

# DRY & ADIABATIC CLOSED CIRCUIT COOLERS

## eco-Air™ Series

**e**nvironmentally  
**C**onscious  
**O**peration

Providing *Maximum* Water Savings

FEATURING



for LIFE







## 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
- 23 engineering & manufacturing facilities in 10 countries
- More than 170 sales offices worldwide

## Learn More Now

Visit [evapco.com](http://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, and eco-Air Series Adiabatic 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 of dry and adiabatic coolers offers unparalleled flexibility in a wide range of capacities, footprints, motor types, and control options.



EC Motor Option



NEMA Motor Option



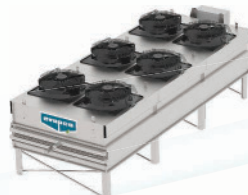
EC Motor Option



NEMA Motor Option

## EAWVA V Coil Adiabatic Models

## EAWWD V Coil Dry Models



EC Motor Option



NEMA Motor Option

## EAFWD Flat Coil Dry 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 and adiabatic 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.

## Heat Exchanger Coil

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



## Structure and Casing

- Standard Type 304L Stainless Steel for increased corrosion resistance and longevity
- G-235 galvanized steel available

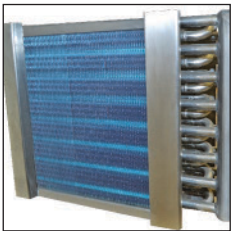
## Warranty

- 2 year complete unit
- 2 year Adiabatic Pads (if equipped)
- 1 year EVAPCO Controller and other electrical components (if equipped)



## V Coil Models

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



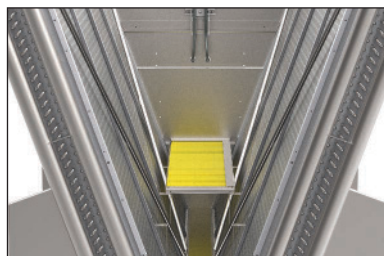
## Epoxy Coated Fins (Optional)

- Increased corrosion resistance
- No impact on unit capacity



## Inspection Panel (V Coil Models)

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



## Internal Step Deck (Optional)

- Platform and grab rail for access to elevated fan section components
- V coil models only

## 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



# eco-Air Series Design & Construction Features

## Advanced Motor Technology

Electronically Commutated (EC) or NEMA fan motor designs

### NEMA

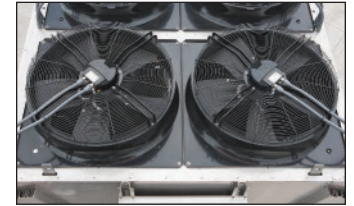
- Premium efficient direct drive
- Zero maintenance sealed bearings
- VFD ready
- Severe Duty



### Electronically Commutated (EC)

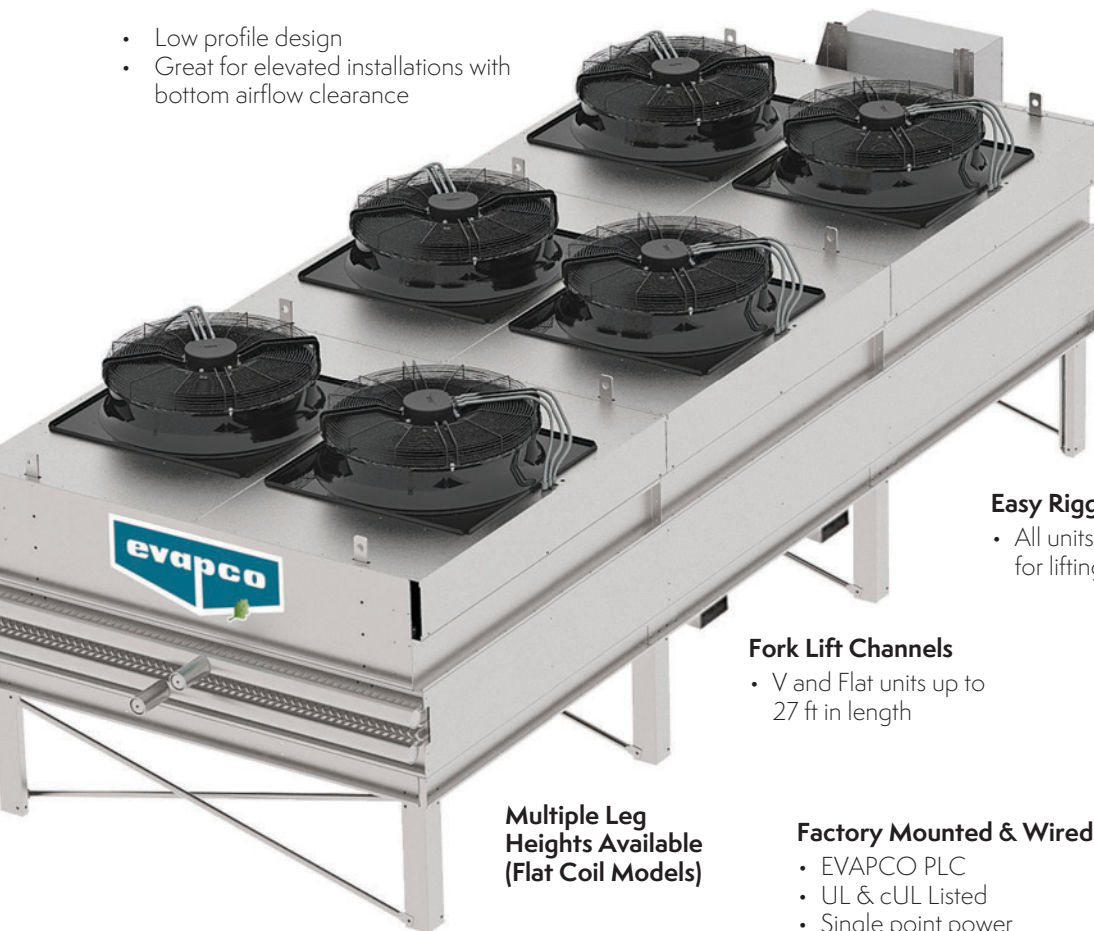
EC motors are the latest development in energy savings and speed control. The high efficiency wing tip fans operate up to 3 dB less than conventional blade fans with improved part speed energy consumption.

- Zero maintenance
- Integrated speed control



## Flat Coil Models

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



### Coil Return Bend Covers

- Protects the coil return bends during handling and operation



### Easy Rigging

- All units are designed for lifting as once piece

### Fork Lift Channels

- V and Flat units up to 27 ft in length

### Coils Pressurized with Nitrogen

- Limits internal corrosion potential during transport and storage

### Multiple Leg Heights Available (Flat Coil Models)

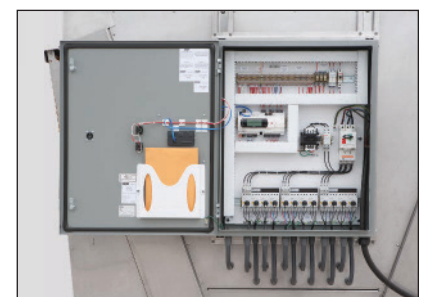
### Factory Mounted & Wired Controls (Optional)

- EVAPCO PLC
- UL & cUL Listed
- Single point power connection



### Common Terminal Box

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



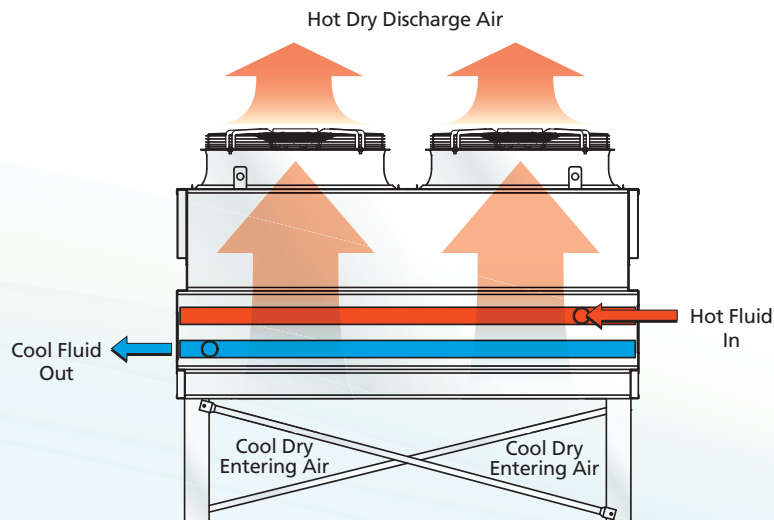
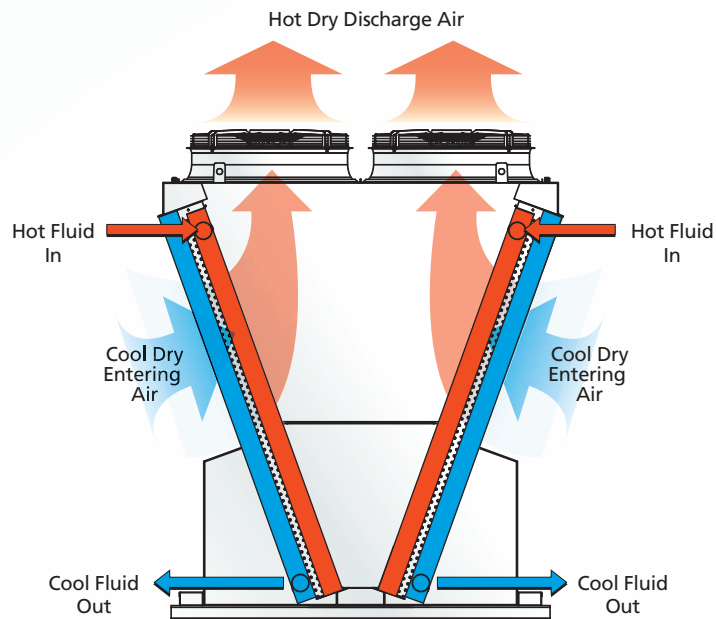
### IBC Compliant Design

- 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

# 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.

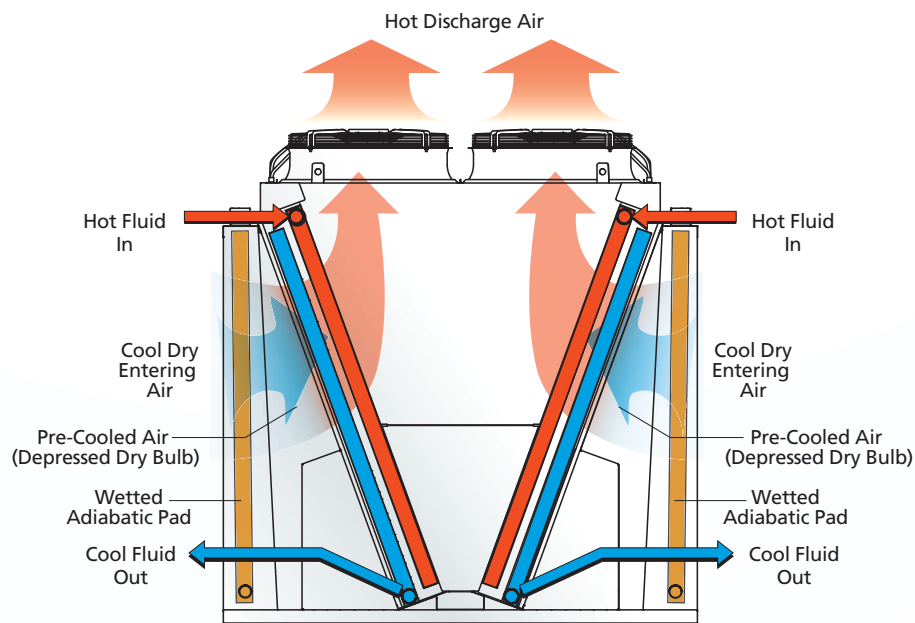




# Adiabatic Principle of Operation

## 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 discharged to the atmosphere. Cool process fluid exits the unit through the connections shown in blue.



# 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 cooler is designed as a once through system, meaning it has no pump and no basin to hold water, reducing the time required for maintenance. Additionally, 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.

## Reduced or Eliminated Water Consumption

Compared to traditional evaporative systems, the eco-Air Series will either eliminate or dramatically reduce water consumption. Adiabatic 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 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.



Adiabatic Pad Drip Pan



Zero Maintenance Motors



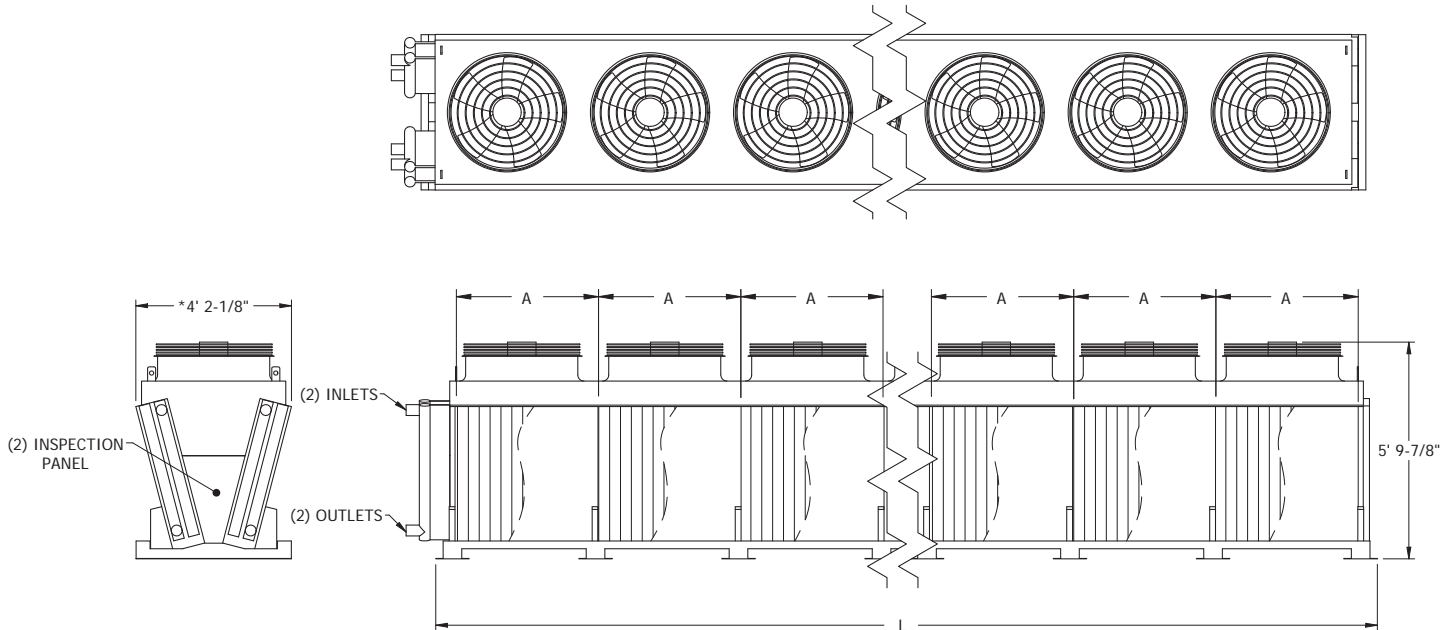
Factory Wired Fan Motors



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.

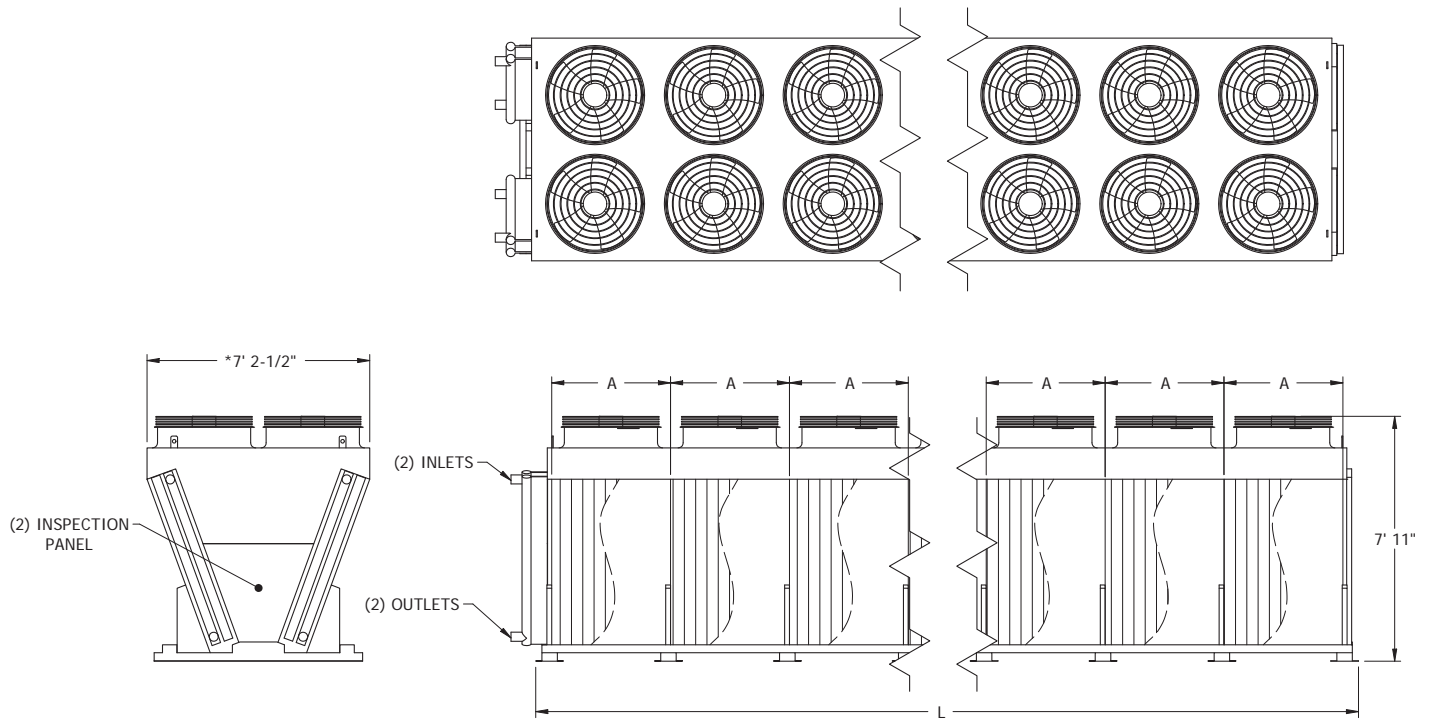
† Nominal Capacity 110°F-100°F at 92°F dry bulb temp. Adiabatic = dry bulb 102°F

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



# 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"

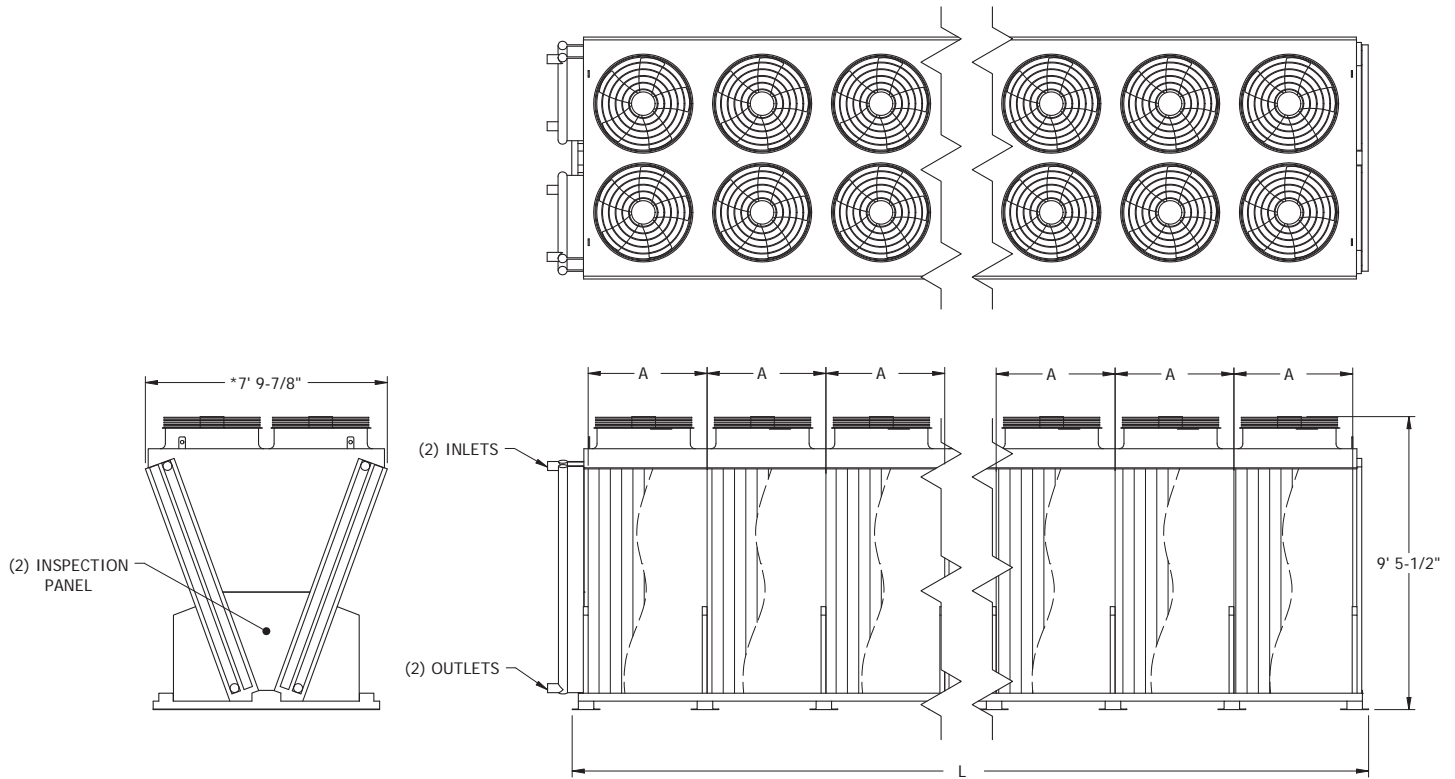
Dimensions are subject to change. Do not use for pre-fabrication.

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

# 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.

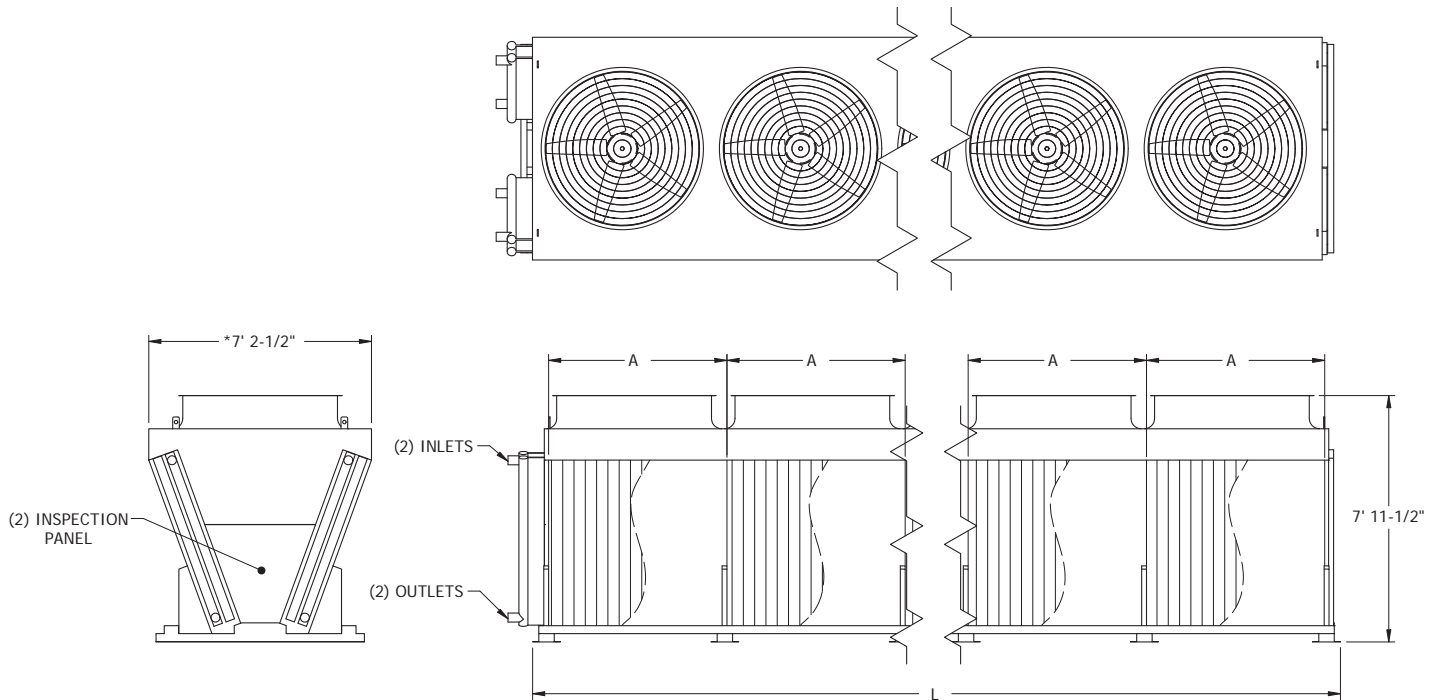
† Nominal Capacity 110°F-100°F at 92°F dry bulb temp. Adiabatic = dry bulb 102°F

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



# 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"

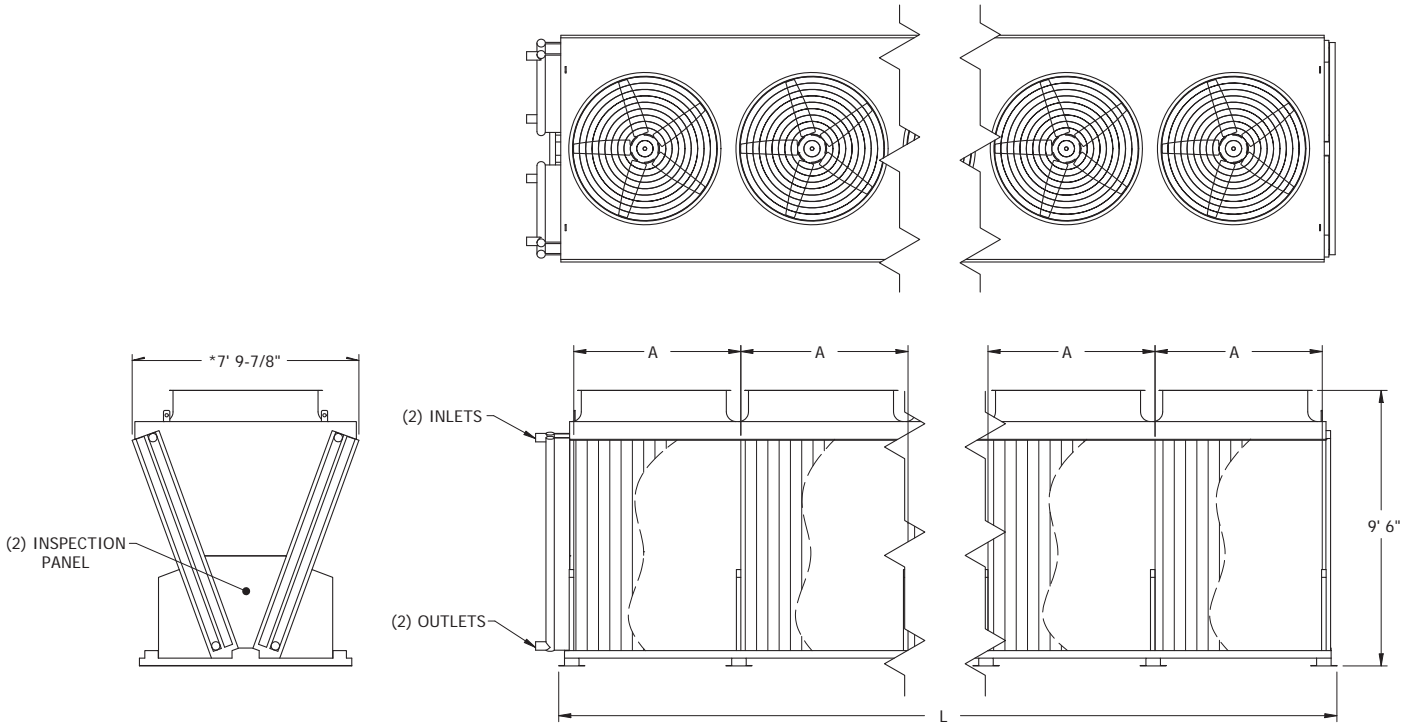
Dimensions are subject to change. Do not use for pre-fabrication.

† 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

# 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.

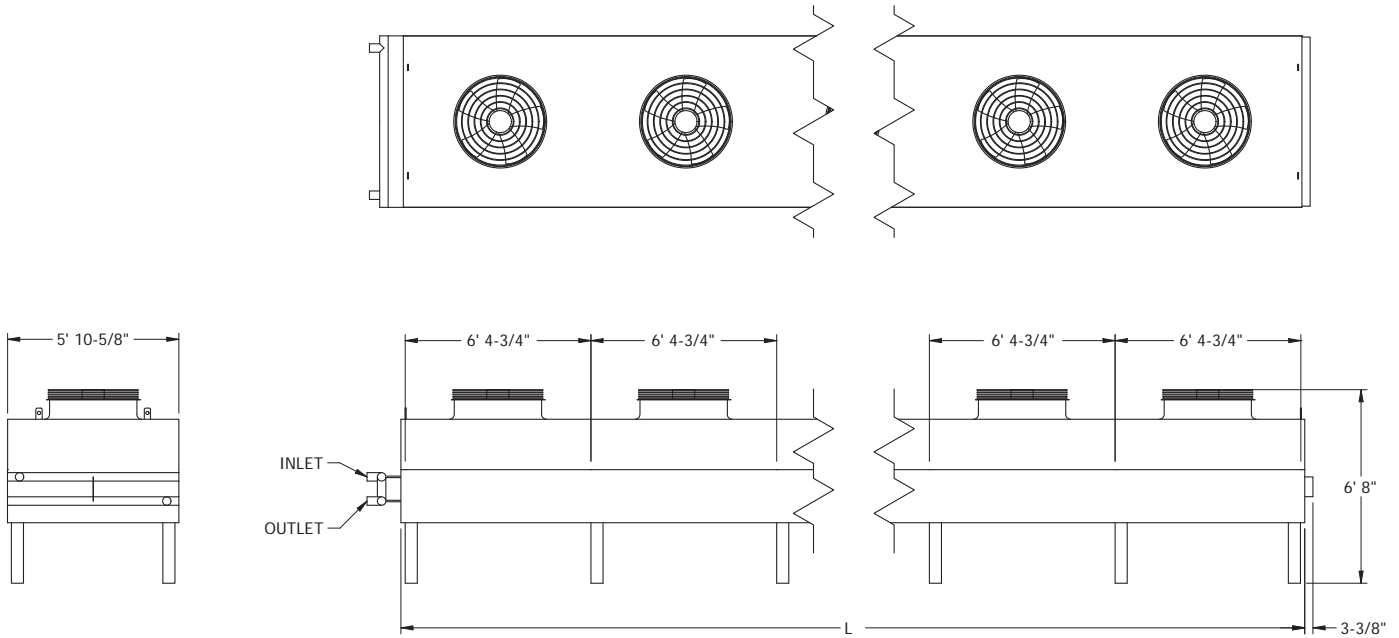
† Nominal Capacity 110°F-100°F at 92°F dry bulb temp. Adiabatic = dry bulb 102°F

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



# Flat Coil Configuration - EC Motor

## Engineering Data



## Single Fan, 6' Wide Models

Model Name	# Fans	Nominal Capacity (MBH) <sup>†</sup>	HP (kW)	Air Volume (cfm)	Unit Length (L)	Coil Volume (gal.)	Shipping Weight (lbs.)	Operating Weight (lbs.)
EAFFWD91S1WK	1	258	4.3 (3.2)	18423	6' - 8-1/4"	33	1800	2080
EAFFWD91S2WK	2	518	8.6 (6.4)	36845	13' - 0"	54	3120	3580
EAFFWD91S3WK	3	775	12.9 (9.6)	55268	19' - 5-3/4"	76	4500	5130
EAFFWD91S4WK	4	1032	17.2 (12.8)	73690	25' - 10-1/2"	97	5790	6600
EAFFWD91S5WK	5	1274	21.5 (16)	92113	32' - 3-1/4"	118	7000	7990
EAFFWD91S6WK	6	1541	25.7 (19.1)	110536	38' - 8"	140	8320	9490

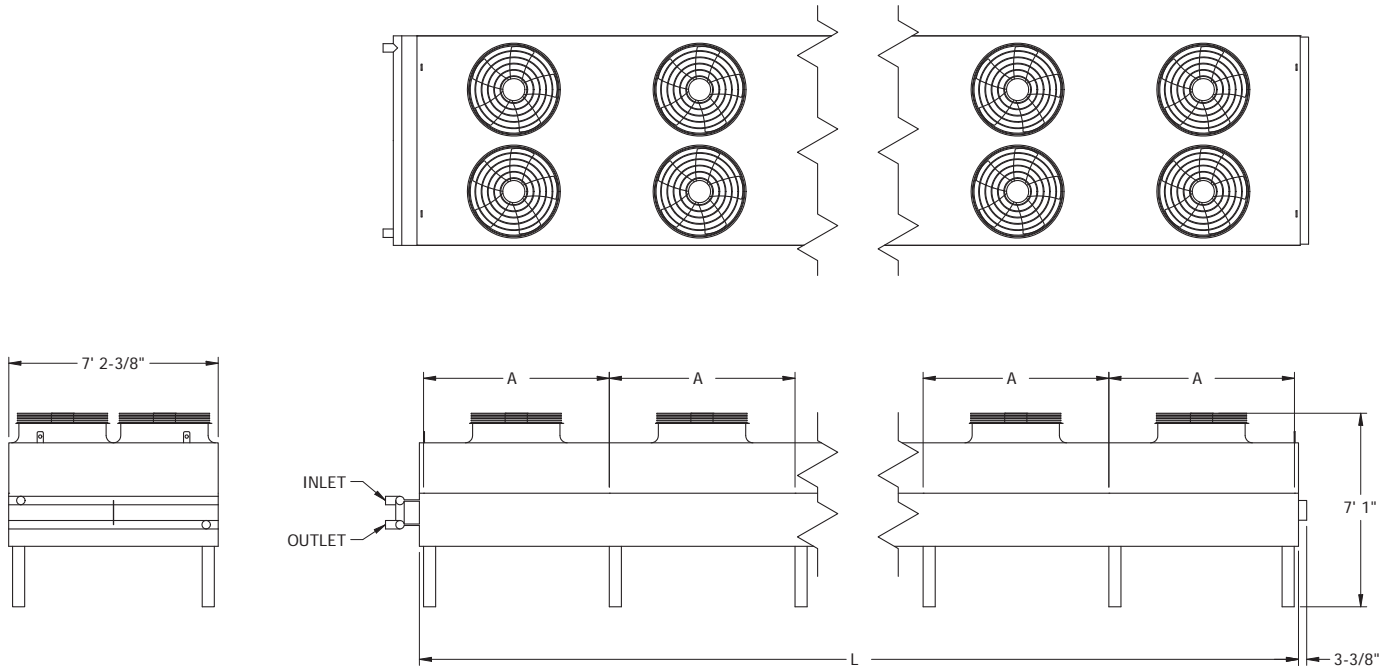
**Notes:**

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

<sup>†</sup> 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:**

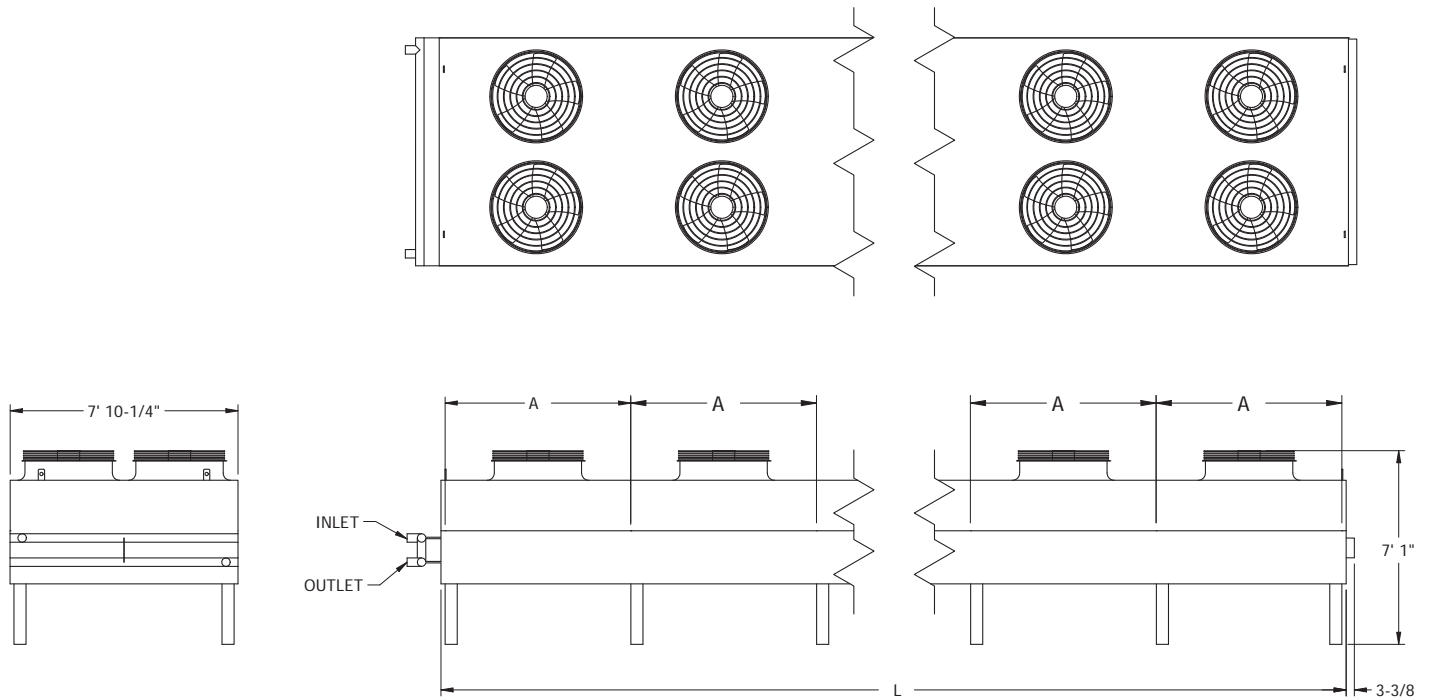
A: Two incremental fin lengths available: 6' 4-3/4" or 7' 8-1/8"

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.)
EAFWD9102ZI	2	470	8.6 (6.4)	34550	7' - 11-1/2"	50	2630	3050
EAFWD9104ZI	4	938	17.2 (12.8)	69101	15' - 7-5/8"	85	4690	5400
EAFWD9106ZI	6	1403	25.7 (19.1)	103651	23' - 3-3/4"	119	6740	7740
EAFWD9108ZI	8	1853	34.3 (25.5)	138201	30' - 11-7/8"	154	8610	9900
EAFWD9110ZI	10	2340	42.9 (31.9)	172752	38' - 8"	189	10660	12240
EAFWD9112ZK	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"

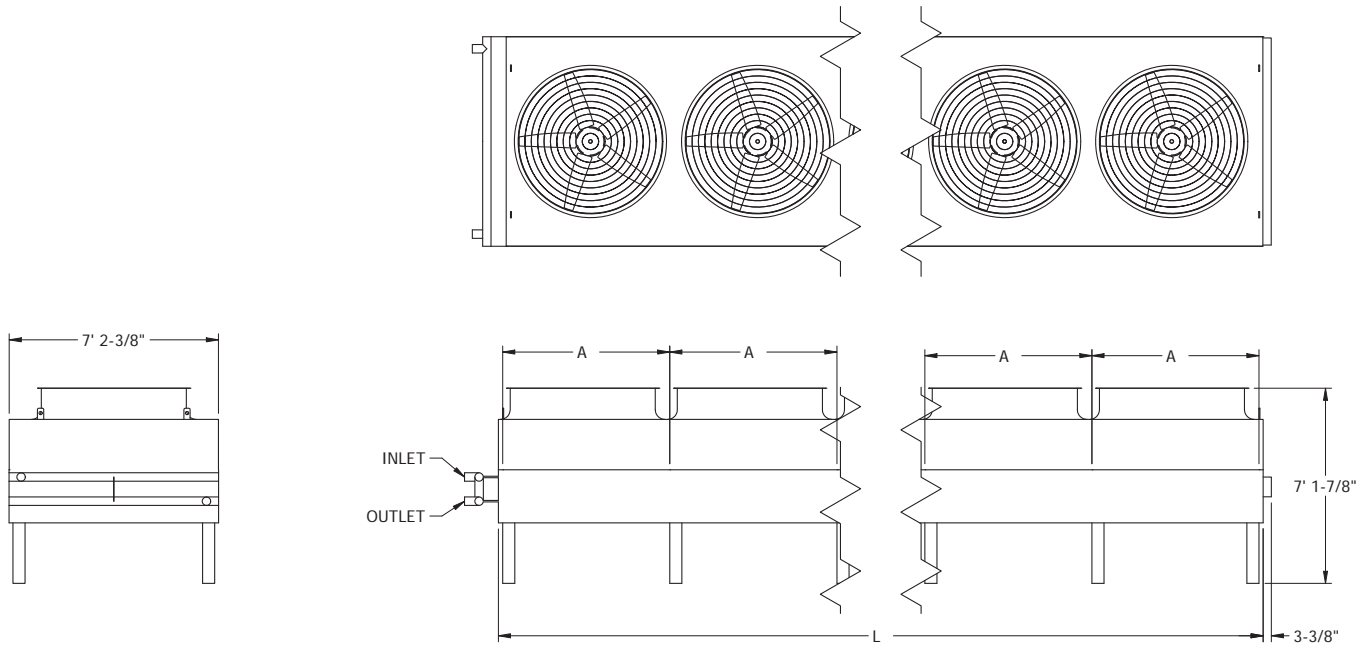
Dimensions are subject to change. Do not use for pre-fabrication.

† 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.)
EAFWD15S1PI	1	446	10 (7.5)	33360	7' - 11-1/2"	44	2740	3110
EAFWD15S2PI	2	884	20 (15)	66760	15' - 7-5/8"	75	4940	5570
EAFWD15S3PI	3	1331	30 (22.5)	100030	23' - 3-3/4"	106	7140	8030
EAFWD15S4PI	4	1758	40 (30)	133510	30' - 11-7/8"	137	9180	10330
EAFWD15S5PI	5	2220	50 (37.5)	166780	38' - 8"	168	11380	12780
EAFWD15S6PK	6	2331	60 (45)	177370	38' - 8"	168	11920	13320

**Notes:**

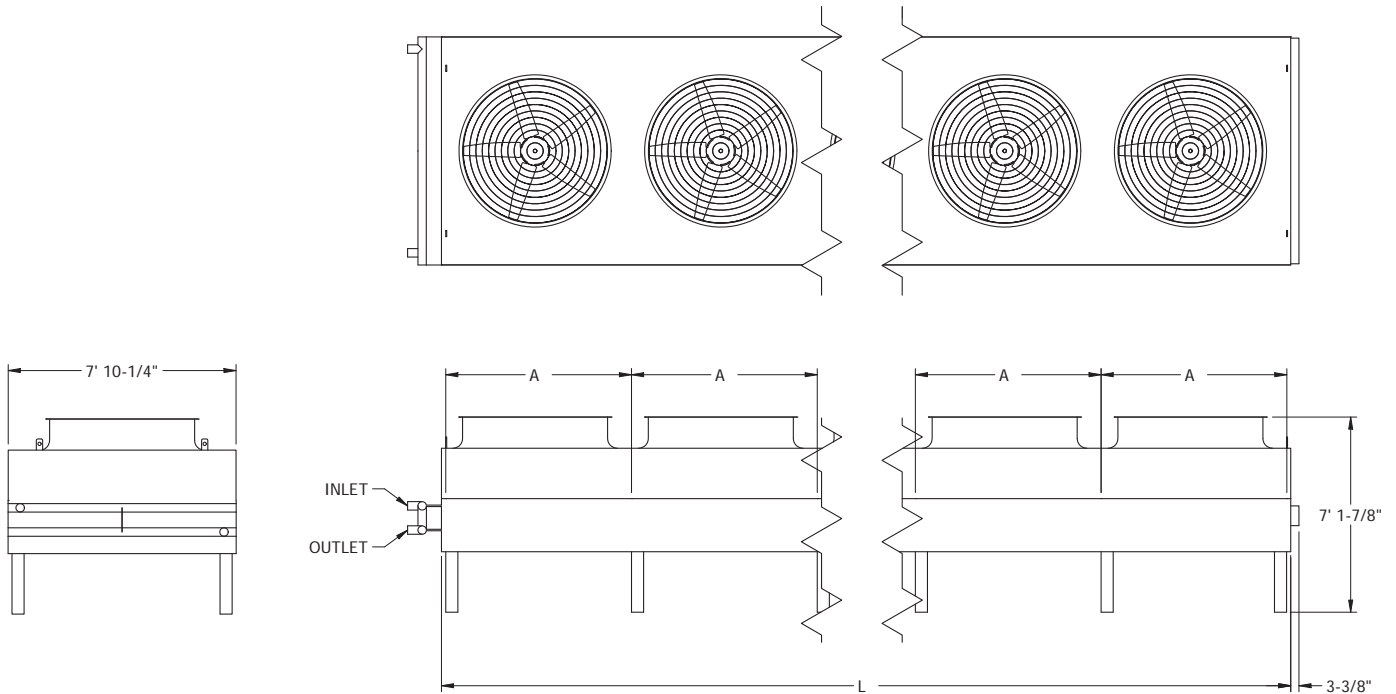
A: Three incremental fin lengths available: 5' 9-1/16", 6' 4-3/4" or 7' 8-1/8"

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) <sup>†</sup>	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.

<sup>†</sup> 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 both dry and adiabatic 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.





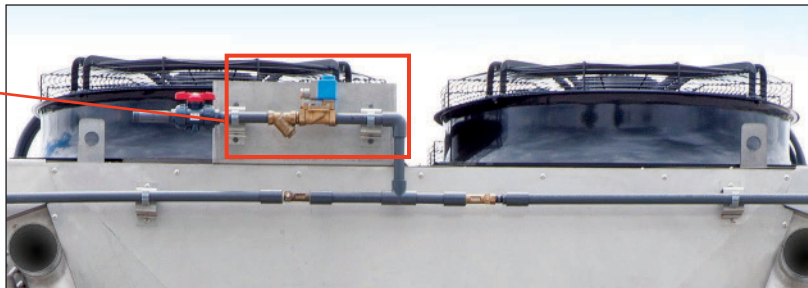
# Wiring and Control Options

**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
- NEMA 3R Rated
- 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 System (if equipped)



Adiabatic 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

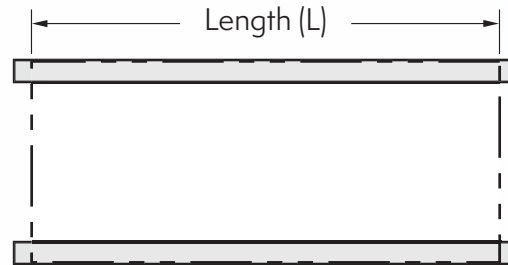
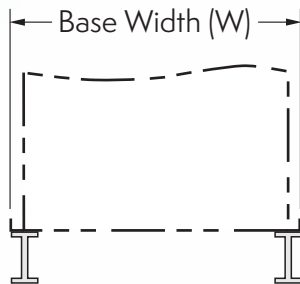


The entire unit is UL Listed when provided with factory mounted and wired EVAPCO Control Package.



# Structural Steel Support

eco-Air Series Supporting Steel Dimensions		
V Models	Dry 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

Your EVAPCO representative is the local expert you can count on to help you with all your HVAC and industrial process needs—from getting quotes, to answering questions, to helping you manage your projects and orders. Find your local representative, by visiting [evapco.com](http://evapco.com) now.

## SPECTRUM™ by EVAPCO

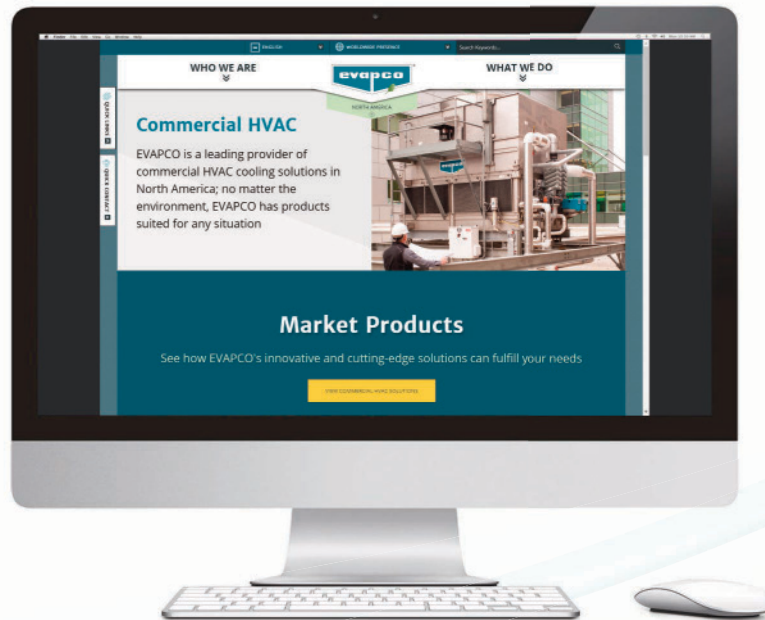
SPECTRUM™ is a new industry leading computer selection program that makes it easy for you to find and optimize the right EVAPCO solutions for every project. Evaluate thermal performance, layout, and energy requirements across units; analyze optional equipment features; and generate complete specifications and unit drawings—all within a friendly and intuitive format. Contact your EVAPCO representative to access SPECTRUM™ now.



## evapco.com

Bookmark [evapco.com](http://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
- Logo apparel and merchandise







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