

CLOSED CIRCUIT COOLERS

eco-Air™ Series

Environmentally
Conscious
Operation

Providing *Maximum* Water Savings

FEATURING





Get to Know EVAPCO

- The global innovator in heat transfer solutions
- Serving the commercial HVAC, Industrial Refrigeration, Power Generation, and Industrial Processing markets
- Founded in 1976
- Employee-owned
- 25 engineering & manufacturing facilities in 10 countries
- More than 200 sales offices worldwide

Learn More Now

Visit evapco.com to download product catalogs, view complete product specifications, and more.

EVAPCO is more than a name.

It's a pledge to make everyday life easier, more comfortable, more reliable, and more sustainable for people everywhere. How do we fulfill that promise? It's simple.

We never stop innovating.

At EVAPCO, we don't just talk about innovation, it's ingrained in our workflow. Guided by our annually developed R&D plans, we set out to find groundbreaking solutions that transform the way the world works for the better. It's why we have more than 78 active patents worldwide.

We craft exceptionally built solutions.

As an employee-owned company, we take pride in our work. We are proud to be one of the most experienced teams of engineers and craftsmen in the industry. This translates into solutions that are always exceptionally built. EVAPCO has an unwavering commitment to provide "best in class" heat transfer solutions and services.

We guarantee performance.

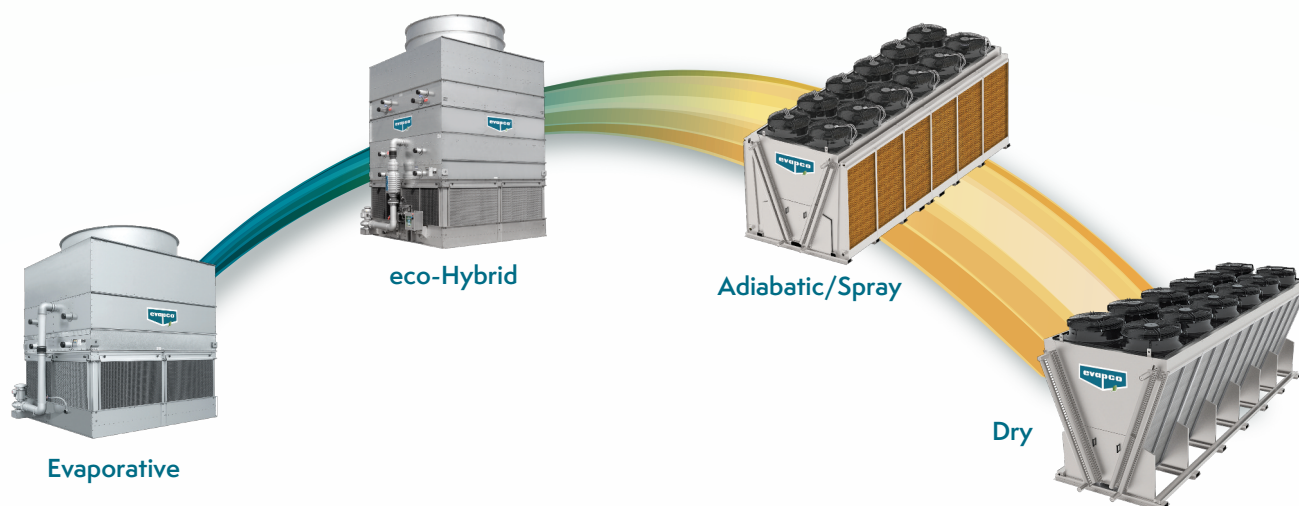
Every EVAPCO solution is put through rigorous research and testing to ensure maximum efficiency and reliability. But we don't stop there. EVAPCO is an industry leader in independent, third-party performance certifications. These certifications guarantee our performance metrics—so that you can plan your projects with complete peace of mind.

We protect the environment.

Innovation and environmental sustainability go hand-in-hand at EVAPCO. Our industrial heat transfer equipment not only conserves natural resources and helps reduce noise pollution, but also features recycled steel content in construction. EVAPCO's stainless steel units are constructed of panels that contain up to 75% of recycled content, and our galvanized units contain over 80%. From sound reduction to water conservation to chemical elimination, we are continuously developing new technologies that deliver the ultimate operating advantages to our clients—while protecting the planet for every generation to come.



FULL SPECTRUM GLOBAL SOLUTIONS



EVAPCO provides a full spectrum of global product solutions for the Commercial HVAC, Process Cooling, Industrial Refrigeration and Power Generation markets.

From the smallest factory assembled cooling tower to the largest field erected air-cooled steam condenser, we offer heat transfer products designed to meet the water and energy requirements for any project. We are committed to providing solutions that are energy efficient and conserve water.

Our latest heat transfer solutions are the eco-Air™ Series Dry Coolers, eco-Air Series Air Cooled Condensers, eco-Air Series Adiabatic Coolers and Condensers, and eco-Air Series Spray Coolers and Condensers. The eco-Air Series completes our successful eco-family of closed circuit coolers and condensers with water-saving dry and hybrid technology.

As an industry leader in independent, third-party performance certifications, our fully-rated products enable you to operate your cooling systems efficiently and with complete peace of mind.

The eco-Air Series coolers offers unparalleled flexibility in a wide range of capacities, footprints, motor types, and control options.



EC Motor Option



NEMA Motor Option

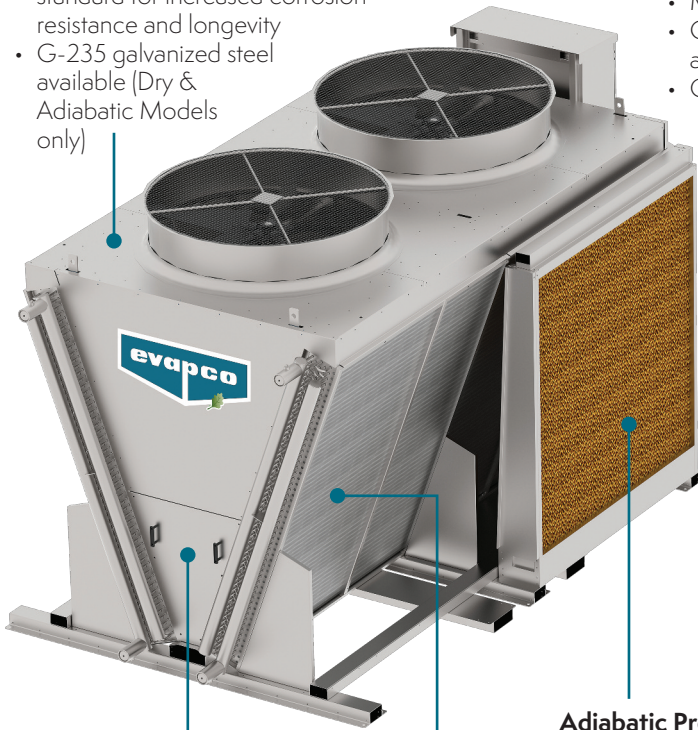
EC & NEMA Motor Options Available on
Flat (EAFWD), V Coil Dry (EAVWD),
V Coil Adiabatic (EAVWA) and V Coil Spray (EAVWS) Models

eco-Air Series Design & Construction Features

The eco-Air Series of dry coolers represents EVAPCO's newest advancement in thermal heat transfer research and development. Available in fully dry, adiabatic and spray designs, the eco-Air Series maximizes heat rejection with minimal or no water use. The eco-Air Series is another chapter in EVAPCO's ongoing commitment to high quality, environmentally friendly products.

Structure and Casing

- Type 304L Stainless Steel as standard for increased corrosion resistance and longevity
- G-235 galvanized steel available (Dry & Adiabatic Models only)



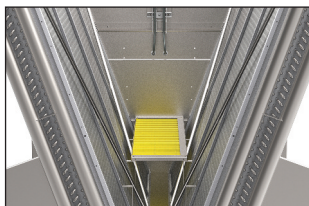
Inspection Panel (V Coil Models)

- Easily removable for interior inspection and access to coils and fan motors



Heat Exchanger Coils

- Type 304L Stainless Steel tubes with aluminum fins
- Multiple fin spacings and tube configurations
- Upgraded fin thickness available



V Coil Models

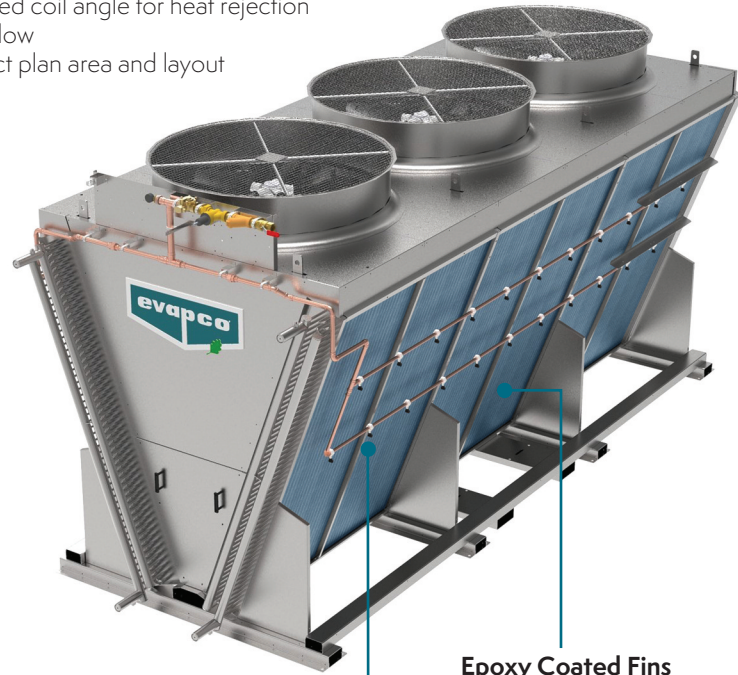
- Maximum surface area per footprint
- Optimized coil angle for heat rejection and air flow
- Compact plan area and layout

Adiabatic Pre-Cooling System (Optional)

- Wetted pads can be utilized to pre-cool entering air, resulting in greater energy savings, and increased capacity, with minimal water use
- Great for high dry bulb climates and high temperature applications
- Once through design
- No water treatment required
- No cold water basin or pump
- No drift
- V coil models only

Internal Step Deck (Optional-V Coil Models)

- Platform and grab rail for access to elevated fan section components (7' 9.75" wide V Coil Models only)



Spray Assist System (Optional)

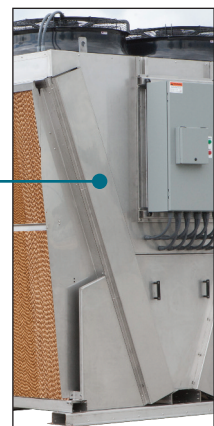
- Peak load cooling solution
- Epoxy Coated Fins
- Tangential-flow hollow cone nozzles
- Self-draining copper piping

Epoxy Coated Fins

- Standard on Spray Models
- Optional on Dry & Adiabatic Models
- Increased corrosion resistance
- No impact on unit capacity

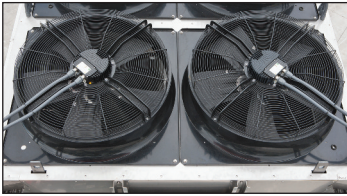
Coil Return Bend Covers

- Protects the coil return bends during handling and operation



eco-Air Series Design & Construction Features

Advanced Motor Technology – Electronically Commutated (EC) or NEMA fan motor designs



EC

- High Efficiency
- Zero Maintenance
- Integral Speed Control
- Inherently Low Sound

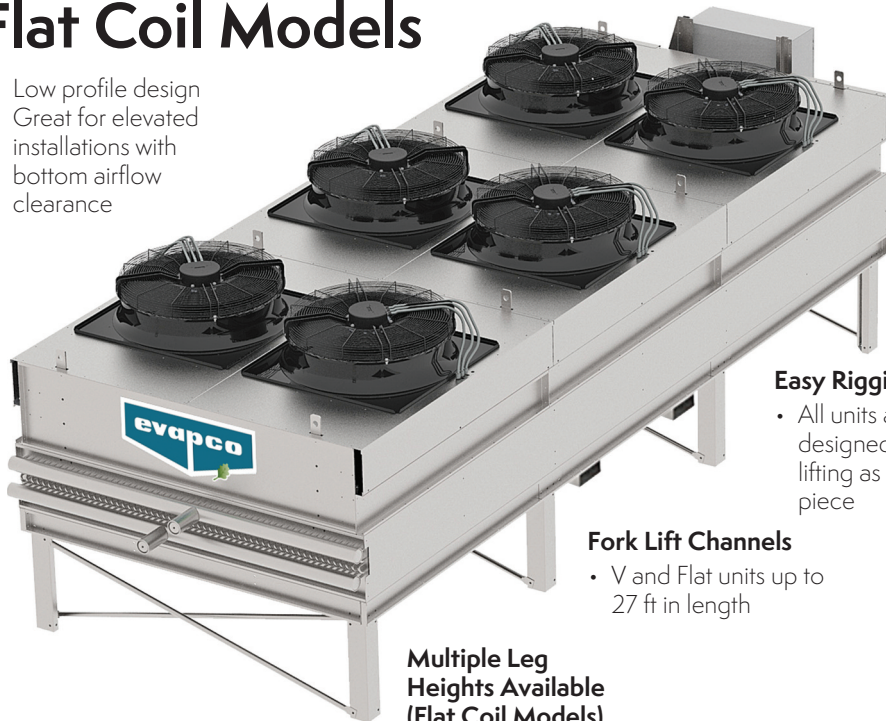


NEMA

- Premium efficient direct drive
- Zero maintenance permanently sealed bearings
- VFD ready
- Severe Duty

Flat Coil Models

- Low profile design
- Great for elevated installations with bottom airflow clearance



Easy Rigging

- All units are designed for lifting as once piece

Fork Lift Channels

- V and Flat units up to 27 ft in length

Multiple Leg Heights Available (Flat Coil Models)

Coils Pressurized with Nitrogen

- Limits internal corrosion potential during transport and storage



IBC Compliant Design

- All standard models meet IBC requirements
- Upgraded designs available for high seismic and wind load areas
- Shake table verified for 1.5 Importance Factor installations

Warranty

- 2 years complete unit
- 2 years adiabatic pads (if equipped)
- 2 years spray system (if equipped)
- 1 year EVAPCO Controller and other electrical components (if equipped)



Common Terminal Box

- All motors factory wired
- Saves time in the field
- UL Recognized



Factory Mounted & Wired Controls

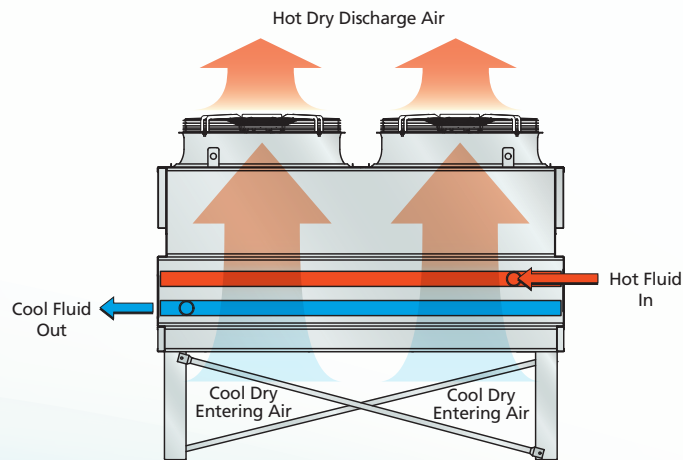
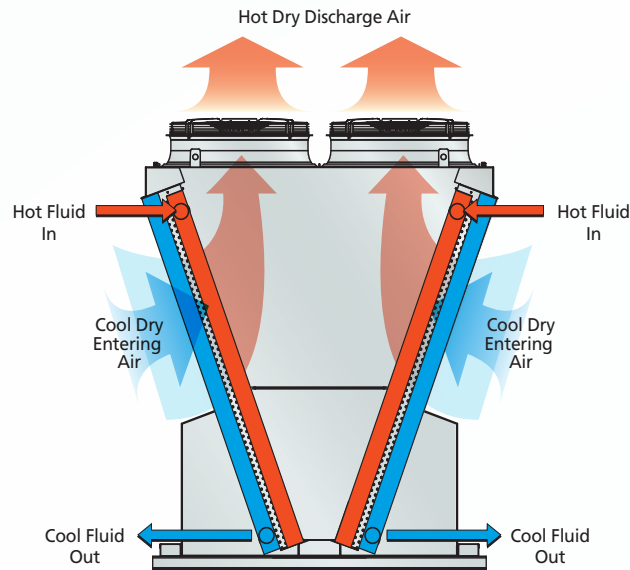
- EVAPCO PLC Panel (EC Motors)
- EVAPCO PLC/VFD Panel (NEMA Motors)
- Single point power connection
- UL & cUL Listed
- UL Type 4 enclosure



Dry Principle of Operation

eco-Air Series V Coil (EAVWD) & Flat Coil (EAFWD) Air Cooled Cooler

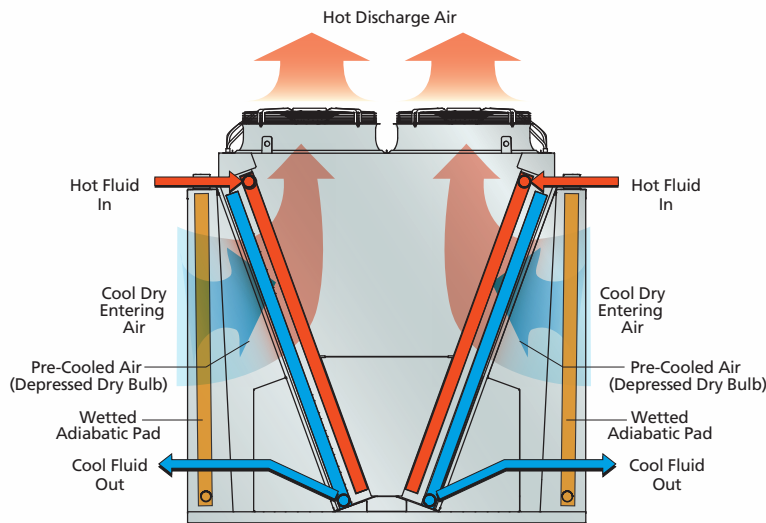
Hot Process fluid enters the inlet header connection, shown in red. Heat from the fluid dissipates through the coil tubes surface and out to the fins. Ambient air is drawn in over the coil surface by the fan located at the top of the unit. Heat from the process fluid transfers to the air and discharges to the atmosphere. Cool process fluid exits the unit through the connections shown in blue.



Adiabatic & Spray Principle of Operation

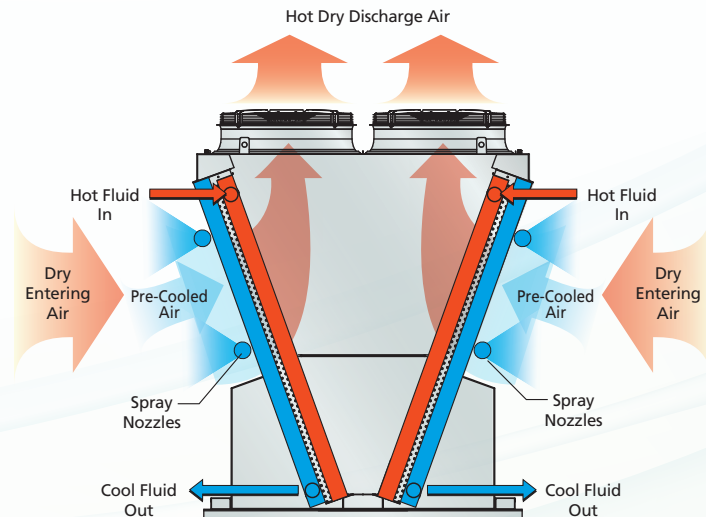
eco-Air Series V Coil (EAVWA) Adiabatic Cooler

Hot process fluid enters the inlet header connection, shown in red. Heat from the process fluid dissipates through the coil tubes surface and out to the fins. The adiabatic system involves fully wetting a fibrous pad located in front of the coil. Ambient air is drawn through the adiabatic pre-cooling pad by the fans located on top of the unit. The air is saturated as it passes through the adiabatic pad, decreasing the dry bulb temperature within a few degrees of the wet bulb temperature. This new air temperature is referred to as the depressed dry bulb. This pre-cooled air is then drawn through the tube and fin surface, offering a substantial increase in heat rejection capability. Heat from the process fluid transfers to the air and is discharged to the atmosphere. Cool process fluid exits the unit through the connections shown in blue.



eco-Air Series V Coil (EAVWS) Spray Cooler

Hot process fluid enters the inlet header connection, shown in red. Heat from the process fluid dissipates through the coil tubes surface and out to the fins. The unit operates completely dry and modulates fan speed as necessary based on process temperature requirements and ambient conditions. When the unit can no longer maintain leaving water temperature set point in dry mode, the spray assist system is actuated. The spray system nozzles spray water away from the coil, cooling the entering air and increasing the heat rejection capability of the unit. The heat from the process fluid transfers to the cooled air and is discharged to the atmosphere. Cool process fluid exits the unit through the connections shown in blue.



Spray System Disclaimer: Although the nozzles spray water away from the coil, the coil and structure will get wet when water is in use. Due to this, the water chemistry guidelines provided in the Installation and Operation Manual should be strictly followed along with the recommended cleaning and maintenance instructions. Evapco also recommends designing the system for a maximum of 200 hours of spray operation per year to help limit the possibility for scale build-up and corrosion.

Advanced Coil Technology

EVAPCO has long been the industry innovator in heat exchanger coil technology starting in the early 1990's with the introduction of Thermal-Pak® coils which revolutionized the industry. Soon after, EVAPCO became the benchmark in industrial evaporator design, standardizing on stainless steel tubes and aluminum fins. The eco-Air Series coil design builds upon this past success. The coil tube diameter, geometry, and circuiting have been optimized through thousands of hours of theoretical modeling and laboratory testing. The result is optimal heat transfer efficiency with low airside pressure drop and low motor horsepower per ton.

Coil Design

Through the use of computational fluid dynamics (CFD) modeling software, finite element heat transfer analysis, and proprietary coil performance calculation methods, EVAPCO engineers have identified significant design elements to improve the finned coil performance. The extensive computer modeling has been refined and verified through coil performance evaluation in EVAPCO's state of the art research laboratories.

Superior Stainless Steel Technology

eco-Air Series dry coolers are constructed with high-grade Type 304L stainless steel tubing and aluminum fins as standard. The stainless steel tubing meets the requirements of ASME B31.5 piping code. The tubing is roll formed and continuously welded, annealed, and tested using an eddy current device.

The round tubing is fit into the aluminum fin plate and hydraulically expanded, this procedure provides more consistent contact between the tube and the fin plate than mechanical expansion. The entire coil is then pressure tested to 110% of design working pressure. Lastly, the coil is dried, evacuated, and charged with low-pressure nitrogen prior to shipment.

EVAPCO's stainless steel tubes are available in 5/8-inch OD. Coils are built in 6, 8, 10 or 12 FPI as standard using a full-collar aluminum fin. Multiple fin thicknesses are available to accommodate a range of industrial applications.

For applications where corrosion of the aluminum fin is a concern, EVAPCO offers pre-coated epoxy fin stock.



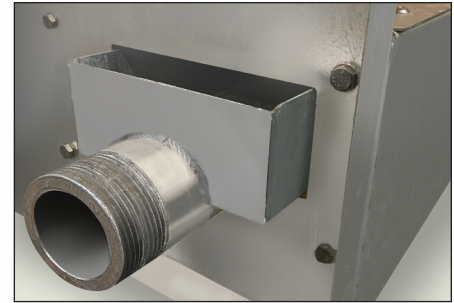
Benefits of eco-Air Series

Reduced Maintenance

Scaling, corrosion, and water born bacteria concerns are minimized or eliminated with dry and adiabatic cooling equipment. The eco-Air Series reduces the maintenance traditionally associated with fully evaporative systems.

The eco-Air Series adiabatic & spray coolers are designed as a once through systems, meaning no pump and no basin to hold water, reducing the time required for maintenance. Additionally on adiabatic units, the adiabatic pads filter the air before reaching the coil, limiting the exposure of dirt and debris to the tube and fin heat transfer surface.

Both NEMA and EC motor options require zero routine maintenance. There are no bearings to grease, belts to adjust, or fans to pitch and balance.



Adiabatic Pad Drip Pan



Zero Maintenance Motors

Reduced or Eliminated Water Consumption

Compared to traditional evaporative systems, the eco-Air Series will either eliminate or dramatically reduce water consumption. Adiabatic & spray models only use water when the ambient conditions and load require it. Reducing water consumption also reduces the ongoing expenses related with the cooling equipment such as purchasing, treating, and disposing of water.

When the eco-Air Series adiabatic & spray models are used in conjunction with the EVAPCO controls package, water conservation is maximized based on proprietary PLC logic.

Factory Mounted and Wired Controls

The motors on the eco-Air Series are pre-wired at the factory to UL standards, reducing costs associated with field wiring. As standard, all units are wired to a common terminal box. Adding the EVAPCO controls package allows for both single point power supply and complete capacity control.

Installation Made Easy

All units are designed for lifting and staging in one piece.

Fork lift channels come standard on all eco-Air Series units up to 27 feet in length. On longer units, reference the eco-Air Series IO&M for lifting requirements from the fan deck lifting lugs.



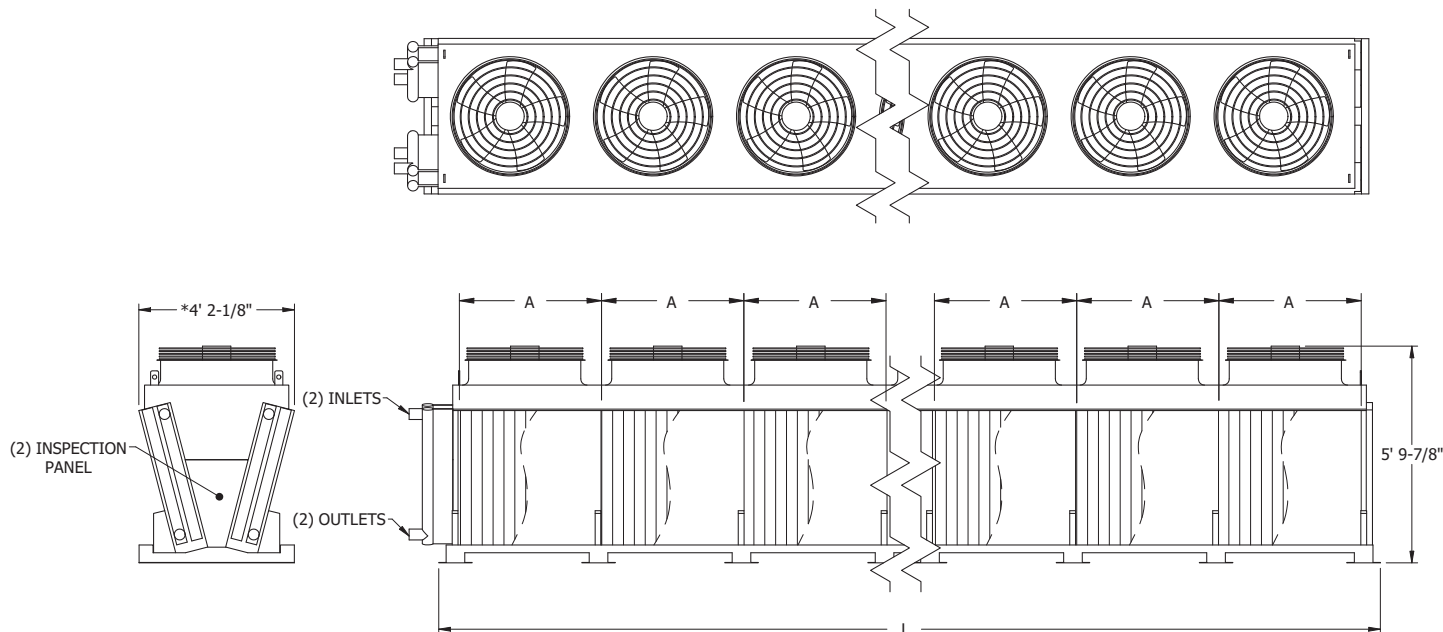
Factory Wired Fan Motors



Factory Mounted Control Panel

V Coil Configuration - EC Motor

Engineering Data



Single Fan, 4' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH)† | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|-------------|--------|-------------------------|-------------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAVWD91S1MJ | 1 | 242 | 4.3 (3.2) | 17670 | 5' - 3-3/8" | 33 | 1660 | 1940 |
| EAVWD91S2MJ | 2 | 484 | 8.6 (6.4) | 35340 | 9' - 6-5/8" | 52 | 2810 | 3250 |
| EAVWD91S3MJ | 3 | 730 | 12.9 (9.6) | 53010 | 13' - 9-3/4" | 70 | 3980 | 4570 |
| EAVWD91S4MJ | 4 | 967 | 17.2 (12.8) | 70680 | 18' - 0" | 89 | 5180 | 5930 |
| EAVWD91S5MJ | 5 | 1203 | 21.5 (16) | 88350 | 22' - 4-1/8" | 108 | 6390 | 7290 |
| EAVWD91S6MJ | 6 | 1456 | 25.7 (19.1) | 106020 | 26' - 7-3/8" | 126 | 7550 | 8610 |
| EAVWD91S7MJ | 7 | 1671 | 30 (22.3) | 123690 | 30' - 10-1/2" | 145 | 8630 | 9840 |
| EAVWD91S8MJ | 8 | 1923 | 34.3 (25.5) | 141360 | 35' - 1-3/4" | 163 | 9800 | 11160 |
| EAVWD91S9MJ | 9 | 2174 | 38.6 (28.7) | 159030 | 39' - 4-7/8" | 182 | 10940 | 12460 |
| EAVWD91S0MA | 10 | 2298 | 42.9 (31.9) | 170447 | 39' - 4-7/8" | 182 | 11210 | 12730 |

Notes:

* Adiabatic width: 5' 10-1/8"

A: Two incremental fin lengths available: 3' 10-1/16" or 4' 3-3/16"

Dimensions are subject to change. Do not use for pre-fabrication.

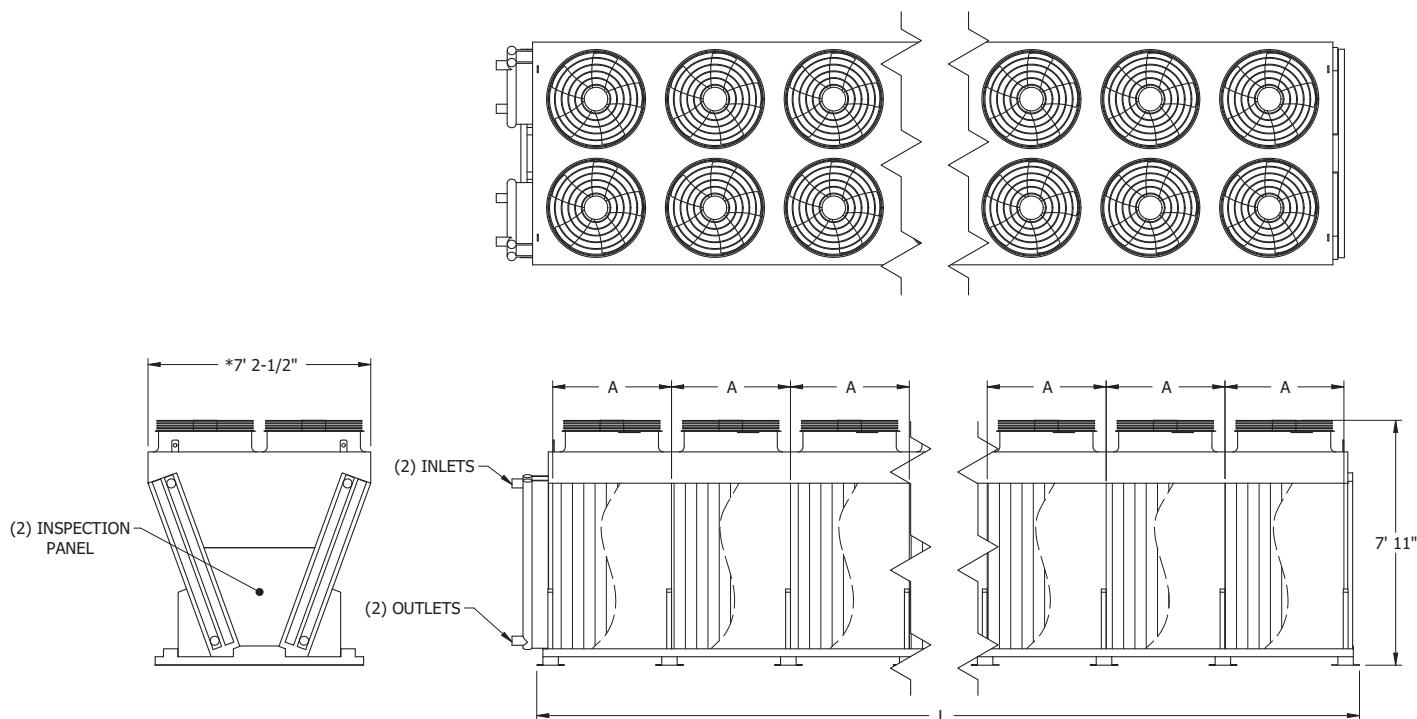
† Nominal Capacity 110°F-100°F at 92°F dry bulb temp.

Adiabatic capacity: The adiabatic cooling effect and resulting depressed dry bulb entering the coil depends on the ambient dry bulb and associated relative humidity. Consult your sales representative, EVAPCO marketing, or Spectrum™ selection software for more information.

Spray Capacity: The cooling effect resulting from operating the spray system depends on the ambient dry bulb and associated relative humidity entering the coil. Consult your sales representative, EVAPCO marketing or Spectrum™ selection software for more information.

V Coil Configuration - EC Motor

Engineering Data



Twin Fan, 7' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH) [†] | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|-------------|--------|-------------------------------------|-------------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAVWD9102PJ | 2 | 425 | 8.6 (6.4) | 31976 | 5' - 3-3/8" | 51 | 2610 | 3040 |
| EAVWD9104PJ | 4 | 848 | 17.2 (12.8) | 63951 | 9' - 6-5/8" | 80 | 4390 | 5060 |
| EAVWD9106PJ | 6 | 1278 | 25.7 (19.1) | 95927 | 13' - 9-3/4" | 108 | 6180 | 7090 |
| EAVWD9108PJ | 8 | 1692 | 34.3 (25.5) | 127902 | 18' - 0" | 137 | 8020 | 9160 |
| EAVWD9110PJ | 10 | 2104 | 42.9 (31.9) | 159878 | 22' - 4-1/8" | 165 | 9860 | 11240 |
| EAVWD9112PJ | 12 | 2547 | 51.5 (38.3) | 191853 | 26' - 7-3/8" | 194 | 11640 | 13260 |
| EAVWD9114PJ | 14 | 2923 | 60.1 (44.7) | 223829 | 30' - 10-1/2" | 223 | 13290 | 15150 |
| EAVWD9116PJ | 16 | 3363 | 68.7 (51.1) | 255804 | 35' - 1-3/4" | 251 | 15080 | 17180 |
| EAVWD9118PJ | 18 | 3804 | 77.2 (57.5) | 287780 | 39' - 4-7/8" | 280 | 16850 | 19180 |
| EAVWD9120PA | 20 | 3971 | 85.8 (63.9) | 304120 | 39' - 4-7/8" | 280 | 17310 | 19640 |

Notes:

* Adiabatic width: 8' 9-5/8"

A: Two incremental fin lengths available: 3' 10-1/16" or 4' 3-3/16"

Dimensions are subject to change. Do not use for pre-fabrication.

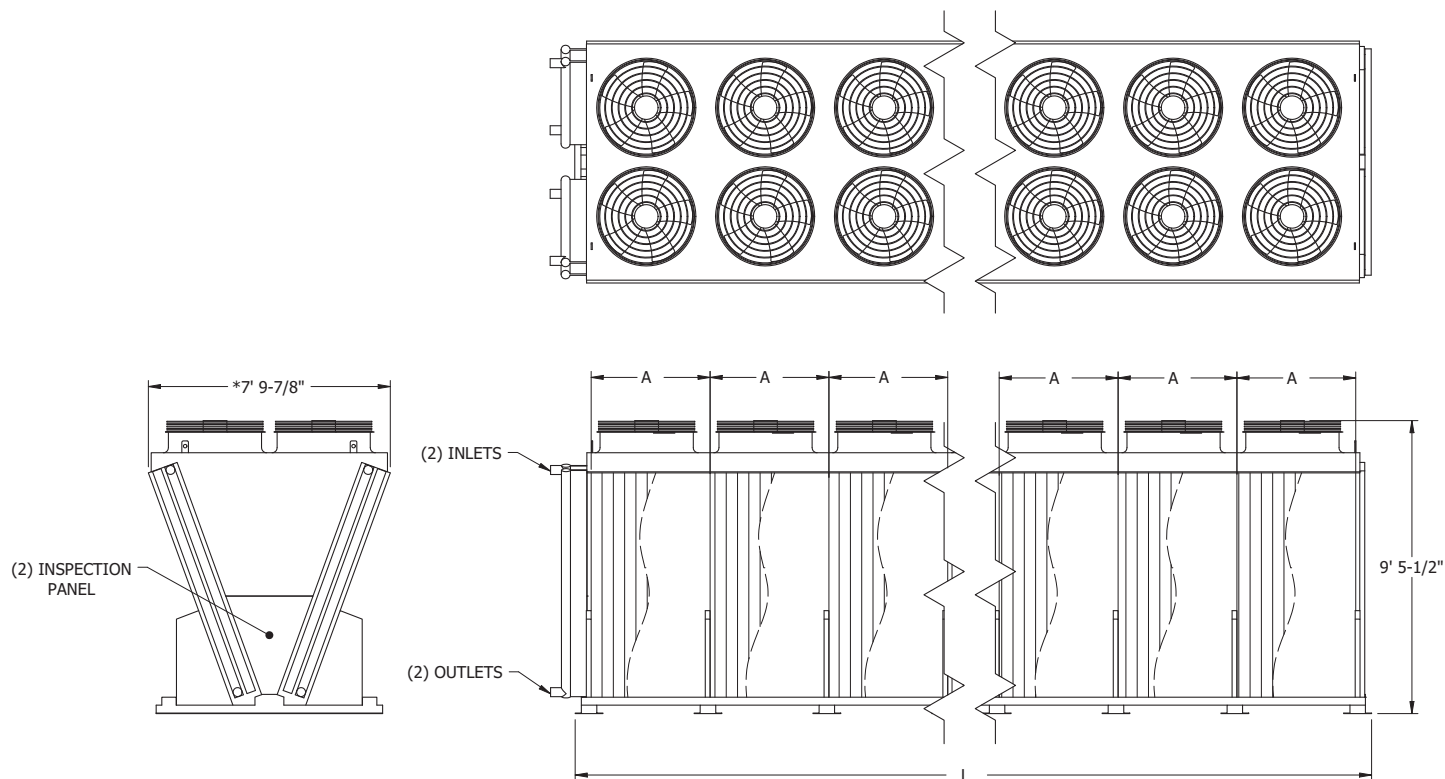
[†] Nominal Capacity 110°F-100°F at 92°F dry bulb temp.

Adiabatic capacity: The adiabatic cooling effect and resulting depressed dry bulb entering the coil depends on the ambient dry bulb and associated relative humidity. Consult your sales representative, EVAPCO marketing, or Spectrum™ selection software for more information.

Spray Capacity: The cooling effect resulting from operating the spray system depends on the ambient dry bulb and associated relative humidity entering the coil. Consult your sales representative, EVAPCO marketing or Spectrum™ selection software for more information.

V Coil Configuration - EC Motor

Engineering Data



Twin Fan, 8' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH) [†] | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|-------------|--------|-------------------------------------|-------------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAVWD9102ZJ | 2 | 496 | 8.6 (6.4) | 35762 | 5' - 3-3/8" | 69 | 3050 | 3630 |
| EAVWD9104ZJ | 4 | 992 | 17.2 (12.8) | 71525 | 9' - 6-5/8" | 107 | 5150 | 6050 |
| EAVWD9106ZJ | 6 | 1486 | 25.7 (19.1) | 107287 | 13' - 9-3/4" | 146 | 7270 | 8490 |
| EAVWD9108ZJ | 8 | 1978 | 34.3 (25.5) | 143050 | 18' - 0" | 185 | 9420 | 10960 |
| EAVWD9110ZJ | 10 | 2482 | 42.9 (31.9) | 178812 | 22' - 4-1/8" | 223 | 11580 | 13440 |
| EAVWD9112ZJ | 12 | 2960 | 51.5 (38.3) | 214574 | 26' - 7-3/8" | 262 | 13680 | 15870 |
| EAVWD9114ZJ | 14 | 3401 | 60.1 (44.7) | 250337 | 30' - 10-1/2" | 300 | 15620 | 18130 |
| EAVWD9116ZJ | 16 | 3912 | 68.7 (51.1) | 286099 | 35' - 1-3/4" | 339 | 17730 | 20560 |
| EAVWD9118ZA | 18 | 4194 | 77.2 (57.5) | 310953 | 35' - 6-7/8" | 378 | 19820 | 22970 |
| EAVWD9120ZA | 20 | 4680 | 85.8 (63.9) | 345503 | 39' - 4-7/8" | 378 | 20310 | 23460 |

Notes:

* Adiabatic width: 9' 7/8"

A: Two incremental fin lengths available: 3' 10-1/16" or 4' 3-3/16"

Dimensions are subject to change. Do not use for pre-fabrication.

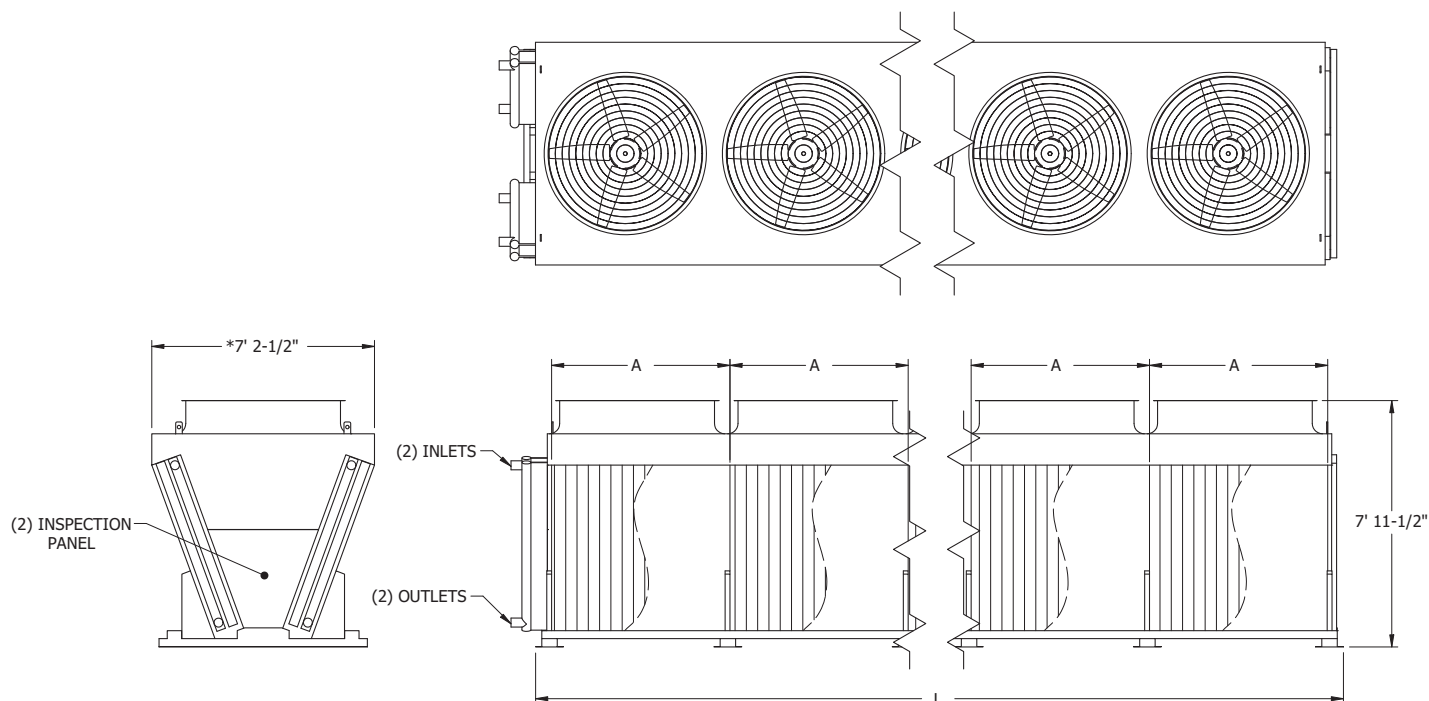
[†] Nominal Capacity 110°F-100°F at 92°F dry bulb temp.

Adiabatic capacity: The adiabatic cooling effect and resulting depressed dry bulb entering the coil depends on the ambient dry bulb and associated relative humidity. Consult your sales representative, EVAPCO marketing, or Spectrum™ selection software for more information.

Spray Capacity: The cooling effect resulting from operating the spray system depends on the ambient dry bulb and associated relative humidity entering the coil. Consult your sales representative, EVAPCO marketing or Spectrum™ selection software for more information.

V Coil Configuration - NEMA Motor

Engineering Data



Single Fan, 7' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH) [†] | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|-------------|--------|-------------------------------------|-----------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAVWD15S1PI | 1 | 601 | 10 (7.5) | 43020 | 8' - 8-3/8" | 74 | 4110 | 4730 |
| EAVWD15S2PI | 2 | 1212 | 20 (15) | 85830 | 16' - 4-1/2" | 125 | 7370 | 8420 |
| EAVWD15S3PI | 3 | 1828 | 30 (22.5) | 128850 | 24' - 5/8" | 177 | 10720 | 12200 |
| EAVWD15S4PI | 4 | 2384 | 40 (30) | 171860 | 31' - 8-3/4" | 228 | 13790 | 15700 |
| EAVWD15S5PI | 5 | 3011 | 50 (37.5) | 214670 | 39' - 4-7/8" | 280 | 17110 | 19430 |
| EAVWD15S6PK | 6 | 3284 | 60 (45) | 239040 | 39' - 4-7/8" | 280 | 17790 | 20120 |

Notes:

* Adiabatic width: 8' 9-5/8"

A: Three incremental fin lengths available: 5' 9-1/16", 6' 4-3/4" or 7' 8-1/8"

Dimensions are subject to change. Do not use for pre-fabrication.

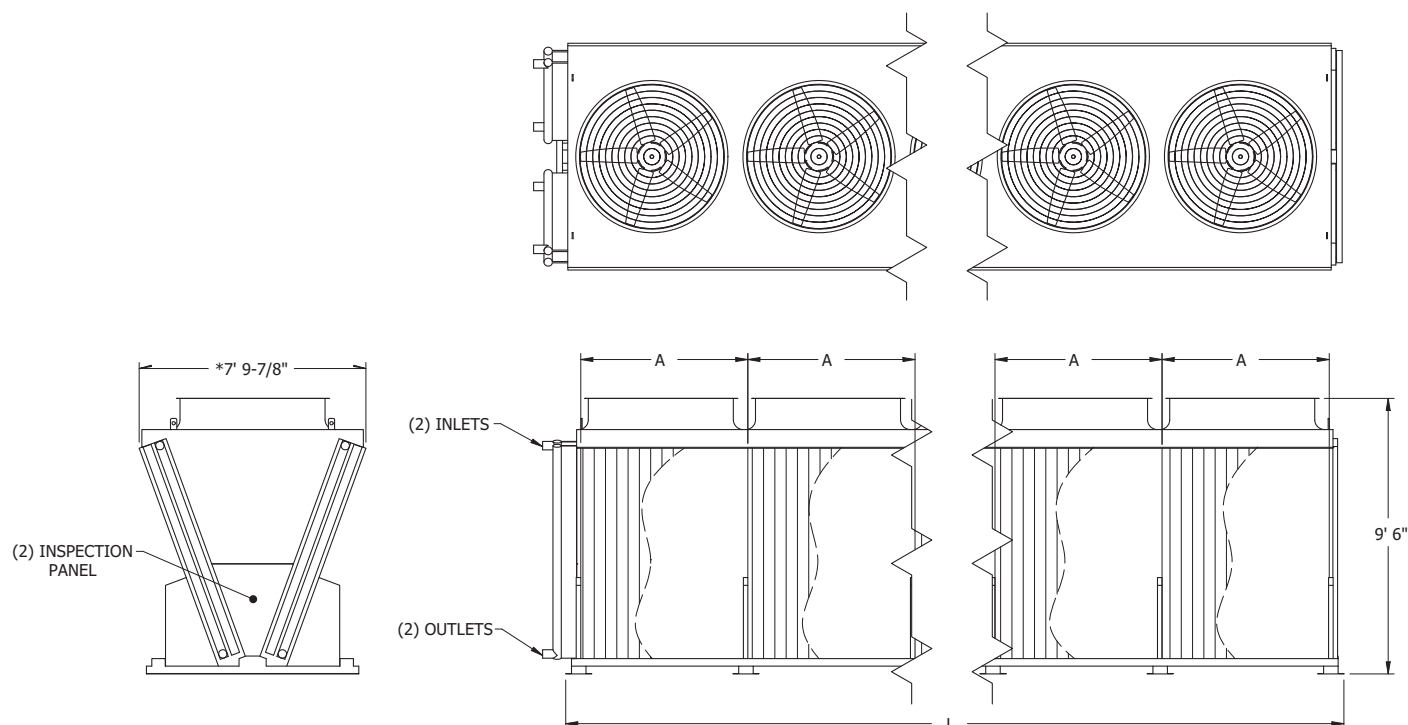
† Nominal Capacity 110°F-100°F at 92°F dry bulb temp. Adiabatic = dry bulb 102°F

Adiabatic capacity: The adiabatic cooling effect and resulting depressed dry bulb entering the coil depends on the ambient dry bulb and associated relative humidity. Consult your sales representative, EVAPCO marketing, or Spectrum™ selection software for more information.

Spray Capacity: The cooling effect resulting from operating the spray system depends on the ambient dry bulb and associated relative humidity entering the coil. Consult your sales representative, EVAPCO marketing or Spectrum™ selection software for more information.

V Coil Configuration - NEMA Motor

Engineering Data



Single Fan, 8' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH) [†] | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|-------------|--------|-------------------------------------|-----------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAVWD15S1ZI | 1 | 696 | 10 (7.5) | 47260 | 8' - 8-3/8" | 100 | 4810 | 5650 |
| EAVWD15S2ZI | 2 | 1391 | 20 (15) | 94520 | 16' - 4-1/2" | 169 | 8630 | 10040 |
| EAVWD15S3ZI | 3 | 2083 | 30 (22.5) | 141770 | 24' - 5/8" | 239 | 12540 | 14530 |
| EAVWD15S4ZI | 4 | 2773 | 40 (30) | 188820 | 31' - 8-3/4" | 308 | 16160 | 18730 |
| EAVWD15S5ZI | 5 | 3432 | 50 (37.5) | 236070 | 39' - 4-7/8" | 378 | 20030 | 23180 |
| EAVWD15S6ZK | 6 | 3822 | 60 (45) | 268920 | 39' - 4-7/8" | 378 | 20750 | 23900 |

Notes:

* Adiabatic width: 9' 7/8"

A: Two incremental fin lengths available: 5' 9-1/16", 6' 4-3/4" or 7' 8-1/8"

Dimensions are subject to change. Do not use for pre-fabrication.

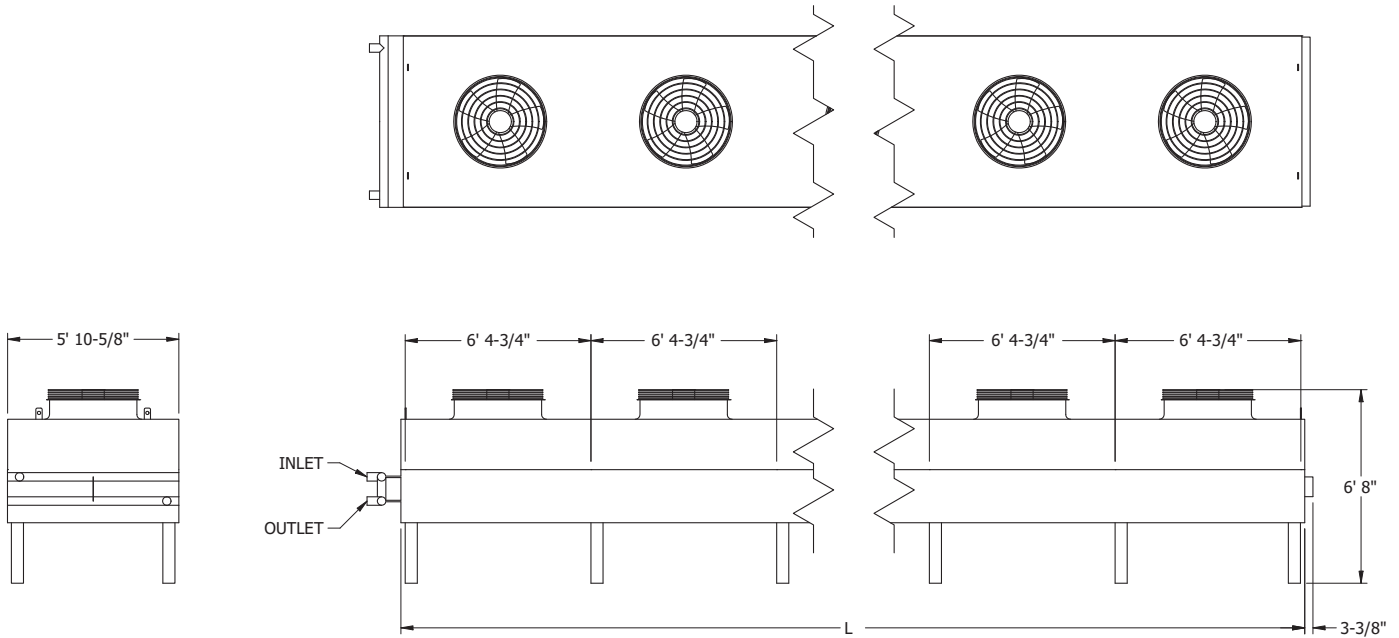
[†] Nominal Capacity 110°F-100°F at 92°F dry bulb temp.

Adiabatic capacity: The adiabatic cooling effect and resulting depressed dry bulb entering the coil depends on the ambient dry bulb and associated relative humidity. Consult your sales representative, EVAPCO marketing, or Spectrum™ selection software for more information.

Spray Capacity: The cooling effect resulting from operating the spray system depends on the ambient dry bulb and associated relative humidity entering the coil. Consult your sales representative, EVAPCO marketing or Spectrum™ selection software for more information.

Flat Coil Configuration - EC Motor

Engineering Data



Single Fan, 6' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH) [†] | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|------------|--------|-------------------------------------|-------------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAFW91S1WK | 1 | 258 | 4.3 (3.2) | 18423 | 6' - 8-1/4" | 33 | 1800 | 2080 |
| EAFW91S2WK | 2 | 518 | 8.6 (6.4) | 36845 | 13' - 0" | 54 | 3120 | 3580 |
| EAFW91S3WK | 3 | 775 | 12.9 (9.6) | 55268 | 19' - 5-3/4" | 76 | 4500 | 5130 |
| EAFW91S4WK | 4 | 1032 | 17.2 (12.8) | 73690 | 25' - 10-1/2" | 97 | 5790 | 6600 |
| EAFW91S5WK | 5 | 1274 | 21.5 (16) | 92113 | 32' - 3-1/4" | 118 | 7000 | 7990 |
| EAFW91S6WK | 6 | 1541 | 25.7 (19.1) | 110536 | 38' - 8" | 140 | 8320 | 9490 |

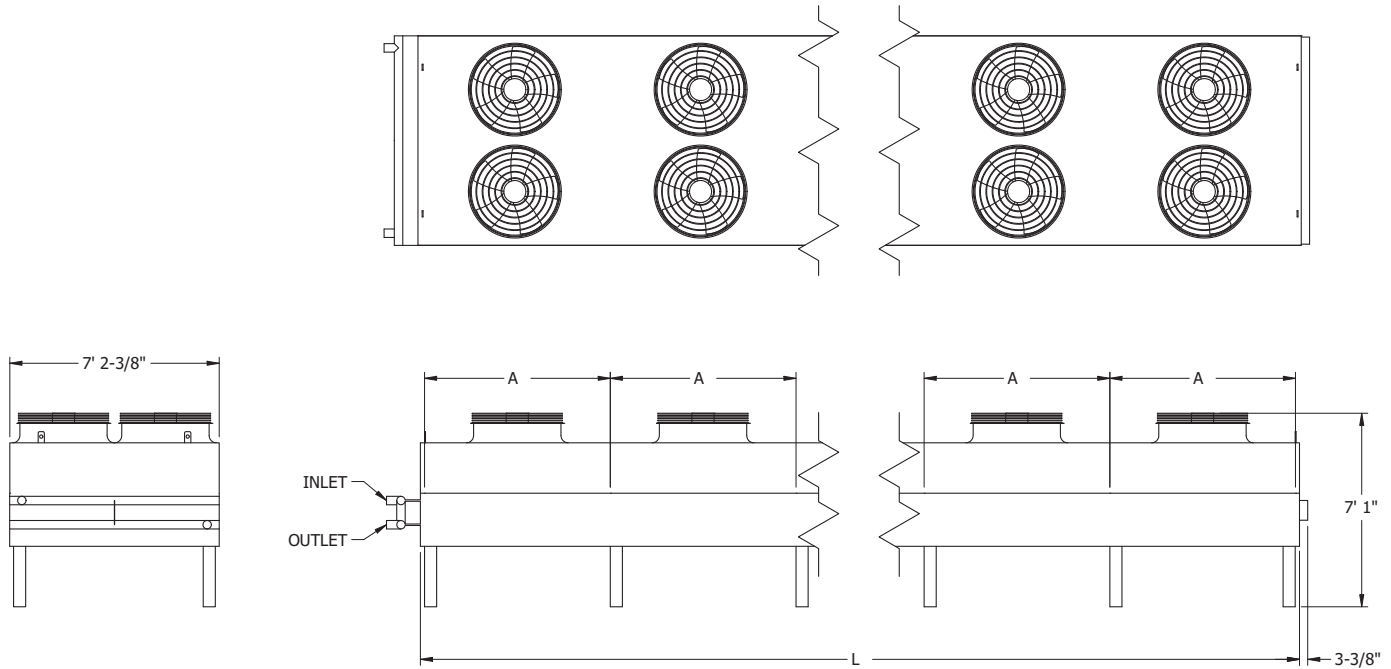
Notes:

Dimensions are subject to change. Do not use for pre-fabrication.

[†] Nominal Capacity based on 110°F-100°F at 92°F dry bulb temperature.

Flat Coil Configuration - EC Motor

Engineering Data



Twin Fan, 7' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH) [†] | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|-------------|--------|-------------------------------------|-------------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAFWD9102PI | 2 | 443 | 8.6 (6.4) | 33060 | 7' - 11-1/2" | 44 | 2420 | 2790 |
| EAFWD9104PI | 4 | 878 | 17.2 (12.8) | 66121 | 15' - 7-5/8" | 75 | 4320 | 4950 |
| EAFWD9106PI | 6 | 1322 | 25.7 (19.1) | 99181 | 23' - 3-3/4" | 106 | 6210 | 7100 |
| EAFWD9108PI | 8 | 1746 | 34.3 (25.5) | 132241 | 30' - 11-7/8" | 137 | 7940 | 9090 |
| EAFWD9110PI | 10 | 2206 | 42.9 (31.9) | 165301 | 38' - 8" | 168 | 9830 | 11230 |
| EAFWD9112PK | 12 | 2258 | 51.5 (38.3) | 182472 | 38' - 8" | 168 | 10160 | 11560 |

Notes:

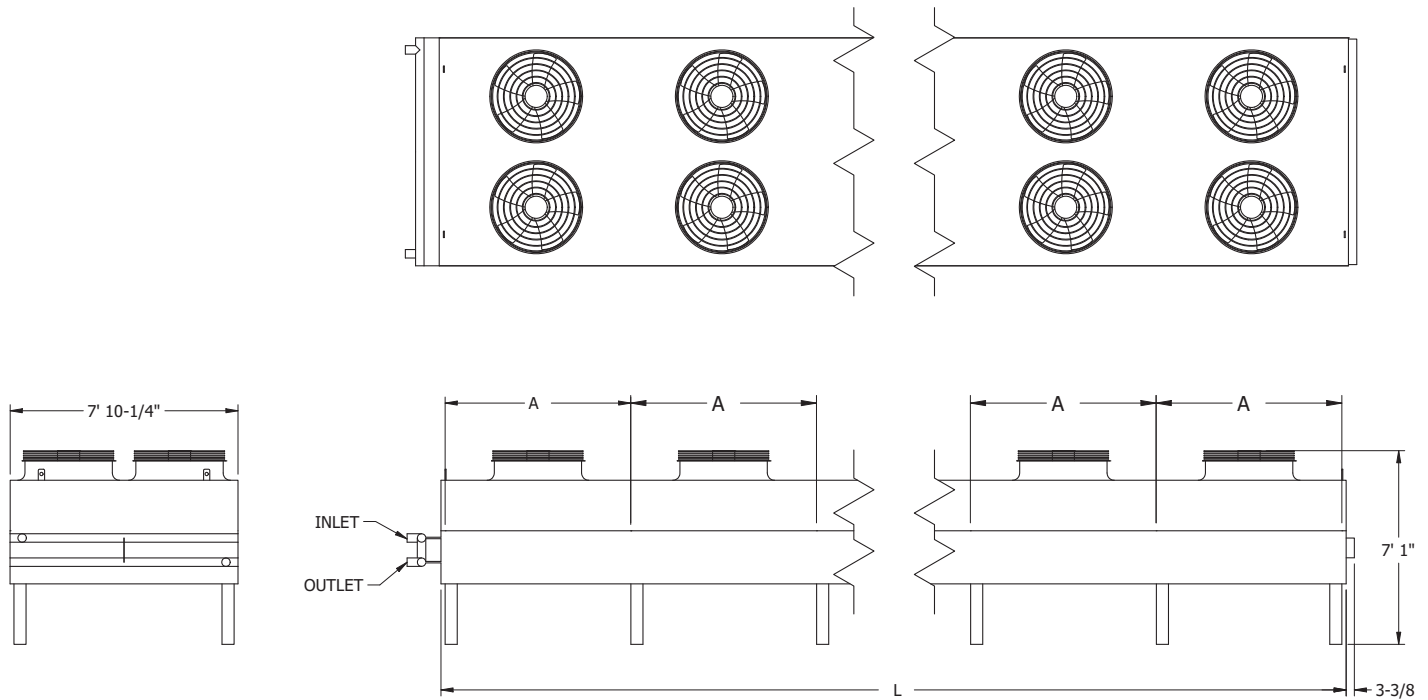
A: Two incremental fin lengths available: 6' 4-3/4" or 7' 8-1/8"

Dimensions are subject to change. Do not use for pre-fabrication.

[†] Nominal Capacity based on 110°F-100°F at 92°F dry bulb temperature.

Flat Coil Configuration - EC Motor

Engineering Data



Twin Fan, 8' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH) [†] | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|------------|--------|-------------------------------------|-------------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAFW9102ZI | 2 | 470 | 8.6 (6.4) | 34550 | 7' - 11-1/2" | 50 | 2630 | 3050 |
| EAFW9104ZI | 4 | 938 | 17.2 (12.8) | 69101 | 15' - 7-5/8" | 85 | 4690 | 5400 |
| EAFW9106ZI | 6 | 1403 | 25.7 (19.1) | 103651 | 23' - 3-3/4" | 119 | 6740 | 7740 |
| EAFW9108ZI | 8 | 1853 | 34.3 (25.5) | 138201 | 30' - 11-7/8" | 154 | 8610 | 9900 |
| EAFW9110ZI | 10 | 2340 | 42.9 (31.9) | 172752 | 38' - 8" | 189 | 10660 | 12240 |
| EAFW9112ZK | 12 | 2553 | 51.5 (38.3) | 192943 | 38' - 8" | 189 | 11000 | 12580 |

Notes:

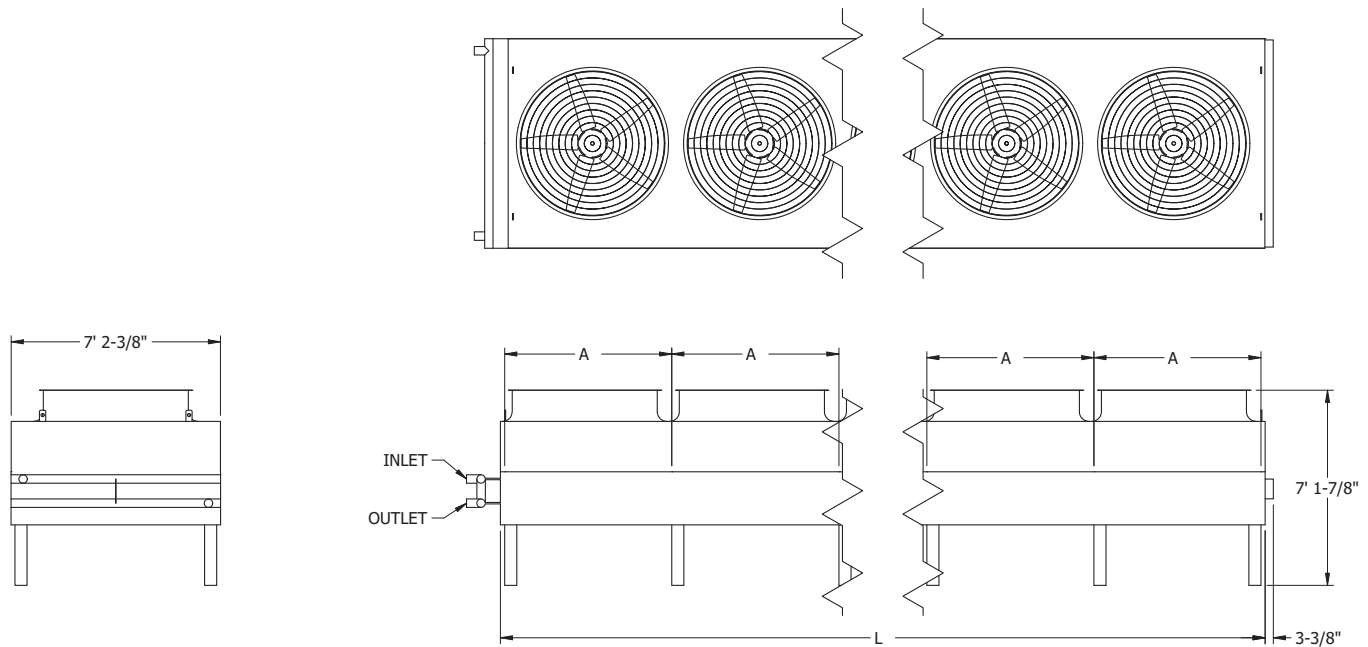
A: Two incremental fin lengths available: 6' 4-3/4" or 7' 8-1/8"

Dimensions are subject to change. Do not use for pre-fabrication.

[†] Nominal Capacity based on 110°F-100°F at 92°F dry bulb temperature.

Flat Coil Configuration - NEMA Motor

Engineering Data



Single Fan, 7' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH)† | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|--------------|--------|-------------------------|-----------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAFFWD15S1PI | 1 | 446 | 10 (7.5) | 33360 | 7' - 11-1/2" | 44 | 2740 | 3110 |
| EAFFWD15S2PI | 2 | 884 | 20 (15) | 66760 | 15' - 7-5/8" | 75 | 4940 | 5570 |
| EAFFWD15S3PI | 3 | 1331 | 30 (22.5) | 100030 | 23' - 3-3/4" | 106 | 7140 | 8030 |
| EAFFWD15S4PI | 4 | 1758 | 40 (30) | 133510 | 30' - 11-7/8" | 137 | 9180 | 10330 |
| EAFFWD15S5PI | 5 | 2220 | 50 (37.5) | 166780 | 38' - 8" | 168 | 11380 | 12780 |
| EAFFWD15S6PK | 6 | 2331 | 60 (45) | 177370 | 38' - 8" | 168 | 11920 | 13320 |

Notes:

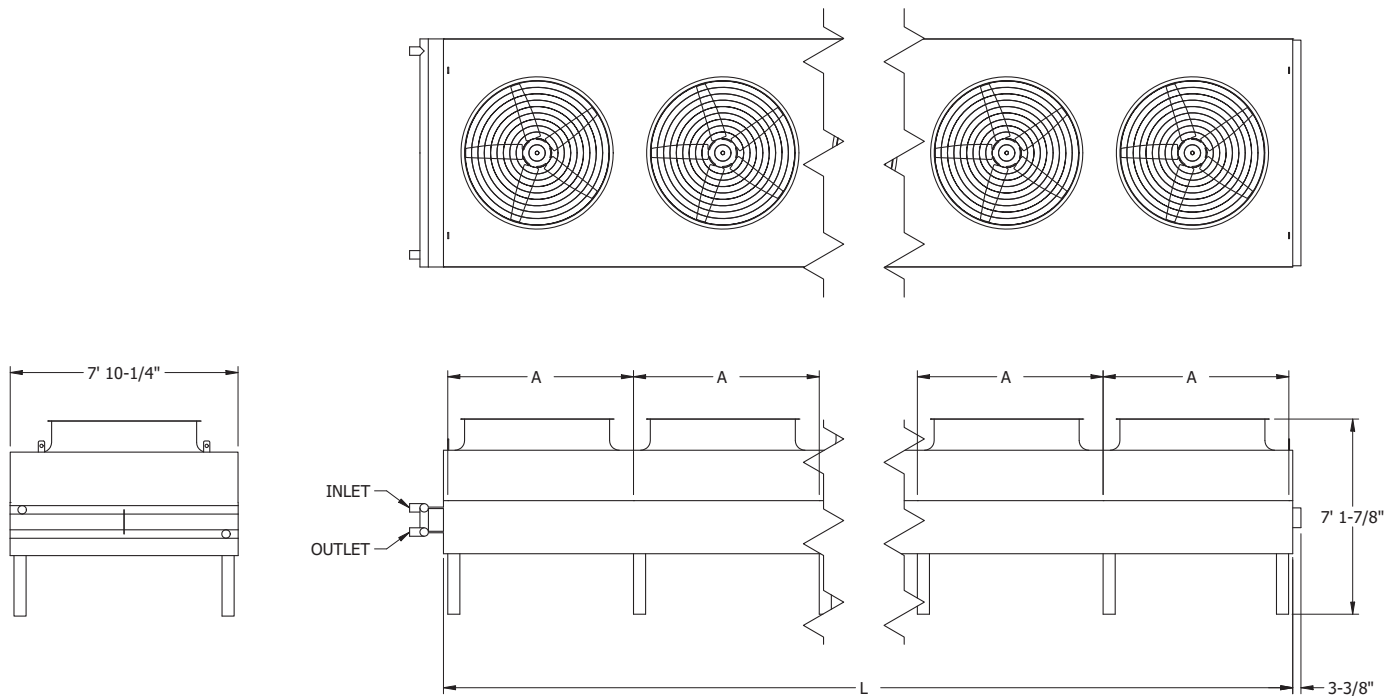
A: Three incremental fin lengths available: 5' 9-1/16", 6' 4-3/4" or 7' 8-1/8"

Dimensions are subject to change. Do not use for pre-fabrication.

† Nominal Capacity based on 110°F-100°F at 92°F dry bulb temperature.

Flat Coil Configuration - NEMA Motor

Engineering Data



Single Fan, 8' Wide Models

| Model Name | # Fans | Nominal Capacity (MBH) [†] | HP (kW) | Air Volume (cfm) | Unit Length (L) | Coil Volume (gal.) | Shipping Weight (lbs.) | Operating Weight (lbs.) |
|-------------|--------|-------------------------------------|-----------|------------------|-----------------|--------------------|------------------------|-------------------------|
| EAFWD15S1ZI | 1 | 483 | 10 (7.5) | 35820 | 7' - 11-1/2" | 50 | 2940 | 3360 |
| EAFWD15S2ZI | 2 | 964 | 20 (15) | 71420 | 15' - 7-5/8" | 85 | 5300 | 6010 |
| EAFWD15S3ZI | 3 | 1441 | 30 (22.5) | 107230 | 23' - 3-3/4" | 119 | 7660 | 8660 |
| EAFWD15S4ZI | 4 | 1903 | 40 (30) | 143040 | 30' - 11-7/8" | 154 | 9840 | 11130 |
| EAFWD15S5ZI | 5 | 2405 | 50 (37.5) | 178640 | 38' - 8" | 189 | 12200 | 13780 |
| EAFWD15S6ZK | 6 | 2538 | 60 (45) | 199060 | 38' - 8" | 189 | 13250 | 14830 |

Notes:

A: Three incremental fin lengths available: 5' 9-1/16", 6' 4-3/4" or 7' 8-1/8"

Dimensions are subject to change.

[†] Nominal Capacity based on 110°F-100°F at 92°F dry bulb temperature.

Wiring and Control Options

Factory wiring and control options are available for all eco-Air Series coolers. All wiring follows UL recognized standards. Many eco-Air Series configurations allow for single point power and factory mounted components. Please consult your sales representative or EVAPCO Marketing for job specific details.

Common Terminal Box (standard) - All motors wired to a common terminal box located on the end panel opposite coil connections. Factory wiring and design complies with UL Recognized Standards.



Individual Motor Disconnect Switches (optional) - Mounted at each fan motor to give the user the ability to isolate individual motor power feeds.



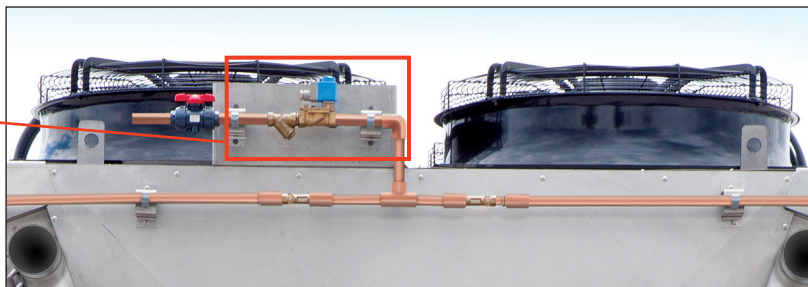
Wiring and Control Options

EVAPCO Control Package – Operating sequence and fan speed control based on real time heat loads and ambient conditions.



- • EVAPCO PLC Controller
- Supervisory control system integration
- Fan speed control
 - EC Motor Option: Modbus control of EC fan
 - NEMA Motor Option: Packaged VFD fan speed control with bypass switch
- UL Listed
- UL Type 4 enclosure
- Thermal overload and short circuit protection of each motor
- Operate and fault indicator lights on outside of panel
- Fluid Temperature Sensor (shipped loose)
- Ambient Temperature Sensor
- Rain/Sun Protection Hood (optional)
- Solenoid control of adiabatic pre-cooling system (if equipped)

Solenoid Control of
Adiabatic Pre-cooling
& Spray Systems
(if equipped)



Water supply solenoid valve arrangement

The EVAPCO Control Package is factory mounted and wired when configuration and shipping limitations allow.



UL (cUL) Compliance

All Components are
UL Recognized

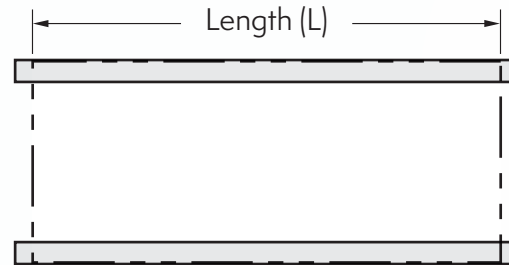
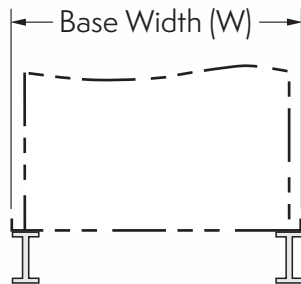


The entire unit is UL
Listed when provided
with factory mounted
and wired EVAPCO
Control Package.



Structural Steel Support

| eco-Air Series Supporting Steel Dimensions | | |
|--|---------------------------------|-------------------------------|
| V Models | Dry & Spray Unit Base Width (W) | Adiabatic Unit Base Width (W) |
| 4' Wide | 4' 2" | 5' 10" |
| 7' Wide | 7' 2-1/2" | 8' 9-1/2" |
| 8' Wide | 7' 3-3/4" | 9' 3/4" |
| F Models | Base Width (W) | — |
| 6' Wide | 5' 7-5/16" | — |
| 7' Wide | 6' 11-1/8" | — |
| 8' Wide | 7' 7" | — |



Length as shown on "unit length range (L)" in catalog table

1. These are suggested arrangements for preliminary layout purposes. Consult your EVAPCO representative for factory certified steel support drawings.
2. The recommended support for the eco-Air Series coolers is structural I-beams running the entire length of the unit. Mounting holes, 3/4" in diameter are provided for bolting to the structural steel.
3. Beams should be sized in accordance with accepted structural practices. Maximum deflection of beam under unit to be 1/360 of the unit length, not to exceed 1/2".
5. Beams should be level before setting the unit in place. Do not level the unit by shimming between it and the I-beams.
6. Support beams and Anchor bolts are to be furnished by others.
7. Dimensions, weights and data are subject to change without notice. Refer to the factory certified drawings for exact dimensions.

EVAPCO Technical Support Services

EVAPCO Representatives

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SPECTRUM™ by EVAPCO

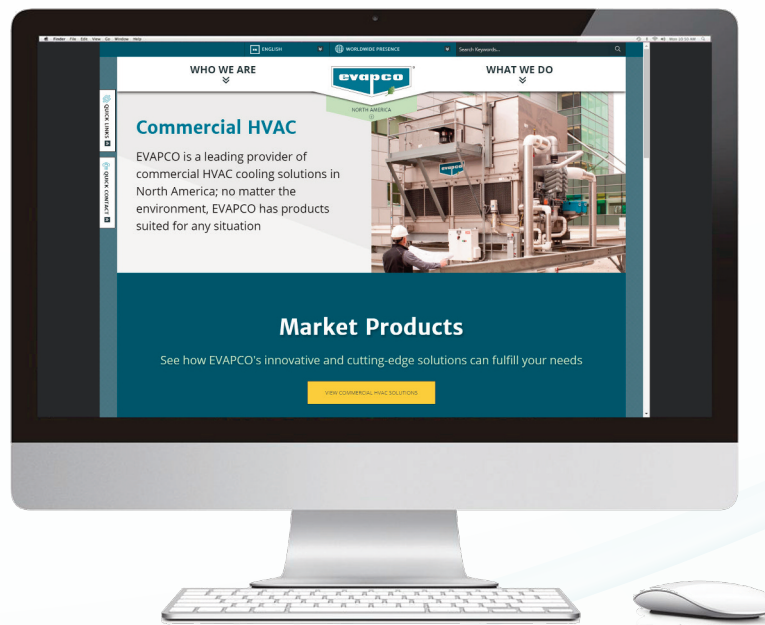
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Bookmark evapco.com for the latest and most complete product information. The website contains a multitude of information and resources including:

- Unit certified drawings
- Steel support drawings
- Scaled isometric views in CAD
- 3-D models in Revit
- Product catalogs
- Rigging instructions
- Operation and maintenance instructions
- White papers
- Videos
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