

DAMMON ENGINEERING, INC

Date: 2/22/2013 Project: USDA Aphis Facility
Reviewed: David Dammon
Reviewed as noted: _____
Revise and ReSubmit: _____
Rejected: _____
Other: _____

Correction or comments made on the shop drawings during this review do not relieve the contractor from compliance with requirements of the drawings and specifications. This check is only for review of the general conformance with the design concept of the project and general compliance with the information given in the contract documents. This contractor is responsible for: confirming and correlating all quantities and dimensions, selecting fabrication processes and techniques of construction; coordinating his or her work with that of all other trades and performing all in a safe and satisfactory manner.

Submittal item: RTU #1 & RTU #4

Comments: Notify Electrician of change for RTU #4



SUBMITTAL DATA

For: Approval

Order #: **Date:** 01/16/2013
Project: Aphis Facility
Project #: REV: #3 - 4/27/2012
Location: 924 Kenner Ave., Kenner, La. 70062

Date

01/16/2013

Project Name

Aphis Facility

Project Number**Client / Purchaser**

Submittal Summary Page

Qty	Tag #	Model #	Description
1	RTU-1	J10ZRE24R2FZZ5	10 Ton, Johnson Controls Series 10 Single Packaged R-410A Air Conditioner, 11.2 EER / 11.5 IEER with Hot Gas Reheat, Two Stage Cooling, 24 kW Two Stage Factory Installed Electric Heat, 3 HP High Static Belt Drive Blower, 208/230-3-60, Copper Tube/Aluminum Fin Condenser Coil, Composite Drain Pan <ul style="list-style-type: none"> • Motorized Damper (Bottom Return Only) • Return Air Smoke Detector (Bottom return only) • 4" Pleated Filters (MERV 13) • Phase Monitor • Coil Guard
1		1RC0471	Roof Curb, 14" Height
1		2DH04700024	De-Humidistat, used to control Humidity in a thermostat controlled Reheat unit
1		2LA04704632	Low Ambient Kit
1	RTU-4	J07ZRE18D2FZZ5	7.5 Ton, Johnson Controls Series 10 Single Packaged R-410A Air Conditioner, 11.2 EER / 12.0 IEER with Hot Gas Reheat, Two Stage Cooling, 18 kW Two Stage Factory Installed Electric Heat, 1.5 HP Standard Static Belt Drive Blower, 208/230-3-60, Copper Tube/Aluminum Fin Condenser Coil, Composite Drain Pan <ul style="list-style-type: none"> • Motorized Damper (Bottom Return Only) • Return Air Smoke Detector (Bottom return only) • 4" Pleated Filters (MERV 13) • Phase Monitor • Coil Guard
1		1RC0471	Roof Curb, 14" Height
1		2DH04700024	De-Humidistat, used to control Humidity in a thermostat controlled Reheat unit
1		2LA04704632	Low Ambient Kit

Equipment start-up and commissioning by a factory trained technician is recommended.
 Contact your supplying distributor or sales representative for additional information & guidance.



Series 10 (6.5-12.5 Ton)

Single Package R-410A AC with Reheat

Project Name: Aphis Facility

Unit Model #: J10ZRE24R2FZZ5

Quantity: 1 Tag #: RTU-1

System: J10ZRE24R2FZZ5

Cooling Performance

Total capacity	106.4 MBH
Sensible capacity	83.7 MBH
Refrigerant type	R-410A
Efficiency (at ARI)	11.20 EER
Integrated eff. (at ARI)	11.50 IEER
Ambient DB temp.	115.0 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	60.5 °F
Leaving WB temp.	58.6 °F
Part load efficiency	12.3 IPLV
Power input (w/o blower)	11.53 kW
Sound power	83 dB(A)

Reheat Performance

Total capacity	59.6 MBH
Sensible capacity	13.4 MBH
Ambient DB temp.	85 °F
Entering DB temp.	75 °F
Entering WB temp.	67 °F
Leaving DB temp.	71.9 °F
Leaving WB temp.	62.6 °F
Power input (w/o blower)	7.64 kW
Gallons of water per hour	5.27 gal/hr

Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	61.4 MBH
Nominal electric heat	24 kW
Applied electric heat	18.0 kW
Installed	Factory
Leaving DB temp.	74.3 °F
Air temp. rise	14.3 °F
Stages	2

Supply Air Blower Performance

Supply air	3965 CFM
Ext. static pressure	0.5 IWG
Unit static resistance	0.12 IWG
Blower speed	1086 RPM
Max BHP of Motor (including service factor)	3.45 HP
Duct location	Bottom
Motor rating	3.00 HP
Actual required BHP	2.62 HP
Power input	2.44 kW
Elevation	0 ft.
Drive type	BELT
Requires field-supplied drive	true

Outside/Mixed Air

Outside Air Cfm	400 CFM
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Electrical Data

Power supply	208-3-60
Unit min circuit ampacity	76.10 Amps
Unit max over-current protection	80 Amps

Dimensions & Weight

Hgt	51 in.	Len	89 in.	Wth	59 in.
Weight with factory installed options	1326 lbs.				

Clearances

Right	12 in.	Front	36 in.	Back	36 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

Note: Please refer to the tech guide for listed maximum static pressures



10 Ton

- JCI Series 10 units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

Unit Features

- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 Hours Salt Spray Test (ASTM B-117 Standards)
- Through-the-Curb and Through-the-Base Utility Connections
- Full perimeter base rails with built in rigging capabilities
- Hinged Access Panels
- Slide-Out Condensate Drain Pan
- Scroll Compressors
- Scroll Compressors
- Two Stage Cooling
- Solid Core Liquid Line Filter Driers
- Copper Tube/Aluminum Fin Condenser Coil
- 24 kW Two Stage Factory Installed Electric Heat
- Unit Ships with 4" Pleated Filters (MERV 13)
- Single Point Power Connection
- Phase Monitor
- Return Air Smoke Detector
- Motorized Damper (Bottom Return Only)
- Coil Guard
- Short Circuit Current: 5kA RMS Symmetrical

Standard Unit Controller: Simplicity® Control Board

- Safety Monitoring - Monitors the high and low-pressure switches, the freezestats, the gas valve, if applicable, and the temperature limit switch on gas and electric heat units. The unit control board will alarm on ignition failures, safety lockouts and repeated limit switch trips.

Warranty

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements



Series 10 (6.5-12.5 Ton)
Single Package R-410A AC with Reheat

Project Name: Aphis Facility

Unit Model #: J10ZRE24R2FZZ5

Quantity: 1 Tag #: RTU-1

System: J10ZRE24R2FZZ5

Factory Installed Options

J10ZRE24R2FZZ5

Nominal Cooling Capacity:	J10	10 Ton Two Stage Cooling
Product Category:	Z	Johnson Controls Series 10 Single Packaged R-410A Air Conditioner
Product Identifier:	R	11.2 EER / 11.5 IEER with Hot Gas Reheat
Heat Type and Nominal Heat Capacity:	E24	24 kW Two Stage Factory Installed Electric Heat
Airflow:	R	3 HP High Static Belt Drive Blower Motorized Damper (Bottom Return Only)
Voltage:	2	208/230-3-60
Installation Options:	F	Return Air Smoke Detector (Bottom return only)
Additional Options:	ZZ	4" Pleated Filters (MERV 13) Copper Tube/Aluminum Fin Condenser Coil Phase Monitor Composite Drain Pan Coil Guard
Product Generation:	5	

Field Installed Accessories

- 1RC0471 - Roof Curb, 14" Height (135.0 lbs)
- 2DH04700024 - De-Humidistat, used to control Humidity in a thermostat controlled Reheat unit (1.0 lbs)
- 2LA04704632 - Low Ambient Kit (6.0 lbs)

Project Name: **Aphis Facility**

Unit Model #: **J10ZRE24R2FZZ5**

Quantity: **1** Tag #: **RTU-1**

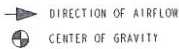
System: **J10ZRE24R2FZZ5**

J10ZR Consolidated Drawing

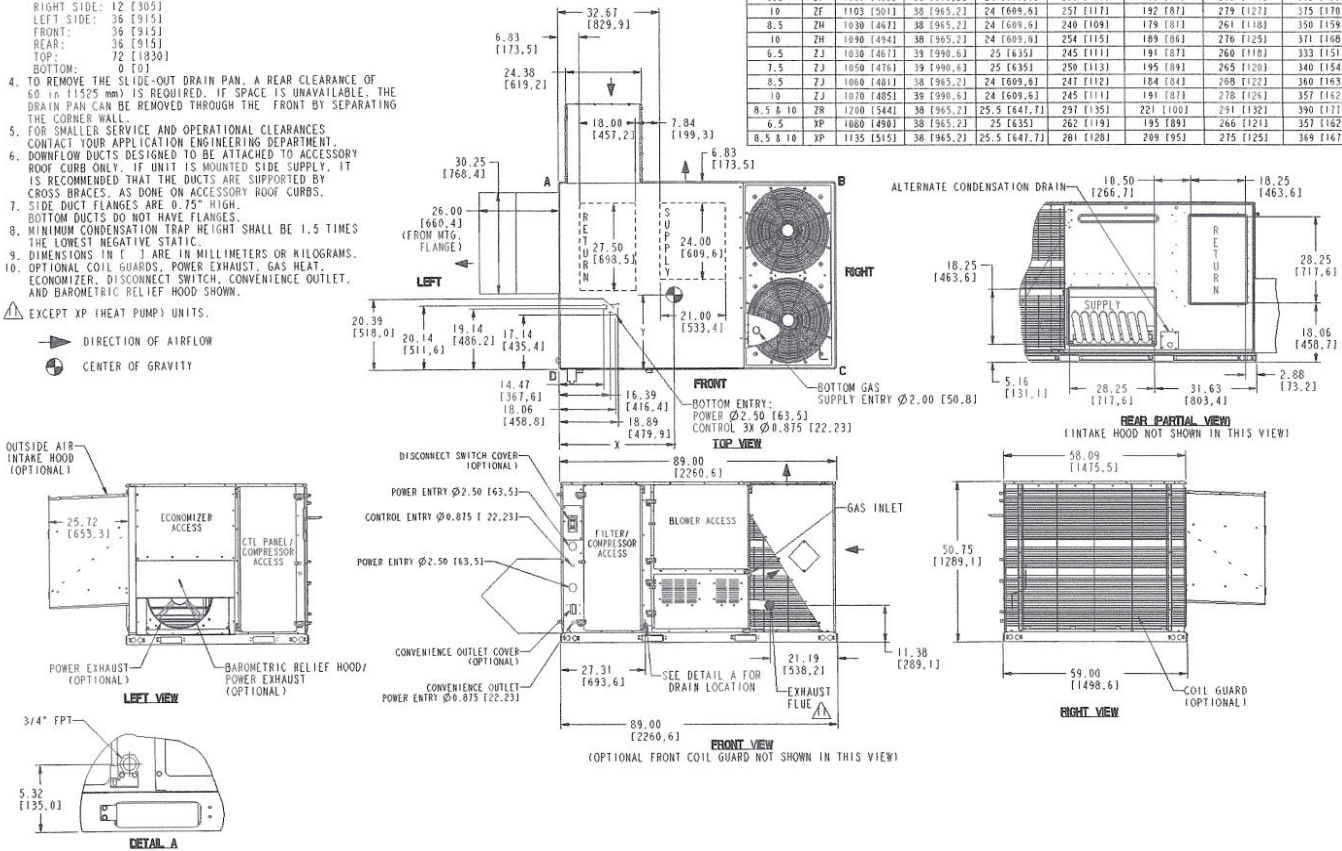
NOTES:

1. FOR OUTDOOR USE ONLY.
2. WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
3. MIN. CLEARANCES TO BE:
 RIGHT SIDE: 12 [305]
 LEFT SIDE: 36 [915]
 FRONT: 36 [915]
 REAR: 36 [915]
 TOP: 72 [1830]
 BOTTOM: 0 [0]
4. TO REMOVE THE SLIDE-OUT DRAIN PAN, A REAR CLEARANCE OF 60 in [1525 mm] IS REQUIRED. IF SPACE IS UNAVAILABLE, THE DRAIN PAN CAN BE REMOVED THROUGH THE FRONT BY SEPARATING THE CORNER WALL.
5. FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
6. DOWNFLOW DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. IF UNIT IS MOUNTED SIDE SUPPLY, IT IS RECOMMENDED THAT THE DUCTS ARE SUPPORTED BY CROSS BRACES, AS DONE ON ACCESSORY ROOF CURBS.
7. SIDE DUCT FLANGES ARE 0.75" HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
8. MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
9. DIMENSIONS IN [] ARE IN MILLIMETERS OR KILOGRAMS.
10. OPTIONAL COIL GUARDS, POWER EXHAUST, GAS HEAT, ECONOMIZER, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND BAROMETRIC RELIEF HOOD SHOWN.

▲ EXCEPT XP (HEAT PUMP) UNITS.



TONNAGE	UNIT	OPERATING WEIGHT (LBS)	CENTER OF GRAVITY LOCATION (BASE UNIT)		4 POINT CORNER LOADS (LBS) (BASE UNIT)			
			X	Y	A	B	C	D
8.5	ZF	1007 [458]	38 [965.2]	24 [609.6]	235 [107]	175 [79]	255 [116]	342 [155]
10	ZF	1103 [501]	38 [965.2]	24 [609.6]	257 [117]	192 [87]	279 [127]	375 [170]
8.5	ZH	1030 [467]	38 [965.2]	24 [609.6]	240 [109]	179 [81]	261 [118]	350 [159]
10	ZH	1090 [494]	38 [965.2]	24 [609.6]	254 [115]	189 [86]	276 [125]	371 [168]
6.5	ZJ	1030 [467]	39 [990.6]	25 [635]	245 [111]	191 [87]	260 [118]	333 [151]
7.5	ZJ	1050 [476]	39 [990.6]	25 [635]	250 [113]	195 [89]	265 [120]	340 [154]
8.5	ZJ	1060 [481]	38 [965.2]	24 [609.6]	247 [112]	184 [84]	260 [122]	360 [163]
10	ZJ	1070 [485]	38 [965.2]	24 [609.6]	245 [111]	191 [87]	278 [126]	357 [162]
8.5 & 10	ZR	1200 [544]	38 [965.2]	25.5 [647.7]	297 [135]	221 [100]	291 [132]	390 [177]
6.5	XP	1060 [480]	38 [965.2]	25 [635]	262 [119]	195 [89]	266 [121]	357 [162]
8.5 & 10	XP	1135 [515]	38 [965.2]	25.5 [647.7]	281 [128]	209 [95]	275 [125]	369 [167]



Project Name: Aphis Facility

Unit Model #: J10ZRE24R2FZZ5

Quantity: 1 Tag #: RTU-1

System: J10ZRE24R2FZZ5

J06-12 ZH/ZR/XP Sound Performance

Sound Performance

Indoor Sound Power Levels

Size (Tons)	Model	CFM	ESP (IWG)	Blower		Sound Power, dB (10 ⁻¹²) Watts								
						Sound Rating ¹ dB (A)	Octave Band Centerline Frequency (Hz)							
				RPM	BHP		63	125	250	500	1000	2000	4000	8000
J06 (6.5)	ZH/ZR/XP	2600	0.6	812	1.14	74	71	73	73	71	69	65	65	60
J07 (7.5)	ZH/ZR/XP	3000	0.6	854	1.47	77	74	76	76	74	72	68	68	63
J08 (8.5)	ZH/ZR/XP	3400	0.6	872	1.65	80	77	79	79	77	75	71	71	66
J10 (10)	ZH/ZR/XP	4000	0.6	959	2.29	83	80	82	82	80	78	74	74	69
J12 (12.5)	ZH/ZR/XP	5000	0.6	1132	3.74	87	84	86	86	84	82	78	78	73

1. These values have been accessed using a model of sound propagation from a point source into the hemispheric/free field. The dBA values provided are to be used for reference only. Calculation of dBA values cover matters of system design and the fan manufacture has no way of knowing the details of each system. This constitutes an exception to any specification or guarantee requiring a dBA value of sound data in any other form than sound power level ratings.

Outdoor Sound Power Levels J06 thru 12 ZH/ZR/XP

Size (Tons)	Model	Sound Rating ¹ dB (A)	Octave Band Centerline Frequency (Hz)						
			125	250	500	1000	2000	4000	8000
J06 (6.5)	ZH	83	88.0	82.5	81.5	78.0	73.0	69.0	62.0
J07 (7.5)	ZH	83	89.5	83.5	82.0	78.0	72.5	68.0	60.5
J08 (8.5)	ZH	90	93.5	92.5	88.0	84.5	79.0	74.5	68.0
J10 (10)	ZH	90	94.0	92.0	88.5	84.5	80.0	75.5	68.5
J12 (12.5)	ZH	84	90.0	84.5	81.5	77.5	72.0	68.5	61.5
J06 (6.5)	ZR/XP	83	88.0	82.5	81.5	78.0	73.0	69.0	62.0
J07 (7.5)	ZR/XP	83	89.5	83.5	82.0	78.0	72.5	68.0	60.5
J08 (8.5)	ZR/XP	83	89.0	84.5	81.5	78.0	72.5	68.5	70.5
J10 (10)	ZR/XP	83	89.5	83.5	81.0	78.0	72.0	68.5	70.5
J12 (12.5)	ZR/XP	84	90.0	84.5	81.5	77.5	72.0	68.5	61.5

1. Rated in accordance with ARI 270 standard.

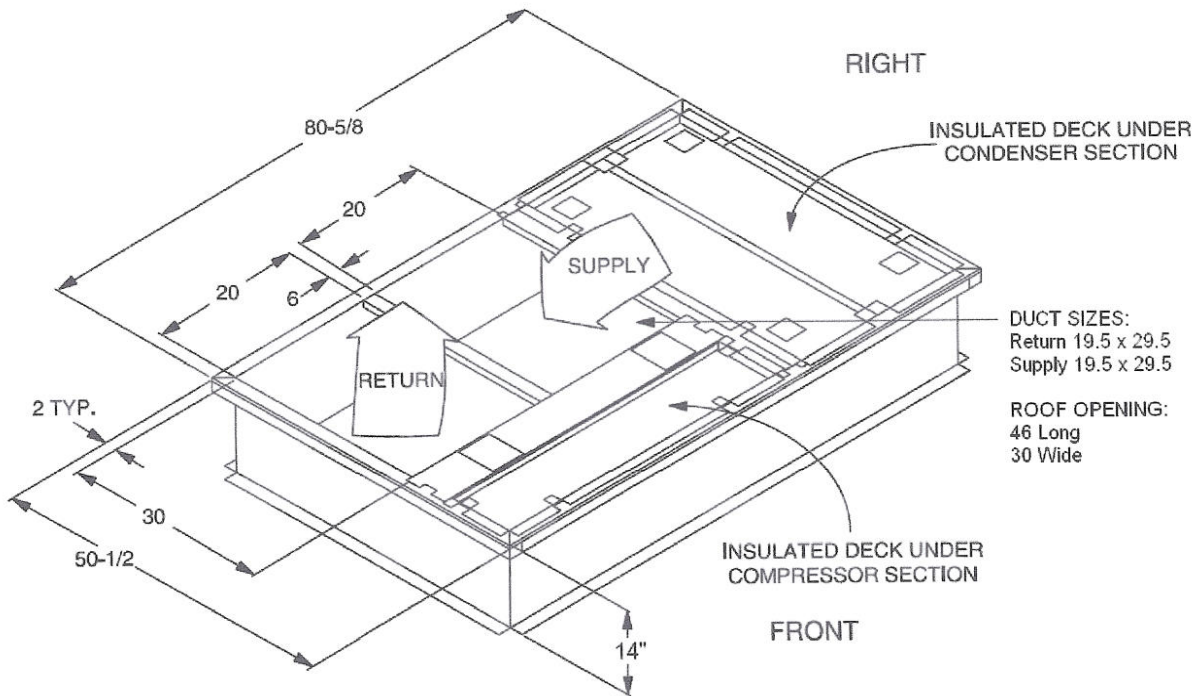
Project Name: Aphis Facility

Unit Model #: J10ZRE24R2FZZ5

Quantity: 1 Tag #: RTU-1

System: J10ZRE24R2FZZ5

1RC0471 Roof Curb Dimensions



* Supply and Return Air (Including duct support rails) as shown, are typical for bottom duct applications.
 For location of horizontal duct applications (On rear of unit), refer to Unit Dimensions details.

1RC0471 Roof Curb Dimensions

Project Name: Aphis Facility

Unit Model #: J07ZRE18D2FZZ5

Quantity: 1 Tag #: RTU-4

System: J07ZRE18D2FZZ5

Cooling Performance

Total capacity	74.4 MBH
Sensible capacity	52.8 MBH
Refrigerant type	R-410A
Efficiency (at ARI)	11.20 EER
Integrated eff. (at ARI)	12.00 IEER
Ambient DB temp.	115.0 °F
Entering DB temp.	80.0 °F
Entering WB temp.	67.0 °F
Leaving DB temp.	59.2 °F
Leaving WB temp.	57.0 °F
Part load efficiency	12.3 IPLV
Power input (w/o blower)	8.72 kW
Sound power	83 dB(A)

Reheat Performance

Total capacity	39.1 MBH
Sensible capacity	3.5 MBH
Ambient DB temp.	85 °F
Entering DB temp.	75 °F
Entering WB temp.	67 °F
Leaving DB temp.	73.6 °F
Leaving WB temp.	62.1 °F
Power input (w/o blower)	6.26 kW
Gallons of water per hour	4.06 gal/hr

Heating Performance

Entering DB temp.	60 °F
Heating output capacity (Max)	46 MBH
Nominal electric heat	18 kW
Applied electric heat	13.5 kW
Installed	Factory
Leaving DB temp.	78.1 °F
Air temp. rise	18.1 °F
Stages	2

Supply Air Blower Performance

Supply air	2350 CFM
Ext. static pressure	0.5 IWG
Unit static resistance	0.11 IWG
Blower speed	1047 RPM
Max BHP of Motor (including service factor)	1.73 HP
Duct location	Bottom
Motor rating	1.50 HP
Actual required BHP	1.24 HP
Power input	1.16 kW
Elevation	0 ft.
Drive type	BELT

Outside/Mixed Air

Outside Air Cfm	280 CFM
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Electrical Data

Power supply	208-3-60
Unit min circuit ampacity	54.60 Amps
Unit max over-current protection	60 Amps

Dimensions & Weight

Hgt	42 in.	Len	89 in.	Wth	59 in.
Weight with factory installed options	1087 lbs.				

Clearances

Right	12 in.	Front	36 in.	Back	36 in.
Top	72 in.	Bottom	0 in.	Left	36 in.

Note: Please refer to the tech guide for listed maximum static pressures



7.5 Ton

- JCI Series 10 units are manufactured at an ISO 9001 registered facility and each rooftop is completely computer-run tested prior to shipment.

Unit Features

- Unit Cabinet Constructed of Powder Painted Steel, Certified At 1000 Hours Salt Spray Test (ASTM B-117 Standards)
- Through-the-Curb and Through-the-Base Utility Connections
- Full perimeter base rails with built in rigging capabilities
- Hinged Access Panels
- Slide-Out Condensate Drain Pan
- Scroll Compressors
- Scroll Compressors
- Two Stage Cooling
- Solid Core Liquid Line Filter Driers
- Copper Tube/Aluminum Fin Condenser Coil
- 18 Two Stage Factory Installed Electric Heat
- 1.5 HP Standard Static Belt Drive Blower
- Unit Ships with 4" Pleated Filters (MERV 13)
- Single Point Power Connection
- Phase Monitor
- Return Air Smoke Detector
- Motorized Damper (Bottom Return Only)
- Coil Guard
- Short Circuit Current: 5kA RMS Symmetrical

Standard Unit Controller: Simplicity® Control Board

- Safety Monitoring - Monitors the high and low-pressure switches, the freezestats, the gas valve, if applicable, and the temperature limit switch on gas and electric heat units. The unit control board will alarm on ignition failures, safety lockouts and repeated limit switch trips.

Warranty

- One (1) Year Limited Warranty on the Complete Unit
- Five (5) Year Warranty - Compressors and Electric Heater Elements



Series 10 (6.5-12.5 Ton)
Single Package R-410A AC with Reheat

Project Name: Aphis Facility

Unit Model #: J07ZRE18D2FZZ5

Quantity: 1 Tag #: RTU-4

System: J07ZRE18D2FZZ5

Factory Installed Options

J07ZRE18D2FZZ5

Nominal Cooling Capacity:	J07	7.5 Ton Two Stage Cooling
Product Category:	Z	Johnson Controls Series 10 Single Packaged R-410A Air Conditioner
Product Identifier:	R	11.2 EER / 12.0 IEER with Hot Gas Reheat
Heat Type and Nominal Heat Capacity:	E18	18 kW Two Stage Factory Installed Electric Heat
Airflow:	D	1.5 HP Standard Static Belt Drive Blower Motorized Damper (Bottom Return Only)
Voltage:	2	208/230-3-60
Installation Options:	F	Return Air Smoke Detector (Bottom return only)
Additional Options:	ZZ	4" Pleated Filters (MERV 13) Copper Tube/Aluminum Fin Condenser Coil Phase Monitor Composite Drain Pan Coil Guard
Product Generation:	5	

Field Installed Accessories

- 1RC0471 - Roof Curb, 14" Height (135.0 lbs)
- 2DH04700024 - De-Humidistat, used to control Humidity in a thermostat controlled Reheat unit (1.0 lbs)
- 2LA04704632 - Low Ambient Kit (6.0 lbs)

Project Name: Aphis Facility
Quantity: 1 Tag #: RTU-4

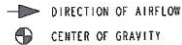
Unit Model #: J07ZRE18D2FZZ5
System: J07ZRE18D2FZZ5

J07ZR Consolidated Drawing

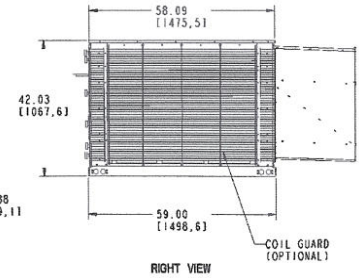
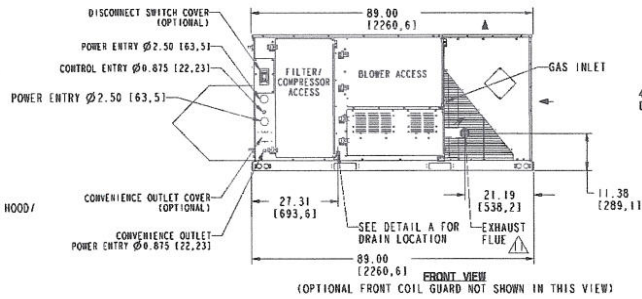
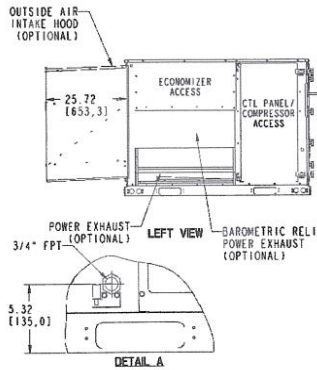
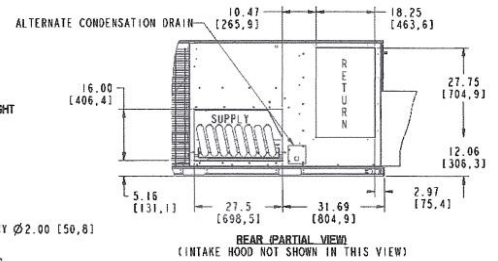
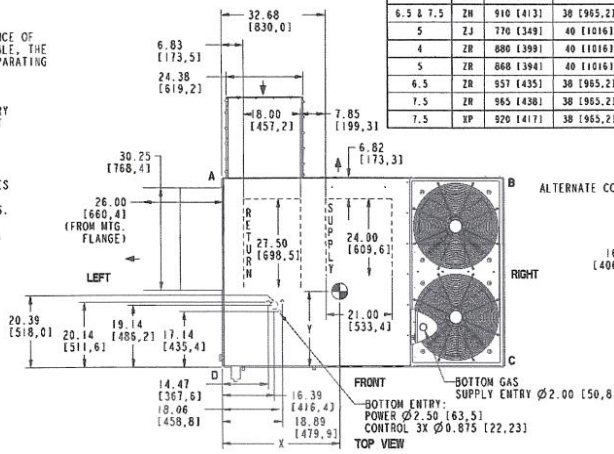
NOTES:

- FOR OUTDOOR USE ONLY.
- WEIGHTS SHOWN ARE FOR COOLING ONLY UNITS.
- MIN. CLEARANCES TO BE:
RIGHT SIDE: 12 (305)
LEFT SIDE: 36 (915)
FRONT: 36 (915)
REAR: 36 (915)
TOP: 72 (1830)
BOTTOM: 0 (0)
- TO REMOVE THE SLIDE-OUT DRAIN PAN, A REAR CLEARANCE OF 60 IN (1525 mm) IS REQUIRED. IF SPACE IS UNAVAILABLE, THE DRAIN PAN CAN BE REMOVED THROUGH THE FRONT BY SEPARATING THE CORNER WALL.
- FOR SMALLER SERVICE AND OPERATIONAL CLEARANCES CONTACT YOUR APPLICATION ENGINEERING DEPARTMENT.
- DOWNFLOW DUCTS DESIGNED TO BE ATTACHED TO ACCESSORY ROOF CURB ONLY. IF UNIT IS MOUNTED SIDE SUPPLY, IT IS RECOMMENDED THAT THE DUCTS ARE SUPPORTED BY CROSS BRACES, AS DONE ON ACCESSORY ROOF CURBS.
- SIDE DUCT FLANGES ARE 0.75" HIGH. BOTTOM DUCTS DO NOT HAVE FLANGES.
- MINIMUM CONDENSATION TRAP HEIGHT SHALL BE 1.5 TIMES THE LOWEST NEGATIVE STATIC.
- DIMENSIONS IN () ARE IN MILLIMETERS OR KILOGRAMS.
- OPTIONAL COIL GUARDS, POWER EXHAUST, GAS HEAT ECONOMIZER, DISCONNECT SWITCH, CONVENIENCE OUTLET, AND BAROMETRIC RELIEF HOOD SHOWN.

- EXCEPT XP (HEAT PUMP) UNITS.
- 8 TUBE HEAT EXCHANGER IS NOT AVAILABLE FOR 4 TON UNITS.



TONNAGE	UNIT	OPERATING WEIGHT (LBS) (BASE UNIT)	CENTER OF GRAVITY LOCATION (BASE UNIT)		4 POINT CORNER LOADS (LBS) (BASE UNIT)			
			X	Y	A	B	C	D
6.5	ZF	860 (390)	38 (965.2)	24 (609.6)	200 (91)	149 (68)	218 (99)	292 (133)
7.5	ZF	880 (399)	38 (965.2)	24 (609.6)	205 (93)	153 (69)	223 (101)	299 (136)
5	ZH	864 (393)	40 (11016)	26 (660.4)	210 (95)	171 (78)	217 (99)	266 (121)
6.5 & 7.5	ZH	910 (413)	38 (965.2)	24 (609.6)	212 (96)	158 (72)	230 (104)	309 (140)
5	ZJ	770 (349)	40 (11016)	24 (609.6)	172 (78)	141 (64)	205 (93)	251 (114)
4	ZR	880 (399)	40 (11016)	26 (660.4)	214 (97)	174 (79)	221 (100)	271 (123)
4	ZR	868 (394)	40 (11016)	26 (660.4)	211 (96)	172 (78)	218 (99)	267 (121)
6.5	ZR	957 (435)	38 (965.2)	23 (584.2)	214 (97)	161 (73)	249 (113)	333 (151)
7.5	ZR	965 (438)	38 (965.2)	23 (584.2)	216 (98)	161 (73)	251 (114)	337 (153)
7.5	XP	920 (417)	38 (965.2)	23 (584.2)	206 (93)	153 (69)	240 (109)	322 (146)



Project Name: Aphis Facility

Unit Model #: J07ZRE18D2FZZ5

Quantity: 1 Tag #: RTU-4

System: J07ZRE18D2FZZ5

J06-12 ZH/ZR/XP Sound Performance

Sound Performance

Indoor Sound Power Levels

Size (Tons)	Model	CFM	ESP (IWG)	Blower		Sound Power, dB (10 ⁻¹²) Watts								
				RPM	BHP	Sound Rating ¹ dB (A)	Octave Band Centerline Frequency (Hz)							
							63	125	250	500	1000	2000	4000	8000
J06 (6.5)	ZH/ZR/XP	2600	0.6	812	1.14	74	71	73	73	71	69	65	65	60
J07 (7.5)	ZH/ZR/XP	3000	0.6	854	1.47	77	74	76	76	74	72	68	68	63
J08 (8.5)	ZH/ZR/XP	3400	0.6	872	1.65	80	77	79	79	77	75	71	71	66
J10 (10)	ZH/ZR/XP	4000	0.6	959	2.29	83	80	82	82	80	78	74	74	69
J12 (12.5)	ZH/ZR/XP	5000	0.6	1132	3.74	87	84	86	86	84	82	78	78	73

1. These values have been accessed using a model of sound propagation from a point source into the hemispheric/free field. The dBA values provided are to be used for reference only. Calculation of dBA values cover matters of system design and the fan manufacture has no way of knowing the details of each system. This constitutes an exception to any specification or guarantee requiring a dBA value of sound data in any other form than sound power level ratings.

Outdoor Sound Power Levels

J06 thru 12 ZH/ZR/XP

Size (Tons)	Model	Sound Rating ¹ dB (A)	Octave Band Centerline Frequency (Hz)						
			125	250	500	1000	2000	4000	8000
J06 (6.5)	ZH	83	88.0	82.5	81.5	78.0	73.0	69.0	62.0
J07 (7.5)	ZH	83	89.5	83.5	82.0	78.0	72.5	68.0	60.5
J08 (8.5)	ZH	90	93.5	92.5	88.0	84.5	79.0	74.5	68.0
J10 (10)	ZH	90	94.0	92.0	88.5	84.5	80.0	75.5	68.5
J12 (12.5)	ZH	84	90.0	84.5	81.5	77.5	72.0	68.5	61.5
J06 (6.5)	ZR/XP	83	88.0	82.5	81.5	78.0	73.0	69.0	62.0
J07 (7.5)	ZR/XP	83	89.5	83.5	82.0	78.0	72.5	68.0	60.5
J08 (8.5)	ZR/XP	83	89.0	84.5	81.5	78.0	72.5	68.5	70.5
J10 (10)	ZR/XP	83	89.5	83.5	81.0	78.0	72.0	68.5	70.5
J12 (12.5)	ZR/XP	84	90.0	84.5	81.5	77.5	72.0	68.5	61.5

1. Rated in accordance with ARI 270 standard.

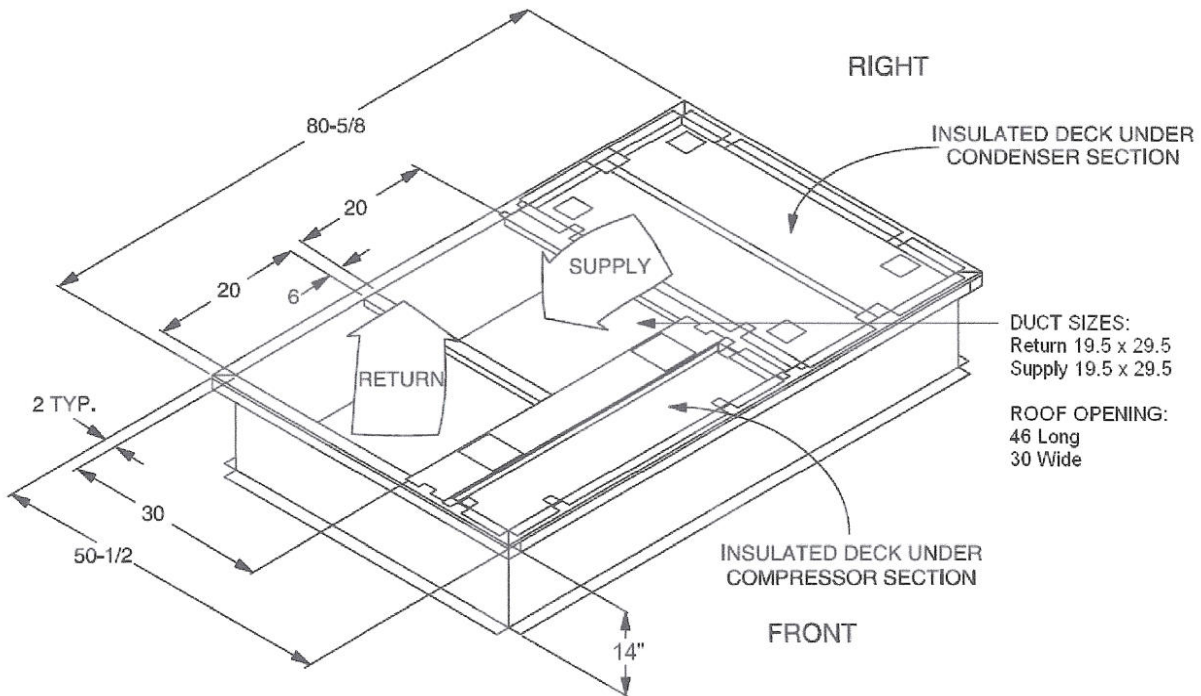
Project Name: Aphis Facility

Unit Model #: J07ZRE18D2FZZ5

Quantity: 1 Tag #: RTU-4

System: J07ZRE18D2FZZ5

1RC0471 Roof Curb Dimensions



* Supply and Return Air (Including duct support rails) as shown, are typical for bottom duct applications.
For location of horizontal duct applications (On rear of unit), refer to Unit Dimensions details.

1RC0471 Roof Curb Dimensions