

Application to Commit Energy
Efficiency/Peak Demand
Reduction Programs
(Mercantile Customers Only)

Case No.: \_\_\_-\_--EL-EEC

Mercantile Customer: The Kroger Co.

Electric Utility: **Duke Energy** 

Program Title or

Description: HVAC Store 351

Rule 4901:1-39-05(F), Ohio Administrative Code (O.A.C.), permits a mercantile customer to file, either individually or jointly with an electric utility, an application to commit the customer's existing demand reduction, demand response, and energy efficiency programs for integration with the electric utility's programs. The following application form is to be used by mercantile customers, either individually or jointly with their electric utility, to apply for commitment of such programs in accordance with the Commission's pilot program established in Case No. <u>10-834-EL-POR</u>

Completed applications requesting the cash rebate reasonable arrangement option (Option 1) in lieu of an exemption from the electric utility's energy efficiency and demand reduction (EEDR) rider will be automatically approved on the sixty-first calendar day after filing, unless the Commission, or an attorney examiner, suspends or denies the application prior to that time. Completed applications requesting the exemption from the EEDR rider (Option 2) will also qualify for the 60-day automatic approval so long as the exemption period does not exceed 24 months. Rider exemptions for periods of more than 24 months will be reviewed by the Commission Staff and are only approved up the issuance of a Commission order.

Complete a separate application for each customer program. Projects undertaken by a customer as a single program at a single location or at various locations within the same service territory should be submitted together as a single program filing, when possible. Check all boxes that are applicable to your program. For each box checked, be sure to complete all subparts of the question, and provide all requested additional information. Submittal of incomplete applications may result in a suspension of the automatic approval process or denial of the application.

Any confidential or trade secret information may be submitted to Staff on disc or via email at <u>ee-pdr@puc.state.oh.us</u>.

### Section 1: Mercantile Customer Information

Name: **The Kroger Co.** 

Principal address: 1014 Vine Street, Cincinnati, OH 45202

Address of facility for which this energy efficiency program applies:

### 9939 Montgomery Rd Cincinnati, Oh 45242

Name and telephone number for responses to questions:

### Grady Reid, Jr 513-287-1038

Electricity use by the customer (check the box(es) that apply):

- ☐ The customer uses more than seven hundred thousand kilowatt hours per year at the above facility. (Please attach documentation.)
- **✓** The customer is part of a national account involving multiple facilities in one or more states. (See Attachment 1 Appendix 1).

### Section 2: Application Information

- A) The customer is filing this application (choose which applies):

  - ✓ Jointly with the electric utility.
  - B) The electric utility is: **Duke Energy**
- C) The customer is offering to commit (check any that apply):
  - □ Energy savings from the customer's energy efficiency program. (Complete Sections 3, 5, 6, and 7.)
  - □ Capacity savings from the customer's demand response/demand reduction program. (Complete Sections 4, 5, 6, and 7.)
  - **✓** Both the energy savings and the capacity savings from the customer's energy efficiency program. (Complete all sections of the Application.)

### Section 3: Energy Efficiency Programs

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A)	I ne customer	's energy efficiency	nrogram involves	icheck thase ti	nat annivi
1 × j	The editorner	b cricing y criticitation	programmivorves	(Criccit triobe tr	itut uppiy,

Early replacement of fully functioning equipment with new equipment. (Provide the date on which the customer replaced fully functioning equipment, and the date on which the customer would have replaced such equipment if it had not been replaced early. Please include a brief explanation for how the customer determined this future replacement date (or, if not known, please explain why this is not known).

### Installed 5 new Roof Top Unitary Air-conditioners in April 2011

Installatio	on of new	equipment	to replace	equipment	that needed	l to be
replaced	The custor	ner installed	new equip	ment on the	following da	ıte(s):

Insta	llation of new equip	ment	for new cons	struct	ion o	r facility ex	pansion.
The	customer installed	new	equipment	on	the	following	date(s):

<ul> <li>Behavioral or operational improvemen</li> </ul>		Behavioral	l or operational	improvement
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- B) Energy savings achieved/to be achieved by the energy efficiency program:
  - 1) If you checked the box indicating that the project involves the early replacement of fully functioning equipment replaced with new equipment, then calculate the annual savings [(kWh used by the original equipment) (kWh used by new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

### Annual savings: 1,481 kWh See Attachment 1 - Appendix 2

2) If you checked the box indicating that the customer installed new equipment to replace equipment that needed to be replaced, then calculate the annual savings [(kWh used by less efficient new equipment) – (kWh used by the higher efficiency new equipment) = (kWh per year saved)]. Please attach your calculations and record the results below:

A .	1 •	1 1 171
/\ mm112	LCOVIDAC.	L///h
Allilua.	l savings:	kWh

Please describe any less efficient new equipment that was rejected in favor of the more efficient new equipment.

3)	new construction or facility expansion, then calculate the annual savings [(kWh used by less efficient new equipment) – (kWh used by higher efficiency new equipment) = (kWh per year saved)]. Please attach your
	calculations and record the results below:
	Annual savings:kWh
	Please describe the less efficient new equipment that was rejected in favor of the more efficient new equipment.
4)	If you checked the box indicating that the project involves behavioral or operational improvements, provide a description of how the annual savings were determined.

### Section 4: Demand Reduction/Demand Response Programs

- A) The customer's program involves (check the one that applies):
  - ✓ Coincident peak-demand savings from the customer's energy efficiency program.
  - □ Actual peak-demand reduction. (Attach a description and documentation of the peak-demand reduction.)
  - □ Potential peak-demand reduction (check the one that applies):
    - □ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a tariff of a regional transmission organization (RTO) approved by the Federal Energy Regulatory Commission.
    - ☐ The customer's peak-demand reduction program meets the requirements to be counted as a capacity resource under a program that is equivalent to an RTO program, which has been approved by the Public Utilities Commission of Ohio.
- B) On what date did the customer initiate its demand reduction program?

### **April 2011**

C) What is the peak demand reduction achieved or capable of being achieved (show calculations through which this was determined):

Annual savings: .52 kW
See Attachment 1 - Appendix 2

### Section 5: Request for Cash Rebate Reasonable Arrangement (Option 1) or Exemption from Rider (Option 2)

Under this section, check the box that applies and fill in all blanks relating to that choice.

Note: If Option 2 is selected, the application will not qualify for the 60-day automatic approval. All applications, however, will be considered on a timely basis by the Commission.

Com	nmission.		
A)	The customer is applying for:		

$\checkmark$	Option 1: A cash rebate reasonable arrangement
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OR

Option 2: An exemption from the energy efficiency cost recovery mechanism implemented by the electric utility.

OR

- □ Commitment payment
- B) The value of the option that the customer is seeking is:

Option 1: A cash rebate reasonable arrangement, which is the lesser of (show both amounts):

✓ A cash rebate of \$302.50 (See Attachment 1 - Appendix 3)

Option 2: An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider.

□ An exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for \_\_\_ months (not to exceed 24 months). (Attach calculations showing how this time period was determined.)

OR

□ A commitment payment valued at no more than \_\_\_\_\_.

OR

 Ongoing exemption from payment of the electric utility's energy efficiency/peak demand reduction rider for an initial period of 24 months because this program is part of the customer's ongoing efficiency program. (Attach documentation that establishes the ongoing nature of the program.) In order to continue the exemption beyond the initial 24 month period, the customer will need to provide a future application establishing additional energy savings and continuance of the organization's energy efficiency program.)

### Section 6: Cost Effectiveness

The program is cost effective because it has a benefit/cost ratio greater than 1 using the (choose which applies):

- Total Resource Cost (TRC) Test. The calculated TRC value is: (Continue to Subsection 1, then skip Subsection 2)
  - Utility Cost Test (UCT) . The calculated UCT value: See **Attachment 1 - Appendix 4** (Skip toSubsection 2.)

### Subsection1: TRCTestUsed(pleasefillinallblanks).

The TRC value of the program is calculated by dividing the value of our avoided supply costs (generation capacity, energy, and any transmission or distribution) by the sum of our program overhead and installation costs and any incremental measure costs paid by either the customer or the electric utility.

> The electric utility's avoided supply costs were Our program costs were . The incremental measure costs were . .

### Subsection2: UCTUsed(pleasefillinallblanks).

We calculated the UCT value of our program by dividing the value of our avoided supply costs (capacity and energy) by the costs to our electric utility (including administrative costs and incentives paid or rider exemption costs) to obtain our commitment.

Our avoided supply costs were \$958 (Attachment 1 - Appendix 5).

The utility's program costs were \$199 (Attachment 1 - Appendix 6).

The utility's incentive costs/rebate costs were \$302.50 (Attachment 1 -Revised October 4, 2011 Appendix 3).

### Section 7: Additional Information

Please attach the following supporting documentation to this application:

Narrative description of the program including, but not limited to, make, model, and year of any installed and replaced equipment.

A copy of the formal declaration or agreement that commits the program or measure to the electric utility, including:

- 1) any confidentiality requirements associated with the agreement;
- 2) a description of any consequences of noncompliance with the terms of the commitment;
- 3) a description of coordination requirements between the customer and the electric utility with regard to peak demand reduction;
- 4) permission by the customer to the electric utility and Commission staff and consultants to measure and verify energy savings and/or peak-demand reductions resulting from your program; and,
- 5) a commitment by the customer to provide an annual report on your energy savings and electric utility peak-demand reductions achieved.

### Refer to Rebate Offer Letter following this application

A description of all methodologies, protocols, and practices used or proposed to be used in measuring and verifying program results. Additionally, identify and explain all deviations from any program measurement and verification guidelines that may be published by the Commission.



**DUKE ENERGY CORPORATION** 

Mercantile Self Direct Program 139 East Fourth Street Cincinnati, OH 45202

513 629 5572 fax

February 10, 2012

Ms. Iman Dodson The Kroger Company 1014 Vine Street Cincinnati, Ohio 45202

Subject: Your Application for a Duke Energy Mercantile Self-Direct Rebate

Dear Ms. Dodson:

Thank you for your Duke Energy Mercantile Self Direct rebate application. As noted in the Energy Conservation Measure (ECM) chart on page two, a total rebate of \$302.50 has been proposed for your HVAC project completed in the 2011calendar year. All Self Direct Rebates are contingent upon approval by the Public Utilities Commission of Ohio (PUCO).

At your earliest convenience, please indicate if you accept this rebate by

- providing your signature on page two
- · completing the PUCO-required affidavit on page three.

Please return the documents to my attention via fax at 513-629-5572 or e-mail to SelfDirect@Duke-Energy.com. Upon receipt, Duke Energy will submit the necessary documentation to PUCO. Following PUCO's approval, Duke Energy will remit payment.

At Duke Energy, we value your business and look forward to working with you on this and future energy efficiency projects. We hope you will consider our Smart \$aver® incentives, when applicable. Please contact me if you have any questions.

Sincerely,

Grady Reid, Jr Product Manager

Mercantile Self Direct Rebates

cc: Deanna Bowden, Duke Energy

Rob Jung, WECC

Please indicate your response to	this rebate offer within 30 days o	of receipt.
Rebate is accepted.	Rebate is declined.	
		n to commit and integrate the Energy's peak demand reduction,
necessary to secure approval of	ny also agrees to serve as joint a this arrangement as required by ements imposed by rule or as par	PUCO and to comply with any
pursuant to this rebate offer is trulimited to, project scope, equipm	firms that all application information and accurate. Information in count of the accurate and ac	question would include, but not be erational details, project costs,
reduction projects?	e the monies to fund future energ	y efficiency and/or demand
YES NO		
If rebate is declined, please indic	cate reason (optional):	
ids	MAN D. DODGON	2/17/12
Customer Signature	Printed Name	Date

### **Proposed Rebate Amounts**

Measure ID	Energy Conservation Measure (ECM)	Proposed Rebate Amount
ECM-1	HVAC – Unitary AC <65000 3 Phase (Qty 3 Store #351)	\$90.00
ECM-2	HVAC - Unitary AC 65000 - 135000 (Qty 2 Store #351)	\$212.50
Total		\$302.50



**Application to Commit** Energy Efficiency/Peak **Demand Reduction Programs** (Mercantile Customers Only)

Case N	No.:EL-EEC
State o	f <u>OHro</u> :
lma that:	Do Do Do Affiant, being duly sworn according to law, deposes and says
1.	I am the duly authorized representative of:
	[insert customer or EDU company name and any applicable name(s) doing business as]
2.	I have personally examined all the information contained in the foregoing application, including any exhibits and attachments. Based upon my examination and inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete.
3.	I am aware of fines and penalties which may be imposed under Ohio Revised Code Sections 2921.11, 2921.31, 4903.02, 4903.03, and 4903.99 for submitting false information.
R	
Signat	ure of Affiant & Title
	and subscribed before me this 2/ day of Filmy,  Month/Year  Baune Class
Signat	ure of official administering oath  Print Name and Title
Му со	mmission expires on /2/9-2012  BONNIE CLARK NOTARY PUBLIC STATE OF OHIO Comm. Expires December 19, 2012
3   P a	g e

### Attachment 1 – Kroger HVAC

### Appendix 1 – Electric History

		1
16200675 01		
KRO-014-351		
9939 MONTGOMERY RD		
CINCINNATI, OH 45242		
		Actual
Date	Days	KWH
10/21/2011	29	208,405
9/22/2011	30	245,585
8/23/2011	29	270,279
7/25/2011	32	301,364
6/23/2011	30	268,157
5/24/2011	29	208,607
4/25/2011	32	89,518
3/24/2011	29	24,872
2/23/2011	29	81,906
1/25/2011	34	251,542
12/22/2010	33	241,025
11/19/2010	29	221,223
Total		2,412,483

### Appendix 2 – Annual kWh losses and annual KW losses

	Annual kWh Gross		TOTAL Annual		
	with	Upload	kWh	KW Per	Total KW
Measure	losses	Amount	losses	Measure	Savings
HVAC Unitary AC < 65000 3 Phase	45.76	9	411.84	0.02	0.18
HVAC Unitary AC - 65000-135000	62.92	17	1069.64	0.02	0.34
Total			1481.48		0.52

### Appendix 3 – Cash Rebate

Measure	Amount
HVAC Unitary AC < 65000 3 Phase	\$90.00
HVAC Unitary AC - 65000-135000	\$212.50
Total	\$302.50

### Appendix 4 – Utility Cost Test

Measure	UCT
HVAC Unitary AC < 65000 3 Phase	1.74
HVAC Unitary AC - 65000-135000	1.92

### Appendix 5 – Avoided Supply Costs

Measure	T&D	Production	Capacity	Quantity	Total Avoided Costs
HVAC Unitary AC < 65000 3 Phase	\$3.00	\$16.00	\$10.00	9	\$261
HVAC Unitary AC - 65000-135000	\$4.00	\$23.00	\$14.00	17	\$697
Total					\$958

### Appendix 6 – Utility Program Costs

Measure	Qty	Admin Costs	Total Costs
HVAC Unitary AC < 65000 3 Phase	9	\$7.00	\$63
HVAC Unitary AC - 65000-135000	17	\$8.00	\$136
Total			\$199

### **Ohio Mercantile Self Direct Program**

**Application Guide & Cover Sheet** 

Questions? Call 1-866-380-9580 or visit www.duke-energy.com.

Email this form along with <u>completed Mercantile Self Direct Prescriptive or Custom applications</u>, proof of payment, energy savings calculations and spec sheets to <u>SelfDirect@Duke-Energy.com</u>. You may also fax to 1-513-419-5572.

Mercantile customers, defined as using at least 700,000 kWh annually are eligible for the Mercantile Self Direct program. Please
indicate mercantile qualification:
□ a single Duke Energy Ohio account
multiple accounts in Ohio (energy usage with other utilities may be counted toward the total)

Please list Duke Energy account numbers below (attach listing of multiple accounts an/or billing history for other utilities as required);

Account Number	Annual Usage	Account Number	Annual Usage	
1620-0675-01	2,412,483.00			
· <del>:</del>				14.4

Self Direct rebates are available for completed Custom projects that have not previously received a Duke Energy Smart \$aver® Custom Incentive. Self Direct incentives are applicable to Prescriptive measures that were installed more than 90 days prior to submission to Duke Energy and have not previously received a Duke Energy Prescriptive rebate.

Self Direct Program requirements dictate that certain projects that may be Prescriptive in nature under the Smart \$aver program must be evaluated using the Custom process. Use the table on page two as a guide to determine which Self Direct program fits your project(s). Apply for Self Direct projects using the appropriate application forms in conjunction with this cover sheet. Where Mercantile Self Direct Prescriptive applications are listed, please refer to the measure list on that application. If your measure is not listed, you may be eligible for a Self Direct Custom rebate. Self Direct Custom applications, like Smart \$aver Custom applications, should include detailed analysis of pre-project and post-project energy usage and project costs. Please indicate which type of rebate applications are included in the table provided on page two.

Please check each box to indicate completion of the following program requirements:

<ul> <li>✓ All sections of appropriate application(s) are completed</li> <li>✓ Proof of payment.*</li> </ul>	☐ Manufacturer's Spec sheets	☑ Energy model/calculations and detailed inputs for Custom applications
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<sup>\*</sup> If a single payment record is intended to demonstrate the costs of both Prescriptive & Custom projects, please include an additional document with an estimated breakout of costs for each Prescriptive and Custom energy conservation measure.

Application Type	Replaced equipment at end of lifetime or because equipment failed**	Replaced fully operational equipment to improve efficiency***	New Construction
	MSD Custom Part 1	MSD Prescriptive Lighting	MSD Prescriptive Lighting
Lighting	Custom Lighting Worksheet	MSD Custom Part 1 ☐ Custom Lighting Worksheet ☐	MSD Custom Part 1 ☐ Custom Lighting Worksheet ☐
Heating & Cooling	MSD Custom Part 1 ☐ MSD Custom General Worksheet	MSD Custom Part 1 ☐ MSD Custom General Worksheet	MSD Prescriptive Heating & Cooling
			MSD Custom Part 1 ☐ MSD Custom General Worksheet ☐
Window Films, Programmable Thermostats, & Guest Room Energy Management Systems	MSD Custom Part 1 ☐ MSD Custom General and/or EMS Worksheet(s) ☐	MSD Prescriptive Heating & Cooling □	MSD Custom Part 1 ☐ MSD Custom General and/or EMS Worksheet(s) ☐
Chillers &	MSD Custom Part 1	MSD Custom Part 1	MSD Prescriptive Chillers & Thermal Storage ☐
Thermal Storage	MSD Custom General Worksheet	MSD Custom General Worksheet	MSD Custom Part 1 ☐ MSD Custom General Worksheet ☐
Materia 9 Duning	MSD Custom Part 1	MSD Custom Part 1	MSD Prescriptive Motors, Pumps & Drives □
Motors & Pumps	MSD Custom General Worksheet	MSD Custom General Worksheet	MSD Custom Part 1  MSD Custom General Worksheet
VFDs	Not Applicable	MSD Prescriptive Motors, Pumps & Drives □	MSD Custom Part 1 ☐
	Not Applicable	MSD Custom Part 1 ☐ MSD Custom VFD Worksheet ☐	MSD Custom VFD Worksheet
	MSD Custom Part 1 ☐	MSD Custom Part 1 ☐	MSD Prescriptive Food Service
Food Service	MSD Custom General Worksheet	MSD Custom General Worksheet	MSD Custom Part 1  MSD Custom General Worksheet
_	MSD Custom Part 1	MSD Prescriptive Process	MSD Custom Part 1 ☐
Process	MSD Custom General Worksheet	MSD Custom Part 1 ☐ MSD Custom General Worksheet	MSD Custom General Worksheet
Energy Management Systems	MSD Custom Part 1 ☐ MSD Custom EMS Worksheet ☐	MSD Custom Part 1  MSD Custom EMS Worksheet	MSD Custom Part 1 ☐ MSD Custom EMS Worksheet ☐
Behavioral*** & No/Low Cost		MSD Custom Part 1 ☐ MSD Custom General Worksheet ☐	

\*\*\*\* Behavioral energy efficiency and demand reduction projects must be both measurable and verifiable. Provide justification with your application.

<sup>\*\*</sup> Under the Self Direct program, failed equipment and equipment at the end of its useful life are evaluated differently than early replacement of fully functioning equipment. All equipment replacements due to failure or old age will be evaluated via the Custom program.

<sup>\*\*\*</sup> Please ensure that you include the age of the replaced equipment for measures classified as "Early Replacement" in your application as well as the estimated date that you would have otherwise replaced the existing equipment if you had not chosen a more energy efficient option.



### MERCANTILE SELF DIRECT Ohio Heating / Cooling Equipment Incentive Application

Questions? Call 1-866-380-9580 or visit www.duke-energy.com.

ls this	application:	Ø NE	W (original) or .	REVISED (change	es made to or	iginal app	lication)		
Building tape at equi	et cheste.	N. W.							
Data Centers			☐ Full Service Re	staurant		Cffic	e		
Education/K-12		·	☐ Hesithcare			Public Assembly			
Education Other			☐ Industriel	☐ Industrial [			ic Order/Safety		
Elder Care/Nursing H	emo		Lodging	□ Re			Religious Worship/Church		
☑ Food Sales/Grocery						☐ Serv	ice		
Fast Food Restauran	t		Retail (Big Box)	•		☐ Ware	shouse		
☐ Other:	/ #- A b								
lovali yatha saa									
Duke Energy Repres	entative	· · · · · · · · · · · · · · · · · · ·	☑ Web Site			Radi	<u> </u>		
Contractor / Vendor			Other			<u> </u>			
Please check each box t	o indicate co	malettan	of the following arrays	um roquiramonto:					
X All sections of applica	tion [	Z Invoic	e with make, model	Tax ID num	her for nave		☑ Customer/v	endor agree to	
	-	ոսուե	er, quantity and		ion io bay		Tenns and		
		equip	ment manufacturer	<u> </u>	···				
Customer information :									
Customer/Business		The Krog		Contact			lman Dodson		
		513-782-3		Account Nu	mbar			_	
freet Address (Where Incentive should be			· · · · · ·				1014 Vine St	>-D1	
		Zincinna			OH	H-L-CA (AUI	Zip Code	45202	
nstallation Street Addres			ontgomen Rd				Pab Code	49202	
City		Cincin		State	A125		Zip Code	100000	
-mail Address			Ison@kroger.com	Grate	OH		Trip Code	45242	
Failure to provide the acc	runt number	accordan	el with the treation use.	ere the installation	tonk place w	vill regult	in rejection of the	annlication	
/endor Information									
/endor			···	Contact			1	Sheete - Albert - Sheeter (Street 198	
Phone				Fax			1		
Street Address				1					
City				State			Zip Code		
-mail Address									
Duke Energy has que:	stions abou	this app	dication, who should	we contact?	⊠ Cust	tomer	☐ Vendo		
ayment information **				T TO					
Vho should receive incer	itive paymen	r? 🗵	Customer				ner must sign be		
hereby authorize payment of incentive firectly to the vendor:			ustomer Signature (wr ete	ltten signature)	<u> </u>				
Provide Tax ID Number for Payee		<del></del>	stomer Tax ID #		31-156956	68		<del></del>	
			andor Tax ID #						
eins and Conditions									
have read and hereby ag		erms & C	onditions and Program						
ustomer Signature	iman.	<del></del>	<del></del>	Vendor Signal	ture				
ate	10/19		,	Date					
	ENGLES	-							

SELF DIRECT OH HCE 9/2011



Description	Make/Model # (for split system, supply both the indoor and outdoor coil numbers)	# of Units	Tons Per Unit	Incentives per Ton**	Installed AHRI Efficiency Rating (mark one)		Annual Operating Hours (min. of 1500)	Cost	Date Installed and Operable (mm/yy)	Total Incentiv
RTU 7	RQ0038VCA01212	1	3	\$10.00	SEER/EER**	4208274	8760	\$4,834.00	4/13/11	\$30.00
RTU 10	RQ0028VCA01212	1	2	\$10.00	⊠ □ SEER/EER**	4208262	8760	\$4,834.00	4/10/2011	\$20.00
RTU 8	RQ0048VCA01212	1	4	\$10.00	□ ⊠ SEER/EER**	3897295	8760	\$4,824.00	4/12/2011	\$40.00
RTU 9	RQ0068VCB01232	1	6	\$12.50	SEER/EER**	4588964	8760	\$5,494.00	4/14/2011	\$75.00
RN 6	RN01180CA022F2	1	11	\$20.00	□ ⊠ SEER/EER**	3561365	8760	\$8,365.00	4/15/2011	\$220.00

<sup>\*\*</sup> Incentive capped at 50% of the equipment cost.

·		•	•
Cooling Incentive Table and AHRI Rated	Efficiency Requirements*	Berein, and a second of the	
Description	Size Range	Minimum AHRI Efficiency	Incentive
Packaged Terminal Air Conditioning			
Α	All sizes	See ** below	\$10/unit
Unitary and Rooftop Air Conditioning			
В	<65,000 BTUH (1 Phase)	14.5 SEER/split system; 14 SEER/single package system	\$12.50/ton
С	<65,000 BTUH (3 Phase)	12.0 EER/split system; 11 EER/single package system	\$10/ton
D	65,000-135,000 BTUH	11.0 EER	\$12.50/ton
E	136,000-240,000 BTUH	11.0 EER	\$20/ton
F	241,000-760,000 BTUH	10.0 EER	\$10/ton
G	>760,000 BTUH	10.0 EER	\$15/ton
Unitary and Rooftop Heat Pump - only A	ir-to-Air Heat Pump units qualify	likali saren era sarrin era dikali puli di Karana	
H	<65,000 BTUH (1 Phase)	14.5 SEER/split system; 14 SEER/single package system	\$12.50/ton
<u> </u>	<65,000 BTUH (3 Phase)	12.0 EER split system; 11 EER/single package system	\$10/ton
J	65,000-135,000 BTUH	11.0 EER	\$17.50/ton
K	136,000-240,000 BTUH	10.0 EER	\$17.50/ton
L	>241,000 BTUH	10.0 EER	\$17.50/ton

\*\* PTAC Minimum Efficiency (EER) calculation: 12.8 EER - (.213 x (BTUH/1000)

\*\*\*\* Incentive capped at 50% of the equipment cost.

- Duke Energy requires an AHRI reference # or documentation from the AHRI Manual to verify the required efficiency level for all central
  air systems. If the equipment or matched set is not in the AHRI manual, the manufacturer's technical fact sheets must be provided
  showing the efficiency level tested under AHRI conditions. Equipment capacity (size) and efficiency must be based on AHRI design
  conditions.
- For split systems, the indoor coil and condenser must be a matched set to be eligible for incentives.

Cooling system(s) must operate >1,500 hours annually to be eligible.

- Incentives are only available for Air-to-Air HP units. Ground Source and Water Source Heat Pumps are not eligible.
   Incentives may be available under the custom program. See custom application on the Duke Energy Mercantile Self Direct website for application and equipment requirements.
- All equipment must be new to be eligible for incentives. Used equipment is not eligible for incentives.



Energy Star	Window / Sleev	//ROOMAC	nemiya a	. <i>(</i>					
Description*		Size Range			EER	Annual Operating Hours (min. of 1500)	Equipment	Date Installed and Operable (mm/yy)	
	·						]		
		<u></u>					·		
							<u> </u>		

<sup>\*\*</sup> Incentive capped at 50% of the equipment cost.

Energy Stor Window Sleeve Room			<b>11.7</b>			2 p. 37 m
Size Range	EER	Incentive	EER	Incentive	EER	Incentive
<8,000 BTU/hr	10.7	\$25	11.2	\$35	11.6	40
8,000 - 13,999 BTU/hr	10.8	\$25	11.3	\$35	11.8	40
14,000 BTU 19,999 BTU/hr	10.7	\$50	11.2	\$75	11.6	80
>=20,000 Btu/hr	9.4	\$50	9.8	\$75	10.2	80

Cooling system(s) must operate >1,500 hours annually to be eligible.

An equipment data sheet is required stating that the unit is Energy Star rated and providing the EER.

All equipment must be new to be eligible for incentives. Used equipment is not eligible for incentives.



	The Equipment below is (check one): LJ New Equipment / New Construction  Early replacement of existing equipment or replacement of failed equipment must apply for Self Direct Custom program.								
Air Source F	leat Pump Wat	er Heater I	ncentives**		<b>新基金有效的数</b>	era di distributi n			1000
Description*	Make/Model #	Quantity	Size Range	Incentive per Tank*	Installed COP Efficiency*	Annual Operating Hours (min. of 1500)	Equipment Cost	Date Installed and Operable (mm/yy)	
			МВН						
			MBH						
			МВН						
** Incentive ca	apped at 50% of t	he equipme	nt cost.						I
	***************************************								
04/1002474/100040000000000000000000000000000000	leat Pump Wate	er Heater li							
Description			Size Range			Minimum CC	P Efficiency	Incentive*	
Q	eat Pump Wate	r Heater	10 50 MPU			lao		\$1,000/un	
R	10-50 MBH 51-100 MBH					3.0	3.0		
S	101-300 MBH				3.0		\$1,750/un \$2,500/un		
T			301v-500 MBH			3.0		\$3,500/uni	
Ü						3.0		\$4,500/un	
* Incentive ca	pped at 50% of th	e equipmen	nt cost.					14 1,000	
<ul><li>All e</li><li>An e</li></ul> The Equipme	equipment data s nt below is (che	be new to be sheet is required to the contract of the contract	e eligible for inc uired stating tha ☐ New Eq	entives. Use t the COP. uipment / Ne	er heaters. ed equipment is <i>n</i> ew Construction ipment must apply	_		ıram.	
High Efficien	cy Commercia	l Electric V	Vater Heater Inc	entives***	Comparable (1988)				100 616 6
Description*	Make/Model #	Quantity	Size Range	Incentive per Tank*	Installed Energy Factor*	Annual Operating Hours (min. of 1500)	Equipment Cost	Date Installed and Operable (mm/yy)	
			MBH					*	
			МВН						
			МВН						<u> </u>
** Incentive ca	pped at 50% of th	ne equipme	nt cost.						

High - Efficiency Commercial Electric Water Heater Incentive Table

\* Maximum incentive cannot exceed 50% of the total equipment cost.

Description

Energy Factor (EF) must be a minimum of 0.93 to qualify.

All equipment must be **new** to be eligible for incentives. Used equipment is **not** eligible for incentives.

Size Range

ΑII

An equipment data sheet is required stating that the EF.

Incentive\*

\$10/unit

Minimum Energy Factor (EF)

0.93



The Equipme New construc	ent below is (ch ction or replace	eck one): ment of faile	☐ Retrofit d equipment mu	(installed on existi ist apply for Self D	ng equipme irect Custon	nt) i program.			
Window Film	i Incentives				0.00				
Item Number (Model #)	SHGC*	Square Feet Installed	Incentive per Square Foot	Direction Window	Faces	Number of Windows	Date Installed (mm/yy)	Project Co	Total Incentive**
			\$.50/sq.ft	☐ East ☐ West	South			1	
			\$.50/sq.ft	☐ East ☐ West	☐ South				
			\$.50/sq.ft	☐ East ☐ West	☐ South				
** Incentive i	s capped at a	maximum d	of 50% of the pr	oject cost (equip	ment and e	xternal labor)	) <b>.</b>		
Window Film Description	) Incentive		Minimum Ef	ficiency		Incentive*			
Window Film					ding	\$.50/square ft.			
*Incentive is	capped at of	50% of the p		terial and extern	al labor).				
<ul> <li>All equip</li> <li>The Equipment</li> </ul>	oment must be nt below is (che	new to be e	ligible for incent	g coefficient of 0.4 ives. Used equipm (installed on existin st apply for Self Di	nent is <i>not</i> e na equipmer	ligible for ince	ntives.	•	
			centives (Rein						
Make/Model #	t			Quantity	Incentive p Unit*	er Equipm Cost		perable	otal Incentive
· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·						
Incentive cap	ped at 50% of t	he equipmen	t cost.						дана из
Sathack/Deac	resoverable Th	armostat la	centives (Retro						
Description	i communite i i i	omiostat III	een y -> taelle	m smy,		Incentive			
Setback/Progr	rammable Ther					\$25/thermos	tat*	•	
<ul> <li>Program</li> </ul>	mable Thermo	stats must r	eplace existing s	tandard thermosta	ts - Incentiv	es for new co	nstruction ar	e not applical	ole.

- Incentives for Programmable Thermostats cannot exceed 50% of the cost of the thermostat.

  Thermostat(s) shall be installed according to manufacturer's specifications and comply with manufacturer's warranty requirements. Thermostat(s) shall have a program memory retention capability or battery back-up (minimum 2 days), with warning indicator for battery replacement. Thermostat(s) shall be capable of automatic variation of the start of daily-warm-up time depending on indoor and outdoor temperature variations.
- All equipment must be new to be eligible for incentives. Used equipment is not eligible for incentives.



flake/Model#	Please indicate whether room is heated by Natural Gas (G) or Electric (E)? (please circle)	Quantity	Incentive per Room*	Equipment Cost	Date Installed and Operable (mm/yy)	Total Incentive
	E or G					
•	E or G					
,	E or G	***************************************		1		

Guestroom Energy Management Controls (Retrofit only)	No. 10 Control of the
Description	Incentive per Room
Guestroom Energy Management Controls for rooms heated with Electric	\$40
Guestroom Energy Management Controls for rooms heated with Gas	\$15

- Incentives are available for sensors that control HVAC units for individual hotel rooms.
- · Sensors controlled by a front desk system are not eligible.
- · Sensors must be controlled by automatic occupancy detectors.
- During unoccupied periods, the default setting for controlled units should differ by at least 8 degrees from the operating set point.
- The incentive is per guest room controlled, not per sensor; for multi-room suites the incentive is available per room controlled, if a sensor is installed in each room.
- Replacement or upgrades of existing occupancy-based controls are not eligible for a prescriptive incentive.
- All equipment must be new to be eligible for incentives. Used equipment is not eligible for incentives.

### **海 A C EQUIPMENT**

### REPRESENTATIVES, INC.

1300 N. Pennsylvania Street Indianapelis, IN 46202 (317)921-8825 Fax (317)921-8826 PROPOSAL DATE 11/8/10

TO:

Ryan D. Stuckenberg

Kroger L. P. 1.

150 Tri-County Parkway Cincinnati, OH 45246

RE:

Kroger Store # A351

Cincinnati, OH

Dear Customer,

Note: Effective 3/20/09 all curbs including curbs for these roof top units are furnished by AES. Contact Lee Angle, <u>lanbgle@aescurb.com</u>

Ph: 800.786,0402 Fax: 334-283-5447

A C Equipment Reps., Inc. offers to sell the following equipment listed below for the subject job, in accordance with our standard terms and conditions of sale.

Item A: Packaged Rooftop Unit; Tagged: RTU# 6

One, (1) AAON Rooftop Unit, Model RN, complete with the following features and accessories:

- 208 V/3 d/60
- R410a Refrigerant
- 2" thick Insulated Double Wall Cabinet with Full Hinged Access Doors & ¼ turn latches
- · Direct drive plenum type supply fan
- · High Efficiency VFD duty Motor with VFD for air balance
- · Scroll compressors, independent circuits, five year compressor parts warranty
- Two (2) independent refrigerant circuits
- 2- Stage, Natural Gas Heat
- 2" Pleated Filters
- Stainless steel drain pan
- Sight Glass
- Phase and Brown Out Protection
- · Manual outside air and return air dampers
- Factory installed disconnect switch with main fusing
- Factory installed GFI receptacle
- Factory furnished and installed CPC Multiflex 88AO controller per Kroger standards
- · Fan proving switch

- Terminals for field furnished and installed smoke detectors. Detectors are by others and must not be powered from the RTU
- All items listed above are factory installed

Not included are any freight charges, roof curbs, power or control wiring external to the unit, start up labor, warranty labor, or any items not specifically listed above.

Item B: Packaged Rooftop Units; Tagged: RTU# 7, 8, 9 & 10

Four (4) AAON Rooftop Unit, Model RQ, complete with the following features and accessories:

- 208 V/3 \$\delta\frac{4}{60}\$
- R410a Refrigerant
- 2" thick Insulated Double Wall Cabinet with Full Hinged Access Doors & ¼ turn latches
- Direct drive plenum type supply fan
- Scroll compressor, five year compressor parts warranty
- High Efficiency VFD duty Motor with VFD for air balance
- 2-stage natural gas heat
- 2" Pleated Filters
- Stainless steel drain pan
- Sight Glass
- Phase and Brown Out Protection
- Manual outside air damper
- · Factory installed disconnect switch with main fusing
- Factory installed GFI receptacle
- Factory furnished and installed CPC Multiflex 88AO controller and sensors per Kroger standards
- Fan proving switch
- Terminals for field furnished and installed smoke detectors. Detectors are by others and must not be powered from the RTU
- All items listed above are factory installed.

Not included are any freight charges, roof curbs, power or control wiring external to the unit, start up labor, warranty labor, or any items not specifically listed above.

AAON's terms of sale are Net 30 days. Our price for Item A & B shipped FOB factory to the first destination, excluding freight, sales and/or use taxes is:

<u>\$28,341.00</u>

We appreciate the opportunity to quote you on this project.

Sincerely,

Steve Goldenberg Kroger\_A351\_ason\_pro

# Kroger Store # A351 Cincinnati, Ohio

Paet 060-00040506

EQUIPMENT
AAON Packaged Roof Top Units
With CPC Controls

MECHANICAL ENGINEER
Kohrs Lonnemann Heil Engineers, PSC
Fort Thomas, Kentucky

GENERAL CONTRACTOR TBD

KROGER NATIONAL ACCOUNT MANUFACTURER'S REPRESENTATIVE

A C Equipment Reps, Inc. 1300 N. Penusylvania Street Indianapolis, Indiana 317.921.8825

PREPARED BY
Steve Goldenberg
317.313.0228
steveg@acequipmentreps.com

SUBMITTAL DATE November 8, 2010

# (AAON°)

### Unit Submittal

2425 Routh Yologa Are - Tuling, Oklohaman 24107-2725 - Ph. (Dist) Ares egies free foliog bees seed. AAUNCMARE Vow 1184 (247-277) 184-28751.275

计图形法 大工人 动物的 机橡胶 下去开放口路路 网络 化环环电路线线

RN-011-8-0-CA02-2F2:0000-00B-DRQ-0A0-COAFHBJ-00-0000000X Tag: RTU-5 DELUBAKERY

Job Name: Job Number:	A361 Montgomery Road A861 Pret 080-60040506	Unit Submittel For: Unit Submittel Deter	November 66, 2019
Rese Option	Description	······································	
R Berien	Reef Top Unit		
N. A.	Nicth Constation	,,	
<u>011</u> g	Eleven	_	
8	2067/36/40He		
🐧 - Provident egyteret	Standard		
C was distributed on the con-	_: Realth : Standard Efficiency		
in 🛕 in the <u>su</u> t o <u>n</u> we what in the sign	Air-Cooled Cond. + Std Brey. Co.	7	
D is country	Standard		
ili≝i oodayaanya kultu	2 Stage.		
🎖 Digital Gari	Natural Gas Aluminizad		
F Booting Documetion	Heat P - 194 MBigh		
2 Heating Staging	2 Stage		•

	Pasture Option	Description
0	JA RAIDA Bestica	Manually Adjustable CA Opening + RA Gouning
Ð	3B. RAEA Blewer Configuration	
0	. IC. RASSA Blower	Standard - None
Q.	ID. RATEA Blowne Motor	. Standard - None
] 0	4- OA Control	Standard - None
.0	. Host Options	Standard
18	- Maintennage Octions	116V. Carrentence Outliet - Partiery Wired
D	A. BA Blower Conferentian	1 Blower + Francium Efficience Motor + 1 VPD mt @ 80 RX
R		27 Direct Drive Beckward Curved Pleasure
Q	CC. BA Motor	3.6 by ± 1170 rpm
0	Pro Filter True	Standard - None
Á	. All Light Pilton Truck	2" Pleated - 50% E/I
0	#C. Filter Outlone	. Standard
C	J. Redireration Control	Fra Cycling
0	A Estriperation Options	Standard
A	1. Refriguration Accessories	Black Clare
F		Power Switch : 60 amps
H	11. Sufety Options	Remote Strake Detector Berndeels - Field Installed Detector
_ <u>B</u>		Phase & Brown Out Protection
	12. Special Controls	Pactory Installed CPO Multiflex 8840 Controls Supplied by AAON
0	i .	Standard - None
0	14B. Probest Sloker	Standard - Nego
0	16 Chroi Percent	Water or No Winter
Ð	16. Interior Cabinet Options	Speciard - Stockie Well + R-12 From Inspiration + Stainless Stool Denia Pan
0		- Standard
0		Standard
, 0 ,	18. Cole Options	Sendard - STL U.S.A. Lindar
Q	48. Crathur	Standard
0	M. Water-Cooled Cond.	Standard - None
0	21 Control Vendore	Szojeni
X,	23, Tone	Standal Price Actherization + AAON Gree Print





Tag: BTU-6 DELUBAKERY

2450 Smith Values, Aug. Tales, Orlicheses Polit/2750. The public Set Spill For Solds Set August Andreine Voy. 4 164 Set. 272184-48751,327

\*\*WEIGHT AND PERFORMANCE DO NOT INCLUDE SPA

2016 / 2016 Be.\*\* 8810 / 0.4 in. seg.

85 TP DB / 72 TF WB

75 1 DB / 61 1 WB

274.82 fpm / 4

0.00 fm, ugs. 0.04 in. 10g.

0.06 in 198.

1.02 in my.

Sid (No Freheat)

1.0 DB / 1.0'F WB

15.0 T DB / 42.0 T WB

60.5 T.DB / 63.7 TWB 98.1 T.DB / 61.7 TWB

Nat. Cas Real 3810 156.0 MBH

196.0 MBH

198.0 MBH

762

法非正法 人名 人名西拉 机电路 人士不知识法 河沟 计并介绍的外数图象 RN-011-8-0-CA02-2F2:0000-00B-DRQ-0A0-COAFRBJ-00-00000000K

Unit Information

Final-Filter FV / Qty:

Ambient Temperature:

Batum Temperature:

Heating Section Preffect Type:

Entering Air Temp: Leaving Air Temp:

Heating Type: Heating CFM: Total Capacity:

QA Temp:

RA Temp:

Heater Qty:

Consumption:

Input

Outside CFM:

Boscomizer: Heating:

Cabinet:

Total

Approx. Op/Ship Weighter Supply CPM/PSP:

### Job Information

Job Name:	A\$\$! Montgomery Road
Job Number:	A\$\$! Puet 060-00940504
Site Aktitude:	0 ft
Bedrigseant	R-410A
men decaur	X-010A

### Static Pressure

External:	(3.40 in, 194.
Evaporator:	0.17 in. we.
Filters Clean:	0.06 in. uye.
Dirt Allowance	0.85 EL 100

### Cooling Section

	Gress	Net
Total Capacity:	112.42	110.74 MBR
Sensible Capacity:	99.30	96.62 MBH
Letent Capacity:	14.13 AGH	***************************************
Mixed Air Temp:	78.40 'F DB	64.88 TF WB
Retaring Air Temp:	78.40 T DB	64.18 T WB
Lv Air Temp (Coll):	54.04 'F DB	51.82 T WB
Let Air Temp (Unit)	54.71 °F DB	54.95 T WH
Supply Air Pan:	1 x 220 € 0.05 BHP	A BANK N. 47 MA
SA Pan RPM / Waith:	977 / 4.920"	

Evaporator Coil: Evaporator Face Velocity:

\$4.4 Nº / 2 Rows / 14 FPI 241.2 fpm

### AHRI Listing Information

Cooling Capacity (MBH):	113.0
Cooling EER:	11.2
Cooling IRBR:	13.2
Application KER @ Op. Conditions:	10.9

### Electrical Data

Rating: Unit PLA:	202/3/40 17			Minimum Circuit Amy: Maximum Overmerent:			
Сопертимог 1:	9 <del>19</del> 2	RP	VAC 208	Phase 3	RPM	FLA	RLA 16.6
Condecate Fans	1	0.76	206	1	1075	5.4	
Supply Para	Ţ	5,00	203	3	1170	10.6	
Combustion:	1	0.08	208	1	3000	1.8	
Cabinet Sound Pow	er Levels*						
Octava Banda:	62	115	250	540	1800	1610	4000
Discharge LW(dB):	60	82	80	71	45	66	64
Return LW(dB):	77	77	72	<b>51</b>	62	58	45
*Manual passes breaks are given for to	Propert perpent -				<b>~~</b>	••	70

8405 62 40



### 22.0" STAR Pionum

### JOB INFORMATION:

Job Name: A351 Montgomery Road
Job Tag: RTU-6 DELI/EAKERY
Rep Firm:

11/06/2010

Date:

### **OPERATING CONDITIONS:**

 Air Flow:
 3,810 CFM

 Static Pressure:
 1.02 in. Wg.

 Plenum DP:
 0.00 in. Wg.

 Inlet Grill DP:
 0.60 in. Wg.

 TSP:
 1.03 in. Wg.

 Site Altitude:
 0.00 Fr

 TSP @ See Level:
 1.02 in. Wg.

### FAN PERFORMANCE;

 RPM:
 977

 BHP:
 0.93

 Efficiency:
 85.7%

 In/Out Velocity:
 1165/128% FPM

 Plenum Out Velocity:
 63 FPM

### WHEEL SPECIFICATION:

 Max RPM:
 2,800

 Diameter x Qty:
 22.6 in. x 1

 Width%:
 100

 Tip Breed:
 5,627 FPM

 Inertia:
 6 WR\*

### MOTOR SELECTION:

 Rated HP / Bypass:
 3 / No

 Frazza Size:
 2137

 Nominat RPM:
 1170

 VAC/PH/BZ:
 208/3/60

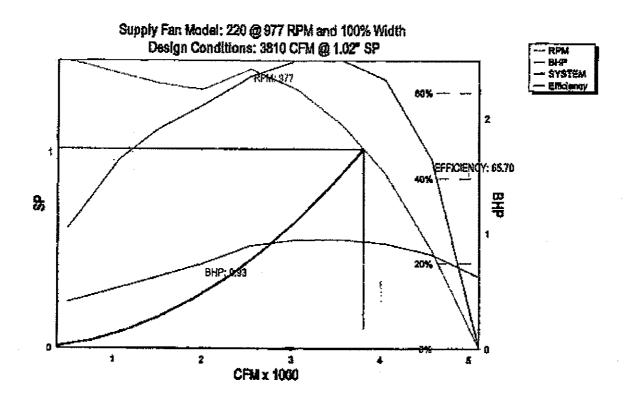
 Efficiency
 Pramium / 0.885

 Enclosure Type:
 ODP

 Max Inertial Load:
 85 WR\*

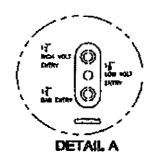
### FAN SOUND POWER (Inlet/Outlet):

Octave Bend: (Re 10^-12 watts) 1 2 5 6 80 88 71 68 80 73 62 56 80 82 80 73 71 68 62 56 SOUND POWER A-Weighted: \$1/81 dB



### RN SERIES B - CABINET STANDARD ~ 9-15 TON

CLEARANCES			
LOCATION	• UNIT 6025 • 0 - 15 TON		
OLITSION AIR (BACK)	48		
CONTROLS BEE	48		
LEPT SIDE	6		
PORTE	48		
TOP	UNCHRUNICIED		



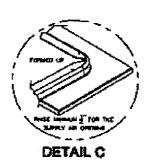


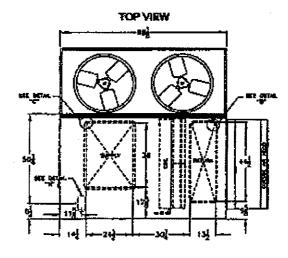
### NUMBER OF CONDENSER FANS

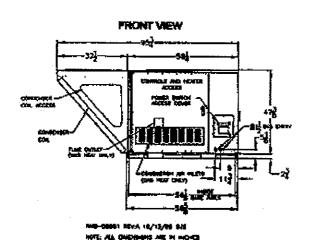
9 & 11 TON

- 1 FAN

13 & 16 TON - 2 FANS







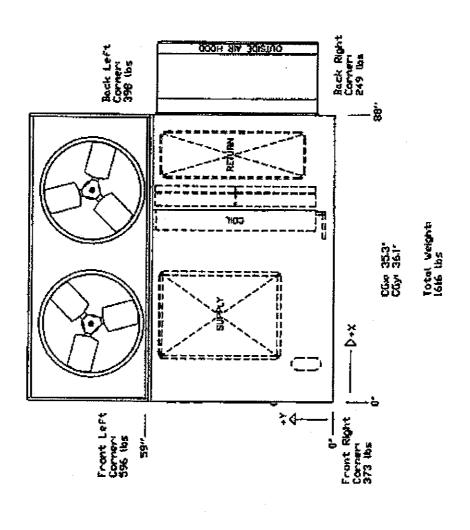
RIGHT SIDE VIEW

Printed \$1/93015 431146 ME

# AIR COOLED CONDENSING UNIT



RN-011-8-0-CA02-2F2:0000-00B-DRQ-0A0-C0AFHBJ-00-00000000X



Discioleration estimate does not account for any SPAs.



### **Unit Submittal**

Zets Groth Tokan Are - Tuka, Celahoma 14307-2722 - Ph. (Dix: Bak-2942 Fax (Dix) 543-2022 And Rizmazz Vec 4, 184 67th 57777284-458782.xxx

RQ-003-8-V-CA01-212:0000-00B-QJD-0A0-COAFHBJ-00-0000000X Tag: RTU-7 LUNCHROOM

Job Name: Job Number:	ASSI Hantgomery Road ASSI Past 940-09049354	Unit Submitted Prez Unit Schreittel Date:	November 04, 2014
Base Option	Description		
R Septem	Roof Top Unit		
Q Generation	Tenth Constation		•
003 Unit Size	Three		
8 Voltege	206V/S68/00Hs		
V Joseph Protestion	Voctical Discharge and Re	Augus	
C Refrigerant Parle	R-410A Significated Religion		
A : Unit Configuration	Air-Cooled Coud. + Std Ry		
OColl Coating	Standard	· ·	
I Cordinal Heart Pages Studies	<u>  1 Stage</u>		
2 Heating Type	Natura) Gas Aluminians		
1 Besting Designation	Heat 1 - 60 MBtalk		•
2 Restine Storing	2.9tage		

	Feature Option	Description
0	1A. RAKIA Section	Manually Adjustable GA Opening + RA Opening
0	IB. RA/EA Blower Configuration	Standard - None
0	, JC, RA/EA Blower	Standard - Mone
0	10. HA/ZA Blower Motor	Standard - None
0	. 2. OA Control	Standard - None
Į 0	, Jr. Heat Options	Standard
В	4. Maintanagaga Options	115Y Contenience Outlet - Partrey Wired
Q.		1 Blower + Reporter Rated 3 Phase Motor + VFO ant & 85 HZ
1	68. SA Biower	10" Direct Drive Backward Correct Phenton
D	6G_ BA_Motor	2 HP 1780 ppm
<u>o</u>		Standard - Noor
A	II. Unit Sites Type	2 Florid - 30% Fif
0	. 1C. Filter Ownions	Plandard
<u>c</u>	A . Bulkicoution Control	Fun Certifica
0	6- Befrienration Option	Standard
. A	<ul> <li>Refrigeration Accessories</li> </ul>	Martin Claus
F_		Power Switch - 60 games
. Ħ	11, Selber Octions	Samulto Delactor Terminals - Field Irainfled Detector
B		Phase & Serven Out Protection
4		Factory Installed OPC Multifler 88AO Controls Furnished by AACM
<u> </u>		1Standard - Norm
0		Brandust - None
O	. 14 Glassi barress	Water to WEED.
0	. 14. Interior Cabinet Certions	Standard Double Wall + R-13 Form Ingulation + Stainless Start Drain Pan
0		Shipland
Ü		Standard
, U .		Sandard, STLUSA Listing
<u>."</u>		<u>Standard</u>
Ų.		Standard - None
u v	22. Constal Versions	<u>Standard</u> .
. A.	21. Tree	Sounded Price Authoritestion + AAON Gray Paint

### **Unit Rating**



an 74.007.9724 - Po. (818; REL-2266 Faz (818; SES-9704 AAONTRAKTZ Var. 4 PO. (835; ST)TST04-ASPELST)

交易的 填露者 一甲甲基巴基亚 美貨 电电子电影电影机 RQ-003-8-Y-CA01-212:0000-00B-QJD-0A0-COAFHBJ-00-00000000X Tag: RTU-7 LUNCHROOM

### Job Information

Job Name:	A341 Montgomery Road
Jeb Number:	A351 Part 040-0004050
Site Altitude:	
	oρ
Retrigurant	R-410A

### Static Pressure

Hyternal:	0.50 fr. ing.
Sysporator:	0,08 in, pp.
Filters Clean:	0.04 in. u.g.
Dist Allowance	0.85 in. uwr.

### Cooling Section

LIFORE	MEG
34.67	33.33 MBH
30.31	29.02 MBH
4.34 MRH	
74.40 F DB	64.42 T WB
72.40 'F DB	64.42 T WB
54.63 F DB	54.48 T WA
53.61 P.DB	54.85 T WB
$I \times RO(33-VFD)$	
1134 / 2.000*	
	36.87 30.81 4.86 MRM 74.40 F DB 74.40 F DB 54.63 F DB 54.61 F DB 1 × BQ145-VFD (

5.8 ft\* / 2 Bours / 14 FPI

278.6 fpm

### Evaporator Coil: Evaporator Face Valority: AHRI Listing Information

Cooling Capacity (MBH):	34.0
Cooling SEER:	14.3
Cooling EER:	18.1
Application RER & Op. Conditions:	0.11

### Electrical Data

Rating: Unit PLA:	208/3/60 29				Minimum Circuit Ampo Maximum Overcupunts			
Compressor 1: Condenser Fans: Supply Fan: Combustions	<b>Qt</b> y 1 1 1 1	HP 0.167 2.60 0.00	VAC 208 208 208 208	Phase 3 1 2 1	RPM 625 1780 2000	1.1 7.6 1.3	RLA 10.4	
Cabinet Sound Powe	rr Lepels*							
Octave Bands: Rischarge LW(dB): Return LW(dB):	<b>68</b> 75 73	226 76 74	250 76 66	680 60 87	1006 64 58	2996 62 56	4000 67 49	5000 52 48

Approx. Op./Ship Weighte:	755 / 753 lbe,**
Supply CFMPESP:	1206 / 0.5 in. wg.
Final-Filtar FV / Qty:	216.00 fpm / 2
Outside ÇEM:	240
Ambient Temperature:	82 PDB / 73 TF WB
Return Temperature:	75 'F DB / 62 'F WB

Personalizaer:	0.00 in. wg.
leating:	0.15 in. wg.
labinet:	0.01 in. urg.
'etal:	i.i é in. ay.

MOUTH Section	
ProHest Type:	Std (No Freheat)
Reating Type:	Nat. Gae Heat
Heating CFM:	1200
Total Capacity:	44.6 MBH
OA Tempe	2.0 DH / 1.0 P WZ
RA Temp.	78.6 T DB / 62.0 T WB
Satering Air Temp:	60.2 T DB / 53.7 T WB
Leeving Air Temp.	97,7 T DB / 67,2 T WB
Enput:	St.C MBR
Hester Qty (HVLow):	. 1
Consumption:	60.0 MBH
Operation:	N/A



### 18.5" STAR Plenum

SCIR South Yakon Arr - Tulus, Orlahoma 74107-2734 - Ph. (6)19 483-2946 Faz (6)16) 483-4904 AAGH Bostel Vot. 4,164-6391-6773184 ARRSIANY;

### JOB INFORMATION:

Job Name: A351 Montgomery Road Job Tug: RTU-7 LUNCHROOM Bap Firm: 11/08/2016

Date: 11/08/2030 11/06/2010

### **OPERATING CONDITIONS:**

Air Flow: 1,200 CFM
Static Pressure: 1.14 in. Wg.
Relief Dampers DP: 0.00 in. Wg.

TSP: 1.14 in. Wg.
Site Altitude: 0.60 Pt.
TSP © Son Level: 1.14 in. Wg.

### FAN PERFORMANCE:

 RPM:
 1184

 BHP:
 0.41

 Efficiency:
 52.3%

 In/Out Velocity:
 / PPM

 Plenum Out Velocity:
 20 FPM

### WHEEL SPECIFICATION:

 Max RPM:
 2,200

 Diamater x Qiy:
 18.5 in. x 1

 CFM:
 1900

 Tip Spead:
 5,492 FPM

 Inertia:
 5,492 FPM

### MOTOR SELECTION:

 Rated HP / Bypass:
 2 / No

 Frame Sine:
 48

 Nominal RPM:
 1760

 VAC/PH/HZ:
 208/3/60

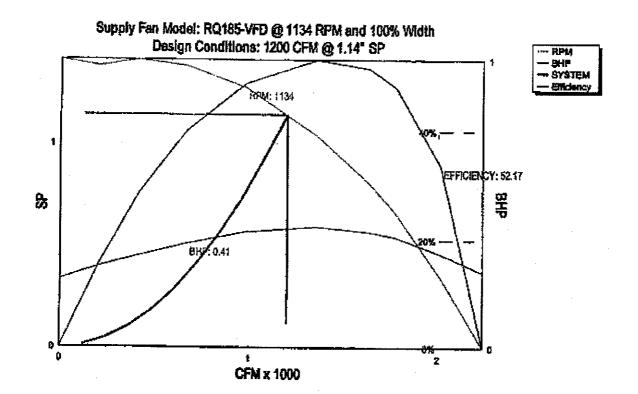
 Efficiency
 Standard / 0.815

 Enclosure Type:
 ODP

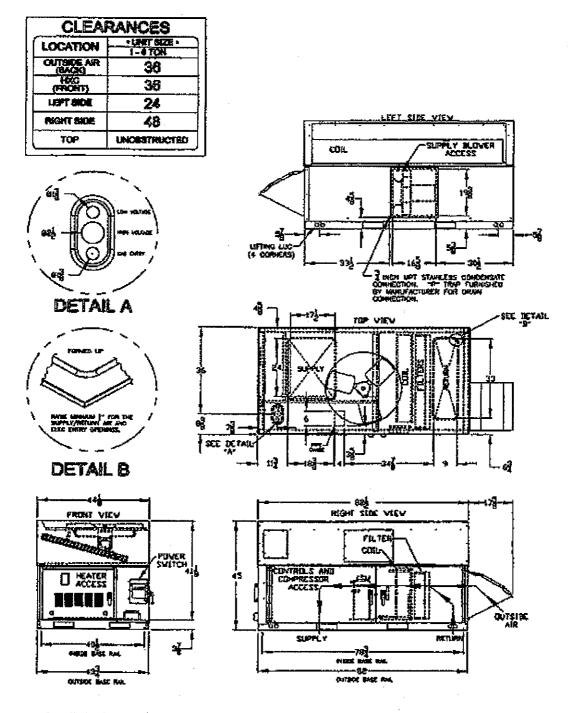
 Max Inertial Load:
 27 WR\*

### FAN SOUND POWER (Inlet/Outlet):

Octave Band: (Re 104-12 watts) ő 6 75 76 75 70 87 66 61 56 75 76 75 70 67 55 6ISOUND POWER A-Weighted: 77/77 dB



## RQ CABINET STANDARD VERTICAL ~ 1-6 TON

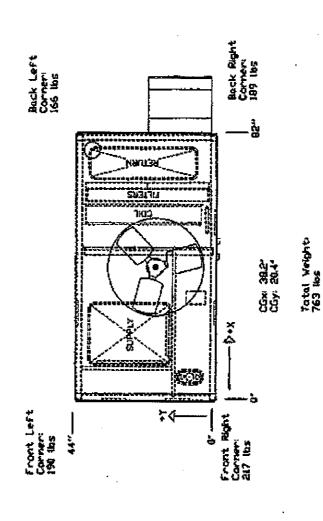


RQ-00009 NEW 03/18/10 SUS NOTE: ALL DIMENSIONS ARE IN INCHES

# RO CABINET VERTICAL AIR COOLED CONDENSING UNIT



RQ-603-8-V-CA01-212-0000-008-QJD-0A0-CDAFHBJ-00-00000000X



Declainers This weight extincts does not account for any SPAs.

# (AAON°)

### **Unit Submittai**

\$425 Feeth Yokes Are Tules, Oktobers 14107-2728 - 78, 0210-683-0266 Vist (810-583-6854 AAON Best 14cc - 1141-6876 8772)56-ARPHAYS

伪指形形 水子子 机硫酸 机磁铁 不多有的比较级 物理 计计算器数据数据

RQ-004-8-V-CA01-212:0000-00B-QJD-0A0-COAFHBJ-00-00000005x Tag: RTU-8 PHARMACY

Job Name: Job Number;	A851 Montgomery Road A351 Peat 980-00040585	Unit Submittel Por: Unit Submittel Date:	November DL 2010
Base Option	Description		
R Corfee	Roof Top Unit		
Q. Generation	Tests Generation		
004 Unit Size	, Four		
8 Voltage V Interior Protection	, 2000/13/2/60His	•	
E	. Varified Discharge and But	win	
C Refrigurant Style_	R-110A - Standard Efficien	<b>a</b>	
A Unit Configuration	Air-Cooled Count + Stat Eve	up, Coli	*
O Coll Coarles	Standard		
1 Cooling/Heat Pump Staying	1 Stage		
2 Heathus Type	Natural Oga Absadnisod		_ i
I Heating Designation	Rest 1 - 60 MBmh		_
2 Houdon Steeler	2 Stage		

	Antona Option	The region pains.
0	The SAFFA SERVER	From Tyde from MondA Oncologie y by Augusta
0		: <u>,                                   </u>
. 0	10. 3100 25mm	Name of Maria
. 0	1D. RA/EA Blower Motor	Standard None
0	, # 9A Control	Standard · Note
0	A Boat Options	Standard
B	& Maleteneres Options	115V Convenience Outles . Factory Wired
Q_	SA. SA Blower Configuration	1 Blower + Inverter Rated 3 Phase Motor + VVD act 8 42 HZ
J	SB. HA Blower	19" Direct Drive Backward Curved Planux
D	BCL SIA MOTOR	2 HP 1760 mp
į D	. M. Rediller Dree	Standard - Norm
A	_ SL Luft Mitor Lygo	学 Pleated ± 50% 数7.
0	#C. Pitog Options	<u>_Gendud</u>
Ç	. T. Refrigry tion Control	Fact Ording.
0	& Refriequation Options	
. <u>A</u>	2. Redrigoration Accessories	Bight Chang
F	12. Power Options	Pares Britch : 60 smps
H	1(. Safety Cotions	Romets Stacks Detector Terminals - Rield Installed Detector
B	12. Quatrole	Phase & Brown Gut Protection
] 3	14 Reported Controls	Factory Installed CPC Ministers 38AO Controls Formistical by AAON
0	34A. Probest Configuration	Renderd - None
0	14K. Probest Kiring	Biendurd - None
0	18. Circo Percent	Winder of No Wiship
1 0	Interior Califort Options	Standard - Double Wall + Rets From Ingulation + Stainless Sized Drain Fan
į O	17. Exterior Cabinet Options	Sanderd .
0	18. Customer Code	Sandard
1 0	I.E., Gode Quijen∗	Standard - ETL U.S.A. Liming
į ()	24 Crains	Standard
0	21. Water Cooled Cond.	Standard None
1 <u>9</u>	24. Control Vendore	Standark
<u> </u>	13. Tens	Regulal Price Authorization + AAON Gray Paint

### **Unit Rating**



2428 Suga, Yukun Are - Tuku, Okinkona 74107-2228 - Fr. (PAR SIS-2398 Fee 2023) 558-8084 AACAMEMBA Yer: 4 144 (200 8773)881-ASPS(AY)

以通信的 半年中 大海路 大麻蛇 下午午日日日日 沙田 医环状腺管试验器

RQ-004-8-V-CA01-212:0000-00B-QJD-0A0-COAFHBJ-00-00000000X Tag: RTU-8 PHARMACY

### Job Information

Job Neme:
Job Number:
Site Altitude:
Refrigerant

A351 Montgomery Road A351 Fret 060-00040308 OR.

### R-110A

### Static Pressure

External:	
Evaporator:	
Filtera Clean;	
Dirt Allowence	

0.50 in. cor. Cities we BOS LIL WE. 0.85 in. wg.

Gross

### Cooling Section

Total Capacity:	
Sensible Capacity:	
Letent Capacity:	
Mixed Air Temp:	
Enturing Air Temp:	
Ly Air Temp (Coff):	
Lv Air Temp (Unit)	
Supply Air Fun:	
SA Ran BPM ( Whiteh-	

47.85 46.20 MBH 88.82 37.16 MBH 9.03 **MBH** 79.26 T DB 65.00 °F WB 75.15 T DB 65.00 °F WB 53.10 T DB 53,09 °F WB 54.16 T DR 52.54 P WB 1 = RQ185-VFD @ 0.53 BHP 1229 / 8.000\*

Net

Symposator Coll: Evaporator Pace Velocity:

5.4 (N° / 3 Rour / 14 PP) 266.7 fpm

### AHRI Listing Information

Cooling Capacity (MBH)
Cooling SEER:
Cooling KKR:

Unit Flat

Compressor 1:

Supply Fare

47.5 14.6 12.5 11.6

### Application EER @ Op. Conditions: Eleci

Electrical Data	
Rating;	208/3/60

Calapatinan	1	0.09	208	
Cabinet Sound Power	r Levele*			
Octave Bande:	63	125	250	
Discharge LW(dB):	77	78	78	
Return LW(dB):	74	74	68	
"Seast power Freels are grown for info.	racional propuns a	ujy. The amount fepale	ans not promoterni.	

### Unit Information "WEIGHT AND PERFORMANCE DO NOT INCLUDE SPA

Appear. Op./Ship Weights:	
Supply CFM/ESP:	
Pinal-Filter FV / Qty:	
Outside CFM:	
Ambient Temperature:	

809 / 809 lbs.\*\* 1400 / 0.5 in. ug. 252.05 fp# / 2 350 32 T DB / 73 T WB

75 'F DE / 82 'F WE

0.00 in. uy. Респекция: G.18 In. W. Heating 0.08 fr. mg. Cabinet Totals 1.27 fr. mg.

### Heating Section

Return Temperature:

Std (No Preheat)
Not. Gen Heat
1400
48.6 MBH
1.0 DB / 1.0T WB
78.0 W DB / 62.0 W
56.5 "F DB / 51.4" F WB
88.6 °F DB / 63.6 °F WE
BOLO MIRH
1
60.0 MBH
N/A

83

68

ŔĐ

60

Minimum Circuit Aug: 27

208/3/60 24 Maximum Overvorrent 10 Qty HP VAC Phase RFH PLA RLA 208 18.7 Condanger Fans: 205 1075 2.6 7.5 1.3 2.00 208 3 1780 4000 508 1800 2000

71 69



# 18.5" STAR Pienum

AAONEMATY OF 4 184 (IN) STREET AND SALES OF

# JOB INFORMATION:

Job Name: A351 Montgomery Road Job Tag: RTU-8 PHARMACY Rep Firm:

11/06/2010

Date:

11/06/2010

# **OPERATING CONDITIONS:**

Air Flow: 1.400 CFM Static Pressure: 1.27 in. Wg. Boilef Dampers DP: 0.00 in. Wg. 1.37 in. Wg.

Site Altitude: TSP @ Sea Lavel: 0.00 Pt 1.87 in. Wg.

# FAN PERFORMANCE:

RPM: 1229 BHP: 0.53 Efficiency: 52.9% In/Out Velocity: / PPM Plenum Out Velocity: 29 F/PM

# WHEEL SPECIFICATION:

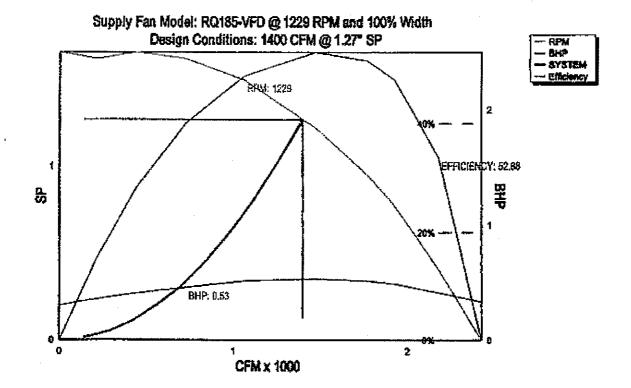
Max RPM: 2,200 Diameter x Qty: 18.5 in. x I CFM: 1400 5,952 FPM Tip Speed: 5,952 FPM Inertia:

# MOTOR SELECTION:

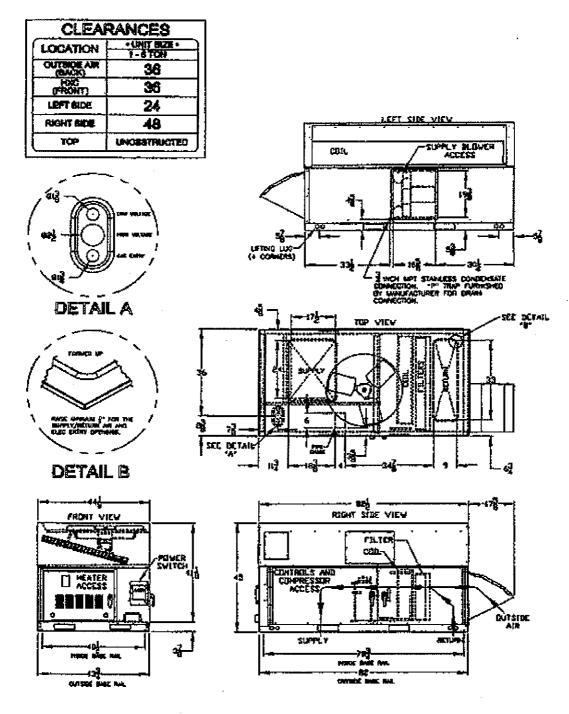
Rated HP / Bypass: 2 / No Frame Size: 48 1760 Nominal RPM: 208/3/60 VAC/PH/HZ: Efficiency Standard / 0.815 ODP Enciosure Type: 27 WR\* Max Inertial Load:

# FAN SOUND POWER (Inlet/Outlet):

Octave Band: (Re 10^-12 watte) 6 6 1 77 78 78 73 69 67 64 58 69 67 58 77 78 78 73 64 SOUND POWER A-Weighted: 78/78 dB



RQ CABINET STANDARD VERTICAL ~ 1-6 TON

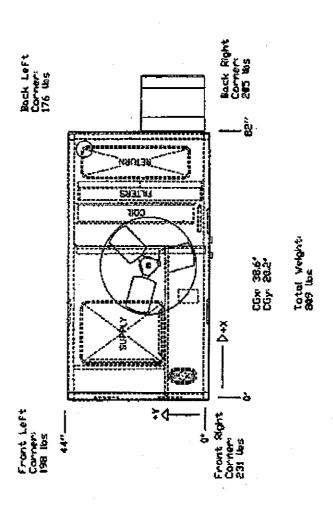


NO-00009 NEW 03/16/10 SJS NOTE: ALL DIMENSONS ARE IN INCHES

# VERTICAL AIR COOLED CONDENSING UNIT



RG-004-8-V-CA01-212:0000-00B-QJD-0A0-C0AFHBJ-00-00000000X



his weight esthate does not account for any SPAS.

# **Unit Submittal**

医锥形虫 医乳红 网络红 医静脉 计非非常比较级 网络 化压力保护器对效数

RQ-006-8-V-CB01-232:0000-00B-QJD-0A0-C0GFHBJ-00-0000000X Tag: RTU-9 OFFICES

Joh Na Job Nu		Adot Montgomery Boad ABS1 Past 050-06040506	Unit Suhmittel Por: Unit Suhmittel Date:	Nevember 96, 8810		
	Hase Option	Description				
R	Sories	Roof Top Unit				
Q_	்டேத்துஞ்டி	Testh Generation				
006	Bait Size	<b></b>				
8	Voltage	206V/9G/80H3				
. V	Interior Protestion	Yortical Discharges and Rat	uen			
<u>c</u>	_Reference Stole_	R-130A - Standard Conice	er .			
B	Unit Configuration	Air-Cooled Cond. + # Raw I	čvag. Coil			
0	Cold Coating	Standard				
1	Cooling Heat Pursy Staning	1 Stage		•		
3	Heating Typo	Netural Cas Altarizated				
3	Heating Designation	258 PM - 100 DED 1628				
2	: Hoating Startog	2 Store				

	Peature Option	Description
0	IA. RAMA Section	Manually Adjustable OA Opening + RA Opening
0	18. RAICA Blower Configuration	Blanderd - Mone
0	IC. RAEA Blower	Standard - None
0	. <u>10</u> 0, 12044 Migrae Moter	Ranfard - None
į. 0	A PAPAGO	Standard - None
0	_ S. Assigning	- Granderd
В	g. Salebourt og ere gapgi	118V Convenience Outlet - Partony Wired
]Q	, I the MAIN out - Designment on	1 Blower + Invertey Rated 3 Plane Motor + VED not @ 53 HZ
] ]	<ul><li>の場合を必要</li></ul>	19" Direct Drive Buckward Curved Pleman
D	<u> 55.7437acz</u>	1.11P.1790.ggg
0	<u>1 _= -                                  </u>	Standard Nove
Á	W. Col. Piter Type	,3" Planted - 30% RII
0	. C. Siter Online	Sandard.
Į C	7. Refrigiration Control	Fan Creling
. 0	. Refrigeration Options	Stenlard
[ G	. Refrigeration Accessmin.	PERI Condenser Pan - Multiple Speed + Sicht Clase
F	19. Power Option	Power Switch - 30 amps
H	11. Safety Options	Remote Stacker Detector Descriptule - Pick Installed Detector.
L B.	It. Controls	Phane & Bypen Got Protection
J	13. Sporiel Controls	Person Installed GPC Multifler 68AO Controls Purplemed by AAON
0	, 14A. Probest Configuration	Standard - None
0	14P. Prehent States	Stendard - Name
, 0	16. Clycol Parouge	Weller of No William
.0	14. Interior Cabinet Options	Standard - Couble Well + R-13 From Insulation + Stainber Stool Drain Fan
0	17. Exterior Cabinet Options	Exederd.
Į 0	, 15, Chapterney Code	Standard
0	19. Code Ontions	Standard - RTL USA Listing
0	20, Ocating	Standard
0	51, Water-Cooked Cond.	Reardaged - Nova
0	\$2. Copyrol Yearing	Standard .
X	H. Type	Special Price Authorization + AAON Gray Paint

# **Unit Rating**



2425 Raudh Yukoa Are - Taires, O'eldhama 74107-1718 - Ph. (211) 583-2210 Fee (311) 583-4824 AAONSandr Vee - 1 124 (511: 6772184-4958).VVI

RQ-006-8-V-CB01-232:0000-00B-QJD-0A0-COGFHBJ-00-0000000X

Job Information				Unit -wei	Information GHT AND PREFOR	MANC	Z DO NOT INCLU	de 9pa
Job Name: Job Number: SRe Alticude: Refrigerant		ionigemery R nei 040-0004		Suppl Final- Outsi Amble	st. Op.#Ship Weight: y CFM/23P: Piliter FV / Qty: de CFM: set Tomperature: n Temperature:	Ľ	907 / 907 lbs.** B020 / Q.& in. wg. 361.60 fpm / 2 506 92 W.DB / 72 *F 75 *F.DB / 62 *F	WB
Static Pressure								
External:	0.50 is.	wg.			animur:		0.00 in. wg.	
Evaporator:	0.55 (n.			Heati			0.22 in. wg.	
Filters Clean:	411 iz.			Cabin			0.06 in. wg.	
Dirt Allowance	0.35 in.	. 砂帽.		Total:			1.79 in. wg.	
Cooling Section				Heat	ing Section			
	Gross		Net	PreHe	at Type:		Std (No Prehent)	
Total Capacity:	78.85		72.19 MBH	Σ7 <b></b>	од Туре:		Mat. Gas Heat	
Sensible Copacity:	58.71		55.85 MBH		ne CFM:		2020	
Latant Capacity:	16941				Capacity:		81.0 MBH	
Mixed Air Temp:	79.25		65.00 'F WB	QA TV			1.0 DB / 1.0°F W.	R
Entering Air Temp:	78.25		65.00 °F WR	RA Te			150 TDB / 62.0	
Le Air Temp (Coil):	\$2.02 T		51,82 T WB	Suter	ing Air Tump:		64.5 F DB / 51.4	P WB
Le Aiz Temp (Unit) Supply Air Fan:	53.54		51.47 F WB	Lesvi	ng Air Pema.		98.6 T DB / 66.5	字 段
SA Pan RPM / Width:	1 = HQ. 1558 /	185-VFD	67 BMP	Input	7		100.0 MBH	
Evaporator Coll:					e Qty (Hi/Low); mastion:		1	
Esuporator Pace Velocity:	5.3 ft* / 584,8 fj	/ 6 Rotes / 14	PPI	Opera			100.0 MBH N/A	
AHRI Listing Informa	•••	P111		-				
Application EER 6 Op.	Conditions	t i	0.9					
Electrical Data								
Rating:	208/3/	60		Minis	sum Čircult Ámpt		38	
Unit FLA:	35			Maxir	MYN GARGITANE:		60	
	Qty	HP	VAC	Please	rpm	71A		
Compression 1:	1		308	8			22.4	
Condenser Fans:	1	0.333	208	Į.	1100	2.0		
Supply Fan:	1	2.00	308	3	1760	7.6		
Combustions	1	<b>90.0</b>	208	1	3000	1.3		
Cabinet Sound Power	Levele*							
Octave Bands:	63	125	250	550	1000	2000	4000	84
CASTAL DELICA:								
Discharge LW(dB); Return LW(dB);	83 27	87 76	84	79	12 62	60 50	67 56	+



# 18.5" STAR Pienum

2425 Testh Yolos Are- Toka, O's labous \$1107-2720 - Ph. (516) \$43 2546 Fex (916) \$53-5044 AACHEMAN Vota 164 (816 475) ph. (516 164 (816 475) ph. (516 475)

# JOB INFORMATION:

Job Name: A351 Montgomery Road Job Tag: RTU-9 OFFICES Rep Firm:

Date: 11/05/2010 11/05/2010

## **OPERATING CONDITIONS:**

Air Flow: 2,020 CFM
Static Pressure: 1.79 in. Wg.
Relief Dampers DP: 0.00 in. Wg.

TSP: 1.79 bs. Wg.
Site Altitude: 0.00 Pt
TSP 6 Sea Level: 1.79 is. Wg.

# FAN PERFORMANCE:

 BPM:
 1559

 BHP:
 1,07

 Efficiency:
 58.1%

 In/Out Velocity:
 / FPM

 Plenum Out Velocity:
 34 FPM

# WHEEL SPECIFICATION:

 Max RPM:
 2,200

 Diameter x Qty:
 18:6 in. x 1

 CFM:
 2020

 Tip Speed:
 7,651 FPM

 Inertia:
 7,551 FPM

# MOTOR SELECTION:

 Rated HP / Bypase:
 2 / No

 Frame Size:
 48

 Nominal RPM:
 1760

 VAC/PH/HZ:
 298/3/80

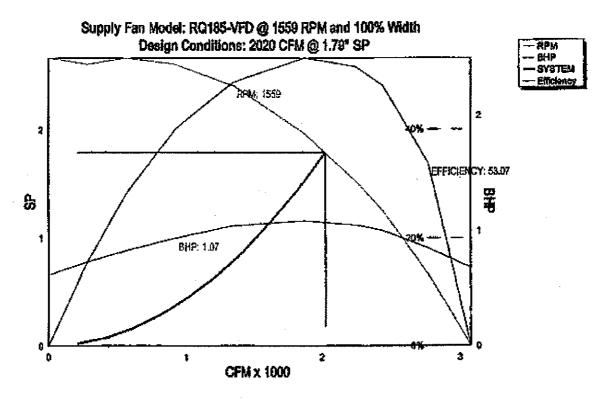
 Efficiency
 Standard / 0.815

 Enclosure Type:
 ODP

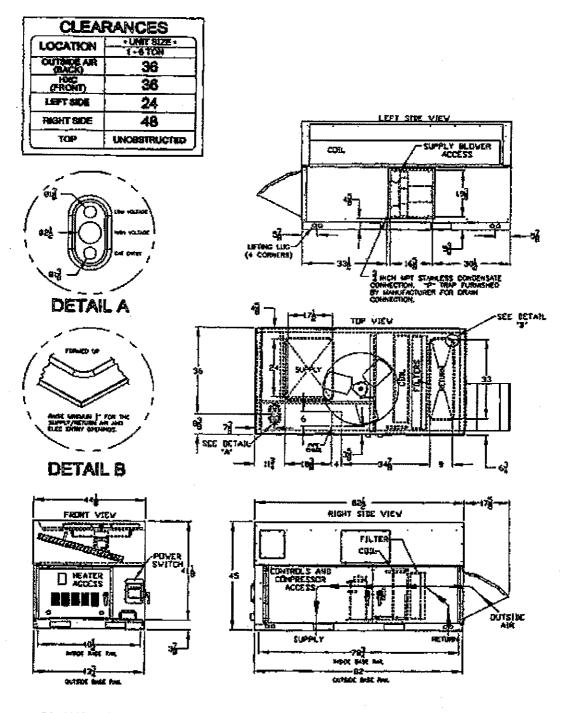
 Max Inertial Load:
 27 WR\*

# FAN SOUND POWER (Inlet/Outlet):

Octave Band: (Re 10^-12 watts) 5 8 8 71 31 75 7.7 65 83 82 84 76 78 71 65 23 89 84 81 SOUND POWER A-Weighted: 84 / 84 dB



# RQ CABINET STANDARD VERTICAL ~ 1-6 TON

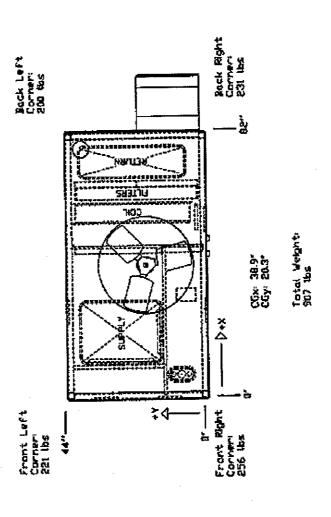


RO-COOCS NEW 03/16/10 SJS NOTE: ALL DIAZDISIONS ARE IN INCHES

# VERTICAL AIR COOLED CONDENSING UNIT RO CABINET



RQ-006-8-V-CB01-232:0000-00B-QJD-0A0-C0GFHBJ-00-66060000X



Disclaimer This weight estimate does not account for any SPAs. materialism attainmentations

# (AADN°)

# **Unit Submittal**

2435 South Yukow Are - Yukow Ohladamor 24107-2128- Ph. (930) 563-2266 Phr (568) 583-5084 AAGNEBAAM Von. 4.284 (598) 877-2184 ASP(81,877)

以表示的 光光子 网络名 网络名 计专业计算器 铁铁 医淋巴性神经神经病

RQ-002-8-V-CA01-212:0000-00B-QKD-GA0-COAFHBJ-00-00000000X Tag: RTU-10 CUSTOMER SERVICE

Job Name: Job Namber:		A351 Montgomery Road A351 Prot 060-09040505	Unit Submittal Port Unit Submittal Date:	Namember 06, 2010
	Baza Option	Description		
R	Series	Reof Sep Unit		
Q	Copyration	Tenth Concretion		
002	, Unit Sim	Tiro		
8	Voltage	2067/36/6065		
V	J Interior Protection	Vertical Discharge and Ri	<del>бэл</del> ч	
C	Bull-lement Stolo	R-1104 - Standard Paticio	ncy	
A	Unit Confermation	_Air-Cooled Coopl + Bid E	rap, Ça <u>il</u>	versit da v
0	Call Costing	Standard		
1	Cooling/Steat Pump Staping	1 Stage		
2	Heating Type	Natural Cast Alexandraised		
1	Senting Designation	First 1 - 80 MBmb		
2	Martin - Strains	7 Banns		

	មិនការ ទេស ម៉ា <b>ព្</b> កា <del>ខ្មែរន</del>	Total i pristage
0	Note of Ald Montplanning	The popular field are the OA Opening of the <b>Opening</b>
.0	Advantage of States (1975)	e (pare de la Marie
0	1, 201 CARRY States	Franchist Com
0	1D. RA/EA Blower Meter	Standard - Naso
10	. 2. CA Control	Standard - None
<u>o</u> .	. A Rost Options	Stanfard
B	4 Maintenance Options	115V Consenious Outlet . Factory Wired
Q.	5A SA Flower Configuration	I Blowery + Lawreter Rated I Place Motor + VVD act is 38 HZ
K	. AR. SA Player	19' Direct Drive Backward Curved Planup - 50% Width
l D	MC. SA Motor	2 HP 1760 mgg
10.	AA. Pro Filter Type	Standard - None
A_	. 48. Unit Pilter Tree	, 2º Plantad - 30% 2/I
0	SC. Filter Options	. Standard
C	J. Refrigoration Control	fig Celing
0	4. Befriespatten Options	Bundard
A	# Refrigeration Accomories	Sight Olim
F	19. Power Options	from Switch - 60 suppe
H	11. Sefety Optioni	Saunte Senies Detector Terminals - Field Installed Detector
B.	12, Controls	Phase & Rivery Out Protection
J	13. Special Controls	Factory Installed CPC Multifles 88AO Contacts Parnished by AAON
0	14A, Prohest Configuration	Standard - None
6	24B. Prebest fixtes	Standard - None
10	15. Classi Percent	Water or No WEIP
[ 0	18. Interior Cabinet Options	Standard - Double Wall + R-13 Fram Insulation + Stainless Steel Drein Pan
Į O	17. Enterior Calcinet Options	Standard
[ 0	16. Customer Code	Standard,
10		Standard - WTL SEA Liging
1.0	20. Craping	2 enderd
] 0	23. Water-Gooled Cond.	Standard - None
0	. 31. Corerol Vendora.	Standard
X	. SJ. Tyros	Special Price Authorization + AAON Gray Passt

# **Unit Rating**



2425 Santh Yehm Ave - Tulos, Obishora 24/07/2725 - Ph. (Bills 665-2266 Fra (Bills 657-2007) AZON ZAMUE Ver - 4 184 (SPA 6775) 54-ADESLAYS

法保护权 电流气 外海蛇 化海绵 人名西拉拉拉斯 淋漓 医闭口线动物机器 RQ-002-8-V-CA01-212:0000-00B-QKD-0A0-C0AFHBJ-00-00000000X Tag: RTU-10 CUSTOMER SERVICE

Unit Information

# Job Information

Jeh Name:	ASSI Montgomery Road
ABS Marine:	MARK MINISTER STATE
Job Number:	A357 Priet 060-00040508
Site Aidtude:	OΛ
Refrigerant	B 410A

# Static Pressure

External:	0.50 fm. edg.
Evaporator:	0.04 in. wg.
Fliters Cleam:	0.02 in. wg.
Dirt Allowance	0.35 in. wg.

## Cooling Section

	chant	TARP.
Total Capacity:	27.45	28.80 MBH
Sensible Capacity:	22.13	21.35 MBH
Latent Capacity:	5.31 MBH	
Mired Air Tempe	78.40 °F DB	86.52 P WB
Entering Air Temp:	78.40 T DB	64.42 °F WB
Le Air Temp (Coll):	82.85 *F DH	52, 33 °F WB
Ly Air Tomp (Unit)	58.24 °F DB	52.71 T WB
Supply Air Fan:	1 x RQ185D60-V	FD 6 0.25 BHP
SA Pap RPM / Width:	1:25 / 1 7502	

Evaporator Coll: Evaporator Face Velocity:

5.3 ft\* / 2 Rows / 14 FPI

152.4 fpm

# AHRI Listing Information

Cooling Capacity (MBH):	27.8
Cooling SEER:	15.2
Cooling BER:	18
Application EER & Op. Conditions:	11.8

# Ricctrical Data

TRACE PLANTON TAMAN								
Bating: Unit FLA:	208/8/60 17				um Circuit Am nun Overcurre			
	Qty.	HP	VAC 206	Phase 2	RPM	Pla	8.3	
Compressor 1:	<u> </u>	5 100	208		825	1.1	*1*	
Condenser Pane:	7	0.167		<u> </u>		7.5		
Supply Fac:	1	2.00	208	3	1760			
Combustions	1	0,00	208	1	8000	1.8		
Cabinet Sound Pow	er Levels*							
Ogiave Banda:	68	325	250	500	1080	2100	4606	8000
Discharge LW(dB):	73	24	74	67	62	80	<b>6</b> 5	50
Return LW(dB):	71	72	65	64	55	54	47	41
"Sound poster levels are given for in	ACCOUNTAGE OF SHARE	aria takan da karanta maka	tera need functioners	<u> </u>				

Appens. Op. Ship Weights: Supply CFM/BSP: Final-Filter FV / Qty: 800 / 0.5 in. tog. 144.00 fpm / 2 Outside CFM: 160 92 'F DB / 78 'F WB

\*\*WEIGHT AND PERFORMANCE DO NOT INCLUDE SPA

761 / 761 lbs.\*\*

Ambient Temperature: 75 T DB / 62 T WB Return Temperature:

0.00 in ug. Recognition. active up Reating: 0.01 in. mg. Cabinat: Total: LOO in ug

# Heating Section

Heating Section	
FraHeat Type:	Std (No Preheal)
Heating Type: Heating CFM:	Not. Gas Heat 800
Total Capacity:	48.4 MBH
OA Temp:	1.0 DB / 1.0°F WB
RA Temps	75.0 T DB / 41.0 T WB
Batering Air Temp:	69.2 °F DB / 63.7 °F WB
Lauving Alz Temp:	136.4°F DB / 78.7°F WB
Input:	60.0 MBH
Heater Qty (Hi/Low):	I
Consumption:	60.0 MBH
Operation:	H/A



# 18.5" STAR Plenum

2425 Small Yukon Arv - Units, Obishoose 74)37:2725 - Piz (2)36:548-2566 Fex (2)40:555 9334 AAO4(2)0432 Vor. 4 143 (2)36 9772194 ASPRESY)

# JOB INFORMATION:

Job Name: ASSI Montgomery Road
Job Tag: RTU-16 CUSTOMER
Rep Pirm: SERVICE
Date:

11/06/2010 11/06/2010

# **OPERATING CONDITIONS:**

Air Flow: 800 CFM
Static Pressure: 1.00 in. Wg.
Relief Dampers DP: 0.00 in. Wg.

TSP: 1.00 is. Wg.
Site Alritude: 0.00 Ft
TSP @ Sea Level: 1.60 is. Wg.

# FAN PERFORMANCE:

 RFM:
 1129

 BHP:
 0.26

 Efficiency:
 50.8%

 In/Out Velocity:
 / FPM

 Plenum Out Velocity:
 13 FPM

# WHEEL SPECIFICATION:

 Max RPM:
 2,200

 Diameter x Qty:
 12.5 in. x I

 CFM:
 500

 Tip Speed:
 5,488 FPM

 5,488 FPM
 5,488 FPM

## MOTOR SELECTION:

 Rated HP / Bypase:
 2 / No

 Frame Size:
 48

 Nominal RPM:
 1760

 VAC/PH/HZ:
 208/3/60

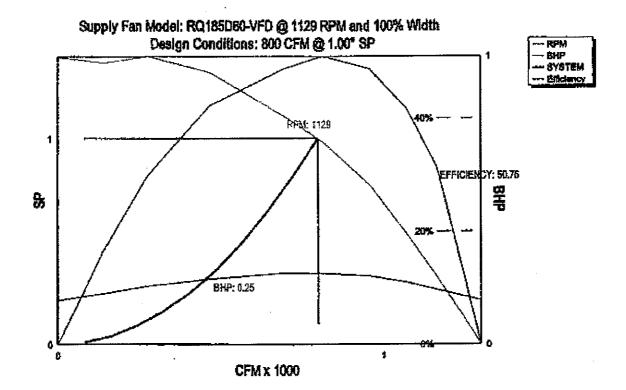
 Efficiency
 Standard / 0.815

 Enclosure Type:
 ODF

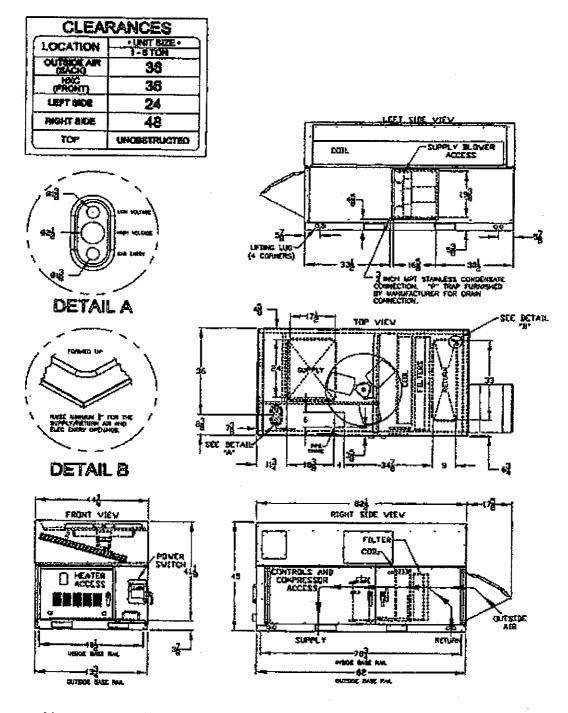
 Max Inertial Load:
 27 WR4

# FAN SOUND POWER (Inlet/Outlet):

(Re 10^-12 watts) Octave Band: Б I 2 54 88 59 74 74 89 65 73 74 68 65 63 59 72 74 SOUND POWER A-Weighted: 75 / 75 dB



RQ CABINET
STANDARD VERTICAL ~ 1-6 TON

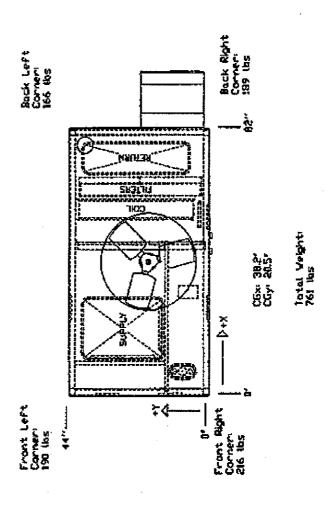


RO-00009 NEW 03/18/10 SJS NOTE: ALL DIMENSIONS ARE IN NICHES

# NERTICAL AIR COOLED CONDENSING UNIT



RQ-602-8-V-CA01-212:0000-00B-0KD-0A0-C0AFHBJ-00-00000000X



Disclaiment This weight estimate does not account for any SPAs.