

Unit Report For 6 Ton RTU

Project: ~Untitled17
 Prepared By:

09/16/2022
 12:03PM

Unit Parameters

Unit Model:.....**48FCFM07A3A5-0A0A0**
 Unit Size:.....**07 (6 Tons)**
 Volts-Phase-Hertz:.....**208-3-60**
 Heating Type:.....**Gas**
 Duct Cfg:.....**Vertical Supply / Vertical Return**
 High Heat
 Single Circuit, Two Stage Cooling (07 only)

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

Unit Length:.....**6' 2.375"**
 Unit Width:.....**3' 10.625"**
 Unit Height:.....**3' 5.375"**
***** Total Operating Weight:.....680 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:.....**1/2**
 Condensate Drain Line Size:.....**3/4**
 Return Air Filter Type:.....**Throwaway**
 Return Air Filter Quantity:.....**4**
 Return Air Filter Size:.....**16 x 16 x 2**

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

Unit Configuration

Direct Drive - EcoBlue - High Static
 Al/Cu - Al/Cu
 Base Electromechanical Controls
 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
48FCFM07A3A5-0A0A0	Rooftop Unit	1
	Base Unit	
	Direct Drive - EcoBlue - High Static	
	None	
Field Installed Accessories		
CRECOMZR020A02	Standard Low Leak Vertical EconoMiSer IV with solid-state controller	1

Performance Summary For 6 Ton RTU

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Part Number:48FCFM07A3A5-0A0A0

ARI EER:.....11.00
IEER:.....15.0

Base Unit Dimensions

Unit Length:.....74.4 in
Unit Width:.....46.6 in
Unit Height:.....41.4 in

Operating Weight

Base Unit Weight:.....562 lb
High Heat:.....63 lb
Direct Drive - EcoBlue - High Static:.....5 lb

Accessories

Standard Low Leak Vertical EconoMi\$er IV with solid-state controller:.....50 lb

Total Operating Weight:.....680 lb

Unit

Unit Voltage-Phase-Hertz:.....208-3-60
Air Discharge:.....Vertical
Fan Drive Type:.....Vane Axial
Actual Airflow:.....2400 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:.....58.5 F
Evaporator Leaving Air WB:.....57.5 F
Evaporator Leaving Air Enthalpy:.....24.73 BTU/lb
Gross Cooling Capacity:.....72.42 MBH
Gross Sensible Capacity:.....55.62 MBH
Compressor Power Input:.....5.29 kW
Coil Bypass Factor:.....0.096

Heating Performance

Heating Airflow:.....2400 CFM
Entering Air Temp:.....70.0 F
Leaving Air Temp:.....116.3 F
Gas Heating Input Capacity:.....120.0 / 150.0 MBH
Gas Heating Output Capacity:.....96.0 / 120.0 MBH
Temperature Rise:.....46.3 F
Thermal Efficiency (%):.....80.0

Supply Fan

External Static Pressure:.....0.90 in wg
Options / Accessories Static Pressure
Economizer:.....0.17 in wg
Total Application Static (ESP + Unit Opts/Acc.):.....1.07 in wg
Fan RPM:.....2522
Fan Power:.....1.72 BHP
NOTE:.....Selected IFM RPM Range: 1596 - 2836

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

Electrical Data

Voltage Range:.....187 - 253

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Compressor #1 RLA:	17.5
Compressor #1 LRA:	136
Indoor Fan Motor Type:	HIGH
Indoor Fan Motor FLA:	6.4
Combustion Fan Motor FLA (ea):	0.48
Power Supply MCA:	30
Power Supply MOCP (Fuse or HACR):	45
Disconnect Size FLA:	29
Disconnect Size LRA:	149
Electrical Convenience Outlet:	None
Outdoor Fan [Qty / FLA (ea)]:	1 / 1.5

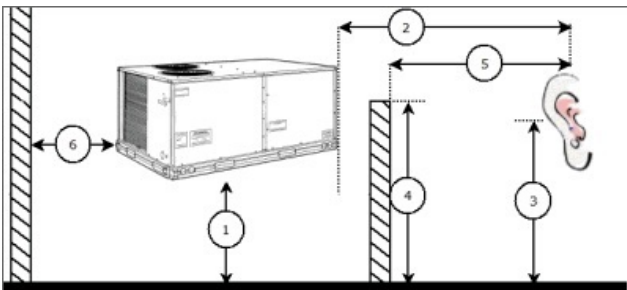
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	95.3	91.7	85.6
125 Hz	87.4	83.9	84.7
250 Hz	81.7	74.2	80.5
500 Hz	78.5	71.5	76.0
1000 Hz	76.1	72.7	72.4
2000 Hz	73.9	64.4	68.0
4000 Hz	68.4	57.1	62.8
8000 Hz	62.9	51.2	59.3
A-Weighted	82.0	76.4	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

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

Performance Summary For 6 Ton RTU

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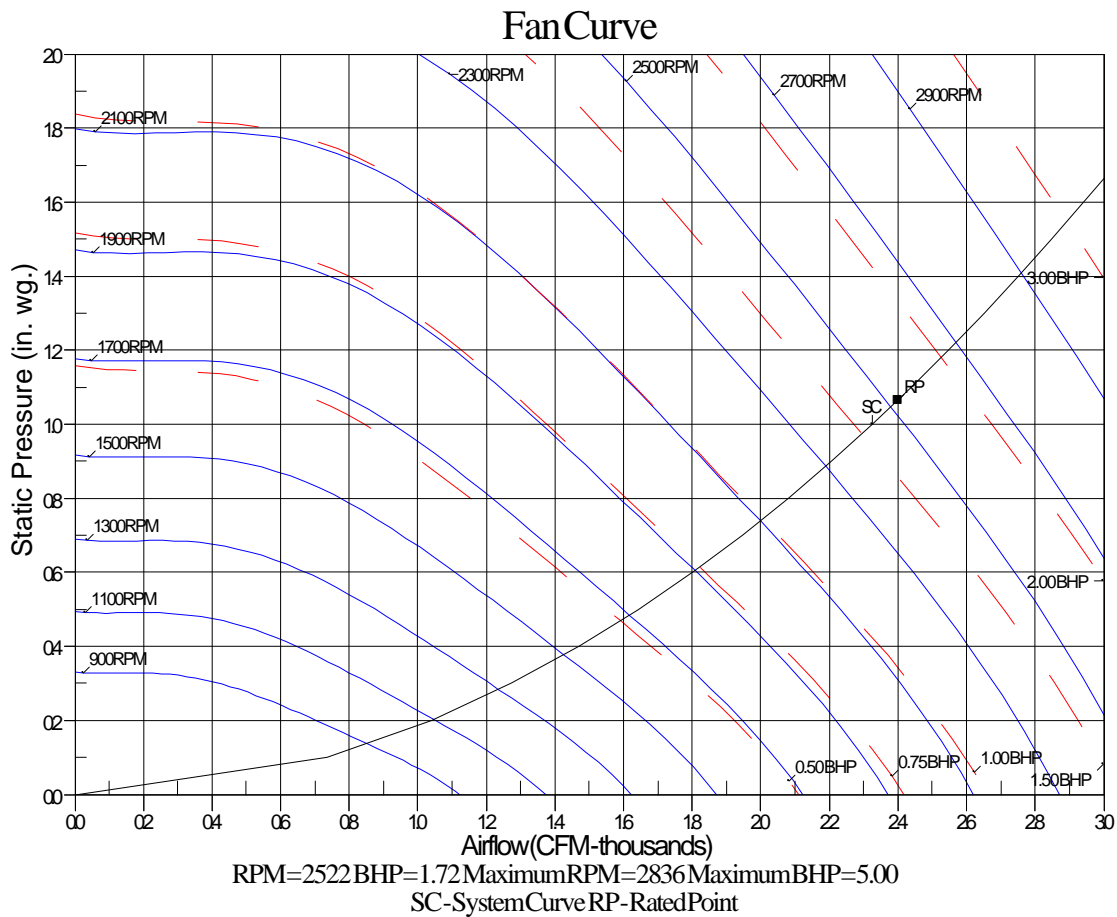
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D	27.0	36.2	39.5	40.4	40.0	36.8	31.4	25.8	46.1 LpA
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Legend

- 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.



Spec Sheet for 6 Ton RTU

Project: ~Untitled17
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12:03PM

Unit Report For 7.5 Ton RTU

Project: ~Untitled17
Prepared By:

09/16/2022
12:03PM

Unit Parameters

Unit Model:.....48TCEM08A2A5-0A0A0
Unit Size:.....08 (7.5 Tons)
Volts-Phase-Hertz:.....208-3-60
Heating Type:.....Gas
Duct Cfg:.....Vertical Supply / Vertical Return
Medium Heat
Round Tube Plate Fin Coils

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

Unit Length:.....7' 4.125"
Unit Width:.....4' 11.5"
Unit Height:.....3' 5.25"
*** Total Operating Weight:.....882 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. This filter is not MERV Rated.

Unit Configuration

Medium Static Option (Belt Drive)
Al/Cu - Al/Cu
Base Electromechanical Controls
Standard Packaging

Warranty Information

1-Year parts(std.)
5-Year compressor parts(std.)
10-Year heat exchanger - Aluminized(std.)
15-Year heat exchanger - Stainless Steel(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
48TCEM08A2A5-0A0A0	Rooftop Unit	1
	Base Unit	
	Medium Static Option (Belt Drive)	
	Electromechanical control, No intake or exhaust option.	
	No Electrical Option	
Field Installed Accessories		
CRECOMZR021A03	Vertical EconoMiSer IV with solid-state controller	1

Performance Summary For 7.5 Ton RTU

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09/16/2022
12:03PM

Part Number:48TCEM08A2A5-0A0A0

ARI EER:.....11.00
IEER:.....12.7

Base Unit Dimensions

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

Operating Weight

Base Unit Weight:.....777 lb
Medium Heat:.....15 lb
Medium Static Option (Belt Drive):.....15 lb

Accessories

Vertical EconoMi\$er IV with solid-state controller:.....75 lb

Total Operating Weight:.....882 lb

Unit

Unit Voltage-Phase-Hertz:.....208-3-60
Air Discharge:.....Vertical
Fan Drive Type:.....Belt
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:.....58.9 F
Evaporator Leaving Air WB:.....57.0 F
Evaporator Leaving Air Enthalpy:.....24.41 BTU/lb
Gross Cooling Capacity:.....94.90 MBH
Gross Sensible Capacity:.....68.42 MBH
Compressor Power Input:.....6.73 kW
Coil Bypass Factor:.....0.161

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
Thermal Efficiency (%):.....82.0

Supply Fan

External Static Pressure:.....0.90 in wg
Options / Accessories Static Pressure
Economizer:.....0.11 in wg
Total Application Static (ESP + Unit Opts/Acc.):.....1.01 in wg
Fan RPM:.....872
Fan Power:.....2.29 BHP
NOTE:.....Selected IFM RPM Range: 733 - 949

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

Electrical Data

Voltage Range:.....187 - 253

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Compressor #1 RLA:	26.8
Compressor #1 LRA:	164
Indoor Fan Motor Type:	MED
Indoor Fan Motor FLA:	8.4
Combustion Fan Motor FLA (ea):	0.48
Power Supply MCA:	45
Power Supply MOCP (Fuse or HACR):	60
Disconnect Size FLA:	44
Disconnect Size LRA:	244
Electrical Convenience Outlet:	None
Outdoor Fan [Qty / FLA (ea)]:	2 / 1.5

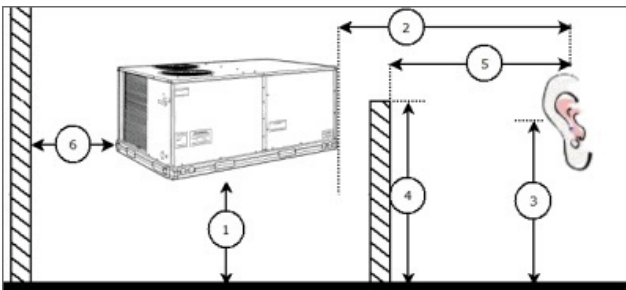
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	99.1	96.3	90.1
125 Hz	92.2	87.7	82.6
250 Hz	79.8	76.2	81.0
500 Hz	72.1	68.1	79.4
1000 Hz	69.4	65.4	77.0
2000 Hz	68.3	60.5	73.0
4000 Hz	69.4	60.2	70.4
8000 Hz	72.9	59.4	66.7
A-Weighted	81.0	76.1	82.0

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
A	90.1	82.6	81.0	79.4	77.0	73.0	70.4	66.7	91.8 Lw
B	63.9	66.5	72.4	76.2	77.0	74.2	71.4	65.6	82.0 LwA
C	57.7	50.2	48.6	47.0	44.6	40.6	38.0	34.3	59.4 Lp

Performance Summary For 7.5 Ton RTU

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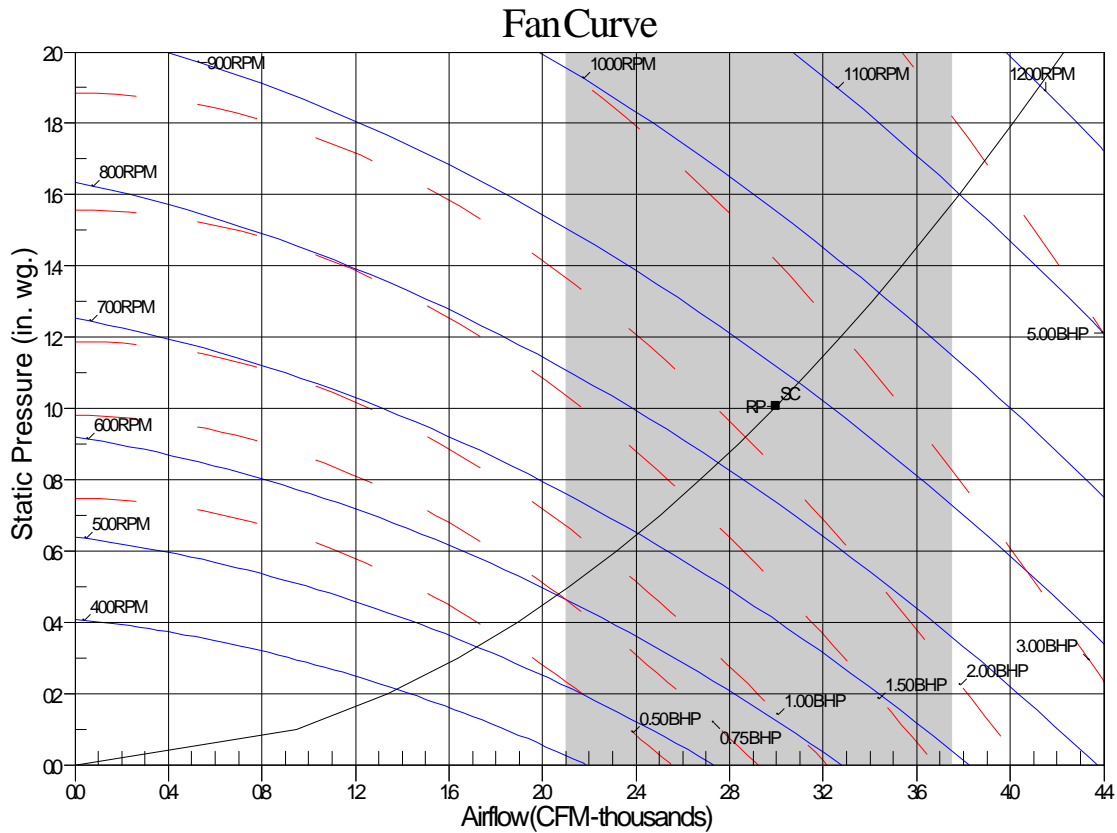
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D	31.5	34.1	40.0	43.8	44.6	41.8	39.0	33.2	49.6 LpA
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Legend

- 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

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RPM=872 BHP=2.29 Maximum RPM=1400 Maximum BHP=4.70
 Note: Please contact application engineering for selections outside the shaded region.
 SC-System Curve RP-Rated Point

Spec Sheet for 7.5 Ton RTU

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