Request for Proposal

Two (2) New Air Handlers for
Building #36 located at 9924 Reese Blvd.

LUBBOCK REESE REDEVELOPMENT AUTHORITY (LRRA)
d/b/a/ Reese Technology Center (RTC)

The LRRA will receive written and sealed Proposals for two (2) new Liebert Air Handlers for Building #36 at 9924 Reese Blvd. per the following agreement. There will be a ***MANDATORY*** *PRE-BID CONFERENCE* at **10:00AM CST on Thursday, May 14, 2020** at 9924 Reese Blvd, Lubbock, TX. Sealed Proposals will be received until **I0:00AM CST, Thursday, May 28, 2020**, at LRRA. Proposals received after that date and time will not be opened. Each proposal and supporting documentation must be in a sealed envelope or container plainly labeled: "*RFP for Two (2) New Air Handlers for Building # 36 "*. Bid proposals are to include the Contractor's company name and address on the front of the envelope or container. Questions regarding the bid proposals and all bid submissions are to be addressed to:

Chris Evans, Manager of Operations
9801 Reese Blvd., Suite 200
Lubbock, Texas 79416
(806) 885-6592
Email: cevans@reesecenter.com

Bids will be opened and evaluated on **Thursday May 28, 2020 at 10:00AM CST**. However, bids must be firm for a 30-day period from bid opening date in case the Board of Directors desires additional evaluation time. Bid will be awarded on **Wednesday June 24, 2020 at 7:30AM CST**.

With uncertainty of mail delivery, the RTC cannot be responsible for bids which are not received before bid opening hour.

In as much as comparison sheets are sent to all bidders and posted to the RTC website, bid quotations will not be communicated by telephone. Interested bidders are encouraged to attend the bid opening should they desire quotations.

RTC reserves the right to accept or reject any or all bids submitted and shall be the sole judge in this matter.

RTC is exempt from all city, state, and federal sales tax. Your signed and otherwise correctly completed sealed bid (one copy only) should meet the following specifications or RTC may, at its option, refuse to consider the bid.

It is to be understood that upon the award of this bid the successful bidder(s) is/are responsible for complying with the Prompt Payment Act, effective July 1, 1986 (Government Code CHS. 2251.001-2251.043)

Vendors are required to have and maintain, at no cost to RTC, insurance of the types and amounts as required by law and/or the bid specification.

In those instances where manufacturer and/or model numbers of equipment/materials are referenced as “equal in quality”, it is not RTC’s intent to rule out other manufacturers, nor will the named

manufacturer receive preferential treatment. RTC is the sole judge in determining the suitability of items bid.

Should vendors have deviations from bid specifications, all deviations must be listed on a self-scribed attachment. This attachment must also be signed by an authorized company representative and be attached to the vendors original bid.

RTC is subject to the Texas Public Information Act, Chapter 552, Texas Government Code. Proposals submitted to RTC in response to this RFP are subject to release by RTC as public information. If the Proposer believes that the proposal, or parts of it, are confidential, as proprietary information, (s)he must specify that either all or part is excepted and provide specific and detailed justification for its claim of confidentiality. Vague and general claims to confidentiality are not acceptable. All proposals or parts of the proposals which are not marked as confidential will be considered public information after contract has been awarded. The successful proposal may be considered public information even though parts are marked confidential.

RTC assumes no responsibility for asserting legal arguments on behalf of Proposers. Proposers are advised to consult with their legal counsel concerning disclosure issues resulting from this proposal process and to take precautions to safeguard trade secrets and other proprietary information.

REQUIREMENTS

- Company to be established in business for a minimum of five years. Three business references are to be provided to LRRA with the bid proposal (RFP).
- “Attachment A” Specifications and Scope of Work
- “Attachment B” BID FORM
- “Attachment C” Site Map
- “Attachment D” Liebert Spec Sheets
- Access to Website: www.ReeseCenter.com, where all applicable documents and drawings are located (www.ReeseCenter.com/rfp-docs)
- Contractor to provide Certificate of Insurance with the bid proposal to RTC. Contractor to carry Worker’s Compensation Insurance and Contractor's Public Liability in the amount of one million ($1,000,000) and Property Damage and Loss Insurance, if contractor has any employees working with him / her on the job, otherwise the Workers Compensation is not required. All employees of contractor working at the RTC under this contract must be covered by Contractors' Workers Compensation Insurance.

ATTACHMENT A

Specifications and Scope of Work

Two (2) New Air Handlers for Building # 36

PART 1 GENERAL

1.01 DESCRIPTION

A. The Reese Building #36 is located at 9924 Reese Blvd. Lubbock, TX 79416. Chris Evans, Manager of Operations (MOO) is the Owner's Representative and may be contacted regarding any questions or for a pre-bid job site inspection at (806) 549-9699.

B. The project consists of removal and replacement of two (2) air handler units located inside of Building # 36

The new units are to be Liebert CW060 indoor cooling units

1.02 EXTENT OF WORK

A. Provide all labor, materials, tools, equipment, and supervision necessary to complete the installation of the two (2) new air handlers including all needed chilled water piping and connections as specified herein and as indicated on the drawings in accordance with the manufacturer's most current specifications and details.

B. The mechanical contractor shall be fully knowledgeable of all requirements of the contract documents and shall make themselves aware of all job site conditions that will affect their work.

C. The mechanical contractor shall confirm all given information and advise the MOO, prior to bid, of any conflicts that will affect their cost proposal.

1.03 SUBMITTALS

A. Prior to starting work, the mechanical contractor must submit the following:

1. A sample of the manufacturer's warranty.

2. Schedule for install of each new unit to allow the other existing units to still operate

3. Schedule of values for the entire project

B. Upon completion of the installed work, submit copies of the manufacturer's final inspection to the MOO prior to the issuance of the manufacturer's warranty.

1.04 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to the job site in the manufacturer's original, unopened containers or wrappings with the manufacturer's name, brand name and installation instructions intact

and legible. Deliver in sufficient quantity to permit work to continue without interruption.

B. Comply with the manufacturer's written instructions for proper material storage.

1. Store units in a dry, cool, shaded area in the original undisturbed plastic.

2. Store curable materials (adhesives and sealants) between 60°F and 80°F in dry areas protected from water and direct sunlight. If exposed to lower temperature, restore to 60°F minimum temperature before using.

3. Store materials containing solvents in dry, well ventilated spaces with proper fire and safety precautions. Keep lids on tight. Use before expiration of their shelf life.

C. Any materials which are found to be damaged shall be removed and replaced at the contractor’s expense.

1.05 WORK SEQUENCE

A. Schedule and execute work to prevent leaks and excessive traffic in the building. Care should be exercised to provide protection for the interior of the building and to ensure water does not flow beneath the raised floor area

1.06 USE OF THE PREMISES

A. Before beginning work, the mechanical contractor must secure approval from the building owner's representative for the following:

1. Areas permitted for personnel parking.

2. Access to the site.

3. Areas permitted for storage of materials and debris.

4. Areas permitted for the location of cranes, hoists and chutes for loading and unloading materials to and from the building

1.07 EXISTING CONDITIONS

A. The building is a functioning data center and must always remain operational. The chiller units are located outside and piped in beneath the raised floor in the center. The existing racks and cages within the data center cannot be relocated during the install process

If discrepancies are discovered between the existing conditions and those noted on the drawings, immediately notify the owner's representative by phone and solicit the manufacturer's approval prior to commencing with the work. Necessary steps shall be taken to make the building operational while issues are resolved

1.08 PRECONSTRUCTION CONFERENCE

A. A pre-bid meeting will be held at the job site at 9924 Reese Blvd. on Thursday, May 14, 2020 at 10:00 AM CST. Contact the owner's representative, Chris Evans, Manager of Operations (MOO), at (806) 549-9699 if there are any questions.

B. Prior to bid submittal, the mechanical contractor should schedule a job site inspection to observe actual conditions. The job site inspection may occur on the day of the pre-bid meeting or prior to such a meeting. Should access to the building be necessary before or after the pre-bid meeting, the contractor must contact the owner's representative, to coordinate an appropriate time.

C. Bids must be received at the following address no later than 10:00 AM on Thursday, May 28, 2020: **Reese Technology Center, ATTN: Chris Evans, 9801 Reese Blvd, Ste. #200, Lubbock, TX 79416**.

D. Any conditions which are not shown on the shop drawings should be indicated on a copy of the shop drawing and included with bid submittal if necessary, to clarify any conditions not shown.

1.09 TEMPORARY FACILITIES AND CONTROLS

A. Temporary Utilities:

1. Water, power for construction purposes, and lighting are available at the site and will be made available to the mechanical contractor.

2. Provide all hoses, valves, and connections for water from a source designated by the MOO when made available.

3. When available, electrical power should be extended as required from the source. Provide all trailers, connections, and fused disconnects.

B. Temporary, Sanitary Facilities

1. Sanitary facilities are available at the job site.

C. Building Site:

1. The mechanical contractor shall use reasonable care and responsibility to protect the building and site against damages. The contractor shall be responsible for the correction of any damage incurred as a result of the performance of the contract.

2. The mechanical contractor shall remove all debris from the job site in a timely and legally acceptable manner so as to not detract from the aesthetics or the functions of the building.

D. Security:

Obey the owner's requirements for personnel identification, inspection, and other security measures.

1.10 JOB SITE PROTECTION

A. The mechanical contractor shall adequately protect building, paved areas, service drives, lawn, shrubs, trees, etc. from damage while performing the required work. Provide canvas, boards, and sheet metal (properly secured) as necessary for protection and remove protection material at completion. The contractor shall repair or be responsible for costs to repair all property damaged.

B. Do not overload any portion of the building, by either use of or placement of equipment, storage of debris, or storage of materials.

C. Protect against fire and flame spread. Maintain proper and adequate fire extinguishers.

D. Store moisture susceptible materials above ground and protect with waterproof coverings.

E. Remove all traces of piled bulk material and return the job site to its original condition upon completion of the work.

1.11 SAFETY

The mechanical contractor shall be responsible for all means and methods as they relate to safety and shall comply with all applicable local, state and federal requirements that are safety related. **Safety shall be the responsibility of the mechanical contractor.** All related personnel shall be instructed daily to be mindful of the full-time requirement to maintain a safe environment for the facility's occupants including staff, visitors, customers and the occurrence of the general public on or near the site.

1.12 WORKMANSHIP

A. All work shall be of highest quality and in strict accordance with the manufacturer's published specifications and to the building owner's satisfaction.

B. There shall always be a supervisor on the job site while work is in progress.

1.13 QUALITY ASSURANCE

A. Unless otherwise noted in this specification, the mechanical contractor must strictly comply with the manufacturer's current specifications and details.

B. The air handler system must be installed in compliance with shop drawings as approved by the manufacturer. The mechanical contractor shall be thoroughly experienced and, upon request, be able to provide evidence of having at least five (5) years successful experience installing air handler systems.

C. Provide adequate number of experienced workmen regularly engaged in this type of work who are skilled in the application techniques of the materials specified.

D. There shall be no deviations made from this specification or the approved shop drawings without the prior written approval of the MOO. Any deviation from the manufacturer's installation procedures must be supported by written certification on manufacturer's letterhead and presented for the MOO's consideration.

1.14 JOB CONDITIONS, CAUTIONS, AND WARNINGS

Refer to manufacturer's recommended specification for General Job Site Considerations.

A. Safety Data Sheets (SDS) must be on location at all times during the transportation, storage and application of material.

1.15 WARRANTY

A. Evidence of the manufacturer's warranty reserve shall be included as part of the project submittals for the MOO's approval.

PART 2 PRODUCTS

2.01 GENERAL

A. Unless otherwise approved by the MOO and accepted by the air handler manufacturer, all products (including adhesives, insulation, fasteners) must **comply with the manufacturers recommended specifications.**

2.02 ADHESIVES, CLEANERS, AND SEALANTS

All products shall be furnished by suppliers that comply with manufacturer's requirements and specifically formulated for the intended purpose.

PART 3 EXECUTION

3.01 GENERAL

A. Comply with the manufacturer's published instructions for the installation of the air handler system.

3.02 CLEAN UP

A. Perform daily clean up to collect all wrappings, empty containers, paper, and other debris from the project site. Upon completion, all debris must be disposed of in a legally acceptable manner.

B. Prior to the manufacturer's inspection for warranty, the applicator must perform a pre-inspection to review all work and to verify all flashing has been completed as well as the application of all caulking.

END OF SPECIFICATION

Attachment B

BID FORM

(2) new Air Handlers for Building #36

Date: _____ 2020

Reese Technology Center
9801 Reese Blvd., Suite 200
Lubbock, Texas 79416

Gentlemen:

The undersigned, having carefully examined the specifications, drawings, and related documents entitled:

Reese Technology Center
Air Handlers for Building #36
9801 Reese Blvd, Ste. #200
Lubbock, Texas 79416

All as prepared by Reese Technology Center 9801 Reese Blvd. Suite 200, Lubbock, Texas, 79416 as well as made an on-site inspection of the premises and all other conditions affecting the cost and/or execution of the work, proposes to furnish all materials, labor, and equipment necessary to complete the work in accordance with said documents, of which this bid is a part, for the following sum:

I. BASE BID: _____Dollars ($_____)

We have included, in the Bid sum all contingency allowances.

(Note: All amounts shall be shown in both written and figure form. In case of discrepancy between the written amount and the figure, the written amount will govern.)

The undersigned acknowledges receipt of addenda to the Drawings and Scope of Work as follows:

No. Date No. Date No. Date_____ _____

No. Date No. Date No. Date _____

(The Bidder is to fill in I.D. Number and date of each thereby acknowledging receipt of Addenda). If awarded the contract, the undersigned agrees to commence work under this contract on or before a date to be specified in Written Notice to Proceed, within _____ (Bidder to fill in days) calendar days from said commencement date, unless modified by change order.

If notified of the acceptance of this bid within thirty (30) days of the time set for the opening of bids, bidder agrees within ten (10) days of notification, to execute a Contract Agreement between Owner and Contractor Where the Basis of Payment Is a Stipulated Sum

It is understood that the Owner reserves the right to accept or reject any and all Bids and to waive all formalities in accordance with State law.

Reese Technology Center
New TPO Roof for Building #540

Respectfully Submitted,

By: _____

Title: _____

Business Address with Zip Code (SEAL: If Bid is by Corporation)

_____

_____

Telephone Number with Area Code_____

FAX Number with Area Code_____

Fill in the applicable information:

A Corporation, chartered in the State of _____.

Authorized to do business in the State of Texas.

A Partnership, composed of_____, and

_____and_____.

An individual operating under the name of_____.

Corporate Seal:

END BID FORM


Building #36
in Reese Technology Center
9924 Reese Blvd.
Legend
Building 36
Building 36
N Davi
3rd Dr
2nd Dr
4th Dr
5th Dr
Eisenhower Dr
Fillmore Dr
Ford Dr
10th Dr
9th Dr
8th Dr
7th Dr
Gilbert Dr
N Reese Blvd
S Reese Blvd
Hoover Dr
Research Blvd
309
Google Earth
© 2020 Google
1000 ft
N

VERTIV.

Liebert®

CW™

26-181kW

Chilled Water Cooled Precision Air Conditioning For Data Centers

AHRI CERTIFIED®
www.ahridirectory.org
Datacom Cooling
AHRI Standard 1360

A Chilled Water Precision System That Handles The Most Demanding Conditions

Based on the historically reliable design of the Liebert® Deluxe System/3, the Liebert CW™ continues this reputation for dependability, and improves upon the design with energy saving upgrades. The Liebert CW chilled water based precision cooling system is specifically designed to handle the high heat loads generated by computers and other electronic equipment, using an existing building chiller as a source of chilled water cooling.

Built to the highest specifications in the industry with proven components and design, the Liebert CW is ideal for critical applications including:

- Data centers
- Telecommunications central switching offices
- Industrial process control centers
- Laboratories
- Medical facilities

THE INDUSTRY'S PREMIER CHILLED WATER SYSTEM

Flexibility

- Provides a complete environmental control package, including both precision air conditioning and humidity control.
- Both upflow and downflow configurations are available to cover raised floor and non-raised applications.
- Liebert iCOM control system brings high-level supervision to multiple units, allowing them to work together as a single system to optimize room performance.

Higher Availability

- Designed with the highest quality components selected for their proven reliability and performance.
- Provides around-the-clock operation to protect critical installations.
- Operates with a high sensible heat ratio, assuring that proper humidity levels will be maintained.
- Liebert iCOM control system adds automatic sequencing of components to even wear and extend service life.

Lowest Total Cost of Ownership

- Uses existing building chilled water systems to provide cooling.
- Higher efficiency fan options include EC Plug Fan on larger downflow models and variable speed drive centrifugal fans available on all models.

EC Plug Fans are available on downflow models Shown in underfloor configuration.

Service Solutions

Liebert Services capabilities can increase the availability of your precision cooling equipment by reducing downtime due to component failure. This is especially valuable to companies who do not have a dedicated technician on-site to troubleshoot equipment. Field service is provided by a nationwide network of locally-based, factory-trained technicians for installation, support and maintenance of Liebert precision environmental products. Liebert Services offerings include warranty service, emergency coverage and preventive maintenance. We also offer an environmental equipment site management program that creates a customized solution for your site by offering a single point of contact for your service needs.

A Choice Of Configurations

More Configurations to Fit More Applications

High performance, sensitive electronic equipment requires precise, reliable control of room temperature, humidity and airflow for proper operation. Liebert® CW™ meets these needs for environmental control in computer dependent operations. It is available in sizes from 26-181kW, and in airflow configurations to meet unique applications.

Downflow Supply

Designed for raised-floor applications, the downflow air supply configuration is commonly found in data centers and other similar facilities housing sensitive electronic equipment.

EC Plug Fans — Under Floor Configuration

With EC Plug Fans below unit in raised floor space, the system is 30 percent more energy efficient than centrifugal blowers, while providing more efficient airflow.

EC Plug Fans — In-Unit Configuration

Designed for applications with limited under floor space, the fans are located within the Liebert CW unit itself. This configuration provides significant energy savings over standard centrifugal fans.

Centrifugal Fans With Variable Speed Drives

Variable speed fans are located within the Liebert CW unit. This option offers considerable savings over standard fans, and is available for both upflow and downflow system configurations.

Top Front Supply With Plenum & Grille And Front Return

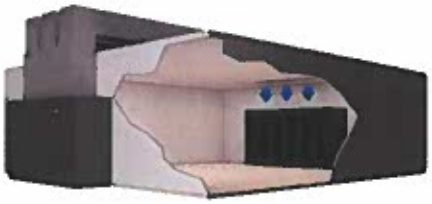
In-the-space applications without ductwork, such as Telecommunications, Networks and Switching Centers, benefit from this economical configuration Optional high filtration may be desirable.

Top Front Supply And Front Return

Engineered for in-the-space applications utilizing duct work, this airflow design is commonly used for Telecommunications or Industrial applications. High static pressure and filtering options may be selected.

Top Rear Supply And Rear Return

Designed for use in out-of-space applications, this configuration is typical for Industrial Processes such as Control Rooms, and Labs. Many of these sites will select a higher static pressure and optional high efficiency filters. (Customer ducted supply and return)



Top Front Supply With Plenum & Grille And Bottom Return

Specifically designed for use in raised floor, in-the-room applications, this configuration takes advantage of typical computer room construction. Additional filtering may be requested to protect sensitive computers and peripherals.

Economical Chilled Water Systems

By taking advantage of your existing central air conditioning chiller, the Liebert® CW™ provides economical, durable cooling and humidity control around the clock, throughout the year.

The Liebert CW chilled water system offers rugged, yet affordable cooling and humidity control where a central water chiller is available as a year-round cooling source. In these applications, a single chiller can be used for multiple air conditioning units, providing savings on additional heat rejection components.

The full line of Liebert chilled water systems use Liebert iCOM microprocessor-based controls to maintain precise temperature and humidity levels, while the cooling hardware is designed and built for continuous, trouble-free operation.

More Cooling Capacities

Available in ten cooling capacities, with either upflow or downflow configurations.

Chilled Water Control Valve

The chilled water valve provides proportional control action in response to room temperature and humidity as sensed by the microprocessor control. It includes operating linkage and electronic motor. Unlike other systems of this nature it requires no over-travel linkage or end switches to be adjusted. The control uses "intelligent logic" to eliminate valve hunting, thus greatly increasing the life of the valve. The valve can be a 3-way or 2-way to meet the appropriate requirements of the installed system.

EC Plug Fans in underfloor configuration (available on downflow models)

EC Plug Fans in-unit configuration (available on downflow models)

Every Feature Contributes To Absolute Reliability

When the demand is for around the clock operation, you simply can't take shortcuts. Liebert® CW™ is designed with robust components that operate reliably under the most demanding conditions, ensuring uptime for sensitive electronics in critical applications.

Fans And Motors

Clean, even air distribution is supplied by large capacity fans, which are balanced to minimize vibration. The fans draw filtered air through the system. An EC Plug Fan option is available for Liebert CW downflow models.

Draw-Through Airflow

The fans draw air evenly and at low velocity through the cooling coil, reheat and humidification systems. The result is fat less turbulence with superior efficiencies in heat transfer. Clean air at the right temperature and humidity is fed positively and evenly into the room.

Premium efficiency centrifugal fans, and optional Variable Speed Drive fan motors, are available on all models

A-Frame Coil

This Liebert designed and manufactured A-Frame coil features a large face area/ low face velocity design for maximum cooling and even air distribution.

Infrared Humidifier

The infrared humidifier design consists of quartz lamps mounted above a stainless steel water reservoir. The lamps never come in contact with the water. When humidification of room air is required, infrared rays generate water vapor—without impurities or odor, within seconds.

Liebert® iCOM™

Optimizing Cooling System Performance For Efficiency And Energy Savings

The Liebert iCOM control system offers a variety of advantages:

- Saves energy using predictive humidity control.
- Built-in lead/lag functions for enhanced system reliability.
- Wellness calculation alerts service personnel before problems occur.
- Unit-to-unit communications allows teamwork settings to keep multiple units working together to optimize energy efficiency.

Liebert iCOM At A Glance

The Status menu shows setpoints, environmental conditions, operational status, alarm conditions and system health.

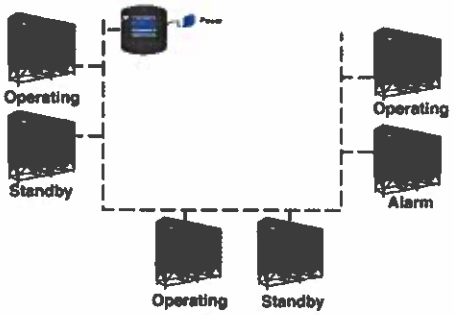
- Graphical view
- Simple view
- Display icons
- Access levels—user, service, advanced
- Help menu layout
- Temperature and humidity graphs
- Online help menus

Small Graphic Display Model

The Liebert iCOM with small display has a 128 x 64 dot matrix screen that simultaneously shows two menu icons, along with descriptive text. This display is capable of controlling only the unit it is directly connected to. Views include:

- Event log
- Temperature and humidity graphs
- Standby/lead/lag
- Unit wellness
- Service contact information

The Optional Wall Mounted Large Graphic Display provides centralized monitoring and control of connected Liebert CW units.



U2U Configuration 2 Liebert CW units with Small Graphic Display may be centrally monitored and controlled with the Optional Wall Mounted Display.

Large Graphic Display Model

The Liebert iCOM with large display has a 320 x 240 dot matrix screen that shows up to 16 menu icons at a time, as well as descriptive text. This display can be used to control a single cooling unit or any cooling unit on a network, regardless of how it is connected—either integrated into a cooling unit or simply connected to the network and mounted remotely. It provides the same information as the small display plus these additional views:

- Spare parts list
- Unit diary
- View status of all cooling units
- Control any cooling unit on network
- View system averages of entire cooling unit network

The optional vNSA with iCOM combines a Wall Mounted Large Graphic Display along with a network switch to facilitate U2U wiring in one convenient cabinet.

A Choice Of Fans To Fit Every Application Requirement

Our downflow floormount Liebert CW models are now available with energy efficient EC Plug Fans.

These energy efficient fans add to the superior efficiency already achieved by the use of a traditional variable speed drive system. In fact, many utility companies offer a rebate for using these energy efficient options—check with your local utility for details.

The Liebert CW with EC Plug Fan delivers energy efficiency gains via the fan system. These electrically commutated fans are a backward curved motorized impeller powered by a direct drive DC Motor with integrated AC-DC conversion.

This design uses less energy than standard centrifugal blowers by lowering motor kW. The EC Plug Fan uses 10-30% less energy on average than standard AC motors.

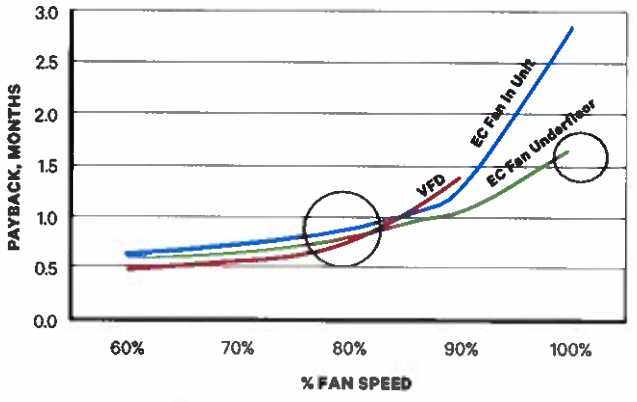
The EC Plug Fan is located in the area beneath the raised floor or within the unit. Superior energy savings can be realized with the fans located beneath the raised floor. Placing the fan in the raised floor space, is 30 percent more energy efficient than centrifugal blowers. The EC Plug Fan also provides greater energy savings than variable speed drives.

Optional Energy Saving Variable Speed Drive Fan Motor

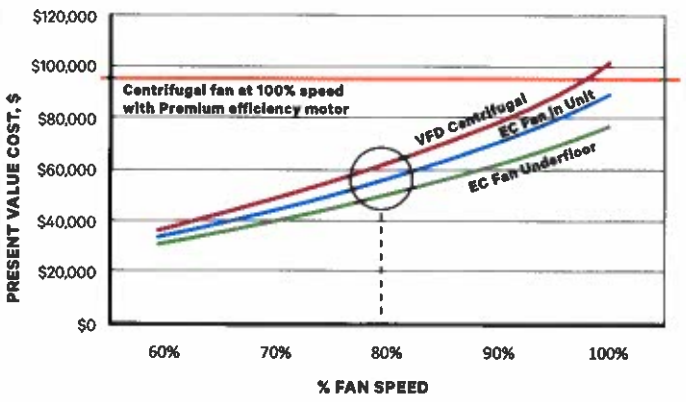
All Liebert CW models are also available with an optional variable speed drive on the fan motor used to drive centrifugal blowers, matching the motor speed to the room cooling requirements. This feature allows the unit to use far less motor energy to move room air.

This drive is controlled by the Liebert iCOM control system to match the speed of the blower with the chilled water valve position and consequently the load in the room. This option eliminates excessive energy use due to an oversized design or changing room conditions.

Real World Energy Savings



The energy saving capabilities of the Liebert CW with EC Plug Fans or variable speed drive fans result in a quick payback through lower electricity costs.



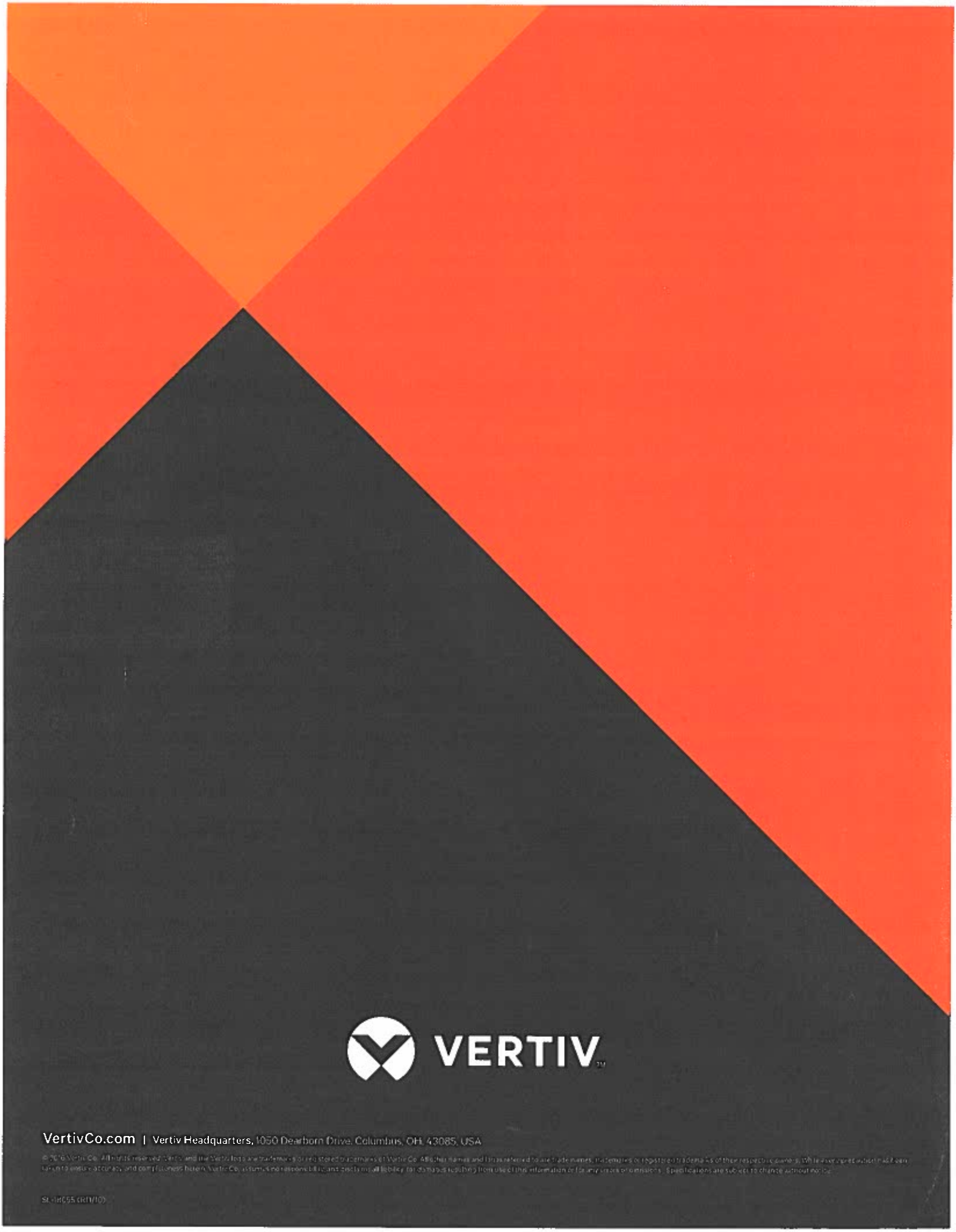
Example shows Liebert CW106 @.10/kWH.

Liebert CW Chilled Water System Specifications

Deluxe CW Capacity Data 50 Hz and 60 Hz Chilled Water Systems

CAPACITY DATA KBTU/HR (KW) (BASED ON 45°F (7.2°C) ENTERING WATER, 10°F WATER RISE					
		75°F DB, 62.5°F WB (23.9°C DB, 16.9°C WB) 50% RH	75°F DB, 61°F WB (23.9°C DB, 16.9°C WB) 45% RH	72°F DB, 60°F WB (22.2°C DB, 15.5°C WB) 50% RH	72°F DB, w58.6°F WB (22.2°C DB, 14.8°C WB) 45% RH
CW026*	Total	92 (26.8)	87 (25.4)	72 (21.2)	72 (21.2)
	Sensible	86 (25.10)	87 (25.4)	72 (21.20)	72 (21.2)
CW038*	Total	130 (38.1)	121 (35.4)	104 (30.4)	100 (29.3)
	Sensible	114 (33.3)	117 (34.2)	99 (29.1)	100 (29.3)
CW041*	Total	177 (51.7)	158 (46.3)	139 (40.6)	129 (37.9)
	Sensible	137 (40.2)	140 (41.0)	121 (35.5)	125 (36.7)
CW051*	Total	196 (57.5)	184 (53.9)	155 (45.4)	152 (44.6)
	Sensible	174 (51.1)	180 (52.7)	152 (44.4)	152 (44.6)
CW060*	Total	280 (82.0)	251 (73.6)	220 (64.4)	204 (59.8)
	Sensible	216 (63.4)	221 (64.8)	191 (55.9)	198 (57.9)
CW076*	Total	279 (81.8)	256 (75.1)	219 (64.3)	211 (61.7)
	Sensible	238 (69.7)	244 (71.6)	208 (60.9)	211 (61.7)
CW084*	Total	359 (105.1)	320 (93.8)	282 (82.6)	262 (76.7)
	Sensible	278 (81.5)	284 (83.2)	245 (71.9)	253 (74.2)
CW089**	Total	395 (115.6)	353 (103.5)	313 (91.8)	286 (83.9)
	Sensible	296 (86.8)	301 (88.2)	262 (76.8)	270 (79.0)
CW106*	Total	410 (120.2)	373 (109.2)	322 (94.3)	305 (89.3)
	Sensible	339 (99.4)	348 (102.0)	298 (87.3)	305 (89.3)
CW114*	Total	517 (151.5)	463 (135.7)	409 (119.8)	372 (109.0)
	Sensible	392 (114.8)	400 (117.10)	346 (101.4)	356 (104.3)
CW146**	Total	567 (166.1)	515 (150.9)	450 (131.8)	422 (123.5)
	Sensible	456 (133.6)	469 (137.3)	405 (118.5)	418 (122.4)
CW181**	Total	811 (237.7)	725 (212.3)	645 (189.0)	589 (172.5)
	Sensible	600 (175.7)	608 (178.2)	531 (155.4)	546 (159.9)

Capacity data is certified to ASHRAE 127-2007 standard. Fan motor heat has been subtracted, resulting in "net" capacity.
*Available with Centrifugal or downflow EC Plug Fan. Centrifugal Fan capacity shown.
** Only available in downflow configuration with EC Plug Fan.



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