

**OBION COUNTY BOARD of EDUCATION**

**CLASSROOM HVAC UPGRADES**

**SOUTH FULTON HIGH/MIDDLE SCHOOL**

**SPECIFICATION PACKAGE**

**AND BID FORM**

The Obion County Board of Education is now accepting bids on HVAC upgrades for five (5) classroom units located at South Fulton High/Middle School. Complete specifications are as follows:

Any questions or clarifications may be addressed to or to schedule a site visit:

Phil Graham  
Maintenance Supervisor  
Office phone 731-536-4226  
Cell phone 731-446-2139  
grahamp@k12tn.net

## **BIDDER REPRESENTATION**

Each bidder by submitting their bid represents that:

1. They have read and understand the project documents and their bid is based in accordance thereof.
2. A representative of the bidder has visited the site and familiarized themselves with the local conditions under which the work is to be performed.
3. Their bid is based upon the materials, systems and equipment described in the project documents without exception.

## **DEFINITIONS**

1. A bid is a complete and properly signed proposal to do the work or designed portion thereof for the sum stipulated therein supported by data called for by the bidding documents.
2. Base bid is the sum stated in the bid for which the bidder offers to perform the work described as the base, to which work may be added or deducted for the sums stated in the alternate bids.
3. An alternate bid is an amount stated in the bid to be added to or deducted from the amount of the base bid if the corresponding change in project scope, materials, or methods of construction described in the bidding documents is accepted.
4. A price is an amount stated in the bid as a price per unit of measurements for materials or services as described in the contract documents.

## **PROCEEDURES**

1. Bids are to be **submitted in duplicate**
2. Bidder may list any voluntary alternatives on a separate bid form.
3. All copies of the bid shall be enclosed in a sealed envelope. The envelope shall be addressed to the owner, and identified with the words "**BID ENCLOSED, Classroom HVAC Upgrades: South Fulton High/Middle School, Obion County Board of Education**" plainly written on the face thereof.
4. Bids are to be filled in by typewriter or manually in ink.
5. Bids are to be submitted to:  
OBION COUNTY BOARD of EDUCATION  
1700 NORTH FIFTH STREET  
UNION CITY, TN. 38261
6. Bids are to be received by February 25, 2015 at 11am.
7. Bids will be opened immediately thereafter, at the above location.
8. The owner retains the right to reject any or all bids,
9. It is the intent of the owner to award this project to the lowest reasonable bidder, provided the bid has been submitted in accordance with the requirements of this document, is judged to be reasonable, and does not exceed the funds available for this project.
10. Bids are to be signed by persons legally authorized to bind the bidder to a contract.

## **INSURANCE**

The successful bidder shall purchase and maintain insurance for the protection from claims which may arise out of or the result from the contractors operation as part of this project, whether such operations be by the contractor or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

1. Claims under workers or workmen's compensation, disability benefit or other similar employee benefit act.
2. Claims for damages because of bodily injury, occupational sickness or disease, or death of the contractors employees.
3. Claims for damages because of bodily injury, sickness, disease, or death of any person other than the contractors' employees.
4. Claims for damages insured by usual personal injury liability coverage which are sustained by any person as a result of an offense directly or indirectly related to the employment of such persons by the contractor or by any other person.
5. Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.
6. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

The insurance required above shall be written for not less than any limits of liability required by law.

## **GENERAL**

The owner shall supply necessary water and electricity for installation. The owner shall permit the use of toilet and wash-up facilities. If applicable to this project (owners discretion).

## **GENERAL CONDITIONS**

**OWNER:** The owner is the person or entity identified as such in the owner-contractor agreement and is referred to throughout as if singular in number and masculine in gender. The term owner means the owner or his authorized representative.

The owner shall furnish information or services under the owners control with reasonable promptness to avoid delay in the orderly progress of the work.

If the contractor fails to correct defective work or persistently fails to carry out the work in accordance with the contract documents, the owner, by written order signed personally or by an agent of owner, may order the contractor to stop work, or any portion thereof, until cause of such order has been eliminated.

If the contractor defaults, or neglects to carry out the work in accordance with the contract documents and fails within seven days after receipt of written notice from the owner to commence and continue such corrections, the owner may make good such differences. In such case an appropriate change order shall be issued deducting from payments then and thereafter due the contractor the cost of correcting such deficiencies.

The contractor is the person or entity identified as such in the owner-contractor agreement and is referred to throughout the contract documents as if singular in number and masculine in gender. The term contractor means the contractor or his authorized representative.

Unless otherwise provided in the contract documents, the contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for the proper execution and completion of work

The contractor shall at all times enforce strict discipline and good order among his employees, in particular while children are present.

The contractor warrants to the owner that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality. The warranty period shall be for one year from the acceptance of the completed work (unless otherwise specified). All extended warranties offered by the manufacturer shall be effective until such limits expressed by the manufacturer have expired.

The contractor shall pay all sales, consumer, use, and other similar taxes for the work or portions thereof.

The contractor, upon being awarded the contract, shall submit for the owner's information an estimated progress schedule for the work.

The contractor shall be responsible for all cutting, fitting, or patching that may be required to complete the work or to make its several parts fit together properly.

#### **PROJECT COMPLETION DATE**

The contractor, upon acceptance of his proposal will honor this project significant completion date of July, 31 2015. If the contractor is unable to comply with this completion date, without proper documented justification to the owner's satisfaction, he will forfeit payments not to exceed 1% (one percent) of the total proposal per day.

#### **PROTECTION OF PERSONS AND PROPERTY**

The successful contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work. The contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury, or loss to:

1. All employees on the jobsite
2. All the work, all materials, and equipment to be incorporated therein.
3. All other employees, students, and guest at the job site.
4. Other property at the site or adjacent thereto.

#### **QUALIFICATIONS:**

**“Contractor shall comply with Public Chapter 587 of 2007, as codified in Tennessee Code Annotated Section 49-5-413, which requires all contractors to facilitate a criminal history records check conducted by the Tennessee Bureau of Investigation and the Federal Bureau of Investigation for each employee prior to permitting the employee to have contact with students or enter school grounds when students are present.”**

## QUALITY ASSURANCE

The contractor shall have the experience of at least three (3) acceptable jobs in the United States within the past five (5) years. This work shall be in locations and conditions similar to those at Obion County Schools.

The contractor shall employ only qualified and experienced workers skilled in the work required for this project.

## CLEANUP

Refuse and debris accumulated from work is required as part of this project, shall be regularly removed from the job site by the contractor and before final acceptance of this project by the owner.

Successful bidder will be responsible for removal and proper disposal of any existing equipment being replaced, unless otherwise notified in writing by the owner.

## WARRANTY

The Contractor shall provide a minimum warranty as described in note #7 of equipment schedule for both outdoor units and indoor units, commencing with the date of final acceptance.

The warranty coverage shall not be pro-rated or limited to the amount of usage.

The warranty submitted must have the following characteristics:

1. Must warrant materials and workmanship
2. Must warrant that the materials installed meet or exceed the product specifications
3. Must have provisions to either make a cash refund or repair or replace such portions of the installed equipment materials that are no longer serviceable to maintain serviceable and useable equipment.
4. Must be a warranty from a single source covering workmanship and all self-manufactured or procured materials.
5. Guarantee the availability of replacement parts, equipment, and materials installed for the full warranty period.

## SUBMITTALS

Submit with bid:

1. Manufacturers data certifying compliance with these specifications

Submit upon notice of award

1. Certified list of existing installations, including owner representative and telephone number, attesting the compliance with quality assurance information.
2. A complete list of suppliers and sub-contractors, **especially if suppliers are different than those specified.**
3. Copies of insurance certificates
4. Verification of compliance with **TCA 49-5-413**

## UTILITIES

The successful bidder shall be responsible for the location of all utilities. Any utilities that have to be re-located or repaired as a result of this contract will be the responsibility of the contractor. The Board of Education shall be held harmless of liability in case of any damage

## **QUALITY STANDARDS OF INSTALLATION**

Upon completion of project, representatives of the Owner, Contractor, and Manufacturer prior to acceptance by the owner shall inspect the installation

**The use of "Brand names, Trademarks, and Professional Services" is to establish a minimum standard of quality.**

## **PAYMENT OF CONTRACT**

Payments of contract will be made as follows:

50% of contract sum will be made when materials are delivered and stored at the job site.

40% of contract sum will be made upon final acceptance by owner and factory representative.

10% of contract will be made upon delivery and acceptance by owner all closing documents including warranty papers.

## **SPECIAL REQUIREMENTS**

The operations performed under this contract shall be closely scheduled, coordinated and conducted in such manor and sequence to cause the least interference with normal flow of traffic. Work is not to inhibit the regular operations of school bus traffic unless coordinated with the owner and is to maintain proper access for any emergency and utility personnel.

## **ACCESS TO JOB SITE**

The owner will designate to the contractor means of access to the job site and for vehicle parking. The contractor shall instruct his personnel, sub-contractors and vendors accordingly.

Equipment and supplies may be stored at the job site in an area designated by the owner.

The owner will not be responsible for the security for materials stored on the job site and will not be responsible for any damages to materials or equipment used in the scope of work.

Any damages to the ground shall be corrected to the satisfaction of the owner.

## **SCHEDULE**

Upon notice of award, successful bidder is to supply a complete schedule for the scope of work.

## **LOCATION OF WORK**

**SOUTH FULTON HIGH/MIDDLE SCHOOL**

**1302 John C. Jones parkway**

**South Fulton, Tn. 38257**

**SITE VISIT**

A site visit will be required prior to submitting a bid for this project.

Bidder will be allowed to view all local conditions and shall submit a bid based on his observations.

Any questions and/or clarifications may be addressed to and to schedule a site visit

Please contact:

Phil Graham  
Maintenance Supervisor  
Obion County Board of Education  
Office (731) 536-4226  
Cell (731)446-2139  
[grahamp@k12tn.net](mailto:grahamp@k12tn.net)

## **SCOPE OF WORK**

It is the intent of the Board of Education to have five (5) classroom units replaced at South Fulton High/Middle School. The existing thru wall units currently in operation are to be replaced with up-graded split systems.

Work under this document is to include (but not limited to):

Furnish and install new air handlers w/filter box, new above ceiling discharge air duct w/ ceiling registers, outside air duct w/manual control damper, and new hot water coils. Existing isolation valves are to be left in place.

All refrigeration piping is to be type K refrigeration copper. All low pressure lines are to be insulated. All refrigeration circuits are to be properly evacuated and charged.

Outdoor units are to be placed on a provided concrete pad installed in courtyard.

Tear out and replace all piping required for hot water circuit.

Install new condensate drain line and pipe to closest field drain.

Install new insulated sheet metal cover for opening left from the thru wall unit removal.

This cover is to be installed from the inside. Outside air grill is to remain.

Obion County Board of Education will be responsible for:

Removal and disposal of existing units.

Construction of closet enclosures

High voltage wiring

Controls



## Bid Form

Date:

To: Obion County Board of Education  
1700 N. Fifth St.  
Union City, Tennessee 38261

From: (Name of Bidder)  
(Address of Bidder)  
(City, State, and Zip code)  
(Phone, Fax number, and e-mail address)

For: FIVE CLASSROOM HVAC UPGRADES, SOUTH FULTON HIGH/MIDDLE SCHOOL  
Obion County Board of Education  
Union City, Tennessee

The undersigned, as Bidder, hereby declares that the only person, or persons, interested in the Bid as principal or principals, is or are, named herein and that no other person than herein mentioned has any interest in this Bid or in the contract to be entered into; that this Bid is made without connection with any other person, company or parties, making a bid, and it is in all respects fair and in good faith without collusion or fraud.

The Bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the places where the work is to be done, that he has examined the drawings and the project manual for the work and the Bidding Documents relative to the Work to be performed and that this bid is based upon thereon, without exception.

The Bidder proposes and agrees, if this Bid is accepted, by request of either party, to contract with the Owner in the form of contract AIA Document A101, Published by the American Institute of Architects for Contractor and Owner, furnishing thereby all services, labor, and materials to complete the construction of the project in full and complete accordance with the noted, described, and reasonably intended requirements of the Contract Documents.

The Undersigned hereby affirms and states that the prices quoted herein constitute the gross total cost for the work involved in the respective items and that this cost also includes taxes, insurance, royalties, transportation charges, use of tools and equipment, superintendents, overhead, profits and other work, services, and conditions necessarily involved in the work done and the materials furnished, in accordance with the requirements of the contract.

The Bidder agrees that his bid may not be withdrawn for a period of 60 calendar days after the scheduled closing time for receiving bids.

Bids shall be filled in by typewriter or manually in ink.

Acknowledge receipt of the following Addenda to the Contract Documents

Addendum #1 \_\_\_\_\_ date \_\_\_\_\_

The bids shall be submitted in **duplicate**. All bids shall be enclosed in a sealed envelope. The envelope shall be addressed to the owner, and identified with the words **“BID ENCLOSED, FIVE CLASSROOM HVAC UPGRADES, SOUTH FULTON HIGH/MIDDLE SCHOOL, Obion County Board of Education”** plainly written on the face thereof.  
**Bids must be submitted by FEBRUARY 25, 2015 at 11am.**

Bidder further certifies that: (One must be checked)

All specifications are met as prescribed herein.

Alternate items and specs are attached and described as required herein.

Five classroom HVAC up-grades, South Fulton High/Middle School

The bidder agrees to perform all of the work described in the bidding documents for a lump sum price of:

\_\_\_\_\_ dollars.

(Written amount)

\$ \_\_\_\_\_

(Numerical amount)

REQUESTED ALTERNATES (N/A FOR THIS PROJECT)

Requested Alternate #1: Add \$ \_\_\_\_\_

(Description of alternate) Annual fee for Maintenance support and technical advice per year (5 year term)

VOLUNTARY ALTERNATE

Voluntary Alternate #1 Add \$ \_\_\_\_\_ Deduct \$ \_\_\_\_\_

(Description of alternate)

VOLUNTARY ALTERNATE

Voluntary Alternate #2 Add \$ \_\_\_\_\_ Deduct \$ \_\_\_\_\_

(Description of alternate)

The Bidder acknowledges by his signature below that the Owner reserves the right to reject any and/or all bids, especially any bids that appear to be irregular in nature or inconsistent in content. The bidder further acknowledges that the Owner has the right to evaluate bids and to accept any bid or bids which, in his opinion, may be in His best interest.

By: \_\_\_\_\_  
(Signature)

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Firm Name:

State of Incorporation

Contractors' License No.:

Expiration Date:

Tennessee ORI No. (If applicable)

**Obion County Board of Education**  
**Five classroom HVAC Upgrades**

Air Cooled Outdoor Condensing Units						
Tag	MBtuH Output	Ambient Temp	Voltage	MCA	MOCp	Model
CU 6-10	58.3	95	460/3	10.5	15	24ABB360

**Notes:**

1. Scroll Compressor
2. R 410A Refrigerant
3. 13 SEER
4. Internal Pressure Relief Valve
5. Internal Thermal Overload
6. Front Seating Service Valve
7. 1 Year parts and 5 year compressor warranty

Vertical Indoor Air Handler Units											
Tag	CFM	ESP	Motor H.P.	Total Cap	Sensible Cap	EAT	EWB	Voltage	MCA	MOCp	Model
FCU 6-10	2,000	.5"	1/2	58.3	43.4	95	67	460/3	1.1	15	BVE12

**Notes:**

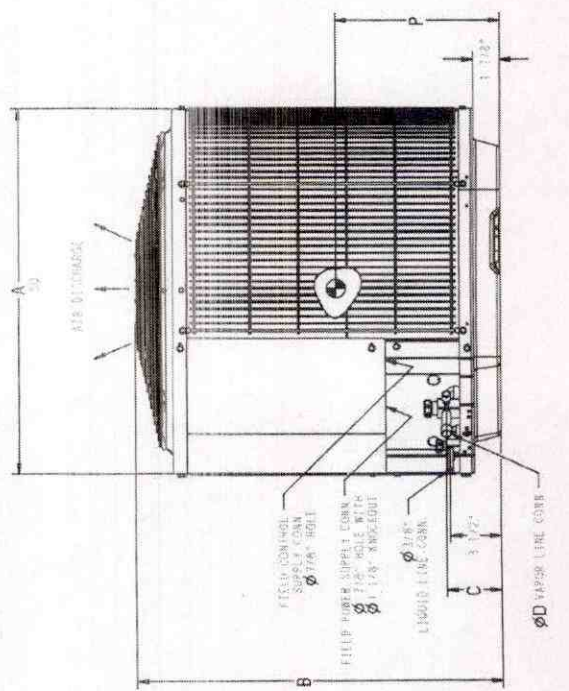
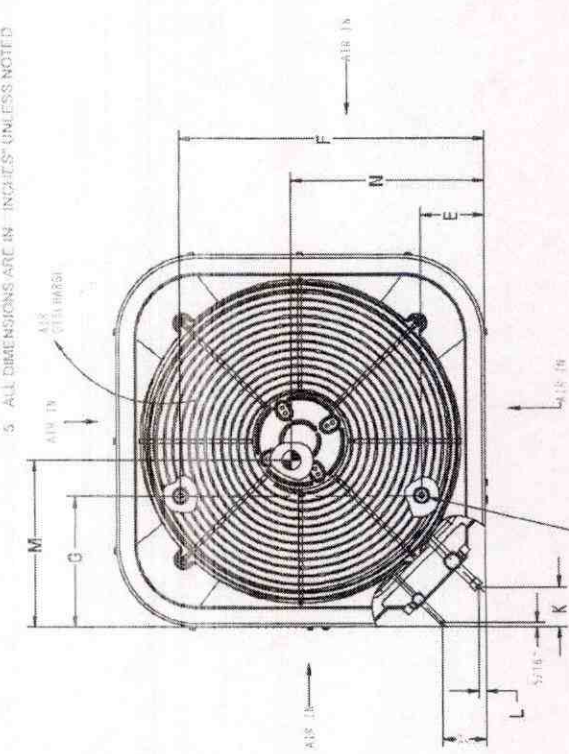
1. Belt Drive Blower Motor, Direct Drive Not Acceptable.
2. Draw Thru Fan.
3. 2 Row Hot Water Coil Internal to Unit in Preheat Position.
4. Units to include Factory Installed ETL Listed Motor Stop Station (disconnect Inluded).
5. Dimensions are 50"H x 22.3"D x 24" W. Height and width are not to be exceeded.
6. Provide an 3 extra filters and one extra belt upon completion.
7. Minimum of 2 Year Parts Warranty.
8. Each unit will require a 3 way valve for the Hot Water Coil. Model VT3327 Schneider Elec and a VG13A020 24 V Actuator.

24ABB3

**DIMENSIONS - ENGLISH**

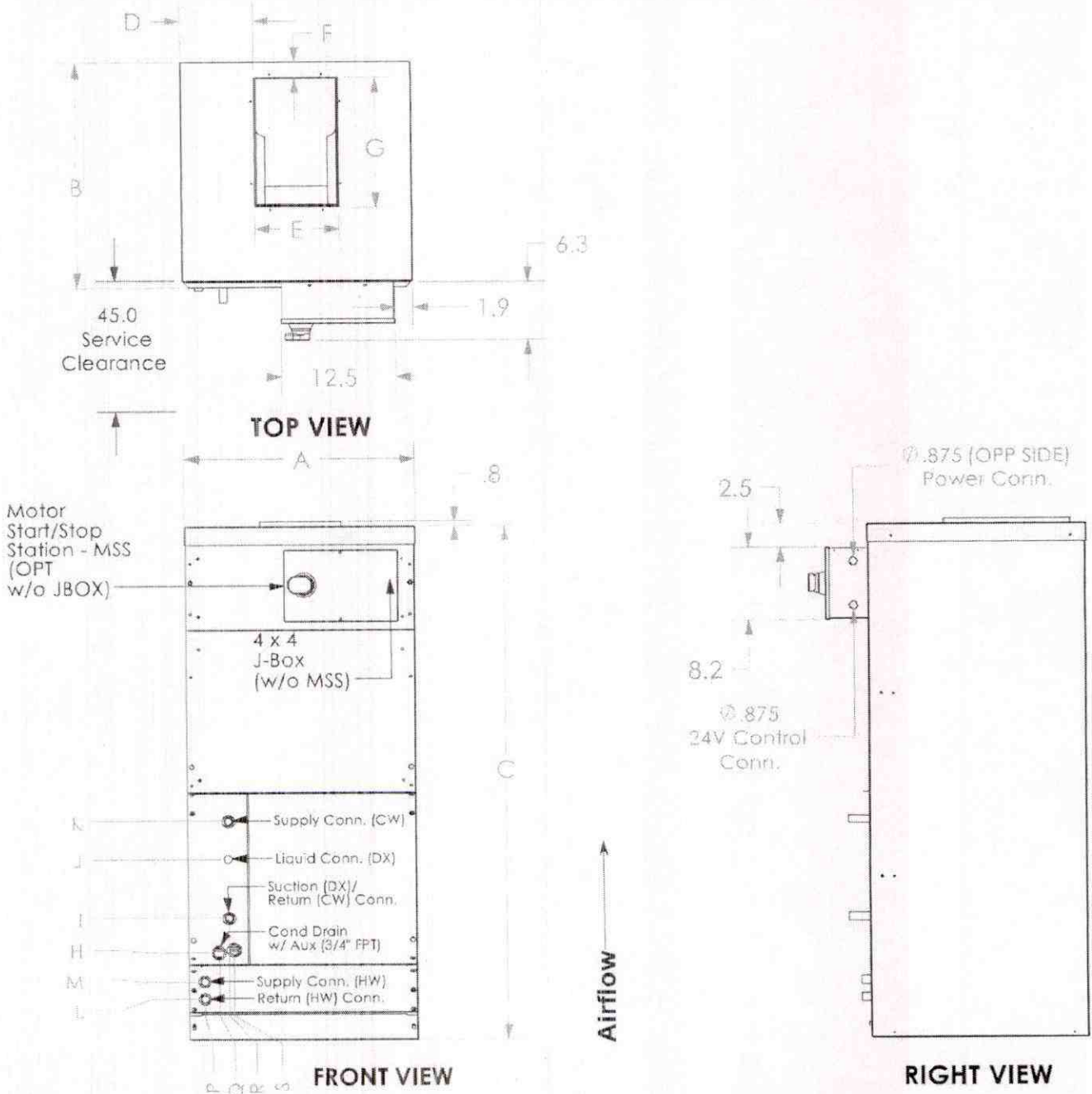
UNIT	SERIES	ELECTRICAL CHARACTERISTICS	A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (lbs.)	SHIPPING WEIGHT (lbs.)	SHIPPING DIMENSIONS (L x W x H)
24AB030E	1, 2	0, 0	23 1/8"	13 3/16"	3 3/4"	3 3/4"	3 3/4"	18 1/16"	13 3/16"	2 1/2"	1 1/2"	16 3/16"	15"	1 1/2"	984	116	24 1/2" x 17 3/8" x 13 1/2"
24AB030A	1	0	23 1/8"	13 3/16"	3 3/4"	3 3/4"	3 3/4"	18 1/16"	13 3/16"	2 1/2"	1 1/2"	16 3/16"	15"	1 1/2"	110	134	24 1/2" x 17 3/8" x 13 1/2"
24AB030U	1	0	23 1/8"	13 3/16"	3 3/4"	3 3/4"	3 3/4"	18 1/16"	13 3/16"	2 1/2"	1 1/2"	16 3/16"	15"	1 1/2"	110	134	24 1/2" x 17 3/8" x 13 1/2"
24AB030S	1	0	23 1/8"	13 3/16"	3 3/4"	3 3/4"	3 3/4"	18 1/16"	13 3/16"	2 1/2"	1 1/2"	16 3/16"	15"	1 1/2"	110	134	24 1/2" x 17 3/8" x 13 1/2"
24AB030C	0	0	23 1/8"	13 3/16"	3 3/4"	3 3/4"	3 3/4"	18 1/16"	13 3/16"	2 1/2"	1 1/2"	16 3/16"	15"	1 1/2"	110	134	24 1/2" x 17 3/8" x 13 1/2"
24AB030D	1	0	23 1/8"	13 3/16"	3 3/4"	3 3/4"	3 3/4"	18 1/16"	13 3/16"	2 1/2"	1 1/2"	16 3/16"	15"	1 1/2"	110	134	24 1/2" x 17 3/8" x 13 1/2"
24AB030G	1, 2	0, 0	31 3/16"	23 1/2"	5 7/8"	5 7/8"	5 7/8"	24 1/16"	19 1/8"	3 1/2"	2 1/2"	18 1/8"	15 1/2"	1 1/2"	148	174	31 3/8" x 23 1/2" x 15 1/2"
24AB030H	1	0	31 3/16"	23 1/2"	5 7/8"	5 7/8"	5 7/8"	24 1/16"	19 1/8"	3 1/2"	2 1/2"	18 1/8"	15 1/2"	1 1/2"	148	174	31 3/8" x 23 1/2" x 15 1/2"

- NOTES:
- ALLOW 24" CLEARANCE TO SERVICE END OF UNIT.  
48" ABOVE UNIT, 6" ON ONE SIDE, 12" ON REMAINING SIDE,  
AND 18" BETWEEN UNITS FOR PROPER AIRFLOW.
  - MINIMUM OUTDOOR OPERATING AMBIENT IN COOLING  
MODE IS 55°F. MAX. 125°F.
  - SERIES DESIGNATION IS THE 13TH POSITION OF THE  
UNIT MODEL NUMBER.
  - CENTER OF GRAVITY
  - ALL DIMENSIONS ARE IN INCHES UNLESS NOTED



UNIT SIZE	MINIMUM MOUNTING PAD DIMENSIONS
18, 24, 30	23 1/2" x 23 1/2"
36	26" x 26"
48, 60	33 1/2" x 33 1/2"
	35" x 35"

# BV 08-20 Preheat Unit



Unit Size	Width	Depth	Height	Supply Duct			Connection Location			
	A	B	C	D	E	F	G	H	I	J
08	22.3	24.0	50.0	6.9	8.5	3.0	11.8	9.3	12.5	17.6
12	22.3	24.0	50.0	6.9	8.5	3.0	11.8	9.3	12.5	17.6
16	25.1	24.3	56.5	8.0	9.1	1.6	13.9	9.4	13.2	19.8
20	29.5	26.0	59.5	8.4	12.6	1.3	13.9	11.7	15.6	24.1

Unit Size	Connection Location					Connection Sizes (OD)				
	K	L	M	P	Q	R	S	CW Supply Return	HW Supply Return	DX Liquid Suction
08	20.7	4.4	6.2	1.6	3.5	4.3	5.2	3/4 - 3/4	7/8 - 7/8	3/8 - 3/4
12	20.7	4.4	6.2	1.6	3.5	4.3	5.2	3/4 - 3/4	7/8 - 7/8	3/8 - 3/4
16	24.0	4.8	6.7	1.7	3.2	4.4	4.9	7/8 - 7/8	7/8 - 7/8	1/2 - 7/8
20	29.9	7.5	9.5	1.7	5.4	5.5	7.0	1 1/8 - 1 1/8	1 1/8 - 1 1/8	1/2 - 1 1/8