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Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

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**RTU-1**

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

## Unit Report For RTU-1

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

### Unit Parameters

Unit Model:.....**48TCTA07A3A5-0K1A0**  
Unit Size:.....**07 (6 Tons)**  
Volts-Phase-Hertz:.....**208-3-60**  
Heating Type:.....**Gas**  
Duct Cfg:.....**Vertical Supply / Vertical Return**  
Stainless Steel, High Heat  
Round Tube Plate Fin Coils

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

Unit Length:.....**6' 2.375"**  
Unit Width:.....**3' 8"**  
Unit Height:.....**3' 5.375"**  
\*\*\* Total Operating Weight:.....**723 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**

### Unit Configuration

High Static Option (Belt Drive)  
Al/Cu - Al/Cu  
Base Electromechanical Controls  
2-Position Damper  
Unpowered Convenience Outlet  
Standard Packaging

### Warranty Information

1-Year parts(std.)  
5-Year compressor parts(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
48TCTA07A3A5-0K1A0	Rooftop Unit	1
	Base Unit	
	High Static Option (Belt Drive)	
	Unpowered Convenience Outlet	
	2-Position Damper	
	None	






# Certified Drawing for RTU-1

Project: King and Parks MultiFamily Residences  
Prepared By:

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10:22AM

## 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

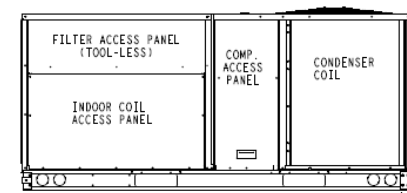
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48TC*04	33 3/8 [847]	18 5/8 [472]
48TC*05	33 3/8 [847]	14 7/8 [377]
48TC*06	33 3/8 [847]	14 7/8 [377]
48TC*07	41 3/8 [1051]	14 7/8 [377]

DRAWING REPRESENTS PRODUCT BUILT BEFORE 01/01/2017  
SEE DETAIL "B"

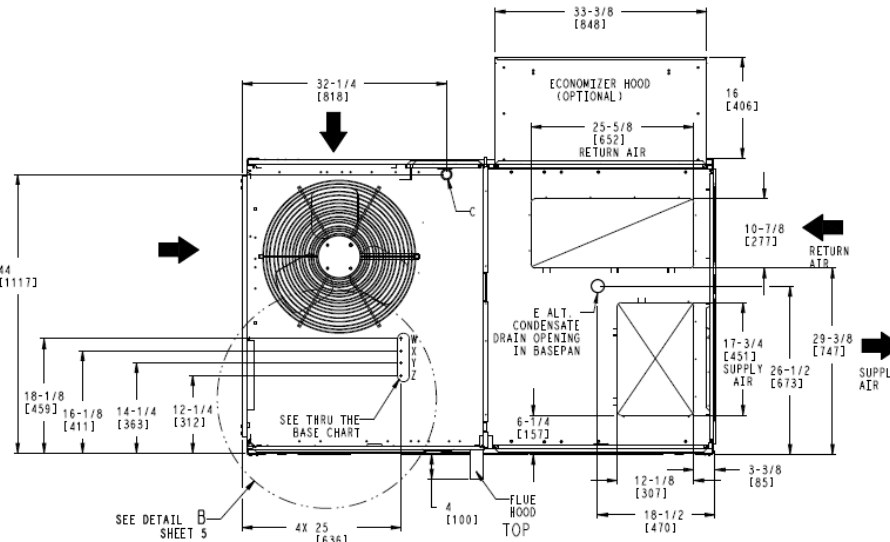


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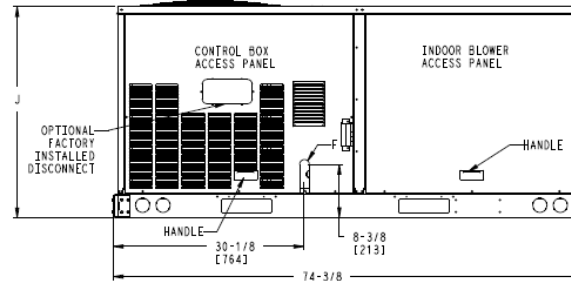
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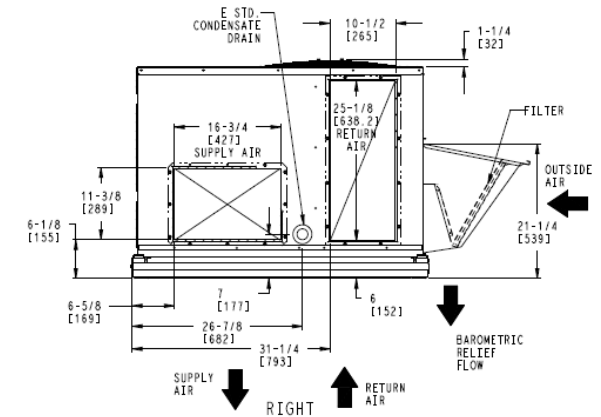
BACK



SEE DETAIL B SHEET 5



FRONT



CONNECTION SIZES	
A	1 3/8" [35] DIA. FIELD POWER SUPPLY HOLE
B	2" [50] 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	2 1/2" [64] DIA. POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPWR001A01, 003A01			
THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZE (MAX.)	
W	1/2"	115V	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	3/4"	POWER	1 1/8" [28.6]
Z**	(003A01) 1/2" FPT	GAS	1 1/8" [28.6]
FOR "THRU-THE-BASE" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED			
* SELECT EITHER 3/4" OR 1/2" FOR POWER, DEPENDING ON WIRE SIZE			
** (001A01) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.			

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48TC 04-07 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM500993	REV
U.S. ECCN:NSR	2 OF 5	8-24-2016	3-16-2015			H

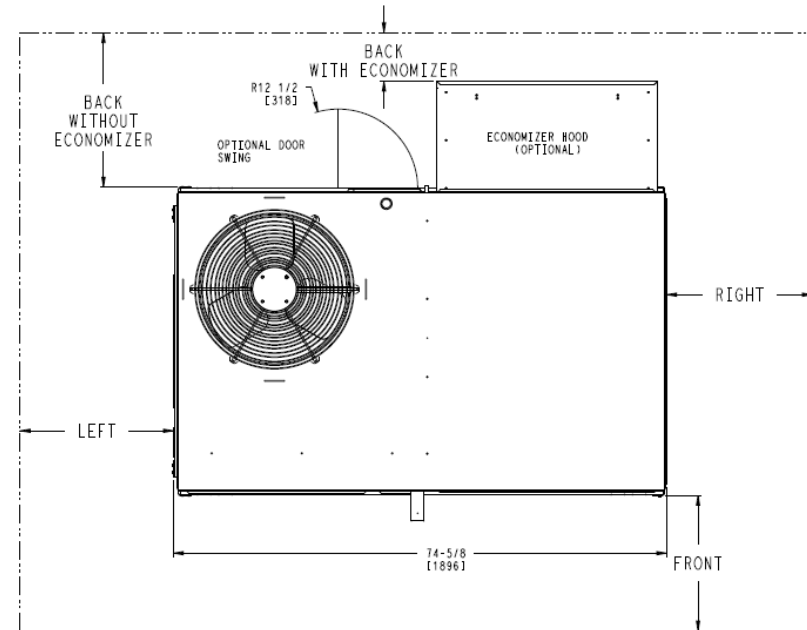
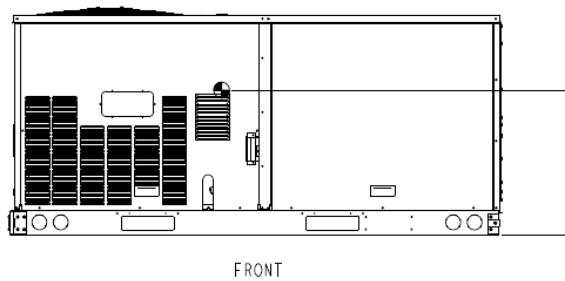
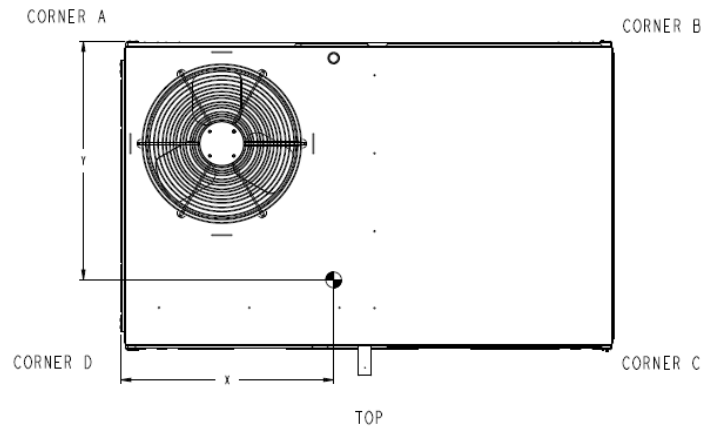
# Certified Drawing for RTU-1

Project: King and Parks MultiFamily Residences  
Prepared By:

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UNIT #	STD. UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.			HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z	
48TCDA04	480	218	102	46	117	53	139	63	122	55	39 [991]	25 [635]	16 3/8 [416]	
48TCDA05	528	239	127	58	125	57	137	62	139	63	37 [940]	24 [610]	17 [432]	
48TCDA06	560	254	126	57	136	62	155	70	144	65	38 [965]	24 [610]	17 1/4 [438]	
48TCDA07	652	296	150	68	169	76	176	80	157	71	39 [991]	23 [584]	20 1/8 [511]	

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



## NOTES:

- FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

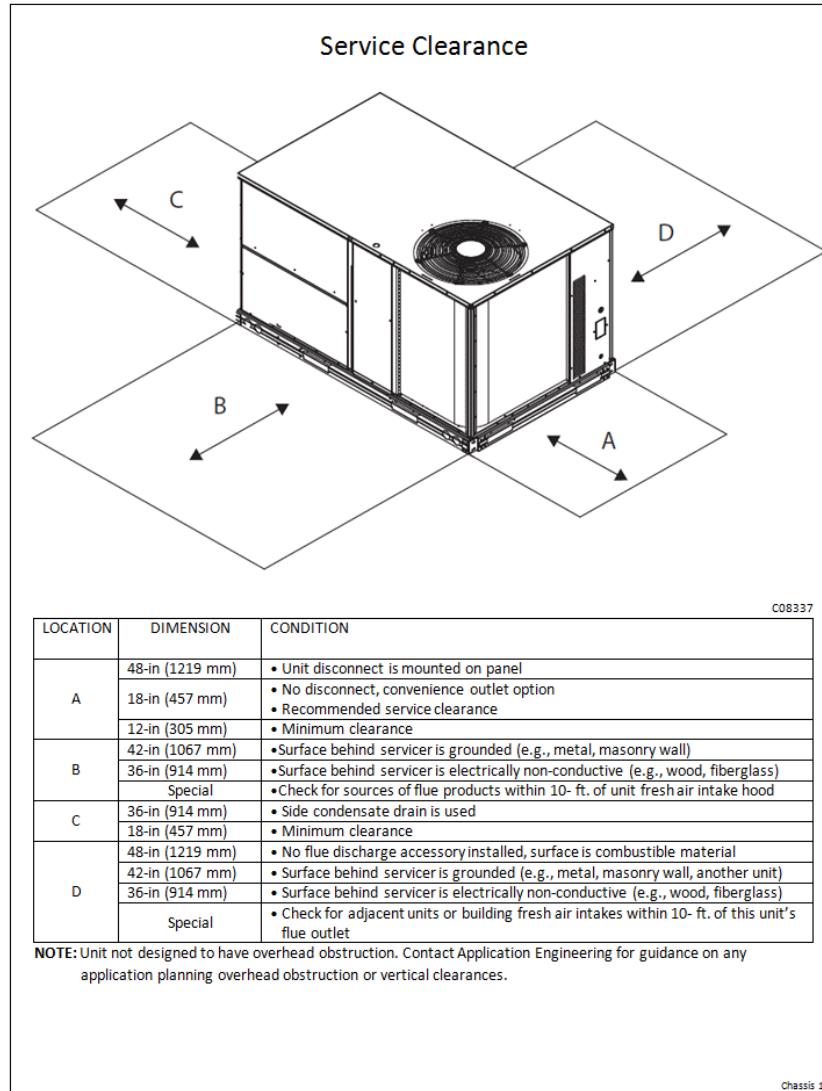
SURFACE	CLEARANCE		OPERATING CLEARANCE
	SERVICE WITH: CONDUCTIVE BARRIER	SERVICE WITH: NONCONDUCTIVE BARRIER	
FRONT	48 [1219mm]	36 [914mm]	18 [457mm]
LEFT	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK	48 [1219mm]	42 [1067mm]	18 [457mm]
BACK W/HOOD	36 [914mm]	36 [914mm]	18 [457mm]
RIGHT	36 [914mm]	36 [914mm]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

ITC CLASSIFICATION U.S. ECCN:NSR	SHEET 3 OF 5	DATE 8-24-2016	SUPERCEDES 3-16-2015	48TC 04-07 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM500993	REV H
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## Certified Drawing for RTU-1

Project: King and Parks MultiFamily Residences  
Prepared By:

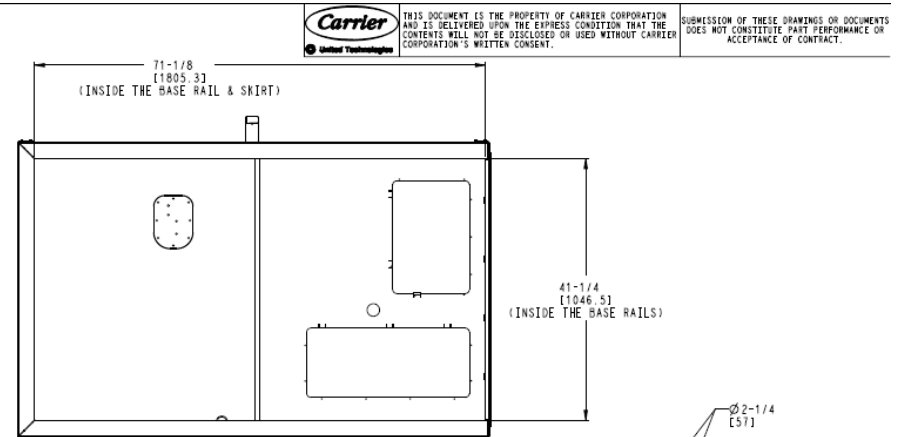
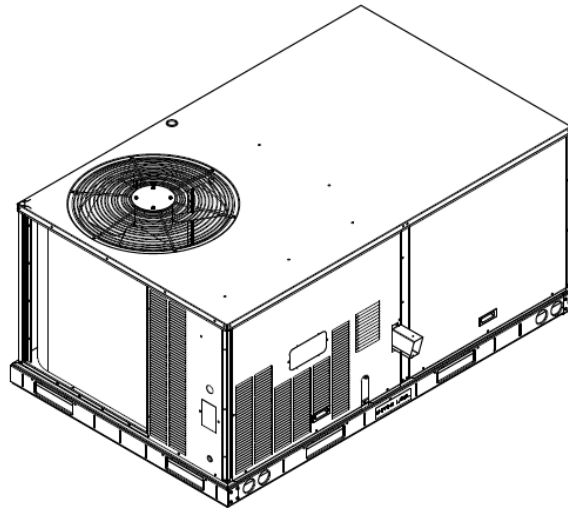
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# Certified Drawing for RTU-1

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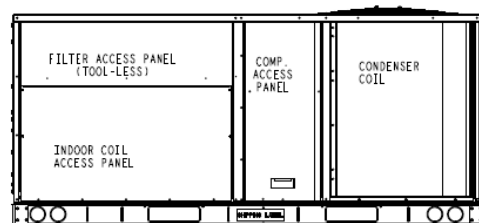
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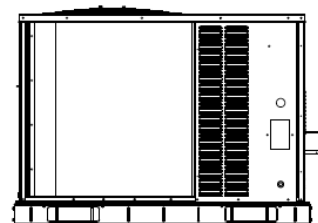
INSIDE BASERAIL DIMENSIONS

BOTTOM

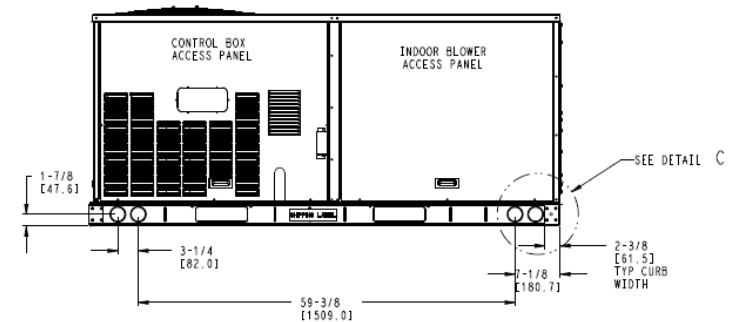
DETAIL C  
TYP 4 PLCS



BACK



LEFT



FRONT

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48TC 04-07 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM500993	REV
U.S. ECCN:NSR	4 OF 5	8-24-2016	3-16-2015			H



# Certified Drawing for RTU-1

Project: King and Parks MultiFamily Residences  
Prepared By:

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10:22AM

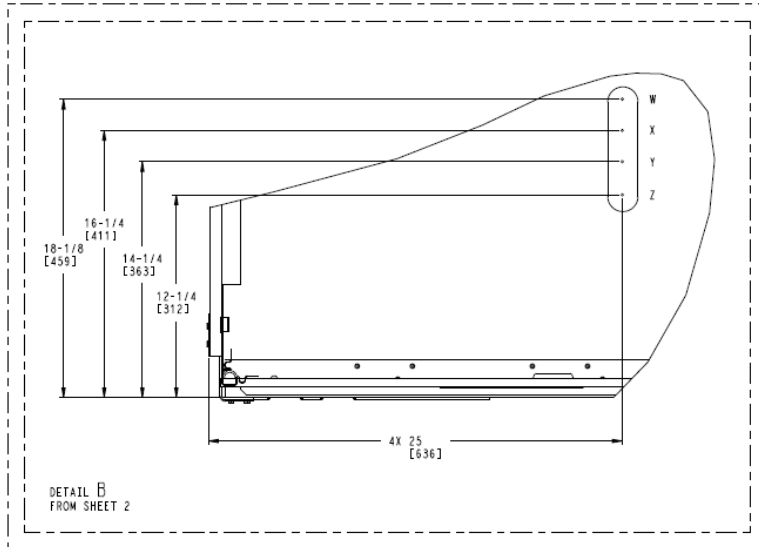


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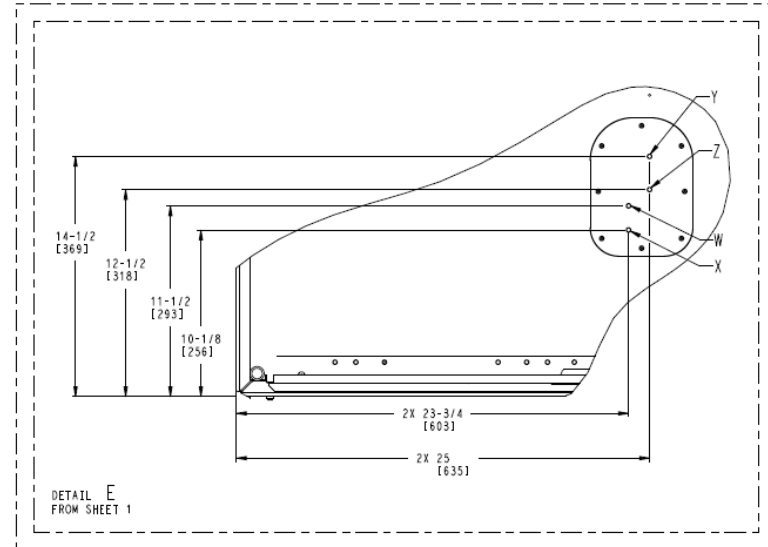
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THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPWR001A01, 003A01			
	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)
W	1/2"	115V	7/8" [22.2]
X	1/2"	24V	7/8" [22.2]
Y	3/4"	POWER	1 1/8" [28.6]
Z	(003A01) 1/2" FPT	GAS	1 1/8" [28.6]
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED			
*	SELECT EITHER 3/4" OR 1/2" FOR POWER, DEPENDING ON WIRE SIZE		
**	(001A01) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.		

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*	SELECT EITHER 3/4" OR 1/2" FOR POWER, DEPENDING ON WIRE SIZE		
**	(001A01) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.		



THIS VIEW REPRESENTS PRODUCT BUILT PRIOR TO 1/1/17



THIS VIEW REPRESENTS PRODUCT BUILT AFTER 1/1/17

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	48TC 04-07 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TM500993	REV
U.S. ECCN:NSR	5 OF 5	8-24-2016	3-16-2015			H

## Performance Summary For RTU-1

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

### Part Number:48TCTA07A3A5-0K1A0

ARI EER: 11.00  
IEER: 11.2

#### Base Unit Dimensions

Unit Length: 74.4 in  
Unit Width: 44.0 in  
Unit Height: 41.4 in

#### Operating Weight

Base Unit Weight: 652 lb  
Stainless Steel, High Heat: 17 lb  
High Static Option (Belt Drive): 10 lb  
2-Position Damper: 39 lb  
Unpowered Convenience Outlet: 5 lb

Total Operating Weight: 723 lb

#### Unit

Unit Voltage-Phase-Hertz: 208-3-60  
Air Discharge: Vertical  
Fan Drive Type: Belt  
Actual Airflow: 2400 CFM  
Site Altitude: 0 ft

#### Cooling Performance

Condenser Entering Air DB: 95.0 F  
Evaporator Entering Air DB: 90.0 F  
Evaporator Entering Air WB: 67.0 F  
Entering Air Enthalpy: 31.36 BTU/lb  
Evaporator Leaving Air DB: 58.4 F  
Evaporator Leaving Air WB: 56.0 F  
Evaporator Leaving Air Enthalpy: 23.78 BTU/lb  
Gross Cooling Capacity: 81.85 MBH  
Gross Sensible Capacity: 81.85 MBH  
Compressor Power Input: 5.11 kW  
Coil Bypass Factor: 0.084

#### 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: 1.20 in wg  
Fan RPM: 1603  
Fan Power: 2.44 BHP  
NOTE: Selected IFM RPM Range: 1474 - 1788

#### Electrical Data

Voltage Range: 187 - 253  
Compressor #1 RLA: 19  
Compressor #1 LRA: 123  
Indoor Fan Motor Type: HIGH  
Indoor Fan Motor FLA: 10.6  
Combustion Fan Motor FLA (ea): 0.48

## Performance Summary For RTU-1

Project: King and Parks MultiFamily Residences  
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Power Supply MCA:	36
Power Supply MOCP (Fuse or HACR):	50
Disconnect Size FLA:	36
Disconnect Size LRA:	213
Electrical Convenience Outlet:	None
Outdoor Fan [Qty / FLA (ea)]:	1 / 1.5

### Electrical Data (Units produced on or after 02/09/2015 )

Compressor #1 RLA:	19.6
Compressor #1 LRA:	136
Power Supply MCA:	37
Power Supply MOCP (Fuse or HACR):	50
Disconnect Size FLA:	36
Disconnect Size LRA:	226

### Electrical Data (Unit produced on or after May 18, 2015)

Power Supply MCA:	37
Power Supply MOCP (Fuse or HACR):	50
Disconnect Size FLA:	36
Disconnect Size LRA:	226

May 18th and beyond units can be identified by serial number 2115XXXXXXXXXX and higher

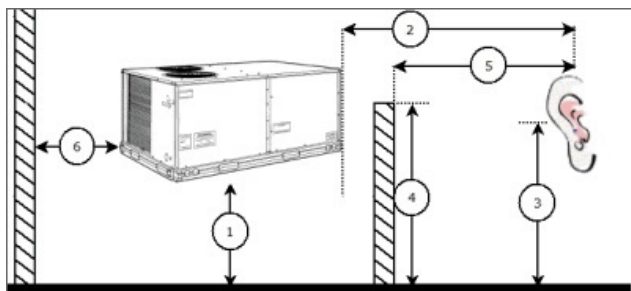
**Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage**

### Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	91.5	89.7	88.8
125 Hz	86.9	84.1	81.8
250 Hz	81.8	72.6	76.9
500 Hz	77.2	68.3	74.4
1000 Hz	73.3	67.3	73.3
2000 Hz	68.1	62.2	69.8
4000 Hz	69.8	58.0	66.3
8000 Hz	66.0	52.2	62.7
A-Weighted	80.3	73.6	78.0

### Advanced Acoustics



### Advanced Accoustics 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

## Performance Summary For RTU-1

Project: King and Parks MultiFamily Residences  
Prepared By:

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6. Horizontal distance from unit to obstruction:.....**0.0** ft

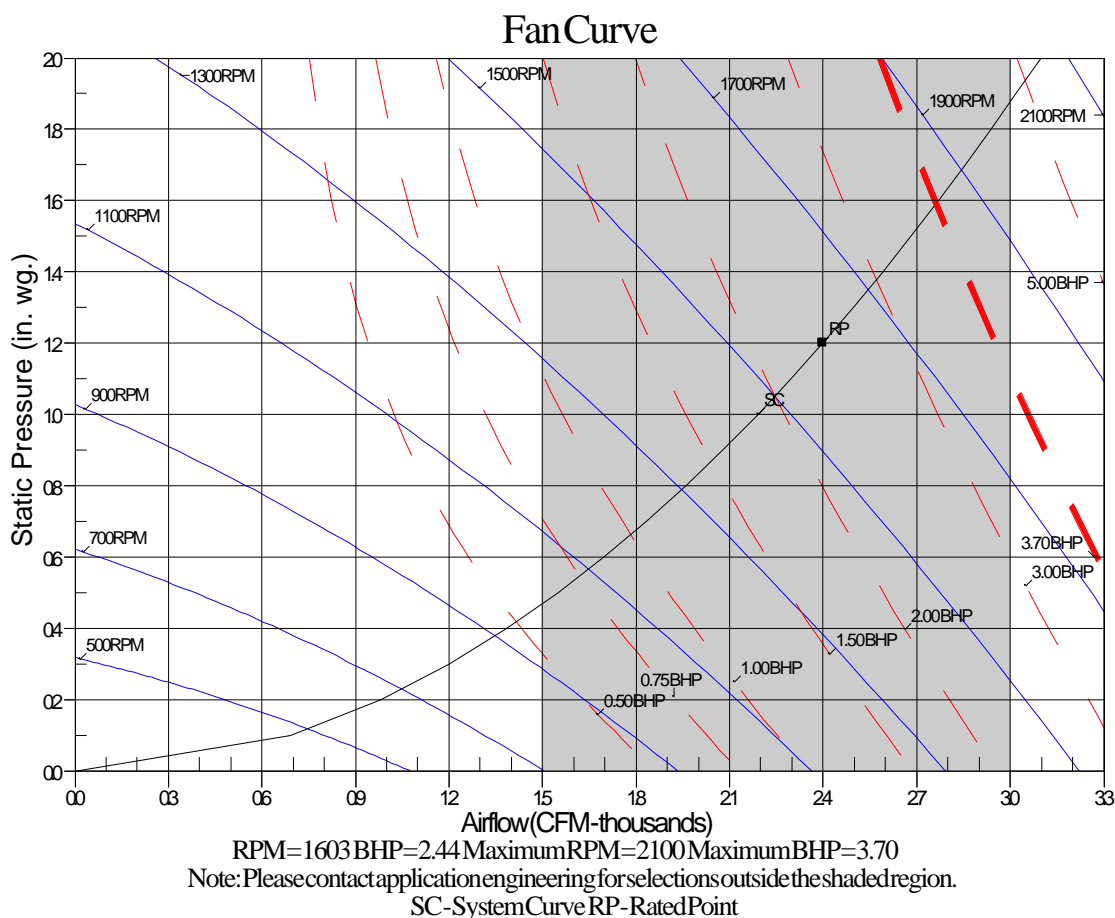
### Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	88.8	81.8	76.9	74.4	73.3	69.8	66.3	62.7	90.1 Lw
B	62.6	65.7	68.3	71.2	73.3	71.0	67.3	61.6	78.2 LwA
C	56.4	49.4	44.5	42.0	40.9	37.4	33.9	30.3	57.7 Lp
D	30.2	33.3	35.9	38.8	40.9	38.6	34.9	29.2	45.8 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: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

### Unit Parameters

Unit Model:.....**48KCTA05A3A3-0A1A0**  
Unit Size:.....**05 (4 Tons)**  
Volts-Phase-Hertz:.....**208-1-60**  
Heating Type:.....**Gas**  
Duct Cfg:.....**Vertical Supply / Vertical Return**  
Stainless Steel, High Heat  
Single Stage Compressor Models

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

Unit Length:.....**6' 2.375"**  
Unit Width:.....**3' 10.75"**  
Unit Height:.....**2' 9.375"**  
\*\*\* Total Operating Weight:.....**615 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

Return Air Filter Type:.....**Throwaway**  
Return Air Filter Quantity:.....**2**  
Return Air Filter Size:.....**16 x 25 x 2**

### Unit Configuration

High Static Option Belt Drive  
Al/Cu - Al/Cu  
Base Electromechanical Controls  
Unpowered Convenience Outlet  
Standard Packaging

### Warranty Information

1-Year parts(std.)  
5-Year compressor parts(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
48KCTA05A3A3-0A1A0	Rooftop Unit	1
	Base Unit	
	High Static Option Belt Drive	
	Unpowered Convenience Outlet	
	None	
<b>Accessories</b>		
CRTWOPOS010A00	Air Damper	1

# Certified Drawing for RTU-2

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

## NOTES:

1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [ ] ARE IN MILLIMETERS.
2.  CENTER OF GRAVITY
3.  DIRECTION OF AIR FLOW

UNIT	J	K (1 PHASE)	K (3 PHASE)
48KC 04	33 3/8 [847]	14 7/8 [377]	14 7/8 [377]
48KC 05	33 3/8 [847]	14 7/8 [377]	18 5/8 [472]
48KC 06	41 3/8 [1051]	14 7/8 [377]	18 5/8 [472]



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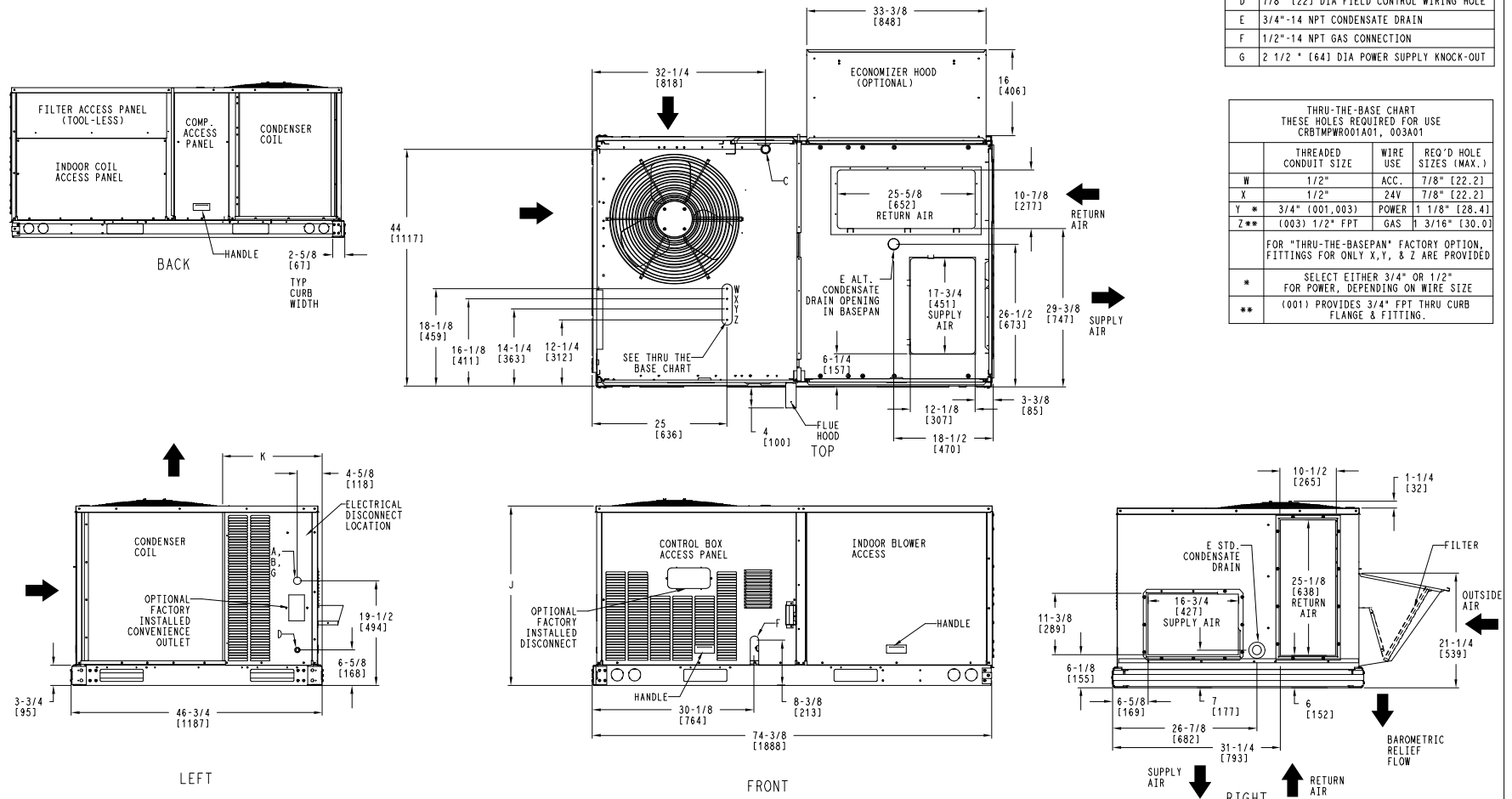
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CONNECTION SIZES	
A	1 3/8" [35] DIA. FIELD POWER SUPPLY HOLE
B	2" [50] DIA. POWER SUPPLY KNOCKOUT
C	1 3/4" [51] DIA. GAUGE ACCESS PLUG
D	7/8" [22] DIA. FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
F	1/2"-14 NPT GAS CONNECTION
G	2 1/2" [64] DIA. POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPWR001A01, 003A01			
	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 *	3/4" (001,003)	POWER	1 1/8" [28.4]
Z **	(003) 1/2" FPT	GAS	1 3/16" [30.0]
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR ONLY X, Y, & Z ARE PROVIDED			
* SELECT EITHER 3/4" OR 1/2" FOR POWER, DEPENDING ON WIRE SIZE			
** (001) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.			



SHEET	DATE	SUPERCEDES	48KC 04-06 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48KC000281	REV
1 OF 2	09-16-14	-			-

Certified Drawing for RTU-2

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

UNIT	STD. UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48KC 04	490	222	120	54	111	50	125	56	135	61	35 3/4 (908)	24 3/4 (628)	18 7/8 (479)
48KC 05	544	246	130	58	126	57	142	64	146	66	36 3/4 (933)	24 3/4 (628)	18 7/8 (479)
48KC 06	597	270	141	64	156	70	158	71	142	64	39 1/8 (993)	23 1/2 (597)	20 1/8 (511)

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

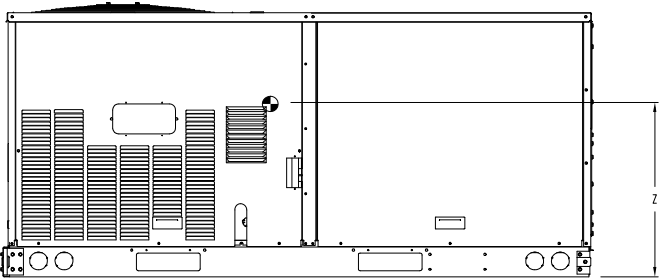
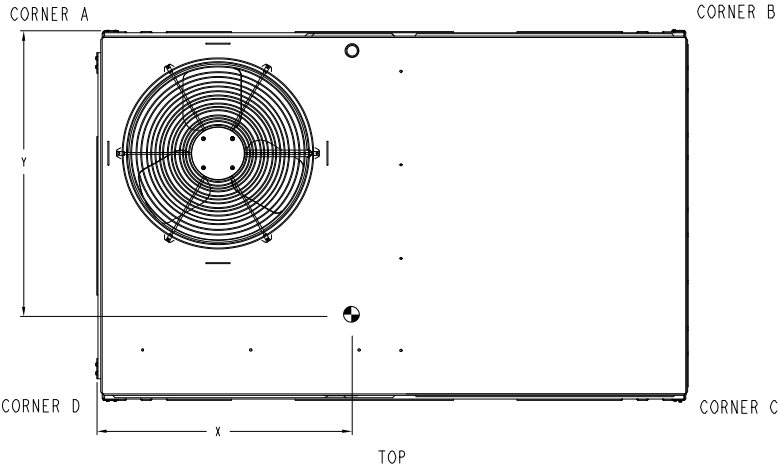


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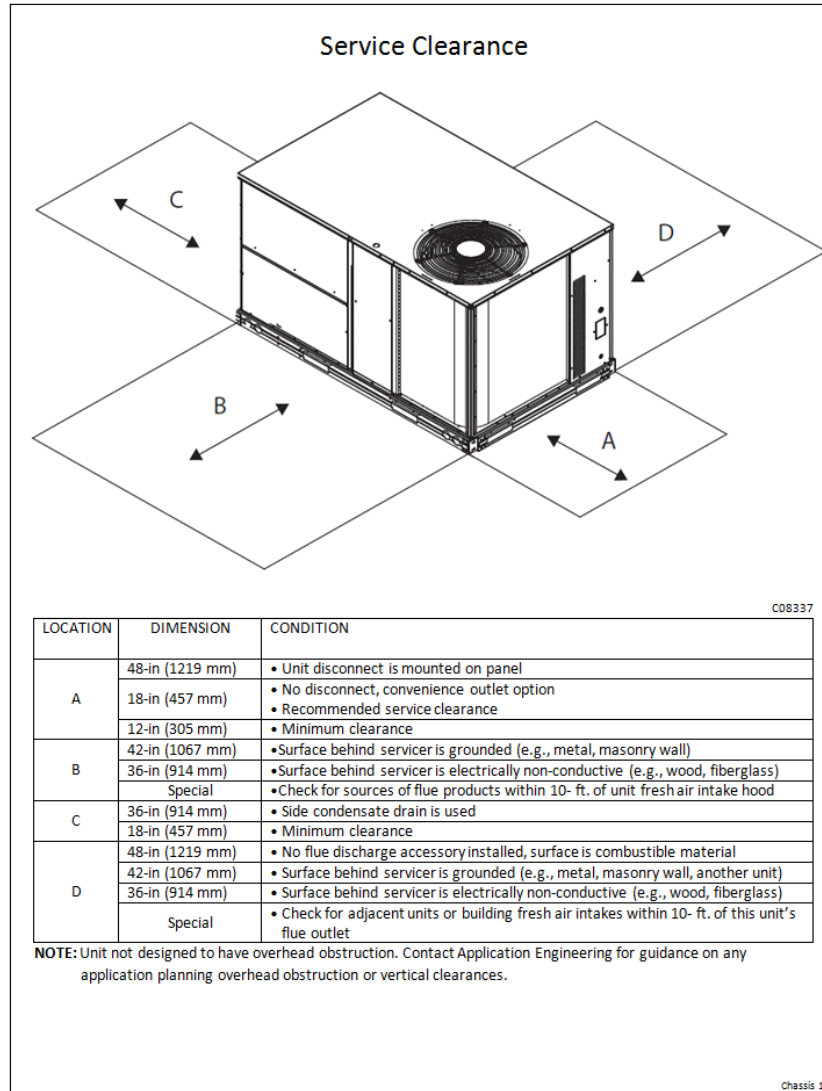
SHEET 2 OF 2	DATE 09-16-14	SUPERCEDES -	48KC 04-06 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48KC000281	REV -
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## Certified Drawing for RTU-2

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM



## Performance Summary For RTU-2

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

### Part Number:48KCTA05A3A3-0A1A0

ARI SEER:.....14.00

#### Base Unit Dimensions

Unit Length:.....74.4 in  
Unit Width:.....46.8 in  
Unit Height:.....33.4 in

#### Operating Weight

Base Unit Weight:.....544 lb  
Stainless Steel, High Heat:.....17 lb  
High Static Option Belt Drive:.....10 lb  
Unpowered Convenience Outlet:.....5 lb

#### Accessories

Air Damper:.....39 lb

Total Operating Weight:.....615 lb

#### Unit

Unit Voltage-Phase-Hertz:.....208-1-60  
Air Discharge:.....Vertical  
Fan Drive Type:.....Belt  
Actual Airflow:.....1300 CFM  
Site Altitude:.....0 ft

#### Cooling Performance

Condenser Entering Air DB:.....95.0 F  
Evaporator Entering Air DB:.....90.0 F  
Evaporator Entering Air WB:.....67.0 F  
Entering Air Enthalpy:.....31.36 BTU/lb  
Evaporator Leaving Air DB:.....58.1 F  
Evaporator Leaving Air WB:.....55.1 F  
Evaporator Leaving Air Enthalpy:.....23.22 BTU/lb  
Gross Cooling Capacity:.....47.62 MBH  
Gross Sensible Capacity:.....44.74 MBH  
Compressor Power Input:.....3.86 kW  
Coil Bypass Factor:.....0.120

#### Heating Performance

Heating Airflow:.....1300 CFM  
Entering Air Temp:.....70.0 F  
Leaving Air Temp:.....145.5 F  
Gas Heating Input Capacity:.....130.0 MBH  
Gas Heating Output Capacity:.....0.0 / 106.0 MBH  
Temperature Rise:.....75.5 F  
AFUE (%):.....81.0  
Thermal Efficiency (%):.....82.0

#### Supply Fan

External Static Pressure:.....1.00 in wg  
Fan RPM:.....1185  
Fan Power:.....0.76 BHP  
NOTE:.....Selected IFM RPM Range: 1035 - 1466

#### Electrical Data

Voltage Range:.....187 - 253  
Compressor #1 RLA:.....21.8  
Compressor #1 LRA:.....117  
Outdoor Fan Motor Qty:.....1  
Outdoor Fan FLA (ea):.....1.5

## Performance Summary For RTU-2

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

Indoor Fan Motor Type:	HIGH
Indoor Fan Motor FLA:	7
Combustion Fan Motor FLA (ea):	0.48
Power Supply MCA:	36
Power Supply MOCP (Fuse or HACR):	50
Disconnect Size FLA:	35
Disconnect Size LRA:	158
Electrical Convenience Outlet:	None

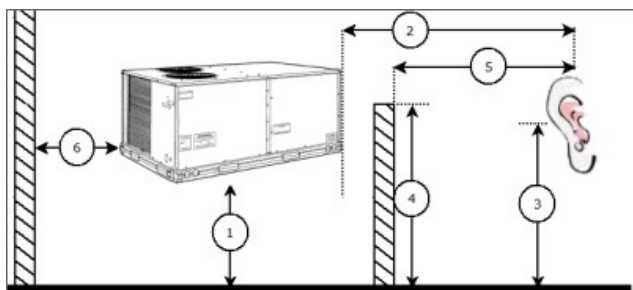
**Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage**

### Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	86.6	87.2	90.9
125 Hz	80.2	77.5	84.6
250 Hz	70.9	63.3	79.5
500 Hz	66.9	61.9	77.9
1000 Hz	63.4	61.1	76.5
2000 Hz	58.1	55.0	71.1
4000 Hz	59.6	50.2	66.9
8000 Hz	54.4	42.6	62.5
A-Weighted	70.9	67.4	81.0

### Advanced Acoustics



#### Advanced Accoustics 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	90.9	84.6	79.5	77.9	76.5	71.1	66.9	62.5	92.4 Lw
B	64.7	68.5	70.9	74.7	76.5	72.3	67.9	61.4	80.8 LwA
C	58.5	52.2	47.1	45.5	44.1	38.7	34.5	30.1	60.0 Lp
D	32.3	36.1	38.5	42.3	44.1	39.9	35.5	29.0	48.4 LpA

## Performance Summary For RTU-2

Project: King and Parks MultiFamily Residences  
Prepared By:

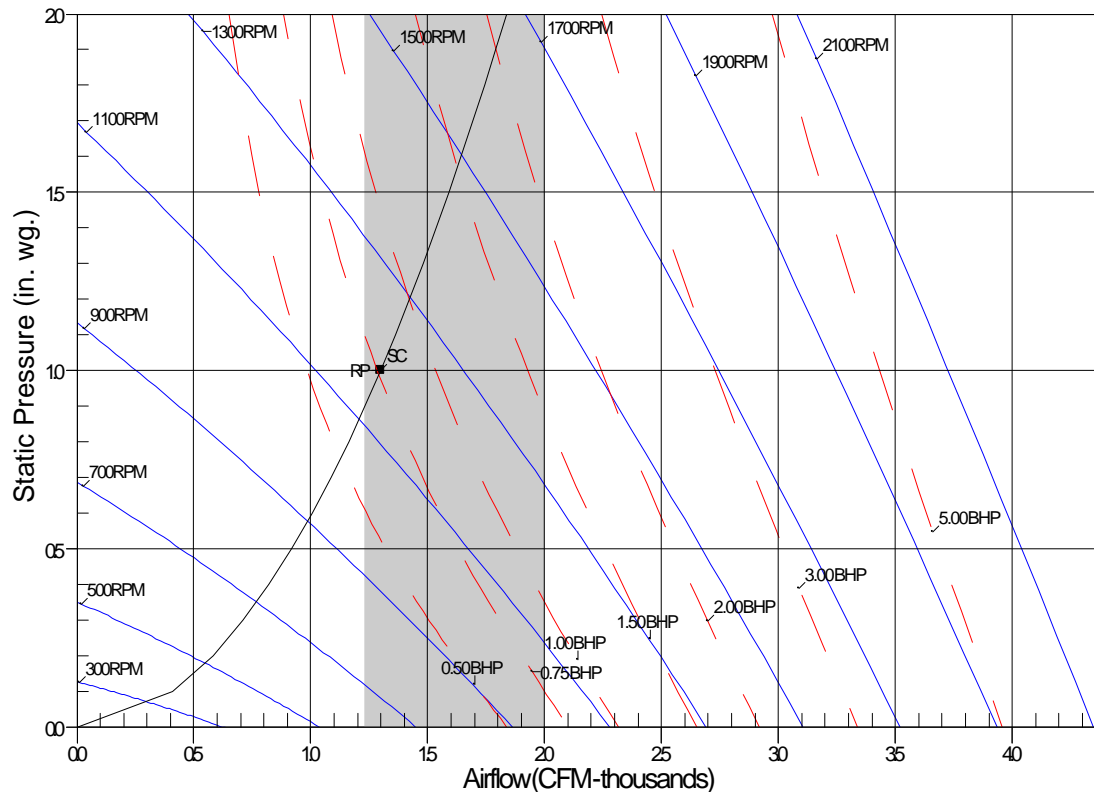
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### Legend

- 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.

### Fan Curve



RPM=1185 BHP=0.76 Maximum RPM=2100 Maximum BHP=2.90  
Note: Please contact application engineering for selections outside the shaded region.  
SC-System Curve RP-Rated Point

**RTU-3**

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

## Unit Report For RTU-3

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

### Unit Parameters

Unit Model:.....48KCRA04A2A3-0A1A0  
Unit Size:.....04 (3 Tons)  
Volts-Phase-Hertz:.....208-1-60  
Heating Type:.....Gas  
Duct Cfg:.....Vertical Supply / Vertical Return  
Stainless Steel, Medium Heat  
Single Stage Compressor Models

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

Unit Length:.....6' 2.375"  
Unit Width:.....3' 10.75"  
Unit Height:.....2' 9.375"  
\*\*\* Total Operating Weight:.....556 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

Return Air Filter Type:.....Throwaway  
Return Air Filter Quantity:.....2  
Return Air Filter Size:.....16 x 25 x 2

### Unit Configuration

Medium Static Option Belt Drive  
Al/Cu - Al/Cu  
Base Electromechanical Controls  
Unpowered Convenience Outlet  
Standard Packaging

### Warranty Information

1-Year parts(std.)  
5-Year compressor parts(std.)  
15-Year heat exchanger - Stainless Steel(std.)

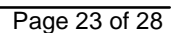
No optional warranties were selected.

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

### Ordering Information

Part Number	Description	Quantity
48KCRA04A2A3-0A1A0	Rooftop Unit	1
	Base Unit	
	Medium Static Option Belt Drive	
	Unpowered Convenience Outlet	
	None	
<b>Accessories</b>		
CRTWOPOS010A00	Air Damper	1

08/08/2017  
10:22AM



# Certified Drawing for RTU-3

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
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UNIT	STD. UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		HEIGHT
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
48KC 04	490	222	120	54	111	50	125	56	135	61	35 3/4 (908)	24 3/4 (628)	18 7/8 (479)
48KC 05	544	246	130	58	126	57	142	64	146	66	36 3/4 (933)	24 3/4 (628)	18 7/8 (479)
48KC 06	597	270	141	64	156	70	158	71	142	64	39 1/8 (993)	23 1/2 (597)	20 1/8 (511)

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

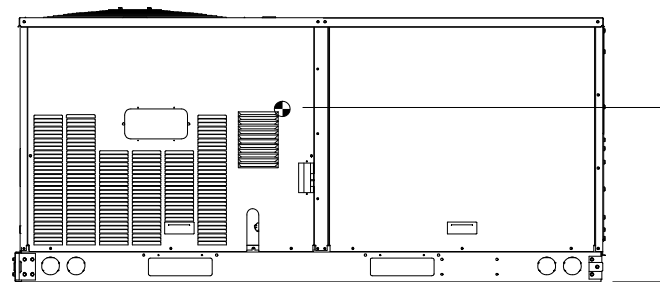
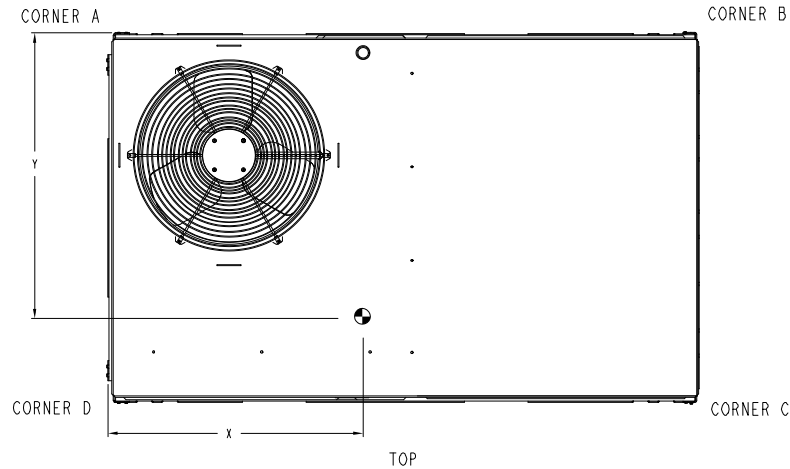


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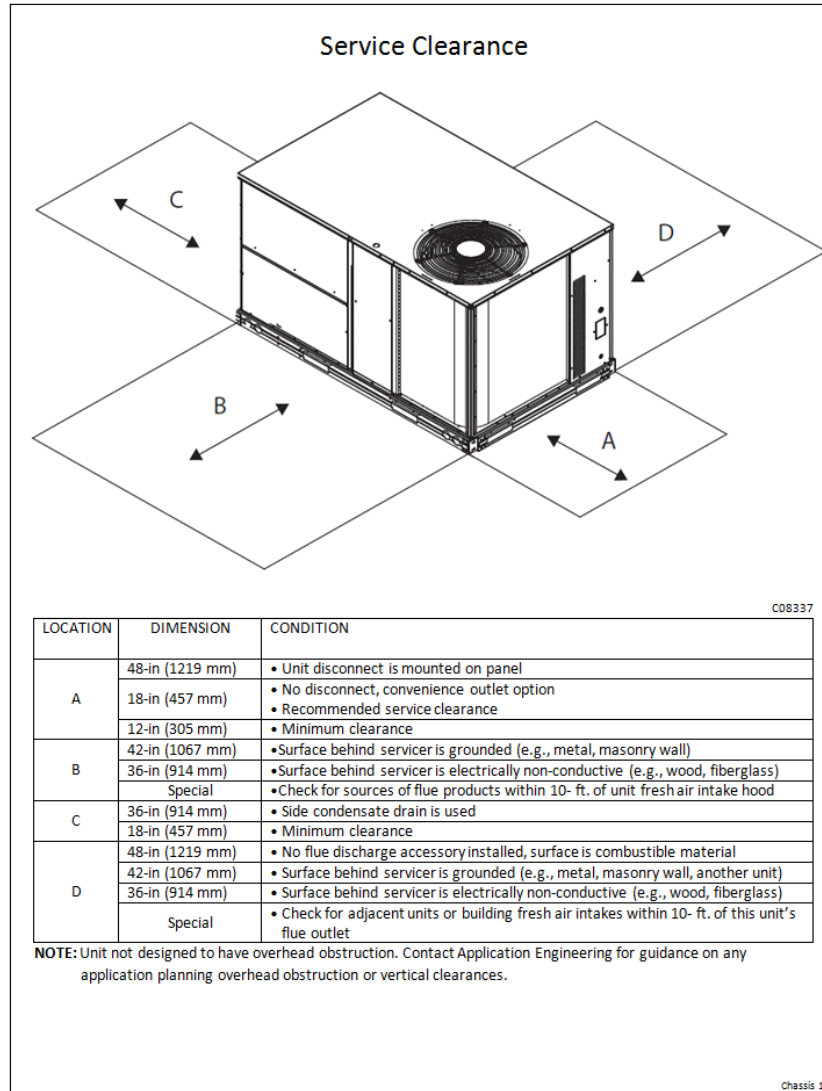
SHEET 2 OF 2	DATE 09-16-14	SUPERCEDES -	48KC 04-06 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48KC000281	REV -
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## Certified Drawing for RTU-3

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM



## Performance Summary For RTU-3

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

### Part Number: 48KCRA04A2A3-0A1A0

ARI SEER: 14.00

#### Base Unit Dimensions

Unit Length: 74.4 in  
Unit Width: 46.8 in  
Unit Height: 33.4 in

#### Operating Weight

Base Unit Weight: 490 lb  
Stainless Steel, Medium Heat: 12 lb  
Medium Static Option Belt Drive: 10 lb  
Unpowered Convenience Outlet: 5 lb

#### Accessories

Air Damper: 39 lb

Total Operating Weight: 556 lb

#### Unit

Unit Voltage-Phase-Hertz: 208-1-60  
Air Discharge: Vertical  
Fan Drive Type: Belt  
Actual Airflow: 900 CFM  
Site Altitude: 0 ft

#### Cooling Performance

Condenser Entering Air DB: 95.0 F  
Evaporator Entering Air DB: 90.0 F  
Evaporator Entering Air WB: 67.0 F  
Entering Air Enthalpy: 31.36 BTU/lb  
Evaporator Leaving Air DB: 57.3 F  
Evaporator Leaving Air WB: 54.6 F  
Evaporator Leaving Air Enthalpy: 22.91 BTU/lb  
Gross Cooling Capacity: 34.21 MBH  
Gross Sensible Capacity: 31.80 MBH  
Compressor Power Input: 2.87 kW  
Coil Bypass Factor: 0.084

#### Heating Performance

Heating Airflow: 900 CFM  
Entering Air Temp: 70.0 F  
Leaving Air Temp: 145.6 F  
Gas Heating Input Capacity: 90.0 MBH  
Gas Heating Output Capacity: 0.0 / 73.5 MBH  
Temperature Rise: 75.6 F  
AFUE (%): 81.2  
Thermal Efficiency (%): 82.0

#### Supply Fan

External Static Pressure: 0.75 in wg  
Fan RPM: 851  
Fan Power: 0.35 BHP  
NOTE: Selected IFM RPM Range: 770 - 1175

#### Electrical Data

Voltage Range: 187 - 253  
Compressor #1 RLA: 16.6  
Compressor #1 LRA: 79  
Outdoor Fan Motor Qty: 1  
Outdoor Fan FLA (ea): 1

## Performance Summary For RTU-3

Project: King and Parks MultiFamily Residences  
Prepared By:

08/08/2017  
10:22AM

Indoor Fan Motor Type:	<b>MED</b>
Indoor Fan Motor FLA:	<b>4.9</b>
Combustion Fan Motor FLA (ea):	<b>0.48</b>
Power Supply MCA:	<b>27</b>
Power Supply MOCP (Fuse or HACR):	<b>40</b>
Disconnect Size FLA:	<b>26</b>
Disconnect Size LRA:	<b>93</b>
Electrical Convenience Outlet:	<b>None</b>

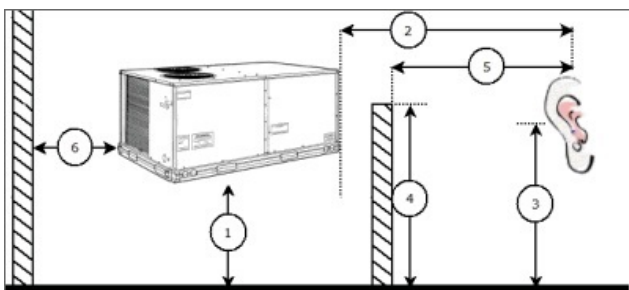
**Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage**

### Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	83.5	85.7	78.2
125 Hz	75.3	73.0	78.0
250 Hz	63.7	58.0	74.2
500 Hz	60.5	58.2	73.3
1000 Hz	57.0	57.9	70.6
2000 Hz	51.9	51.9	66.0
4000 Hz	52.7	46.6	62.4
8000 Hz	46.5	37.9	56.9
A-Weighted	65.0	64.3	76.0

### Advanced Acoustics



#### Advanced Accoustics Parameters

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

### Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	78.2	78.0	74.2	73.3	70.6	66.0	62.4	56.9	82.9 Lw
B	52.0	61.9	65.6	70.1	70.6	67.2	63.4	55.8	75.4 LwA
C	45.8	45.6	41.8	40.9	38.2	33.6	30.0	24.5	50.5 Lp
D	19.6	29.5	33.2	37.7	38.2	34.8	31.0	23.4	43.0 LpA

## Performance Summary For RTU-3

Project: King and Parks MultiFamily Residences  
Prepared By:

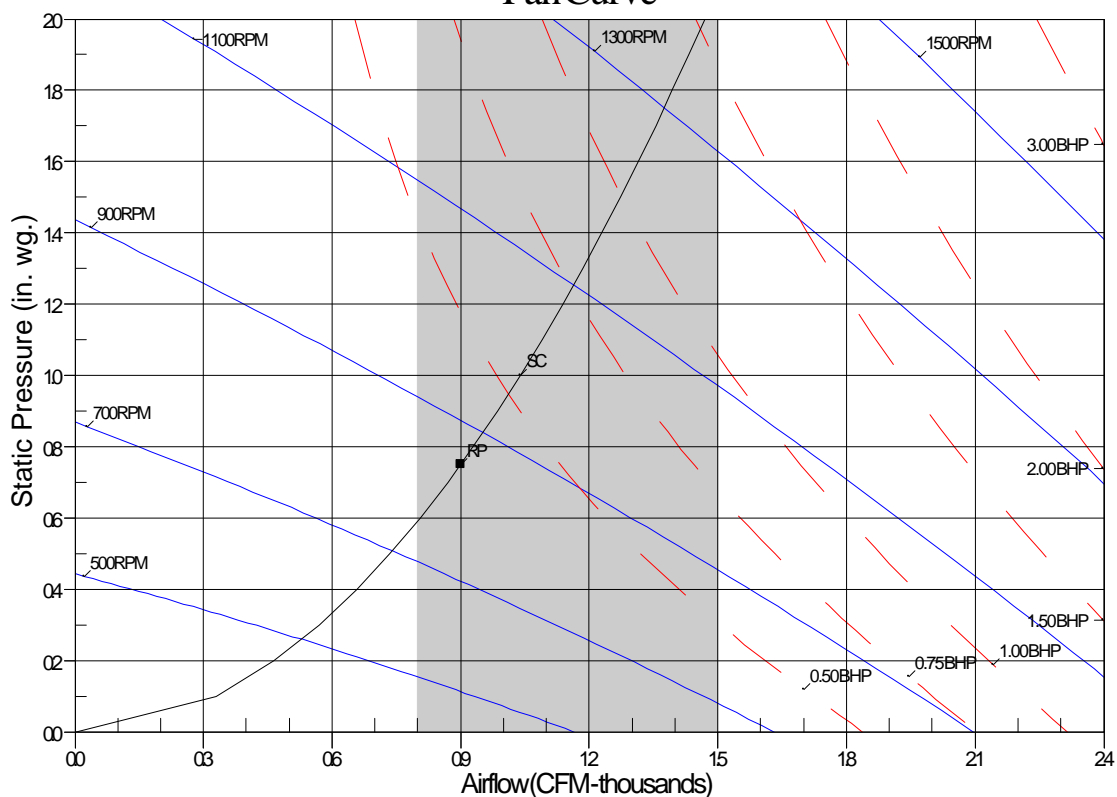
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### Fan Curve



RPM=851 BHP=0.35 Maximum RPM=2100 Maximum BHP=2.90  
Note: Please contact application engineering for selections outside the shaded region.  
SC-System Curve RP-Rated Point