# **Restoration Hardware**

# Aaon Packaged Rooftop Unit

# Tag: RTU-4

# Comments:

- 1. 208/3/60 Voltage.
- 2. 100% make up air unit with 2 position outside air damper. There is no return air opening in this unit.
- 3. 115 volt convenience outlet, factory wired.
- 4. Double wall construction with R13 injected foam insulation.
- 5. VFD on supply fan by Yaskawa mounted at the factory. We are not providing ABB drives.
- 6. 2 inch 30% filter with 65% second stage filter.
- 7. Clogged filter switch.
- 8. DX cooling coil with stainless steel drain pan.
- 9. R410a refrigerant.
- 10. Digital scroll compressor for modulating cooling. 5 year compressor parts warranty.
- 11. Modulating hot gas reheat coil for dehumidification.
- 12. Natural gas heat with modulating burner. Stainless steel heat exchanger with 25 year parts warranty.
- 13. Single point disconnect switch, factory wired.
- 14. Make up air unit controller.
- 15. Unit to be mounted on steel dunnage provided by others.
- 16. Factory start up.
- 17. Engineer and/or contractor to confirm all above comments and attached information.

# **Guide Specifications - Aaon RN Series Rooftop Units**

# Packaged Rooftop Units / Outdoor Air Handling Units

# Part 1 - General

# **1.01 Related Documents**

# **1.02** General Description

A. This section includes the design, controls and installation requirements for packaged rooftop units / outdoor air handling units.

# **1.03 Quality Assurance**

- A. [RTU-4] Packaged air-cooled condenser units shall be certified in accordance with ANSI/AHRI Standard 340/360 performance rating of commercial and industrial unitary air-conditioning and heat pump equipment.
- B. Unit shall be certified in accordance with UL Standard 1995/CSA C22.2 No. 236, Safety Standard for Heating and Cooling Equipment.
- C. [RTU-4] Unit and refrigeration system shall comply with ASHRAE 15, Safety Standard for Mechanical Refrigeration.
- D. [RTU-4] Unit shall be certified in accordance with ANSI Z21.47b/CSA 2.3b and ANSI Z83.8/CSA 2.6, Safety Standard Gas-Fired Furnaces.
- E. [RTU-4] Unit Energy Efficiency Ratio (EER) shall be equal to or greater that prescribed by ASHRAE 90.1, Energy Efficient Design of New Buildings except Low-Rise Residential Buildings.
- F. [RTU-4] Unit shall be safety certified by ETL and ETL US listed. Unit nameplate shall include the ETL/ETL Canada label.

# 1.04 Submittals

- A. Product Data: Literature shall be provided that indicates dimensions, operating and shipping weights, capacities, ratings, fan performance, filter information, factory supplied accessories, electrical characteristics and connection requirements. Installation, Operation and Maintenance manual with startup requirements shall be provided.
- B. Shop Drawings: Unit drawings shall be provided that indicate assembly, unit dimensions, construction details, clearances and connection details. Computer generated fan curves for each fan shall be submitted with specific design operation point noted. Wiring diagram shall be provided with details for both power and control systems and differentiate between factory installed and field installed wiring.

# 1.05 Delivery, Storage, and Handling

- A. Unit shall be shipped with doors screwed shut and outside air hood closed to prevent damage during transport and thereafter while in storage awaiting installation.
- B. Follow Installation, Operation and Maintenance manual instructions for rigging, moving, and unloading the unit at its final location.
- C. Unit shall be stored in a clean, dry place protected from construction traffic in accordance with the Installation, Operation and Maintenance manual.

# 1.06 Warranty

A. Manufacturer shall provide a limited "parts only" warranty for a period of 12 months from the date of equipment startup or 18 months from the date of original equipment shipment from the factory, whichever is less. Warranty shall cover material and workmanship that prove defective, within the specified warranty period, provided manufacturer's written instructions for installation, operation and maintenance have been followed. Warranty excludes parts associated with routine maintenance, such as belts and filters.

# Part 2 - Products

# 2.01 Manufacturer

- A. Products shall be provided by the following manufacturers:
  - 1. AAON
  - 2. Substitute equipment may be considered for approval that includes at a minimum:
    - a. [RTU-4] R-410A refrigerant
    - b. [RTU-4] variable capacity compressors with 10-100% capacity.
    - c. Direct drive supply fans
    - d. Double wall cabinet construction
    - e. Insulation with a minimum R-value of 13
    - f. [RTU-4] Stainless steel drain pans
    - g. Hinged access doors with lockable handles
    - h. All other provisions of the specifications must be satisfactorily addressed

### 2.02 Rooftop Units

- A. General Description
  - 1. [RTU-4] Packaged rooftop unit shall include compressors, evaporator coils,

filters, supply fans, dampers, air-cooled condenser coils, condenser fans, reheat coil, gas heaters, and unit controls.

- 2. Unit shall be factory assembled and tested including leak testing of the DX coils, pressure testing of the refrigeration circuit, and run testing of the completed unit. Run test report shall be supplied with the unit in the service compartment's literature pocket.
- 3. Unit shall have decals and tags to indicate lifting and rigging, service areas and caution areas for safety and to assist service personnel.
- 4. Unit components shall be labeled, including refrigeration system components and electrical and controls components.
- 5. Estimated sound power levels (dB) shall be shown on the unit ratings sheet.
- 6. Installation, Operation and Maintenance manual shall be supplied within the unit.
- 7. Laminated color-coded wiring diagram shall match factory installed wiring and shall be affixed to the interior of the control compartment's hinged access door.
- 8. Unit nameplate shall be provided in two locations on the unit, affixed to the exterior of the unit and affixed to the interior of the control compartment's hinged access door.
- B. Construction
  - 1. All cabinet walls, access doors, and roof shall be fabricated of double wall, impact resistant, rigid polyurethane foam panels.
  - 2. Unit insulation shall have a minimum thermal resistance R-value of 13. Foam insulation shall have a minimum density of 2 pounds/cubic foot and shall be tested in accordance with ASTM D-1929 for a minimum flash ignition temperature of 610°F.
  - 3. Unit construction shall be double wall with G90 galvanized steel on both sides and a thermal break. Double wall construction with a thermal break prevents moisture accumulation on the insulation, provides a cleanable interior, prevents heat transfer through the panel, and prevents exterior condensation on the panel.
  - 4. Unit shall be designed to reduce air leakage and infiltration through the cabinet. Cabinet leakage shall not exceed 1% of total airflow when tested at 3 times the minimum external static pressure provided in AHRI Standard 340/360. Panel deflection shall not exceed L/240 ratio at 125% of design static pressure, at a maximum 8 inches of positive or negative static pressure, to reduce air leakage. Deflection shall be measured at the midpoint of the panel height and width. Continuous sealing shall be included between panels and between access doors and openings to reduce air leakage. Piping and electrical conduit through cabinet panels shall include sealing to reduce air leakage.

- 5. Roof of the air tunnel shall be sloped to provide complete drainage. Cabinet shall have rain break overhangs above access doors.
- 6. [RTU-4] Access to filters, dampers, cooling coils, reheat coil, heaters, compressors, and electrical and controls components shall be through hinged access doors with quarter turn, zinc cast, lockable handles. Full length stainless steel piano hinges shall be included on the doors.
- 7. Exterior paint finish shall be capable of withstanding at least 2,500 hours, with no visible corrosive effects, when tested in a salt spray and fog atmosphere in accordance with ASTM B 117-95 test procedure.
- 8. Units with cooling coils shall include double sloped 304 stainless steel drain pans.
- 9. Unit shall be provided with base discharge and return air openings. All openings through the base pan of the unit shall have upturned flanges of at least 1/2 inch in height around the opening.
- 10. Unit shall include lifting lugs on the top of the unit.
- 11. [RTU-4] Unit base shall be fabricated of 1 inch thick double wall, impact resistant, rigid polyurethane foam panels.
- C. Electrical
  - 1. [RTU-4] Unit shall be provided with factory installed and factory wired, nonfused disconnect switch.
  - 2. [RTU-4] Unit shall be provided with a factory installed and field wired 115V, 20 amp GFI outlet in the unit control panel.
- D. Supply Fans
  - 1. Unit shall include direct drive, unhoused, backward curved, plenum supply fans.
  - 2. Blowers and motors shall be dynamically balance and mounted on rubber isolators.
  - 3. [RTU-4] Motors shall be premium efficiency ODP with ball bearings rated for 200,000 hours service with external lubrication points.
  - 4. [RTU-4] Variable frequency drives shall be factory wired and mounted in the unit. Fan motors shall be premium efficiency.
- E. [RTU-4] Cooling Coils
  - 1. [RTU-4] Evaporator Coils
    - a. [RTU-4] Coils shall be designed for use with R-410A refrigerant and constructed of copper tubes with aluminum fins mechanically bonded to the

tubes and galvanized steel end casings. Fin design shall be sine wave rippled.

- b. [RTU-4] Coils shall have interlaced circuitry and shall be standard capacity.
- c. Coils shall be helium leak tested.
- d. Coils shall be furnished with factory installed thermostatic expansion valves.
- F. [RTU-4] Refrigeration System
  - 1. [RTU-4] Unit shall be factory charged with R-410A refrigerant.
  - 2. [RTU-4] Compressors shall be scroll type with thermal overload protection, independently circuited and carry a 5 year non-prorated warranty, from the date of original equipment shipment form the factory.
  - 3. Compressors shall be mounted in an isolated service compartment which can be accessed without affecting unit operation. Lockable hinged compressor access doors shall be fabricated of double wall, rigid polyurethane foam injected panels to prevent the transmission of noise outside the cabinet.
  - 4. Compressors shall be isolated from the base pan with the compressor manufacturer's recommended rubber vibration isolators, to reduce any transmission of noise from the compressors into the building area.
  - 5. Each refrigeration circuit shall be equipped with thermostatic expansion valve type refrigerant flow control.
  - 6. Each refrigeration circuit shall be equipped with automatic reset low pressure and manual reset high pressure refrigerant safety controls, Schrader type service fittings on both the high pressure and low pressure sides and a factory installed replaceable core liquid line filter driers.
  - 7. [RTU-4] Unit shall include a variable capacity scroll compressor on the lead refrigeration circuits which shall be capable of modulation from 10-100% of its capacity.
  - 8. [RTU-4] Lead refrigeration circuits shall be provided with hot gas reheat coil, modulating valves, electronic controller, supply air temperature sensor and a control signal terminal which allow the unit to have a dehumidification mode of operation, which includes supply air temperature control to prevent supply air temperature swings and overcooling of the space.
  - 9. [RTU-4] Lag refrigeration circuits shall be provided with factory installed hot gas bypass to protect against evaporator frosting and to prevent excessive compressor cycling.
- G. [RTU-4] Condensers
  - 1. [RTU-4] Air-Cooled Condenser

- a. Condenser fans shall be a vertical discharge, axial flow, direct drive fans.
- b. Coils shall be designed for use with R-410A refrigerant and constructed of copper tubes with aluminum fins mechanically bonded to the tubes and aluminum end casings. Fin design shall be sine wave rippled.
- c. Coils shall be designed for a minimum of 10°F of refrigerant sub-cooling.
- d. Coils shall be helium leak tested.
- H. [RTU-4] Gas Heating
  - 1. [RTU-4] Stainless steel heat exchanger furnace shall carry a 25 year nonprorated warranty, from the date of original equipment shipment from the factory.
  - 2. [RTU-4] Gas furnace shall consist of stainless steel heat exchangers with multiple concavities, an induced draft blower and an electronic pressure switch to lockout the gas valve until the combustion chamber is purged and combustion airflow is established.
  - 3. Furnace shall include a gas ignition system consisting of an electronic igniter to a pilot system, which will be continuous when the heater is operating, but will shut off the pilot when heating is not required.
  - 4. Unit shall include a single gas connection and have gas supply piping entrances in the unit base for through-the-curb gas piping and in the outside cabinet wall for across the roof gas piping.
  - 5. [RTU-4] Natural gas furnace shall be equipped with modulating gas valves, adjustable speed combustion blowers, stainless steel tubular heat exchangers, and electronic controller. Combustion blowers and gas valves shall be capable of modulation. Electronic controller includes a factory wired, field installed supply air temperature sensor. Sensor shall be field installed in the supply air ductwork. Supply air temperature setpoint shall be adjustable on the electronic controller within the controls compartment. 90 Mbtu/h, 150 MBtu/h, 195 MBtu/h, 210 MBtu/h, 270 MBtu/h, 292.5 MBtu/h, 390 MBtu/h, and 540 MBtu/h gas heating assemblies shall be capable of operating at any firing rate between 100% and 30% of their rated capacity. 405 MBtu/h and 810 MBtu/h gas heating assemblies shall be capable of operating at any firing rate between 100% and 20% of their rated capacity. 1080 MBtu/h gas heating assembly shall be capable of operating at any firing rate between 100% and 20% of their rated capacity. 1080 MBtu/h gas heating assembly shall be capable of operating at any firing rate between 100% and 20% of their rated capacity. 1080 MBtu/h gas heating assembly shall be capable of operating at any firing rate between 100% and 20% of their rated capacity.
- I. Filters
  - 1. [RTU-4] Unit shall include 4 inch thick, pleated panel filters with an ASHRAE efficiency of 65% and a MERV rating of 11, upstream of the cooling coil. Unit shall also include 2 inch thick, pleated panel pre filters with an ASHRAE efficiency of 30% and MERV rating of 8, upstream of the 4 inch standard filters.

- 2. [RTU-4] Unit shall include a clogged filter switch.
- J. Outside Air/Economizer
  - 1. [RTU-4] Unit shall include 100% motor operated outside air damper assembly constructed of extruded aluminum, hollow core, airfoil blades with rubber edge seals and aluminum end seals. Damper blades shall be gear driven and designed to have no more than 15 CFM of leakage per sq. ft. of damper area when subjected to 2 inches w.g. air pressure differential across the damper. Damper assembly shall be controlled by spring return, 2 position actuator. Unit shall include outside air opening bird screen and outside air hood with rain lip.
- K. Controls
  - 1. [RTU-4] Factory Installed and Factory Provided Controller
    - a. Unit controller shall be capable of controlling all features and options of the unit. Controller shall be factory installed in the unit controls compartment and factory tested. Controller shall be capable of stand alone operation with unit configuration, setpoint adjustment, sensor status viewing, unit alarm viewing, and occupancy scheduling available without dependence on a building management system.
    - b. Controller shall have an onboard clock and calendar functions that allow for occupancy scheduling.
    - c. Controller shall include non-volatile memory to retain all programmed values without the use of a battery, in the event of a power failure.
    - d. [RTU-4] Make Up Air Controller
      - 1. [RTU-4] Unit shall modulate cooling with constant airflow to meet ventilation outside air loads. Cooling capacity shall modulate based on supply air temperature.
      - 2. [RTU-4] With modulating hot gas reheat, unit shall modulate cooling and hot gas reheat as efficiently as possible, to meet outside air humidity loads and prevent supply air temperature swings and overcooling of the space.
      - 3. [RTU-4] Unit shall modulate heating with constant airflow to meet ventilation outside air loads. Heating capacity shall modulate based on supply air temperature.
    - e. [RTU-4] Unit configuration, setpoint adjustment, sensor status viewing, unit alarm viewing, and occupancy scheduling shall be accomplished with connection to interface module with LCD screen and input keypad, interface module with touch screen, or with connection to PC with free configuration software. Controller shall be capable of connection with other factory installed and factory provided unit controllers with individual unit configuration, setpoint adjustment, sensor status viewing, and occupancy

scheduling available from a single unit. Connection between unit controllers shall be with a modular cable. Controller shall be capable of communicating and integrating with a LonWorks or BACnet network. [WattMaster Orion Controls System]

# Part 3 - Execution

### 3.01 Installation, Operation and Maintenance

- A. Installation, Operation and Maintenance manual shall be supplied with the unit.
- B. Installing contractor shall install unit, including field installed components, in accordance with Installation, Operation and Maintenance manual instructions.
- C. Start up and maintenance requirements shall be complied with to ensure safe and correct operation of the unit.



# **Unit Rating**

2425 South Yukon Ave - Tulsa, Okiadoma 74107-2728 - Pn. (918) 583-2266 Fax (918) 583-6094 AAONEcat32 Ver. 4.185 (SN: 5770512-6GT7PAWS)

14A 14B 7 9 11 12 13 15 116 117 118 20 22 22 22 23 23

#### RN-060-8-0-EA09-3D9:M000-U0A-DLS-AFA-0H0D00F-00-0000000AB Tag: RTU-4

#### Job Information

Job Name: Job Number: Site Altitude: Refrigerant

Restoration Hardware 1204-0024 0 ft R-410A

1.50 in. wg.

0.20 in. wg.

0.18 in. wg.

0.35 in. wg.

#### Static Pressure

External: Evaporator: Filters Clean: Dirt Allowance

#### Cooling Section

Gross	Net
672.41	654.73 MBH
408.98	391.30 MBH
263.43 MBH	
91.00 °F DB	74.00 °F WB
91.00 °F DB	74.00 °F WB
53.56 °F DB	53.36 °F WB
55.10 °F DB	54.00 °F WB
100%	
1 × 300D @ 6.27 BHF	2
1077 / 6.742"	
43.8 ft² / 4 Rows / 14 240.0 fpm	4 FPI
	Gross 672.41 408.98 263.43 MBH 91.00 °F DB 91.00 °F DB 53.56 °F DB 55.10 °F DB 100% 1 × 300D @ 6.27 BHF 1077 / 6.742" 43.8 rc <sup>2</sup> / 4 Rows / 1- 240.0 rpm

### Rating Information

Cooling Capacity (MBH):	615.0
Cooling EER:	10.3
Cooling IEER:	12.1
Rated in accordance with AHRI 340/360	

#### Application EER @ Op. Conditions:

Electrical Data

Rating:	208/3/	<i>⁄60</i>		Minim	num Circuit Ar	np: 275	5	
Unit FLA:	262			Maxir	num Overcurre	ent: 300	)	
	Qty	HP	VAC	Phase	RPM	FLA	RLA	
Compressor 1:	2		208	3			51.3	
Compressor 2:	2		208	3			51.3	
Condenser Fans:	6	0.75	208	1	1075	5.4		
Supply Fan:	1	7.50	208	3	1170	24.2		
Combustion:	3	0.25	208	1	3200	1.7		
Cabinet Sound Powe	er Levels*							
Octave Bands:	63	125	250	500	1000	2000	4000	8000
Discharge LW(dB):	89	90	92	92	88	84	79	73
Return LW(aB):	74	74	73	68	68	59	40	27
*Sound power levels are given for in	formational purposes o	niy. The sound levels	are not guaranteed					

10.8

Unit	Information
• · · · •	

Approx. Op./Ship Weights: Supply CFM/ESP: Pre-Filter FV / Qty: Final-Filter FV / Qty: Outside CFM: Ambient Temperature:

Economizer: Heating: Cabinet: Re-Heat Coil Total

### Heating Section

PreHeat Type: Heating Type: Heating CFM: Total Capacity: OA Temp: RA Temp: Entering Air Temp: Leaving Air Temp: Input: Heater Qty: Consumption:

#### Re-Heat Coil:

Capacity: LA DB / WB: RH:

6015 / 6015 гьз. 10500 / 1.5 in. wg. 218.75 fpm / 24 218.75 fpm / 24 10500 92 °F DB / 74 °F WB

0.00 in. wg. 0.09 in. wg. 0.19 in. wg. 0.03 in. wg. 2.54 in. wg.

Std (No Preheat)

Nat. Gas Heat 10500 648.0 MBH 6.0 DB / 4.0°F WB 72.0 °F DB / 54.0 °F WB 6.0 °F DB / 4.0 °F WB 63.2 °F DB / 41.2 °F WB 810.0 MBH 1 810.0 MBH

186 MBH 70.00 °F / 59.77 °F 55%



# **30.0" STAR Plenum**

2425 South Yukon Ave - Tuisa, Okiahoma 74107-2728 - Ph. (918) 583-2266 Fax (918) 583-6094 AAONEcat32 Ver. 4.185 (SN: 5770512-6GT7PAWS)

### JOB INFORMATION:

Air Flow:

TSP:

Static Pressure:

Site Altitude:

Relief Dampers DP:

Job Name: Restoration Hardware Job Tag: RTU-4 Rep Firm: Date: 06/13/2012

10.500 CFM

2.54 in. Wg.

0.00 in. Wg.

2.54 in. Wg. 0.00 Ft

2.54 in. Wg.

# WHEEL SPECIFICATION:

Max RPM:	1,600
Diameter x Qty:	30.0 in. x 1
CFM:	10500
Tip Speed:	8,459 FPM
nertia:	35 WR2

# MOTOR SELECTION:

Rated HP / Bypass:	7.5 / No
Frame Size:	254T
Nominal RPM:	1170
VAC/PH/HZ:	208/3/60
Efficiency	Premium / 0.902
Enclosure Type:	ODP
Max Inertial Load:	290 WR²

# TSP @ Sea Level:

**OPERATING CONDITIONS:** 

#### **FAN PERFORMANCE:** FAN SOUND POWER (Inlet/Outlet): RPM: 1077 Octave Band: (R. 10^-12 watts) BHP: 6.27 1 2 3 4 5 6 7 8 Efficiency: 67.1% 85 86 85 85 84 81 76 71 In/Out Velocity: 1768/2323 FPM 89 90 92 93 91 87 82 76 Plenum Out Velocity: 119 FPM SOUND POWER A-Weighted: 88/94 aB

#### Max Duct SP with Blocked Airway:

<sup>3.5</sup> in. Wg. @ 1077 rpm





# **Unit Submittal**

2425 South Yukon Ave - Tulsa, Okiahoma 74107-2728 - Pn. (918) 583-2266 Fax (918) 583-6094 AAONEcat32 Ver. 4.185 (SN: 5770512-6GT7PAWS)

### RN-060-8-0-EA09-3D9:M000-U0A-DLS-AFA-0H0D00F-00-000000AB Tag: RTU-4

Job Nar Job Nur	ne: nber:	Restoration Hardware 1204-0024	Unit Submittal For: Unit Submittal Date:	June 11, 2012
	Base Option	Description		
R	Series	Roof Top Unit		
N	Generation	Ninth Generation		
060	Unit Size	Sixty		
8	Voltage	208V/3Ø/60H₂		
0	Interior Protection	Standard		
E	Refrigerant Style	R-410A Variable Capacity	Scroll Compressor (VCC)	
Α	Unit Configuration	Air-Cooled Cond. + Std Ev	ap. Coil	
0	Coil Coating	Standard		
9	Cooling/Heat Pump Staging	Modulating - 2 VCC + 2 O	n/Off Comp.	
3	Heating Type	Natural Gas Stainless Ste	el	
D	Heating Designation	Heat D - 810 MBtun		
9	Heating Staging	Modulating Gas - Temper	ature Control	
	Feature Option	Description		

Μ	<b>1A.</b> RA/OA Section	Motorized 100% Outside Air Dampers - No RA Opening
0	<b>1B.</b> RA/EA Biower Configuration	Standard - None
0	1C. RA/EA Blower	Standard - None
0	<b>1D.</b> RA/EA Blower Motor	Standard - None
U	2. OA Control	2 Position Actustor
0	3. Heat Options	Standard
Α	<b>4.</b> Maintenance Options	115V Convenience Outlet - Field Wired
D	<b>5A.</b> SA Blower Configuration	1 Biower + Premium Efficiency Motor + 1 VFD
L	5B. SA Biower	30" Direct Drive Backward Curved Pienum - 1600 rpm Max - Aluminum Wheel
S	5C. SA Motor	7.5 hp - 1170 rpm
Α	6A. Pre Filter Type	2" Pleated Pre Filter - 30% Err
F	<b>6B.</b> Unit Filter Type	4" Pleated - 65% Err - MERV 11
Α	6C. Filter Options	Clogged Filter Switch
0	7. Refrigeration Control	Standard - Fixed 55°F Comp. Cooling Lock Out
н	8. Refrigeration Options	HGB Lag + MHGR
0	9. Refrigeration Accessories	Standard
D	<b>10.</b> Power Options	Power Switch - 400 amps
0	<b>11.</b> Safety Options	Standard
0	12. Controls	Standard
F	13. Special Controls	Make Up Air Unit Controller - CV Cool + CV Heat
0	14A. Preheat Configuration	Standard - None
0	14B. Preheat Sizing	Standard - None
0	15. Giycoi Percent	Water or No WSHP
0	16. Interior Cabinet Options	Standard - Double Wall + R-13 Foam Insulation + Stainless Steel Drain Pan
0	17. Exterior Cabinet Options	Standard
0	<b>18.</b> Customer Code	Standard
0	<b>19.</b> Code Options	Standard - ETL U.S.A. Listing
0	20. Crating	Standard
0	<b>21.</b> Water-Cooled Cond.	Standard - None
Α	22. Control Vendors	Wattmaster Controls
В	<b>23.</b> Туре	Standard - Includes AAON Gray Paint



# **VCMX Components**

2425 South Yukon Ave - Tulsa, Okiahoma 74107-2728 - Pn. (918) 583-2266 Fax (918) 583-6094 AAONEcat32 Ver. 4.185 (SN: 5770512-6GT7PAWS)

# RN-060-8-0-EA09-3D9:M000-U0A-DLS-AFA-0H0D00F-00-000000AB

Tag: RTU-4 Јоь Name: Јоь Number:

Restoration Hardware 1204-0024 VCMX For: VCMX Date:

June 11, 2012

#### Hardware Included For VCMX Controller

Part #	Included Parts	Assigned Channel
V07150	VCMX Controller with EBUS	
R28390	Suction Pressure Transducer	MainController\Al5
R82890	Supply Air Temp Sensor - Field Installed	MainController\Al2
R81550	Outside Air Temp Sensor	MainController\Al4
R69190	VCMX Large Expansion Module	
P62520	Proof of Flow Sensor	LargeExpansionModule\BI3
P62520	Dirty Filter Sensor	LargeExpansionModule\B12
R34700	Outside Air Humidity Sensor	LargeExpansionModule\Al1

		1	2	3	4	5	6	7
	Analog In		X		X	X		
VOMY	Analog Out	Х	X					
VCIVIX	Binary In							
Controller	Relay Out	Х	X	Х	X	X		
with EDU3	Digital							
	Sensor(s)							

		1	2	3	4	5	6	7	8
VCMX	Analog In	Х							
Large	Analog Out			Х					
Expansion	Binary In		Х	Х					
Module	Relay Out								

RN UNITS 26-70 TON (AAC

(AAON®)

100% OUTSIDE AIR MANUAL FRESH AIR MOTORIZED OUTSIDE AIR



RND-00016 REV:B 07/24/09 SJS

ALL DIMENSIONS ARE IN INCHES

# RND CABINET AIR COOLED CONDENSING UNIT

AAO

RN-060-8-0-EA09-3D9:M000-U0A-DLS-AFA-0H0D00F-00-0000000A8



Disclaimer: This weight estimate does not account for any SPAs.

Date Created/Modified: 6/11/2012 2:52:18 PM Using Ver 4.185 (OSN# 5770512)