



SUBMITTAL

Project

Williamsburg Jr Athletic Sports Ctr

Date

Tuesday, June 3, 2025

Dan Stagge

Table Of Contents

Project: Williamsburg Jr Athletic Sports Ctr
Prepared By: Dan Stagge

06/03/2025
06:37AM

RTU-1	3
Unit Report.....	4
Certified Drawing.....	5
Performance Summary.....	8
RTU-2	11
Unit Report.....	12
Certified Drawing.....	13
Performance Summary.....	16
AC GF-1 2	19
Unit Report.....	20
Performance Summary.....	22
System Parameters.....	22
Electrical Data.....	22
Acoustic Summary.....	23
Certified Drawing.....	24

RTU-1

**Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report**

Unit Report For RTU-1

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025
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Unit Parameters

Unit Model:.....**48FEFN16A3A5-0A2C0**
 Unit Size:.....**16 (15 Tons)**
 Volts-Phase-Hertz:.....**208-3-60**
 Heating Type:.....**Gas**
 Refrigerant:.....**R-454B**
 Heat Control:.....**High Gas Heat**
 Duct Cfg:.....**Horizontal Supply / Horizontal Return**
 DX Options:**Single Circuit with Humidi-MiZer, Two Stage Cooling**

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length:.....**9' 7.875"**
 Unit Width:.....**5' 3.375"**
 Unit Height:.....**4' 9.375"**
Total Operating Weight:.....1974 lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Gas Line Size:.....**3/4**
 Condensate Drain Line Size:.....**3/4**
 Return Air Filter Type:.....**Throwaway**
 Return Air Filter Quantity:.....**6**
 Return Air Filter Size:.....**18 x 24 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

High Gas Heat
 Single Circuit with Humidi-MiZer, Two Stage Cooling
 High Static - EcoBlue Vane Axial Fan
 Al/Cu - Al/Cu
 Electromechanical Controls
 Powered Convenience Outlet
 Non-Fused Disconnect
 Standard Packaging
 Humidi-MiZer™ Adaptive Dehumidification System

Warranty Information

1-Year parts(std.)
 5-Year compressor parts(std.)
 10-Year heat exchanger - Aluminized(std.)

No optional warranties were selected.

NOTE: Please see Warranty Catalog 500-089 for explanation of policies and ordering methods.

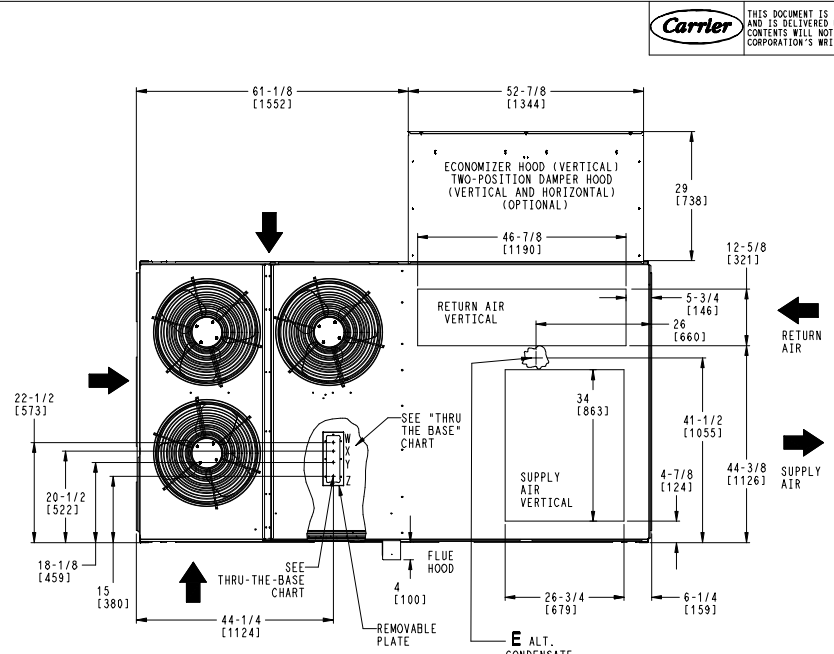
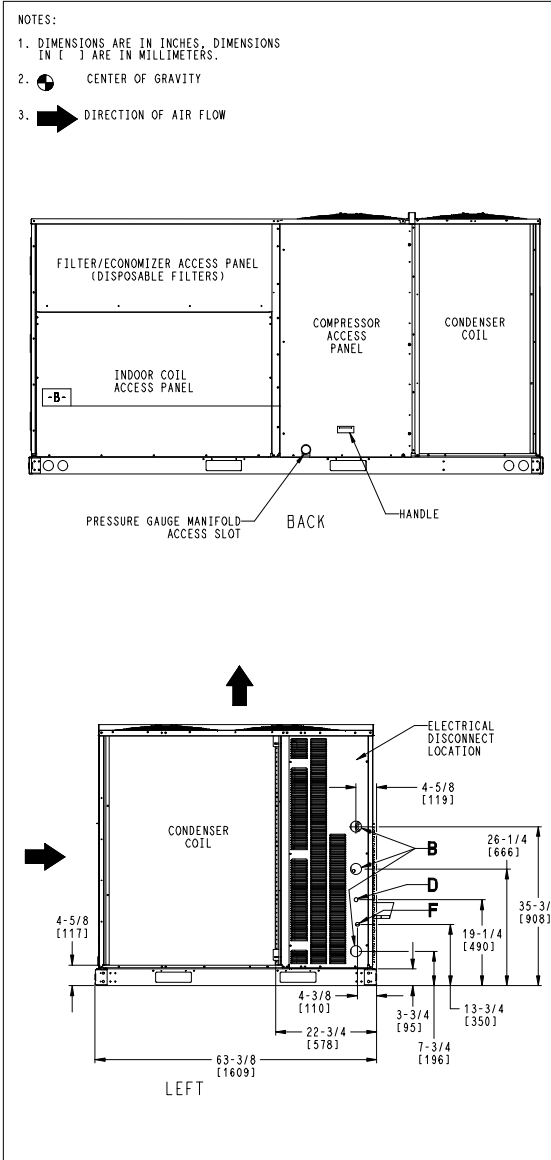
Ordering Information

Part Number	Description	Quantity
48FEFN16A3A5-0A2C0	Rooftop Unit	1
Field Installed Accessories		
33TCSPL-4	Carrier Connect Plus™ Wi-Fi® 7-day programmable/non-prog;	1
CRPWREXH082A00	Horizontal Power Exhaust	1
CRECOMZR110A00	CH 5 Horizontal SL Econ w/POL224	1
CRRFCURB074A00	14-inch Roof Curb	1

Certified Drawing for RTU-1

Project: Williamsburg Jr Athletic Sports Ctr
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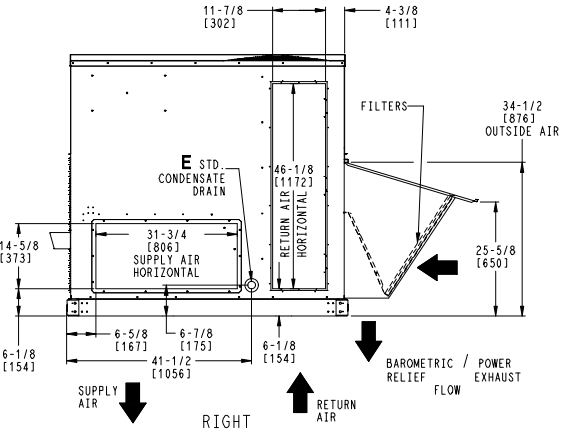
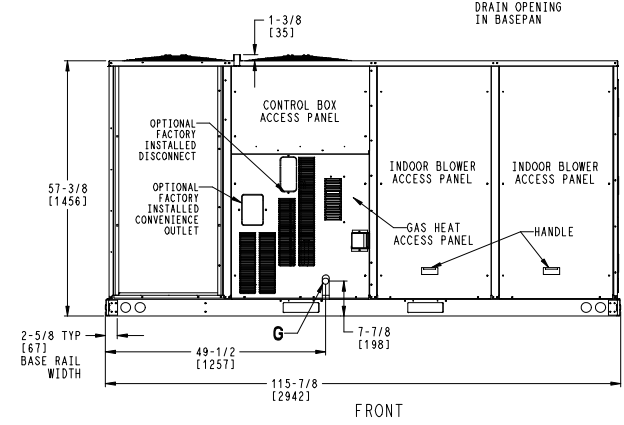
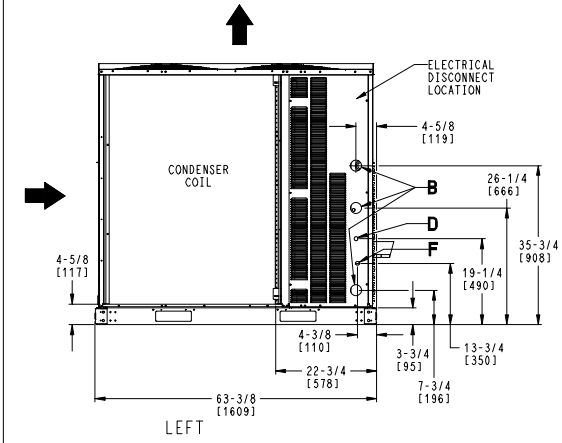
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CONNECTION SIZES	
B	2 1/2" [64] DIA POWER SUPPLY HOLE
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
F	7/8" [22] DIA FIELD CONVENIENCE OUTLET HOLE
G	3/4"-14 NPT GAS CONNECTION

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPR005A00, 006A00, 007A00				
005	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	1 1/4"	POWER	1 1/2" [38.1]
	Z	3/4" PIPE	GAS	1 3/4" [44.5]
006	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	1 1/2"	POWER	2" [50.8]
007	Z	3/4" PIPE	GAS	1 3/4" [44.5]
	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	2"	POWER	2 1/2" [63.5]
	Z	3/4" PIPE	GAS	1 3/4" [44.5]

FOR "THRU-THE-BASE" FACTORY OPTION, FITTINGS FOR X & Y ARE PROVIDED AS SPECIFIED ON "006".



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48FE 16 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	50TM003162	REV
U.S. ECCN:NSR	1 OF 2	8/10/23	-			-

Certified Drawing for RTU-1

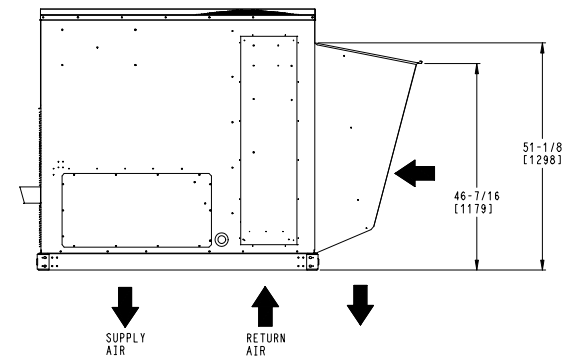
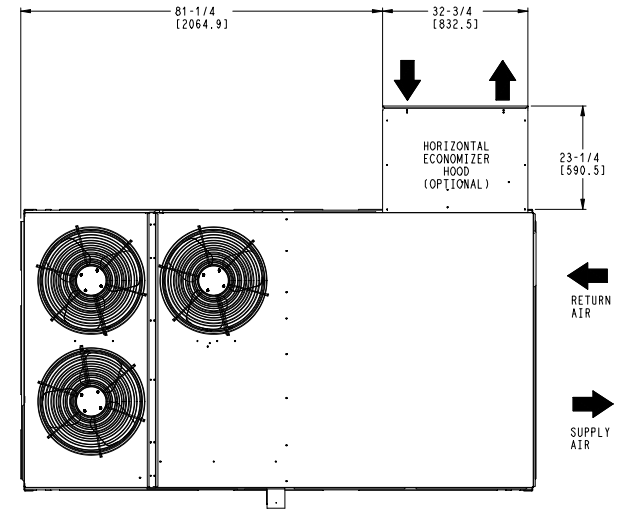
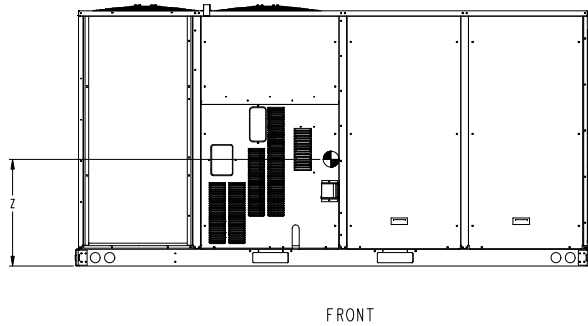
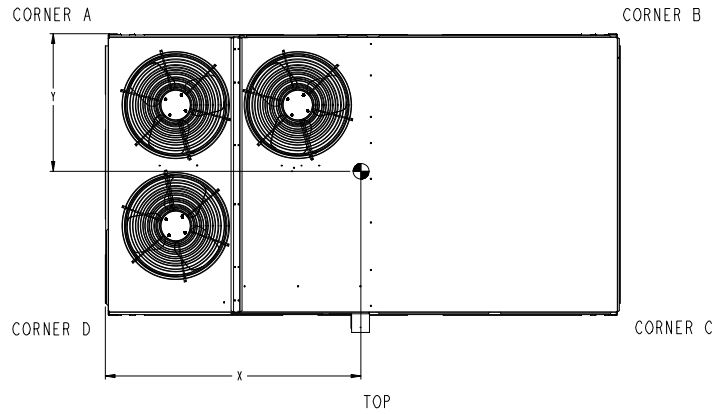
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UNIT	STD UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.			
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z	
48FE-M16	1408	639	373	169	341	155	332	150	362	164	55 3/8	31 1/4	21 1/8	[1407] [794] [537]

STANDARD UNIT WEIGHT IS WITH LOW HEAT & WITHOUT PACKAGING.
 FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.

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ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48FE 16 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	50TM003162	REV
U. S. ECCN: NSR	2 OF 2	8/10/23	-			-

Certified Drawing for RTU-1

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

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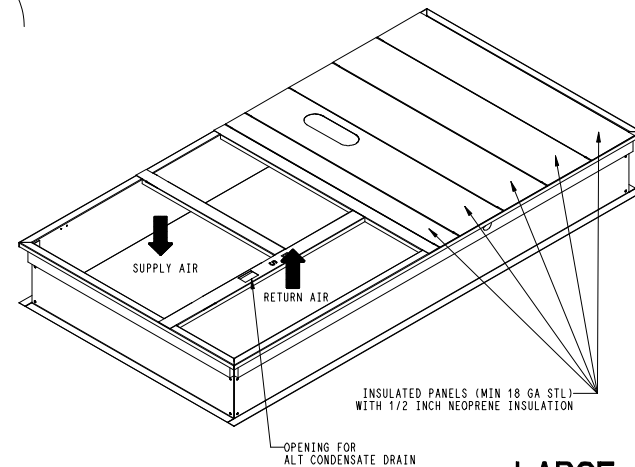
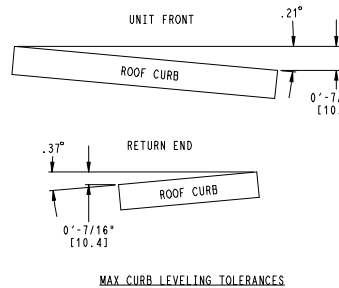
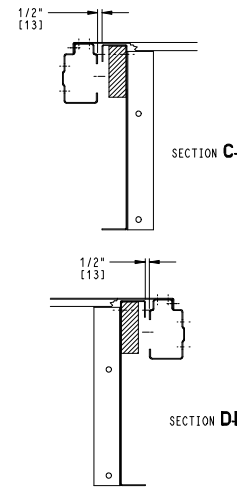
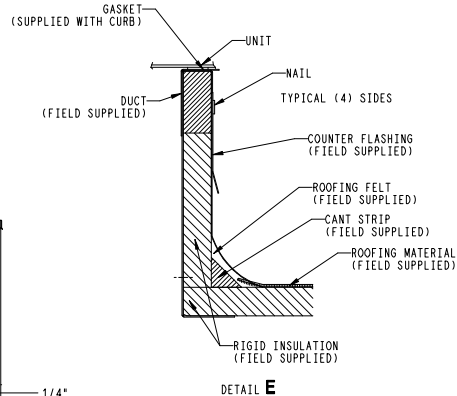
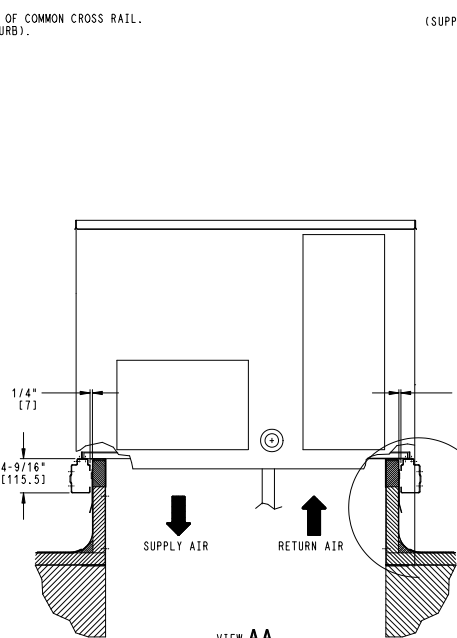
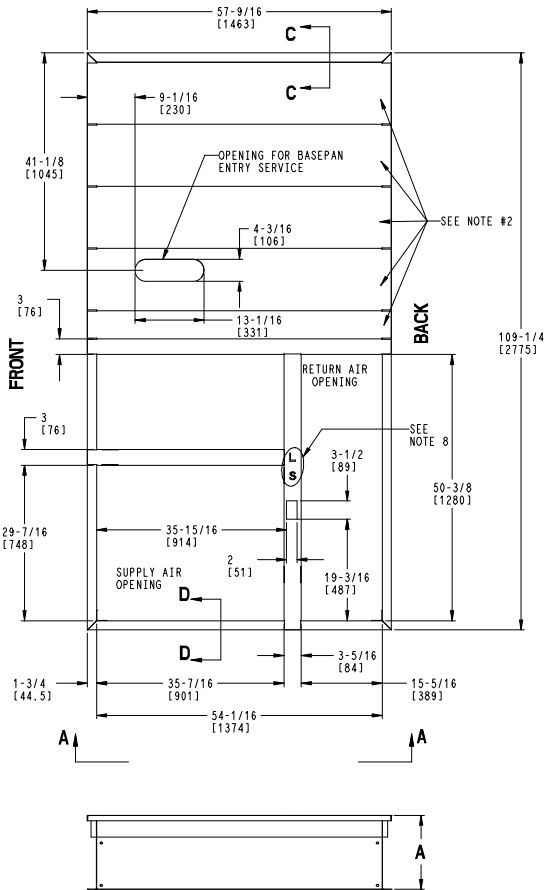
ROOF CURB ACCESSORY #	A
CRRFCURB074A00	14" [356]
CRRFCURB075A00	24" [610]

- NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
 2. INSULATED PANELS: 1/2" THK. NEOPRENE FOAM, 1.0# DENSITY.
 3. DIMENSIONS IN [] ARE IN MILLIMETERS.
 4. ROOFCURB SIDEWALLS: 16 GAGE STEEL.
 5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB).
 6. SERVICE CLEARANCE 4 FT ON EACH SIDE.
 7. DIRECTION OF AIR FLOW.
 8. "L" & "S" DESIGNATIONS DENOTE LOCATION OF COMMON CROSS RAIL. (POSITION "L" FOR LARGE DUCT OPENING CURB).



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LARGE DUCT OPENINGS

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48/50HCD14 / 48/50TCD16 / 48/50LC08,09,12	50TM500780	REV
U.S. ECCN:NSR	1 OF 1	12/19/17	02/15/13	ROOF CURB		B

Performance Summary For RTU-1

Project: Williamsburg Jr Athletic Sports Ctr
Prepared By: Dan Stagge

06/03/2025
06:37AM

Part Number:48FEFN16A3A5-0A2C0

Refrigerant:..... R-454B
ARI EER:..... 10.80
IEER (Max Cooling at Normal Cooling Design Mode):..... 14.5

Base Unit Dimensions

Unit Length:..... 115.9 in
Unit Width:..... 63.4 in
Unit Height:..... 57.4 in
Total Operating Weight:..... 1974 lb

Unit

Unit Voltage-Phase-Hertz:..... 208-3-60
Air Discharge:..... Horizontal
Fan Drive Type:..... Vane Axial
Actual Airflow:..... 6000 CFM
Site Altitude:..... 0 ft

Cooling Performance

Condenser Entering Air DB:..... 95.0 F
Evaporator Entering Air DB:..... 80.0 F
Evaporator Entering Air WB:..... 67.0 F
Evaporator Entering Air Enthalpy:..... 31.44 BTU/lb
Evaporator Leaving Air DB:..... 59.2 F
Evaporator Leaving Air WB:..... 57.5 F
Evaporator Leaving Air Enthalpy:..... 24.72 BTU/lb
Gross Cooling Capacity:..... 181.30 MBH
Gross Sensible Capacity:..... 134.70 MBH
Compressor Power Input:..... 13.50 kW
Coil Bypass Factor:..... 0.110

Heating Performance

Heating Airflow:..... 6000 CFM
Entering Air Temp:..... 70.0 F
Leaving Air Temp:..... 113.8 F
Gas Heating Input Capacity:..... 280.0 / 350.0 MBH
Gas Heating Output Capacity:..... 224.0 / 284.0 MBH
Temperature Rise:..... 43.8 F
Thermal Efficiency (%):..... 81.0

Supply Fan

External Static Pressure:..... 1.50 in wg
Options / Accessories Static Pressure
Humidi-MiZer Dehumidification System:..... 0.11 in wg
Power Exhaust:..... (Fan Data Includes Drop)
Application External Static (ESP + Unit Opts/Acc.):..... 1.61 in wg
Fan RPM:..... 2028
Fan Power:..... 4.29 BHP
NOTE:..... Selected IFM RPM Range: 1248 - 2200

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Power Exhaust

Return Duct Static:..... 0.40 in wg
Max. Air To Exhaust:..... 2850 CFM

Electrical Data

Voltage Range:..... 187 - 253
Compressor #1 RLA:..... 28.5

Performance Summary For RTU-1

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06/03/2025
 06:37AM

Compressor #1 LRA:.....	.255
Compressor #2 RLA:.....	21.1
Compressor #2 LRA:.....	157
Indoor Fan Motor Type:.....	HIGH
Indoor Fan Motor FLA (Total):.....	12.6
Combustion Fan Motor FLA (ea):.....	0.48
Power Supply MCA:.....	83
Power Supply MOCP (Fuse or HACR):.....	100
Disconnect Size FLA:.....	87
Disconnect Size LRA:.....	451
Electrical Convenience Outlet FLA (based on unit line voltage):.....	4.8
Power Exhaust [Kit Qty / FLA(ea kit)]:.....	1 / 3.8
Outdoor Fan [Qty / FLA (ea)]:.....	3 / 1.5

NOTE: Convenience outlet must be field connected to the line/load side of the unit disconnect per local code.

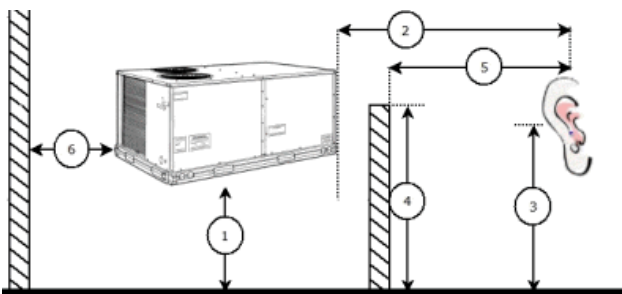
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	90.9	86.2	87.0
125 Hz	87.8	81.3	85.2
250 Hz	84.8	75.2	84.6
500 Hz	83.4	74.7	84.9
1000 Hz	84.3	75.0	82.2
2000 Hz	81.1	69.7	78.4
4000 Hz	76.4	59.5	75.3
8000 Hz	68.3	51.3	72.9
A-Weighted	88.2	78.3	87.0

Advanced Acoustics



Advanced Acoustics Parameters

1. Unit height above ground:.....	30.0	ft
2. Horizontal distance from unit to receiver:.....	50.0	ft
3. Receiver height above ground:.....	5.7	ft
4. Height of obstruction:.....	0.0	ft
5. Horizontal distance from obstruction to receiver:.....	0.0	ft
6. Horizontal distance from unit to obstruction:.....	0.0	ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
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Performance Summary For RTU-1

Project: Williamsburg Jr Athletic Sports Ctr
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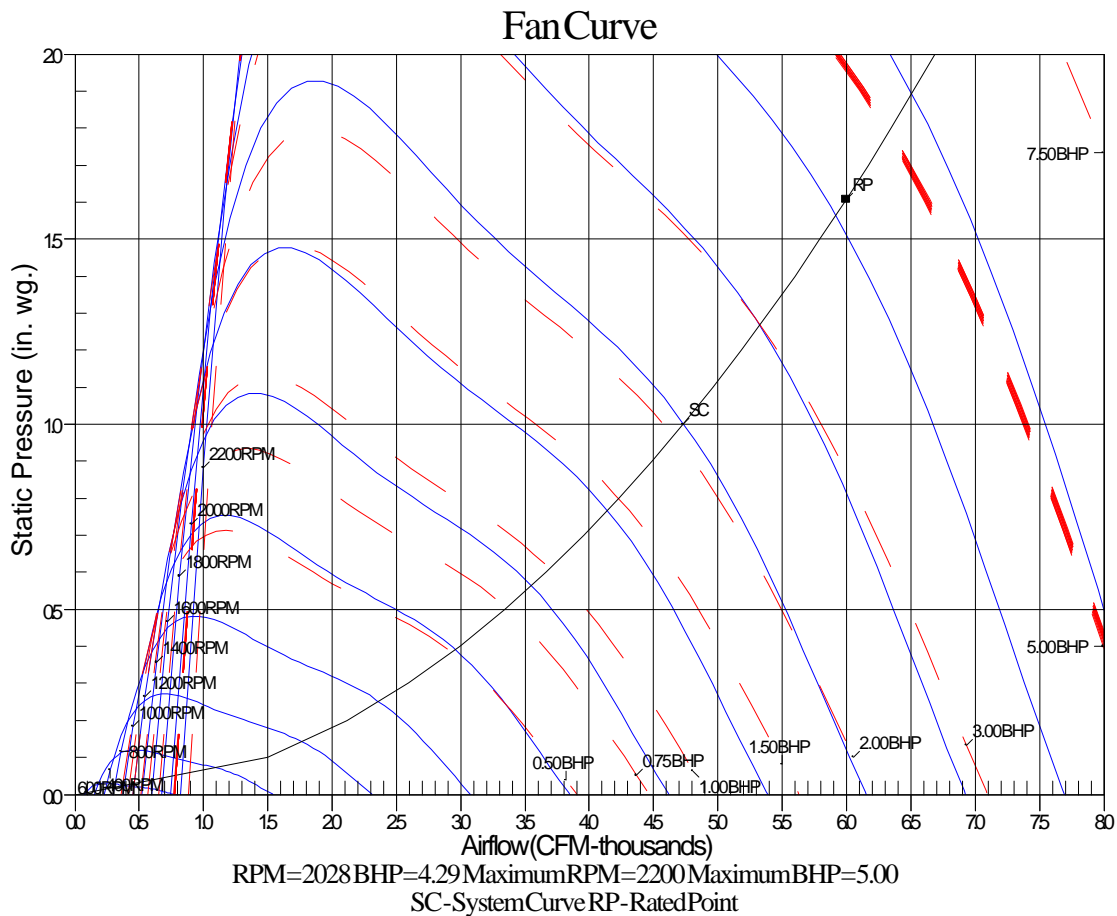
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A	87.0	85.2	84.6	84.9	82.2	78.4	75.3	72.9	92.4 Lw
B	60.8	69.1	76.0	81.7	82.2	79.6	76.3	71.8	87.1 LwA
C	54.6	52.8	52.2	52.5	49.8	46.0	42.9	40.5	60.0 Lp
D	28.4	36.7	43.6	49.3	49.8	47.2	43.9	39.4	54.7 LpA

Legend

- A Sound Power Levels at Unit's Acoustic Center, Lw
- B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
- C Sound Pressure Levels at Specific Distance from Unit, Lp
- D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.



RTU-2

**Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report**

Unit Report For RTU-2

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025
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Unit Parameters

Unit Model:.....**48FEFN16A3A5-0A2C0**
 Unit Size:.....**16 (15 Tons)**
 Volts-Phase-Hertz:.....**208-3-60**
 Heating Type:.....**Gas**
 Refrigerant:.....**R-454B**
 Heat Control:.....**High Gas Heat**
 Duct Cfg:.....**Horizontal Supply / Horizontal Return**
 DX Options:**Single Circuit with Humidi-MiZer, Two Stage**
Cooling.....

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length:.....**9' 7.875"**
 Unit Width:.....**5' 3.375"**
 Unit Height:.....**4' 9.375"**
Total Operating Weight:.....1974 lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Gas Line Size:.....**3/4**
 Condensate Drain Line Size:.....**3/4**
 Return Air Filter Type:.....**Throwaway**
 Return Air Filter Quantity:.....**6**
 Return Air Filter Size:.....**18 x 24 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

High Gas Heat
 Single Circuit with Humidi-MiZer, Two Stage Cooling
 High Static - EcoBlue Vane Axial Fan
 Al/Cu - Al/Cu
 Electromechanical Controls
 Powered Convenience Outlet
 Non-Fused Disconnect
 Standard Packaging
 Humidi-MiZer™ Adaptive Dehumidification System

Warranty Information

1-Year parts(std.)
 5-Year compressor parts(std.)
 10-Year heat exchanger - Aluminized(std.)

No optional warranties were selected.

NOTE: Please see Warranty Catalog 500-089 for explanation of policies and ordering methods.

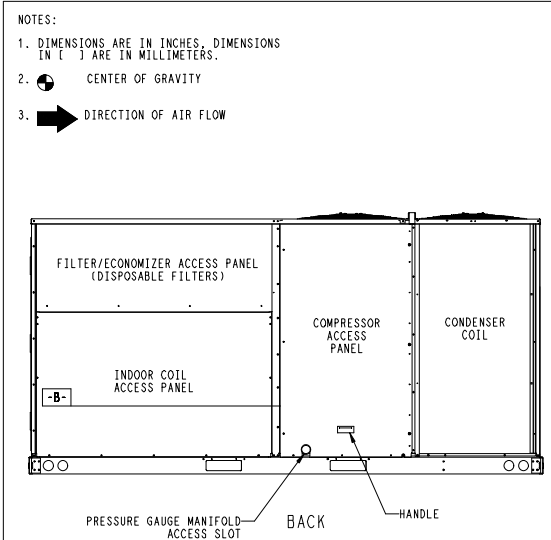
Ordering Information

Part Number	Description	Quantity
48FEFN16A3A5-0A2C0	Rooftop Unit	1
Field Installed Accessories		
33TCSPL-4	Carrier Connect Plus™ Wi-Fi® 7-day programmable/non-prog;	1
CRPWREXH082A00	Horizontal Power Exhaust	1
CRECOMZR110A00	CH 5 Horizontal SL Econ w/POL224	1
CRRFCURB074A00	14-inch Roof Curb	1

Certified Drawing for RTU-2

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

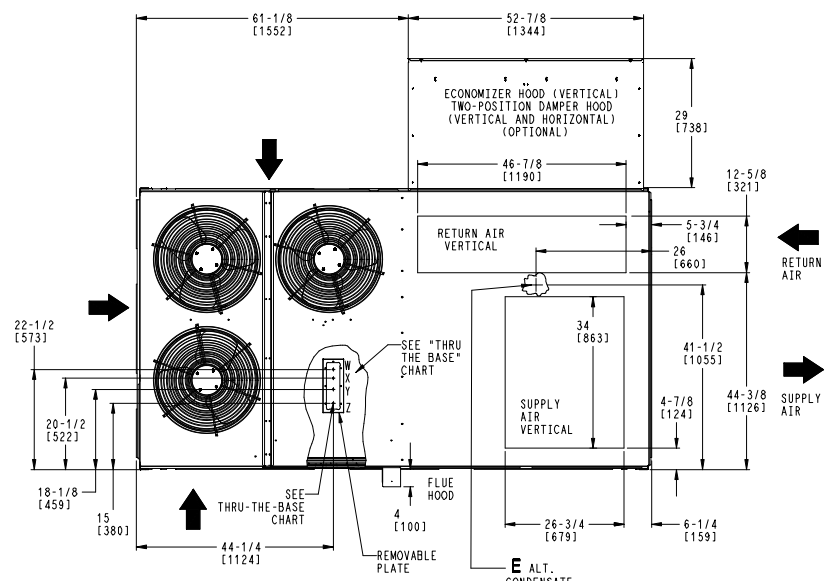
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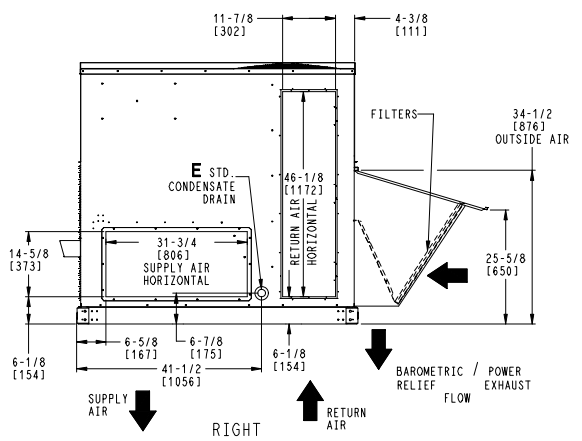
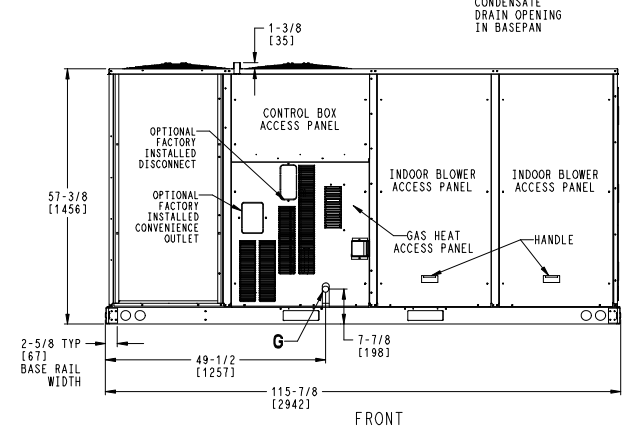
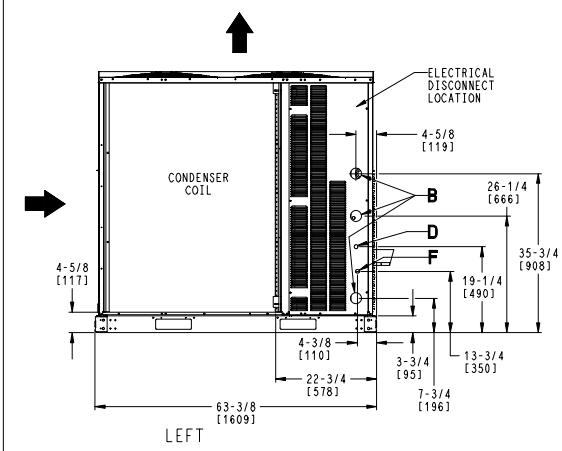
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CONNECTION SIZES	
B	2 1/2" [64] DIA POWER SUPPLY HOLE
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
F	7/8" [22] DIA FIELD CONVENIENCE OUTLET HOLE
G	3/4"-14 NPT GAS CONNECTION



THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPR005A00, 006A00, 007A00				
ACCESSORY NO.		THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
005	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	1 1/4"	POWER	1 1/2" [38.1]
	Z	3/4" PIPE	GAS	1 3/4" [44.5]
006	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	1 1/2"	POWER	2" [50.8]
	Z	3/4" PIPE	GAS	1 3/4" [44.5]
007	W	1/2"	ACC.	7/8" [22.2]
	X	1/2"	24V	7/8" [22.2]
	Y	2"	POWER	2 1/2" [63.5]
	Z	3/4" PIPE	GAS	1 3/4" [44.5]

FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR X & Y ARE PROVIDED AS SPECIFIED ON "006".



ITC CLASSIFICATION U.S. ECCN:NSR	SHEET 1 OF 2	DATE 8/10/23	SUPERCEDES -	48FE 16 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	50TM003162	REV -
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Certified Drawing for RTU-2

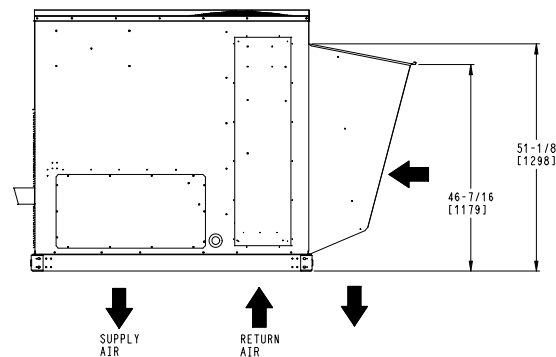
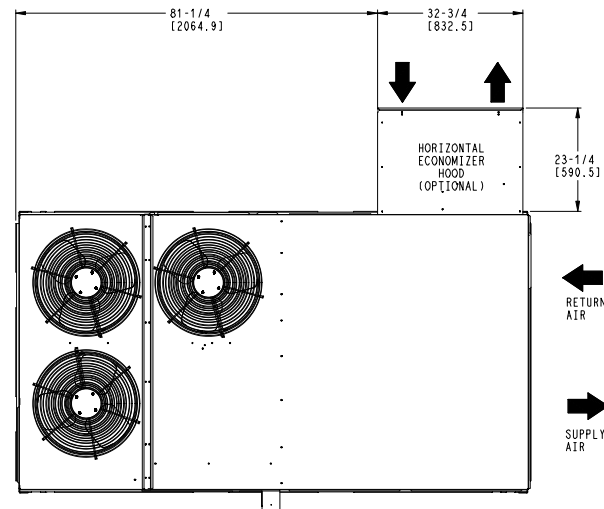
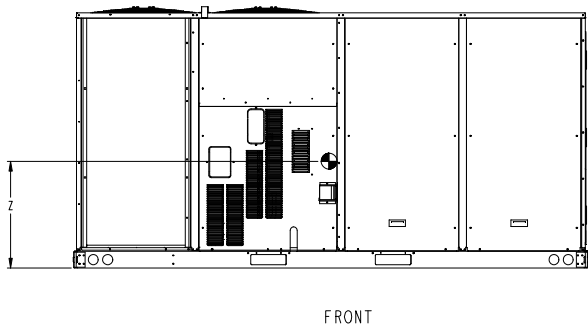
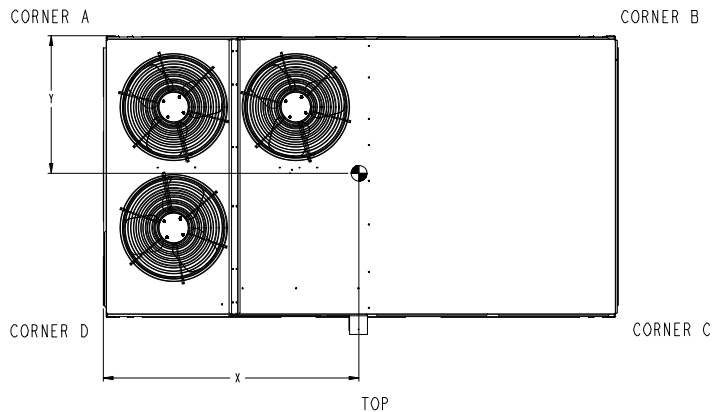
Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025
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UNIT	STD UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.			
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z	
48FE-M16	1408	639	373	169	341	155	332	150	362	164	55 3/8	31 1/4	21 1/8	[1407] [794] [537]

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 FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.

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HORIZONTAL ECONOMIZER

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48FE 16 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	50TM003162	REV
U. S. ECCN: NSR	2 OF 2	8/10/23	-			-

Certified Drawing for RTU-2

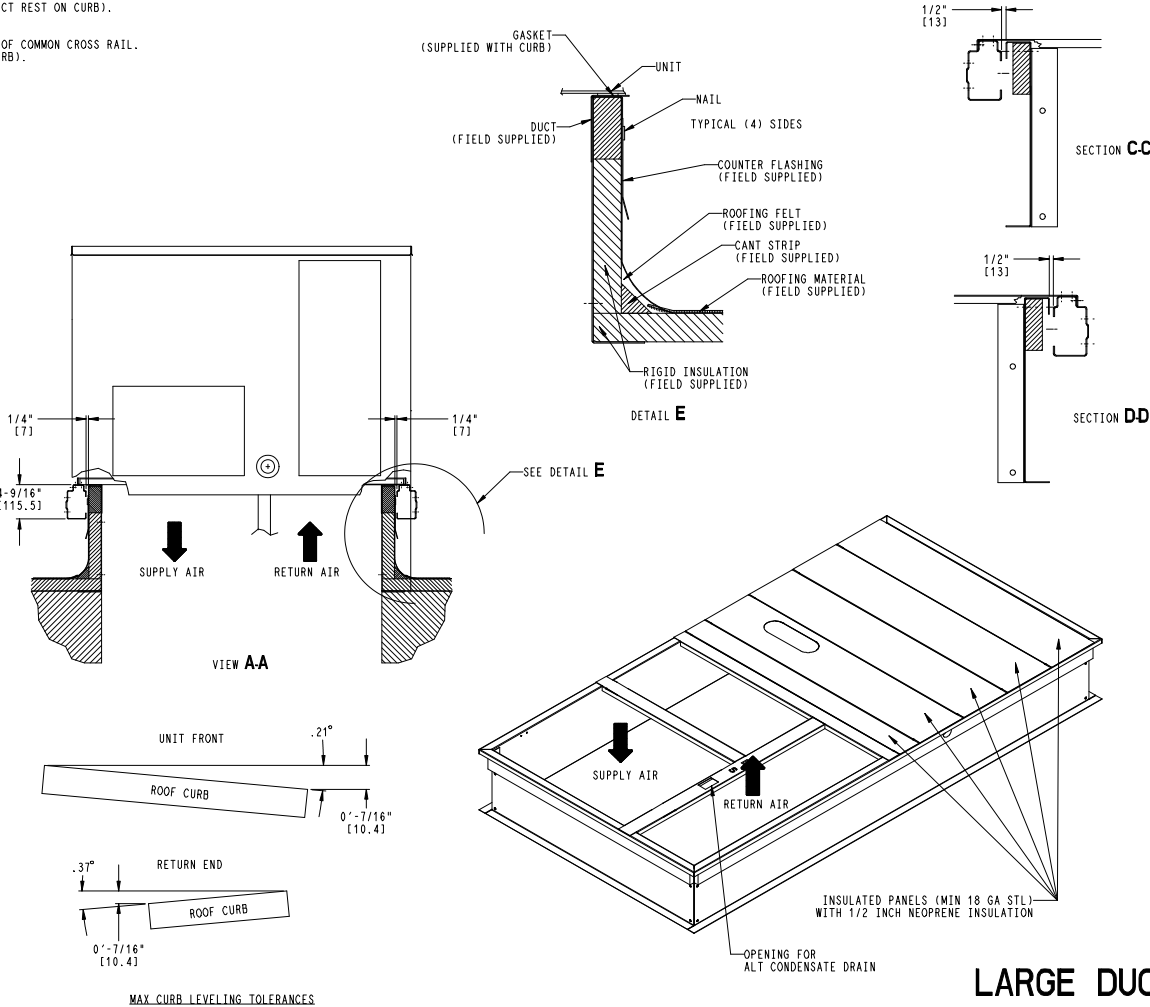
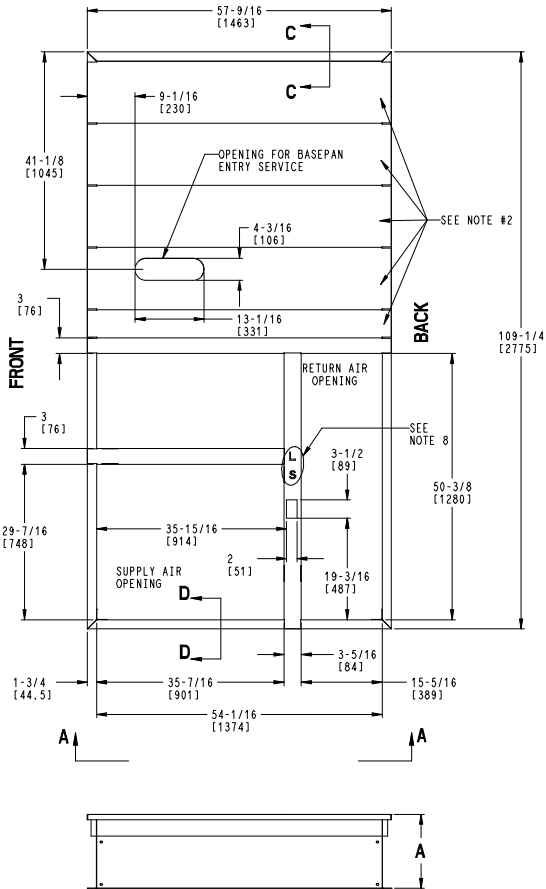
Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025
 06:37AM

ROOF CURB ACCESSORY #	A
CRRFCURB074A00	14" [356]
CRRFCURB075A00	24" [610]

- NOTES:
1. ROOFCURB ACCESSORY IS SHIPPED DISASSEMBLED.
 2. INSULATED PANELS: 1/2" THK. NEOPRENE FOAM, 1.0# DENSITY.
 3. DIMENSIONS IN [] ARE IN MILLIMETERS.
 4. ROOFCURB SIDEWALLS: 16 GAGE STEEL.
 5. ATTACH DUCTWORK TO CURB. (FLANGES OF DUCT REST ON CURB).
 6. SERVICE CLEARANCE 4 FT ON EACH SIDE.
 7. DIRECTION OF AIR FLOW.
 8. "L" & "S" DESIGNATIONS DENOTE LOCATION OF COMMON CROSS RAIL. (POSITION "L" FOR LARGE DUCT OPENING CURB).

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MAX CURB LEVELING TOLERANCES

LARGE DUCT OPENINGS

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48/50HCD14 / 48/50TCD16 / 48/50LC08,09,12	50TM500780	REV
U.S. ECCN:NSR	1 OF 1	12/19/17	02/15/13	ROOF CURB		B

Performance Summary For RTU-2

Project: Williamsburg Jr Athletic Sports Ctr
Prepared By: Dan Stagge

06/03/2025
06:37AM

Part Number:48FEFN16A3A5-0A2C0

Refrigerant:..... **R-454B**
ARI EER:..... **10.80**
IEER (Max Cooling at Normal Cooling Design Mode):..... **14.5**

Base Unit Dimensions

Unit Length:..... **115.9** in
Unit Width:..... **63.4** in
Unit Height:..... **57.4** in
Total Operating Weight:..... **1974** lb

Unit

Unit Voltage-Phase-Hertz:..... **208-3-60**
Air Discharge:..... **Horizontal**
Fan Drive Type:..... **Vane Axial**
Actual Airflow:..... **6000** CFM
Site Altitude:..... **0** ft

Cooling Performance

Condenser Entering Air DB:..... **95.0** F
Evaporator Entering Air DB:..... **80.0** F
Evaporator Entering Air WB:..... **67.0** F
Evaporator Entering Air Enthalpy:..... **31.44** BTU/lb
Evaporator Leaving Air DB:..... **59.2** F
Evaporator Leaving Air WB:..... **57.5** F
Evaporator Leaving Air Enthalpy:..... **24.72** BTU/lb
Gross Cooling Capacity:..... **181.30** MBH
Gross Sensible Capacity:..... **134.70** MBH
Compressor Power Input:..... **13.50** kW
Coil Bypass Factor:..... **0.110**

Heating Performance

Heating Airflow:..... **6000** CFM
Entering Air Temp:..... **70.0** F
Leaving Air Temp:..... **113.8** F
Gas Heating Input Capacity:..... **280.0 / 350.0** MBH
Gas Heating Output Capacity:..... **224.0 / 284.0** MBH
Temperature Rise:..... **43.8** F
Thermal Efficiency (%):..... **81.0**

Supply Fan

External Static Pressure:..... **1.50** in wg
Options / Accessories Static Pressure
Humidi-MiZer Dehumidification System:..... **0.11** in wg
Power Exhaust:..... **(Fan Data Includes Drop)**
Application External Static (ESP + Unit Opts/Acc.):..... **1.61** in wg
Fan RPM:..... **2028**
Fan Power:..... **4.29** BHP
NOTE:..... **Selected IFM RPM Range: 1248 - 2200**

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Power Exhaust

Return Duct Static:..... **0.40** in wg
Max. Air To Exhaust:..... **2850** CFM

Electrical Data

Voltage Range:..... **187 - 253**
Compressor #1 RLA:..... **28.5**

Performance Summary For RTU-2

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025
 06:37AM

Compressor #1 LRA:	.255
Compressor #2 RLA:	21.1
Compressor #2 LRA:	157
Indoor Fan Motor Type:	HIGH
Indoor Fan Motor FLA (Total):	12.6
Combustion Fan Motor FLA (ea):	0.48
Power Supply MCA:	83
Power Supply MOCP (Fuse or HACR):	100
Disconnect Size FLA:	87
Disconnect Size LRA:	451
Electrical Convenience Outlet FLA (based on unit line voltage):	4.8
Power Exhaust [Kit Qty / FLA(ea kit)]:	1 / 3.8
Outdoor Fan [Qty / FLA (ea)]:	3 / 1.5

NOTE: Convenience outlet must be field connected to the line/load side of the unit disconnect per local code.

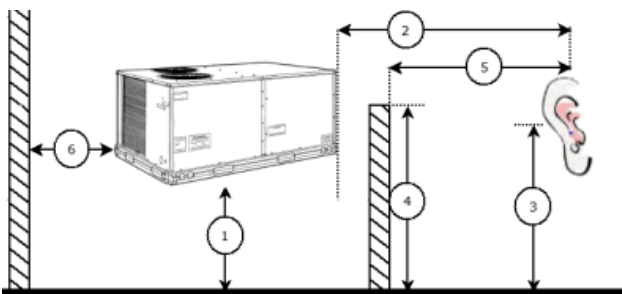
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	90.9	86.2	87.0
125 Hz	87.8	81.3	85.2
250 Hz	84.8	75.2	84.6
500 Hz	83.4	74.7	84.9
1000 Hz	84.3	75.0	82.2
2000 Hz	81.1	69.7	78.4
4000 Hz	76.4	59.5	75.3
8000 Hz	68.3	51.3	72.9
A-Weighted	88.2	78.3	87.0

Advanced Acoustics



Advanced Acoustics Parameters

- 1. Unit height above ground:..... **30.0** ft
- 2. Horizontal distance from unit to receiver:..... **50.0** ft
- 3. Receiver height above ground:..... **5.7** ft
- 4. Height of obstruction:..... **0.0** ft
- 5. Horizontal distance from obstruction to receiver:..... **0.0** ft
- 6. Horizontal distance from unit to obstruction:..... **0.0** ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
-----------------------------	----	-----	-----	-----	----	----	----	----	---------

Performance Summary For RTU-2

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

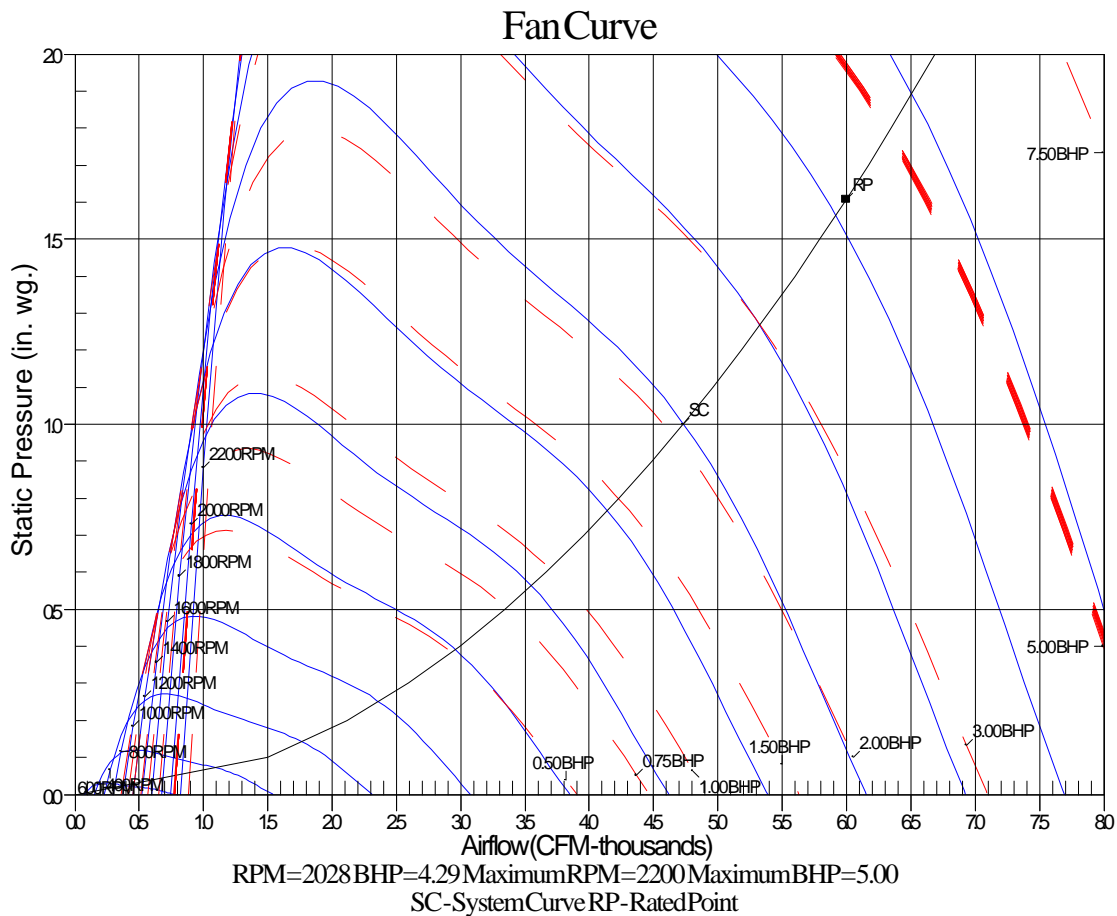
06/03/2025
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A	87.0	85.2	84.6	84.9	82.2	78.4	75.3	72.9	92.4	Lw
B	60.8	69.1	76.0	81.7	82.2	79.6	76.3	71.8	87.1	LwA
C	54.6	52.8	52.2	52.5	49.8	46.0	42.9	40.5	60.0	Lp
D	28.4	36.7	43.6	49.3	49.8	47.2	43.9	39.4	54.7	LpA

Legend

- A Sound Power Levels at Unit's Acoustic Center, Lw
- B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
- C Sound Pressure Levels at Specific Distance from Unit, Lp
- D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.



You are browsing the product catalog for

United States

C7233 & C7263 Wall Mount CO2 Sensor

The C7233 & C7263 Series Sensors are a stand-alone carbon dioxide (CO2) sensors for use in determining ventilation necessity with HVAC controllers.

Overview



Feedback

The C7233 & C7263 Series Sensors are a stand-alone carbon dioxide (CO2) sensors for use in determining ventilation necessity with HVAC controllers. The C7233 measures the CO2 concentration in the occupied space. The C7263 measures the CO2 concentration and temperature in the occupied space. The C7233 & C7263 are used in ventilation systems to control the amount of fresh outdoor air supplied to maintain acceptable levels of CO2, and optional temperature sensing.

Features & Benefits:

- Wall mount
- Ultra compact size and elegant design with easy cleaning with smooth front membrane
- Options with or without white LED displays - all variants have red LED notification activated when CO2 level exceeds preset threshold
- Analog output range is selectable 0/2-10 Vdc, 4-20mA and provides accurate proportional linear signal through entire sensing range 0-2000ppm
- Highly accurate and reliable non-dispersion infrared (NDIR) technology for CO2 sensing
- Programmable SPST Relay (1A@50VAC/24VDC)
- Optional temperature output (20K ohm NTC)

Certifications:

- CA Title 24, Part 6
- CEC Standard for Residential and Non-Residential Buildings-2016
- CEC Standard - CO2

Specifications

- Brand : Alerton

Product Number

PART NUMBER	COMPARE	DESCRIPTION	ADD TO LIST
C7233A1008	<input checked="" type="checkbox"/>	Wall Mount CO2 Sensor, display, 2-10VDC04-20mA	
C7233A1016	<input type="checkbox"/>	Wall Mount CO2 Sensor, no display, 2-10VDC04-20mA	
C7233A1024	<input type="checkbox"/>	Wall Mount CO2 Sensor, display, 2-10VDC04-20mA, no logo	
C7263A1008	<input type="checkbox"/>	Wall Mount CO220K ohm Temperature Sensor, display, 20-10VDC04-20mA	

AC GF-1 2

**Submittal Cover Sheet
Unit Report
Performance Summary Report
Acoustic Summary
Certified Drawings**

Unit Report For AC GF-1 2

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025



Fig. 1 - Typical Coil

Outdoor Unit Parameters

Unit Model:.....**26TPA**
 Unit Size:.....**4 Tons (Size 48)**
 Voltage:.....**208/230-1-60** V-Ph-Hz

Indoor Coil Parameters

Unit Model:.....**CVAV**
 Unit Size:.....**5 Tons (Size 60)**
 Cabinet Finish:.....**2nd Launch Vertical**
 Cabinet Width:.....**21 inch**

Outdoor Unit Dimensions and Weight

Unit Length:.....**35** in
 Unit Width:.....**35** in
 Unit Height:.....**35.5** in
 Unit Shipping Weight:.....**282.** lb

Indoor Coil Dimensions and Weight

Unit Length:.....**20.625** in
 Unit Width:.....**21** in
 Unit Height:.....**29.75** in
 Unit Shipping Weight:.....**52.** lb

RESIDENTIAL APPLICATIONS

This warranty is to the original purchasing owner and subsequent owners only to the extent and as stated in the Warranty Conditions and below. The limited warranty period in years, depending on the part and the claimant, is as shown in the table below.

Limited Warranty (Years)		
Item	Original Owner	Subsequent Owner
Parts	10* (or 5)	5
Compressor	10* (or 5)	5

*If properly registered within 90 days of original installation, otherwise 5 years (except in California and Quebec and other jurisdictions that prohibit warranty benefits conditioned on registration). See Warranty Conditions below.

OTHER APPLICATIONS

The warranty period is five (5) years on the compressor, and one (1) year on all other parts. The warranty is the original owner only and is not available for subsequent owners.

Ordering Information

Part Number	Description	Quantity
Outdoor Unit		
26TPA848W003	Performance 2-Single Stage Air Conditioner with Puron Advance 4 Tons Cooling 18 SEER2 @ ARI Conditions	2
Accessories		
KSALA1001AAA	Low Ambient Control for Outdoor Unit	2
KAACH1601AAA	Crankcase Heater for Outdoor Unit	2
KAAWS0101AAA	Winter Start Control for Outdoor Unit	2
KSAFT0101AAA	Evaporator Freeze Thermostat for Outdoor Unit	2
KSAHS2501AAA	Hard Start Kit for Outdoor Unit	2
Indoor Coil		
CVAVA6021XMA	Cased Vertical V-Coil Evaporator Coil with Puron 19 Tons Cooling 2nd Launch Vertical	2

Unit Report For AC GF-1 2

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025

	21 inch	
Furnace		
59SP6B100V21--20	59SP6 Performance +96 Single Stage Condensing Gas Furnace	2
	+96 AFUE	
	100,000 Btuh (Size 100)	
	Up to 2000 Cfg CFM on Evap Coil	
	Variable Speed (VCT) ECM	
	21.0 inches	

Furnace Parameters and Dimensions and Weight

Furnace:.....**SEER Enhancing Furnace**
 Furnace Model:.....**59SP**
 Furnace Efficiency:.....**+96 AFUE**
 Htg Capacity:.....**100,000 Btuh (Size 100)**
 Airflow:.....**Up to 2000 Cfg CFM on Evap Coil**
 Unit Length:.....**29.50** in
 Unit Width:.....**21.00** in
 Unit Height:.....**35.00** in
 Unit Shipping Weight:.....**172.** lb



The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at www.ahridirectory.org for the most up-to-date information.

Performance Summary For AC GF-1 2

Project: Williamsburg Jr Athletic Sports Ctr
Prepared By: Dan Stagge

06/03/2025

System Performance

System:	26TPA/CVAV	Actual Clg Airflow:.....	1600.0	CFM
System Quantity:.....	2	Standard Clg Airflow:.....	1600.0	CFM
Altitude:.....	0.0 ft	Total Net Clg Capacity:.....	49.64	MBH
Furnace Type:.....	59SP6B100V21**20	Net Sensible Clg Capacity:.....	34.90	MBH
Linear Pipe Length:.....	0.0 ft	Total System Power:.....	3.82	kW
SEER @ ARI Conditions:.....	17.0			
EER @ ARI Conditions:.....	13.0			

System Parameters

Outdoor Unit Parameters

Unit Model:.....	26TPA848W003	
Unit Size (Nominal):.....	4 Tons (Size 48)	
Voltage:.....	208/230-1-60	V-Ph-Hz
Clg Ent Air DB Ambient:.....	95.0	°F

Indoor Coil Parameters

Unit Model:.....	CVAVA6021XMA	
Unit Size (Nominal):.....	5 Tons (Size 60)	
Ent Air DB:.....	80.00	°F
Ent Air WB:.....	67.00	°F
Ent Enthalpy:.....	31.44	BTU/lb
Lvg Air DB:.....	59.80	°F
Lvg Air WB:.....	57.25	°F
Lvg Enthalpy:.....	24.54	BTU/lb
Total External Static Pressure:.....	0.50	in wg

Furnace Ratings

Furnace:.....	59SP6B100V21--20	
Furnace Efficiency:.....	+96 AFUE	
Input Max Heat:.....	100,000	BTU/hr
Output Max Heat:.....	97,000	BTU/hr

Furnace Performance

Certified Temp High Rise Range:.....	40-70	F
Certified ESP for Heat/Cool:.....	0.20/0.50	in wg
Airflow High Heat:.....	1695	CFM

The customer must ensure the specified airflow and static pressure are within furnace capabilities.

Electrical Data

Outdoor Electrical Data

Unit Voltage:.....	208/230-1-60	V-Ph-Hz
Fan Motor FLA:.....	2.60	Amps
MCA:.....	25.5	Amps
Max Fuse:.....	40	Amps
Operating Range Min:.....	197	V
Operating Range Max:.....	253	V
Compressor RLA:.....	18.3	Amps
Compressor LRA:.....	138.0	Amps

Furnace Electrical Data

Unit Voltage:.....	115-1-60	V-Ph-Hz
Unit MCA:.....	13.2	Amps
Unit MOCP:.....	20	Amps

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at www.ahridirectory.org for the most up-to-date information.

Acoustic Summary For AC GF-1 2

Project: Williamsburg Jr Athletic Sports Ctr
Prepared By: Dan Stagge

06/03/2025

Outdoor Unit Parameters:

Unit Model: **26TPA**
Unit Size: **4 Tons (Size 48)**
Variations: **Standard**

Octave Band Center Frequency, Hz	125	250	500	1k	2k	4k	8k	dBA
Sound Power,dB	68.0	68.0	68.0	69.0	60.0	56.0	55.0	
A-Weighted Sound Power, dBA								68.0

Indoor Coil Parameters:

Unit Model: **CVAV**
Unit Size: **5 Tons (Size 60)**
Cabinet Finish: **2nd Launch Vertical**
Cabinet Width: **21 inch**

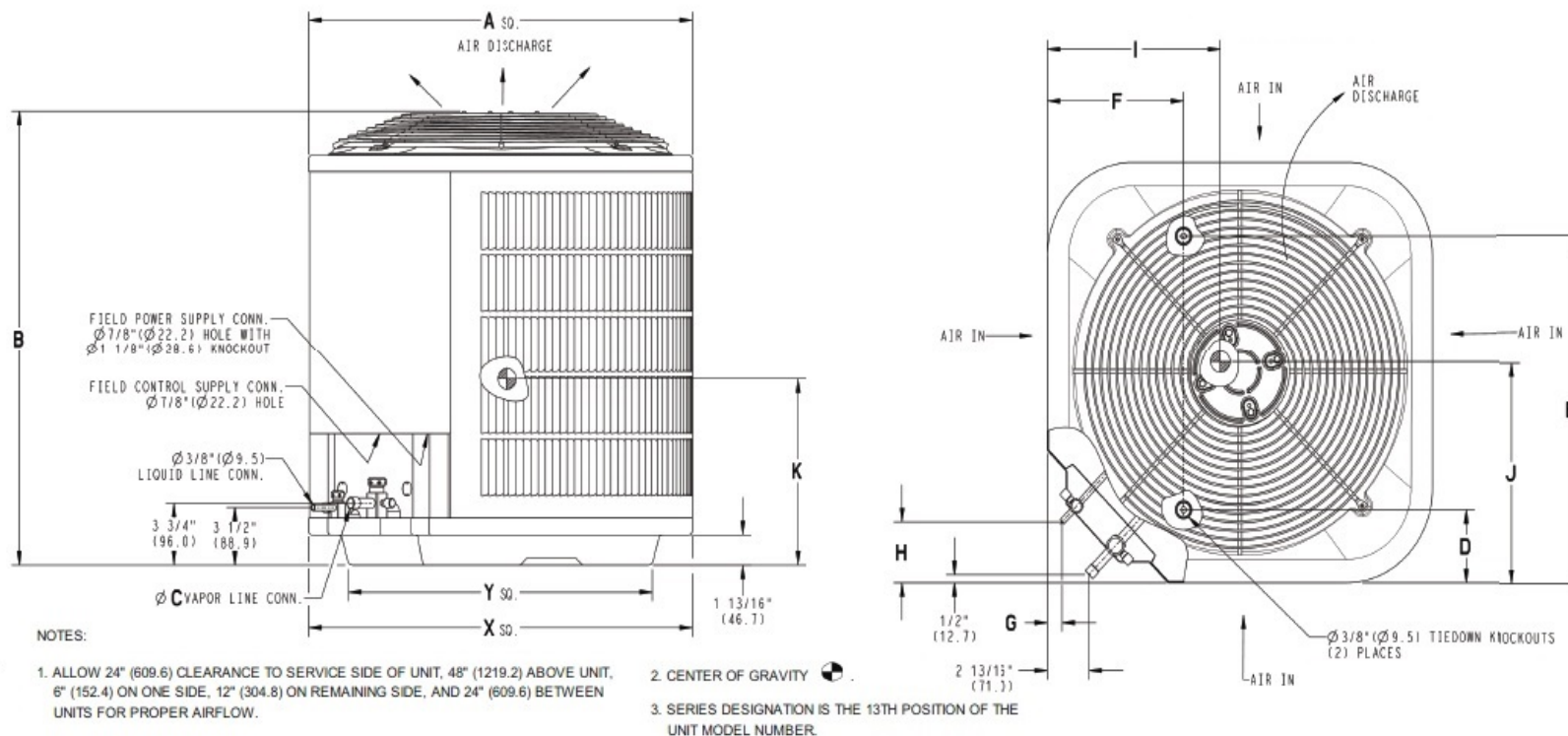
No Indoor sound data available.

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at www.ahridirectory.org for the most up-to-date information.

Certified Drawing For AC GF-1 2

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025



Outdoor Model

Unit Model:.....**26TPA**
 Unit Size:.....**4 Tons (Size 48)**
 Voltage:.....**208/230-1-60** V-Ph-Hz
 SEER:.....**18**
 PartNumber:.....**26TPA848W003**

Shipping Dimensions and Weights	Outdoor Unit
Height	39.81 in
Width	38.00 in
Length	38.00 in
Operating Weight	255. lb
Shipping Weight	282. lb

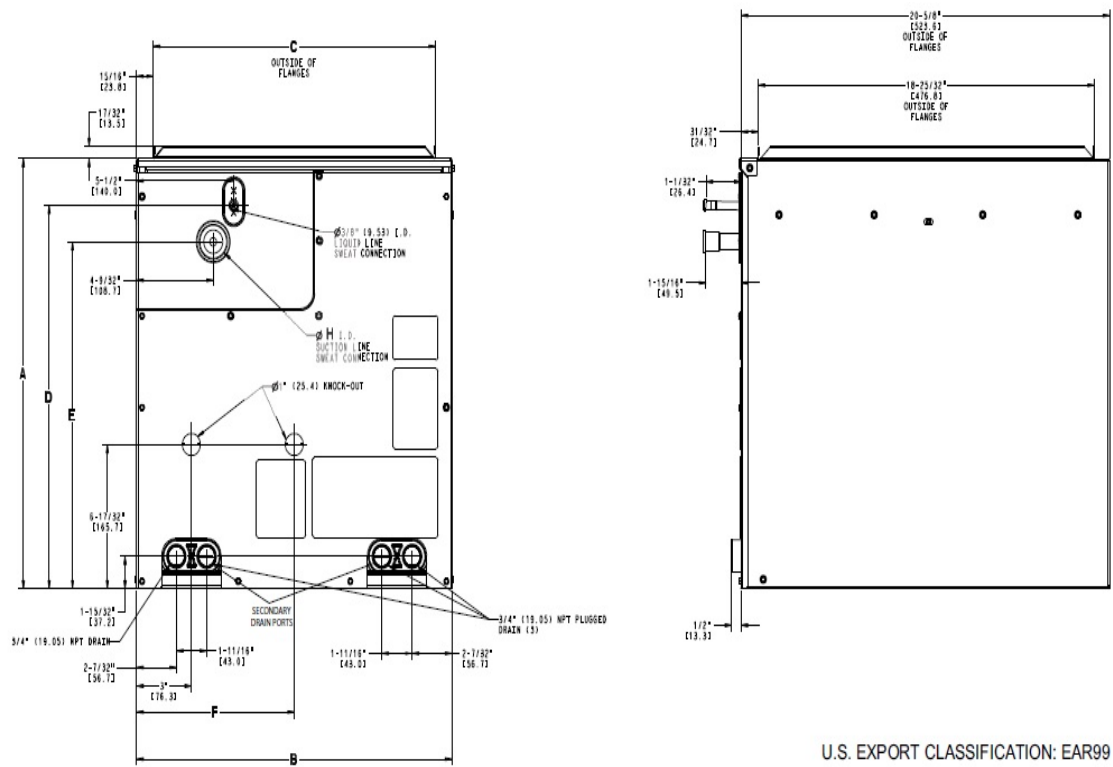
Dimensions										
A	B	C	D	E	F	G	H	I	J	K
35.00 in	35.50 in	0.88 in	6.56 in	28.44 in	9.13 in	0.31 in	3.00 in	17.75 in	16.75 in	16.50 in

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at www.ahrirectory.org for the most up-to-date information.

Certified Drawing For AC GF-1 2

Project: Williamsburg Jr Athletic Sports Ctr
 Prepared By: Dan Stagge

06/03/2025



U.S. EXPORT CLASSIFICATION: EAR99

Indoor Coil

Unit Model:.....**CVAV**
 Unit Size:.....**5 Tons (Size 60)**
 Cabinet Finish:.....**2nd Launch Vertical**
 Cabinet Width:.....**21 inch**
 PartNumber:.....**CVAVA6021XMA**

Dimensions and Weights		Indoor Coil
Height		31.00 in
Width		26.60 in
Length		23.80 in
Shipping Weight		52. lb

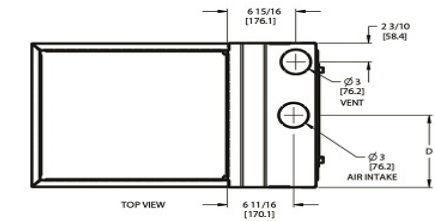
Dimensions							
A	B	C	D	E	F	H	J
29.75 in	21.00 in	19.25 in	28.13 in	26.69 in	10.50 in	0.88 in	--

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at www.ahrirectory.org for the most up-to-date information.

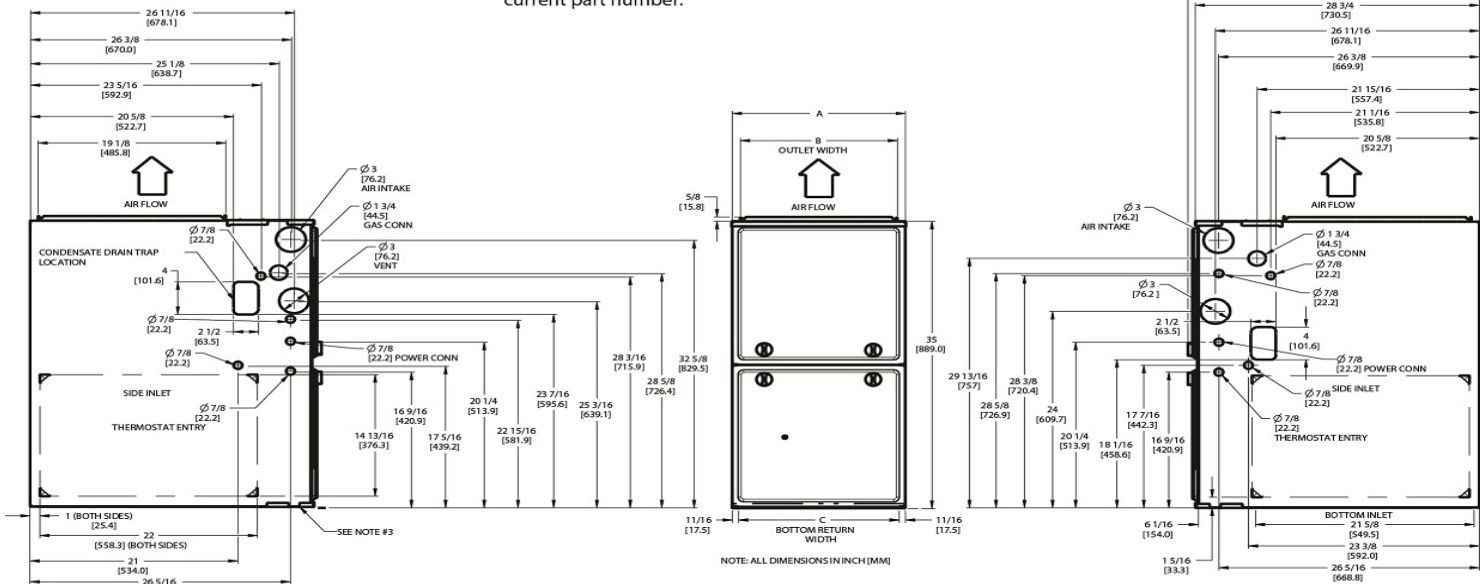
Certified Drawing For AC GF-1 2

Project: Williamsburg Jr Athletic Sports Ctr
Prepared By: Dan Stagge

06/03/2025



- NOTES:**
- Doors may vary by model.
 - Minimum return-air openings at furnace, based on metal duct. If flex duct is used, see flex duct manufacturer's recommendations for equivalent diameters.
 - For 800 CFM-16-in. (406 mm) round or 14 1/2 x 12-in. (368 x 305 mm) rectangle.
 - For 1200 CFM-20-in. (508 mm) round or 14 1/2 x 19 1/2-in. (368 x 495 mm) rectangle.
 - For 1600 CFM-22-in. (559 mm) round or 14 1/2 x 22 1/16-in. (368 x 560mm) rectangle.
 - Return air above 1800 CFM at 0.5 in. w.c. ESP on 24.5" casing, requires one of the following configurations: 2 sides, 1 side and a bottom or bottom only. See Air Delivery table in this document for specific use to allow for sufficient airflow to the furnace.
 - Vent and Combustion air pipes through blower compartment must use accessory "Vent Kit - Through the Cabinet". See accessory list for current part number.



DIMENSIONAL DRAWING

NOTE: ALL DIMENSIONS IN INCH (MM)

REV	1	E
SHT	1	
PART NUMBER: SD5024-4		

Furnace Model:.....**59SP**
 Furnace Efficiency:.....**+96 AFUE**
 Htg Capacity:.....**100,000 Btuh (Size 100)**

Airflow:.....**Up to 2000 Cig CFM on Evap Coil**
 PartNumber:.....**59SP6B100V21--20**

Dimensions				
A	B	C	D	Shipping Wgt
21.00 in	19.38 in	19.50 in	10.50 in	172.00 in

The Product and Ratings Data in this program is subject to change at any time and without notice. Please refer to the latest product literature and the AHRI directory at www.ahrirectory.org for the most up-to-date information.



i-Vu® Building Automation System Connect™ Plus Thermostat

Part number: 33TCSPL-4



Carrier's Connect Plus Thermostat offers control of your building's heating, ventilation, and air-conditioning (HVAC) system via Wi-Fi® through the Connect smartphone mobile app, web interface, and any BACnet-compliant building management system (BMS), including the Carrier i-Vu building automation system.



Hardware Features

- **Responsive Touchscreen:** 4.3" responsive LCD touchscreen for easy viewing and operation
- **BACnet:** MS/TP port for easy integration with the i-Vu system or any BACnet-compliant BMS
- **Sensors:** Onboard temperature, humidity, or CO₂ plus remote sensor options
- **Direct Wi-Fi® Access:** Easily connect to your building's network
- **Slim Profile:** Blends easily into any building's decor and environmental surroundings



Application and System Features

- **Display:** Celsius or Fahrenheit
- **Applications:** Supports up to 4 heating and 3 cooling stages with various new or existing HVAC equipment with 24 VAC control
- **7-Day Scheduling:** Precisely adjust optimum comfort setpoints to achieve energy savings
- **Demand Response Ready:** For participation in local demand response programs
- **Over-the-Air Software Updates:** Directly sent over Wi-Fi network without having to manually check for updates
- **Control:** Make basic temperature, comfort and efficiency adjustments easily and quickly
- **Alerts:** Notification through SMS text and eMail of any critical issues
- **Embedded Contractor Info:** Lets you know who to contact for service
- **Local Access Security:** Provides selective access for authorized individuals
- **Smartphone App and Web Portal:** Configure using your internet-connected Smartphone, PC or Tablet from anywhere or anytime... in real time
- **Bluetooth Commissioning:** Effortless setup for Connect Thermostat via Bluetooth



Visit connectstat.carrier.com and create an account.



i-Vu® Building Automation System

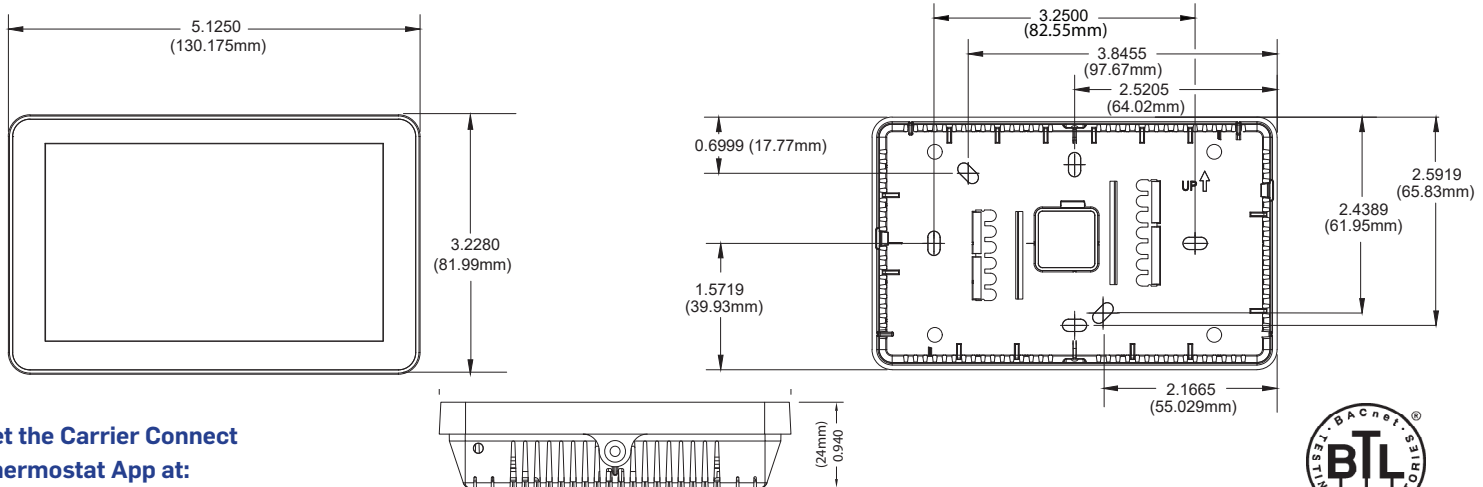
Connect Plus Thermostat



Part number: 33TCSPL-4

Specifications

BACnet Conformance	Conforms to the BACnet Application Specific Controller (B-ASC) as defined in BACnet 135. Tested to and listed to Protocol Revision 14 (135-2012).
Power Requirements	R,C 24 Vac 50/60 Hz @ 6VA
Communication	A+, B- BACnet: MS/TP with baud rates up to 115.2 kbps. Max 127 devices. Wi-Fi: 802.11 a/b/g/n
Real-Time Clock	Real-time clock keeps track of time in the event of a power failure for up to 7 days.
Display	Color Capacitive Backlit Touchscreen, °F or °C Selectable
Input	T-C Remote Temperature Sensor 10K Type II. Software selectable for: Remote Temp (33ZCT55SPT), Outside Air Temp (33ZCSENOAT), Duct Temp (33ZCSENSAT) H-C Relative Humidity Sensor (0-10 volt or 4-20 mA) : Wall Mounted RH Sensor (33ZCSENSRH-02), Duct RH Sensor (33ZCSENDRH-02), Outdoor RH Sensor (33ZCSENRH-02), Wall Mounted Temp/CO2 Sensor (33ZCSPTCO2-01)
Outputs	G,W1,W2,Y1,Y2,Y3,O Minimum Load = 1000 ohms Maximum Load = 1.25 A, 50% power factor
Environmental Operating Range	32° to 104°F (0° to 40°C), 10 to 95% relative humidity, non-condensing
Compliance	FCC Part 15, Subpart J compliant Title 24 compliant IECC 2015 compliant
Physical	Dimensions: (H x W x D): 3.23 in. (82mm) x 5.13 in. (130mm) x .94 in. (24mm) Weight: approximately .75 lb (340g) Lead-free design
Mounting	Wall mount on a standard 4" x 2-1.2 x 2" electrical box



Get the Carrier Connect
Thermostat App at:

