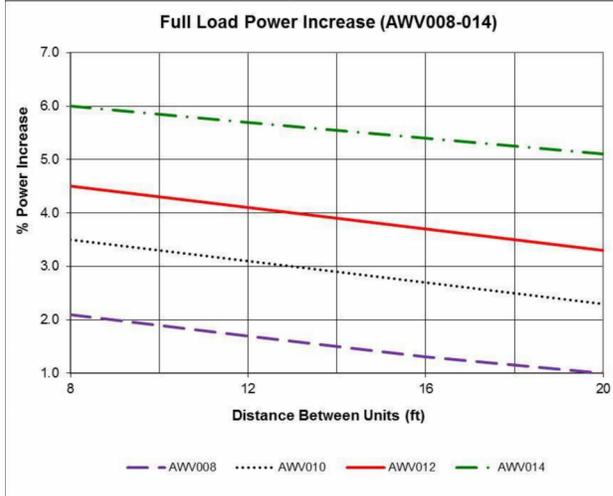


### Case 3: Three or More Units, Side-by-Side

For all models, there must be a minimum of 8 feet between any units placed side-by-side; however, performance may be affected at this distance.

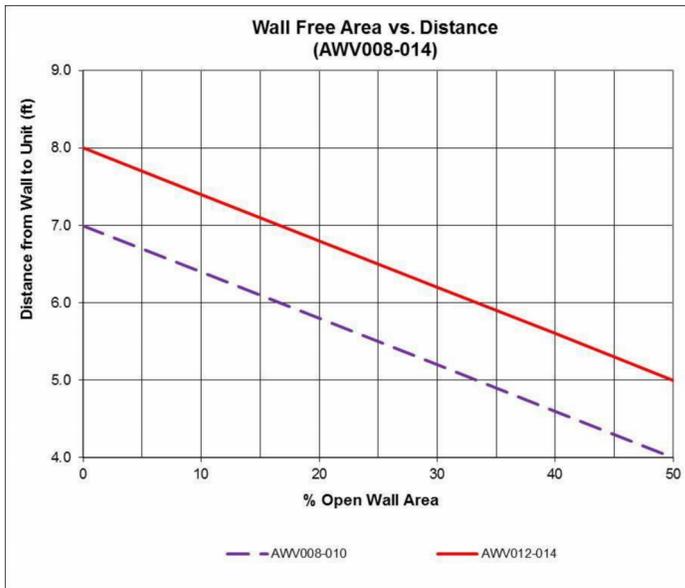


#### Case 3 - Full Load Capacity Reduction and Power Increase

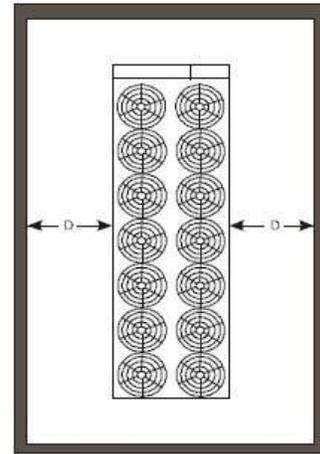


### Case 4: Open Screening Walls

Decorative screening walls are often used to help conceal a unit either on grade or on a rooftop. When possible, design these walls such that the combination of their open area and distance from the unit do not require performance adjustment. If the wall opening percentage is less than recommended for the distance to the unit, it should be considered as a solid wall. It is assumed that the wall height is equal to or less than the unit height when mounted on its base support. If the wall height is greater than the unit height, see Case 5: Pit Installation. The distance from the sides of the unit to the side walls must be sufficient for service, such as opening control panel doors. For uneven wall spacing, the distance from the unit to each wall can be averaged providing no distance is less than 4 feet. Values are based on walls on all four-sides.



Case 4 - Allowable Wall Open Area

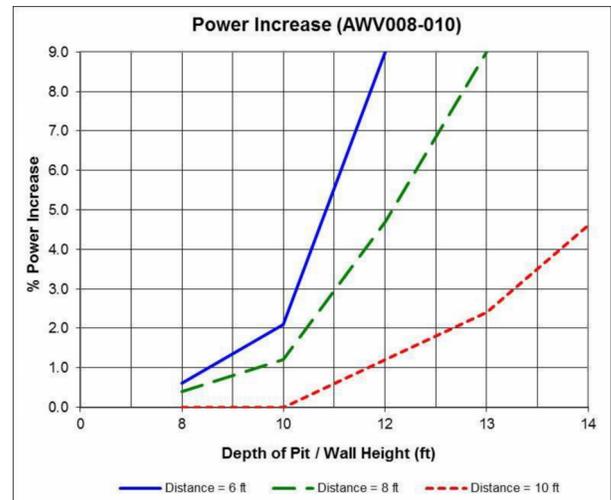
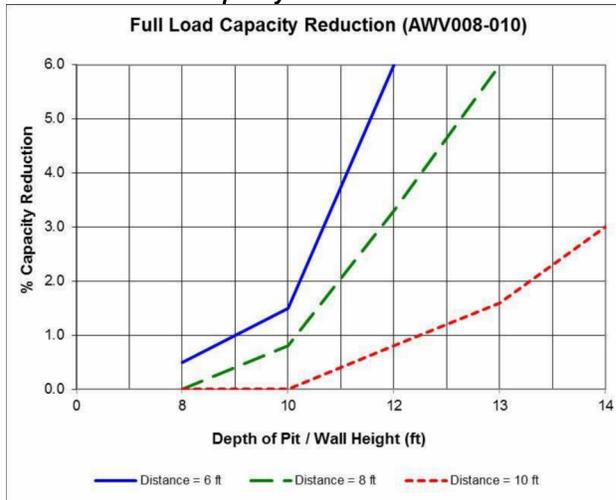


### Case 5: Pit Installation

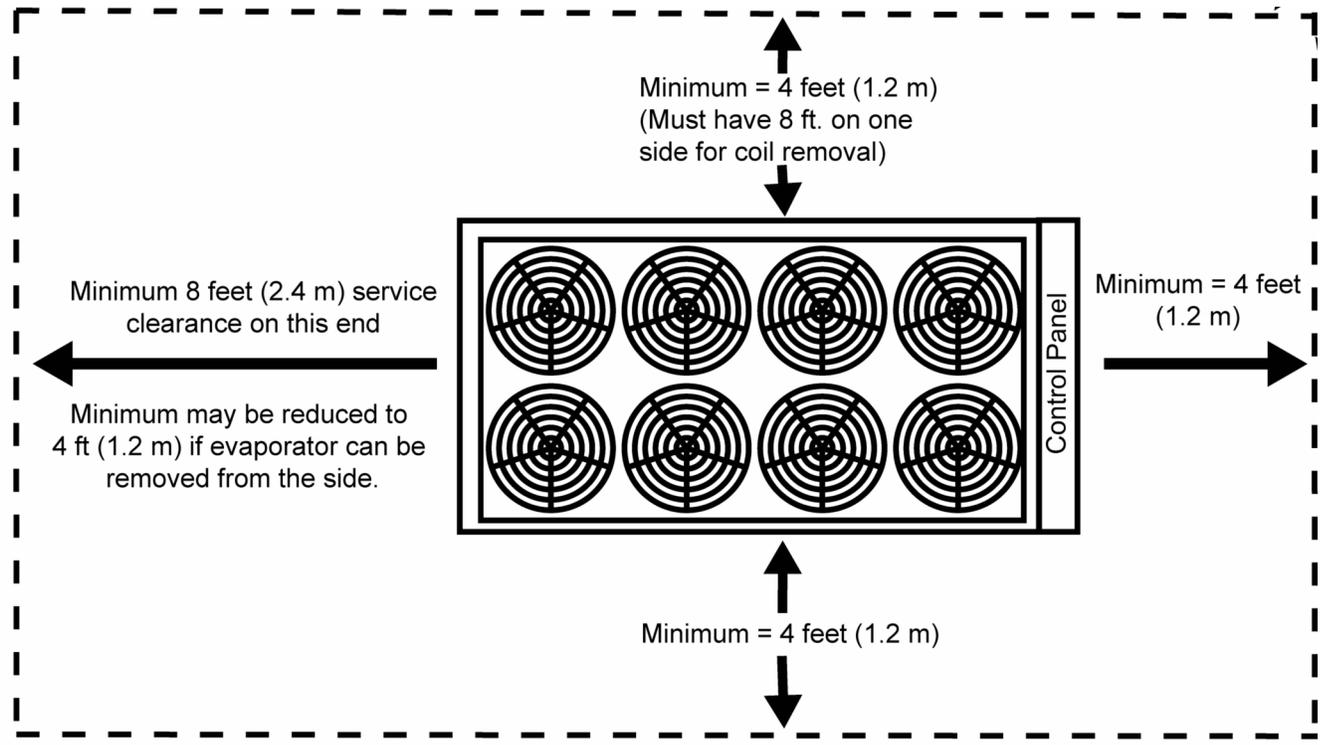
Pit installations can cause operating problems resulting from air recirculation and restriction and require care that sufficient air clearance is provided, safety requirements are met and service access is provided. A solid wall surrounding a unit is substantially a pit and this data should be used. Derates are based on single chiller installation only.

Steel grating is sometimes used to cover a pit to prevent accidental falls or trips into the pit. The grating material and installation design must be strong enough to prevent such accidents, yet provide abundant open area to avoid recirculation problems. Have any pit installation reviewed by the Daikin Applied sales representative prior to installation to ensure it has sufficient air-flow characteristics and approved by the installation design engineer to avoid risk of accident.

Case 5 - Full Load Capacity Reduction and Power Increase



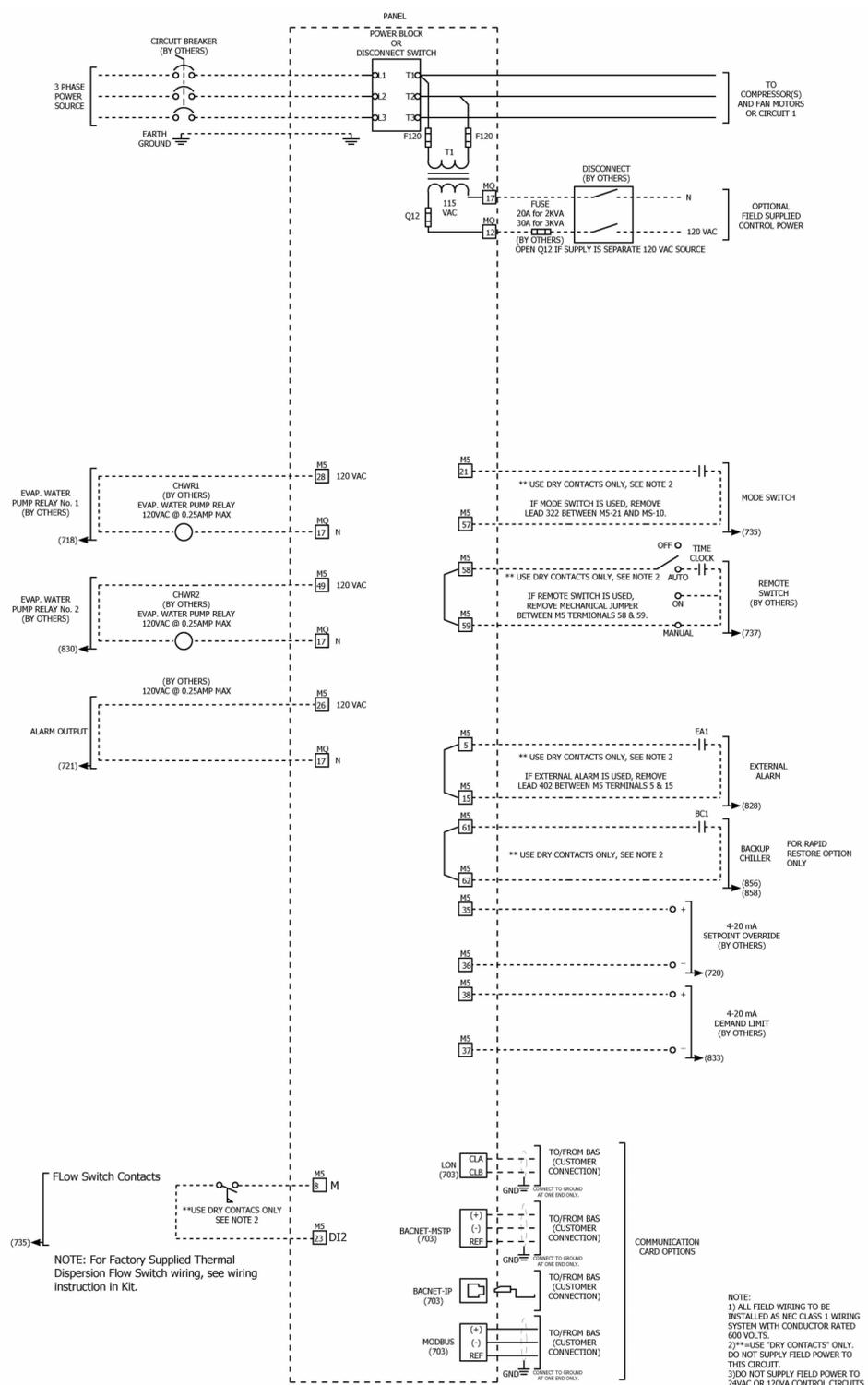
# Pathfinder® Variable Speed ScrewAWV-A Service Clearance



\*NOTE: Additional clearance may be required for proper airflow. Please consult Close Spacing drawings and IOM for additional details.

<b>Product Drawing</b>	Unit Tag: CH-1B Screw			 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com      Software Version: 14.60
Product: Pathfinder® Variable Speed	Project Name: Augustana Lutheran			
Model: AWV010BAWV-A	Sales Office: Long Building			Scale: NTS    Tolerance: +/-1.0"    Dwg Units: in [mm]
Sales Engineer: Bill Roan	Nov. 21, 2023	Ver/Rev:	Sheet 1 of 1	
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.				

# AWV Single-Point Connection Field Wiring Diagram



<b>Field Wiring Diagram</b>		Unit Tag: CH-1B Screw		 13600 Industrial Park Blvd. Minneapolis, MN 55441 www.DaikinApplied.com Software Version: 14.60		
Product: Pathfinder® Variable Speed		Project Name: Augustana Lutheran				
Model: AWV010BAWV Single-Point		Sales Office: Long Building		Scale: N/A	Tolerance: N/A	Dwg Units: N/A
Sales Engineer: Bill Roan		Nov. 21, 2023	Ver/Rev:	Sheet 1 of 1		
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.						