



# VERTEX<sup>TM</sup>

## EVAPORATIVE CONDENSER

**MEDIUM  
TO LARGE**  
TONNAGE  
REQUIREMENTS

**188 – 1,434 Nominal Tons**  
in a Single Unit



WHERE PEAK  
**RELIABILITY**  
MEETS EASY  
**MAINTENANCE**

Counterflow // Forced Draft // EC Fan System



# Vertex™ Evaporative Condenser

## BENEFITS

Introducing the Vertex™ Evaporative Condenser, where peak reliability meets easy maintenance. This new benchmark combines what you like most about legacy BAC evaporative condensers with new innovations for the future. The Vertex Condenser offers maximum uptime with easy and safe accessibility. It also has the lowest total cost of ownership with the lowest installation, maintenance, and operating costs. And of course, the Vertex Condenser uses evaporative cooling, so it's an inherently sustainable solution for your industrial refrigeration and other industrial process applications.



### MAXIMUM UPTIME & RELIABILITY

#### YEAR-ROUND OPERATION

- Maximize reliability and minimize unplanned downtime with the EC Fan System (direct-drive fan system with EC motors and axial fans)
- Enjoy peace of mind and uninterrupted operation with multiple fans and motors
- Perform through the harshest conditions with a durable and robust industrial design
- Increase reliability, corrosion resistance, and longevity with superior material options that save you time and money



INDUSTRIAL DESIGN FOR  
HARSHEST CONDITIONS



### EASY & SAFE ACCESSIBILITY

#### ALLEVIATE CONFINED SPACE LIMITATIONS <sup>[1]</sup>

- The largest access door easily accommodates a 6.5' tall person; a sturdy step and safety handle provides safe entry and exit
- Ground level access to the drive system, pump(s), and terminal box eliminates the need for platforms or ladders to access them
- Stay dry while safely inspecting the basin with an internal walkway
- Reduce maintenance labor costs by 50% and address confined space hazards with a walkable, spacious interior and easy entry and exit<sup>[1]</sup>
- Industry-leading, most configurable OSHA compliant modular platforms to meet your specific site requirements



ALLEVIATE CONFINED SPACE LIMITATIONS;  
EASILY ACCOMMODATES A 6.5' TALL PERSON



## LOWEST INSTALLATION COSTS

30% REDUCTION IN INSTALLATION COSTS<sup>[2]</sup>

- Reduce on-site labor requirements and ensure on-time commissioning with pre-assembled platform options
- Align the upper section to the lower section in less than 15 minutes per cell, due to the industrial-grade rigidity of the unit
- Simplify field installation and save time with single point EC fan wiring
- Save time and money; no VFD or vibration switch is required<sup>[3]</sup>



SIMPLIFY FIELD INSTALLATION  
WITH SINGLE POINT EC FAN WIRING



## LOWEST MAINTENANCE COSTS

50% REDUCTION IN MAINTENANCE COSTS<sup>[2]</sup>

- No regular maintenance required for the direct-drive EC Fan System
- Easy inspection of the basin, strainer, and drive components with a sturdy internal walkway
- Easy cleaning and improved hygiene with a compact, sloped water basin
- Save on chemical and water costs with up to 30% lower water volume<sup>[2]</sup>
- Fast and easy inspection of all nozzles with optional pre-assembled platforms at an ergonomic working height
- Reduce maintenance costs and maximize uptime with BAC's enhanced belt-driven independent fan system (optional); that easily allows access to all drive components



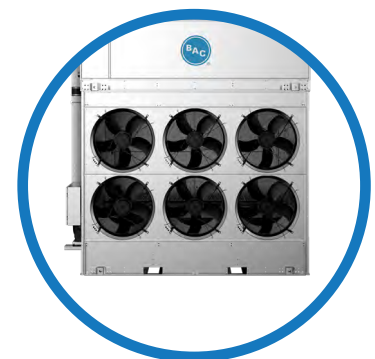
STAY DRY WHILE SAFELY INSPECTING THE  
BASIN WITH THE INTERNAL WALKWAY



## SUPERIOR EFFICIENCY

10% LOWER ENERGY USAGE<sup>[2]</sup>

- Reduce operating costs with the highly-efficient, direct-drive, variable-speed EC Fan System
- For many replacement jobs, the innovative design can provide a higher capacity or reduced energy usage at the same weight
- Save energy with improved head pressure control in winter months due to the EC Fan System's lower minimum speeds



SUPERIOR EFFICIENCY  
WITH THE EC FAN SYSTEM

### Notes:

1. Check local codes to verify confined space requirements.
2. Comparisons are based on the Vertex Condenser vs. traditional forced draft axial fan evaporative condensers.
3. For EC Fan System models only.



# Vertex™ Evaporative Condenser

## INNOVATIVE DESIGN FEATURES

*you won't find anywhere else*



### BranchLok™ Removal System

No tools required to remove or inspect spray branches and nozzles, reducing maintenance costs. Faster cleaning makes peak energy efficiency easier to sustain.

### Largest Access Door(s)

**\$20,000 Lifetime Maintenance Savings**

The largest access door (68" H x 20" W) is also safe with a sturdy step and safety handle. It's easy for a 6.5' tall person to enter and exit for service. (2<sup>nd</sup> door optional)

### Factory Pre-Assembled Platforms with Perimeter Handrails (Optional)

**\$2,000 Savings Per Cell**

Easy-to-install design for contractors and owners looking to reduce the cost of installation and ensure on-time commissioning. Safely inspect the nozzles across the entire unit with platforms at an ergonomic height.

### EC Fan System

**\$68,000 Lifetime Savings**

Simple design for lowest maintenance, easiest access and maximum efficiency, this system includes single-stage axial fans and variable-speed EC motors. There is no transmission to maintain!

### Internal Walkway

**\$20,000 Lifetime Maintenance Savings**

Stay dry while safely inspecting the basin with a sturdy internal walkway.

### Basin

**\$6,000 Lifetime Maintenance Savings**

The falling water on the high step of the basin causes turbulence and reduces cleaning requirements. The lower water volume reduces chemical and water volume by up to 30%.

### BALTDRIIVE® Power Train (Optional)

**\$30,000 Lifetime Maintenance Savings**

Reduce maintenance costs and maximize uptime with BAC's belt-driven independent fan system. It's the most serviceable, most robust, and most reliable in the industry.

### TriArmor® Corrosion Protection System & EVERTOUGH™ Construction (Optional)

**\$270,000 Lifetime Savings Per Cell**

Superior material options increase reliability, corrosion resistance, and longevity; 10-year leak-free warranty and seamless basins allow for higher cycles of concentration, save water and reduce chemical usage.



# Vertex™ Evaporative Condenser

## THE BEST CHOICE

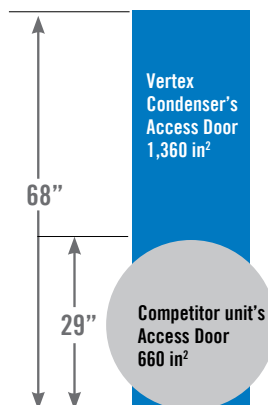


### ADVANTAGE VERTEX CONDENSER!

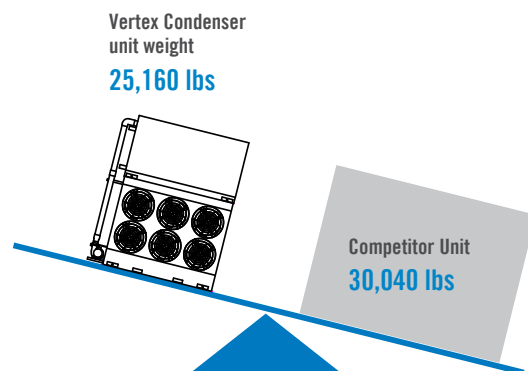
	Competitor's Forced Draft Axial Fan Evaporative Condenser	Vertex Evaporative Condenser	
Operating Weight	30,040 lbs	25,160 lbs	16% LIGHTER WEIGHT
Overflow Basin Volume	818 gal	521 gal	36% LESS WATER
High Efficiency	Belt-Drive	EC Fan System	UP TO 30% MORE EFFICIENT
Access Door	29" Tall	68" Tall	3.25' TALLER DOOR
Internal Walkway	Not Available	Standard	\$6,000 MAINTENANCE SAVINGS
VFD	Added Cost	Not Needed	\$6,000 INSTALLATION SAVINGS
Factory Wiring	Added Cost	Standard	\$2,000 INSTALLATION SAVINGS
Pre-Assembled Platforms <sup>[2]</sup>	Added Cost	Standard	\$2,000 INSTALLATION SAVINGS
Unit Construction	Galvanized Steel	EVERTOUGH™ Construction with TriArmor® Corrosion Protection System <sup>[2]</sup>	ADVANCED MATERIAL OPTIONS FOR MAXIMUM VALUE

#### Notes:

1. Selections are based on 448 nominal R717 tons at 96.3°F condensing 78°F wet bulb.
2. Optional feature or accessory.
3. Estimated dollar savings based on 20-year equipment life, actual savings may vary.



700in<sup>2</sup> Larger Access Area



16% Lighter Weight

## BALTIMORE AIRCOIL COMPANY

# THE BAC DIFFERENCE

WITH 80 YEARS OF INDUSTRY-LEADING INNOVATION AND EXPERIENCE, BAC CREATES CUTTING-EDGE COOLING EQUIPMENT FOR THE REFRIGERATION, HVAC, AND INDUSTRIAL MARKETPLACES. WE SOLVE CUSTOMERS' UNIQUE NEEDS WITH OUR EXPERTISE AND WIDE RANGE OF HIGH-PERFORMANCE SYSTEMS. BAC LEVERAGES THE POWER OF EVAPORATIVE COOLING BY OPTIMIZING THE BALANCE OF WATER AND ENERGY, BUT THE TRUE BAC DIFFERENCE LIES IN OUR ABSOLUTE COMMITMENT TO CREATING SUSTAINABLE SOLUTIONS AND DELIVERING VALUE TO YOU, OUR CUSTOMER.



EXPERT SUPPORT



EXPERIENCED REPS



EXCEPTIONAL VALUE



EFFICIENT SOLUTIONS



PEACE OF MIND

[baltimoreaircoil.com](https://baltimoreaircoil.com)

## ASSURED PERFORMANCE

The Vertex™ Evaporative Condenser was subjected to a rigorous qualification process to ensure corrosion resistance, longevity, and reliability.

