Bulletin 240-E Metric

evapco® for LIFE

eco-ATWB-H

The NEW Family of Closed Circuit Coolers

Eurovent-CTI CERTIFIED

NEW!

ARID *fin Pak*™

Ellipti-*fin*® *coil*

CROSScool™ Technology

Sage® CONTROL SYSTEM

Environmentally Conscious Operation Hybrid

Providing Maximum Water Savings & Higher Dry Switchover Temperatures

RESEARCH POWERED SOLUTIONS!

CERTIFIED EN ISO 9001

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

CTI CERTIFIED Mark owned by the Cooling Technology Institute

CE PRESSURE EQUIPMENT DIRECTIVE 97/23/EC ASSESSED BY NOTIFIED BODY

EAC

eco-ATWB-H

Since its founding in 1976, EVAPCO, Inc. has become a world-wide leader in supplying quality cooling equipment for thousands of customers in both the commercial and industrial markets.

EVAPCO's success has been the result of a continual commitment to product improvement, quality workmanship and a dedication to providing unparalleled service.

Our emphasis on research and development has led to many product innovations – a hallmark of EVAPCO through the years.

The ongoing R & D Program enables EVAPCO to provide the most advanced products in the industry – technology for the future, available today.

EVAPCO products are manufactured on five continents around the world and distributed through hundreds of factory authorized sales representatives.

Design and Construction Features

The eco-ATWB-H Hybrid line of closed circuit coolers was designed with the purpose of providing maximum water savings, higher dry bulb switch over temperatures, while achieving plume abatement or elimination by utilizing evaporative (latent) and dry (sensible) modes of cooling, simultaneously!

The eco-ATWB-H is provided with EVAPCO's new **ARID-*fin Pak*™** dry coil. Utilizing copper tubes and aluminum magnesium fins, the **ARID-*fin Pak*™** maximizes the total surface area available for sensible heat transfer, which results in maximum water savings and higher dry bulb switchover temperatures. Since it is located in the discharge airstream, the **ARID-*fin Pak*™** heats the saturated discharge air, abating or eliminating the plume. Since a significant portion of the heat load is dissipated through the dry cooling coil, the eco-ATWB-H saves water whenever it is in operation!

The eco-ATWB-H is the ideal solution for: Maximized Water Savings, Highest Dry Bulb Switchovers, Plume Reduction or Plume Abatement. This closed circuit cooler product line is designed with IBC Compliant construction.

Water Saver Drift Eliminators

- New patented design reduces drift rate to < 0.001%
- Saves water and reduces water treatment cost
- Greater structural integrity vs. old style blade-type
- Recessed into casing for greater protection
- Drift rate certifications with Eurovent OM-14-2009

EUROVENT CERTIFICATION COMPANY SCRL
53 rue Turbigo 75003 Paris FRANCE - RCS Paris B 393 363 460 - Code APE : 748K

Accreditation # 5-0527 Industrial Product Certification according to ISO/IEC guide 65:1996 or EN 45011:1998
Scope and validity at www.cofrac.fr
International recognition EA/IAF

Certification Diploma N° : 10.02.455

EUROVENT Certification Company certifies that

Drift Eliminators

from

EVAPCO EUROPE N.V.

Located at

Industriezone Oost 4010, B-3700 Tongeren, Belgium

Range

Counter flow EDE001

Trade name

EVAPCO

have been assessed according the requirements of following standard

OM-14-2009

The list of certified products is displayed at :

http://www.eurovent-certification.com

EVAPCO EUROPE N.V.

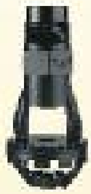
is authorised to use the EUROVENT Certification mark in accordance with the rules specified in the Operational Manual

OM-14-2009

Erick MELQUIOND
Managing Director

Approval date : 2010/02/24
Re-checked on : 2012/12/20
Valid until : 2014/03/31

PVC Spray Distribution Header with ZM II™ Nozzles



- Large orifice nozzles prevent clogging (no moving parts)
- Nozzles are threaded into header at proper orientation
- Fixed position nozzles require zero maintenance
- Guaranteed for life

"Clean Pan" Basin Design

- Access from all four sides
- Large open area simplifies maintenance
- Basin may be inspected with pumps running
- Sloped basin design prevents sediment buildup, biological film and standing water

Sage2® Control System

Water and Energy Conservation Control System

The eco-Hybrid closed circuit cooler is provided with the EVAPCO *Sage2*® Control System. This system operates the unit in a manner which will maximize water or energy savings. Control is accomplished by operating each cell of the eco-Hybrid in the **Evaporative Mode** or **Dry Mode** based on **water** or **energy savings priority**.

Advanced Design Smooth Flow Fans

- Totally Enclosed Fan Motors assures long life
- Power-Band Belts for Better Lateral Rigidity
- Advanced Design Aluminum Fan Blades
- Non-corroding Cast Aluminum Sheaves
- Heavy-Duty Fan Shaft Bearings with L-10 life of 75,000 - 135,000 hrs
- All Other Components Corrosion Resistant Materials

Eurovent-CTI Certified

Refer to page 23

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

CTI CERTIFIED †

Low Sound Options available

Refer to page 17

Super Low Sound Fan (optional)

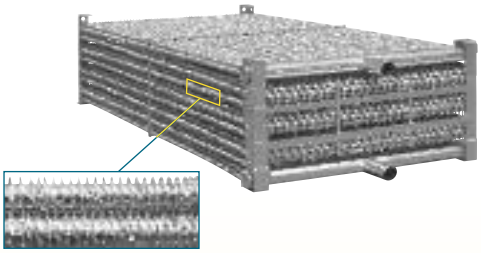
- Extremely wide sloped fan blades for sound sensitive applications
- One piece molded heavy duty construction
- 9-15 dB(A) sound reduction

Ellipti-*fin*® Coil

Featuring Elliptical Spiral Fin Coil Technology

Introducing the Most Efficient Closed Circuit Cooler Coil in th HVAC industry! The Ellipti-*fin*® provides:

- All coil rows feature patent pending finned Thermal-Pak® elliptical tube design
- Lower airflow resistance than typical finned round tubes
- Increased Evaporative and Dry Cooling efficiency
- Features EVAPCO's exclusive ***CROSS*cool™** tube enhancement for greater internal heat transfer.



ARID *fin* Pack

Dry Cooling Coil

Featuring Copper Tubing with Aluminum Magnesium Fins

- Maximizes Water Efficiency
- Higher Dry Switchover Temperatures
- Plume Elimination in Dry Mode
- Plume Abatement in Evaporative Mode
- Increases Evaporative and Dry Cooling Efficiency

Louver Access Door

- Hinged access panel with quick release mechanism
- Allows easy access to perform routine maintenance and inspection of the make-up assembly, strainer screen and basin
- Available on larger models

Easy Field Assembly

- A new field assembly seam design which ensures easier assembly and reduced potential for field seam leaks
- Self-guided channels guide the fan casing section into position improving the quality of the field seam
- Eliminates up to 66% of fasteners *(Patent Pending)*

Stainless Steel Strainers

- Resists corrosion better than other materials

Totally Enclosed Pump Motors

- Help assure long, trouble-free operation

WST Air Inlet Louvers (Water and Sight Tight)

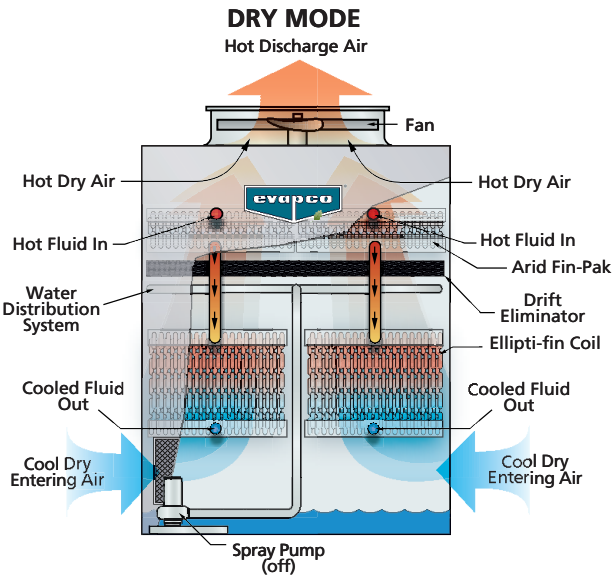
- Easily removable for access
- Improved design to keep sunlight out–preventing biological growth
- Keeps water in while keeping dirt and debris out (U.S. Patent No. 7927196)

† Mark owned by the Cooling Technology Institute

eco-ATWB-H

DESIGN FEATURES

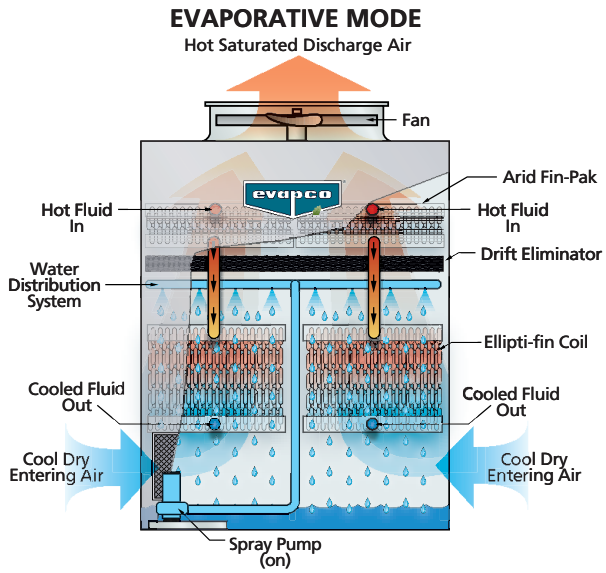
Principle of Operation



Dry Mode (Sensible Heat Transfer)

In the dry mode, the process fluid enters the **ARID-*fin Pak*™** coil through the top coil connections. The fan motor is energized, while the spray pump is de-energized. The axial fan draws air upward through the louvers and across the coils. As the air passes over the **ARID-*fin Pak*™** coil, a portion of the load is dissipated to the atmosphere through the tube walls and fins using sensible heat transfer. The warm process fluid exits the **ARID-*fin Pak*™** coil, then enters the **Ellipti-*fin*®** coil through the factory installed piping.

The remaining load is dissipated through the tube and extended surface fins of the **Ellipti-*fin*®** coil utilizing sensible heat transfer. The unit will remain in the dry mode of operation until the temperature set point can no longer be met. In this mode, **NO** water is used and plume is eliminated.



Evaporative mode (Latent and Sensible Heat Transfer)

Once the temperature set point can no longer be met, the unit will switch to the Evaporative mode. This mode of operation in the eco-Hybrid utilizes evaporative and dry cooling simultaneously.

First, the process fluid enters the **ARID-*fin Pak*™** coil through the top coil connections. The fan and pump motors are energized. A portion of the heat load is transferred through the tube walls and fins to the air passing over the **ARID-*fin Pak*™** coil. No water is evaporated during this process. The warm process fluid exits the **ARID-*fin Pak*™** coil, then enters the **Ellipti-*fin*®** coil through the factory installed piping. The spray system cascades water over the tubes of the **Ellipti-*fin*®** coil while heat is absorbed by the water. Air is drawn upward and over the coils by the axial fan. A small amount of the recirculating water is evaporated due to latent heat transfer through the tube and fin walls of the **Ellipti-*fin*®** coil. In this mode, water usage is reduced and plume is abated as the saturated discharge air is heated as it passes over the **ARID-*fin Pak*™** coil.

DESIGN FEATURES

eco-ATWB-H

EVAPCOAT Corrosion Protection System

EVAPCO, long known for using premium materials of construction, has developed the ultimate system for corrosion protection in galvanized steel construction – the EVAPCOAT Corrosion Protection System. Marrying corrosion free materials with heavy gauge mill hot-dip galvanized steel construction to provide the longest life product with the best value.

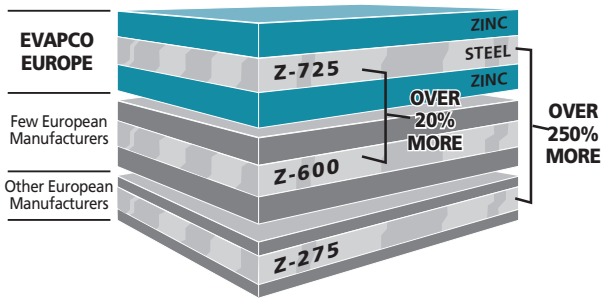
The Evapcoat Corrosion Protection System consist of:

• Z-725 Mill Hot-Dip Galvanized Steel Construction

Mill hot-dip galvanized steel has been successfully used for over 25 years for the protection of evaporative coolers against corrosion. There are various grades of mill galvanized steel each with differing amounts of zinc protection. EVAPCO has been a leader in the industry in developing heavier galvanizing, and was the first to standardize on Z-600 mill hot-dip galvanized steel. Now, EVAPCO is, once again, increasing the level of corrosion protection by being the first manufacturer in Europe to use Z-725 mill hot-dip galvanized steel.

Z-725 designation means there is a minimum of 725 g of zinc per m^2 of surface area present on the steel. Z-725 is the heaviest level of galvanizing available for manufacturing evaporative coolers and has over 2.5 times more zinc protection than competitive designs using Z-275 steel. With Z-725 mill hot-dip galvanized steel construction, EVAPCO provides galvanized steel panels with corrosion protection that approaches the level of the hot-dip galvanized heat exchanger coils.

During fabrication, all panel edges are coated with a 95% pure zinc-rich compound for extended corrosion resistance.



• Type 304 Stainless Steel Strainers

Subjected to excessive wear and corrosion, the sump strainer is critical to the successful operation of the cooler. EVAPCO uses only stainless steel for this very important component.

• PVC Air Inlet Louvers

The innovative design uses corrosion free materials while effectively eliminating splash out and reducing the potential for algae formation inside the cooler.

• PVC Drift Eliminators

The final elements in the upper part of the cooler are moisture eliminators which strip the entrained water droplets from the leaving air stream.

EVAPCO eliminators are constructed entirely of inert, corrosion-free PVC. This PVC material has been specially treated to resist damaging ultraviolet light. The eliminators are assembled in easily handled sections to facilitate removal thereby exposing the upper portion of the unit and water distribution system for periodic inspection.

• PVC Water Distribution System, ZM Spray Nozzle

The fixed position ZM Spray Nozzles are mounted in corrosion-free PVC water distribution pipes. Together, these elements combine to provide unequaled coil coverage, scale prevention and make the industries best performing non-corrosive, maintenance-free water distribution system.

• Totally Enclosed Motors

EVAPCO uses totally enclosed motors for all fan and pump motors as standard. These superior motors help to assure longer equipment life without motor failures, which result in costly downtime.

• Alternate Materials of Construction

EVAPCO induced draft coolers have a modular design which allows for specific areas to be enhanced for increased corrosion protection. For particularly corrosive environments, EVAPCO coolers are available with Stainless Steel construction for the basin, casing and/or coil.

• Stainless Steel Welded Basin

The basin area of a cooler is often subjected to high concentrations of impurities and silt. In addition to the EVAPCOAT Corrosion Protection System, EVAPCO offers optional stainless steel construction for superior corrosion resistance. This option provides Type 304 or Type 316 stainless steel for the entire basin section - including the support columns and air inlet louver frames.

NOTE: Closed Circuit Coolers should only be used on sealed, pressurized systems. Continual aeration of the water in an open system can cause corrosion inside the tubes of the cooler leading to premature failure.

eco-ATWB-H

SAGE SYSTEM

EVAPCO's *Sage*® ... Water and Energy

The eco-Hybrid closed circuit cooler is provided with the EVAPCO *Sage2*® Control System. This system operates the unit in a manner which will maximize water or energy savings. Control is accomplished by operating each cell of the eco-Hybrid in the **Evaporative Mode** or **Dry Mode** based on **water** or **energy savings priority**.

The *Sage2*® control system contains a Programmable Logic Controller (PLC) with adaptive logic, which allows the operator to select either a priority for maximizing water or energy efficiency. Real time load and weather data are measured and recorded by the PLC and sensors. This data is then analyzed and used to switch the unit between the various modes of operation in order to maximize water or energy savings. If the panel is set to operate in the **water savings priority**, the Sage Panel will vary the unit between the Dry and Evaporative modes of operation, limiting the time spent in the evaporative mode to maximize water savings. If the panel is set to operate in the **energy savings priority**, the Sage Panel will switch the unit between the Dry & Wet modes of operation, controlling the fan speed and pump operation in an effort to maximize energy savings.

Standard Control Items

- A MODBUS 485* Port for the Building Automation System
- Programmable Logic Control
- Fluid Inlet Temperature Sensor(s)
- Fluid Outlet Temperature Sensor(s)
- Basin Temperature Sensor(s)
- Ambient Dry Bulb Sensor(s)
- Variable frequency drive(s) For Fan Motor(s)
- Recirculating Pump Motor Starter(s).
- Main Disconnect
- Manual Bypass
- DC power supply for the PLC and instrumentation.
- Heater Package Controls w/ Contactor with Overload Protection
- Control Power Transformer
- 5-Probe Electronic Water Level Control Package
- High Water Level Alarm Contact(s)
- Low Water Level Alarm Contact(s)
- Fan Motor: Space Heater Control(s)

Control for Optional Accessories

- Discharge Hood Damper Controls
- Vibration Switch Controls

SAGE SYSTEM

eco-ATWB-H

Conservation Control System

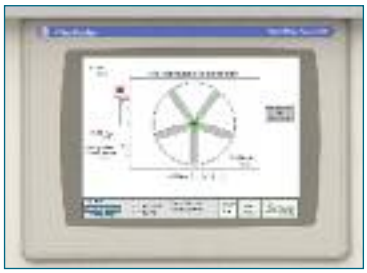
HMI Panel Display

Sage2® Control Panel is provided with a 10" touch screen operator interface with a color display.
This allows for easy viewing and control at the panel.

Easy-to-use Touch Screen Navigation

The panel boasts an easy to navigate menu which will allow the user to control each cell independently from other units and gather useful run time information at the unit.

Alarm Set Points Screen

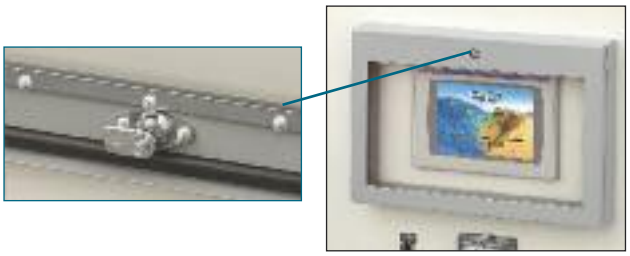


Plan View Screen

End View Screen

Window Enclosure

The display screen is encased by a window enclosure.
This enclosure protects the HMI display from the elements.



Electric Water Level Control Package

When a *Sage2*® Panel is provided, a 5-probe Electronic Water Level Controller is standard. In addition to controlling the make-up valve, this controller contains two probes that can be utilized as High/Low water alarms. This controller will also be used as a safety device, shutting off the pump and heaters if the water level becomes too low.

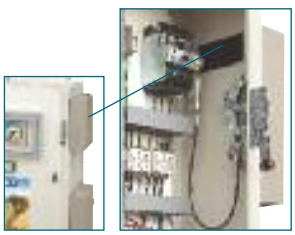
Temperature Sensors

Four separate temperature data points are monitored with this package.

- Inlet Water Temperature Sensor
- Outlet Water Temperature Sensor
- Dry Bulb External Air Temperature Sensor
- Water Basin Temperature Sensor

Enclosure Temperature Control

The panel enclosure includes an intake and an exhaust ventilation fan. When the enclosure temperature rises to a predetermined set point, the exhaust fans are activated. The enclosure also contains a heater. The heater eliminates the drastic temperature changes which could create condensation inside of the enclosure.



Fan

Heater

Optional Communication Protocol May Be Available.
Please Contact Your Local Sales Representative.

eco-ATWB-H

DESIGN FEATURES

Axial Fan Drive System
Belt Drive Units
0.9 & 1.2 m Wide eco-H Models

The T.E.F.C. motors are located on the outside of the unit and are protected by a hinged, swing away cover.

External Motor Mount (with swing away cover)

Belt Drive Units
2.3 m, 2.4 m and 4.9 mm Wide eco-H Models

The fan motor and drive assembly on these units are designed to allow easy servicing of the motor and adjustment of the belt tension from the exterior of the unit. The T.E.F.C. fan motor is mounted on the outside of these models.

External Motor Mount (with optional ladder)

A large hinged access door with a "quick release" latch provide access to the fan section for maintenance.

NOTE: the sloped access ladder is available on all eco-Hybrid models. Please check conformity with local legislation before application.

Belt Drive Units
3 m, 3.6 m, 6 m & 7.2 m Wide eco-H Models

Designed as the ideal replacement cooler, these models provide both cost effective and energy efficient alternatives to obsolete centrifugal fan designs. The 3 m wide plan areas are also well suited for new installations and provide more layout flexibility. The unique belt drive design features are detailed below.

Motor Base Assembly

The fan motor and drive assembly is designed to allow easy servicing of the motor and adjustment of the belt tension from the exterior of the unit. The T.E.A.O. fan motor is located inside the fan casing on a rugged heavy duty motor base. The innovative motor base also features a unique locking mechanism for a positive adjustment.

The motor base is designed to swing out through a very large 1.3 m^2 access opening. This allows for easy servicing of the motor.

Motor Access

Power- Band Drive Belt: The Power-Band is a solid-back, multigroove belt system that has high lateral rigidity. The belt is constructed of neoprene with polyester cords. The drive belt is designed for 150 percent of the motor nameplate kW for long life and durability.

Fan Shaft Bearings: The fan shaft bearings in eco-ATWB-H units are specially selected for long, trouble-free life. They are rated for an L-10 life of 75.000 to 135.000 hours and are the heaviest pillow block bearings available.

Aluminum Alloy Pulleys: Fan pulleys are constructed of corrosion free aluminum for long life. The aluminum also helps belts last longer.

DESIGN FEATURES

eco-ATWB-H

Water Management
High Efficient Water Saver Drift Eliminators

An extremely efficient drift eliminator system is standard on EVAPCO coolers. The patented system removes entrained water droplets from the air stream to limit the drift rate to less than 0.001% of the recirculating water rate. With a low drift rate, EVAPCO coolers save valuable water and water treatment chemicals. The drift eliminators are constructed of an inert polyvinyl chloride (PVC) plastic material which effectively eliminates corrosion of these vital components. They are assembled in sections to facilitate easy removal for inspection of the water distribution system.

Superior WST Air Inlet Louver and Screen Design

EVAPCO's patented WST Inlet Louvers keep water in and sunlight out of the basins of induced draft products. The unique non-planar design is made from light-weight PVC sections which easily fit together and have no loose hardware, enabling easy basin access.

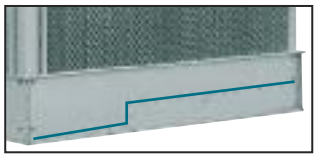
Inlet Louver Material

Developed with computational fluid dynamics (CFD) software, the louver's air channels are optimized to maintain fluid dynamic and thermodynamic efficiency and block all line-of-sight paths into the basin eliminating splash-out; even when the fans are off. Additionally, algae growth is minimized by blocking all sunlight.

The combination of easy basin access, no splash-out and minimized algae growth saves the end user money on maintenance hours, water consumption and water treatment costs.

"Clean Pan" Basin Design

EVAPCO coolers feature a completely sloped basin from the upper to lower pan section. This "Clean Pan" design allows the water to be completely drained from the basin. The cooler water will drain from the upper section to the depressed lower basin section where the dirt and debris can be easily flushed out through the drain. This design helps prevent buildup of sedimentary deposits, biological films and minimizes standing water.

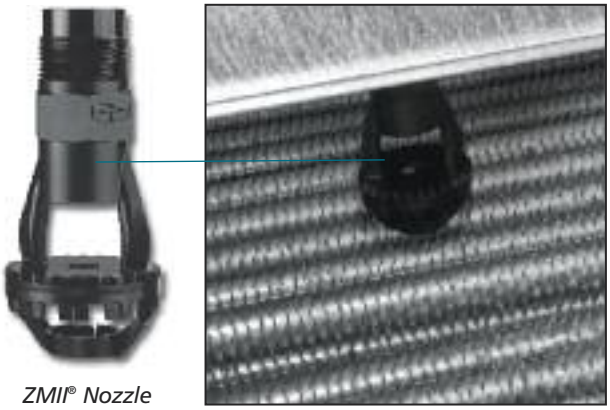


Sloped Basin

Maintenance Free ZMII® Spray Nozzle Water Distribution System

EVAPCO'S Zero Maintenance ZMII® Spray Nozzle remains clog-free while providing even and constant water distribution for reliable, scale-free evaporative cooling under all operating conditions.

The heavy duty nylon ZMII® Spray nozzles have a 33 mm diameter opening and a 38 mm splash plate clearance. Furthermore, the fixed position ZMII® nozzles are mounted in corrosion-free PVC water distribution pipes. Together, these elements combine to provide unequaled coil coverage and scale prevention, and make the industry's best performing non-corrosive, maintenance-free water distribution system.



ZMII® Nozzle

eco-ATWB-H

DESIGN FEATURES

ARID-*fin Pak*™ Coil

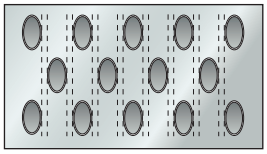
ARID *fin Pak*™ Dry Cooling Coil

Installed in the air discharge of the cooler the **ARID-*fin Pak*™** dry cooling coil is piped in series with the evaporative cooling coil.

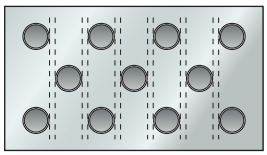
The **ARID-*fin Pak*™** dry cooling coil is constructed of copper tubes and tubular copper header with carbon steel coil connections for easy field piping.

The fins have fully drawn collars to maintain consistent fin spacing and continuous surface contact over the entire tube to maximize heat transfer.

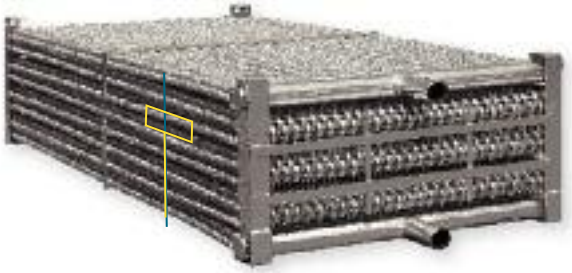
The fins are constructed of Aluminum / Magnesium alloy for superior corrosion resistance.

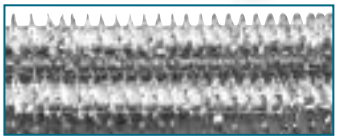


Thermal-Pak® Coil by EVAPCO



Round Tube Coil by Others





Ellipti-*fin*® Coil

Ellipti-*fin*® Cooling Coil

The new eco-ATWB-H Closed Circuit Cooler utilizes Evapco's patented **Ellipti-*fin*®** coil design which assures even greater operating efficiency.

The elliptical tube design allows for closer tube spacing, resulting in greater surface area per unit plan area than round-tube coil designs. In addition, the revolutionary **Ellipti-*fin*®** design utilizes elliptical spiral fin coil technology which has an inherent air side pressure drop lower than finned round tube designs.

This permits greater water loading, making the new **Ellipti-*fin*®** coil the most effective design available.

The coils are manufactured from high quality internally enhanced ***CROSS*COOL™** carbonsteel tubing following the most stringent quality control procedures.
Each circuit is inspected to ensure the material quality and then tested before being assembled into a coil and encased in a steel framework. Finally, the assembled coil is pneumatically tested in accordance with the "Pressure Equipment Directive" - PED 97/23 EC.

To protect the coil against corrosion, it is placed in a heavy steel frame and then the entire assembly is dipped in molten zinc (hot-dip galvanized) at a temperature of approximately 430°C.

OPTIONAL EQUIPMENT

eco-ATWB-H

Two Speed Motors

Two speed fan motors can provide an excellent means of capacity control. In periods of lightened loads or reduced wet bulb temperatures, the fans can operate at low speed, which will provide about 60% of full speed capacity, yet consume only about 15% of the power compared with high speed. In addition to the energy savings, the sound levels of the units will be greatly reduced at low speed.

Inverter Duty Motors

Inverter Duty motors are available for cooler applications which utilize variable frequency drive systems for capacity control. Inverter Duty motors offer totally enclosed premium efficiency construction which is designed for variable frequency drive applications.

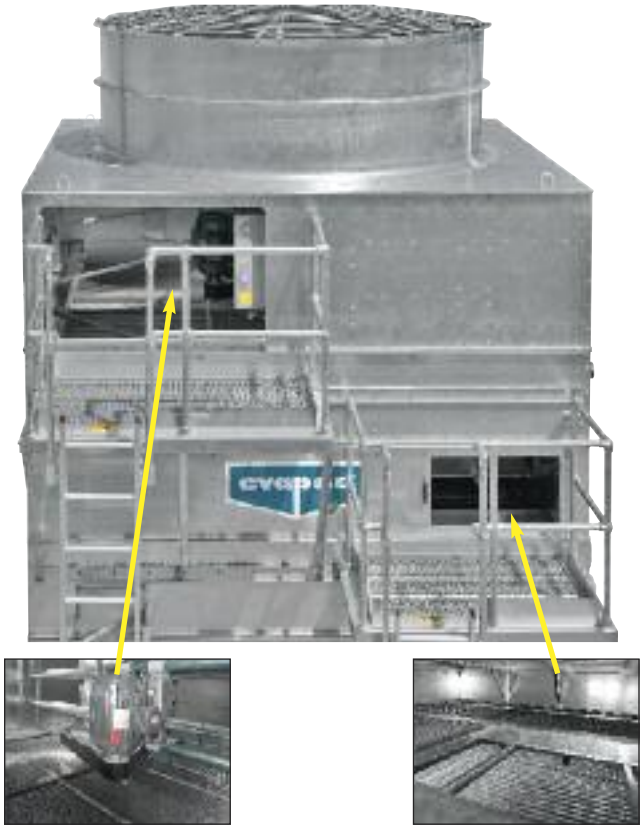
Note: Other special motor configurations are available to meet specific proper requirements. Contact your local EVAPCO sales representative for application assistance and motor availability.

Multiple Circuit Coils

Coolers may be supplied with multiple circuit coils to match various system requirements such as split systems.

Working Platform & Ladder with Davit

Eco-Hybrids are available with a self-supported external working platform and ladder. Two separate platforms will allow easy access to the motor and drive system, water distribution system as well as the **ARID-*fin Pak***™ coil. The working platforms are constructed of the heavy duty galvanized steel. The CE compliant working platform option uses a straight ladder with safety cage and ships in sections for easy installation.



The optional davit eliminates crane rentals and facilitates the removal of motors and fans. The davit is constructed of aluminum for ease of use. When the davit is ordered, the galvanized steel bracket is mounted on the side of the unit. The Davit ships loose and is installed in the field.

eco-ATWB-H Hybrid with Working Platform and Ladder with Davit

eco-ATWB-H

OPTIONAL EQUIPMENT

EVAPCO Water Systems Solutions

The **eco-ATWB-H** is available with EVAPCO's **Factory Mounted** water treatment systems. EVAPCO offers both a solid chemical and a hybrid solution for water treatment to maintain your heat transfer efficiency and extend the life of the equipment. Each system has been specifically designed for your eco-cooler.

EVAPCO's Water Systems offer eco-ATWB-H owners a single-source of responsibility for equipment, water treatment, and service. Both Smart Shield® and *Pulse*~Pure® Plus are manufactured and warranted by EVAPCO.

Benefits of adding an EVAPCO water treatment system include:

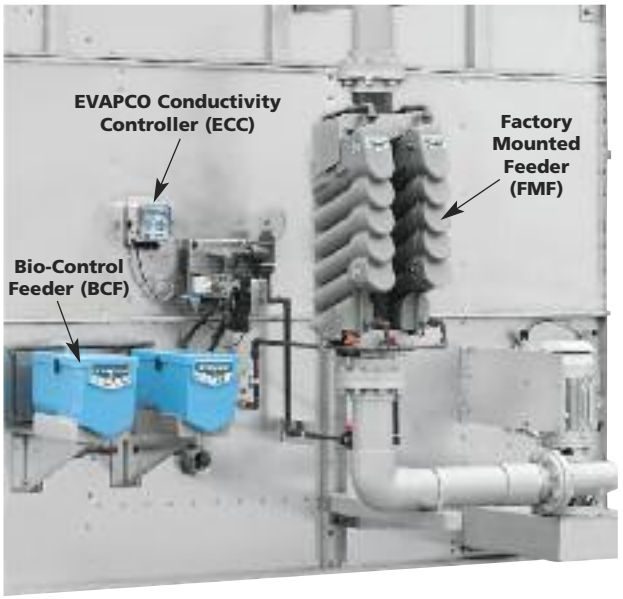
- **SAVE MONEY**
  by simplifying commission:
  - Single power connection is the only field installation requirement
- **Factory Mounting**
  your water treatment system ensures that it is installed to factory specifications.
- **Patented self-draining piping**
  eliminates the need for line insulation and heat tracing above the overflow level.
- **A Factory Authorized Service Partner**
  provides the first year of water system service and monitoring, to ensure proper operation and ongoing success.
- **Conductivity control package**
  maximizes water efficiency and features:
  - Low maintenance non-fouling torodial probe
  - USB port for downloadable 60 day audit trail of system operation
  - Motorized blowdown valve that provides the most reliable bleed control with power open / spring return operation.

OPTIONAL EQUIPMENT

eco-ATWB-H

EVAPCO Water Systems Solutions

Smart Shield® Solid Chemical Water Treatment System



EVAPCO's **Smart Shield®** system utilizes proven solid chemistry delivered via our revolutionary feed system. Patented controlled release scale and corrosion inhibitor is fed whenever your spray water pump is energized, keeping your system protected anytime the spray water pump is operating. **Smart Shield®** is a complete water treatment package that:

- Utilizes 'Bag in Bag' no touch chemical replenishments, making reloads easier and safer.
- Creates reduced packaging, shipping and handling providing a reduced carbon footprint compared to liquid chemicals.
- Eliminates the hazards associated with liquid chemicals, potential for liquid spills and the need for expensive feed pumps making it the easiest and safest chemical water treatment system available today

Watch a short product video at: www.smartshield.evapco.com

Pulse~Pure® PLUS Hybrid Water Treatment System

EVAPCO's ***Pulse~Pure® PLUS*** water treatment system utilizes pulsed electric field technology to provide an environmentally responsible alternative for the treatment of water in evaporative cooled equipment. The ***Pulse~Pure® PLUS*** system delivers short, high-frequency bursts of low energy electromagnetic fields to the recirculating water in the eco-ATWB-H.

- EVAPCO guarantees that total bacterial counts will not exceed 10,000 CFU/ml in the cooling water.
- Controls scale, corrosion, and microbiological growth.
- Compact design with no moving parts and low energy consumption.
- Safe and easy granular biocide eliminates the shipping, handling and storage concerns associated with liquid biocides.

Learn More about *Pulse~Pure® PLUS* online at: www.evapco.com

eco-ATWB-H

APPLICATION

Design
Evapco units are of heavy-duty construction and designed for long trouble-free operation. Proper equipment selection, installation and maintenance is, however, necessary to ensure full unit performance. Some of the major considerations in the application of a cooler are presented below. For additional information, please contact the factory.

Air Circulation
It is important that proper air circulation be provided. The best location is on an unobstructed roof top or on ground level away from walls and other barriers. Those closed circuit coolers located in wells, enclosures or adjacent to high walls must be properly located to avoid the problems associated with recirculation. Recirculation raises the wet bulb temperature of the entering air causing the water temperature to rise above the design. For these cases, the discharge of the fan should be located at a height even with the adjacent wall, thereby reducing the chance of recirculation. For additional information, see the Evapco Equipment Layout Manual.
Good engineering practice dictates that the closed circuit cooler discharge air not be directed or located close to or in the vicinity of building air intakes.

Piping
Cooler piping should be designed and installed in accordance with generally accepted engineering practices. The piping layout should be symmetrical on multiple unit systems, and sized for a reasonably low water velocity and pressure drop.
The standard closed circuit cooler is recommended only on a closed, pressurized system. The piping system should include an expansion tank to allow for fluid expansion and purging air from the system.

Note: Closed Circuit Coolers should never be used on an open system. Continual aeration of the water in an open system can cause corrosion inside the tubes of the cooler leading to premature failure.

The piping system should be designed to permit complete drainage of the heat exchanger coil. This will require a vacuum breaker or air vent to be installed at the high point and a drain valve installed at the low point of the piping system. Both must be adequately sized.
All piping should be securely anchored by properly designed hangers and supports. No external loads should be placed upon the cooler connections, nor should any of the pipe supports be anchored to the cooler framework.

Recirculating Water System
Electric pan heaters, steam or hot water coils can be used to keep the pan water from freezing when the unit cycles off. Water lines to and from the unit, spray pump and related piping should be heat traced and insulated up to the overflow level in order to protect from freezing.

Freeze Protection
If the units are installed in a cold climate and operated year-round, freeze protection must be provided for the heat exchanger coil in the unit as well as for the recirculating water system.

eco-ATWB-H		std coil(s)	series flow coil(s)
Width (mm)	# cell(s)	l/s	l/s
2388	1	10,1	5,1
2388	2	20,2	10,1
4906	2	20,2	10,1
2991	1	11,9	6,0
2991	2	23,8	11,9
6112	2	23,8	11,9
6112	4	47,6	23,8
3607	1	14,7	7,4
3607	2	29,4	14,7
7344	2	29,4	14,7
7344	4	58,6	29,3

Heat Exchanger Coil
The simplest and most foolproof method of protecting the heat exchanger coil from freeze-up is to use a glycol solution. If this is not possible, an auxiliary heat load must be maintained on the coil at all times so that the water temperature does not drop below 10°C when the cooler is shut down. Also, a minimum recommended flow rate must be maintained.

Maintaining the Recirculated Water System
The heat rejection in an evaporative cooler is accomplished by the evaporation of a portion of the recirculated spray water. As this water evaporates, it leaves behind all of its mineral content and impurities. Therefore, it is important to bleed-off an amount of water equal to that which is evaporated to prevent the build-up of these impurities. If this is not done, the mineral or the acidic nature of the water will continue to increase. This will ultimately result in heavy scaling or a corrosive condition.

Bleed-off
Each unit supplied with a pump mounted on the side is furnished with a clear bleed line for visual inspection and a valve which, when fully open, will bleed-off the proper amount of water. If the make-up water supplying to the unit is relatively free of impurities, it may be possible to cut back the bleed, but the unit must be checked frequently to make sure scale is not forming. Make-up water pressure should be maintained between 140 and 340 kPa.

APPLICATION

eco-ATWB-H

Water Treatment

In some cases the make-up water will be so high in mineral content that a normal bleed-off will not prevent scaling. In this case, water treatment will be required and a reputable water treatment company familiar with the local water conditions should be consulted.
Units constructed of galvanized steel operating with circulating water having a pH of 8,3 or higher will require periodic passivation of the galvanized steel to prevent the formation of "white rust".
Any chemical water treatment used must be compatible with the galvanized construction of the unit. If acid is used for treatment, it should be accurately metered and the concentration properly controlled. The pH of the water should be maintained between 7 and 8,8. Batch chemical feeding is not recommended because it does not afford the proper degree of control. If acid cleaning is required, extreme caution must be exercised and only inhibited acids recommended for use with galvanized construction should be used.

Control of Biological Contamination

Water quality should be checked regularly for biological contamination. If biological contamination is detected, a more aggressive water treatment and mechanical cleaning program is required. The water treatment program should be performed in accordance with local legislation and in conjunction with a qualified water treatment company.
It is important that all internal surfaces be kept clean of accumulated dirt or sludge. In addition, the drift eliminators should be kept in good operating condition to minimize water from exiting the evaporative cooling unit in the discharge air. To minimize the risk of biological contamination, at initial start up or after an extended shut down, it is recommended that the cooler be properly treated. Clean all debris such as leaves and dirt from the unit. Completely fill the basin to the overflow level with fresh water. Initiate a biocide water treatment or shock treatment program prior to operating the unit. It is preferable that all such procedures be conducted or supervised by a water treatment specialist.

Technical Support Services

EVAPCO's *Spectrum* Equipment Selection Program

Spectrum is a Web based computer selection program which allows the design engineer to choose EVAPCO models and optimize unit selections. The program allows the engineer to evaluate the equipment's thermal performance, space, energy requirements and water consumption. Once the model is selected and optional equipment features are inserted, the engineer may output a complete specification **AND** a unit drawing from this program.

The software is designed to provide the user with maximum flexibility in analyzing the various selection parameters while in a friendly and familiar Windows format.

The ***Spectrum*** software is available to all consulting engineering offices and design-build contractors. The programs are distributed through the local EVAPCO sales representative or the EVAPCO offices.

EVAPCO's Website

Log on to EVAPCO's new and improved website **http://www.evapco.eu** for expanded product information. Product literature, Rigging and Maintenance Instructions are all accessible online from your computer.

The ***Spectrum*** Equipment Selection Software program may be accessed using Microsoft Internet Explorer after contacting your local EVAPCO sales representative. Users may make Requests for Quotation through the website or by e-mailing EVAPCO at this address:

evapco.europe@evapco.eu

With the *Spectrum* program, equipment selections, written specifications, unit drawing files and EVAPCO on-line information are readily available from the comfort of your own office!

eco-ATWB-H

Notes:

eco-ATWB-H

Ultra Quiet Hybrid Coolers

The New EVAPCO eco-Hybrid Coolers eco-ATWB-H are now available with four (4) equipment options to reduce the overall sound generated from the side or top.

Each option provides various levels of sound reduction and can be used in combination to provide the lowest sound level.

Ultra Quiet operation for induced draft counterflow Hybrid Closed Circuit Coolers

SOUND

eco-ATWB-H

ADVANCED TECHNOLOGY LOW SOUND SOLUTIONS

Super Low Sound Solution for Sound Sensitive Applications

Family of Super Low Sound Fans

The Super Low Sound Fan

Reduced Sound Levels versus eco-ATWB-H Standard Fan

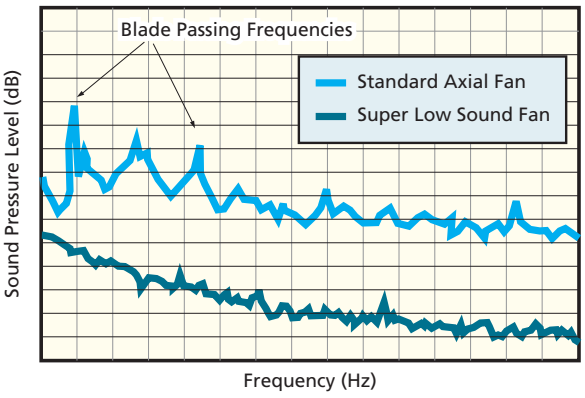
EVAPCO's Super Low Sound Fan on the **eco-ATWB-H** Hybrid Closed Circuit Coolers utilizes an extremely wide chord blade design applied for sound sensitive applications where the lowest sound levels are desired. The fan is one piece molded heavy duty FRP construction utilizing a forward swept blade design. The Super Low Sound Fan reduces sound levels 9 to 15 dB(A) compared to the Model **eco-ATWB-H** standard fan.

Improved Sound Quality versus Model eco-ATWB-H Standard Fan

The Super Low Sound Fan on the **eco-ATWB-H** Hybrid Closed Circuit Cooler reduces sound levels 9-15 dB(A) and eliminates audible blade passing frequencies indicative of straight bladed axial type fans.

Refer to the Narrow Band Spectrum graph which shows how straight bladed axial fans produce blade passing frequencies – the same phenomena that produce the signature pulsating helicopter noise.

The blade passing frequencies are audible spikes in sound pressure levels, but are not apparent in the octave band sound spectrum.



Narrow Band Spectrum Analysis

*The Super Low Sound Fan on the **eco-ATWB-H Hybrid** Closed Circuit Cooler reduces sound levels and betters the sound quality!*

NOTE: These low sound options may impact the overall installed dimensions of the eco-ATWB-H Hybrid Closed Circuit Cooler selected.

ADVANCED TECHNOLOGY LOW SOUND SOLUTIONS

eco-ATWB-H

Additional Solutions for Sound Sensitive Applications

Low Sound Fan *4 – 7 dB(A) Reduction!*

The Low Sound Fan offered by EVAPCO is a wide chord blade design for sound sensitive applications where low sound levels are desired. The Low Sound Fan shall utilize a unique soft-connect blade-to-hub design that is compatible with Variable Speed Drives.

The Low Sound Fan is capable of reducing the unit sound pressure levels **4 dB(A)** to **7 dB(A)**, depending upon specific unit selection and measurement location. The fans are high efficiency axial propeller type and are available on 2.4 m wide and larger eco-ATWB-H Hybrid Closed Circuit Coolers.

Water Silencer

Reduces Water Noise in the Cold Water Basin up to 7 dB(A)!

The water silencer option is available for all induced draft models and is located in the falling water area of the cold water basin. The water silencer will reduce the high frequency noise associated with the falling water and is capable of reducing overall sound levels **4 dB(A) to 7 dB(A)** measured at 1.5 m from the side or end of the unit. The water silencers reduce overall sound levels **9 dB(A) to 12 dB(A)** (depending on water loading and louver height) measured 1.5 m from the side or end of the unit when water is circulated with fans off.

The water silencers are constructed of lightweight PVC sections and can be easily removed for access to the basin area. *The water silencer will have no impact on unit thermal performance.*

The Water Silencer is available on ALL eco-ATWB-H Hybrid Closed Circuit Coolers.

Offset Sound Attenuation Walls

Offset Sound Attenuation Walls are EVAPCO's newest attenuation option for even greater levels of sound reduction when used in combination with the Super Low Sound Fan and Water Silencer options.

The addition of Offset Sound Attenuation Walls will reduce the 15 m free field sound level by an additional **3 db(A)**. The walls are constructed of Z-725 galvanized steel (stainless steel construction also available) lined with acoustical padding on the inside of the walls.

This option requires external support by others.

Consult ***Spectrum*** software for unit sound levels. If a detailed analysis or full octave band data sheet is required for your application, please consult your EVAPCO Sales Representative.

SOUND

Background in Sound Basics

Sound

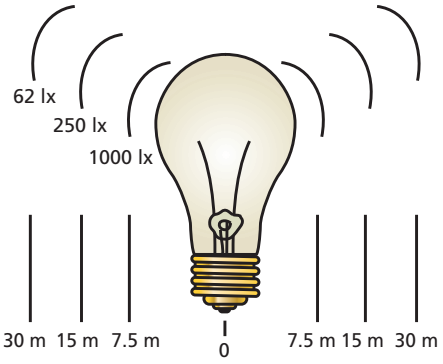
Sound is the alteration in pressure, stress, particle displacement and particle velocity, which is propagated in an elastic material. Audible sound is the sensation produced at the ear by very small pressure fluctuations in the air.

Sound Pressure

Sound pressure is the *intensity* of sound. Sound pressure, L_p in decibels is the ratio of measured pressure, P in the air to a reference sound pressure, $P_o = 2 \times 10^{-5}$ Pascal following the following formula:

L_p (dB) = 10 $\log_{10}$ ($\triangle P^2 / \triangle P_o^2$)

The most important point to understand about sound pressure level is that **sound pressure level is what is actually being measured when sound data is recorded.** Microphones that measure sound are pressure sensitive devices that are calibrated to convert the sound pressure waves into decibels.



"SOUND PRESSURE"

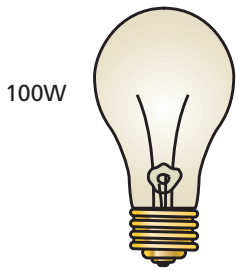
Similar to the intensity coming from a light bulb which gets dimmer as one gets further and further away, sound pressure decreases in decibels as your ear gets further from the sound source.

Sound Power

Sound Power is the *energy* of sound. Sound power, L_w in decibels is the ratio of the calculated sound power, W to a reference power, W_o=1 picowatt, according to the following formula:

L_w (dB) = 10 $\log_{10}$ (W/W_o)

The most important point to remember about **sound power level is that sound power level is not a measured value, but is calculated based on the measured sound pressure.**



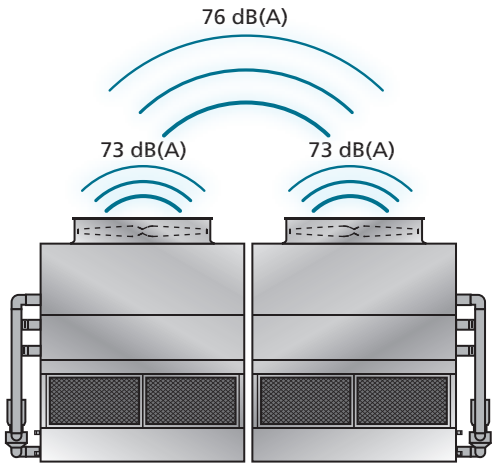
"SOUND POWER"

Similar to the wattage of a light bulb that does not change the farther one is away from the light bulb, sound power does not vary with distance.

Adding Multiple Sound Sources

Since the decibel is a logarithmic function, the numbers are not added linearly. Therefore, two 73 dB sound sources added together do not equal 146 dB. The resultant sound would actually be 76 dB. The following table shows how to add decibels from two sound sources.

Difference in dB Level	Add to the higher dB Level
0 to 1	3
2 to 3	2
4 to 8	1
9 or greater	0

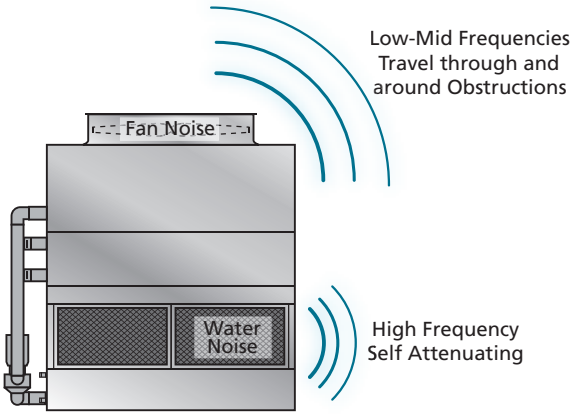


SOUND BASIC

eco-ATWB-H

Sound Science and Closed Circuit Coolers

Sound Frequency



Fan Noise

- Low / Mid frequencies that travel long distances, through walls, and around obstructions.
- Very difficult to attenuate. Reduce fan noise by using Low Sound Fans.
- Dominates what is measured and heard at the Closed Circuit Cooler and at the sound sensitive location.

Water Noise

- High frequencies that attenuate naturally with distance. Attenuated easily by walls, trees or other obstructions.
- Totally masked and drowned out by fan noise at a short distance away from the Closed Circuit Cooler.

Sound Pressure – The A-Weighted Scale

The A-weighted scale, dB(A) is a means to translate what a sound meter microphone measures to how the human ear perceives the sound.

dB(A) Formula and Conversions:

$$dB(A) = 10 \log_{10} \sum_{f=63}^{f=8000} 10^{((dB+Cf)/10)}$$

where: C_f = correction factor per band
dB = measured sound pressure
let: $Z_f = (dB + Cf)/10$

Band	Center Freq. (Hz)	Frequency Range (Hz)	Sample Data (dB)	Cf (dB)	Z_f
1	63	44-88	68	-26.2	4.18
2	125	89-175	76	-16.1	5.99
3	250	176-350	77	-8.6	6.84
4	500	351-700	73	-3.2	6.98
5	1000	701-1400	70	0	7.00
6	2000	1401-2800	68	+1.2	6.92
7	4000	2801-5600	71	+1.0	7.20
8	8000	5601-11200	73	-1.1	7.19

Typical Sound Pressure Levels of Well Known Noises:

Jet Airplane, 45 meters away	140 dB(A)
Painful	130 dB(A)
Very Uncomfortable	120 dB(A)
Circular Saw	110 dB(A)
Nightclub	100 dB(A)
Semi Truck	90 dB(A)
Sidewalk of a Busy Road	80 dB(A)
Household Vacuum, 1 meter away	70 dB(A)
Normal Conversation	60 dB(A)
Inside Average Home	50 dB(A)
Quiet Library	40 dB(A)
Bedroom at Night	30 dB(A)

Notable Facts about Sound:

- +/- 1 dB(A) is inaudible to the human ear
- Decreasing a noise source by 10 dB(A) sounds half as loud to the human ear

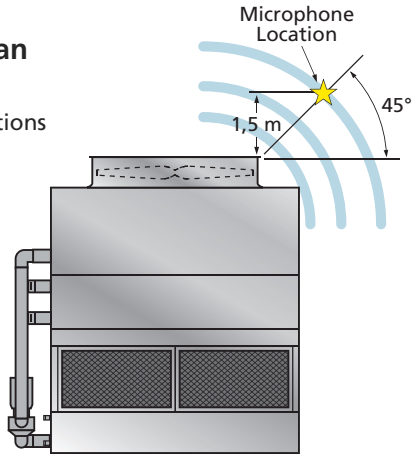
Example calculation of the dB(A) formula using the Sample Data above.

$dB(A) = 10 \log_{10} \sum 10^{(Z1)} + 10^{(Z2)} + 10^{(Z3)} + 10^{(Z4)} + 10^{(Z5)} + 10^{(Z6)} + 10^{(Z7)} + 10^{(Z8)}$
$= 10 \log_{10} (67114245.2) = 78.3$ dB(A)

Sound Verifications

Specify sound pressure in dB(A) measured 1,5 m above the fan discharge during full speed operation.

- All manufacturers can meet a performance specification with Low Sound Options
- Fan noise is what matters. 1,5 m above the fan is where it matters.



Measurement Location

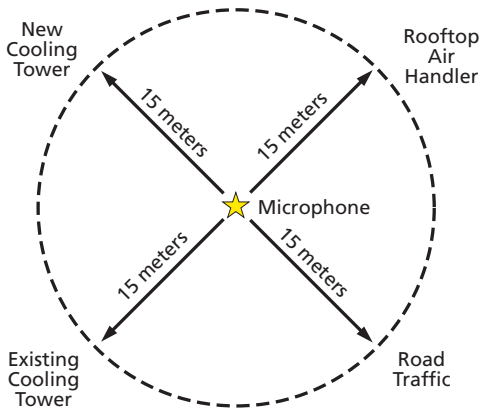
Per Cooling Technology Institute Standard ATC-128

Sound Microphone location 1,5 m above the closed circuit cooler fan cowl edge at a 45° angle.

This position assures accurate sound measurements by eliminating a source of uncertainty by taking the microphone out of the high velocity fan discharge air.

Easy Verification

At 1,5 m from the Closed Circuit Cooler, a sound meter records only closed circuit cooler noise. Interested parties can easily verify the actual noise coming from the closed circuit cooler against the specified sound data with good certainty.



If sound were specified at 15 meters or some greater distance from the sound sensitive location, there is increased uncertainty in the measured data due to other possible sound sources within the 15 meters radius of the sound microphone.

Sound Quality

Sound coming from the top of the closed circuit cooler is comprised of low- and mid-frequency fan noise. Low- and mid-frequency fan "rumble" is very difficult to attenuate. Fan rumble travels through everything and around everything and what is audible at any sound sensitive location.

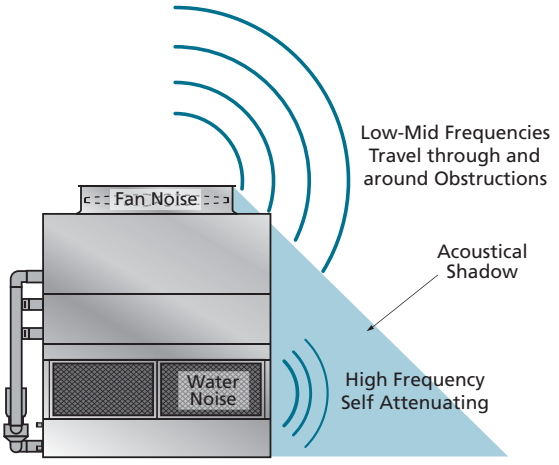
Sound coming from the sides of the Closed Circuit Cooler is comprised of high frequency water noise, is much less objectionable than fan noise and attenuates naturally with distance.

Acoustical Shadow*

"Subjective reactions to the overall noise generated by Closed Circuit Coolers indicate that as one walks away from a cooler intake, a point is reached where the water noise is masked by the fan noise. The point coincides with the point at which one emerges from the acoustical shadow of the Closed Circuit Cooler structure, which shields intake water noise from discharge fan noise."

*Seelbach & Oran, "What To Do About Cooling Tower Noise", Industrial Acoustics Company.

Sound measured at the side of a Closed Circuit Cooler is inside the acoustical shadow of the noise emitted from the top. Outside the acoustical shadow, the low- and mid-frequency fan noise completely masks the high frequency water noise.



Specify fan noise because it matters! Specify fan noise where it matters!

SOUND

eco-ATWB-H

Eurovent-CTI Certified eco-ATWB-H Hybrid Coolers

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Eurovent-CTI Certification Purpose

This standard sets forth a program whereby the Cooling Technology Institute will certify that all models of a line of evaporative heat rejection equipment offered for sale by a specific manufacturer will perform thermally in accordance with the manufacturer's published ratings...

Technology for the Future, Available Today!

† Mark owned by the Cooling Technology Institute

eco-ATWB-H

CTI CERTIFICATION

In its continuing commitment to be the leaders in evaporative cooling equipment design and services, EVAPCO eco-ATWB-H Hybrid Closed Circuit Coolers are now ***Independently Certified*** by ***CTI***, to perform thermally in accordance with the published data.

What is CTI?

Cooling Technology Institute

The Cooling Technology Institute is an organization headquartered in the United States with over 400 member companies from around the globe. CTI membership is composed of manufacturers, suppliers, owner operators, and test agencies from over 40 countries. In 2012 CTI certified more than 10000 Evaporative Heat Transfer Systems (EHTS) from 76 product line of 37 participants.

CTI's Mission and Objectives

This can be best explained by the CTI's published Mission statement and Objectives revised in December 2003 and published on their website **www.cti.org**.

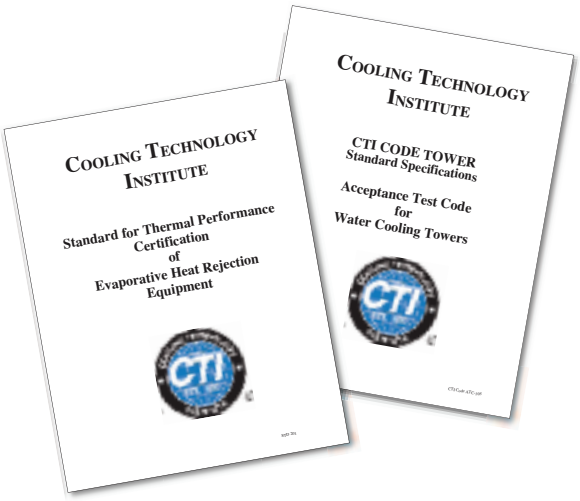
CTI Mission Statement

To advocate and promote the use of environmentally responsible Evaporative Heat Transfer Systems (EHTS) for the benefit of the public by encouraging:

- Education
- Research
- Standards Development and Verification
- Government Relations
- Technical Information Exchange

CTI Objectives

- Maintain and expand a broad base membership of individuals and organizations interested in Evaporative Heat Transfer Systems (EHTS).
- Identify and address emerging and evolving issues concerning EHTS.
- Encourage and support educational programs in various formats to enhance the capabilities and competence of the industry to realize the maximum benefit of EHTS.
- Encourage and support cooperative research to improve EHTS technology and efficiency for the long-term benefit of the environment.
- Assure acceptable minimum quality levels and performance of EHTS and their components by establishing standard specifications, guidelines, and certification programs.
- Establish standard testing and performance analysis systems and procedures for EHTS.
- Communicate with and influence governmental entities regarding the environmentally responsible technologies, benefits, and issues associated with EHTS.
- Encourage and support forums and methods for exchanging technical information on EHTS.



Benefits to the End User

CTI defines an independent testing certification program that is specifiable, enforceable and available to all equipment manufacturer's. End users that purchase CTI certified products are assured that those products will perform thermally as specified.
Additionally CTI certification is the first step for the Green Building Concept in Europe:

- LEED - Leadership in Energy and Environmental Design
- Best Available Practice
- Green Building Rating System

Thermal Performance Guarantee

In addition to the CTI Certification, Evapco unequivocally guarantees the Thermal Performance of ALL Evapco Equipment. Every unit order is confirmed with a submittal package that includes an Evapco Thermal Performance Guarantee Certificate.


evapco

Guarantee of Thermal Performance

Evapco Europe (EVAPCO) unequivocally guarantees the thermal performance of its equipment as shown on the certified drawings, when the equipment is installed in accordance with good engineering practice. If after installation and start-up there is any question regarding thermal performance of the equipment, at the owner's request EVAPCO will send its engineers to the jobsite to conduct a performance test. This test may be observed by the owner and the consulting engineer or by their authorized representatives. If the results of the evaluation show the equipment to be deficient, EVAPCO will make the necessary repairs or alterations to correct the deficiency at no cost to the owner. If the equipment is found to be performing in accordance with its certified drawing, the owner is expected to reimburse the company for its costs associated with this performance test. This guarantee is subject to all conditions and limitations set forth in the express warranty that applies to the equipment.

EVAPCO...Specialists in Heat Transfer Products and Services.

CTI CERTIFICATION

eco-ATWB-H

CTI Certification Program

CTI Certification Process

- Submit Application for Certification
- CTI completes a technical review of the product line submitted
- CTI performs an initial qualification test in a laboratory on a specified model number
- CTI issues an Approval Letter with Validation Number if test is passed. Letter is also distributed to all members of CTI to inform everyone that a successfull certification has been completed. The Certification Validation Number assigned should be fixed to each unit sold and displayed in all catalogs and other literature
- Product Line must undergo an Annual Reverification Test - Different model number is selected every year
- More details can be found on the CTI website **www.cti.org**

CTI Certification Test Parameters

- Entering Wet Bulb temperature - 12.8°C to 32.2°C
- Cooling Range - Minimum of 2.2°C
- Cooling Approach - Minimum of 2.8°C
- Process Fluid Temperature - Maximum of 51.7°C
- Barometric Pressure - 91.4 to 105 kPa
- More details can be found on the CTI website **www.cti.org**

CTI Certification Limitations

- Specific manufacturer's product line name and model numbers
- Applicable only to product lines and model numbers submitted
- Multiple cell model numbers are allowed if the airflow is not affected or the configuration impact is included in the unit rating
- Optional accessories are allowed if the aiflow is not affected or the accessory impact is accounted for in the rating
- More details can be found on the CTI website **www.cti.org**

Evapco Europe CTI Certified eco-ATWB-H Product Line

eco-ATWB-H line of CTI Certified Closed Circuit Coolers

- Includes optional Super Low Sound Fan (SLSF)
- Includes optional pan Water Silencers (WS)
- Includes optional external service platform and ladders for access
- Includes Series Flow Coil arrangement (suffix –Z)
- Includes optional High Flow Header connections
- Includes optional Low Sound Fan
- Includes the use of an optional remote sump
- Includes the use of a Straight Discharge Hood
- Includes the use of Positive Closure Dampers
- Includes the use of CE Fan Screen
- Includes the use of optional Discharge Attenuation
- ***Spectrum*** Technical data sheet will state "CTI Certified Selection" if the selection falls within the CTI Certification Test Parameters
- Unit will receive a CTI Certified Shield located near the nameplate

Note

All CTI Certified Product Lines of all manufacturers with CTI certified products can be found on the website: **http://www.cti.org/certification.shtml**

CTI CERTIFIED

† Mark owned by the Cooling Technology Institute

eco-ATWB-H

EUROVENT-CTI CERTIFICATION

In 2007 Evapco launched the initiative to create the "European Chapter" of CTI.
At the start of this initiative, Eurovent and CTI established a "Memorandum of Understanding".
Since then the "Operational Manual for Certification of Closed Circuit Coolers" and the "Eurovent Rating Standard for Closed Circuit Coolers" were written.
Both documents are strongly tied to the CTI documents STD 201 and ATC 105.
A common **"EUROVENT-CTI"** Certification program has become the European Standard for independent thermal performance rating of Closed Circuit Coolers.
All Evapco CTI Certified Coolers will be **Eurovent-CTI certified as from February 2012**.

EUROVENT – CTI cooperation

EUROVENT Association

Initially founded in 1958 EUROVENT Association represents the European refrigeration, air conditioning, air handling, heating and ventilation industry and trade associations from European and non-European countries. Over 1000 companies in 13 European countries, employing 150000 employees who jointly generate more than € 25 to 30 billion of annual output are member of this organization.

EUROVENT mission

EUROVENT represents, promotes and defends the industry to relevant national and international bodies and cooperates with other European umbrella associations. Over the years EUROVENT has become a well-known and respected stakeholder in all industry related matters and, in particular, in climate change and energy efficiency.
EUROVENT develops product certification programs for the entire industry through the EUROVENT Certification Company.

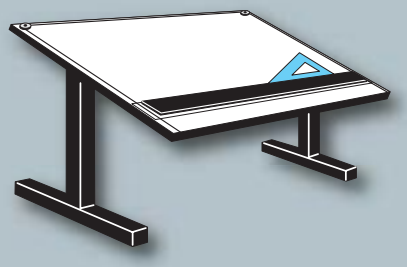
EUROVENT Certification

The main objective of the EUROVENT Certification Company (ECC) is to certify cooling equipment (and/or components) independently from EUROVENT Association. With a common set of well-defined procedures and criteria for the rating of products, comparison of product performance ensures a healthy and solid competition on a market open to all manufacturers. When a manufacturer participates in a certification program, he has to present its list of models or model ranges together with their performance data. The files are evaluated by the ECC Certification and a predefined number of units are selected for testing by **independent laboratories**. If the results comply with the relevant standards, the submitted models or ranges will be listed in the **EUROVENT Certification Online Directory**. Models are subject to regular random testing to verify compliance with catalogue data.

Benefits

The Certification Mark guarantees specifying engineers, installers and end users that the products marketed by a participant have been submitted to independent testing and that they have been accurately rated.
Through specification of **certified products**, the engineer's tasks become easier, since there is no need to carry out detailed comparison and performance testing.

eco-ATWB-H

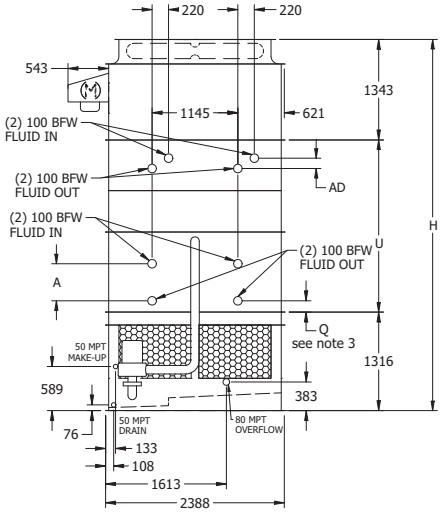


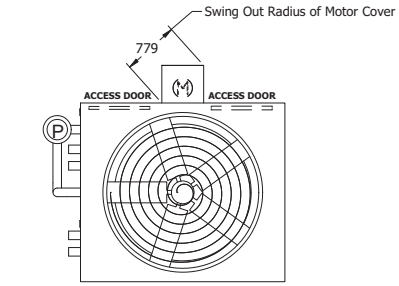
Engineering Data & Dimensions

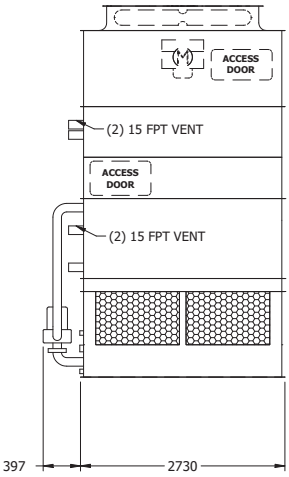
eco-ATWB-H Models 8-1G9 to 8-4K9

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 2.4mx9 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1G9	2.685	1.195	3.930	4	15,5	1,5	227	910	200	3.370	4.610	2.731	1.943	140
eco-ATWB-H 8-1H9	2.710	1.195	3.950	5,5	17,8	1,5	227	910	200	3.395	4.610	2.731	1.943	140
eco-ATWB-H 8-1I9	2.710	1.195	3.955	7,5	19,6	1,5	227	910	200	3.395	4.610	2.731	1.943	140
eco-ATWB-H 8-1J9	2.770	1.195	4.015	11	21,9	1,5	227	910	200	3.455	4.610	2.731	1.943	140
eco-ATWB-H 8-2G9	3.480	1.985	4.900	4	15,1	1,5	401	910	200	4.340	4.775	2.731	2.108	305
eco-ATWB-H 8-2H9	3.500	1.985	4.920	5,5	17,3	1,5	401	910	200	4.365	4.775	2.731	2.108	305
eco-ATWB-H 8-2I9	3.505	1.985	4.925	7,5	19,0	1,5	401	910	200	4.370	4.775	2.731	2.108	305
eco-ATWB-H 8-2J9	3.565	1.985	4.985	11	21,3	1,5	401	910	200	4.425	4.775	2.731	2.108	305
eco-ATWB-H 8-3G9	4.150	2.660	5.740	4	14,7	1,5	575	910	200	5.185	4.966	2.731	2.299	495
eco-ATWB-H 8-3H9	4.175	2.660	5.765	5,5	16,8	1,5	575	910	200	5.205	4.966	2.731	2.299	495
eco-ATWB-H 8-3I9	4.180	2.660	5.770	7,5	18,5	1,5	575	910	200	5.210	4.966	2.731	2.299	495
eco-ATWB-H 8-3J9	4.235	2.660	5.830	11	20,7	1,5	575	910	200	5.270	4.966	2.731	2.299	495
eco-ATWB-H 8-4G9	4.825	3.335	6.595	4	14,2	1,5	753	910	200	6.035	5.156	2.731	2.489	686
eco-ATWB-H 8-4H9	4.850	3.335	6.620	5,5	16,3	1,5	753	910	200	6.060	5.156	2.731	2.489	686
eco-ATWB-H 8-4I9	4.855	3.335	6.620	7,5	17,9	1,5	753	910	200	6.065	5.156	2.731	2.489	686
eco-ATWB-H 8-4J9	4.910	3.335	6.680	11	20,1	1,5	753	910	200	6.125	5.156	2.731	2.489	686
eco-ATWB-H 8-4K9	4.940	3.335	6.710	15	21,8	1,5	753	910	200	6.150	5.156	2.731	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

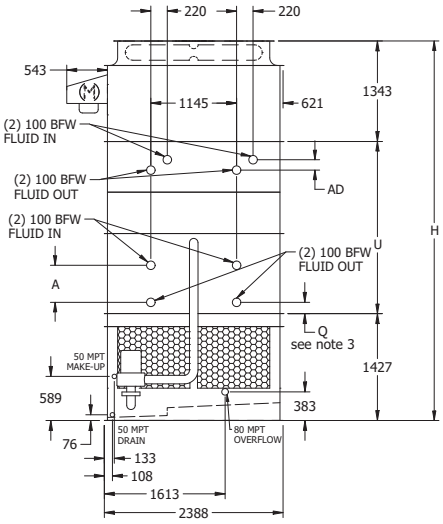
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

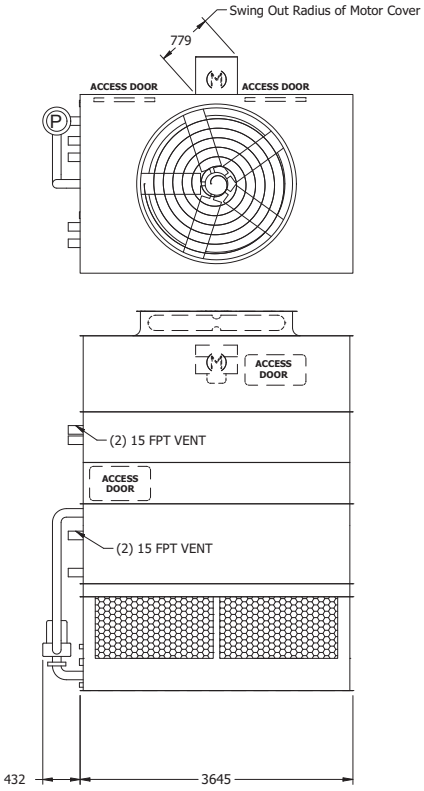
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	40	780	820
4	139	79	965	1045
6	173	119	1150	1265
8	242	159	1330	1490

eco-ATWB-H Models 8-1H12 to 8-4L12

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 2.4mx12 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.





eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1H12	3.345	1.470	5.050	5,5	21,6	2,2	288	1.210	250	4.310	4.721	3.651	1.943	140
eco-ATWB-H 8-1I12	3.350	1.470	5.060	7,5	23,7	2,2	288	1.210	250	4.320	4.721	3.651	1.943	140
eco-ATWB-H 8-1J12	3.405	1.470	5.110	11	27,0	2,2	288	1.210	250	4.375	4.721	3.651	1.943	140
eco-ATWB-H 8-1K12	3.435	1.470	5.140	15	29,3	2,2	288	1.210	250	4.400	4.721	3.651	1.943	140
eco-ATWB-H 8-2H12	4.350	2.475	6.290	5,5	21,0	2,2	522	1.210	250	5.550	4.886	3.651	2.108	305
eco-ATWB-H 8-2I12	4.360	2.475	6.300	7,5	23,1	2,2	522	1.210	250	5.560	4.886	3.651	2.108	305
eco-ATWB-H 8-2J12	4.415	2.475	6.355	11	26,3	2,2	522	1.210	250	5.615	4.886	3.651	2.108	305
eco-ATWB-H 8-2K12	4.440	2.475	6.380	15	28,5	2,2	522	1.210	250	5.645	4.886	3.651	2.108	305
eco-ATWB-H 8-3H12	5.235	3.360	7.410	5,5	20,4	2,2	757	1.210	250	6.670	5.077	3.651	2.299	495
eco-ATWB-H 8-3I12	5.245	3.360	7.420	7,5	22,4	2,2	757	1.210	250	6.680	5.077	3.651	2.299	495
eco-ATWB-H 8-3J12	5.300	3.360	7.475	11	25,5	2,2	757	1.210	250	6.735	5.077	3.651	2.299	495
eco-ATWB-H 8-3K12	5.325	3.360	7.500	15	27,7	2,2	757	1.210	250	6.765	5.077	3.651	2.299	495
eco-ATWB-H 8-4H12	6.155	4.280	8.570	5,5	19,8	2,2	992	1.210	250	7.830	5.267	3.651	2.489	686
eco-ATWB-H 8-4I12	6.165	4.280	8.575	7,5	21,8	2,2	992	1.210	250	7.840	5.267	3.651	2.489	686
eco-ATWB-H 8-4J12	6.220	4.280	8.630	11	24,8	2,2	992	1.210	250	7.895	5.267	3.651	2.489	686
eco-ATWB-H 8-4K12	6.245	4.280	8.660	15	26,9	2,2	992	1.210	250	7.920	5.267	3.651	2.489	686
eco-ATWB-H 8-4L12	6.260	4.280	8.675	18,5	28,6	2,2	992	1.210	250	7.935	5.267	3.651	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

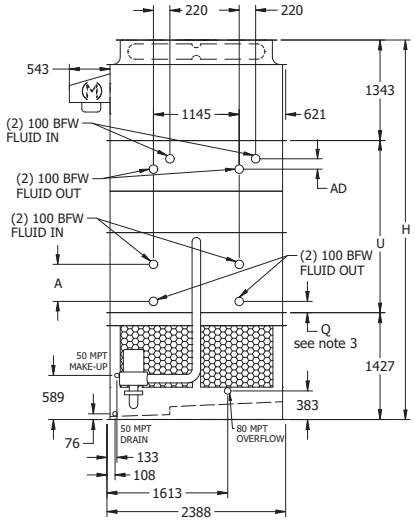
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

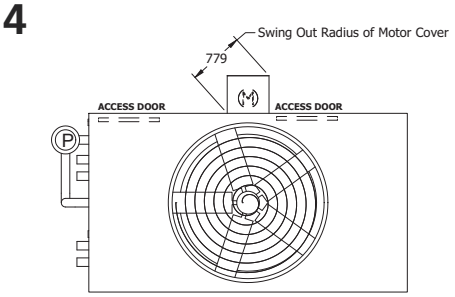
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	79	1220	1300
4	139	159	1600	1755
6	173	244	1975	2215
8	242	323	2350	2675

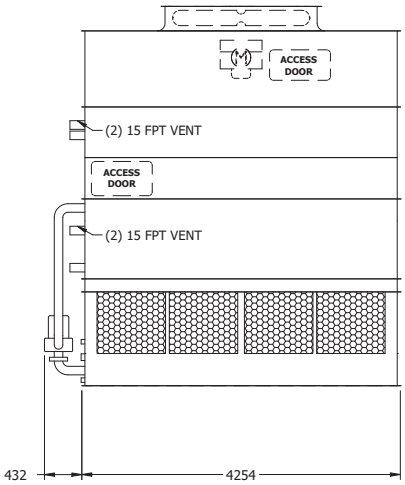
eco-ATWB-H Models 8-1I14 to 8-4M14

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 2.4mx14 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1I14	3.730	1.695	5.710	7,5	26,3	4	326	1.365	250	4.830	4.721	4.261	1.943	140
eco-ATWB-H 8-1J14	3.785	1.695	5.765	11	30,1	4	326	1.365	250	4.885	4.721	4.261	1.943	140
eco-ATWB-H 8-1K14	3.810	1.695	5.790	15	32,7	4	326	1.365	250	4.910	4.721	4.261	1.943	140
eco-ATWB-H 8-1L14	3.825	1.695	5.805	18,5	34,8	4	326	1.365	250	4.925	4.721	4.261	1.943	140
eco-ATWB-H 8-2I14	4.855	2.820	7.110	7,5	25,6	4	602	1.365	250	6.230	4.886	4.261	2.108	305
eco-ATWB-H 8-2J14	4.910	2.820	7.165	11	29,3	4	602	1.365	250	6.285	4.886	4.261	2.108	305
eco-ATWB-H 8-2K14	4.935	2.820	7.195	15	31,8	4	602	1.365	250	6.315	4.886	4.261	2.108	305
eco-ATWB-H 8-2L14	4.950	2.820	7.210	18,5	33,9	4	602	1.365	250	6.330	4.886	4.261	2.108	305
eco-ATWB-H 8-3I14	5.950	3.920	8.480	7,5	24,9	4	878	1.365	250	7.600	5.077	4.261	2.299	495
eco-ATWB-H 8-3J14	6.005	3.920	8.535	11	28,5	4	878	1.365	250	7.655	5.077	4.261	2.299	495
eco-ATWB-H 8-3K14	6.035	3.920	8.565	15	30,9	4	878	1.365	250	7.685	5.077	4.261	2.299	495
eco-ATWB-H 8-3L14	6.045	3.920	8.575	18,5	32,9	4	878	1.365	250	7.695	5.077	4.261	2.299	495
eco-ATWB-H 8-4I14	7.015	4.980	9.820	7,5	24,1	4	1.155	1.365	250	8.940	5.267	4.261	2.489	686
eco-ATWB-H 8-4J14	7.065	4.980	9.875	11	27,6	4	1.155	1.365	250	8.995	5.267	4.261	2.489	686
eco-ATWB-H 8-4K14	7.095	4.980	9.900	15	30,0	4	1.155	1.365	250	9.020	5.267	4.261	2.489	686
eco-ATWB-H 8-4L14	7.110	4.980	9.915	18,5	32,0	4	1.155	1.365	250	9.035	5.267	4.261	2.489	686
eco-ATWB-H 8-4M14	7.130	4.980	9.940	22	33,6	4	1.155	1.365	250	9.060	5.267	4.261	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

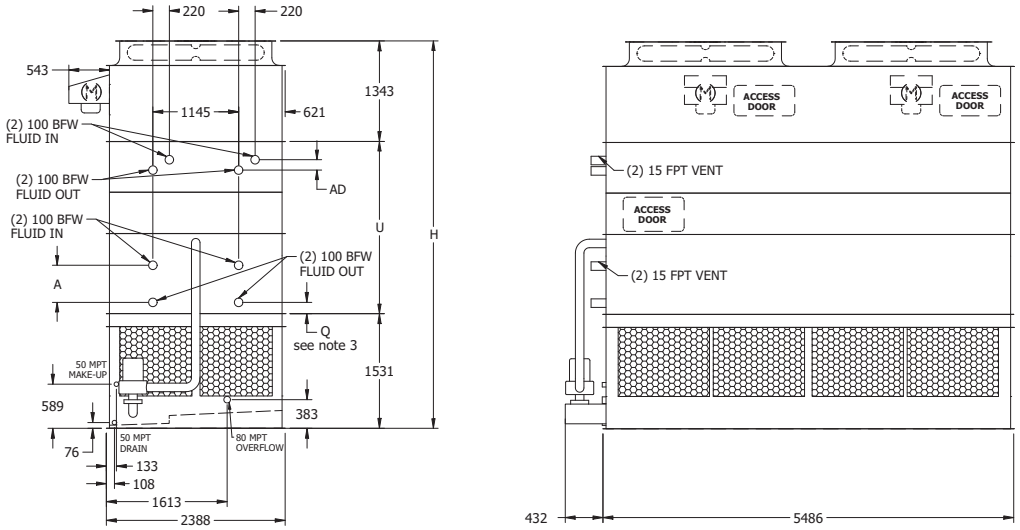
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	62	1030	1095
4	139	125	1320	1445
6	173	187	1610	1800
8	242	249	1900	2150

eco-ATWB-H Models 8-1G18 to 8-4K18

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 2.4mx18 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.



eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1G18	5.105	2.130	7.680	(2) 4	31,0	4	409	1.815	300	6.575	4.823	5.486	1.943	140
eco-ATWB-H 8-1H18	5.155	2.130	7.725	(2) 5.5	35,5	4	409	1.815	300	6.620	4.823	5.486	1.943	140
eco-ATWB-H 8-1I18	5.165	2.130	7.740	(2) 7.5	39,1	4	409	1.815	300	6.635	4.823	5.486	1.943	140
eco-ATWB-H 8-1J18	5.280	2.130	7.850	(2) 11	43,8	4	409	1.815	300	6.750	4.823	5.486	1.943	140
eco-ATWB-H 8-2G18	6.585	3.610	9.510	(2) 4	30,2	4	761	1.815	300	8.410	4.988	5.486	2.108	305
eco-ATWB-H 8-2H18	6.630	3.610	9.555	(2) 5.5	34,5	4	761	1.815	300	8.455	4.988	5.486	2.108	305
eco-ATWB-H 8-2I18	6.645	3.610	9.570	(2) 7.5	38,0	4	761	1.815	300	8.470	4.988	5.486	2.108	305
eco-ATWB-H 8-2J18	6.760	3.610	9.685	(2) 11	42,6	4	761	1.815	300	8.580	4.988	5.486	2.108	305
eco-ATWB-H 8-3G18	7.905	4.930	11.185	(2) 4	29,3	4	1.117	1.815	300	10.085	5.178	5.486	2.299	495
eco-ATWB-H 8-3H18	7.950	4.930	11.230	(2) 5.5	33,6	4	1.117	1.815	300	10.130	5.178	5.486	2.299	495
eco-ATWB-H 8-3I18	7.965	4.930	11.245	(2) 7.5	37,0	4	1.117	1.815	300	10.140	5.178	5.486	2.299	495
eco-ATWB-H 8-3J18	8.080	4.930	11.360	(2) 11	41,4	4	1.117	1.815	300	10.255	5.178	5.486	2.299	495
eco-ATWB-H 8-4G18	9.295	6.320	12.930	(2) 4	28,5	4	1.473	1.815	300	11.830	5.369	5.486	2.489	686
eco-ATWB-H 8-4H18	9.340	6.320	12.975	(2) 5.5	32,6	4	1.473	1.815	300	11.875	5.369	5.486	2.489	686
eco-ATWB-H 8-4I18	9.355	6.320	12.990	(2) 7.5	35,9	4	1.473	1.815	300	11.890	5.369	5.486	2.489	686
eco-ATWB-H 8-4J18	9.465	6.320	13.105	(2) 11	40,2	4	1.473	1.815	300	12.000	5.369	5.486	2.489	686
eco-ATWB-H 8-4K18	9.520	6.320	13.160	(2) 15	43,6	4	1.473	1.815	300	12.055	5.369	5.486	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

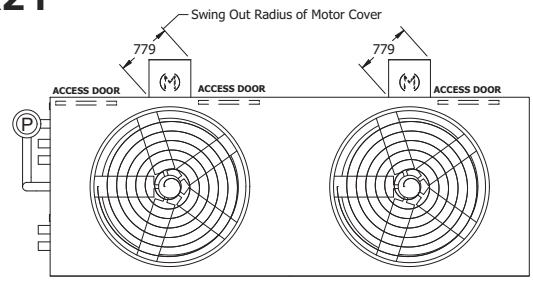
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

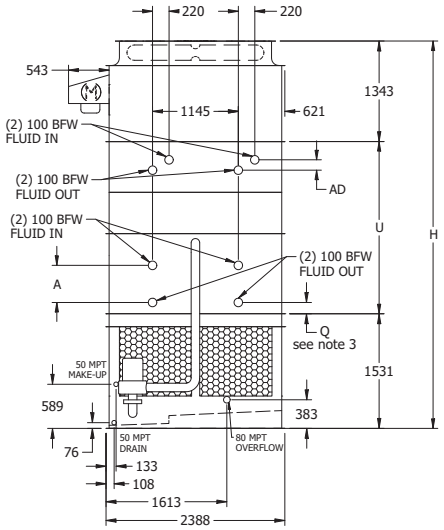
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	79	1220	1300
4	139	159	1600	1755
6	173	244	1975	2215
8	242	323	2350	2675

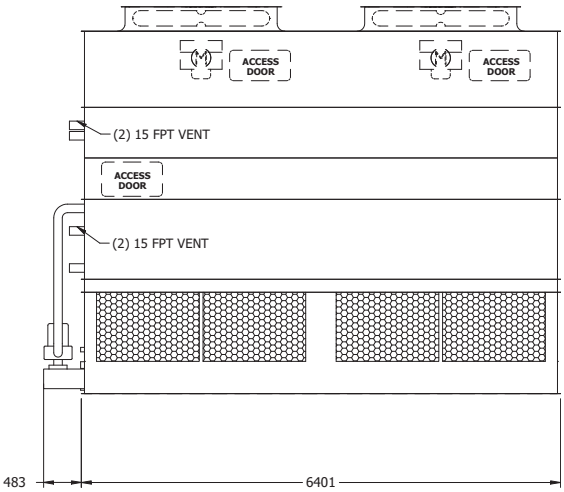
eco-ATWB-H Models 8-1H21 to 8-4K21

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 2.4mx21 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1H21	5.775	2.435	8.820	(2) 5.5	39,5	5,5	466	2.120	300	7.535	4.823	6.401	1.943	140
eco-ATWB-H 8-1I21	5.790	2.435	8.835	(2) 7.5	43,5	5,5	466	2.120	300	7.550	4.823	6.401	1.943	140
eco-ATWB-H 8-1J21	5.900	2.435	8.950	(2) 11	49,1	5,5	466	2.120	300	7.660	4.823	6.401	1.943	140
eco-ATWB-H 8-1K21	5.955	2.435	9.005	(2) 15	53,3	5,5	466	2.120	300	7.715	4.823	6.401	1.943	140
eco-ATWB-H 8-2H21	7.410	4.075	10.875	(2) 5.5	38,4	5,5	882	2.120	300	9.590	4.988	6.401	2.108	305
eco-ATWB-H 8-2I21	7.425	4.075	10.890	(2) 7.5	42,3	5,5	882	2.120	300	9.605	4.988	6.401	2.108	305
eco-ATWB-H 8-2J21	7.540	4.075	11.005	(2) 11	47,8	5,5	882	2.120	300	9.715	4.988	6.401	2.108	305
eco-ATWB-H 8-2K21	7.595	4.075	11.060	(2) 15	51,8	5,5	882	2.120	300	9.770	4.988	6.401	2.108	305
eco-ATWB-H 8-3H21	9.035	5.695	12.915	(2) 5.5	37,3	5,5	1.298	2.120	300	11.625	5.178	6.401	2.299	495
eco-ATWB-H 8-3I21	9.050	5.695	12.925	(2) 7.5	41,1	5,5	1.298	2.120	300	11.640	5.178	6.401	2.299	495
eco-ATWB-H 8-3J21	9.165	5.695	13.040	(2) 11	46,4	5,5	1.298	2.120	300	11.755	5.178	6.401	1.530	495
eco-ATWB-H 8-3K21	9.215	5.695	13.095	(2) 15	50,3	5,5	1.298	2.120	300	11.805	5.178	6.401	1.530	495
eco-ATWB-H 8-4H21	10.655	7.315	14.950	(2) 5.5	36,2	5,5	1.715	2.120	300	13.660	5.369	6.401	1.530	686
eco-ATWB-H 8-4I21	10.670	7.315	14.965	(2) 7.5	39,9	5,5	1.715	2.120	300	13.675	5.369	6.401	1.530	686
eco-ATWB-H 8-4J21	10.780	7.315	15.075	(2) 11	45,1	5,5	1.715	2.120	300	13.790	5.369	6.401	1.530	686
eco-ATWB-H 8-4K21	10.835	7.315	15.130	(2) 15	48,9	5,5	1.715	2.120	300	13.845	5.369	6.401	1.530	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin* Pak**™ coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

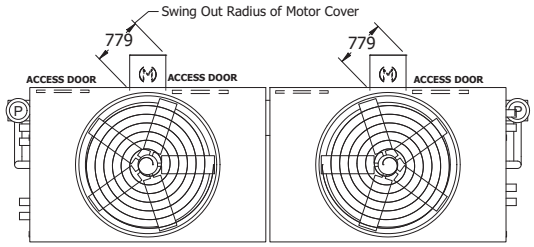
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

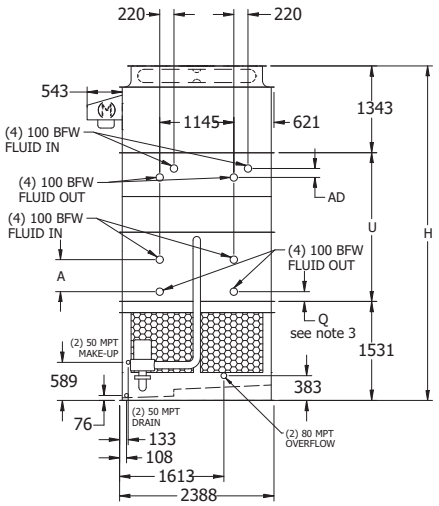
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	96	1370	1470
4	139	187	1810	2000
6	173	283	2250	2535
8	242	374	2690	3065

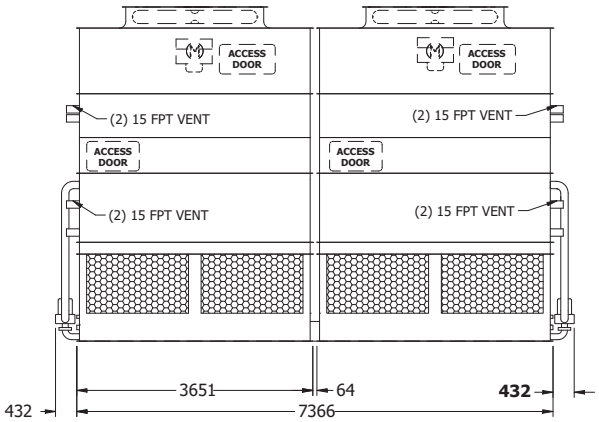
eco-ATWB-H Models 8-1H24 to 8-4L24

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 2.4 m x 24 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1H24	6.615	1.435	10.025	(2) 5.5	43,1	(2) 2.2	572	2.425	(2) 250	8.545	4.823	7.366	1.943	140
eco-ATWB-H 8-1I24	6.630	1.435	10.045	(2) 7.5	47,5	(2) 2.2	572	2.425	(2) 250	8.565	4.823	7.366	1.943	140
eco-ATWB-H 8-1J24	6.740	1.435	10.150	(2) 11	54,0	(2) 2.2	572	2.425	(2) 250	8.675	4.823	7.366	1.943	140
eco-ATWB-H 8-1K24	6.795	1.435	10.205	(2) 15	58,5	(2) 2.2	572	2.425	(2) 250	8.725	4.823	7.366	1.943	140
eco-ATWB-H 8-2H24	8.655	2.455	12.535	(2) 5.5	41,9	(2) 2.2	1.041	2.425	(2) 250	11.060	4.988	7.366	2.108	305
eco-ATWB-H 8-2I24	8.675	2.455	12.555	(2) 7.5	46,2	(2) 2.2	1.041	2.425	(2) 250	11.075	4.988	7.366	2.108	305
eco-ATWB-H 8-2J24	8.780	2.455	12.665	(2) 11	52,5	(2) 2.2	1.041	2.425	(2) 250	11.185	4.988	7.366	2.108	305
eco-ATWB-H 8-2K24	8.835	2.455	12.720	(2) 15	56,9	(2) 2.2	1.041	2.425	(2) 250	11.240	4.988	7.366	2.108	305
eco-ATWB-H 8-3H24	10.470	3.360	14.825	(2) 5.5	40,8	(2) 2.2	1.514	2.425	(2) 250	13.345	5.178	7.366	2.299	495
eco-ATWB-H 8-3I24	10.485	3.360	14.840	(2) 7.5	44,9	(2) 2.2	1.514	2.425	(2) 250	13.365	5.178	7.366	2.299	495
eco-ATWB-H 8-3J24	10.595	3.360	14.950	(2) 11	51,0	(2) 2.2	1.514	2.425	(2) 250	13.470	5.178	7.366	2.299	495
eco-ATWB-H 8-3K24	10.650	3.360	15.005	(2) 15	55,3	(2) 2.2	1.514	2.425	(2) 250	13.525	5.178	7.366	2.299	495
eco-ATWB-H 8-4H24	12.310	4.280	17.135	(2) 5.5	39,6	(2) 2.2	1.984	2.425	(2) 250	15.660	5.369	7.366	2.489	686
eco-ATWB-H 8-4I24	12.330	4.280	17.155	(2) 7.5	43,6	(2) 2.2	1.984	2.425	(2) 250	15.675	5.369	7.366	2.489	686
eco-ATWB-H 8-4J24	12.435	4.280	17.265	(2) 11	49,5	(2) 2.2	1.984	2.425	(2) 250	15.785	5.369	7.366	2.489	686
eco-ATWB-H 8-4K24	12.490	4.280	17.320	(2) 15	53,7	(2) 2.2	1.984	2.425	(2) 250	15.840	5.369	7.366	2.489	686
eco-ATWB-H 8-4L24	12.520	4.280	17.345	(2) 18.5	57,2	(2) 2.2	1.984	2.425	(2) 250	15.865	5.369	7.366	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

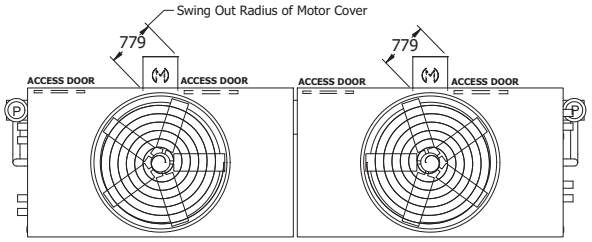
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

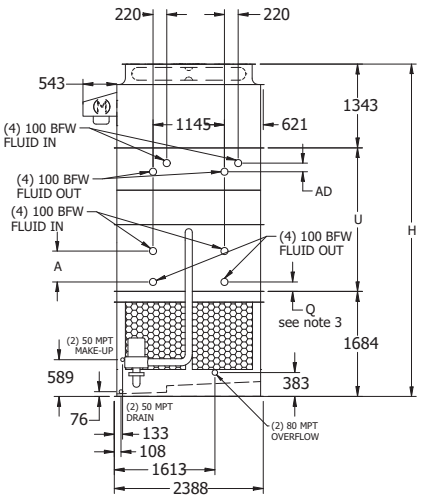
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	102	(2) 925	1950
4	139	215	(2) 1180	2570
6	173	317	(2) 1425	3165
8	242	419	(2) 1670	3765

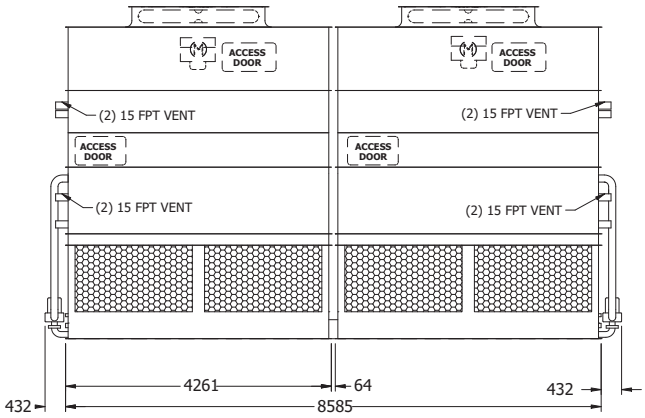
eco-ATWB-H Models 8-1I28 to 8-4M28

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 2.4 m x28 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1I28	7.365	1.650	11.330	(2) 7.5	52,6	(2) 4	651	2.725	(2) 250	9.570	4.975	8.585	1.943	140
eco-ATWB-H 8-1J28	7.475	1.650	11.440	(2) 11	60,2	(2) 4	651	2.725	(2) 250	9.680	4.975	8.585	1.943	140
eco-ATWB-H 8-1K28	7.530	1.650	11.495	(2) 15	65,4	(2) 4	651	2.725	(2) 250	9.735	4.975	8.585	1.943	140
eco-ATWB-H 8-1L28	7.555	1.650	11.520	(2) 18.5	69,6	(2) 4	651	2.725	(2) 250	9.760	4.975	8.585	1.943	140
eco-ATWB-H 8-2I28	9.660	2.800	14.180	(2) 7.5	51,2	(2) 4	1.204	2.725	(2) 250	12.420	5.140	8.585	2.108	305
eco-ATWB-H 8-2J28	9.770	2.800	14.290	(2) 11	58,6	(2) 4	1.204	2.725	(2) 250	12.530	5.140	8.585	2.108	305
eco-ATWB-H 8-2K28	9.825	2.800	14.345	(2) 15	63,6	(2) 4	1.204	2.725	(2) 250	12.585	5.140	8.585	2.108	305
eco-ATWB-H 8-2L28	9.850	2.800	14.370	(2) 18.5	67,7	(2) 4	1.204	2.725	(2) 250	12.610	5.140	8.585	2.108	305
eco-ATWB-H 8-3I28	11.900	3.920	16.965	(2) 7.5	49,7	(2) 4	1.753	2.725	(2) 250	15.205	5.331	8.585	2.299	495
eco-ATWB-H 8-3J28	12.010	3.920	17.075	(2) 11	56,9	(2) 4	1.753	2.725	(2) 250	15.315	5.331	8.585	2.299	495
eco-ATWB-H 8-3K28	12.065	3.920	17.130	(2) 15	61,8	(2) 4	1.753	2.725	(2) 250	15.370	5.331	8.585	2.299	495
eco-ATWB-H 8-3L28	12.095	3.920	17.155	(2) 18.5	65,8	(2) 4	1.753	2.725	(2) 250	15.395	5.331	8.585	2.299	495
eco-ATWB-H 8-4I28	14.025	4.980	19.640	(2) 7.5	48,3	(2) 4	2.305	2.725	(2) 250	17.880	5.521	8.585	2.489	686
eco-ATWB-H 8-4J28	14.135	4.980	19.750	(2) 11	55,3	(2) 4	2.305	2.725	(2) 250	17.990	5.521	8.585	2.489	686
eco-ATWB-H 8-4K28	14.190	4.980	19.805	(2) 15	60,0	(2) 4	2.305	2.725	(2) 250	18.045	5.521	8.585	2.489	686
eco-ATWB-H 8-4L28	14.215	4.980	19.830	(2) 18.5	63,9	(2) 4	2.305	2.725	(2) 250	18.070	5.521	8.585	2.489	686
eco-ATWB-H 8-4M28	14.260	4.980	19.875	(2) 22	67,2	(2) 4	2.305	2.725	(2) 250	18.115	5.521	8.585	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

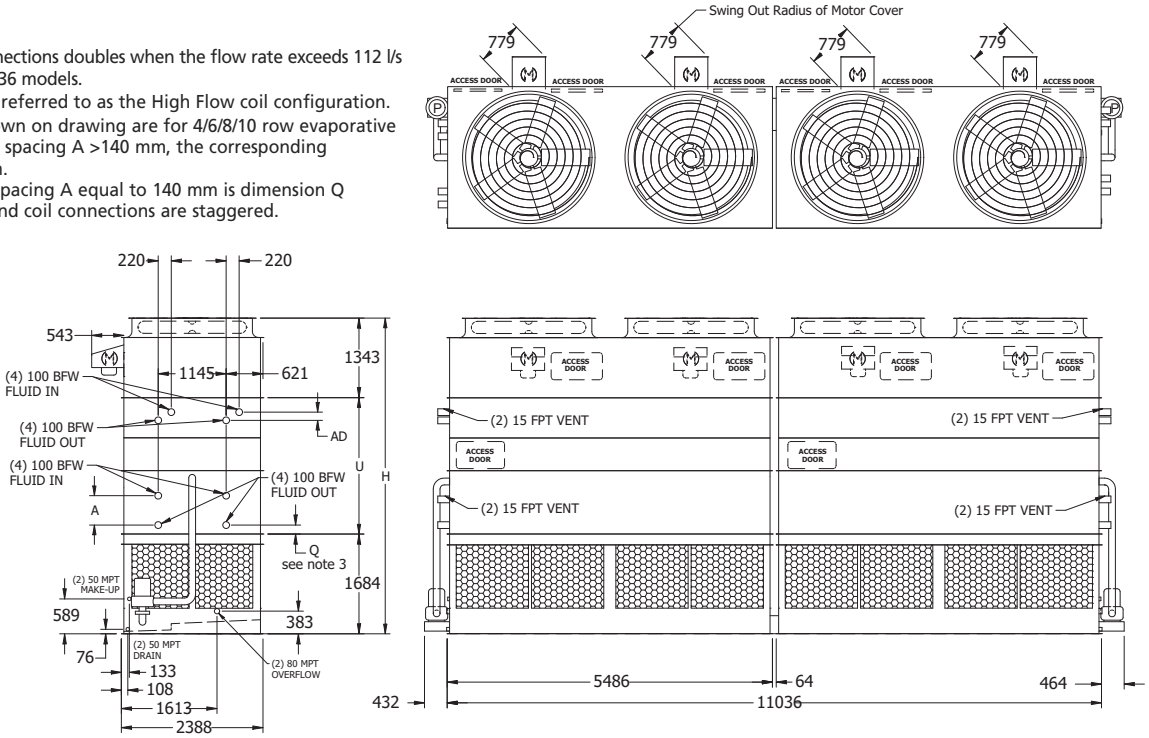
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	125	(2) 1030	2185
4	139	249	(2) 1320	2890
6	173	374	(2) 1610	3595
8	242	498	(2) 1900	4300

eco-ATWB-H Models 8-1H36 to 8-4K36

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 2.4 m x36 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.



eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1H36	10.195	2.075	15.340	(4) 5.5	71,1	(2) 4	814	3.635	(2) 300	13.135	4.975	11.036	1.943	140
eco-ATWB-H 8-1I36	10.225	2.075	15.370	(4) 7.5	78,2	(2) 4	814	3.635	(2) 300	13.165	4.975	11.036	1.943	140
eco-ATWB-H 8-1J36	10.450	2.075	15.595	(4) 11	87,6	(2) 4	814	3.635	(2) 300	13.390	4.975	11.036	1.943	140
eco-ATWB-H 8-2H36	13.200	3.580	19.050	(4) 5.5	69,1	(2) 4	1.522	3.635	(2) 300	16.845	5.140	11.036	2.108	305
eco-ATWB-H 8-2I36	13.225	3.580	19.080	(4) 7.5	76,1	(2) 4	1.522	3.635	(2) 300	16.875	5.140	11.036	2.108	305
eco-ATWB-H 8-2J36	13.455	3.580	19.305	(4) 11	85,2	(2) 4	1.522	3.635	(2) 300	17.100	5.140	11.036	2.108	305
eco-ATWB-H 8-3H36	15.905	4.930	22.460	(4) 5.5	67,1	(2) 4	2.233	3.635	(2) 300	20.255	5.331	11.036	2.299	495
eco-ATWB-H 8-3I36	15.930	4.930	22.490	(4) 7.5	73,9	(2) 4	2.233	3.635	(2) 300	20.285	5.331	11.036	2.299	495
eco-ATWB-H 8-3J36	16.155	4.930	22.715	(4) 11	82,8	(2) 4	2.233	3.635	(2) 300	20.510	5.331	11.036	2.299	495
eco-ATWB-H 8-4H36	18.680	6.320	25.955	(4) 5.5	65,2	(2) 4	2.945	3.635	(2) 300	23.750	5.521	11.036	2.489	686
eco-ATWB-H 8-4I36	18.705	6.320	25.980	(4) 7.5	71,8	(2) 4	2.945	3.635	(2) 300	23.775	5.521	11.036	2.489	686
eco-ATWB-H 8-4J36	18.935	6.320	26.210	(4) 11	80,4	(2) 4	2.945	3.635	(2) 300	24.005	5.521	11.036	2.489	686
eco-ATWB-H 8-4K36	19.040	6.320	26.315	(4) 15	87,1	(2) 4	2.945	3.635	(2) 300	24.115	5.521	11.036	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

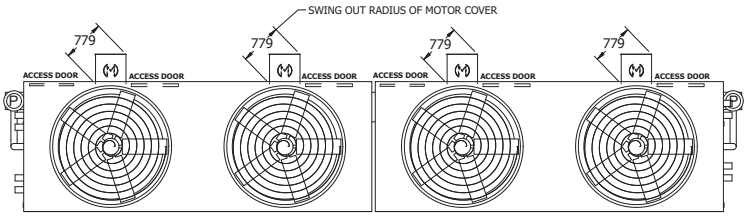
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

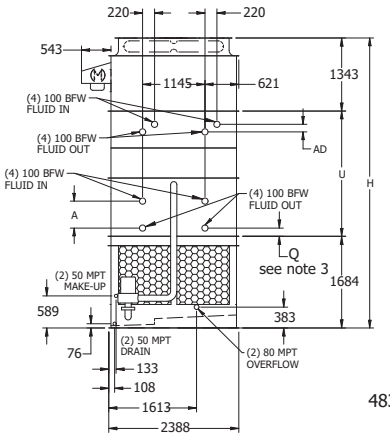
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	159	(2) 1220	2600
4	139	317	(2) 1600	3515
6	173	487	(2) 1975	4435
8	242	646	(2) 2350	5345

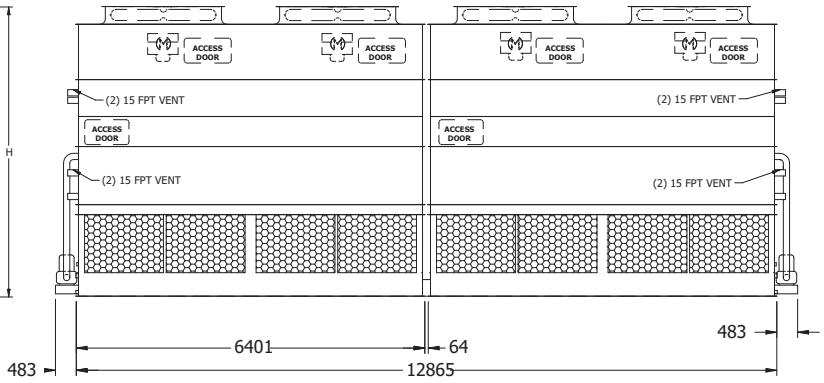
eco-ATWB-H Models 8-1H42 to 8-4K42

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 2.4 m x42 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 8-1H42	11.410	2.370	17.510	(4) 5.5	79,0	(2) 5.5	931	4.240	(2) 300	14.930	4.975	12.865	1.943	140
eco-ATWB-H 8-1I42	11.440	2.370	17.535	(4) 7.5	87,0	(2) 5.5	931	4.240	(2) 300	14.960	4.975	12.865	1.943	140
eco-ATWB-H 8-1J42	11.665	2.370	17.765	(4) 11	98,3	(2) 5.5	931	4.240	(2) 300	15.185	4.975	12.865	1.943	140
eco-ATWB-H 8-1K42	11.775	2.370	17.870	(4) 15	106,5	(2) 5.5	931	4.240	(2) 300	15.295	4.975	12.865	1.943	140
eco-ATWB-H 8-2H42	14.750	4.035	21.680	(4) 5.5	76,8	(2) 5.5	1.764	4.240	(2) 300	19.105	5.140	12.865	2.108	305
eco-ATWB-H 8-2I42	14.780	4.035	21.710	(4) 7.5	84,6	(2) 5.5	1.764	4.240	(2) 300	19.135	5.140	12.865	2.108	305
eco-ATWB-H 8-2J42	15.005	4.035	21.935	(4) 11	95,6	(2) 5.5	1.764	4.240	(2) 300	19.360	5.140	12.865	2.108	305
eco-ATWB-H 8-2K42	15.115	4.035	22.045	(4) 15	103,6	(2) 5.5	1.764	4.240	(2) 300	19.470	5.140	12.865	2.108	305
eco-ATWB-H 8-3H42	18.070	5.695	25.830	(4) 5.5	74,7	(2) 5.5	2.593	4.240	(2) 300	23.250	5.331	12.865	2.299	495
eco-ATWB-H 8-3I42	18.100	5.695	25.855	(4) 7.5	82,2	(2) 5.5	2.593	4.240	(2) 300	23.280	5.331	12.865	2.299	495
eco-ATWB-H 8-3J42	18.325	5.695	26.080	(4) 11	92,9	(2) 5.5	2.593	4.240	(2) 300	23.505	5.331	12.865	2.299	495
eco-ATWB-H 8-3K42	18.435	5.695	26.190	(4) 15	100,6	(2) 5.5	2.593	4.240	(2) 300	23.615	5.331	12.865	2.299	495
eco-ATWB-H 8-4H42	21.310	7.315	29.900	(4) 5.5	72,5	(2) 5.5	3.426	4.240	(2) 300	27.325	5.521	12.865	2.489	686
eco-ATWB-H 8-4I42	21.335	7.315	29.930	(4) 7.5	79,8	(2) 5.5	3.426	4.240	(2) 300	27.350	5.521	12.865	2.489	686
eco-ATWB-H 8-4J42	21.565	7.315	30.155	(4) 11	90,2	(2) 5.5	3.426	4.240	(2) 300	27.580	5.521	12.865	2.489	686
eco-ATWB-H 8-4K42	21.675	7.315	30.265	(4) 15	97,7	(2) 5.5	3.426	4.240	(2) 300	27.685	5.521	12.865	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

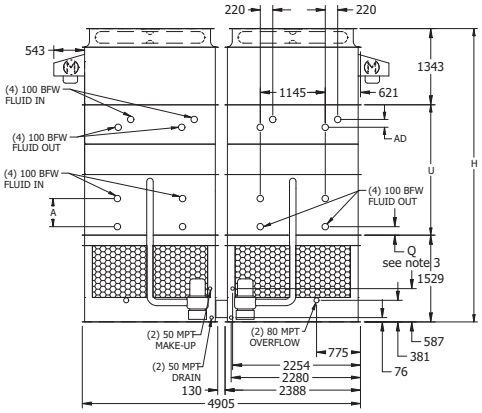
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

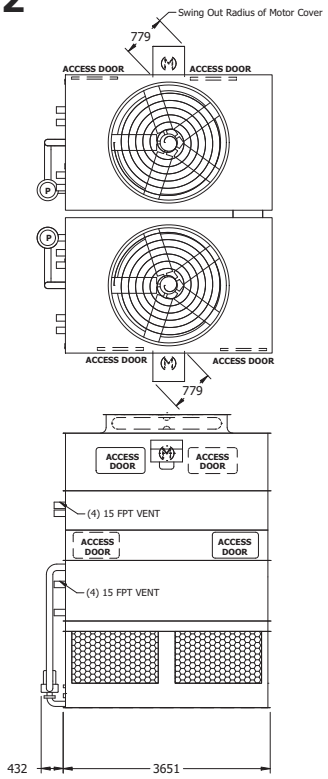
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	193	(2) 1370	2935
4	139	374	(2) 1810	3995
6	173	566	(2) 2250	5070
8	242	748	(2) 2690	6130

eco-ATWB-H Models 16-1H12 to 16-4L12

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 4.8 m x12 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.





eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 16-1H12	6.630	1.440	10.045	(2) 5.5	43,1	(2) 2.2	572	2.425	(2) 250	8.565	4.823	3.651	1.943	140
eco-ATWB-H 16-1I12	6.650	1.440	10.060	(2) 7.5	47,5	(2) 2.2	572	2.425	(2) 250	8.580	4.823	3.651	1.943	140
eco-ATWB-H 16-1J12	6.760	1.440	10.170	(2) 11	54,0	(2) 2.2	572	2.425	(2) 250	8.690	4.823	3.651	1.943	140
eco-ATWB-H 16-1K12	6.815	1.440	10.225	(2) 15	58,5	(2) 2.2	572	2.425	(2) 250	8.745	4.823	3.651	1.943	140
eco-ATWB-H 16-2H12	8.675	2.465	12.555	(2) 5.5	41,9	(2) 2.2	1.041	2.425	(2) 250	11.075	4.988	3.651	2.108	305
eco-ATWB-H 16-2I12	8.690	2.465	12.575	(2) 7.5	46,2	(2) 2.2	1.041	2.425	(2) 250	11.095	4.988	3.651	2.108	305
eco-ATWB-H 16-2J12	8.800	2.465	12.680	(2) 11	52,5	(2) 2.2	1.041	2.425	(2) 250	11.205	4.988	3.651	2.108	305
eco-ATWB-H 16-2K12	8.855	2.465	12.735	(2) 15	56,9	(2) 2.2	1.041	2.425	(2) 250	11.260	4.988	3.651	2.108	305
eco-ATWB-H 16-3H12	10.470	3.360	14.825	(2) 5.5	40,8	(2) 2.2	1.514	2.425	(2) 250	13.345	5.178	3.651	2.299	495
eco-ATWB-H 16-3I12	10.485	3.360	14.840	(2) 7.5	44,9	(2) 2.2	1.514	2.425	(2) 250	13.365	5.178	3.651	2.299	495
eco-ATWB-H 16-3J12	10.595	3.360	14.950	(2) 11	51,0	(2) 2.2	1.514	2.425	(2) 250	13.470	5.178	3.651	2.299	495
eco-ATWB-H 16-3K12	10.650	3.360	15.005	(2) 15	55,3	(2) 2.2	1.514	2.425	(2) 250	13.525	5.178	3.651	2.299	495
eco-ATWB-H 16-4H12	12.310	4.280	17.135	(2) 5.5	39,6	(2) 2.2	1.984	2.425	(2) 250	15.660	5.369	3.651	2.489	686
eco-ATWB-H 16-4I12	12.330	4.280	17.155	(2) 7.5	43,6	(2) 2.2	1.984	2.425	(2) 250	15.675	5.369	3.651	2.489	686
eco-ATWB-H 16-4J12	12.435	4.280	17.265	(2) 11	49,5	(2) 2.2	1.984	2.425	(2) 250	15.785	5.369	3.651	2.489	686
eco-ATWB-H 16-4K12	12.490	4.280	17.320	(2) 15	53,7	(2) 2.2	1.984	2.425	(2) 250	15.840	5.369	3.651	2.489	686
eco-ATWB-H 16-4L12	12.520	4.280	17.345	(2) 18.5	57,2	(2) 2.2	1.984	2.425	(2) 250	15.865	5.369	3.651	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

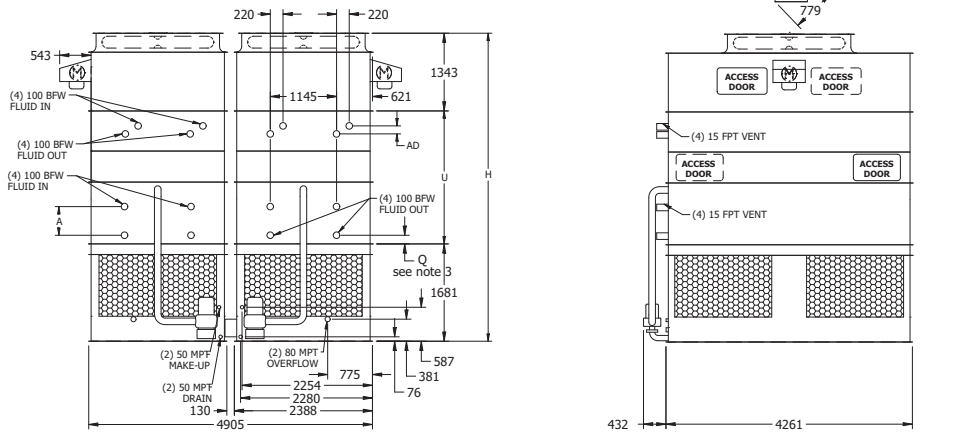
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	102	(2) 925	1950
4	139	215	(2) 1180	2570
6	173	317	(2) 1425	3165
8	242	419	(2) 1670	3765

eco-ATWB-H Models 16-1I14 to 16-4M14

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 4.8 m x14 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.



eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 16-1I14	7.405	1.670	11.365	(2) 7.5	52,6	(2) 4	651	2.725	(2) 250	9.605	4.975	4.261	1.943	140
eco-ATWB-H 16-1J14	7.510	1.670	11.475	(2) 11	60,2	(2) 4	651	2.725	(2) 250	9.715	4.975	4.261	1.943	140
eco-ATWB-H 16-1K14	7.565	1.670	11.530	(2) 15	65,4	(2) 4	651	2.725	(2) 250	9.770	4.975	4.261	1.943	140
eco-ATWB-H 16-1L14	7.595	1.670	11.560	(2) 18.5	69,6	(2) 4	651	2.725	(2) 250	9.800	4.975	4.261	1.943	140
eco-ATWB-H 16-2I14	9.680	2.810	14.195	(2) 7.5	51,2	(2) 4	1.204	2.725	(2) 250	12.435	5.140	4.261	2.108	305
eco-ATWB-H 16-2J14	9.790	2.810	14.305	(2) 11	58,6	(2) 4	1.204	2.725	(2) 250	12.545	5.140	4.261	2.108	305
eco-ATWB-H 16-2K14	9.845	2.810	14.360	(2) 15	63,6	(2) 4	1.204	2.725	(2) 250	12.600	5.140	4.261	2.108	305
eco-ATWB-H 16-2L14	9.870	2.810	14.390	(2) 18.5	67,7	(2) 4	1.204	2.725	(2) 250	12.630	5.140	4.261	2.108	305
eco-ATWB-H 16-3I14	11.900	3.920	16.965	(2) 7.5	49,7	(2) 4	1.753	2.725	(2) 250	15.205	5.331	4.261	2.299	495
eco-ATWB-H 16-3J14	12.010	3.920	17.075	(2) 11	56,9	(2) 4	1.753	2.725	(2) 250	15.315	5.331	4.261	2.299	495
eco-ATWB-H 16-3K14	12.065	3.920	17.130	(2) 15	61,8	(2) 4	1.753	2.725	(2) 250	15.370	5.331	4.261	2.299	495
eco-ATWB-H 16-3L14	12.095	3.920	17.155	(2) 18.5	65,8	(2) 4	1.753	2.725	(2) 250	15.395	5.331	4.261	2.299	495
eco-ATWB-H 16-4I14	14.025	4.980	19.640	(2) 7.5	48,3	(2) 4	2.305	2.725	(2) 250	17.880	5.521	4.261	2.489	686
eco-ATWB-H 16-4J14	14.135	4.980	19.750	(2) 11	55,3	(2) 4	2.305	2.725	(2) 250	17.990	5.521	4.261	2.489	686
eco-ATWB-H 16-4K14	14.190	4.980	19.805	(2) 15	60,0	(2) 4	2.305	2.725	(2) 250	18.045	5.521	4.261	2.489	686
eco-ATWB-H 16-4L14	14.215	4.980	19.830	(2) 18.5	63,9	(2) 4	2.305	2.725	(2) 250	18.070	5.521	4.261	2.489	686
eco-ATWB-H 16-4M14	14.260	4.980	19.875	(2) 22	67,2	(2) 4	2.305	2.725	(2) 250	18.115	5.521	4.261	2.489	686

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

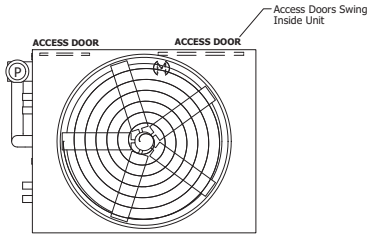
* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

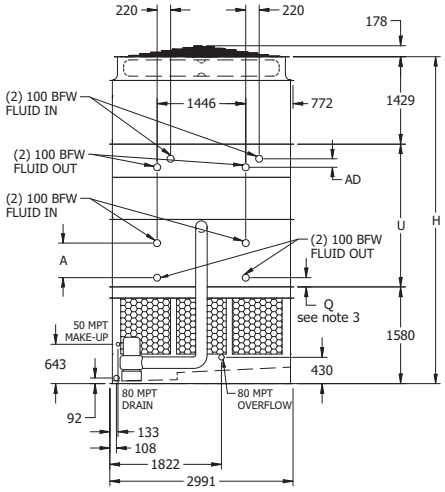
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	125	(2) 1030	2185
4	139	249	(2) 1320	2890
6	173	374	(2) 1610	3595
8	242	498	(2) 1900	4300

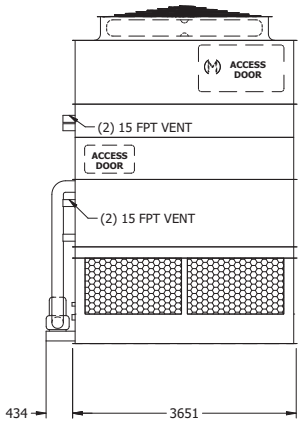
eco-ATWB-H Models 10-1I12 to 10-4M12



Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 10x12 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.





eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 10-1I12	4.485	2.225	7.030	7,5	27,7	4	360	1.590	300	5.410	4.918	3.651	1.905	140
eco-ATWB-H 10-1J12	4.545	2.225	7.090	11	31,7	4	360	1.590	300	5.470	4.918	3.651	1.905	140
eco-ATWB-H 10-1K12	4.570	2.225	7.115	15	34,6	4	360	1.590	300	5.500	4.918	3.651	1.905	140
eco-ATWB-H 10-1L12	4.585	2.225	7.130	18,5	36,8	4	360	1.590	300	5.510	4.918	3.651	1.905	140
eco-ATWB-H 10-1M12	4.610	2.225	7.155	22	38,7	4	360	1.590	300	5.535	4.918	3.651	1.905	140
eco-ATWB-H 10-2I12	5.765	3.505	8.610	7,5	26,9	4	659	1.590	300	6.990	5.128	3.651	2.115	349
eco-ATWB-H 10-2J12	5.825	3.505	8.670	11	30,8	4	659	1.590	300	7.050	5.128	3.651	2.115	349
eco-ATWB-H 10-2K12	5.850	3.505	8.695	15	33,6	4	659	1.590	300	7.075	5.128	3.651	2.115	349
eco-ATWB-H 10-2L12	5.865	3.505	8.710	18,5	35,8	4	659	1.590	300	7.090	5.128	3.651	2.115	349
eco-ATWB-H 10-2M12	5.890	3.505	8.730	22	37,7	4	659	1.590	300	7.110	5.128	3.651	2.115	349
eco-ATWB-H 10-3I12	6.880	4.620	10.020	7,5	26,2	4	958	1.590	300	8.400	5.344	3.651	2.330	565
eco-ATWB-H 10-3J12	6.940	4.620	10.080	11	30,0	4	958	1.590	300	8.460	5.344	3.651	2.330	565
eco-ATWB-H 10-3K12	6.965	4.620	10.105	15	32,7	4	958	1.590	300	8.485	5.344	3.651	2.330	565
eco-ATWB-H 10-3L12	6.980	4.620	10.120	18,5	34,8	4	958	1.590	300	8.500	5.344	3.651	2.330	565
eco-ATWB-H 10-3M12	7.005	4.620	10.140	22	36,6	4	958	1.590	300	8.525	5.344	3.651	2.330	565
eco-ATWB-H 10-4I12	8.060	5.800	11.500	7,5	25,4	4	1.257	1.590	300	9.880	5.559	3.651	2.546	781
eco-ATWB-H 10-4J12	8.120	5.800	11.560	11	29,1	4	1.257	1.590	300	9.940	5.559	3.651	2.546	781
eco-ATWB-H 10-4K12	8.145	5.800	11.585	15	31,7	4	1.257	1.590	300	9.965	5.559	3.651	2.546	781
eco-ATWB-H 10-4L12	8.160	5.800	11.600	18,5	33,8	4	1.257	1.590	300	9.980	5.559	3.651	2.546	781
eco-ATWB-H 10-4M12	8.185	5.800	11.620	22	35,5	4	1.257	1.590	300	10.000	5.559	3.651	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

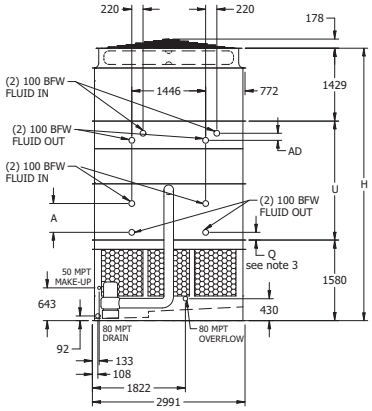
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

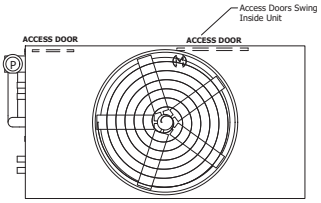
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	68	1105	1170
4	139	136	1425	1560
6	173	210	1750	1960
8	242	278	2075	2350

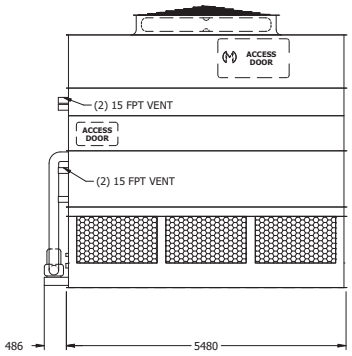
eco-ATWB-H Models 10-1I18 to 10-4N18

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATW-HB 10x18 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 10-1I18	6.270	3.200	10.090	7,5	36,4	5,5	515	2.385	300	7.710	4.918	5.486	1.905	140
eco-ATWB-H 10-1J18	6.330	3.200	10.150	11	41,6	5,5	515	2.385	300	7.770	4.918	5.486	1.905	140
eco-ATWB-H 10-1K18	6.355	3.200	10.180	15	45,8	5,5	515	2.385	300	7.795	4.918	5.486	1.905	140
eco-ATWB-H 10-1L18	6.370	3.200	10.190	18,5	49,4	5,5	515	2.385	300	7.810	4.918	5.486	1.905	140
eco-ATWB-H 10-1M18	6.390	3.200	10.215	22	52,0	5,5	515	2.385	300	7.835	4.918	5.486	1.905	140
eco-ATWB-H 10-1N18	6.465	3.200	10.285	30	56,4	5,5	515	2.385	300	7.905	4.918	5.486	1.905	140
eco-ATWB-H 10-2I18	8.185	5.120	12.465	7,5	35,4	5,5	965	2.385	300	10.085	5.128	5.486	2.115	349
eco-ATWB-H 10-2J18	8.245	5.120	12.525	11	40,5	5,5	965	2.385	300	10.140	5.128	5.486	2.115	349
eco-ATWB-H 10-2K18	8.275	5.120	12.550	15	44,6	5,5	965	2.385	300	10.170	5.128	5.486	2.115	349
eco-ATWB-H 10-2L18	8.285	5.120	12.565	18,5	48,0	5,5	965	2.385	300	10.185	5.128	5.486	2.115	349
eco-ATWB-H 10-2M18	8.310	5.120	12.585	22	50,6	5,5	965	2.385	300	10.205	5.128	5.486	2.115	349
eco-ATWB-H 10-2N18	8.380	5.120	12.660	30	54,8	5,5	965	2.385	300	10.280	5.128	5.486	2.115	349
eco-ATWB-H 10-3I18	9.875	6.810	14.600	7,5	34,4	5,5	1.416	2.385	300	12.220	5.344	5.486	2.330	565
eco-ATWB-H 10-3J18	9.935	6.810	14.660	11	39,3	5,5	1.416	2.385	300	12.280	5.344	5.486	2.330	565
eco-ATWB-H 10-3K18	9.960	6.810	14.685	15	43,3	5,5	1.416	2.385	300	12.305	5.344	5.486	2.330	565
eco-ATWB-H 10-3L18	9.975	6.810	14.700	18,5	46,6	5,5	1.416	2.385	300	12.320	5.344	5.486	2.330	565
eco-ATWB-H 10-3M18	9.995	6.810	14.725	22	49,1	5,5	1.416	2.385	300	12.340	5.344	5.486	2.330	565
eco-ATWB-H 10-3N18	10.070	6.810	14.795	30	53,3	5,5	1.416	2.385	300	12.415	5.344	5.486	2.330	565
eco-ATWB-H 10-4I18	11.630	8.565	16.810	7,5	33,4	5,5	1.870	2.385	300	14.430	5.559	5.486	2.546	781
eco-ATWB-H 10-4J18	11.690	8.565	16.870	11	38,2	5,5	1.870	2.385	300	14.490	5.559	5.486	2.546	781
eco-ATWB-H 10-4K18	11.715	8.565	16.895	15	42,0	5,5	1.870	2.385	300	14.515	5.559	5.486	2.546	781
eco-ATWB-H 10-4L18	11.730	8.565	16.910	18,5	45,3	5,5	1.870	2.385	300	14.530	5.559	5.486	2.546	781
eco-ATWB-H 10-4M18	11.755	8.565	16.935	22	47,7	5,5	1.870	2.385	300	14.550	5.559	5.486	2.546	781
eco-ATWB-H 10-4N18	11.825	8.565	17.005	30	51,7	5,5	1.870	2.385	300	14.625	5.559	5.486	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

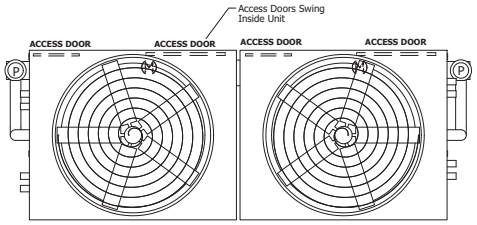
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

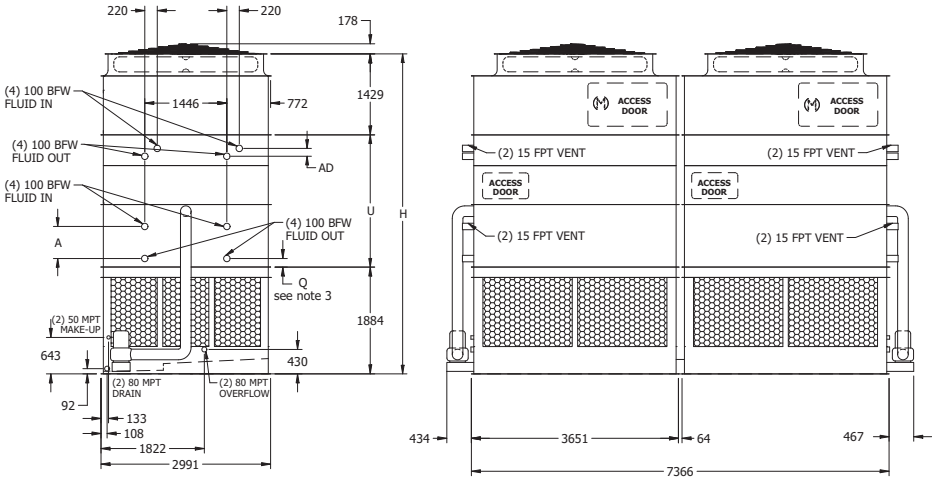
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	102	1460	1565
4	139	210	1950	2160
6	173	311	2440	2755
8	242	419	2930	3350

eco-ATWB-H Models 10-1I24 to 10-4M24

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 10x24 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.





eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 10-1I24	8.890	2.185	13.980	(2) 7.5	55,4	(2) 4	719	3.180	(2) 300	10.740	5.223	7.366	1.905	140
eco-ATWB-H 10-1J24	9.010	2.185	14.100	(2) 11	63,4	(2) 4	719	3.180	(2) 300	10.860	5.223	7.366	1.905	140
eco-ATWB-H 10-1K24	9.065	2.185	14.150	(2) 15	69,2	(2) 4	719	3.180	(2) 300	10.915	5.223	7.366	1.905	140
eco-ATWB-H 10-1L24	9.090	2.185	14.180	(2) 18.5	73,6	(2) 4	719	3.180	(2) 300	10.940	5.223	7.366	1.905	140
eco-ATWB-H 10-1M24	9.135	2.185	14.225	(2) 22	77,5	(2) 4	719	3.180	(2) 300	10.985	5.223	7.366	1.905	140
eco-ATWB-H 10-2I24	11.495	3.490	17.180	(2) 7.5	53,9	(2) 4	1.317	3.180	(2) 300	13.945	5.432	7.366	2.115	349
eco-ATWB-H 10-2J24	11.610	3.490	17.300	(2) 11	61,7	(2) 4	1.317	3.180	(2) 300	14.060	5.432	7.366	2.115	349
eco-ATWB-H 10-2K24	11.665	3.490	17.355	(2) 15	67,2	(2) 4	1.317	3.180	(2) 300	14.115	5.432	7.366	2.115	349
eco-ATWB-H 10-2L24	11.695	3.490	17.380	(2) 18.5	71,6	(2) 4	1.317	3.180	(2) 300	14.145	5.432	7.366	2.115	349
eco-ATWB-H 10-2M24	11.740	3.490	17.425	(2) 22	75,3	(2) 4	1.317	3.180	(2) 300	14.190	5.432	7.366	2.115	349
eco-ATWB-H 10-3I24	13.760	4.620	20.040	(2) 7.5	52,3	(2) 4	1.915	3.180	(2) 300	16.800	5.648	7.366	2.330	565
eco-ATWB-H 10-3J24	13.880	4.620	20.160	(2) 11	59,9	(2) 4	1.915	3.180	(2) 300	16.920	5.648	7.366	2.330	565
eco-ATWB-H 10-3K24	13.935	4.620	20.210	(2) 15	65,3	(2) 4	1.915	3.180	(2) 300	16.975	5.648	7.366	2.330	565
eco-ATWB-H 10-3L24	13.960	4.620	20.240	(2) 18.5	69,6	(2) 4	1.915	3.180	(2) 300	17.000	5.648	7.366	2.330	565
eco-ATWB-H 10-3M24	14.005	4.620	20.285	(2) 22	73,2	(2) 4	1.915	3.180	(2) 300	17.045	5.648	7.366	2.330	565
eco-ATWB-H 10-4I24	16.120	5.800	22.995	(2) 7.5	50,8	(2) 4	2.514	3.180	(2) 300	19.760	5.864	7.366	2.546	781
eco-ATWB-H 10-4J24	16.240	5.800	23.115	(2) 11	58,2	(2) 4	2.514	3.180	(2) 300	19.875	5.864	7.366	2.546	781
eco-ATWB-H 10-4K24	16.295	5.800	23.170	(2) 15	63,4	(2) 4	2.514	3.180	(2) 300	19.930	5.864	7.366	2.546	781
eco-ATWB-H 10-4L24	16.320	5.800	23.195	(2) 18.5	67,5	(2) 4	2.514	3.180	(2) 300	19.960	5.864	7.366	2.546	781
eco-ATWB-H 10-4M24	16.365	5.800	23.240	(2) 22	71,1	(2) 4	2.514	3.180	(2) 300	20.005	5.864	7.366	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

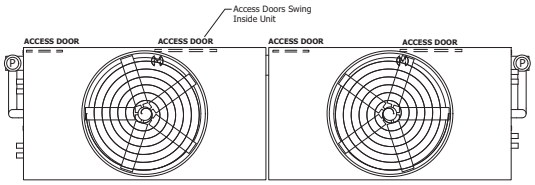
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

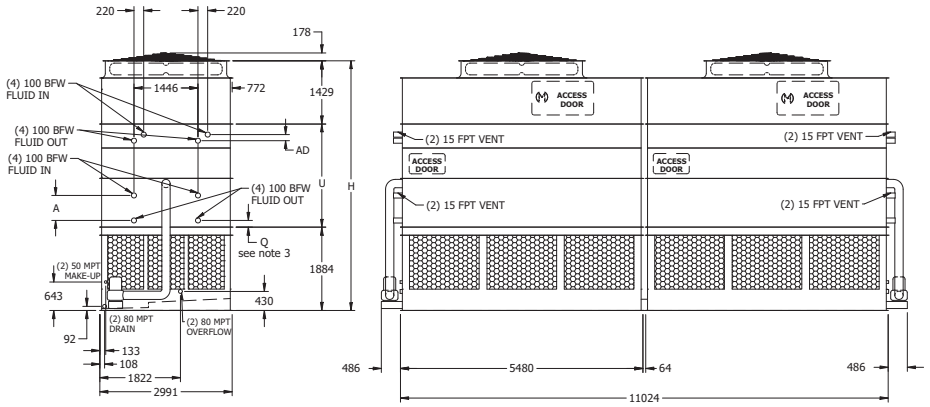
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	136	(2) 1105	2340
4	139	272	(2) 1425	3125
6	173	419	(2) 1750	3915
8	242	555	(2) 2075	4700

eco-ATWB-H Models 10-1I36 to 10-4N36

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 10x36 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.





eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 10-1I36	12.430	3.150	20.075	(2) 7.5	72,7	(2) 5.5	1.026	4.770	(2) 300	15.315	5.223	11.036	1.905	140
eco-ATWB-H 10-1J36	12.545	3.150	20.195	(2) 11	83,3	(2) 5.5	1.026	4.770	(2) 300	15.430	5.223	11.036	1.905	140
eco-ATWB-H 10-1K36	12.600	3.150	20.250	(2) 15	91,7	(2) 5.5	1.026	4.770	(2) 300	15.485	5.223	11.036	1.905	140
eco-ATWB-H 10-1L36	12.630	3.150	20.275	(2) 18.5	98,7	(2) 5.5	1.026	4.770	(2) 300	15.515	5.223	11.036	1.905	140
eco-ATWB-H 10-1M36	12.675	3.150	20.320	(2) 22	104,0	(2) 5.5	1.026	4.770	(2) 300	15.560	5.223	11.036	1.905	140
eco-ATWB-H 10-1N36	12.820	3.150	20.465	(2) 30	112,7	(2) 5.5	1.026	4.770	(2) 300	15.705	5.223	11.036	1.905	140
eco-ATWB-H 10-2I36	16.310	5.090	24.865	(2) 7.5	70,7	(2) 5.5	1.931	4.770	(2) 300	20.105	5.432	11.036	2.115	349
eco-ATWB-H 10-2J36	16.430	5.090	24.985	(2) 11	81,0	(2) 5.5	1.931	4.770	(2) 300	20.220	5.432	11.036	2.115	349
eco-ATWB-H 10-2K36	16.485	5.090	25.040	(2) 15	89,1	(2) 5.5	1.931	4.770	(2) 300	20.275	5.432	11.036	2.115	349
eco-ATWB-H 10-2L36	16.510	5.090	25.065	(2) 18.5	96,0	(2) 5.5	1.931	4.770	(2) 300	20.305	5.432	11.036	2.115	349
eco-ATWB-H 10-2M36	16.555	5.090	25.110	(2) 22	101,1	(2) 5.5	1.931	4.770	(2) 300	20.350	5.432	11.036	2.115	349
eco-ATWB-H 10-2N36	16.700	5.090	25.255	(2) 30	109,6	(2) 5.5	1.931	4.770	(2) 300	20.495	5.432	11.036	2.115	349
eco-ATWB-H 10-3I36	19.750	6.810	29.200	(2) 7.5	68,7	(2) 5.5	2.831	4.770	(2) 300	24.440	5.648	11.036	2.330	565
eco-ATWB-H 10-3J36	19.865	6.810	29.320	(2) 11	78,7	(2) 5.5	2.831	4.770	(2) 300	24.555	5.648	11.036	2.330	565
eco-ATWB-H 10-3K36	19.920	6.810	29.375	(2) 15	86,6	(2) 5.5	2.831	4.770	(2) 300	24.610	5.648	11.036	2.330	565
eco-ATWB-H 10-3L36	19.950	6.810	29.400	(2) 18.5	93,3	(2) 5.5	2.831	4.770	(2) 300	24.640	5.648	11.036	2.330	565
eco-ATWB-H 10-3M36	19.995	6.810	29.445	(2) 22	98,3	(2) 5.5	2.831	4.770	(2) 300	24.685	5.648	11.036	2.330	565
eco-ATWB-H 10-3N36	20.140	6.810	29.590	(2) 30	106,5	(2) 5.5	2.831	4.770	(2) 300	24.830	5.648	11.036	2.330	565
eco-ATWB-H 10-4I36	23.260	8.565	33.620	(2) 7.5	66,7	(2) 5.5	3.736	4.770	(2) 300	28.860	5.864	11.036	2.546	781
eco-ATWB-H 10-4J36	23.380	8.565	33.740	(2) 11	76,4	(2) 5.5	3.736	4.770	(2) 300	28.975	5.864	11.036	2.546	781
eco-ATWB-H 10-4K36	23.435	8.565	33.795	(2) 15	84,1	(2) 5.5	3.736	4.770	(2) 300	29.030	5.864	11.036	2.546	781
eco-ATWB-H 10-4L36	23.460	8.565	33.820	(2) 18.5	90,6	(2) 5.5	3.736	4.770	(2) 300	29.055	5.864	11.036	2.546	781
eco-ATWB-H 10-4M36	23.505	8.565	33.865	(2) 22	95,4	(2) 5.5	3.736	4.770	(2) 300	29.100	5.864	11.036	2.546	781
eco-ATWB-H 10-4N36	23.650	8.565	34.010	(2) 30	103,4	(2) 5.5	3.736	4.770	(2) 300	29.250	5.864	11.036	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

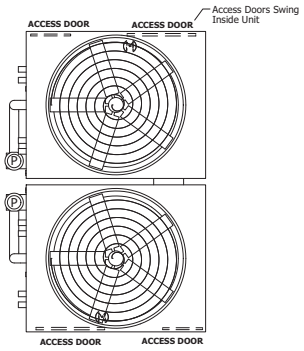
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

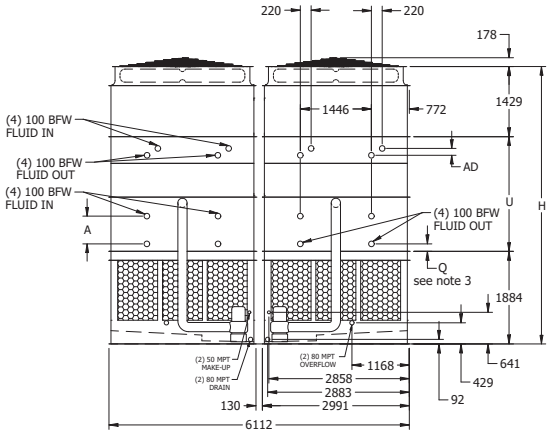
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	204	(2) 1460	3130
4	139	419	(2) 1950	4325
6	173	623	(2) 2440	5505
8	242	838	(2) 2930	6700

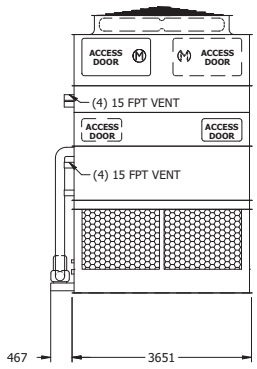
eco-ATWB-H Models 20-1I12 to 20-4M12

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 20x12 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 20-1I12	8.980	2.225	14.070	(2) 7.5	55,4	(2) 4	719	3.180	(2) 300	10.830	5.223	3.651	1.905	140
eco-ATWB-H 20-1J12	9.100	2.225	14.190	(2) 11	63,4	(2) 4	719	3.180	(2) 300	10.950	5.223	3.651	1.905	140
eco-ATWB-H 20-1K12	9.155	2.225	14.245	(2) 15	69,2	(2) 4	719	3.180	(2) 300	11.005	5.223	3.651	1.905	140
eco-ATWB-H 20-1L12	9.180	2.225	14.270	(2) 18.5	73,6	(2) 4	719	3.180	(2) 300	11.030	5.223	3.651	1.905	140
eco-ATWB-H 20-1M12	9.225	2.225	14.315	(2) 22	77,5	(2) 4	719	3.180	(2) 300	11.075	5.223	3.651	1.905	140
eco-ATWB-H 20-2I12	11.540	3.505	17.225	(2) 7.5	53,9	(2) 4	1.317	3.180	(2) 300	13.990	5.432	3.651	2.115	349
eco-ATWB-H 20-2J12	11.655	3.505	17.345	(2) 11	61,7	(2) 4	1.317	3.180	(2) 300	14.105	5.432	3.651	2.115	349
eco-ATWB-H 20-2K12	11.710	3.505	17.400	(2) 15	67,2	(2) 4	1.317	3.180	(2) 300	14.160	5.432	3.651	2.115	349
eco-ATWB-H 20-2L12	11.740	3.505	17.425	(2) 18.5	71,6	(2) 4	1.317	3.180	(2) 300	14.190	5.432	3.651	2.115	349
eco-ATWB-H 20-2M12	11.785	3.505	17.470	(2) 22	75,3	(2) 4	1.317	3.180	(2) 300	14.235	5.432	3.651	2.115	349
eco-ATWB-H 20-3I12	13.770	4.620	20.050	(2) 7.5	52,3	(2) 4	1.915	3.180	(2) 300	16.810	5.648	3.651	2.330	565
eco-ATWB-H 20-3J12	13.890	4.620	20.165	(2) 11	59,9	(2) 4	1.915	3.180	(2) 300	16.930	5.648	3.651	2.330	565
eco-ATWB-H 20-3K12	13.945	4.620	20.220	(2) 15	65,3	(2) 4	1.915	3.180	(2) 300	16.980	5.648	3.651	2.330	565
eco-ATWB-H 20-3L12	13.970	4.620	20.250	(2) 18.5	69,6	(2) 4	1.915	3.180	(2) 300	17.010	5.648	3.651	2.330	565
eco-ATWB-H 20-3M12	14.015	4.620	20.295	(2) 22	73,2	(2) 4	1.915	3.180	(2) 300	17.055	5.648	3.651	2.330	565
eco-ATWB-H 20-4I12	16.130	5.800	23.005	(2) 7.5	50,8	(2) 4	2.514	3.180	(2) 300	19.770	5.864	3.651	2.546	781
eco-ATWB-H 20-4J12	16.250	5.800	23.125	(2) 11	58,2	(2) 4	2.514	3.180	(2) 300	19.885	5.864	3.651	2.546	781
eco-ATWB-H 20-4K12	16.300	5.800	23.180	(2) 15	63,4	(2) 4	2.514	3.180	(2) 300	19.940	5.864	3.651	2.546	781
eco-ATWB-H 20-4L12	16.330	5.800	23.205	(2) 18.5	67,5	(2) 4	2.514	3.180	(2) 300	19.965	5.864	3.651	2.546	781
eco-ATWB-H 20-4M12	16.375	5.800	23.250	(2) 22	71,1	(2) 4	2.514	3.180	(2) 300	20.010	5.864	3.651	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

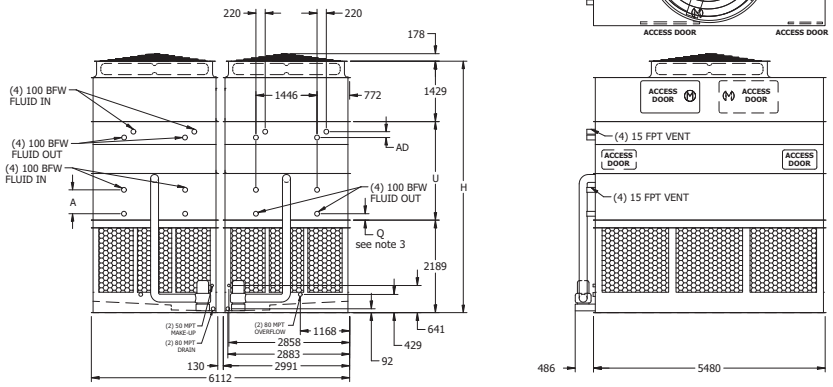
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	136	(2) 1105	2340
4	139	272	(2) 1425	3125
6	173	419	(2) 1750	3915
8	242	555	(2) 2075	4700

eco-ATWB-H Models 20-1I18 to 20-4N18

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 20x18 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.



eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 20-1I18	12.500	3.175	20.150	(2) 7.5	72,7	(2) 5.5	1.026	4.770	(2) 300	15.385	5.528	5.486	1.905	140
eco-ATWB-H 20-1J18	12.620	3.175	20.265	(2) 11	83,3	(2) 5.5	1.026	4.770	(2) 300	15.505	5.528	5.486	1.905	140
eco-ATWB-H 20-1K18	12.675	3.175	20.320	(2) 15	91,7	(2) 5.5	1.026	4.770	(2) 300	15.560	5.528	5.486	1.905	140
eco-ATWB-H 20-1L18	12.700	3.175	20.350	(2) 18.5	98,7	(2) 5.5	1.026	4.770	(2) 300	15.585	5.528	5.486	1.905	140
eco-ATWB-H 20-1M18	12.745	3.175	20.395	(2) 22	104,0	(2) 5.5	1.026	4.770	(2) 300	15.630	5.528	5.486	1.905	140
eco-ATWB-H 20-1N18	12.890	3.175	20.540	(2) 30	112,7	(2) 5.5	1.026	4.770	(2) 300	15.775	5.528	5.486	1.905	140
eco-ATWB-H 20-2I18	16.355	5.105	24.910	(2) 7.5	70,7	(2) 5.5	1.931	4.770	(2) 300	20.150	5.737	5.486	2.115	349
eco-ATWB-H 20-2J18	16.475	5.105	25.030	(2) 11	81,0	(2) 5.5	1.931	4.770	(2) 300	20.265	5.737	5.486	2.115	349
eco-ATWB-H 20-2K18	16.530	5.105	25.085	(2) 15	89,1	(2) 5.5	1.931	4.770	(2) 300	20.320	5.737	5.486	2.115	349
eco-ATWB-H 20-2L18	16.555	5.105	25.110	(2) 18.5	96,0	(2) 5.5	1.931	4.770	(2) 300	20.350	5.737	5.486	2.115	349
eco-ATWB-H 20-2M18	16.600	5.105	25.155	(2) 22	101,1	(2) 5.5	1.931	4.770	(2) 300	20.395	5.737	5.486	2.115	349
eco-ATWB-H 20-2N18	16.745	5.105	25.300	(2) 30	109,6	(2) 5.5	1.931	4.770	(2) 300	20.540	5.737	5.486	2.115	349
eco-ATWB-H 20-3I18	19.770	6.810	29.220	(2) 7.5	68,7	(2) 5.5	2.831	4.770	(2) 300	24.460	5.953	5.486	2.330	565
eco-ATWB-H 20-3J18	19.885	6.810	29.340	(2) 11	78,7	(2) 5.5	2.831	4.770	(2) 300	24.575	5.953	5.486	2.330	565
eco-ATWB-H 20-3K18	19.940	6.810	29.395	(2) 15	86,6	(2) 5.5	2.831	4.770	(2) 300	24.630	5.953	5.486	2.330	565
eco-ATWB-H 20-3L18	19.965	6.810	29.420	(2) 18.5	93,3	(2) 5.5	2.831	4.770	(2) 300	24.655	5.953	5.486	2.330	565
eco-ATWB-H 20-3M18	20.010	6.810	29.465	(2) 22	98,3	(2) 5.5	2.831	4.770	(2) 300	24.705	5.953	5.486	2.330	565
eco-ATWB-H 20-3N18	20.160	6.810	29.610	(2) 30	106,5	(2) 5.5	2.831	4.770	(2) 300	24.850	5.953	5.486	2.330	565
eco-ATWB-H 20-4I18	23.280	8.565	33.640	(2) 7.5	66,7	(2) 5.5	3.736	4.770	(2) 300	28.875	6.169	5.486	2.546	781
eco-ATWB-H 20-4J18	23.395	8.565	33.755	(2) 11	76,4	(2) 5.5	3.736	4.770	(2) 300	28.995	6.169	5.486	2.546	781
eco-ATWB-H 20-4K18	23.450	8.565	33.810	(2) 15	84,1	(2) 5.5	3.736	4.770	(2) 300	29.050	6.169	5.486	2.546	781
eco-ATWB-H 20-4L18	23.480	8.565	33.840	(2) 18.5	90,6	(2) 5.5	3.736	4.770	(2) 300	29.075	6.169	5.486	2.546	781
eco-ATWB-H 20-4M18	23.525	8.565	33.885	(2) 22	95,4	(2) 5.5	3.736	4.770	(2) 300	29.120	6.169	5.486	2.546	781
eco-ATWB-H 20-4N18	23.670	8.565	34.030	(2) 30	103,4	(2) 5.5	3.736	4.770	(2) 300	29.265	6.169	5.486	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

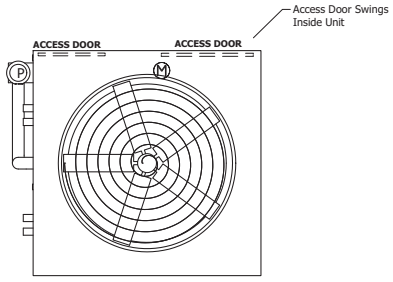
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

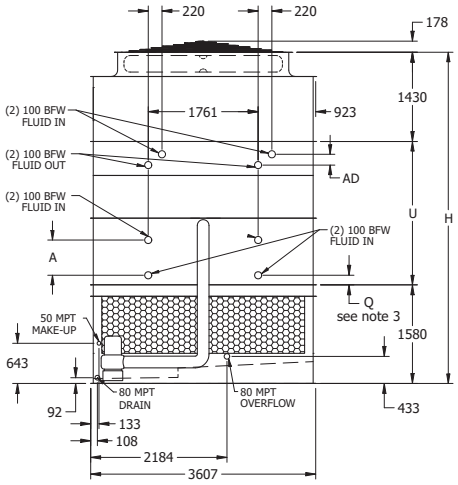
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	204	(2) 1460	3130
4	139	419	(2) 1950	4325
6	173	623	(2) 2440	5505
8	242	838	(2) 2930	6700

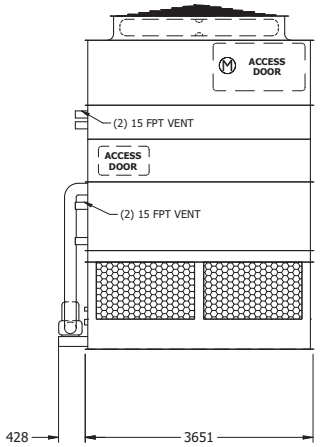
eco-ATWB-H Models 12-1J12 to 12-4N12

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 12x12 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 12-1J12	4.960	2.450	7.940	11	36,1	4	443	1.855	300	6.150	4.918	3.651	1.905	140
eco-ATWB-H 12-1K12	4.990	2.450	7.970	15	39,7	4	443	1.855	300	6.180	4.918	3.651	1.905	140
eco-ATWB-H 12-1L12	5.005	2.450	7.985	18,5	42,3	4	443	1.855	300	6.190	4.918	3.651	1.905	140
eco-ATWB-H 12-1M12	5.025	2.450	8.005	22	44,5	4	443	1.855	300	6.215	4.918	3.651	1.905	140
eco-ATWB-H 12-2J12	6.455	3.940	9.800	11	35,1	4	810	1.855	300	8.010	5.128	3.651	2.115	349
eco-ATWB-H 12-2K12	6.480	3.940	9.830	15	38,6	4	810	1.855	300	8.040	5.128	3.651	2.115	349
eco-ATWB-H 12-2L12	6.495	3.940	9.845	18,5	41,1	4	810	1.855	300	8.050	5.128	3.651	2.115	349
eco-ATWB-H 12-2M12	6.520	3.940	9.865	22	43,3	4	810	1.855	300	8.075	5.128	3.651	2.115	349
eco-ATWB-H 12-3J12	7.885	5.370	11.600	11	34,1	4	1.181	1.855	300	9.805	5.344	3.651	2.330	565
eco-ATWB-H 12-3K12	7.910	5.370	11.625	15	37,5	4	1.181	1.855	300	9.835	5.344	3.651	2.330	565
eco-ATWB-H 12-3L12	7.925	5.370	11.640	18,5	40,0	4	1.181	1.855	300	9.845	5.344	3.651	2.330	565
eco-ATWB-H 12-3M12	7.945	5.370	11.660	22	42,1	4	1.181	1.855	300	9.870	5.344	3.651	2.330	565
eco-ATWB-H 12-4J12	9.330	6.815	13.415	11	33,1	4	1.548	1.855	300	11.625	5.559	3.651	2.546	781
eco-ATWB-H 12-4K12	9.360	6.815	13.445	15	36,4	4	1.548	1.855	300	11.655	5.559	3.651	2.546	781
eco-ATWB-H 12-4L12	9.370	6.815	13.460	18,5	38,8	4	1.548	1.855	300	11.665	5.559	3.651	2.546	781
eco-ATWB-H 12-4M12	9.395	6.815	13.480	22	40,8	4	1.548	1.855	300	11.690	5.559	3.651	2.546	781
eco-ATWB-H 12-4N12	9.465	6.815	13.555	30	44,3	4	1.548	1.855	300	11.760	5.559	3.651	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

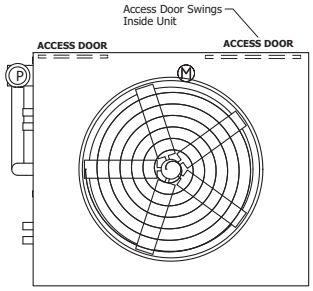
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW). also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

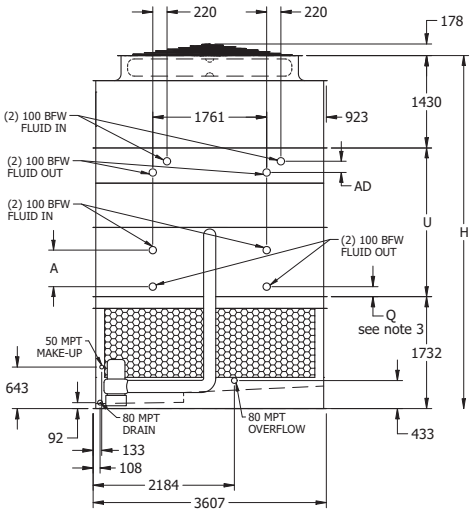
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	85	1280	1365
4	139	170	1675	1845
6	173	255	2070	2325
8	242	340	2470	2810

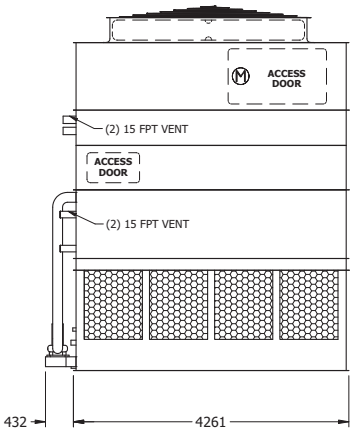
eco-ATWB-H Models 12-1K14 to 12-4N14

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 12x14 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 12-1K14	5.585	2.780	9.085	15	44,0	4	507	2.160	300	7.015	5.070	4.261	1.905	140
eco-ATWB-H 12-1L14	5.595	2.780	9.100	18,5	47,3	4	507	2.160	300	7.025	5.070	4.261	1.905	140
eco-ATWB-H 12-1M14	5.620	2.780	9.120	22	49,7	4	507	2.160	300	7.050	5.070	4.261	1.905	140
eco-ATWB-H 12-1N14	5.695	2.780	9.195	30	53,9	4	507	2.160	300	7.120	5.070	4.261	1.905	140
eco-ATWB-H 12-2K14	7.290	4.485	11.220	15	42,8	4	939	2.160	300	9.150	5.280	4.261	2.115	349
eco-ATWB-H 12-2L14	7.305	4.485	11.235	18,5	46,0	4	939	2.160	300	9.165	5.280	4.261	2.115	349
eco-ATWB-H 12-2M14	7.325	4.485	11.260	22	48,4	4	939	2.160	300	9.185	5.280	4.261	2.115	349
eco-ATWB-H 12-2N14	7.400	4.485	11.330	30	52,4	4	939	2.160	300	9.260	5.280	4.261	2.115	349
eco-ATWB-H 12-3K14	8.990	6.185	13.355	15	41,6	4	1.370	2.160	300	11.280	5.496	4.261	2.330	565
eco-ATWB-H 12-3L14	9.005	6.185	13.365	18,5	44,7	4	1.370	2.160	300	11.295	5.496	4.261	2.330	565
eco-ATWB-H 12-3M14	9.025	6.185	13.390	22	47,0	4	1.370	2.160	300	11.315	5.496	4.261	2.330	565
eco-ATWB-H 12-3N14	9.100	6.185	13.465	30	51,0	4	1.370	2.160	300	11.390	5.496	4.261	2.330	565
eco-ATWB-H 12-4K14	10.680	7.875	15.470	15	40,4	4	1.802	2.160	300	13.400	5.712	4.261	2.546	781
eco-ATWB-H 12-4L14	10.690	7.875	15.485	18,5	43,4	4	1.802	2.160	300	13.415	5.712	4.261	2.546	781
eco-ATWB-H 12-4M14	10.715	7.875	15.510	22	45,6	4	1.802	2.160	300	13.435	5.712	4.261	2.546	781
eco-ATWB-H 12-4N14	10.785	7.875	15.580	30	49,5	4	1.802	2.160	300	13.510	5.712	4.261	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

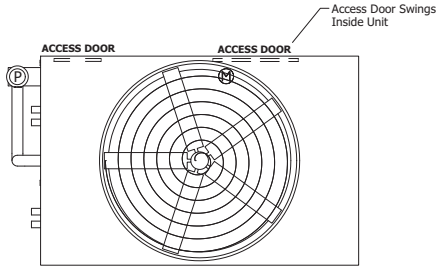
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

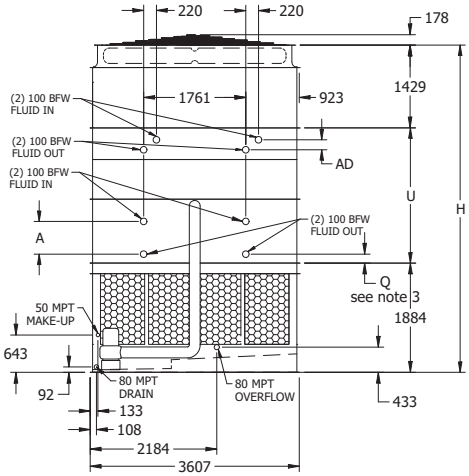
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	102	1415	1520
4	139	198	1880	2080
6	173	300	2350	2650
8	242	396	2810	3205

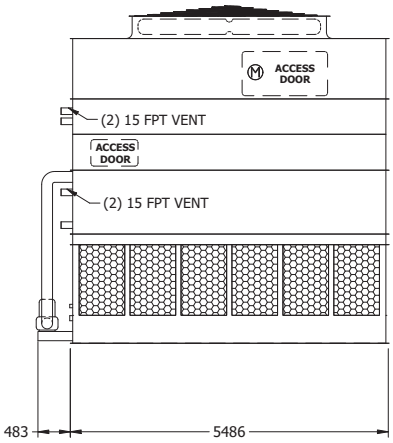
eco-ATWB-H Models 12-1K18 to 12-4O18

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 12x18 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray ump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 12-1K18	6.965	3.520	11.380	15	53,7	5,5	632	2.725	300	8.720	5.223	5.486	1.905	140
eco-ATWB-H 12-1L18	6.975	3.520	11.395	18,5	57,9	5,5	632	2.725	300	8.730	5.223	5.486	1.905	140
eco-ATWB-H 12-1M18	7.000	3.520	11.415	22	61,5	5,5	632	2.725	300	8.755	5.223	5.486	1.905	140
eco-ATWB-H 12-1N18	7.070	3.520	11.490	30	66,8	5,5	632	2.725	300	8.825	5.223	5.486	1.905	140
eco-ATWB-H 12-2K18	9.235	5.790	14.210	15	52,3	5,5	1.189	2.725	300	11.550	5.432	5.486	2.115	349
eco-ATWB-H 12-2L18	9.250	5.790	14.225	18,5	56,3	5,5	1.189	2.725	300	11.560	5.432	5.486	2.115	349
eco-ATWB-H 12-2M18	9.270	5.790	14.245	22	59,8	5,5	1.189	2.725	300	11.585	5.432	5.486	2.115	349
eco-ATWB-H 12-2N18	9.345	5.790	14.320	30	64,9	5,5	1.189	2.725	300	11.655	5.432	5.486	2.115	349
eco-ATWB-H 12-3K18	11.360	7.920	16.895	15	50,8	5,5	1.745	2.725	300	14.235	5.648	5.486	2.330	565
eco-ATWB-H 12-3L18	11.375	7.920	16.910	18,5	54,7	5,5	1.745	2.725	300	14.245	5.648	5.486	2.330	565
eco-ATWB-H 12-3M18	11.400	7.920	16.935	22	58,1	5,5	1.745	2.725	300	14.270	5.648	5.486	2.330	565
eco-ATWB-H 12-3N18	11.470	7.920	17.005	30	63,1	5,5	1.745	2.725	300	14.345	5.648	5.486	2.330	565
eco-ATWB-H 12-4K18	13.515	10.075	19.610	15	49,3	5,5	2.302	2.725	300	16.945	5.864	5.486	2.546	781
eco-ATWB-H 12-4L18	13.530	10.075	19.620	18,5	53,1	5,5	2.302	2.725	300	16.960	5.864	5.486	2.546	781
eco-ATWB-H 12-4M18	13.555	10.075	19.645	22	56,4	5,5	2.302	2.725	300	16.980	5.864	5.486	2.546	781
eco-ATWB-H 12-4N18	13.625	10.075	19.720	30	61,3	5,5	2.302	2.725	300	17.055	5.864	5.486	2.546	781
eco-ATWB-H 12-4O18	13.630	10.075	19.720	37	65,2	5,5	2.302	2.725	300	17.060	5.864	5.486	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

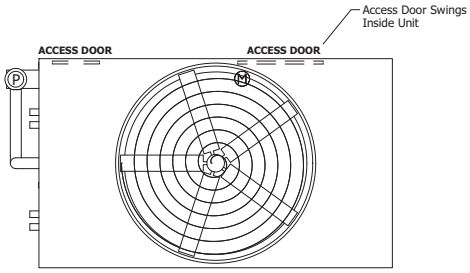
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

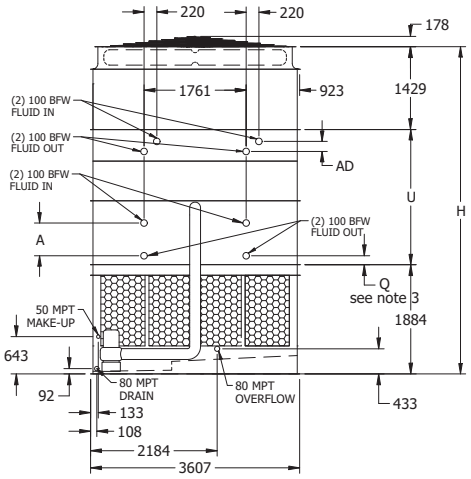
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	130	1690	1820
4	139	255	2290	2545
6	173	385	2895	3280
8	242	515	3500	4015

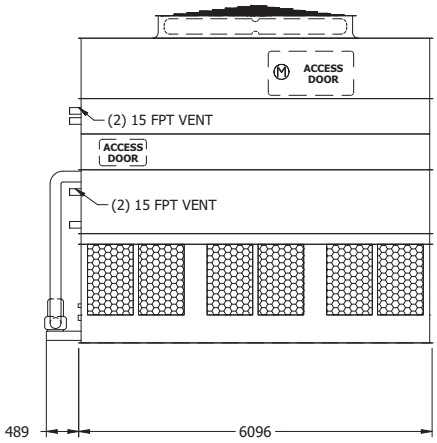
eco-ATWB-H Models 12-1L20 to 12-4O20

Notes:

1) The number of coil connections doubles when the flow rate exceeds 56 l/s on eco-ATWB-H 12x20 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 12-1L20	7.655	3.850	12.630	18,5	62,1	7,5	693	3.030	350	9.590	5.223	6.096	1.905	140
eco-ATWB-H 12-1M20	7.680	3.850	12.650	22	66,0	7,5	693	3.030	350	9.610	5.223	6.096	1.905	140
eco-ATWB-H 12-1N20	7.750	3.850	12.725	30	72,0	7,5	693	3.030	350	9.685	5.223	6.096	1.905	140
eco-ATWB-H 12-1O20	7.755	3.850	12.730	37	76,7	7,5	693	3.030	350	9.690	5.223	6.096	1.905	140
eco-ATWB-H 12-2L20	10.140	6.330	15.730	18,5	60,4	7,5	1.314	3.030	350	12.690	5.432	6.096	2.115	349
eco-ATWB-H 12-2M20	10.160	6.330	15.755	22	64,2	7,5	1.314	3.030	350	12.715	5.432	6.096	2.115	349
eco-ATWB-H 12-2N20	10.235	6.330	15.825	30	70,0	7,5	1.314	3.030	350	12.785	5.432	6.096	2.115	349
eco-ATWB-H 12-2O20	10.240	6.330	15.830	37	74,6	7,5	1.314	3.030	350	12.790	5.432	6.096	2.115	349
eco-ATWB-H 12-3L20	12.540	8.735	18.750	18,5	58,7	7,5	1.934	3.030	350	15.710	5.648	6.096	2.330	565
eco-ATWB-H 12-3M20	12.565	8.735	18.775	22	62,4	7,5	1.934	3.030	350	15.735	5.648	6.096	2.330	565
eco-ATWB-H 12-3N20	12.635	8.735	18.845	30	68,1	7,5	1.934	3.030	350	15.810	5.648	6.096	2.330	565
eco-ATWB-H 12-3O20	12.640	8.735	18.850	37	72,5	7,5	1.934	3.030	350	15.810	5.648	6.096	2.330	565
eco-ATWB-H 12-4L20	14.920	11.115	21.750	18,5	57,0	7,5	2.555	3.030	350	18.710	5.864	6.096	2.546	781
eco-ATWB-H 12-4M20	14.940	11.115	21.770	22	60,5	7,5	2.555	3.030	350	18.735	5.864	6.096	2.546	781
eco-ATWB-H 12-4N20	15.015	11.115	21.845	30	66,1	7,5	2.555	3.030	350	18.805	5.864	6.096	2.546	781
eco-ATWB-H 12-4O20	15.020	11.115	21.850	37	70,3	7,5	2.555	3.030	350	18.810	5.864	6.096	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

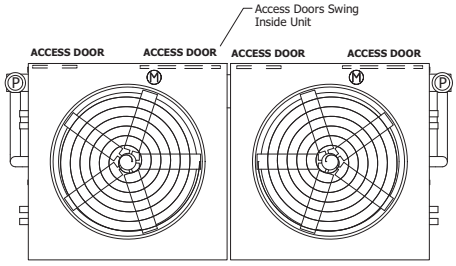
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW).also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

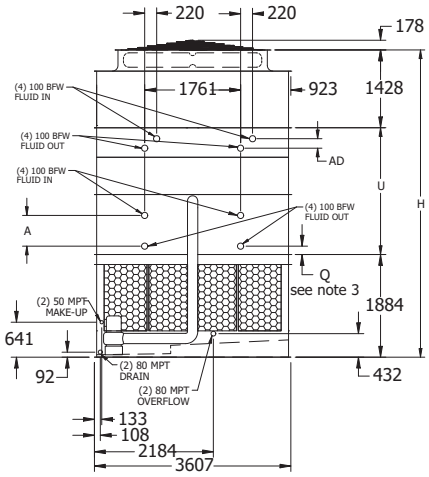
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	142	1830	1970
4	139	289	2500	2785
6	173	430	3170	3600
8	242	572	3840	4410

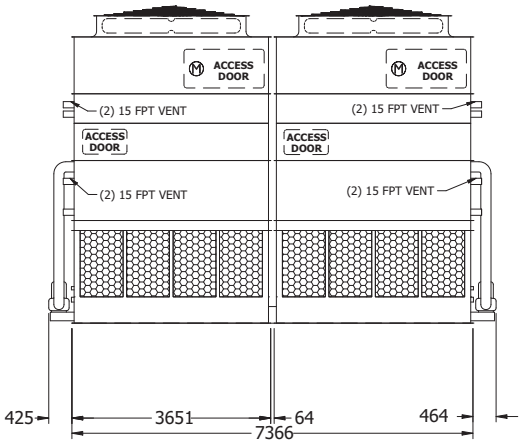
eco-ATWB-H Models 12-1J24 to 12-4N24

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 12x24 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 12-1J24	9.850	2.415	15.810	(2) 11	72,1	(2) 4	886	3.710	(2) 300	12.230	5.223	7.366	1.905	140
eco-ATWB-H 12-1K24	9.905	2.415	15.865	(2) 15	79,4	(2) 4	886	3.710	(2) 300	12.285	5.223	7.366	1.905	140
eco-ATWB-H 12-1L24	9.935	2.415	15.895	(2) 18.5	84,6	(2) 4	886	3.710	(2) 300	12.310	5.223	7.366	1.905	140
eco-ATWB-H 12-1M24	9.980	2.415	15.940	(2) 22	89,0	(2) 4	886	3.710	(2) 300	12.355	5.223	7.366	1.905	140
eco-ATWB-H 12-2J24	12.875	3.925	19.570	(2) 11	70,1	(2) 4	1.620	3.710	(2) 300	15.985	5.432	7.366	2.115	349
eco-ATWB-H 12-2K24	12.925	3.925	19.620	(2) 15	77,2	(2) 4	1.620	3.710	(2) 300	16.040	5.432	7.366	2.115	349
eco-ATWB-H 12-2L24	12.955	3.925	19.650	(2) 18.5	82,3	(2) 4	1.620	3.710	(2) 300	16.065	5.432	7.366	2.115	349
eco-ATWB-H 12-2M24	13.000	3.925	19.695	(2) 22	86,6	(2) 4	1.620	3.710	(2) 300	16.110	5.432	7.366	2.115	349
eco-ATWB-H 12-3J24	15.765	5.370	23.195	(2) 11	68,2	(2) 4	2.358	3.710	(2) 300	19.615	5.648	7.366	2.330	565
eco-ATWB-H 12-3K24	15.820	5.370	23.250	(2) 15	75,0	(2) 4	2.358	3.710	(2) 300	19.670	5.648	7.366	2.330	565
eco-ATWB-H 12-3L24	15.850	5.370	23.280	(2) 18.5	79,9	(2) 4	2.358	3.710	(2) 300	19.695	5.648	7.366	2.330	565
eco-ATWB-H 12-3M24	15.895	5.370	23.325	(2) 22	84,1	(2) 4	2.358	3.710	(2) 300	19.740	5.648	7.366	2.330	565
eco-ATWB-H 12-4K24	18.715	6.815	26.890	(2) 15	72,8	(2) 4	3.096	3.710	(2) 300	23.305	5.864	7.366	2.546	781
eco-ATWB-H 12-4L24	18.740	6.815	26.915	(2) 18.5	77,6	(2) 4	3.096	3.710	(2) 300	23.335	5.864	7.366	2.546	781
eco-ATWB-H 12-4M24	18.790	6.815	26.960	(2) 22	81,7	(2) 4	3.096	3.710	(2) 300	23.380	5.864	7.366	2.546	781
eco-ATWB-H 12-4N24	18.935	6.815	27.105	(2) 30	88,5	(2) 4	3.096	3.710	(2) 300	23.525	5.864	7.366	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

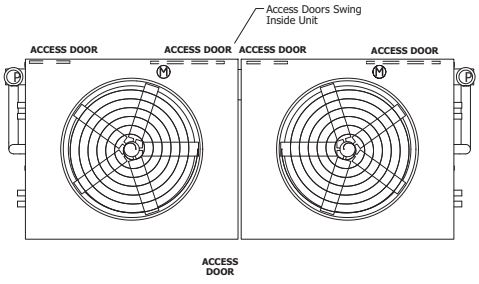
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

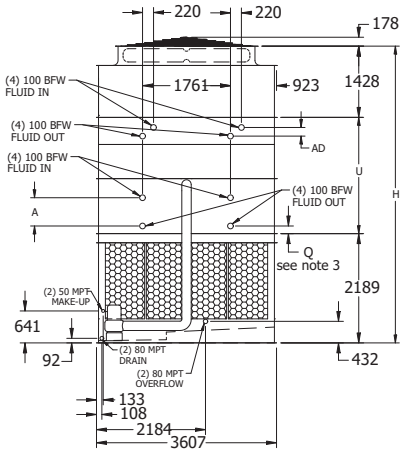
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	170	(2) 1280	2725
4	139	340	(2) 1675	3690
6	173	510	(2) 2070	4655
8	242	680	(2) 2470	5615

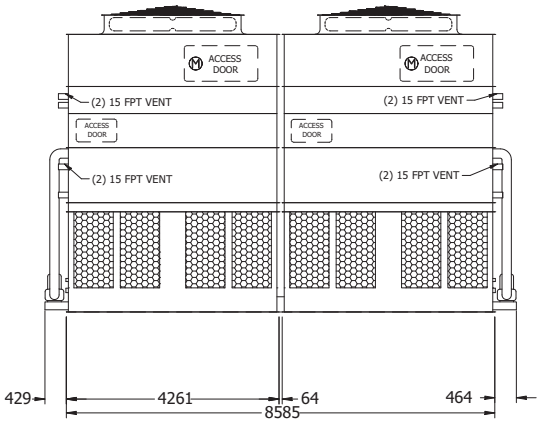
eco-ATWB-H Models 12-1K28 to 12-4N28

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 12x28 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 12-1K28	11.075	2.735	18.080	(2) 15	88,0	(2) 4	1.011	4.315	(2) 300	13.935	5.528	8.585	1.905	140
eco-ATWB-H 12-1L28	11.105	2.735	18.105	(2) 18.5	94,5	(2) 4	1.011	4.315	(2) 300	13.960	5.528	8.585	1.905	140
eco-ATWB-H 12-1M28	11.150	2.735	18.155	(2) 22	99,5	(2) 4	1.011	4.315	(2) 300	14.005	5.528	8.585	1.905	140
eco-ATWB-H 12-1N28	11.295	2.735	18.300	(2) 30	107,8	(2) 4	1.011	4.315	(2) 300	14.150	5.528	8.585	1.905	140
eco-ATWB-H 12-2K28	14.525	4.460	22.390	(2) 15	85,6	(2) 4	1.874	4.315	(2) 300	18.245	5.737	8.585	2.115	349
eco-ATWB-H 12-2L28	14.550	4.460	22.415	(2) 18.5	91,9	(2) 4	1.874	4.315	(2) 300	18.270	5.737	8.585	2.115	349
eco-ATWB-H 12-2M28	14.595	4.460	22.460	(2) 22	96,8	(2) 4	1.874	4.315	(2) 300	18.315	5.737	8.585	2.115	349
eco-ATWB-H 12-2N28	14.740	4.460	22.605	(2) 30	104,9	(2) 4	1.874	4.315	(2) 300	18.460	5.737	8.585	2.115	349
eco-ATWB-H 12-3K28	17.980	6.185	26.705	(2) 15	83,1	(2) 4	2.737	4.315	(2) 300	22.560	5.953	8.585	2.330	565
eco-ATWB-H 12-3L28	18.010	6.185	26.735	(2) 18.5	89,3	(2) 4	2.737	4.315	(2) 300	22.590	5.953	8.585	2.330	565
eco-ATWB-H 12-3M28	18.055	6.185	26.780	(2) 22	94,0	(2) 4	2.737	4.315	(2) 300	22.635	5.953	8.585	2.330	565
eco-ATWB-H 12-3N28	18.200	6.185	26.925	(2) 30	101,9	(2) 4	2.737	4.315	(2) 300	22.780	5.953	8.585	2.330	565
eco-ATWB-H 12-4K28	21.355	7.875	30.945	(2) 15	80,7	(2) 4	3.600	4.315	(2) 300	26.800	6.169	8.585	2.546	781
eco-ATWB-H 12-4L28	21.380	7.875	30.970	(2) 18.5	86,7	(2) 4	3.600	4.315	(2) 300	26.825	6.169	8.585	2.546	781
eco-ATWB-H 12-4M28	21.430	7.875	31.015	(2) 22	91,3	(2) 4	3.600	4.315	(2) 300	26.870	6.169	8.585	2.546	781
eco-ATWB-H 12-4N28	21.575	7.875	31.160	(2) 30	98,9	(2) 4	3.600	4.315	(2) 300	27.015	6.169	8.585	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

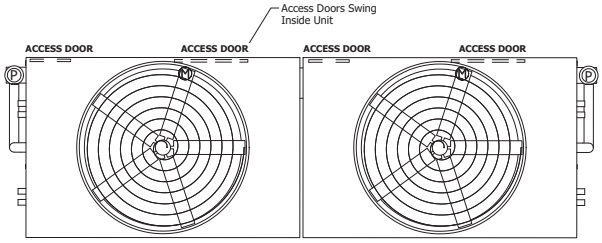
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

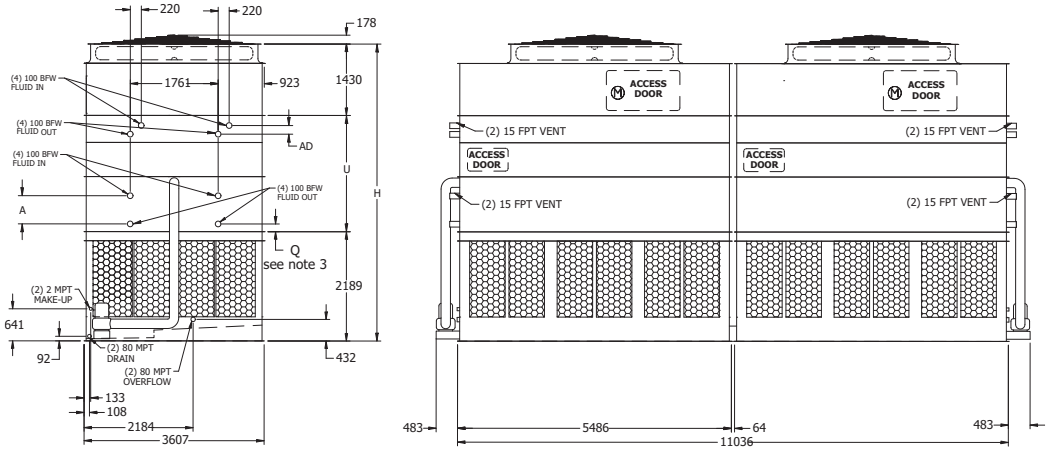
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	204	(2) 1415	3035
4	139	396	(2) 1880	4160
6	173	600	(2) 2350	5295
8	242	793	(2) 2810	6415

eco-ATWB-H Models 12-1K36 to 12-4O36

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 12x36 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.





eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 12-1K36	13.815	3.465	22.650	(2) 15	107,5	(2) 5.5	1.261	5.450	(2) 300	17.325	5.528	11.036	1.905	140
eco-ATWB-H 12-1L36	13.845	3.465	22.680	(2) 18.5	115,8	(2) 5.5	1.261	5.450	(2) 300	17.355	5.528	11.036	1.905	140
eco-ATWB-H 12-1M36	13.890	3.465	22.725	(2) 22	123,0	(2) 5.5	1.261	5.450	(2) 300	17.400	5.528	11.036	1.905	140
eco-ATWB-H 12-1N36	14.035	3.465	22.870	(2) 30	133,5	(2) 5.5	1.261	5.450	(2) 300	17.545	5.528	11.036	1.905	140
eco-ATWB-H 12-2K36	18.405	5.760	28.360	(2) 15	104,5	(2) 5.5	2.373	5.450	(2) 300	23.035	5.737	11.036	2.115	349
eco-ATWB-H 12-2L36	18.435	5.760	28.385	(2) 18.5	112,6	(2) 5.5	2.373	5.450	(2) 300	23.060	5.737	11.036	2.115	349
eco-ATWB-H 12-2M36	18.480	5.760	28.430	(2) 22	119,6	(2) 5.5	2.373	5.450	(2) 300	23.105	5.737	11.036	2.115	349
eco-ATWB-H 12-2N36	18.625	5.760	28.575	(2) 30	129,8	(2) 5.5	2.373	5.450	(2) 300	23.250	5.737	11.036	2.115	349
eco-ATWB-H 12-3K36	22.725	7.920	33.795	(2) 15	101,6	(2) 5.5	3.490	5.450	(2) 300	28.465	5.953	11.036	2.330	565
eco-ATWB-H 12-3L36	22.750	7.920	33.820	(2) 18.5	109,4	(2) 5.5	3.490	5.450	(2) 300	28.495	5.953	11.036	2.330	565
eco-ATWB-H 12-3M36	22.800	7.920	33.865	(2) 22	116,3	(2) 5.5	3.490	5.450	(2) 300	28.540	5.953	11.036	2.330	565
eco-ATWB-H 12-3N36	22.945	7.920	34.010	(2) 30	126,2	(2) 5.5	3.490	5.450	(2) 300	28.685	5.953	11.036	2.330	565
eco-ATWB-H 12-4K36	27.035	10.075	39.220	(2) 15	98,6	(2) 5.5	4.603	5.450	(2) 300	33.890	6.169	11.036	2.546	781
eco-ATWB-H 12-4L36	27.060	10.075	39.245	(2) 18.5	106,2	(2) 5.5	4.603	5.450	(2) 300	33.920	6.169	11.036	2.546	781
eco-ATWB-H 12-4M36	27.105	10.075	39.290	(2) 22	112,9	(2) 5.5	4.603	5.450	(2) 300	33.965	6.169	11.036	2.546	781
eco-ATWB-H 12-4N36	27.250	10.075	39.435	(2) 30	122,5	(2) 5.5	4.603	5.450	(2) 300	34.110	6.169	11.036	2.546	781
eco-ATWB-H 12-4O36	27.260	10.075	39.445	(2) 37	130,4	(2) 5.5	4.603	5.450	(2) 300	34.120	6.169	11.036	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

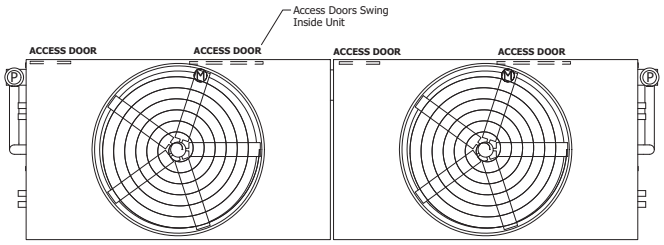
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

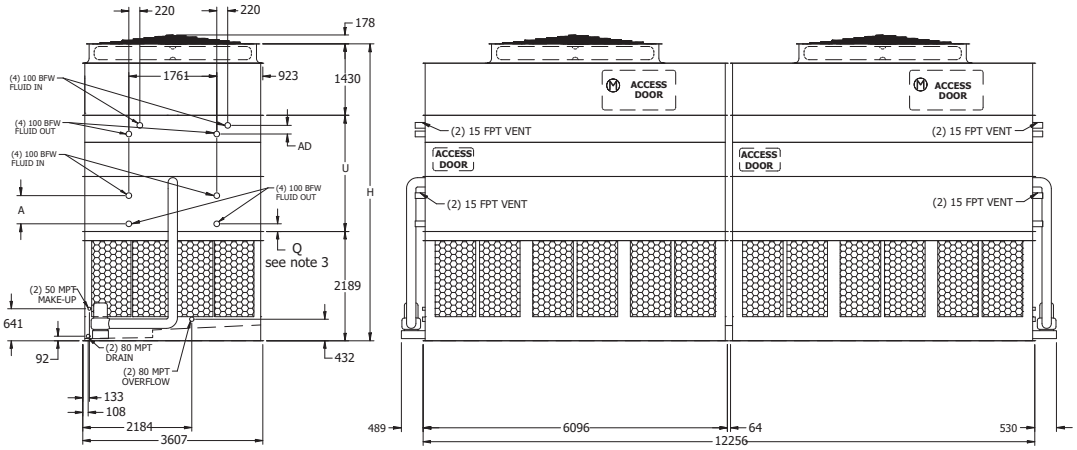
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	261	(2) 1690	3640
4	139	510	(2) 2290	5095
6	173	770	(2) 2895	6555
8	242	1031	(2) 3500	8030

eco-ATWB-H Models 12-1L40 to 12-4O40

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 12x40 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.





eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 12-1L40	15.185	3.785	25.130	(2) 18.5	124,2	(2) 7.5	1.385	6.055	(2) 350	19.050	5.528	12.256	1.905	140
eco-ATWB-H 12-1M40	15.230	3.785	25.175	(2) 22	132,0	(2) 7.5	1.385	6.055	(2) 350	19.095	5.528	12.256	1.905	140
eco-ATWB-H 12-1N40	15.375	3.785	25.320	(2) 30	144,1	(2) 7.5	1.385	6.055	(2) 350	19.240	5.528	12.256	1.905	140
eco-ATWB-H 12-1O40	15.385	3.785	25.330	(2) 37	153,3	(2) 7.5	1.385	6.055	(2) 350	19.250	5.528	12.256	1.905	140
eco-ATWB-H 12-2L40	20.210	6.300	31.400	(2) 18.5	120,8	(2) 7.5	2.627	6.055	(2) 350	25.320	5.737	12.256	2.115	349
eco-ATWB-H 12-2M40	20.255	6.300	31.445	(2) 22	128,4	(2) 7.5	2.627	6.055	(2) 350	25.365	5.737	12.256	2.115	349
eco-ATWB-H 12-2N40	20.405	6.300	31.590	(2) 30	140,1	(2) 7.5	2.627	6.055	(2) 350	25.510	5.737	12.256	2.115	349
eco-ATWB-H 12-2O40	20.410	6.300	31.595	(2) 37	149,1	(2) 7.5	2.627	6.055	(2) 350	25.520	5.737	12.256	2.115	349
eco-ATWB-H 12-3L40	25.085	8.735	37.505	(2) 18.5	117,4	(2) 7.5	3.865	6.055	(2) 350	31.425	5.953	12.256	2.330	565
eco-ATWB-H 12-3M40	25.130	8.735	37.550	(2) 22	124,7	(2) 7.5	3.865	6.055	(2) 350	31.470	5.953	12.256	2.330	565
eco-ATWB-H 12-3N40	25.275	8.735	37.695	(2) 30	136,1	(2) 7.5	3.865	6.055	(2) 350	31.615	5.953	12.256	2.330	565
eco-ATWB-H 12-3O40	25.285	8.735	37.705	(2) 37	144,9	(2) 7.5	3.865	6.055	(2) 350	31.625	5.953	12.256	2.330	565
eco-ATWB-H 12-4L40	29.835	11.115	43.500	(2) 18.5	113,9	(2) 7.5	5.107	6.055	(2) 350	37.420	6.169	12.256	2.546	781
eco-ATWB-H 12-4M40	29.885	11.115	43.545	(2) 22	121,1	(2) 7.5	5.107	6.055	(2) 350	37.465	6.169	12.256	2.546	781
eco-ATWB-H 12-4N40	30.030	11.115	43.690	(2) 30	132,2	(2) 7.5	5.107	6.055	(2) 350	37.610	6.169	12.256	2.546	781
eco-ATWB-H 12-4O40	30.035	11.115	43.700	(2) 37	140,7	(2) 7.5	5.107	6.055	(2) 350	37.620	6.169	12.256	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

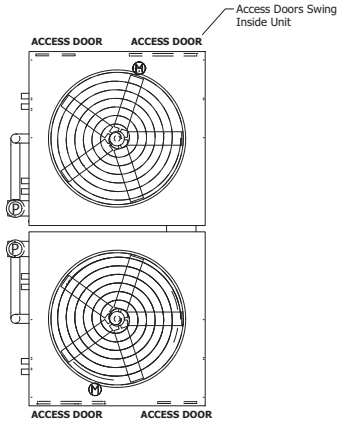
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

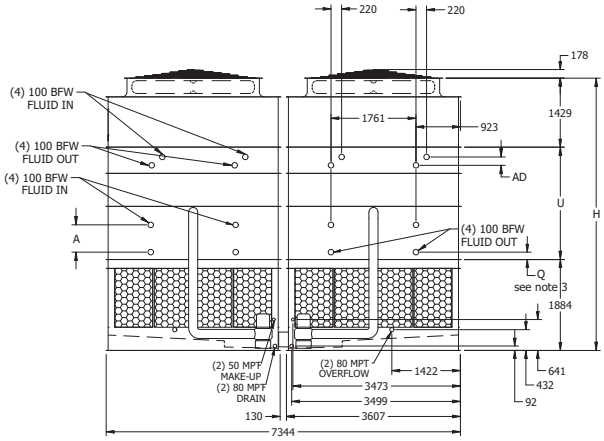
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	283	(2) 1830	3940
4	139	578	(2) 2500	5575
6	173	861	(2) 3170	7200
8	242	1144	(2) 3840	8820

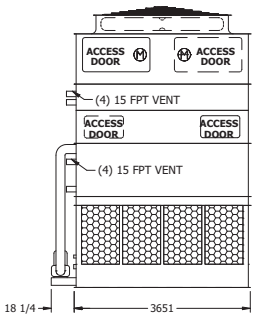
eco-ATWB-H Models 24-1J12 to 24-4N12

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 24x12 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 24-1J12	9.850	2.415	15.810	(2) 11	72,1	(2) 4	886	3.710	(2) 300	12.230	5.223	3.651	1.905	140
eco-ATWB-H 24-1K12	9.905	2.415	15.865	(2) 15	79,4	(2) 4	886	3.710	(2) 300	12.285	5.223	3.651	1.905	140
eco-ATWB-H 24-1L12	9.935	2.415	15.895	(2) 18.5	84,6	(2) 4	886	3.710	(2) 300	12.310	5.223	3.651	1.905	140
eco-ATWB-H 24-1M12	9.980	2.415	15.940	(2) 22	89,0	(2) 4	886	3.710	(2) 300	12.355	5.223	3.651	1.905	140
eco-ATWB-H 24-2J12	12.875	3.925	19.570	(2) 11	70,1	(2) 4	1.620	3.710	(2) 300	15.985	5.432	3.651	2.115	349
eco-ATWB-H 24-2K12	12.925	3.925	19.620	(2) 15	77,2	(2) 4	1.620	3.710	(2) 300	16.040	5.432	3.651	2.115	349
eco-ATWB-H 24-2L12	12.955	3.925	19.650	(2) 18.5	82,3	(2) 4	1.620	3.710	(2) 300	16.065	5.432	3.651	2.115	349
eco-ATWB-H 24-2M12	13.000	3.925	19.695	(2) 22	86,6	(2) 4	1.620	3.710	(2) 300	16.110	5.432	3.651	2.115	349
eco-ATWB-H 24-3J12	15.765	5.370	23.195	(2) 11	68,2	(2) 4	2.358	3.710	(2) 300	19.615	5.648	3.651	2.330	565
eco-ATWB-H 24-3K12	15.820	5.370	23.250	(2) 15	75,0	(2) 4	2.358	3.710	(2) 300	19.670	5.648	3.651	2.330	565
eco-ATWB-H 24-3L12	15.850	5.370	23.280	(2) 18.5	79,9	(2) 4	2.358	3.710	(2) 300	19.695	5.648	3.651	2.330	565
eco-ATWB-H 24-3M12	15.895	5.370	23.325	(2) 22	84,1	(2) 4	2.358	3.710	(2) 300	19.740	5.648	3.651	2.330	565
eco-ATWB-H 24-4K12	18.715	6.815	26.890	(2) 15	72,8	(2) 4	3.096	3.710	(2) 300	23.305	5.864	3.651	2.546	781
eco-ATWB-H 24-4L12	18.740	6.815	26.915	(2) 18.5	77,6	(2) 4	3.096	3.710	(2) 300	23.335	5.864	3.651	2.546	781
eco-ATWB-H 24-4M12	18.790	6.815	26.960	(2) 22	81,7	(2) 4	3.096	3.710	(2) 300	23.380	5.864	3.651	2.546	781
eco-ATWB-H 24-4N12	18.935	6.815	27.105	(2) 30	88,5	(2) 4	3.096	3.710	(2) 300	23.525	5.864	3.651	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

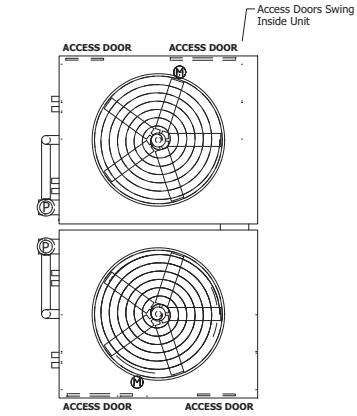
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

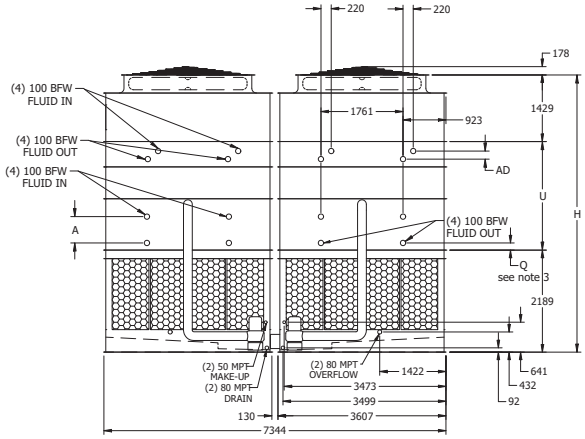
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	170	(2) 1280	2725
4	139	340	(2) 1675	3690
6	173	510	(2) 2070	4655
8	242	680	(2) 2470	5615

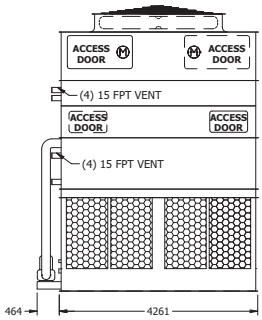
eco-ATWB-H Models 24-1K14 to 24-4N14

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 24x14 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm.
   For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW	(liters)	Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 24-1K14	11.095	2.745	18.100	(2) 15	88,0	(2) 4	1.011	4.315	(2) 300	13.950	5.528	4.261	1.905	140
eco-ATWB-H 24-1L14	11.120	2.745	18.125	(2) 18.5	94,5	(2) 4	1.011	4.315	(2) 300	13.980	5.528	4.261	1.905	140
eco-ATWB-H 24-1M14	11.165	2.745	18.170	(2) 22	99,5	(2) 4	1.011	4.315	(2) 300	14.025	5.528	4.261	1.905	140
eco-ATWB-H 24-1N14	11.315	2.745	18.315	(2) 30	107,8	(2) 4	1.011	4.315	(2) 300	14.170	5.528	4.261	1.905	140
eco-ATWB-H 24-2K14	14.535	4.465	22.400	(2) 15	85,6	(2) 4	1.874	4.315	(2) 300	18.255	5.737	4.261	2.115	349
eco-ATWB-H 24-2L14	14.560	4.465	22.425	(2) 18.5	91,9	(2) 4	1.874	4.315	(2) 300	18.280	5.737	4.261	2.115	349
eco-ATWB-H 24-2M14	14.605	4.465	22.470	(2) 22	96,8	(2) 4	1.874	4.315	(2) 300	18.325	5.737	4.261	2.115	349
eco-ATWB-H 24-2N14	14.750	4.465	22.615	(2) 30	104,9	(2) 4	1.874	4.315	(2) 300	18.470	5.737	4.261	2.115	349
eco-ATWB-H 24-3K14	17.980	6.185	26.705	(2) 15	83,1	(2) 4	2.737	4.315	(2) 300	22.560	5.953	4.261	2.330	565
eco-ATWB-H 24-3L14	18.010	6.185	26.735	(2) 18.5	89,3	(2) 4	2.737	4.315	(2) 300	22.590	5.953	4.261	2.330	565
eco-ATWB-H 24-3M14	18.055	6.185	26.780	(2) 22	94,0	(2) 4	2.737	4.315	(2) 300	22.635	5.953	4.261	2.330	565
eco-ATWB-H 24-3N14	18.200	6.185	26.925	(2) 30	101,9	(2) 4	2.737	4.315	(2) 300	22.780	5.953	4.261	2.330	565
eco-ATWB-H 24-4K14	21.355	7.875	30.945	(2) 15	80,7	(2) 4	3.600	4.315	(2) 300	26.800	6.169	4.261	2.546	781
eco-ATWB-H 24-4L14	21.380	7.875	30.970	(2) 18.5	86,7	(2) 4	3.600	4.315	(2) 300	26.825	6.169	4.261	2.546	781
eco-ATWB-H 24-4M14	21.430	7.875	31.015	(2) 22	91,3	(2) 4	3.600	4.315	(2) 300	26.870	6.169	4.261	2.546	781
eco-ATWB-H 24-4N14	21.575	7.875	31.160	(2) 30	98,9	(2) 4	3.600	4.315	(2) 300	27.015	6.169	4.261	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

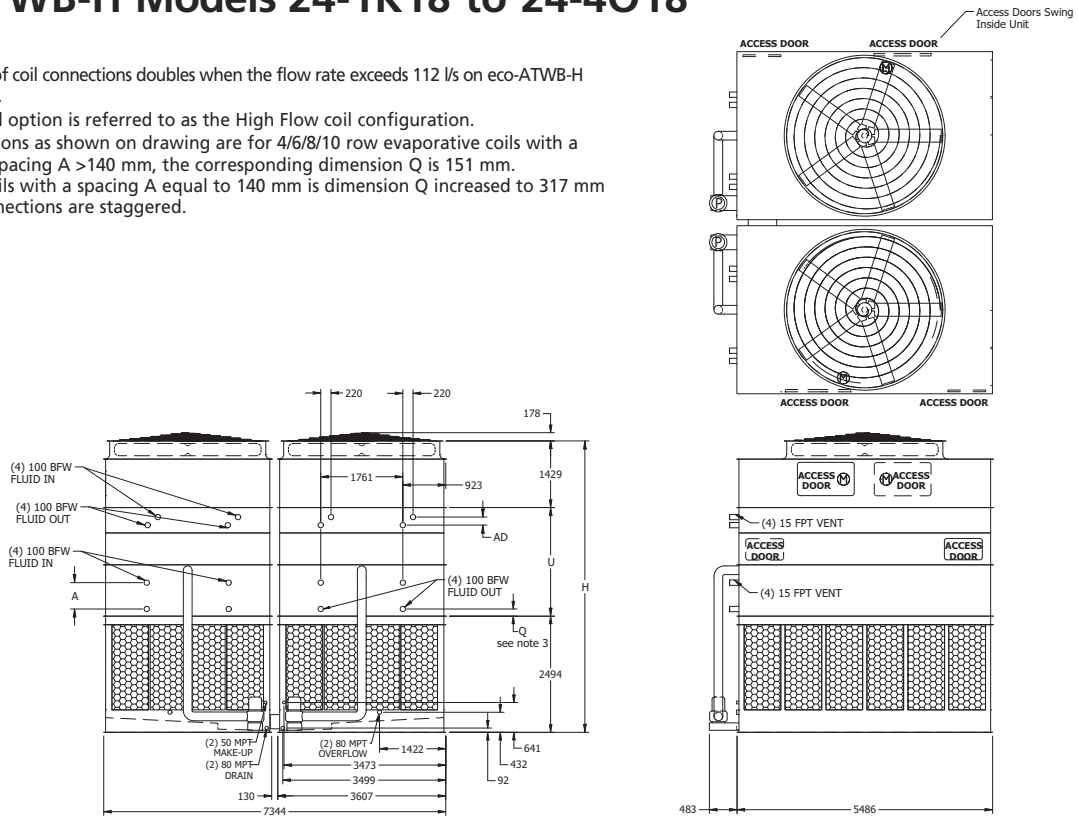
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	204	(2) 1415	3035
4	139	396	(2) 1880	4160
6	173	600	(2) 2350	5295
8	242	793	(2) 2810	6415

eco-ATWB-H Models 24-1K18 to 24-4O18

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 24x18 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.



eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 24-1K18	13.855	3.485	22.690	(2) 15	107,5	(2) 5.5	1.261	5.450	(2) 300	17.365	5.832	5.486	1.905	140
eco-ATWB-H 24-1L18	13.880	3.485	22.715	(2) 18.5	115,8	(2) 5.5	1.261	5.450	(2) 300	17.390	5.832	5.486	1.905	140
eco-ATWB-H 24-1M18	13.925	3.485	22.760	(2) 22	123,0	(2) 5.5	1.261	5.450	(2) 300	17.435	5.832	5.486	1.905	140
eco-ATWB-H 24-1N18	14.070	3.485	22.905	(2) 30	133,5	(2) 5.5	1.261	5.450	(2) 300	17.580	5.832	5.486	1.905	140
eco-ATWB-H 24-2K18	18.435	5.775	28.385	(2) 15	104,5	(2) 5.5	2.373	5.450	(2) 300	23.060	6.042	5.486	2.115	349
eco-ATWB-H 24-2L18	18.460	5.775	28.415	(2) 18.5	112,6	(2) 5.5	2.373	5.450	(2) 300	23.090	6.042	5.486	2.115	349
eco-ATWB-H 24-2M18	18.505	5.775	28.460	(2) 22	119,6	(2) 5.5	2.373	5.450	(2) 300	23.135	6.042	5.486	2.115	349
eco-ATWB-H 24-2N18	18.650	5.775	28.605	(2) 30	129,8	(2) 5.5	2.373	5.450	(2) 300	23.280	6.042	5.486	2.115	349
eco-ATWB-H 24-3K18	22.725	7.920	33.795	(2) 15	101,6	(2) 5.5	3.490	5.450	(2) 300	28.465	6.258	5.486	2.330	565
eco-ATWB-H 24-3L18	22.750	7.920	33.820	(2) 18.5	109,4	(2) 5.5	3.490	5.450	(2) 300	28.495	6.258	5.486	2.330	565
eco-ATWB-H 24-3M18	22.800	7.920	33.865	(2) 22	116,3	(2) 5.5	3.490	5.450	(2) 300	28.540	6.258	5.486	2.330	565
eco-ATWB-H 24-3N18	22.945	7.920	34.010	(2) 30	126,2	(2) 5.5	3.490	5.450	(2) 300	28.685	6.258	5.486	2.330	565
eco-ATWB-H 24-4K18	27.035	10.075	39.220	(2) 15	98,6	(2) 5.5	4.603	5.450	(2) 300	33.890	6.474	5.486	2.546	781
eco-ATWB-H 24-4L18	27.060	10.075	39.245	(2) 18.5	106,2	(2) 5.5	4.603	5.450	(2) 300	33.920	6.474	5.486	2.546	781
eco-ATWB-H 24-4M18	27.105	10.075	39.290	(2) 22	112,9	(2) 5.5	4.603	5.450	(2) 300	33.965	6.474	5.486	2.546	781
eco-ATWB-H 24-4N18	27.250	10.075	39.435	(2) 30	122,5	(2) 5.5	4.603	5.450	(2) 300	34.110	6.474	5.486	2.546	781
eco-ATWB-H 24-4O18	27.260	10.075	39.445	(2) 37	130,4	(2) 5.5	4.603	5.450	(2) 300	34.120	6.474	5.486	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak*™** coil section and **Ellipti-*fin*®** coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

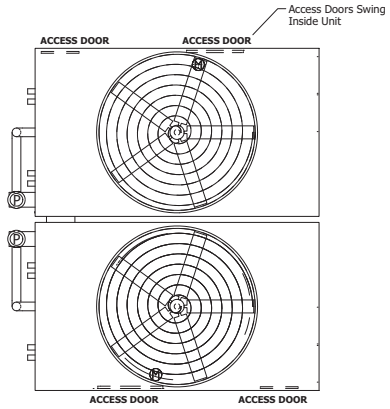
▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

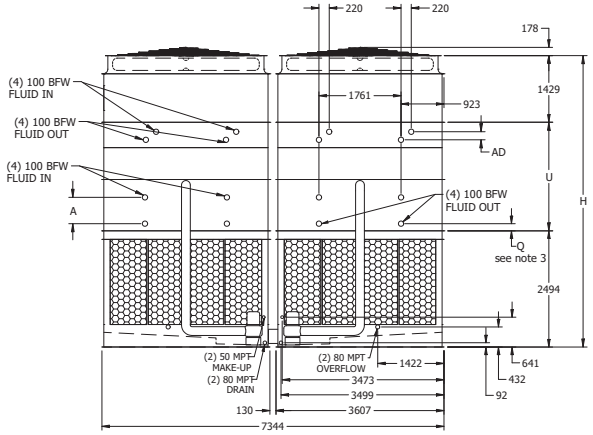
Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	261	(2) 1690	3640
4	139	510	(2) 2290	5095
6	173	770	(2) 2895	6555
8	242	1031	(2) 3500	8030

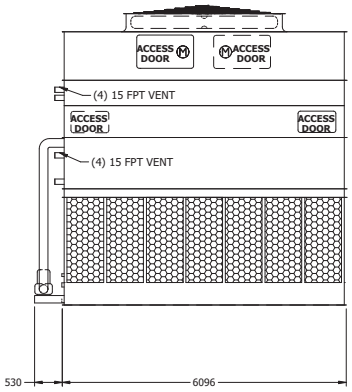
eco-ATWB-H Models 24-1L20 to 24-4O20

Notes:

1) The number of coil connections doubles when the flow rate exceeds 112 l/s on eco-ATWB-H 24x20 models.
2) This required option is referred to as the High Flow coil configuration.
3) Coil connections as shown on drawing are for 4/6/8/10 row evaporative coils with a connection spacing A >140 mm, the corresponding dimension Q is 151 mm. For 2 row coils with a spacing A equal to 140 mm is dimension Q increased to 317 mm and coil connections are staggered.







eco-ATWB-H Model Number†	Weights (kg)			Fans		Spray Pump	Coil Volume (liters)	Remote Sump ✦			Dimensions (mm) ▲			
	Shipping	Heaviest Section††	Operating	kW	m³/s	kW		Liters Req'd*	Conn. Size (mm)	Operating Weight (kg)	Height H	Length L	Middle U	Coil A
eco-ATWB-H 24-1L20	15.240	3.815	25.185	(2) 18.5	124,2	(2) 7.5	1.385	6.055	(2) 350	19.105	5.832	6.096	1.905	140
eco-ATWB-H 24-1M20	15.285	3.815	25.230	(2) 22	132,0	(2) 7.5	1.385	6.055	(2) 350	19.150	5.832	6.096	1.905	140
eco-ATWB-H 24-1N20	15.430	3.815	25.375	(2) 30	144,1	(2) 7.5	1.385	6.055	(2) 350	19.295	5.832	6.096	1.905	140
eco-ATWB-H 24-1O20	15.440	3.815	25.385	(2) 37	153,3	(2) 7.5	1.385	6.055	(2) 350	19.305	5.832	6.096	1.905	140
eco-ATWB-H 24-2L20	20.240	6.315	31.425	(2) 18.5	120,8	(2) 7.5	2.627	6.055	(2) 350	25.345	6.042	6.096	2.115	349
eco-ATWB-H 24-2M20	20.285	6.315	31.470	(2) 22	128,4	(2) 7.5	2.627	6.055	(2) 350	25.390	6.042	6.096	2.115	349
eco-ATWB-H 24-2N20	20.430	6.315	31.615	(2) 30	140,1	(2) 7.5	2.627	6.055	(2) 350	25.535	6.042	6.096	2.115	349
eco-ATWB-H 24-2O20	20.440	6.315	31.625	(2) 37	149,1	(2) 7.5	2.627	6.055	(2) 350	25.545	6.042	6.096	2.115	349
eco-ATWB-H 24-3L20	25.085	8.735	37.505	(2) 18.5	117,4	(2) 7.5	3.865	6.055	(2) 350	31.425	6.258	6.096	2.330	565
eco-ATWB-H 24-3M20	25.130	8.735	37.550	(2) 22	124,7	(2) 7.5	3.865	6.055	(2) 350	31.470	6.258	6.096	2.330	565
eco-ATWB-H 24-3N20	25.275	8.735	37.695	(2) 30	136,1	(2) 7.5	3.865	6.055	(2) 350	31.615	6.258	6.096	2.330	565
eco-ATWB-H 24-3O20	25.285	8.735	37.705	(2) 37	144,9	(2) 7.5	3.865	6.055	(2) 350	31.625	6.258	6.096	2.330	565
eco-ATWB-H 24-4L20	29.835	11.115	43.500	(2) 18.5	113,9	(2) 7.5	5.107	6.055	(2) 350	37.420	6.474	6.096	2.546	781
eco-ATWB-H 24-4M20	29.885	11.115	43.545	(2) 22	121,1	(2) 7.5	5.107	6.055	(2) 350	37.465	6.474	6.096	2.546	781
eco-ATWB-H 24-4N20	30.030	11.115	43.690	(2) 30	132,2	(2) 7.5	5.107	6.055	(2) 350	37.610	6.474	6.096	2.546	781
eco-ATWB-H 24-4O20	30.035	11.115	43.700	(2) 37	140,7	(2) 7.5	5.107	6.055	(2) 350	37.620	6.474	6.096	2.546	781

† Model Number will end in "-Z" for units with Series Flow piping configuration. Series Flow units may require additional coil connections and will require crossover piping.

†† Heaviest section is the **ARID-*fin Pak***™ coil section and **Ellipti-*fin***® coil sections, shipped mounted together.

* Liters shown is water in suspension in unit and piping. Allow for additional water in bottom of remote sump to cover pump suction and strainer during operation (300 mm would normally be sufficient).

✦ When a remote sump arrangement is selected, the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

▲ Unit dimensions and coil connections may vary slightly from catalog. See factory certified prints for dimensions, quantity of coil connections, and piping configuration. Coil connections are 4" bevel for weld (BFW) also available as options. Other connection types such as grooved for mechanical coupling or flanged are also available as options.

Dry Coil Section Adds				
Dry Coil Rows	Nipple C-C as "AD" (mm)	Dry Coil Volume (l)	Shipping Weight (kg)	Operating Weight (kg)
2	139	283	(2) 1830	3940
4	139	578	(2) 2500	5575
6	173	861	(2) 3170	7200
8	242	1144	(2) 3840	8820

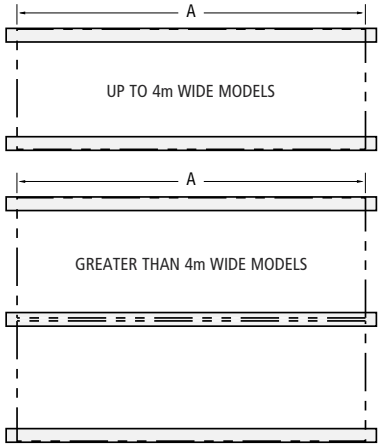
RECOMMENDED STEEL SUPPORT

eco-ATWB-H

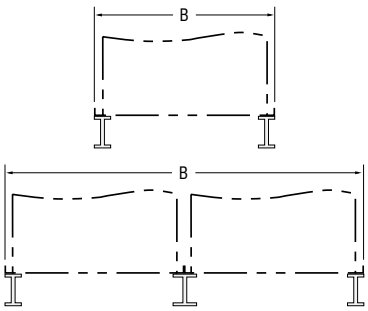
The recommended support for EVAPCO Closed Circuit Coolers is structural "I" beams located under the outer flanges and running the entire length of the unit. The unit should be elevated to allow access underneath the unit and to the roof below. Mounting holes 19 mm in diameter are located in the bottom flanges of the pan section to provide for bolting to the structural steel. (Refer to certified drawings from the factory for bolt hole locations.)

Beams should be level before setting the unit in place. Do not level the unit by shimming between the unit and the structural steel. Dimensions weights and data are subject to change without notice. Refer to the factory certified drawings for exact dimensions.

Plan Views



End Elevations



SUPPORTING STEEL DIMENSIONS		
eco-ATWB-H	**A**	**B**
8-1G9 to 8-4K9	2731	2388
8-1H12 to 8-4L12	3651	2388
8-1I14 to 8-4M14	4261	2388
8-1G18 to 8-4K18	5486	2388
8-1H21 to 8-4K21	6401	2388
8-1H24 to 8-4L24	7366	2388
8-1I28 to 8-4M28	8586	2388
8-1H36 to 8-4K36	11036	2388
8-1H42 to 8-4K42	12866	2388
	A	B
16-1H12 to 16-4L12	3651	4906
16-3I14 to 16-4M14	4261	4906
	A	B
10-1I12 to 10-4M12	3651	2991
10-1I18 to 10-4N18	5486	2991
	A	B
20-1I12 to 20-4M12	3651	6112
20-1I18 to 20-4N18	5486	6112
20-1I24 to 20-4M24	7366	6112
20-1I36 to 20-4N36	11036	6112
	A	B
12-1J12 to 12-4N12	3651	3607
12-1K14 to 12-4N14	4261	3607
12-1K18 to 12-4O18	5486	3607
12-1L20 to 12-4O20	6096	3607
12-1J24 to 12-4N24	7366	3607
12-1K28 to 12-4N28	8585	3607
12-1K36 to 12-4O36	11036	3607
12-1L40 to 12-4O40	12256	3607
	A	B
24-1J12 to 24-4N12	3651	7344
24-1K14 to 24-4N14	4261	7344
24-1K18 to 24-4O18	5486	7344
24-1L20 to 24-4O20	6096	7344

eco-ATWB-H

SPECIFICATIONS

FACTORY FABRICATED INDUCED DRAFT eco-ATWB-H CLOSED CIRCUIT COOLER

General

Furnish and install factory assembled closed circuit cooler of induced draft counterflow design with a horizontal multiple side air entry and a vertical air discharge.
The unit shall be completely factory assembled and conform to the specifications and schedules.

The closed circuit cooler shall be **CTI certified** and have the capacity to cool ____ l/s water / glycol from _____°C to_____°C with a_____ °C entering wet bulb temperature and a dry bulb switchover temperature of _____ °C.

Optional: (If dry operating conditions are different than the wet operating conditions)
Each unit shall also cool _____l/s of_____ from _____ °C to _____ °C with a _____ °C entering dry bulb temperature.

The total fan power should not exceed _____kW.
The total pump power should not exceed _____ kW.

The total overall unit dimensions should not exceed the following:
Length: _____ mm Width: _____ mm Height: _____ mm

The maximum operating weight should not exceed _____ kg.

The unit will be delivered in three parts: the bottom basin - louver section, the coil section and the fan section.
The unit sections shall be joined together with elastic sealer and bolted together with corrosion resistant fasteners.

Approved manufacturer **Evapco – model eco-ATWB-H_____**

Thermal Performance – Performance Warranty
The cooler shall be capable of performing the thermal duties as shown in the schedule and on the drawings, and its design thermal rating shall be certified by the Cooling Technology Institute (C.T.I.) and the Eurovent Certification Company (ECC). Only models with performance certified by CTI and ECC will be approved.

Manufacturers' performance guarantee without ECC-CTI certification for the proposed model or an independent field performance test shall not be accepted.

Applicable Standards

a) CTI ATC 128 Test Code for Measurement of Sound from Water Cooling Towers
b) CTI STD 201 Standard for Thermal Performance Certification of Evaporative Heat Rejection Equipment.
c) Eurovent Rating Standard for Cooling Towers

Submittals

a) Shop drawings: submit shop drawings indicating dimensions, weight loadings and required clearances.
b) Product data: submit manufacturers technical product data, original selection printouts and clearance requirements.
c) Complete noise data sheet for the selected closed circuit cooler(s).
d) Maintenance data for the closed circuit cooler(s) and
e) The manufacturer shall provide factory test run certificates of the fans and fan motor.

Product Delivery – Storage and Handling

a) The contractor shall make the provisions for proper storage at site before installation and handle the product per the instructions of the manufacturer.
b) Once installed provide the necessary measures to keep units clean and protected from any dust and mechanical damage.

Quality Assurance

a) The manufacturer shall have a quality assurance system in place which is certified by an accredited registrar and complying with the requirements of ISO 9001. This is to guarantee a consistant level of product and service quality.
b) Manufacturers without ISO 9001 certification are not acceptable.

Warranty

a) The products will be warranted for a period of minimum two years from the date of shipment.

PRODUCT

Construction – Corrosion Resistance

a) The structure and all steel elements of the pan and casing shall be constructed of Z 725 hot dip galvanized steel for long life and durability. Alternatives with lower zinc layer thickness and external paint or coating are not accepted as equal.
b) The strainer shall be made of stainless steel type 304L.
c) During fabrication all panel edges shall be coated with a 95% pure zinc compound.
d) Casing materials shall be of non flammable construction only.

OPTIONAL EXECUTION – BASIN IN AISI 304L

Construction – Corrosion Resistance

a) The structure and all steel elements of the Basin and Louver section up to the water level shall be made of stainless steel AISI 304L.
b) Alternatives with hot dip galvanized steel and epoxy coatings in lieu of the stainless steel AISI 304L are not considered to be equal and are not accepted.
c) All other steel components of the casing shall be constructed of Z 725 hot dip galvanized steel for long life and durability. Alternatives with lower zinc layer thickness and external paint or coating or FRP materials are not accepted as equal.
d) The strainer shall be made of stainless steel AISI 304L.
e) During fabrication all galvanized steel panel edges shall be coated with a 95% pure zinc compound.
f) Casing materials shall be of non flammable construction only.

OPTIONAL EXECUTION – COMPLETE UNIT IN STAINLESS STEEL AISI 304L [except heat exchange coil(s)]

Construction – Corrosion Resistance

a) The structure and all steel elements shall be made of AISI 304L.
b) Alternatives with hot dip galvanized steel and epoxy coatings in lieu of the AISI 304L are not considered to be equal and are not accepted.
c) The strainer shall be made of stainless steel AISI 304L.
d) Casing materials shall be of non flammable construction only.

Construction – Seismic and wind load resistance

a) The structural design must withstand 1g seismic or 6.94 kN/m²
b) Closed Circuit Coolers must be independently certified according to IBC 2012

Basin Section

Closed Circuit Cooler Basin

a) Standard basin accessories include: overflow, drain, strainer and brass make up valve with plastic float ball.
b) The strainer shall be made of AISI 304L.
c) The entire pan area shall incorporate a sloped and stepped basin design to prevent sediment built up, biological film and standing water.
d) Upper and lower basin bottoms shall be sloped to provide drainage of the complete basin section.
e) The basin can be inspected while the unit is in operation with the fan(s) and pump(s) running.

Air Inlet Louvers

a) The air inlet louvers shall be constructed of UV inhibited polyvinyl chloride (PVC), mounted in easily removable frames for easy access to the basin.

SPECIFICATIONS

eco-ATWB-H

b) The louvers shall be at four sides to provide easy access to the basin interior.
c) The louvers shall have a minimum of two changes in air direction to prevent splash out and block direct sunlight from entering the basin.
d) The louvers will have a 19 mm opening to prevent debris from entering the basin.

Water Circulation Pump(s)
a) The pump(s) shall be a close coupled, centrifugal type with mechanical seal, installed vertically at the factory to allow free drainage on shut down.
b) A _____ kW totally enclosed motor(s) suitable for outdoor service shall be furnished.
c) The motor shall be suitable for the following power supply: ____volts, ____hertz and ____ phase and ____ kW.

Electric Heaters
a) The closed circuit cooler cold water basin shall be provided with an electric heater package to prevent freezing of the water in the cold water basin, while the pump is shut down.
b) The electric heater package includes: electric heater element(s), thermostat and low water level cutoff.
c) The heaters shall be selected to maintain 4°C basin water temperature at _____°C ambient
d) The heater(s) shall be ____V / ____ phase / ____ Hz electric power supply.

Five Probe Electric Water Level Control Package
a) The closed circuit cooler manufacturer shall provide an electric water level control package instead of the mechanical float valve arrangement.
b) The package consist of the following elements :
- Multiple heavy duty stainless steel 316 static sensors mounted in a stilling chamber outside the unit. Electrodes or sensors mounted inside the unit are not accepted as their operation will be disturbed by the moving water in the basin.
- An ABS, IP 56 case contains all the contactors for the different level probes and will provide an output signal of a relay for automatic filling and one relay for alarm level.
- The power supply to the control package is 24 Vac / 230 Vac - ____ Hz .
- A weather protected solenoid valve (PN16) for the water make up ready for piping to a water supply with pressure between 35 kPa and 700 kPa.

Evaporative Coil Section
Heat Transfer Coil
a) The closed circuit cooler shall use internally enhanced heat exchange coils of an elliptical tube design to obtain lower air flow resistance and allow higher water loadings around the tubes. Each row of the heat exchanger coil shall be provided with elliptical spiral fins to increase the evaporative and dry thermal performance of the unit.
b) The heat transfer coil(s) shall be made of all prime surface, encased in a steel framework and hot dip galvanized after fabrication as a complete assembly.
c) The tubes shall be arranged in a self spacing, staggered pattern in the direction of air flow for maximum heat transfer efficiency and minimum pressure drop.
d) The heat exchange coils shall be air pressure tested under water.
e) The design and manufacturing process shall be approved and in accordance with the "Pressure Equipment Directive" – PED 97 / 23 EC.
f) The manufacturer shall be responsible for the manufacturing and performance testing of the entire heat transfer coil. This is to assure single source responsibility.
g) The casing shall totally encase the complete coil section to protect the complete coil from direct atmospheric contact.
h) The pressure drop of the process fluid through the coil shall not exceed ____kPa.

Sensible Heat Transfer Coil
a) The sensible heat transfer coil is installed in the air discharge of the closed circuit cooler and will be piped in series with the wet coil.
b) The sensible heat transfer coil shall be constructed of copper tubes with tubular copper headers.
c) To maximize heat transfer, tubes shall be arranged in a staggered design and be equipped with fins.
d) The fins should have fully drawn collars to maintain consistent fin spacing and continuous surface contact over the entire tube.
e) The fins should be made of Aluminum Magnesium of at least 0.7% to have good corrosion resistance and the distance between the fins should be 2,5 mm to avoid clogging.
f) The coils should be placed in a heavy-duty galvanized Z-725 frame. The frame should have full collars to support the coil correctly and avoid damaging the tubes.
g) The dry coil shall be pneumatically tested under water at 16 barg.

Fan Section
Water Distribution
a) The water distribution system shall be completely enclosed and protected from sunlight exposure, environmental elements and debris. Water distribution systems with direct exposure to the environment are not allowed.
b) The spray header and branches shall be constructed of Schedule 40, Polyvinyl Chloride (PVC) pipe for corrosion resistance.
c) The water shall be distributed over the coil by precision molded ZM spray nozzles with large minimum orifice openings and integral sludge ring to eliminate clogging.
d) The nozzles shall be threaded into the water distribution piping to assure positive positioning and easy removal for maintenance. Snap in or strapped on nozzles are not accepted.

Drift Eliminators
a) The drift eliminators shall be constructed of entirely inert polyvinyl (PVC) that has been specially treated to resist ultra violet light.
b) Assembled in easily handled sections, the eliminator blades shall be spaced on 25 mm centers and shall incorporate three changes in air direction to assure efficient removal of entrained moisture from the discharge air stream.
c) The maximum drift rate shall not exceed 0,001 % of the circulating water rate.

Access Door
a) A large hinged access door shall provide access to the fan section for maintenance.
b) A second access door shall provide access to the evaporative coil section.

Mechanical Equipment
Axial Propeller Fan(s) (Standard)
a) Fan shall be heavy duty wide chord axial propeller type, statically balanced and constructed of extruded aluminum alloy blades.
b) Fans shall be installed in a closely fitted cowl with venturi air inlet for maximum fan efficiency.
c) The fans shall utilize a soft connect blade to hub design, compatible with variable speed drives, to avoid transmission of vertical forces to the unit structure.
d) Each fan blade shall be individually adjustable.
e) The fan cowl shall be covered with a heavy gauge hot dip galvanized steel wire fan guard.
f) The fan – drive system (fan – drive – motor) shall be factory mounted, adjusted and undergo a trial run in the factory before shipment.

Axial Propeller Fan(s) - Low Sound Fan (Alternative)
a) Fan shall be heavy duty wide chord axial propeller type,

eco-ATWB-H

SPECIFICATIONS

statically balanced and constructed of extruded aluminum alloy blades.
b) Fans shall be installed in a closely fitted cowl with venturi air inlet for maximum fan efficiency.
c) The fans shall utilize a soft connect blade to hub design, compatible with variable speed drives, to avoid transmission of vertical forces to the unit structure.
d) Each fan blade shall be individually adjustable.
e) The fan cowl shall be covered with a heavy gauge hot dip galvanized steel wire fan guard.
f) The fan – drive system (fan – drive – motor) shall be factory mounted, adjusted and undergo a trial run in the factory before shipment.

Axial Propoller Fan(s) - Super Low Sound Fan (Alternative)
a) Fan shall be extremely wide chord axial, one piece heavy duty propeller type, statically balanced and made of FRP.
b) Fans will be installed in a closely fitted cowl with venturi air inlet for maximum fan efficiency.
c) The fan cowl shall be covered with a heavy gauge hot dip galvanized steel wire fan guard.
d) The fan – drive system (fan – drive – motor) shall be factory mounted, adjusted and undergo a trial run in the factory before shipment.
e) The fans are high efficiency and operate with no loss of thermal performance

Bearings and Drive
a) The fan shaft (s) shall be supported by heavy duty, self aligning ball type bearings with cast iron housings and lubrication fittings for maintenance.
b) The bearings shall be rated for an L-10 life of 75000 to 135000 hours.
c) The fan drive sheaves shall be aluminum alloy.
d) The belt shall be a multigroove belt system, constructed of neoprene with polyester cords and designed for 150% of the motor nameplate horsepower.
e) The grease fittings shall be extended to a location just inside the access door.

Motor (2.4 and 4.8 meter wide Models)
a) The fan motor shall be Totally Enclosed Fan Cooled (TEFC), squirrel cage, ball bearing type motor.
b) The motor shall be specially designed for cooling tower use with moisture protection on the winding, shaft and bearings.
c) The motor shall be minimum IP 55 degree of protection, Class F insulation, Service Factor 1 and selected for the appropriate cooling tower duty and the correct ambient temperature but minimum 40°C.
d) Motors bearings shall be double sealed non-relubricable or external grease nipples shall be provided.
e) The motor shall be mounted on an adjustable heavy duty steel motor base.
f) A hinged protective cover shall shield the motor and sheave from the weather.
g) The motor power supply shall be ____ volts, ____ hertz and ___ phase.

Motor (3, 3.6, 6 and 7.3 meter wide Models)
a) The fan motor shall be Totally Enclosed Air Over (TEAO), squirrel cage, ball bearing type motor.
b) The motor shall be specially designed for cooling tower use with moisture protection on the windings, shaft and bearings.
c) The motor shall be minimum IP 55 degree of protection, Class F insulation, Service Factor 1 and selected for the appropriate cooling tower duty and the correct ambient temperature but minimum 40°C.
d) Motor bearings shall be double sealed non-relubricable or external grease nipples shall be provided.
e) The motor shall be mounted on an adjustable heavy duty steel motor base.
f) The motor base shall be able to swing to the outside of the unit for repair or removal.
g) The motor power supply shall be ____ volts, ____ hertz and ____ phase.

Control panel
The unit(s) shall be provided with a control panel which operates by measuring and analyzing water inlet and outlet temperature simultaneous with ambient dry bulb monitoring in order to minimize the evaporative cooling mode of operation and to save system water. The control panel can also be programmed to operate with a water savings or energy savings priority.

The system will include:
A MODBUS 485* Port for the Building Automation System
- Programmable Logic Control
- Fluid Inlet Temperature Sensor(s)
- Fluid Outlet Temperature Sensor(s)
- Basin Temperature Sensor(s)
- Ambient Dry Bulb Sensor(s)
- Variable frequency drive(s) For Fan Motor(s)
- Recirculating Pump Motor Starter(s).
- Main Disconnect
- Manual Bypass
- DC power supply for the PLC and instrumentation.
- Heater Package Controls w/Contactor with Overload Protection
- Control Power Transformer
- Electronic Water Level Control Package
- Preprogrammed software to ensure optimized water and energy savings priority
- Ethernet Connection between VFD's, PMC and Operator Interface
- Relays for all PLC Digital Outputs
- Fan Motor: Space Heater Control
- Manual Operation of Pump(s) and Fan(s)
- Visual Status Display of All Components.

Sound Levels
Sound Level
The maximum sound pressure levels (dB) measured 1.5 m 45° from the top of the closed circuit cooler operating at full fan speed shall not exceed the sound levels detailed below.

Location	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz	dB(A)
Fan discharge									
Air inlet /end									

ACCESSORIES (Optional)

Vibration Switch
a) A vibration limit switch shall be installed on the mechanical equipment support and wired into the control panel. The purpose of this switch is to interrupt power to the motor in the event of excessive vibration.
b) The switch shall be adjustable for sensitivity and shall require manual reset.

Vertical Access Ladders
a) A vertical ladder with safety cage which provide easy access to the water distribution system and drive components shall be provided with the closed circuit cooler(s).
b) The ladder will be completed with a safety cage for safety purposes.
c) Ladder safety cage shall meet OSHA - CE - BS requirements.

Service Platforms
a) The closed circuit cooler shall be supplied with a double external service platform.
b) The external service platforms will be self supporting and include access ladders to the platforms.
c) The external service platforms will be installed in front of the access doors.
d) The platform shall meet OSHA - CE - BS requirements.

SPECIFICATIONS

eco-ATWB-H

Motor Davit

a) The closed circuit cooler shall be supplied with a motor davit to facilitate the removal of fan motor(s) and fan(s).
b) The davit and braket are constructed of aluminum and are mounted on the side of the unit.
c) The fan motor davit ships loose with the unit and is installed in the field.

Water Silencer

a) The water silencers are located in the falling water area of the cold water basin.
b) The water silencers will reduce the overall sound levels 4 dB (A) to 7 dB (A) measured at 1.5 m from the side or end of the unit, when the fans are running, and 9 dB (A) to 12 dB (A) when fans are off.
c) The water silencers are constructed of lightweight PVC sections and can be easily removed for access to the basin area.
d) The water silencers will have no impact on the unit's thermal performance.

eco-ATWB-H

Notes:

Notes:

Evapco Products are Manufactured Worldwide

EVAPCO, Inc. - World Headquarters & Research / Development Center

P.O. Box 1300 • Westminster, MD 21158 USA
Ph: +1 410-756-2600 • Fx: +1 410-756-6450 • marketing@evapco.com

EVAPCO North America

EVAPCO, Inc.
World Headquarters
P.O. Box 1300
Westminster, MD 21158 USA
Ph: 410-756-2600 - Fx: 410-756-6450
marketing@evapco.com

EVAPCO East
5151 Allendale Lane
Taneytown, MD 21787 USA
Ph: 410-756-2600 - Fx: 410-756-6450
marketing@evapco.com

EVAPCO Midwest
1723 York Road
Greenup, IL 62428 USA
Ph: 217-923-3431 - Fx: 217-923-3300
evapcomw@evapcomw.com

EVAPCO West
1900 West Almond Avenue
Madera, CA 93637 USA
Ph: 559-673-2207 - Fx: 559-673-2378
contact@evapcowest.com

EVAPCO Iowa
925 Quality Drive
Lake View, IA 51450 USA
Ph: 712-657-3223 - Fx: 712-657-3226

EVAPCO Iowa
Sales & Engineering
215 1st Street, NE
P.O. Box 88
Medford, MN 55049 USA
Ph: 507-446-8005 - Fx: 507-446-8239
evapcomn@evapcomn.com

EVAPCO Newton
701 East Jourdan Street
Newton, IL 62448 USA
Ph: 618-783-3433 - Fx: 618-783-3499
evapcomw@evapcomw.com

EVAPCOLD
521 Evapco Drive
Greenup, IL 62428 USA
Ph: 217-923-3431
evapcomw@evapcomw.com

EVAPCO-Dry Cooling, Inc.
981 US Highway 22 West
Bridgewater, NJ 08807 USA
Ph: 1-908-379-2665
info@evapco-blct.com

Refrigeration Valves & Systems Corporation
A wholly owned subsidiary of EVAPCO, Inc.
1520 Crosswind Dr.
Bryan, TX 77808 USA
Ph: 979-778-0095 - Fx: 979-778-0030
rvs@rvscorp.com

Evapco Northwest
5775 S.W. Jean Road, Suite 104
Lake Oswego, OR 97035 USA
Ph: 503-639-2137 - Fx: 503-639-1800

EvapTech, Inc.
A wholly owned subsidiary of EVAPCO, Inc.
8331 Nieman Road
Lenexa, KS 66214 USA
Ph: 913-322-5165 - Fx: 913-322-5166
marketing@evaptechinc.com

Tower Components, Inc.
A wholly owned subsidiary of EVAPCO, Inc.
5960 US HWY 64E
Ramseur, NC 27316
Ph: 336-824-2102 - Fx: 336-824-2190
mail@towercomponentsinc.com

EVAPCO South America

EVAPCO Brasil
Equipamentos Industriais Ltda
Al. Vênus, 151 – CEP: 13347-659
Indaiatuba –São Paulo – Brasil
Ph: (55+11) 5681-2000 p
vendas@evapco.com.br

Fan Technology Resources
Cruz das Almas – Indaiatuba
São Paulo, Brasil 13308-200
Ph: 55 (11) 4025-1670 p
fantr@fantr.com

EVAPCO Europe

EVAPCO Europe BVBA
European Headquarters
Heersterveldweg 19, Industrieterrein Oost
3700 Tongeren, Belgium
Ph: (32) 12-395029 -Fx: (32) 12-238527
evapco.europe@evapco.be

EVAPCO Europe, S.r.l.
Via Ciro Menotti 10
I-20017 Passirana di Rho, Milan, Italy
Ph: (39) 02-939-9041- Fx: (39) 02-935-00840
evapcoeurope@evapco.it

EVAPCO Europe, S.r.l.
Via Dosso 2 - 23020 Piateda Sondrio, Italy

EVAPCO Europe, GmbH
Insterburger Straße, 18
D-40670 Meerbusch, Germany
Ph: (49) 2159-69560 - Fx: (49) 2159-695611
info@evapco.de

EVAPCO Middle East DMCC
Reef Tower, 29th Level
Cluster O, Jumeirah Lake Towers
P.O. Box 5003310
Dubai, U.A.E.
Ph: (971) 4-448 7242 - Fx: (971) 4-448 7112
info@evapco.ae

EVAPCO Air Solutions a/s
A wholly owned subsidiary of EVAPCO, Inc.
Knøsgårdvej 115, 9440 Aabybro, Denmark
Ph: (45) 9824-4999 - Fx: (45) 9824-4990
flexcoil@flexcoil.dk

EVAPCO S.A. (Pty.) Ltd.
A licensed manufacturer of Evapco, Inc.
18 Quality Rd, Isando 1600, Rep. of S. Africa
Ph: (27) 11 392-6630 - Fx: (27) 11-392-6615
evapco@evapco.co.za

Evap Egypt Engineering Industries Co.
A licensed manufacturer of Evapco, Inc.
5 Al Nasr Road St., Nasr City, Cairo, Egypt
Ph: (20) 2-24022866 / (20) 2-24044997/8
Fx: (20) 2-404-4667/ Mob: (20) 12-3917979
primacool@link.net / shady@primacool.net

EVAPCO Asia/Pacific

EVAPCO China
Asia/Pacific Headquarters
1159 Luoning Rd. Baoshan Industrial Zone
Shanghai, P. R. China, Postal Code: 200949
Ph: (86) 21-6687-7786 - Fx: (86) 21-6687-7008
marketing@evapcochina.com

Evapco (Shanghai) Refrigeration Equipment Co., Ltd.
1159 Louning Rd., Baoshan Industrial Zone
Shanghai, P.R. China, Postal Code: 200949
Ph: (86) 21-6687-7786 - Fx: (86) 21-6687-7008
marketing@evapcochina.com

Beijing EVAPCO Refrigeration Equipment Co., Ltd.
Yan Qi Industrial Development District
Huai Rou County
Beijing, P.R. China, Postal Code: 101407
Ph: (86) 10 6166-7238 - Fx: (86) 10 6166-7395
evapcobj@evapcochina.com

EVAPCO Australia Pty Ltd.
34-42 Melbourne Road - P.O. Box 436
Riverstone, N.S.W. Australia 2765
Ph: (61) 29 627-3322 - Fx: (61) 29 627-1715
sales@evapco.com.au

EvapTech Composites Sdn. Bhd
No. 70 (Lot 1289) Jalan Industri 2/3
Rawang Integrated Industrial Park
Rawang, Selangor, 48000 Malaysia
Ph: 60 3 6092-2209 - Fx: 60 3 6092-2210

EvapTech Asia Pacific Sdn. Bhd
A wholly owned subsidiary of EvapTech, Inc.
IOI Business Park, 2/F Unit 20
Persiaran Puchong Jaya Selatan
Bandar Puchong Jaya,
47170 Puchong, Selangor, Malaysia
Ph: +(60-3) 8070 7255 - Fx: +(60-3) 8070 5731
marketing-ap@evaptech.com

EVAPCO... Specialists in Heat Transfer Products and Services.
Visit **EVAPCO's** Websites at: **www.evapco.eu / www.mrgoodtower.eu**

MIX
Paper from responsible sources
FSC® C019251
www.fsc.org

Bulletin 240-E Metric 0920