

REVIT CONTENT GUIDE

Manufacturer: Aaon, Inc.
Description: Hot Water/Chilled Water air handling unit with Economizer/Power Exhaust & Heat Wheel options
File: Air_Handling_Unit-Aaon-RQA-V-CW-HW.rfa
Type Catalog: Not Applicable
Rendering file: Not Applicable
Schedule file: Schedule-Aaon, Inc.rvt



Constraints	
Level	Level 1
Host	Level : Level 1
Offset	0' 0"
Graphics	
Show Curb	<input checked="" type="checkbox"/>
Show Clearance Lines	<input type="checkbox"/>
Clearance_RightSide	4' 0"
Clearance_OutsideAir	3' 0"
Clearance_LeftSide	2' 0"
Clearance_HXC	3' 0"
24 Inch Curb	<input type="checkbox"/>
14 Inch Curb	<input checked="" type="checkbox"/>
Electrical - Loads	
Supply Fan HP	0.000000
RLA	0.00 A
MOCP	0.00 A
MCA	0.00 A
LRA	0.00 A
FLA	0.00 A
Exhaust Fan HP	0.000000
* Apparent Load	0.00 VA
Panel	
Circuit Number	
Mechanical	
Secondary Filter	
Primary Filter	
Hot Water PD	0.000 in-wg
Hot Water LWT	0.00 °F
* Hot Water GPM	0 GPM
Hot Water EWT	0.00 °F
Hot Water Coil Rows	0.000000
Hot Water Coil FPI	0.000000
Chilled Water PD	0.000 in-wg
Chilled Water LWT	0.00 °F
* Chilled Water GPM	0 GPM
Chilled Water EWT	0.00 °F
Chilled Water Coil Rows	0.000000
Chilled Water Coil FPI	0.000000
System Type	Hydronic Return,Hydronic Supply,San
System Name	Default Hydronic Return (Bryan.No
Mechanical - Airflow	
* Supply Air CFM	0 CFM
* Return Air CFM	0 CFM
Outdoor Air CFM	0 CFM
Heating LAT	0.00 °F
Heating EAT	0.00 °F
Exhaust Air CFM	0 CFM
ESP	0.0000 in-wg
Cooling LAT	0.00 °F
Cooling EAT	0.00 °F
Mechanical - Loads	
Heating Total Capacity	0.00 Btu
Equivalent Total Capacity	0.00 Btu
ERV Total Cooling Capacity	0.00 Btu
Cooling Total Tonnage	0.000000
Cooling Total Capacity	0.00 Btu
Cooling Sensible Capacity	0.00 Btu
Cooling Latent Capacity	0.00 Btu

Dimensions	
OffsetCurb	1' 2"
Offset	0' 10 1/8"
Identity Data	
IBD Equipment Number	
AHRI Rating	
Comments	
Mark	5
Phasing	
Phase Created	New Construction
Phase Demolished	None
Analytical Model	
Octave Band - 8000 Hz	0.000000
Octave Band - 63 Hz	0.000000
Octave Band - 500 Hz	0.000000
Octave Band - 4000	0.000000
Octave Band - 250 Hz	0.000000
Octave Band - 2000	0.000000
Octave Band - 125 Hz	0.000000
Octave Band - 1000 Hz	0.000000

Instance Properties (cont.)

Electrical - Loads	
* Voltage	0.00 V
Phase	3
* Number of Poles	3
Hertz	0.00 Hz
Structural	
Shipping Weight	0.00 lb
Operating Weight	0.00 lb
Identity Data	
URL	http://www.aaon.com
RQ Series Operation Manual	http://www.aaon.com/literature
Model Disclaimer	Reference the unit drawing cut
Model	RQA-V-CW-ERC-HW
Manufacturer	Aaon, Inc.
IBD Equipment Abbreviation	AHU
For More Information	http://www.bimadvent.com
Family Version	1.0.0
Date Last Modified	January 11, 2011
Created By	Intelligent Building Design Reso
Copyright	Copyright © 2011 AAON, Inc.
Keynote	
Type Comments	
Description	
Assembly Description	
Assembly Code	
Type Mark	
Cost	
OmniClass Number	23.75.35.14
OmniClass Title	Air Handling Units

Type Properties

Instance Properties

* Indicates the parameter is mapped to a connector

Loading into the Project:

One family file is supplied and may be loaded into the project through all traditional methods. The file contains geometry that represents not just the air handling unit, but it also contains a roof curb assembly. Once the family is loaded into a project the user can select a checkbox in the instance properties (Group: Graphics) to toggle the roof curb on/off. As the user does this, the entire height of the resulting assembly is raised or lowered the height of the curb—this does not affect the actual “*Offset*” parameter.

Clearance areas are defined in the family file through the use of solid geometry. Clearance areas are defined at each side of the AHU. This enables the model to report collisions when such a report is queried on the entire model. When displayed, the clearance areas are shown as being mostly transparent and their outlining edges are dashed red lines. Because clearance areas are given their own Sub-Category, they may be hidden through Visibility/Graphics – Mechanical Equipment or through the instance parameter “*Show Clearance Lines.*”

Three types exist for this family: **Economizer, Power Exhaust & Heat Wheel**. Each option sizes accordingly. The model name will update according to the Type selected. Dimensional parameters are not editable by the users.

In the family environment, all geometry for the different types displays together. This may cause some confusion. Each element that applies only to a specific family type is given an on/off visibility parameter. However, regardless the on/off status of the element, the element will *always* display in the family editor. The only distinguishing feature of an element set to *off* is slightly grayed-out lines. This is typical Revit behavior and the family will display each type correctly when loaded into a project.

Instance Parameters: (only parameters specific to this Aeon, Inc. family are described)

- **[Graphics]**
 - **Show Curb:** Toggles the curb on/off. Adjusts the entire height of the AHU accordingly.
 - **Show Clearance Lines:** Turns on/off the visibility of the clearance areas.
 - **Clearance_[RightSide,OutsideAir,LeftSide,HXC]:** Adjusts the width of the applicable clearance areas.
 - **[14, 24] Inch Curb:** These two checkboxes are coded to be either/or, thus only **14 Inch Curb** is editable. The user may choose the desired height of roof curb.
- **[Electrical – Loads]**
 - **RLA*:** Running Load Amperes.
 - **MOCP*:** Maximum Overcurrent Protection.
 - **MCA*:** Minimum Circuit Amperes.
 - **LRA*:** Locked Rotor Amperes.
 - **Exhaust Fan HP*:** Horse Power.
 - **Supply Fan HP*:** Horse Power.
 - **FLA*:** Full Load Amperes.
 - **Apparent Load***
- **[Mechanical]**
 - **Water Cooled PD*:** Pressure Drop.
 - **Cooling GPM***
 - **Water Cooled Coil Rows*:**
 - **Water Cooled Coil FPI*:** Fins Per Inch.
 - **Secondary Filter***
 - **Primary Filter***
- **[Mechanical – Airflow]**
 - **Supply Air CFM*:** Mapped to connector.
 - **Return Air CFM*:** Mapped to connector.
 - **Outdoor Air CFM*:** Connector does not exist as the unit is outdoor.
 - **Exhaust Air CFM*:** Connector does not exist as the unit is outdoor.
 - **Heating LAT***
 - **Heating EAT***
 - **Cooling LAT***
 - **Cooling EAT***

- **[Mechanical – Loads]**
 - **Heating Total Capacity***
 - **Equivalent Total Capacity*:**
 - **ERV Total Cooling Capacity*:**
 - **Cooling Total Tonnage***
 - **Cooling Total Capacity***
 - **Cooling Sensible Capacity***
- **[Identity Data]**
 - **AHRI Rating***
- **[Analytical Model]**
 - **Octave Band – [63,125,250,500,1000,4000,8000] Hz***

Type Parameters: (only parameters specific to this Aeon, Inc. family are described)

- **[Electrical – Loads]**
 - **Voltage*:** Mapped to electrical connector.
 - **Phase*:** Mapped to electrical connector.
 - **Number of Poles*:** Mapped to electrical connector.
 - **Hertz*:** Defaults at 60 Hz
- **[Structural]**
 - **Shipping Weight*:** Units are lb/ft³
 - **Operating Weight:** Units are lb/ft³ *

*Indicates that the parameter is a shared parameter and is schedulable.

Rendering:

When the family file is loaded into the project, standard Aeon, Inc. materials are imported. These materials pertain mostly to the housing, Aeon, Inc. logo and the clearance areas.

Scheduling:

Aeon, Inc. products may be scheduled utilizing the schedule view in the given project file “Schedule-Aeon, Inc.rvt”. Select and copy (**Ctrl-C**) the schedule from the sheet view and past it (**Ctrl-V**) into a sheet in your project. The schedule filters are set to look for only those units designated with manufacturer as “Aeon, Inc.”