



SUBMITTAL

Project

Five Below - Cincinnati, OH (Hyde Park Plaza)

Date

Tuesday, November 21, 2023

Contractor to coordinate with electrical contractor for the difference between the specified and submitted MCA and MOCP of the RTU's. Contractor to coordinate with the plumbing contractor for the difference between the specified and submitted Gas MBH.

- | | |
|--|--|
| <input checked="" type="checkbox"/> No Exception Taken | <input type="checkbox"/> Rejected |
| <input type="checkbox"/> Make Corrections as Noted | <input type="checkbox"/> Submit Specified Item |
| <input type="checkbox"/> Review and Resubmit | <input type="checkbox"/> Not Reviewed |

Submittal is reviewed only as to general conformity with design concept of the project and general compliance with the information given in the contract documents. Corrections and/or comments made as part of this submittal review do not relieve contractor of responsibility from conformance with the contract documents, applicable codes, and laws-all of which have priority over this submittal. The design professional does not warrant or represent that the information within this submittal is either accurate or complete. Sole responsibility for correct design, details, and dimensions shall remain with the party providing the submittal. Contractor is responsible for all dimensions, quantities and performance requirements to be confirmed and correlated at the job site; for all information that pertains solely to the fabrication processes or to techniques of construction; for all coordination of work of all trades; for assuring consistency with the contract documents; and for performing the work in a safe and satisfactory manner.

Custom Designing & Engineering, P.C.

Reviewed by: Kenneth Fuller

Date: 2-12-24

Notes:

- Units pulled from 2023 Five Below Shelf Stock
- Roof curbs included.
- CO2 and Phase monitors included.
- Low ambient kits not included due to supply chain constraints.
- MERV8 Filters included (seen on quote)
- Only RA smoke detector included.
- Programmable thermostat not included.
- "Micro-Channel" Fins not included.
 - Standard condenser and evaporator coils selected with hail guards.
- Please confirm units meet all requirements prior to order.

RTU-1,2 PAGE 4
RTU-3,4 PAGE 13

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Prepared By:

11/21/2023
10:39AM

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RTU - 1 - 2

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

Unit Report For RTU - 1 - 2

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
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11/21/2023
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Unit Parameters

Unit Model:.....**48FCEM08B2M5-6W1C0**
 Unit Size:.....**08 (7.5 Tons)**
 Volts-Phase-Hertz:.....**208-3-60**
 Heating Type:.....**Gas**
 Heat Control:.....**Medium Heat**
 Duct Cfg:.....**Vertical Supply / Vertical Return**
 DX Options:.....**Single Circuit, Two Stage Cooling**

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

Unit Length:.....**7' 4.125"**
 Unit Width:.....**4' 11.5"**
 Unit Height:.....**3' 5.25"**
Total Operating Weight:..... 1001 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: **4**
 Return Air Filter Size: **16 x 20 x 2**

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

RA Smoke Detector
Standard/Medium Static (EcoBlue)
 Al/Cu - Al/Cu - Louvered Hail Guards
 Electromechanical Controls w/W7220 Econo Controller
 Enthalpy Ultra Low Leak Econo w/Baro Relief
 Unpowered Convenience Outlet
 Non-Fused Disconnect
 Standard Packaging

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
48FCEM08B2M5-6W1C0	Rooftop Unit	2
	Base Unit	
	RA Smoke Detector	
	Al/Cu - Al/Cu - Louvered Hail Guards	
	Unpowered Convenience Outlet	
	Non-Fused Disconnect	
	Ultra Low leak Enty Econo X with baro relief, W7220 control. Meets Calif. Title 24 FDD & Leak Rates	
Field Installed Accessories		
CRPHASE3001A02	Phase Monitor Control	2
33ZCSPTCO2-01	CO2/Space Temp. Sensor without LCD Display and No Override	2
16X20X2-M8-R-P4	16x20x2 MERV-8 replacement air filters	2
CRRFCURB003A01	14-inch Tall Roof Curb	2

Certified Drawing for RTU - 1 - 2

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
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- NOTES:
1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS.
 2. CENTER OF GRAVITY
 3. DIRECTION OF AIR FLOW
 4. ALL VIEW DRAWN USING 3RD ANGLE

UNIT	OUTDOOR COIL TYPE	J	K	H
48FC-M08	RTPF	41 1/4 [1048]	33 3/4 [857]	15 7/8 [403]
48FC-M09	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]
48FC-M12	RTPF	49 3/8 [1253]	36 3/8 [925]	15 7/8 [403]

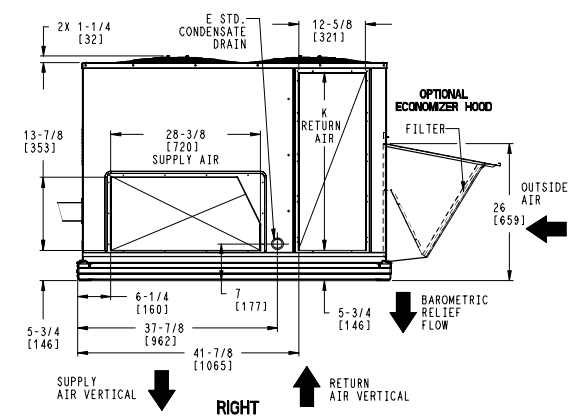
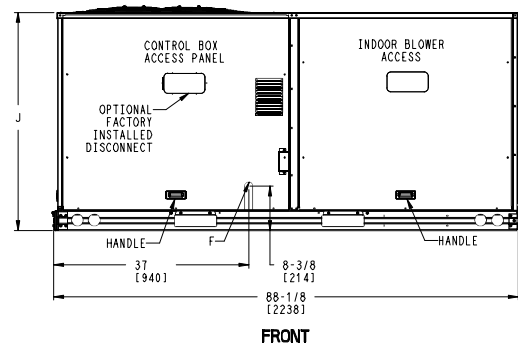
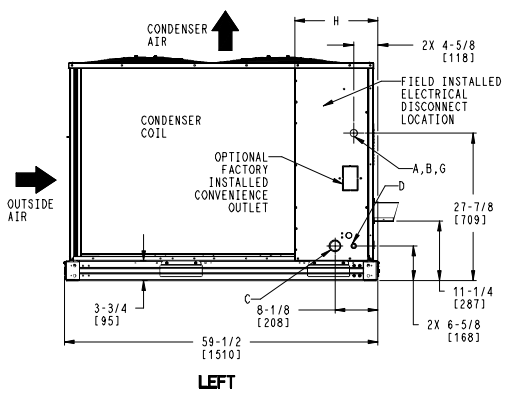
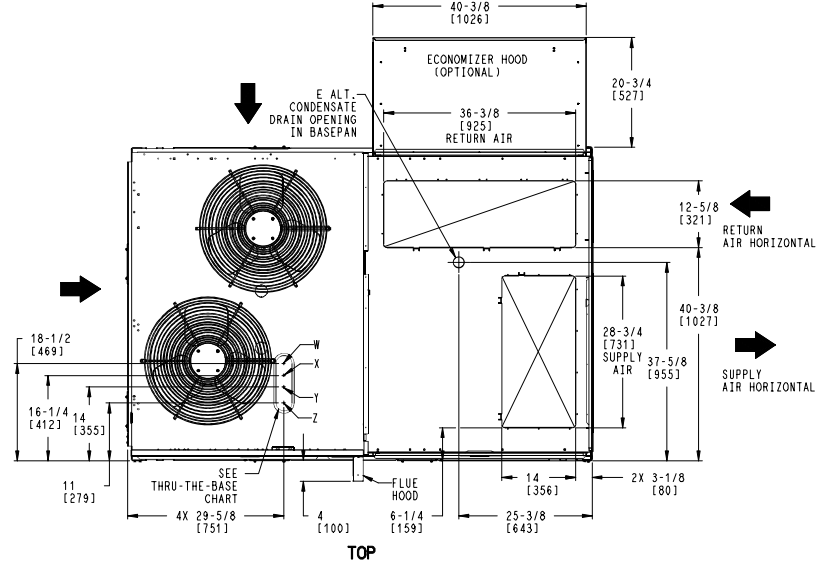
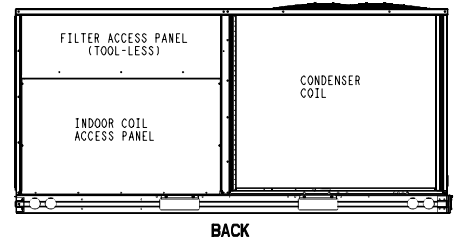
RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)

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CONNECTION SIZES	
A	1 3/8" [35] DIA FIELD POWER SUPPLY HOLE
B	2 1/2" [64] DIA POWER SUPPLY KNOCKOUT
C	1 3/4" [51] DIA GAUGE ACCESS PLUG
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
F	1/2"-14 NPT GAS CONNECTION
G	3/4"-14 NPT GAS CONNECTION
	2" [51] DIA POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART (FIELD INST)			
THESE HOLES REQUIRED FOR USE WITH ACCY KITS: CRBTMPWR002A01: GAS THRU CURB CRBTMPWR004A01: GAS THRU BASEPAN			
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	ACC.	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	1 1/4" (002, 004)	POWER	1 3/4" [44.4]
Z *	(004) 3/4" FPT	GAS	1 3/4" [44.4]
* (002) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING. HOLE SIZE: 2" [50.8]			

THRU-THE-BASE CHART (FIOP)	
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED. **	
** FOR BELOW LISTED MODELS: A FIELD SUPPLIED 1/2" ADAPTER IS REQUIRED BETWEEN BASE PAN FITTING AND GAS VALVE: 48FCD, S=08, 09	



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48FC 08-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM006295	REV
U.S. ECCN: NSR	1 OF 3	03/12/21	-			-

Certified Drawing for RTU - 1 - 2

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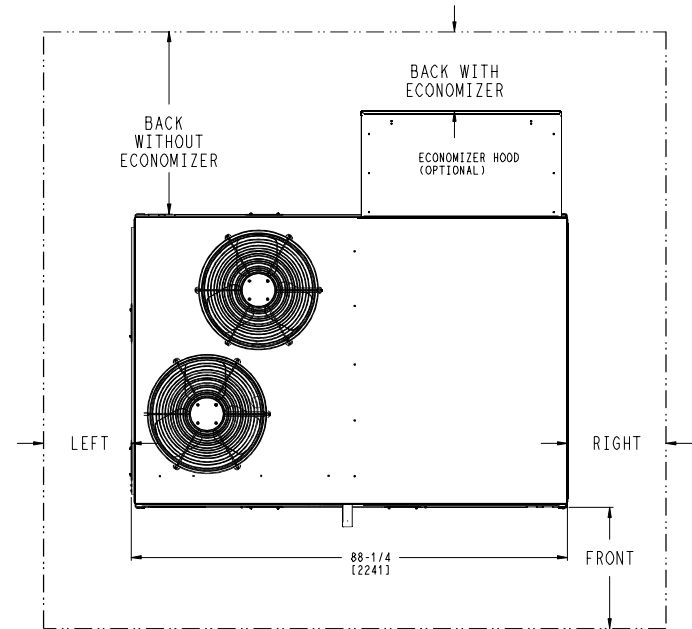
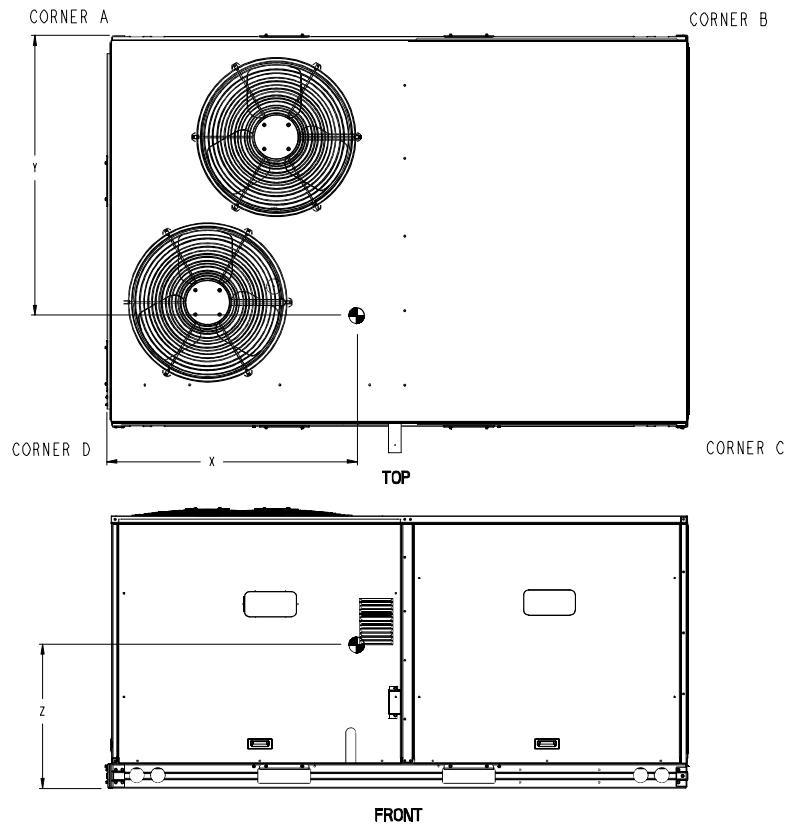
11/21/2023
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UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT ***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48FC-M08	RTPF	787	357	181	82	150	68	207	94	249	113	40 [1016]	34 1/2 [876]	19 3/8 [492]
48FC-M09	RTPF	868	394	197	89	160	73	229	104	282	128	39 1/2 [1003]	35 [889]	18 5/8 [473]
48FC-M12	RTPF	878	398	213	97	175	80	221	100	268	121	39 7/8 [1013]	33 1/4 [841]	18 1/2 [470]

RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)

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



NOTE:
 1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

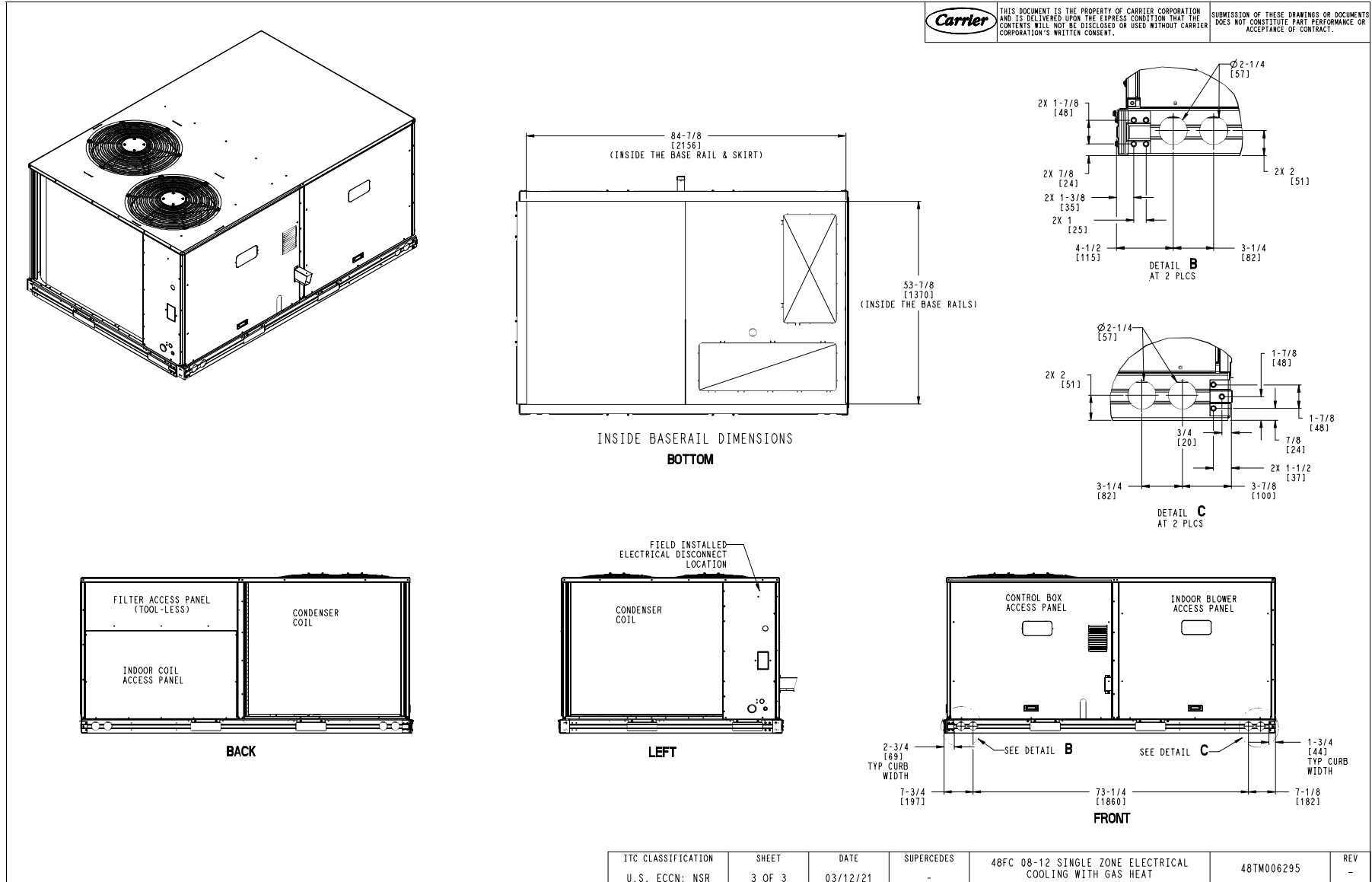
SURFACE	SERVICE WITH:		OPERATING CLEARANCE
	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O ECON	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/ECON	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48FC 08-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM006295	REV
U.S. ECCN:NSR	2 OF 3	03/12/21	-			-

Certified Drawing for RTU - 1 - 2

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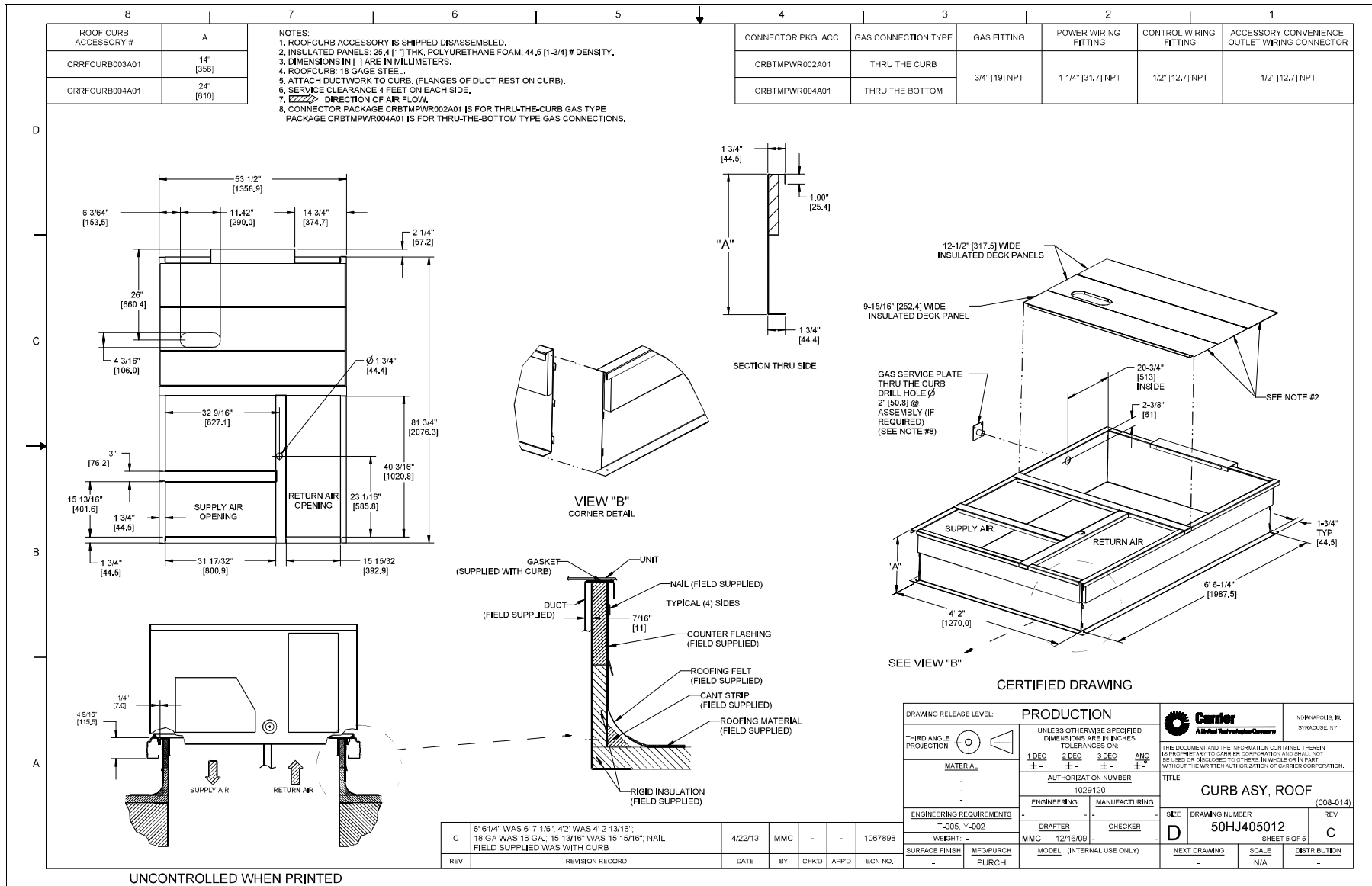


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U.S. ECCN: NSR	3 OF 3	03/12/21	-			-

Certified Drawing for RTU - 1 - 2

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
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10:39AM



Performance Summary For RTU - 1 - 2

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
 Prepared By:

11/21/2023
 10:39AM

Part Number: 48FCEM08B2M5-6W1C0

ARI EER: 11.20
 IEER: 15.0

Base Unit Dimensions

Unit Length: 88.1 in
 Unit Width: 59.5 in
 Unit Height: 41.3 in

Operating Weight

Base Unit Weight: 743 lb
 Medium Heat: 15 lb
 RA Smoke Detector: 7 lb
 Al/Cu - Al/Cu - Louvered Hail Guards: 17 lb
 Enthalpy Ultra Low Leak Econo w/Baro Relief: 57 lb
 Unpowered Convenience Outlet: 4 lb
 Non-Fused Disconnect: 15 lb

Accessories

14-inch Tall Roof Curb: 143 lb

 Total Operating Weight: 1001 lb

Unit

Unit Voltage-Phase-Hertz: 208-3-60
 Air Discharge: Vertical
 Fan Drive Type: Vane Axial
 Actual Airflow: 3000 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
 Entering Air Enthalpy: 31.44 BTU/lb
 Evaporator Leaving Air DB: 59.6 F
 Evaporator Leaving Air WB: 57.5 F
 Evaporator Leaving Air Enthalpy: 24.74 BTU/lb
 Gross Cooling Capacity: 90.47 MBH
 Gross Sensible Capacity: 66.02 MBH
 Compressor Power Input: 6.30 kW
 Coil Bypass Factor: 0.147

Heating Performance

Heating Airflow: 3000 CFM
 Entering Air Temp: 70.0 F
 Leaving Air Temp: 115.7 F
 Gas Heating Input Capacity: 120.0 / 180.0 MBH
 Gas Heating Output Capacity: 98.0 / 148.0 MBH
 Temperature Rise: 45.7 F

Supply Fan

External Static Pressure: 0.75 in wg
 Options / Accessories Static Pressure
 Economizer: 0.11 in wg
 MERV-8 Filter Kit: 0.12 in wg
 Application External Static (ESP + Unit Opts/Acc.): 0.98 in wg
 Fan RPM: 1682
 Fan Power: 1.77 BHP

NOTE: Selected IFM RPM Range: 1069 - 2000

Performance Summary For RTU - 1 - 2

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

Filter pressure drop assumes a clean filter and is intended to be an estimate based on available supplier data. The actual pressure drop the unit experiences may vary due to alternate suppliers or filter loading over time.

Electrical Data

Voltage Range:	187 - 253
Compressor #1 RLA:.....	13.1
Compressor #1 LRA:.....	123
Compressor #2 RLA:.....	13.1
Compressor #2 LRA:.....	123
Indoor Fan Motor Type:.....	MED
Indoor Fan Motor FLA (Total):.....	6.4
Combustion Fan Motor FLA (ea):.....	0.48
Power Supply MCA:.....	39
Power Supply MOCP (Fuse or HACR):.....	50
Disconnect Size FLA:.....	41
Disconnect Size LRA:	263
Electrical Convenience Outlet:.....	None
Outdoor Fan [Qty / FLA (ea)]:	2 / 1.5

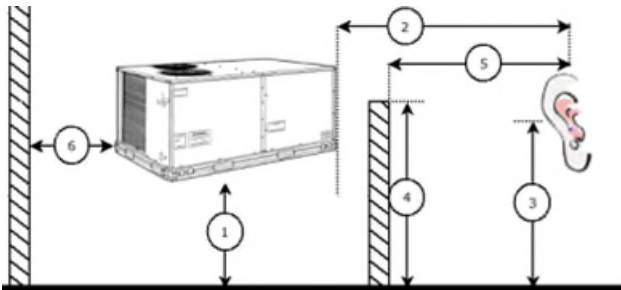
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	89.1	84.4	85.6
125 Hz	85.3	80.3	84.7
250 Hz	78.6	72.6	80.5
500 Hz	75.4	68.1	76.0
1000 Hz	76.8	68.3	72.4
2000 Hz	73.2	62.5	68.0
4000 Hz	68.9	54.9	62.8
8000 Hz	59.7	48.8	59.3
A-Weighted	80.9	72.7	79.0

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

Performance Summary For RTU - 1 - 2

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
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Detailed Acoustics Information

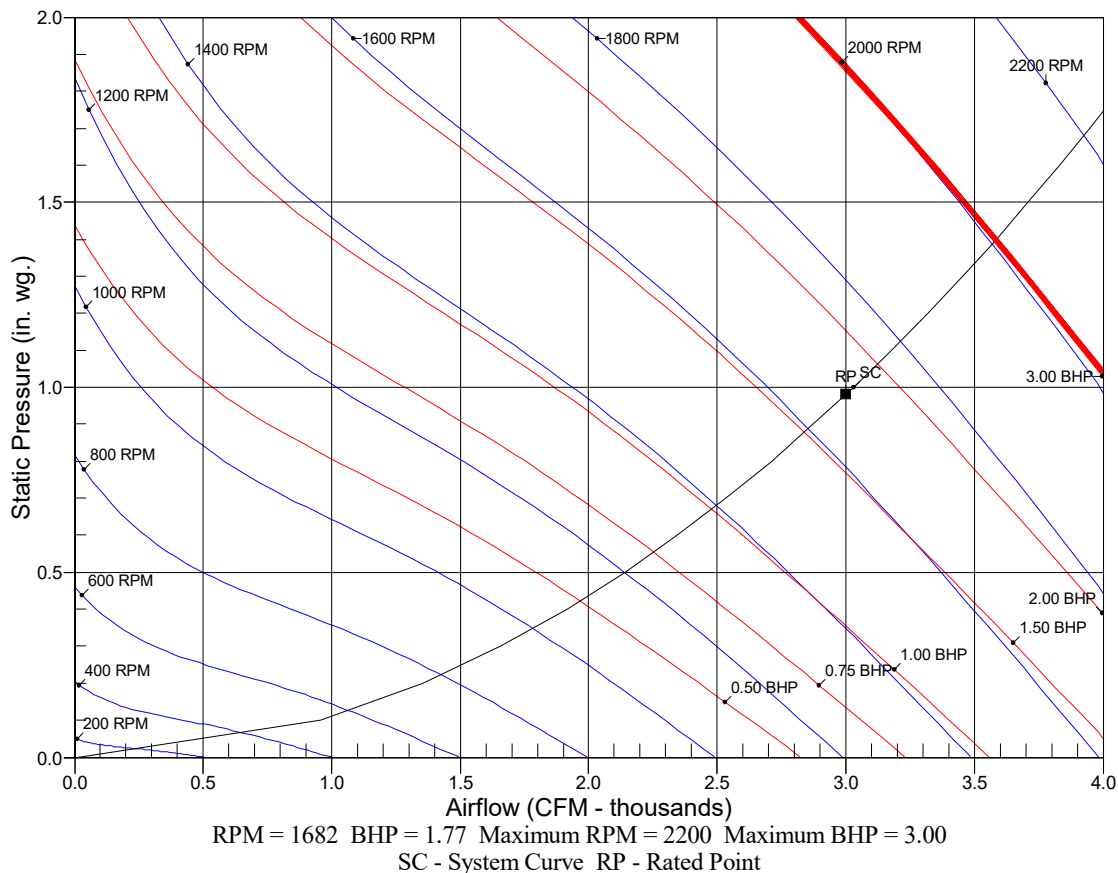
Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3	89.2 Lw
B	59.4	68.6	71.9	72.8	72.4	69.2	63.8	58.2	78.5 LwA
C	53.2	52.3	48.1	43.6	40.0	35.6	30.4	26.9	56.8 Lp
D	27.0	36.2	39.5	40.4	40.0	36.8	31.4	25.8	46.1 LpA

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.

Fan Curve



RTU - 3 - 4

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

Unit Report For RTU - 3 - 4

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Unit Parameters

Unit Model:.....**48FCEM12B2M5-6W1C0**
 Unit Size:.....**12 (10.0 Tons)**
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 Heating Type:.....**Gas**
 Heat Control:.....**Medium Heat**
 Duct Cfg:.....**Vertical Supply / Vertical Return**
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Dimensions (ft. in.) & Weight (lb.) ***

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	Al/Cu - Al/Cu - Louvered Hail Guards	
	Unpowered Convenience Outlet	
	Non-Fused Disconnect	
	Ultra Low leak Enty Econo X with baro relief, W7220 control. Meets Calif. Title 24 FDD & Leak Rates	
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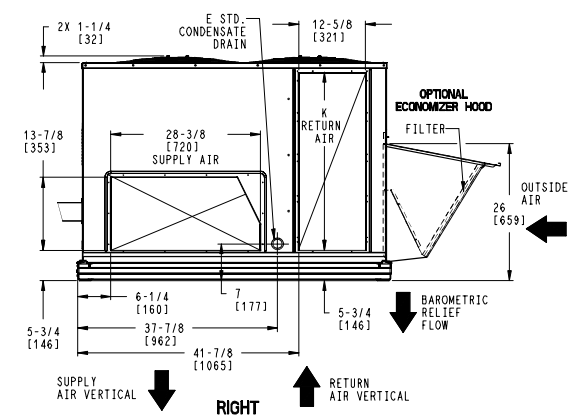
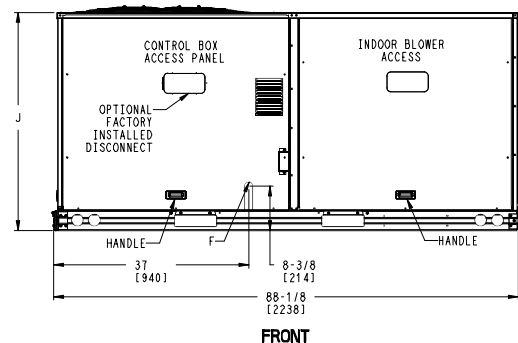
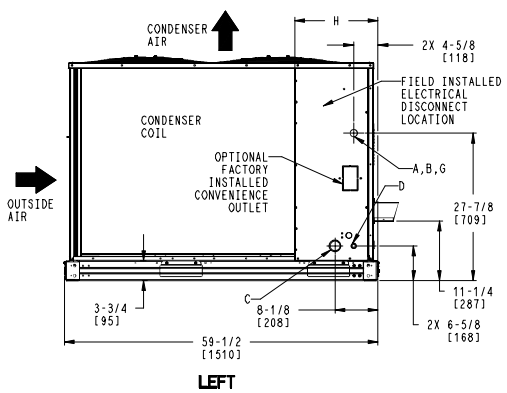
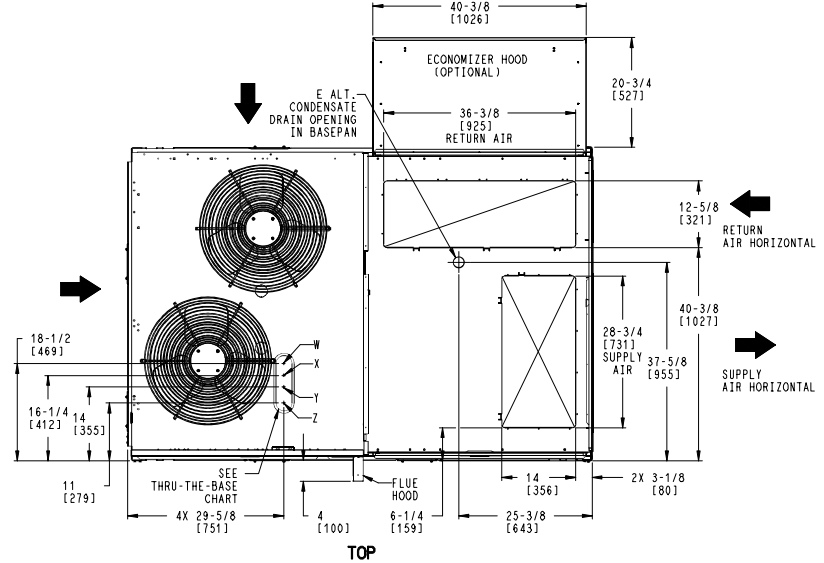
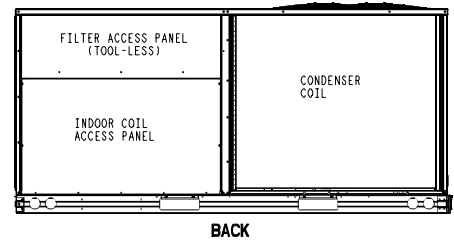
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U.S. ECCN: NSR	1 OF 3	03/12/21	-			-

Certified Drawing for RTU - 3 - 4

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 Prepared By:

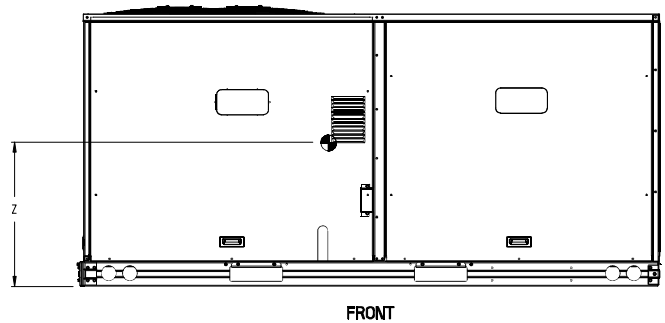
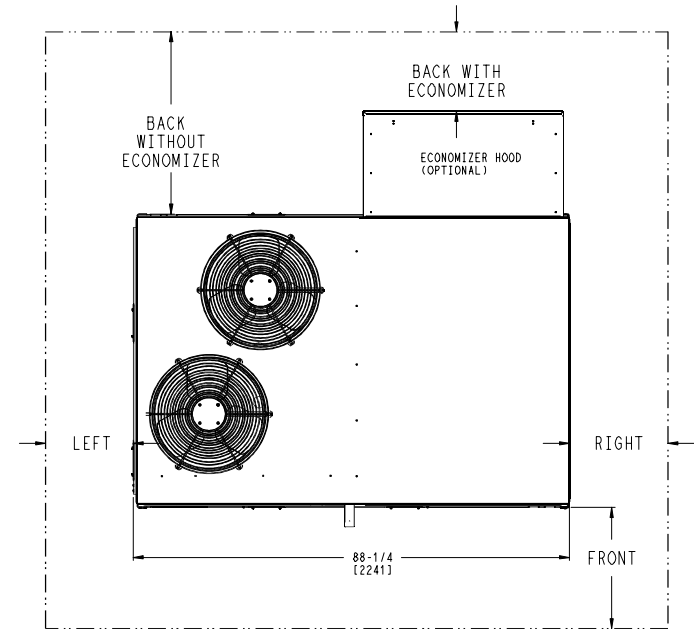
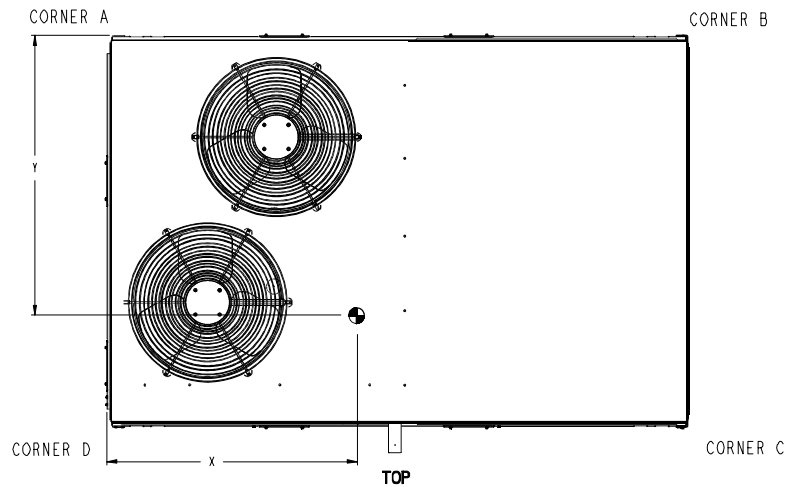
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UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT ***		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48FC-M08	RTPF	787	357	181	82	150	68	207	94	249	113	40 [1016]	34 1/2 [876]	19 3/8 [492]
48FC-M09	RTPF	868	394	197	89	160	73	229	104	282	128	39 1/2 [1003]	35 [889]	18 5/8 [473]
48FC-M12	RTPF	878	398	213	97	175	80	221	100	268	121	39 7/8 [1013]	33 1/4 [841]	18 1/2 [470]

RTPF - ROUND TUBE, PLATE FIN (COPPER/ALUM)

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



NOTE:
 1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

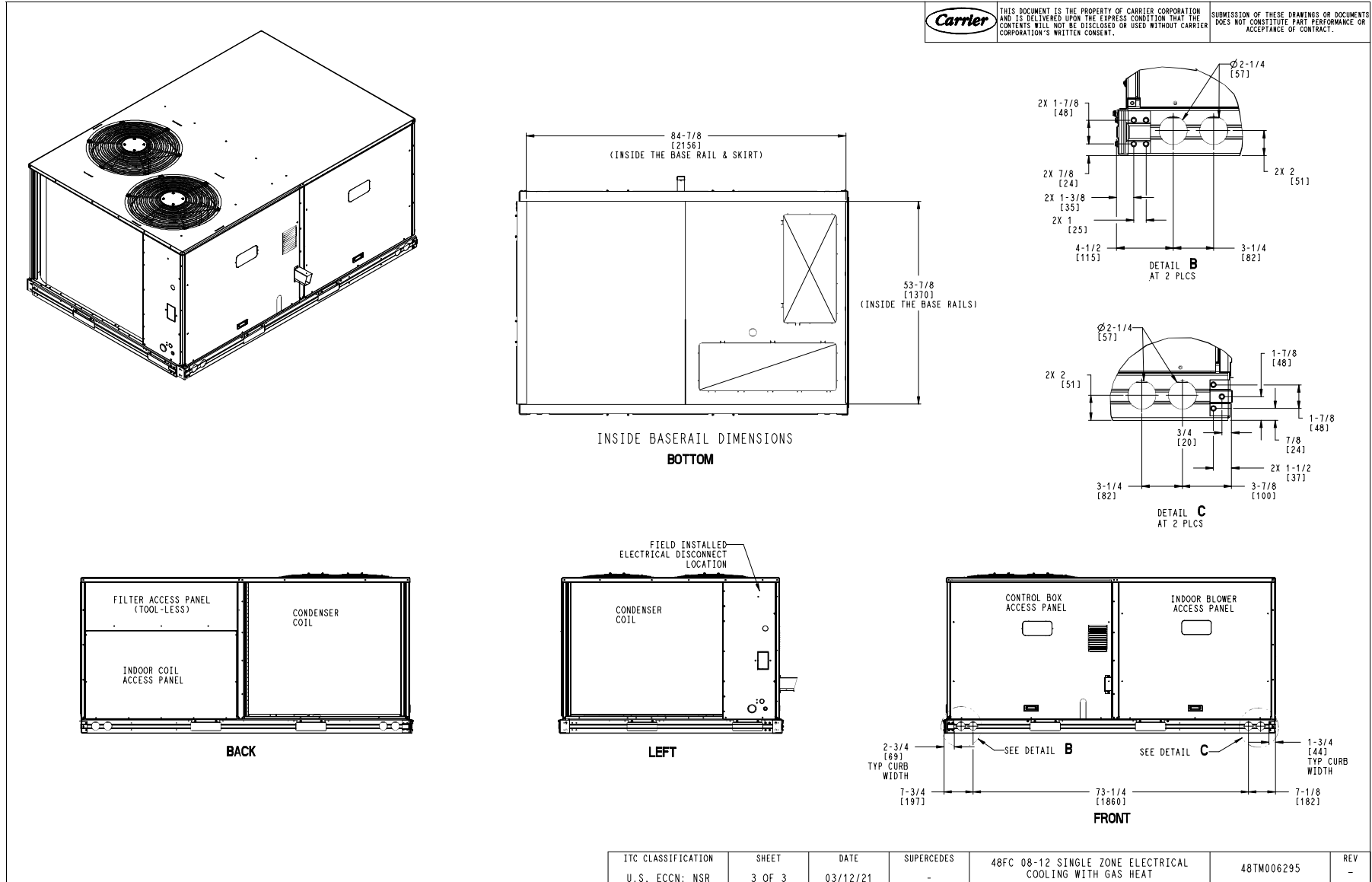
SURFACE	CLEARANCE		
	SERVICE WITH CONDUCTIVE BARRIER	SERVICE WITH NONCONDUCTIVE BARRIER	OPERATING CLEARANCE
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/O ECON	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/ECON	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]	18 [457mm]
TOP	72 [1829mm]	72 [1829mm]	72 [1829mm]

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48FC 08-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM006295	REV
U.S. ECCN:NSR	2 OF 3	03/12/21	-			-

Certified Drawing for RTU - 3 - 4

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
 Prepared By:

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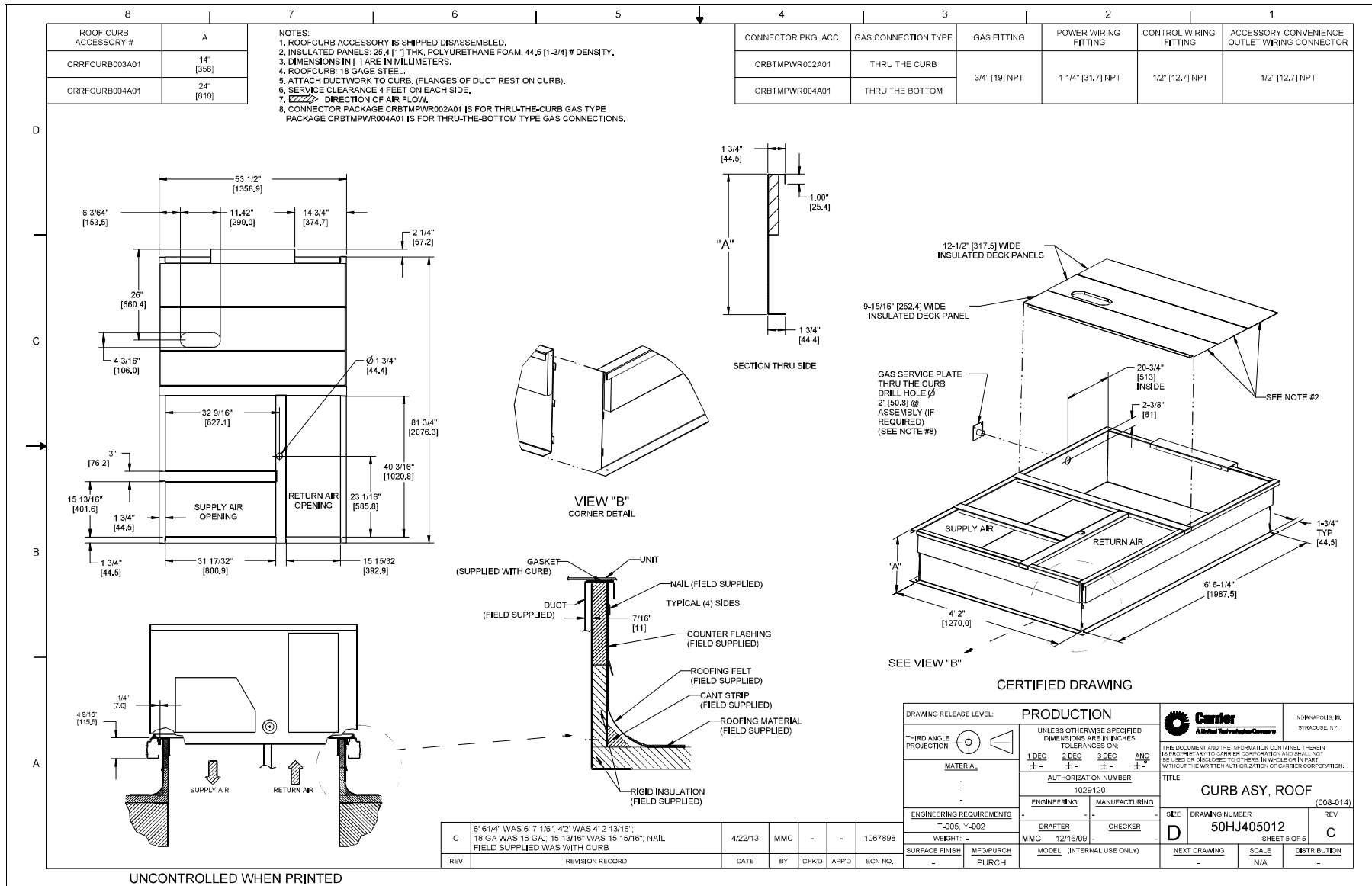


ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48FC 08-12 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM006295	REV
U.S. ECCN: NSR	3 OF 3	03/12/21	-			-

Certified Drawing for RTU - 3 - 4

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
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11/21/2023
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Performance Summary For RTU - 3 - 4

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
 Prepared By:

11/21/2023
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Part Number: 48FCEM12B2M5-6W1C0

ARI EER: 11.00
 IEER: 15.0

Base Unit Dimensions

Unit Length: 88.1 in
 Unit Width: 59.5 in
 Unit Height: 49.4 in

Operating Weight

Base Unit Weight: 815 lb
 Medium Heat: 18 lb
 RA Smoke Detector: 7 lb
 Al/Cu - Al/Cu - Louvered Hail Guards: 17 lb
 Enthalpy Ultra Low Leak Econo w/Baro Relief: 57 lb
 Unpowered Convenience Outlet: 4 lb
 Non-Fused Disconnect: 15 lb

Accessories

14-inch Tall Roof Curb: 143 lb
 Total Operating Weight: 1076 lb

Unit

Unit Voltage-Phase-Hertz: 208-3-60
 Air Discharge: Vertical
 Fan Drive Type: Vane Axial
 Actual Airflow: 4000 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
 Entering Air Enthalpy: 31.44 BTU/lb
 Evaporator Leaving Air DB: 57.7 F
 Evaporator Leaving Air WB: 57.1 F
 Evaporator Leaving Air Enthalpy: 24.45 BTU/lb
 Gross Cooling Capacity: 125.75 MBH
 Gross Sensible Capacity: 96.22 MBH
 Compressor Power Input: 9.17 kW
 Coil Bypass Factor: 0.052

Heating Performance

Heating Airflow: 4000 CFM
 Entering Air Temp: 70.0 F
 Leaving Air Temp: 111.9 F
 Gas Heating Input Capacity: 180.0 / 224.0 MBH
 Gas Heating Output Capacity: 146.0 / 181.0 MBH
 Temperature Rise: 41.9 F

Supply Fan

External Static Pressure: 0.50 in wg
 Options / Accessories Static Pressure
 Economizer: 0.20 in wg
 MERV-8 Filter Kit: 0.14 in wg
 Application External Static (ESP + Unit Opts/Acc.): 0.84 in wg
 Fan RPM: 1847
 Fan Power: 2.20 BHP
 NOTE: Selected IFM RPM Range: 1264 - 2000

Performance Summary For RTU - 3 - 4

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
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Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Filter pressure drop assumes a clean filter and is intended to be an estimate based on available supplier data. The actual pressure drop the unit experiences may vary due to alternate suppliers or filter loading over time.

Electrical Data

Voltage Range:	187 - 253
Compressor #1 RLA:.....	15.6
Compressor #1 LRA:.....	110
Compressor #2 RLA:.....	15.6
Compressor #2 LRA:.....	110
Indoor Fan Motor Type:.....	MED
Indoor Fan Motor FLA (Total):.....	6.4
Combustion Fan Motor FLA (ea):.....	0.48
Power Supply MCA:.....	45
Power Supply MOCP (Fuse or HACR):.....	60
Disconnect Size FLA:.....	47
Disconnect Size LRA:	237
Electrical Convenience Outlet:.....	None
Outdoor Fan [Qty / FLA (ea)]:	2 / 1.5

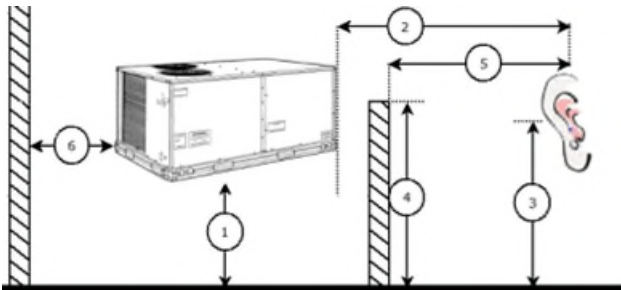
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	88.2	84.0	85.6
125 Hz	84.5	79.2	84.7
250 Hz	80.5	72.9	80.5
500 Hz	77.0	69.4	76.0
1000 Hz	78.6	70.2	72.4
2000 Hz	75.1	64.3	68.0
4000 Hz	70.9	56.3	62.8
8000 Hz	61.7	49.5	59.3
A-Weighted	82.5	73.8	79.0

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

Performance Summary For RTU - 3 - 4

Project: Five Below - Cincinnati, OH (Hyde Park Plaza)
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Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3	89.2 Lw
B	59.4	68.6	71.9	72.8	72.4	69.2	63.8	58.2	78.5 LwA
C	53.2	52.3	48.1	43.6	40.0	35.6	30.4	26.9	56.8 Lp
D	27.0	36.2	39.5	40.4	40.0	36.8	31.4	25.8	46.1 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.

