



AT/UAT COOLING TOWERS

NEW!

**Eurovent-CTI
CERTIFIED**



ADVANCED **T**ECHNOLOGY IN
INDUCED DRAFT, COUNTERFLOW COOLING TOWERS
139 to 22.128 kW NOMINAL CAPACITY

TECHNOLOGY FOR THE FUTURE... AVAILABLE TODAY!

CERTIFIED EN ISO 9001





AT/UAT



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.

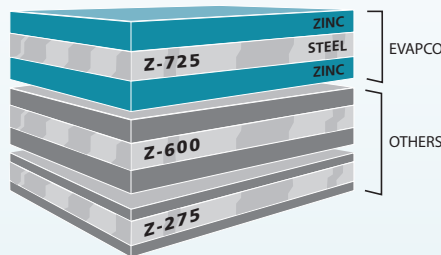
With 19 facilities in nine countries and over 175 sales offices in 51 countries world-wide, EVAPCO is ready to assist in all your equipment needs.

EVAPCO, Inc., continues its dedication to advancements in induced draft counterflow cooling tower technology and easy maintenance by proudly introducing the *NEW* CTI-ECC Certified and IBC compliant Advanced Technology Cooling Tower.

AT Cooling Towers Easiest Maintenance with Highest Efficiency

The AT Cooling Tower is corrosion protected by the EVAPCOAT Corrosion Protection System

The Z-725 Mill Hot-Dip Galvanized Steel Construction is the heaviest level of galvanizing available for manufacturing cooling towers and has more zinc protection than competitive designs using Z-275 and Z-600 steel.

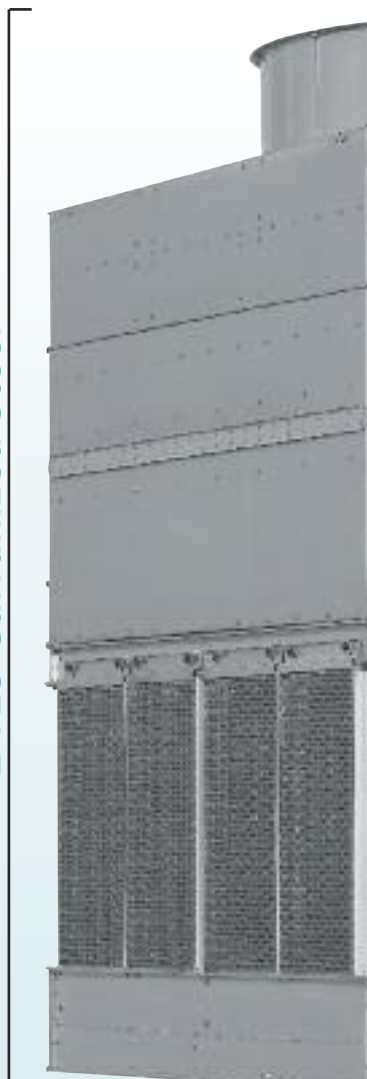


Mill hot-dip galvanized steel has been successfully used for over 25 years for the protection of cooling towers against corrosion.

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-725 mill hot-dip galvanized steel. Z-725 designation means there is a minimum of 725 g/m² of surface area as measured in a triple spot test.

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

Z-725 Galvanized Steel



EVAPCOAT - Corrosion Protection System consists of:

- Z-725 Galvanized Steel Construction.
- Stainless steel suction strainer eliminates excessive wear and corrosion.
- Non-corrosive PVC Water Distribution System, Drift Eliminators and Inlet Louvers.

PROVIDING EASIER SOLUTIONS AND BETTER CHOICES

The AT/UAT is the result of a tradition of engineering success based on easy maintenance, durable construction and a highly efficient design. The AT/UAT brings marquee features that make the AT/UAT the best choice in cooling towers.

Ultra-AT Cooling Towers *The Ultimate Corrosion Protection*



Stainless Steel AISI 304L and / or 316L

EVAPCO offers the UAT cooling tower with a standard Type 304L stainless steel construction. Since the cold water basin provides the structural support for the unit and is the area most susceptible to corrosion, it is constructed with the highest quality materials. The UAT is the **ONLY** cooling tower in the industry that offers this protection as standard.

The UAT can be upgraded with a Type 316L SS lower section or to a complete Type 316L SS construction.

The chemical compositions of Type 304 and 316 stainless steel are similar. However, there are several differences in their makeup that allow Type 316 SS to have better corrosion resistance than Type 304 SS. Type 316 SS contains molybdenum (304 SS does not) and has a greater percentage of nickel than Type 304 SS. Type 316 SS provides superior corrosion resistance to a wide variety of environments. Also, resistance of stainless steels to pitting and/or crevice corrosion in the presence of chloride or other halide ions is enhanced by molybdenum content.

Type 316L SS material offers the best protection against corrosion. Once again, EVAPCO raises the quality standard in the cooling tower industry with the UAT!

The Ultra-AT is a 100% corrosion resistant cooling tower constructed of stainless steel.

The premium components include:

Type 304L or 316L Stainless Steel: Upper casing and structure • Mechanical equipment support • Fan Cowl
• Cold water basin • Vertical support columns • Air inlet louver frames

PVC: Patented Evapak® Fill • Water distribution system • Air inlet louvers • Drift eliminators



AT/UAT

Technical Support Services

EVAPCO's Website

Log on to EVAPCO's website <http://www.evapco.eu> for expanded product information. Users can download Product Literature, Rigging and Maintenance Instructions from their computer. Users may make Requests for Quotation through the website or by e-mailing EVAPCO at this address:

evapco.europe@evapco.eu

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

evapSelect™ 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 and energy requirements. 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.

The **evapSelect™** software is available to all consulting engineering offices and contractors after contacting your local EVAPCO sales representative.

Available in 62 Cross Sections and a range of 139 to 22.128 kW Nominal Capacity, the AT/UAT has a model for every application. If there is an application for which the standard catalog product line does not work, EVAPCO will make a cooling tower that will fit your requirement! Consult your local EVAPCO Representative for a cooling tower solution.



EVAPCO Power-Band Drive System

- The AT Cooling Tower features the highly successful, easy maintenance, heavy duty Power-Band Drive System.
- Standard heavy-duty pillow block bearings with a minimum L10 life of 75.000 hours.
- Extended lube lines.
- External motor/belt adjustment.
- Aluminum Alloy Sheaves in moist airstream, Solid-Back Multi-Groove Power-Band Belts and Totally Enclosed motors are standard.

Totally Enclosed Fan Motors

- Motors positioned for external access.
- Assures long life.
- Motor location allows for easy accessibility and serviceability.



NEW! Louver Access Door

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



NEW! 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

WST Air Inlet Louvers (Water and Sight Tight)

- Easily removable for access.
- Optimized design keeps sunlight out—preventing biological growth.
- Keeps water in while keeping dirt and debris out
- U.S. patent No. 7,927,196



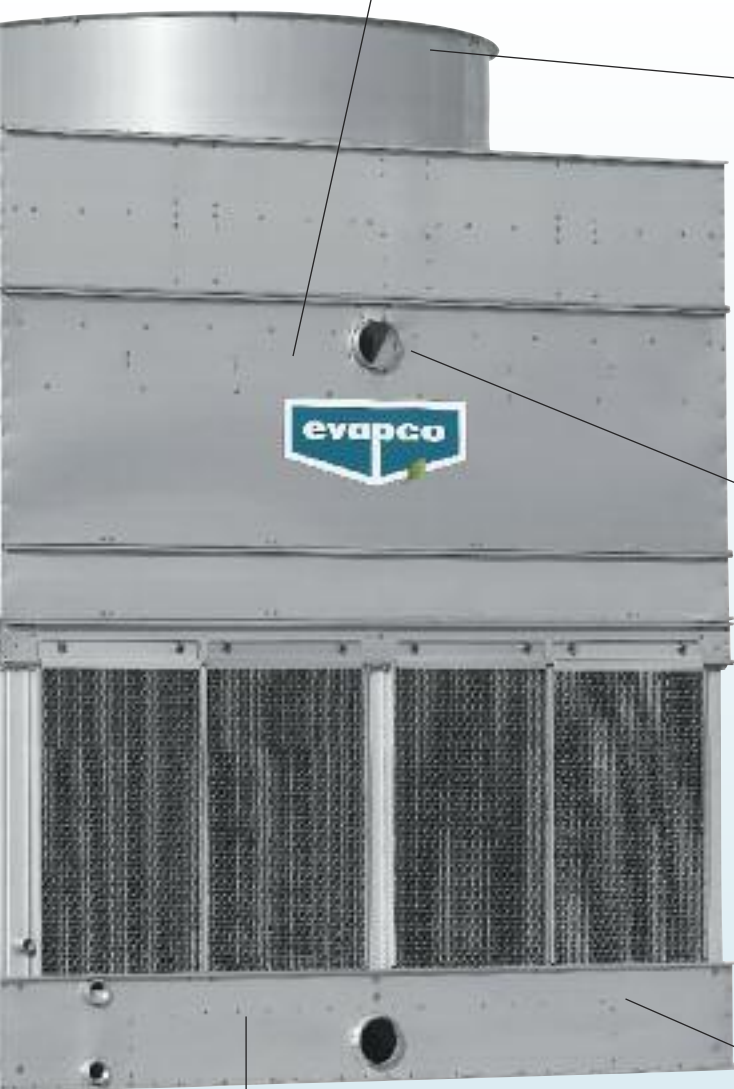
PROVIDING EASIER SOLUTIONS AND BETTER CHOICES

Fast, On-Time Shipments. The AT/UAT is a completely factory assembled cooling tower manufactured by a dedicated professional workforce, experts in building cooling towers. Factory trained mechanics and EVAPCO's strict quality control and inspection procedures guarantee the quality of every unit shipped. EVAPCO's controlled factory environment ensures fast on-time shipments, allowing the AT/UAT to be available WHEN THE CUSTOMER WANTS IT!



Eurovent-CTI Certified
Refer to page 23 for details

Low Sound Options available
Refer to page 15 for details



Smooth Flow Fan

- Soft-connect blade to hub design.
- VFD-friendly
- Eliminates critical blade passing frequencies at any speed.

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.



NEW! EvapJet™ Nozzle



Water Distribution System

- Non-corrosive PVC construction with new EvapJet™ nozzles.
- Large orifice nozzles prevent clogging and are threaded for easy removal and positive positioning.
- 66% fewer nozzles!
- System branches have threaded end caps to assist with debris removal.

Clean Pan Sloped Basin Design

- Designed to completely drain the cold water basin.
- Helps prevent buildup of sediment and biological film.
- Eliminates standing water after drain down.



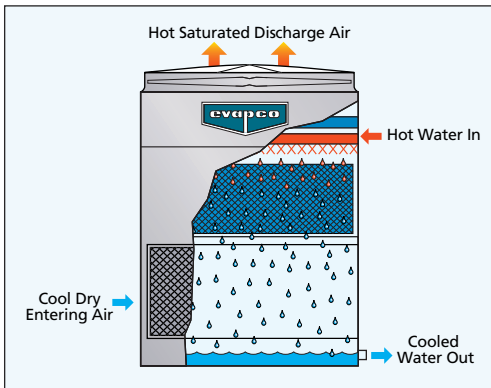
IBC Compliant Design
Refer to page 21 for details



† Mark owned by the Cooling Technology Institute

The Advanced Technology Design

The AT/UAT Cooling Tower product line is an Advanced Technology design which utilizes induced draft, counterflow technology—the most efficient in the industry and the best design for operation in a freezing climate. The counterflow design provides the AT/UAT Cooling Tower with inherently better operational and maintenance features. These features are described below.



Principle of Operation, Reduced Air Circulation

Warm water from the heat source is pumped to the water distribution system at the top of the tower. The water is distributed over the wet deck fill by means of large orifice nozzles. Simultaneously, air is drawn in through the air inlet louvers at the base of the tower and travels upward through the wet deck fill opposite the water flow. A small portion of the water is evaporated which removes the heat from the remaining water. The warm moist air is drawn to the top of the cooling tower by the fan and discharged to the atmosphere. The cooled water drains to the basin at the bottom of the tower and is returned to the heat source.

The vertical air discharge of the AT/UAT design and the distance between the discharge air and fresh air intakes, reduces the chance of air recirculation, since the warm humid air is directed up and away from the unit. For detailed layout information please consult EVAPCO's Equipment Layout Guidelines Bulletin 311.



Patented High Efficient Drift Eliminators

An extremely efficient drift eliminator system is standard on the AT/UAT Cooling Tower. The 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, the AT/UAT Cooling Tower rejects less water and water treatment chemicals. The AT/UAT can be located in areas where minimum water carryover is critical, such as parking lots.

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.



Patented EVAPAK® Fill

The EVAPAK® film type fill design used in the AT/UAT Cooling Tower line is specially designed to induce highly turbulent mixing of the air and water for heat transfer. Special drainage tips allow high water loadings without excessive pressure drop. The fill is constructed of inert polyvinyl chloride, (PVC). It will not rot or decay and is formulated to withstand water temperatures of 55°C. The fill also has excellent fire resistant qualities providing a flame spread rating of 5 per ASTM-E84-81a. (The flame spread rating scale ranges from 0 for non-combustible to 100 for highly combustible). Because of the unique way in which the cross-fluted sheets are bonded together, the structural integrity of the fill is greatly enhanced, making the fill usable as a working platform.

A high temperature fill is available for water temperatures exceeding 55°C. Consult your EVAPCO representative for further details.



Superior WST Air Inlet Louver and Screen Design

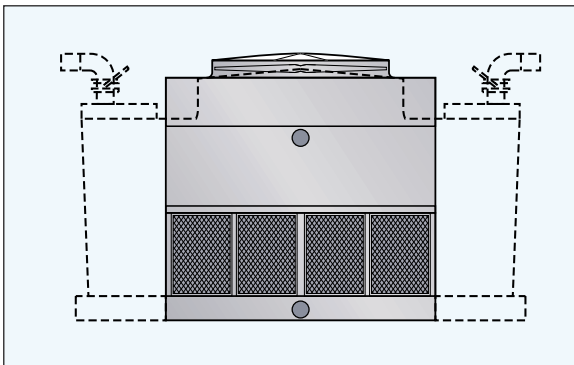
EVAPCO'S WST Inlet Louvers keep water in and sunlight out of the basins of induced draft products. The unique non-planar design is made from light-weight PVC sections which easily fit together and have no loose hardware, enabling easy basin access.

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.

The latest WST louver is patented.

DESIGN FEATURES



Reduced Piping Costs

Each cell of the AT/UAT Cooling Tower is furnished with one inlet and one outlet piping connection. This design reduces the amount of external piping and thereby lowers the installed cost of the cooling tower. The water distribution system is pressurized and self balancing. Since field balancing is not required on the AT/UAT, the need for flow balancing valves is eliminated, further reducing the cost of tower installation. The wide orifice nozzles with anti-sludge ring used in the AT/UAT water distribution system helps prevent clogging, reducing the maintenance costs of the water distribution system.

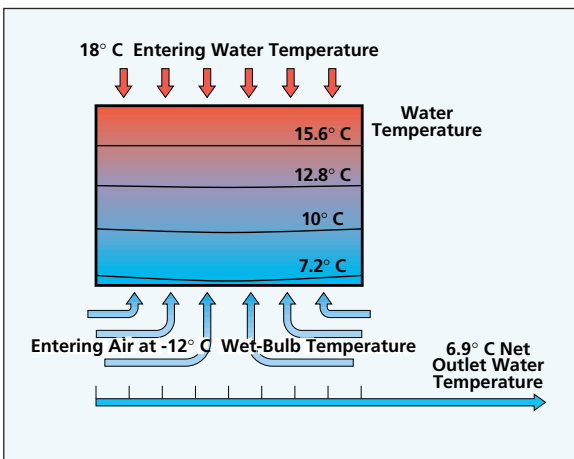


Pressurized Water Distribution System

The water distribution system is made of schedule 40 PVC pipe and ABS plastic water diffusers for corrosion protection in this key area. The piping is easily removable for cleaning. The water diffusers have a large orifice and are practically impossible to clog. In addition, the spray branches have threaded end caps to allow easy debris removal.



All AT/UAT units have as per standard the EvapJet™ Nozzle to ensure that every square meter of heat transfer surface receives complete and even water coverage, resulting in maximum thermal performance.



Optimum Design for Freezing Climates

The counterflow fill design used in the AT/UAT Cooling Tower is well suited for winter operation. The wet deck surface is totally encased, and protected from freezing winds thus inhibiting ice formation on the fill section.

The even temperature gradient of the counterflow fill design makes the AT/UAT Cooling Tower the ideal unit for operation in freezing climates.

The counterflow design of the AT/UAT Cooling Tower fill section reduces the chance of ice formation and with bottom support, eliminates fill collapse should ice form.

AT/UAT

MAINTENANCE FEATURES

The Advanced Technology Easy Maintenance Basin Design

The cold water basin is the most important area of a cooling tower to maintain. As a result of the evaporation process in a cooling tower, dirt and debris will collect in the basin and must be cleaned out on a regular basis. EVAPCO's AT/UAT basin section is designed to allow quick and easy access -promoting maintenance of the cold water basin. The basin features the following:



Easy Access

The cold water basin section is easily accessible by simply removing the (2) two Quick Release Fasteners on the inlet louver assemblies surrounding the cooling tower and lifting out the lightweight louver.

The basin of 2,4 m wide and bigger units can be accessed from all (4) four sides of the cooling tower. The bottom of the fill section of 2,4 m wide and bigger units is a minimum of 1,2 m above the basin floor. This open basin design enables the AT/UAT basin to be easily cleaned.



Louver Access Door (optional)

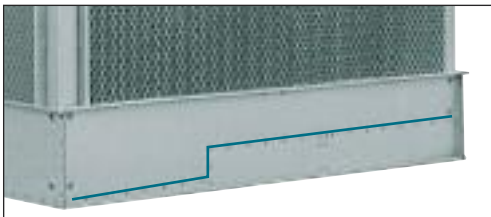
To aid in basin maintenance, all AT/UAT models with louvers of 1,2 m or taller can be equipped with an optional louver access door. This feature allows easy access to perform routine maintenance and inspection of the makeup assembly, strainer screen and basin without removing an entire inlet louver. The louver access door is standard on models with 1,5 and 1,8 m tall louver sizes.



Easy, Removable Air Inlet Louvers with Quick Release Fasteners

The AT/UAT features a Quick Release Fastener design (if local legislation allows) consisting of (2) two large thumbscrews and a retaining bracket system. By loosening the thumbscrews, the retaining bracket lifts away from the louver frame, allowing the louver to be removed while the retaining bracket and thumbscrews stay on the cooling tower.

- Design allows quick removal of louvers.
- Louver fastener is large and easy to release.
- Louver fastener remains on the unit eliminating the possibility of missing hardware



Clean Pan Basin Design

The AT/UAT features a completely sloped basin from the upper to lower pan section (1,2 m wide units have no step). This "Clean Pan" design allows the water to be completely drained from the basin. The cooling tower water will drain from the upper section to the depressed lower pan 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.



Stainless Steel Strainers

The EVAPCO standard for many years, the stainless steel strainer is one component of the cooling tower subject to excessive wear and corrosion. With stainless steel construction, this component will last the life of the cooling tower.

MAINTENANCE FEATURES

The Advanced Technology Easy Maintenance Drive System

The EVAPCO POWER-BAND drive system utilized on the AT/UAT Cooling Tower is the *easiest* belt drive system to maintain in the industry. There is no need to stand inside the cold water basin to service the bearings, belts or electrical equipment. In addition, there is no need for fan deck handrails or safety cages, since all periodic maintenance can be safely performed from the side of the AT/UAT. The most important features of this design are listed below.

Models AT / UAT 14-64 through AT / UAT 14-912

Models AT / UAT 19-56 through AT / UAT 38-942

Motor Mount, Power Band Belt Adjustment and Bearing Lubrication



The fan motor and drive assembly 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 on these models and is protected from the weather by a cover which swings away for maintenance.

A large access door is located on the side of the unit for easy access to the fan drive system. The belt can be adjusted by tightening the J-Bolts on the motor base and the tension can be checked easily through the access door, all while standing at the side of the unit. The bearing lubrication lines have been extended to the exterior casing and are located by the access door, thus making bearing lubrication easy.

Models AT / UAT 110-112 through AT / UAT 456-926

Motor Mount, Power Band Belt Adjustment and Bearing Lubrication



The T.E.A.O. fan motor is located inside the fan casing on the large AT/UAT Cooling Tower, and is mounted on a rugged heavy duty motor base. The motor base is designed to swing completely to the outside of the unit through a very large hinged (1,3 m²) access door greatly simplifying maintenance.

The unique swinging motor mount designed for these models features easy belt adjustment from the exterior of the unit. The T.E.A.O. fan motor is mounted on an adjustable base which is supported by two heavy duty galvanized steel pipes. The belt is adjusted by tightening an all-thread which runs through the motor base.

The innovative motor base features a unique locking mechanism for a positive belt adjustment and is also used to adjust the belt tension if a wrench is not available.

Bearing lubrication fittings are extended to the side of the unit inside the access door to allow easy application of the bearing lubricant. This external location allows for easy servicing of the bearings and is another important advantage of EVAPCO equipment.



The Advanced Technology Easy Maintenance Drive System *(continued)*



On Models AT/UAT 14-64 through 14-912

On Models AT/UAT 19-56 through 38-942



Fan Motors

All AT/UAT Cooling Tower models utilize heavy duty totally enclosed fan motors designed specifically for cooling tower applications suitable for VFD applications. In addition to the standard motors offered on each cooling tower, EVAPCO offers many optional motors to meet your specific needs, including Multi-Speed Motors.

The T.E.F.C. motors are located on the outside of the unit on Models AT 14-64 through AT/UAT 38-942 and are protected by a hinged, swing away cover.

Models AT/UAT 110-112 through 456-926 have T.E.A.O. motors located inside the fan section on a heavy duty motor base. The motor base swings to the outside for motor repair or removal, for AT/UAT 110-112 through 456-926.

On Models AT/UAT 110-112 through 456-926



Power-Band Belt Drive

The Power-Band drive is a solid-back multigroove belt system that has high lateral rigidity. The belt is designed for cooling tower service, and is constructed of neoprene with polyester cords. The drive belt is sized for 1.5 service factor of the motor nameplate kW ensuring long and trouble free operation.

Drive System Sheaves

Drive system sheaves located in the warm, moist atmosphere inside the cooling tower are constructed of an aluminum alloy. Those located externally are protected by a hinged protective cover.

Fan Shaft Bearings

The fan shaft bearings on the AT/UAT cooling tower are specially selected to provide long life, minimizing costly downtime. They are rated for an L-10 life of 75,000 to 135,000 hours, making them the heaviest duty pillow block bearing in the industry used for cooling tower duty.

OPTIONAL EQUIPMENT

Optional Equipment for Easier Operation and Maintenance

The standard design of the EVAPCO AT/UAT provides the customer with the *easiest* cooling tower to maintain in the industry. There are additional options which can make maintenance easier and extend the life of the cooling tower. These options are listed below.



Sloped Access Ladders

The EVAPCO designed access ladder features a sloped "ships type" ladder arrangement which provides fast and easy access to the water distribution system and drive components. A handrail is attached to the sloped ladder for safe and easy ascent and descent. The ladder(s) will ship loose and must be field mounted.

Note: The sloped access ladder is available on all models AT/UAT 19-56 through AT/UAT 456-926.

A safety cage is not included in this design. Check conformity with local legislation before application.



Working Platform & Ladder with Davit

AT/UAT Cooling Towers are available with an external working platform and ladder to allow easy servicing of the fan motor and water distribution system. Providing a convenient platform to perform work, the heavy duty platform is self-supporting-which eliminates the need for any external support. A less expensive alternative to field erected catwalks, the working platform option uses a straight ladder as standard and ships in sections for easy installation.

Note: The Working Platform is not available on models AT/UAT 14-64 through 14-912.

The davit option eliminates crane rentals and facilitates the removal of motors. The davit and bracket are constructed of aluminum and are mounted on the side of the unit. The optional fan motor davit ships loose and is installed in the field.



Stainless Steel Water Touch Basin (for AT Cooling Towers only)

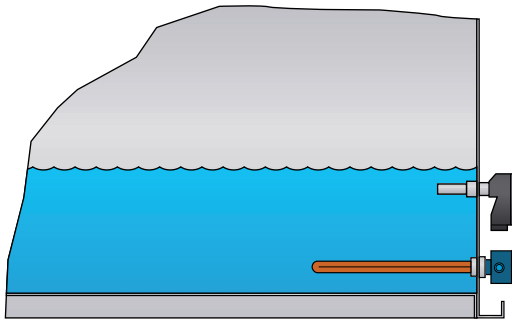
The AT Cooling Tower has a modular design which allows specific areas to be enhanced for increased corrosion protection. The basin area of the cooling tower experiences turbulent mixing of air and water, in addition to silt build-up. In conjunction with the EVAPCOAT Corrosion Protection System, EVAPCO offers an optional Stainless Steel Water Touch Basin. This option provides Type 304L or Type 316L stainless steel for the entire basin area including the support columns of the cooling tower and the louver frames.

The basin section provides the structural support for the unit and is the most important part of the cooling tower. The Stainless Steel Water Touch Basin provides maximum corrosion protection.

Optional Equipment for Easier Operation and Maintenance

Electric Heaters

Electric immersion heaters are available factory installed in the basin of the cooling tower. They are sized to maintain a +5°C pan water temperature with the fans off and an ambient air temperature of -18, -28 or -40°C. They are furnished with a combination thermostat/low water protection device to cycle the heater on when required and to prevent the heater elements from energizing unless they are completely submerged. All components are in weather proof enclosures for outdoor use. The heater power contactors and electric wiring are not included as standard. (See page 14 for heater size information).



Electric Water Level Control

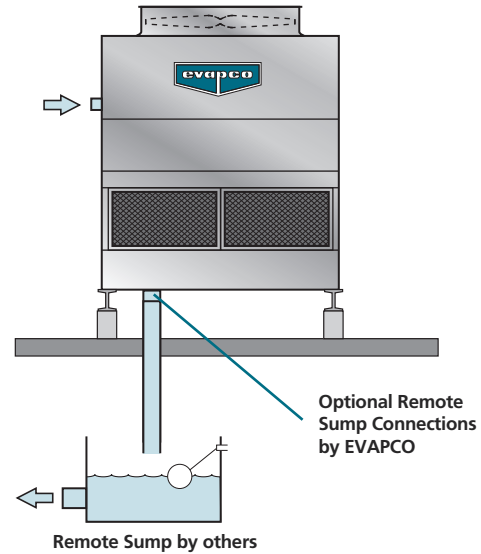
EVAPCO cooling towers are available with an optional electric water level control system in place of the standard mechanical makeup valve and float assembly. This package provides very accurate control for the basin water level and does not require field adjustment, even under varying operating conditions.

The control consists of multiple heavy duty stainless steel electrodes. These electrodes are mounted external to the unit in a vertical stand pipe. For winter operation, the stand pipe must be wrapped with electric heating cable and insulated to protect it from freezing.

The weather protected slow closing solenoid valve(s) for the makeup water connection is factory supplied and is ready for piping to a water supply with a pressure between 140 and 340 kPa.



Remote Sump Configuration



For units operating in areas where ambient temperatures may be very low, or where low temperatures may occur during periods when the unit is not operating, a sump located inside the building is the preferred means of ensuring that the basin water will not freeze. For these applications, the cooling tower will be supplied without the suction strainers but with an oversize bottom outlet.

Other Options

- Vibration Isolators (single cell units only)
- Vibration Switches
- Fill Access Doors
- Sump Sweeper Piping
- Many more options ...



Fill Access Door



Flanged Connections

APPLICATIONS

Special Applications of the AT/UAT Cooling Tower

The standard AT/UAT Cooling Tower is suitable for the majority of air conditioning and industrial cooling applications. However, there are some design situations where special consideration must be given with regard to materials of construction, thermal performance, sound level and water quality. Some of these special applications are described below.

System Design

AT/UAT Cooling Towers are constructed of heavy duty materials and are designed for superior performance providing long, trouble-free operation. However, proper equipment selection, installation and maintenance are necessary to ensure optimum unit performance. Several of the major considerations when designing and operating a cooling tower installation are presented in the following paragraphs. For additional information, contact your local EVAPCO representative.

Air Circulation

The location of a cooling tower is an important consideration when reviewing system design. Since cooling towers use large quantities of air, adequate spacing around the unit is necessary for it to perform properly. The best place to locate any cooling tower is on a roof or at ground level away from walls and other obstructions. Cooling towers that are located in wells, enclosures, or are adjacent to high walls must be properly located to avoid the effects of recirculation. Recirculation occurs when some of the hot moist discharge air leaving the cooling tower flows back into the fresh air inlet. When recirculation causes the inlet wet bulb temperature to the cooling tower to be increased, the capacity of the cooling tower is **decreased**. Refer to EVAPCO Bulletin 311, Equipment Layout Manual, for the recommended layout guidelines for cooling towers.

Maintaining the Recirculated Water System

A cooling tower removes heat by evaporating a portion of the recirculated spray water. **As a general rule, a cooling tower evaporates 1.58 l/h per 1 kW of cooling capacity.** As this water evaporates, it leaves behind all of its mineral content and impurities. Therefore, it is important to bleed an amount equal to that which is evaporated to prevent the buildup of impurities. If this is not done, the mineral content in the water will increase until the solids eventually deposit in the unit, causing heavy scaling. The bleed line should be installed in the external piping of the unit. It must be properly sized for the application and be provided with a metering valve and flow measurement device to allow for field adjustment of the bleed rate.

Water Treatment

EVAPCO recommends that all cooling tower users should consult a reputable water treatment company familiar with local water conditions in order to determine the extent and type of water treatment program recommended for each specific application. Any chemical water treatment used must be compatible with the construction of the unit. If acid is used for treatment, it should be accurately metered and the concentration properly controlled. **Consult EVAPCO's Maintenance Bulletin 113 for additional information.**

Capacity Control

The design wet bulb temperature for which a cooling tower is sized occurs only a small percentage of the time. Since the wet bulb temperature is lower than design much of the time, and cooling loads tend to fluctuate, some form of capacity

control will be required. The simplest form of capacity control is to cycle the fans on and off. However, this type of control results in larger temperature differentials and does not provide close control of the leaving water temperature.

A better method of capacity control is to use two speed fan motors, which adds a second step of control. Two speed motors are an excellent method of capacity control for the AT/UAT Cooling Tower. This arrangement gives capacity steps of 10% (fans off), 60% (Fans at half speed) and 100%.

Two speed motors also reduce operating costs. At half speed, the motor draws approximately 15% of the full load power. Since the maximum wet bulb temperature and maximum load very seldom coincide, the cooling tower will actually operate at half speed about 80% of the time. Therefore, power costs will be reduced during the major portion of the year.

A third advantage of two speed motors is that noise levels are reduced by approximately 6 dB(A) when operating at half speed. Since both the load and wet bulb temperature are normally lower at night, the sound generated by the cooling tower will be substantially reduced during the most noise sensitive time period.

For multiple cell units, both fan cycling and two speed motors can be used to provide additional steps of control. The combination of fan cycling and two speed motors offers a simple and inexpensive means of controlling unit capacity along with substantially reducing the energy costs of the cooling tower.

The best method of capacity control is the use of Variable Frequency Drives. This stepless control guarantees an optimized fan speed and as per consequence, an optimized heat rejection. Important energy/cost saving can be realized.

Piping

Cooling tower piping should be designed and installed in accordance with generally accepted engineering practices. All piping should be supported by properly designing hangers and supports with allowances made for possible expansion and contraction of the piping system. No external loads should be placed on the cooling tower connections. **Do NOT** anchor any of the piping supports to the cooling tower or its framework.

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 should be undertaken. The water treatment program should be performed by a qualified water treatment company. It is important that all internal surfaces be kept clean of accumulated dirt and sludge. In addition, the drift eliminators should be checked periodically to ensure that they are clean and have not been damaged.

Note: The location of the cooling tower must be considered during the equipment layout stages of a project. It is important to prevent the discharge air (potential of biological contamination) from being introduced into the fresh air intakes of the building.



AT/UAT

APPLICATIONS

Freecooling

Freecooling is when chilled water is produced by the cooling tower without the use of a mechanical chiller during low ambient conditions. The freecooling or economizer mode of an air conditioning system is used to save cost per kWh when the conditions allow the water in the tower to be cooled to "chiller" like temperatures, typically 5.5°C–7°C leaving water temperature.

EVAPCO's AT/UAT counterflow cooling towers are well suited for free cooling applications. The counterflow fill design helps preventing ice formation with its even temperature gradient through the fill section and enclosed location blocking it from the elements. However, special caution must be taken when selecting, sizing and operating a cooling tower during normal winter or severe winter applications.

Please consult EVAPCO's Engineering Bulletin on Free Cooling Operation of Open Cooling Towers or EVAPCO to assist in selecting a tower for a freecooling application.

High Temperature Applications

EVAPCO's AT/UAT Cooling Tower as standard is capable of handling up to 55°C entering water temperature. It will not deform or degrade at a continuous temperature application of 55°C.

However, there are applications where a higher temperature rated fill is required. For these applications, a fill material is available as an option which allows the entering water temperature to operate at a continuous 65°C. Please consult the factory for selections of high temperature fill Cooling Towers.

Dirty Water Applications

The fill used in the AT/UAT Cooling Tower is designed to operate in almost all cooling water applications. However, there are some "dirty" water applications where the standard fill spacing is not adequate, such as a pulp and paper mill cooling towers or other applications where heavy particulate will be mixed in with the water.

To prevent clogging of the fill, EVAPCO offers proprietary **Wide-Pak** and **VertiCLEAN** fill types.

For additional information, contact your local EVAPCO representative.

Alternate AT/UAT Arrangements

The AT/UAT Cooling Tower will fit almost every application. However, there are installations with special piping locations or existing steel that will require the AT/UAT to be modified to fit the layout.

Please contact the factory and we will develop a design to fit your need.

Consult the Factory for:

- Layout Guidelines
- Equalizer Connection Sizing and Location
- Remote Sump Connection Sizing and Location
- Seismic and Wind Load Application
- Operating and Maintenance Questions
- Ladders, Platforms and Motor Davits

AT Electric Heater Sizes

Model No.	-18°C kW	-28°C kW	-40°C kW
14-64 to 14-94	(1) 2	(1) 3	(1) 4
14-66 to 14-96	(1) 3	(1) 4	(1) 5
14-69 to 14-99	(1) 4	(1) 5	(1) 7
14-612 to 14-912	(1) 5	(1) 7	(1) 9
18-49 to 18-99	(1) 6	(1) 9	(1) 12
18-511 to 18-911	(1) 7	(1) 10	(1) 15
18-312 to 18-912	(2) 4	(2) 6	(2) 8
18-214 to 18-914	(2) 5	(2) 7	(2) 9
28-518 to 28-918	(2) 6	(2) 9	(2) 12
28-521 to 28-921	(2) 7	(2) 10	(2) 15
28-524 to 28-924	(4) 4	(4) 6	(4) 8
28-428 to 28-928	(4) 5	(4) 7	(4) 9
38-236 to 38-936	(6) 4	(6) 6	(6) 8
38-442 to 38-942	(6) 5	(6) 7	(6) 9
216-49 to 216-99	(2) 6	(2) 9	(2) 12
216-511 to 216-911	(2) 7	(2) 10	(2) 15
216-312 to 216-912	(4) 4	(4) 6	(4) 8
216-214 to 216-914	(4) 5	(4) 7	(4) 9
19-56 to 19-96	(1) 5	(1) 7	(1) 9
19-28 to 19-98	(1) 6	(1) 8	(1) 12
212-59 to 212-99	(2) 5	(2) 7	(2) 9
215-29 to 215-99	(2) 6	(2) 8	(2) 12
26-517 to 26-917	(2) 5	(2) 7	(2) 9
28-217 to 28-917	(2) 6	(2) 8	(2) 12
110-112 to 110-912	(2) 5	(2) 8	(2) 10
110-118 to 110-918	(2) 7	(2) 12	(2) 15
210-124 to 210-924	(4) 5	(4) 8	(4) 10
210-136 to 210-936	(4) 7	(4) 12	(4) 15
310-136 to 310-936	(6) 5	(6) 8	(6) 10
310-154 to 310-954	(6) 7	(6) 12	(6) 15
220-112 to 220-912	(4) 5	(4) 8	(4) 10
220-118 to 220-918	(4) 7	(4) 12	(4) 15
420-124 to 420-924	(4) 10	(4) 15	(4) 20
420-136 to 420-936	(4) 15	(6) 15	(6) 20
112-012 to 112-912	(2) 6	(2) 9	(2) 12
112-314 to 112-914	(2) 7	(2) 10	(2) 15
112-018 to 112-918	(2) 9	(2) 15	(2) 18
112-520 to 112-920	(2) 10	(2) 15	(3) 15
212-024 to 212-924	(4) 6	(4) 9	(4) 12
212-128 to 212-928	(4) 7	(4) 10	(4) 15
212-036 to 212-936	(4) 9	(4) 15	(4) 18
312-036 to 312-936	(6) 6	(6) 9	(6) 12
312-042 to 312-942	(6) 7	(6) 10	(6) 15
312-054 to 312-954	(6) 9	(6) 15	(6) 18
312-260 to 312-960	(6) 10	(6) 15	(9) 15
224-018 to 224-918	(4) 9	(4) 15	(4) 18
224-720 to 224-920	(4) 10	(4) 15	(4) 20
424-024 to 424-924	(4) 12	(4) 18	(6) 15
424-028 to 424-928	(4) 15	(4) 20	(6) 18
424-036 to 424-936	(4) 18	(6) 18	(8) 18
114-0124 to 114-1224	(2) 16	(3) 16	(3) 20
114-526 to 114-926	(2) 16	(3) 16	(3) 20
214-0148 to 214-1148	(4) 16	(6) 16	(6) 20
214-552 to 214-952	(4) 16	(6) 16	(6) 20
314-0172 to 314-1272	(6) 16	(9) 16	(9) 20
314-578 to 314-978	(6) 16	(9) 16	(9) 20
228-0124 to 228-0924	(4) 16	(6) 16	(6) 20
228-526 to 228-926	(4) 16	(6) 16	(6) 20
428-0148 to 428-1248	(8) 16	(12) 16	(12) 20
428-552 to 428-952	(8) 16	(12) 16	(12) 20
342-526 to 342-926	(6) 16	(9) 16	(9) 20
456-526 to 456-926	(8) 16	(12) 16	(12) 20

APPLICATIONS

Ultra Quiet Cooling Towers

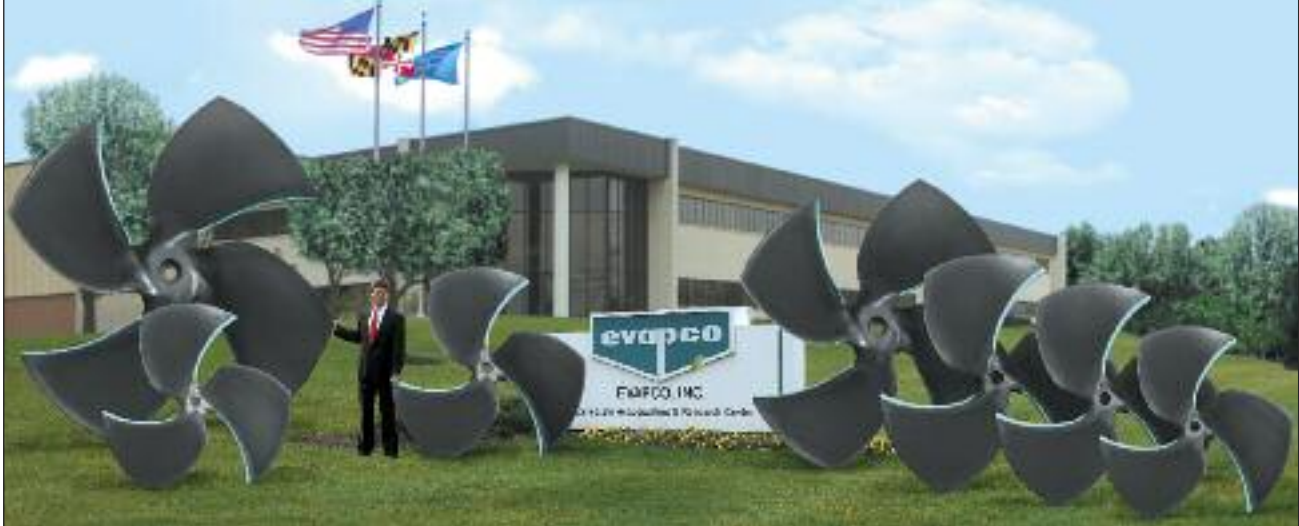


The AT/UAT Cooling Tower is now available with four (4) equipment options to reduce the overall sound generated from the side or top of the AT/UAT Cooling Tower. Each option provides various levels of sound reduction and can be used in combination to provide the lowest sound level.



Ultra Quiet operation for induced draft counterflow Cooling Towers

Super Low Sound Solution for Sound Sensitive Applications



Family of Super Low Sound Fans

The Super Low Sound Fan

Reduced Sound Levels versus Model AT/UAT Standard Fan

EVAPCO's Super Low Sound Fan on the **AT/UAT** cooling tower 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 AT/UAT standard fan.

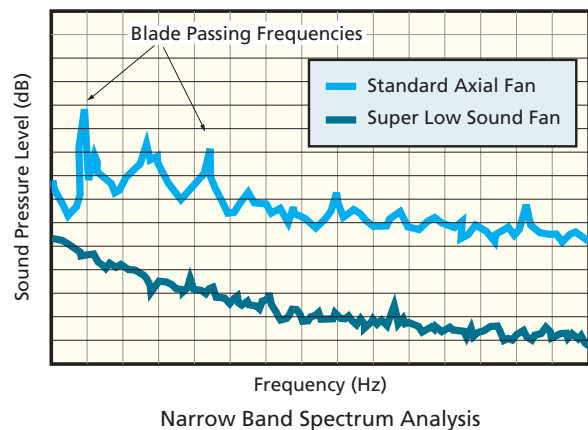
The **SUPER** Low Sound Fan is available on all 2.3 m wide and larger AT/UAT Cooling Towers.

Improved Sound Quality versus Model AT/UAT Standard Fan

The **SUPER** Low Sound Fan on the **AT/UAT** cooling tower 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.



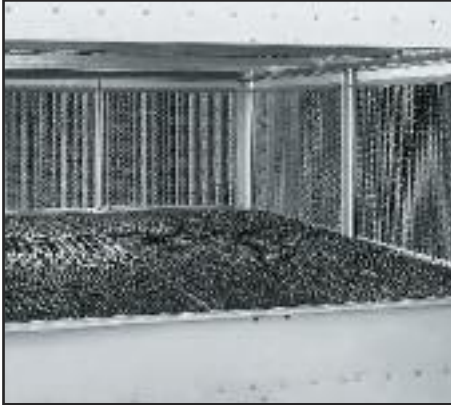
The Super Low Sound Fan on the AT/UAT Cooling Tower reduces sound levels and betters the sound quality!

NOTE: These low sound options may impact the overall installed dimensions of the AT/UAT Cooling Tower selected.

ADVANCED TECHNOLOGY LOW SOUND SOLUTIONS

AT/UAT

Additional Solutions for Sound Sensitive Applications



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 AT/UAT Cooling Towers.



Fan Discharge Sound Attenuation *Up to 10 dB(A) Reduction!*

The discharge attenuator is a factory assembled straight sided discharge hood designed to reduce overall discharge sound levels at full fan speed **5 dB(A) to 10 dB(A)**, depending on specific unit selection and measurement location. It is constructed of Z-725 galvanized steel as standard (options available for Type 304L and 316L stainless steel) and includes insulated walls and a low pressure drop baffling system that is acoustically lined with high density fiberglass. The discharge attenuator is supported entirely by the unit and is shipped as an assembled section for easy mounting in the field. The discharge attenuator is covered by a heavy gauge hot dip galvanized steel fan guard to prevent debris from entering the attenuator.

The Discharge Attenuator is available on ALL AT/UAT Cooling Towers.



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 typically 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.

Offset Sound Attenuation Walls are available on ALL AT/UAT Cooling Towers with Super Low Sound Fan and Water Silencer options selected.

Consult EVAPCO's **evapSelect™** selection 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.

Background in Sound Basics

Sound

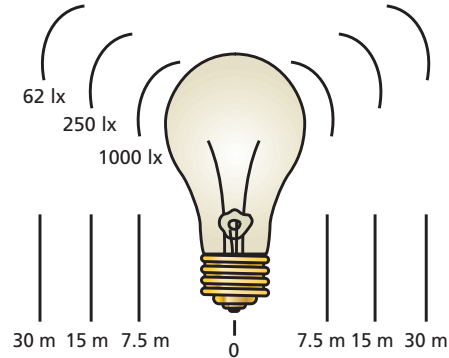
Sound is the alteration in pressure, stress, particle displacement and particle velocity, which is propagated in an elastic material. Audible sound is the sensation produced at the ear by very small pressure fluctuations in the air.

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, $P_0 = 2 \times 10^{-5}$ Pascal following the following formula:

$$L_p \text{ (dB)} = 10 \log_{10} (\Delta P^2 / \Delta P_0^2)$$

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"

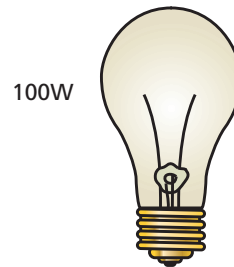
Similar to the intensity coming from a light bulb which gets dimmer as one gets further and further away, sound pressure decreases in decibels as your ear gets further from the sound source.

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, $W_0 = 1$ picowatt, according to the following formula:

$$L_w \text{ (dB)} = 10 \log_{10} (W/W_0)$$

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**.



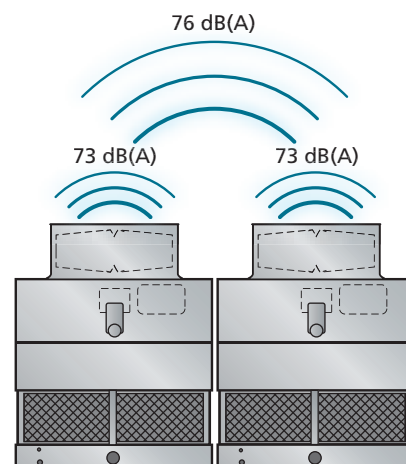
"SOUND POWER"

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.

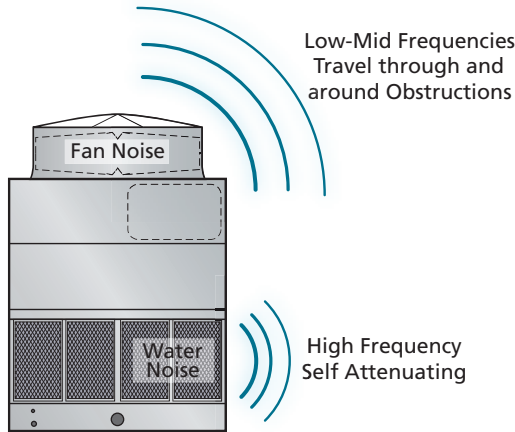
Difference in dB Level	Add to the higher dB Level
0 to 1	3
2 to 3	2
4 to 8	1
9 or greater	0



SOUND BASIC

Sound Science and Cooling Towers

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 cooling tower 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 cooling tower.

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:

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

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

Band	Center Freq. (Hz)	Frequency Range (Hz)	Sample Data (dB)	C_f (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.

$$dB(A) = 10 \log_{10} (10^{(Z_1)} + 10^{(Z_2)} + 10^{(Z_3)} + 10^{(Z_4)} + 10^{(Z_5)} + 10^{(Z_6)} + 10^{(Z_7)} + 10^{(Z_8)})$$

$$= 10 \log_{10} (67114245.2) = 78.3 \text{ dB(A)}$$

Sound Verifications

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

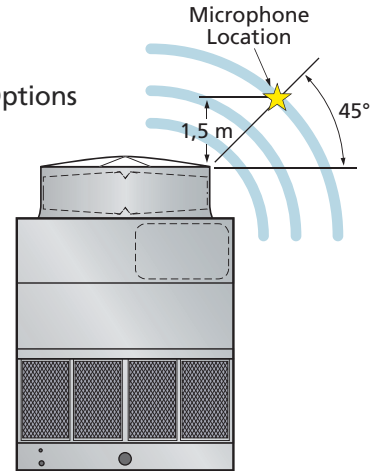
- All manufacturers can meet a performance specification with Low Sound Options
- Fan noise is what matters. 1,5 m above the fan is where it matters.

Measurement Location

Per Cooling Technology Institute Standard ATC-128

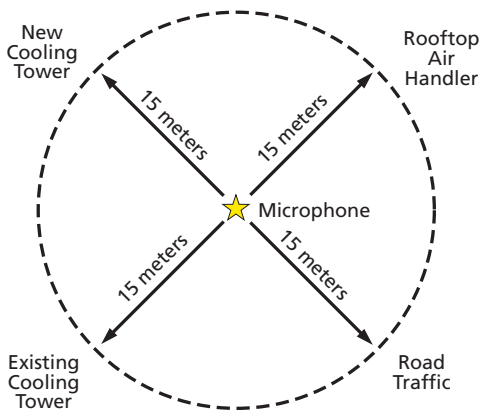
Sound Microphone location 1,5 m above the cooling tower fan cowl edge at a 45° angle.

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 cooling tower, a sound meter records only cooling tower noise. Interested parties can easily verify the actual noise coming from the cooling tower 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 cooling tower 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.

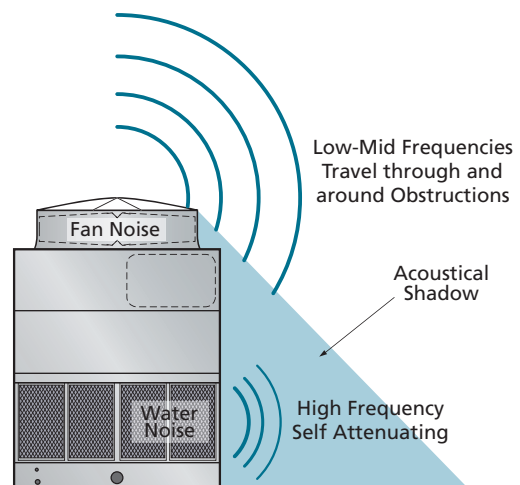
Sound coming from the sides of the cooling tower is comprised of high frequency water noise, is much less objectionable than fan noise and attenuates naturally with distance.

Acoustical Shadow*

"Subjective reactions to the overall noise generated by cooling towers indicate that as one walks away from a tower 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 tower 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 cooling tower 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.

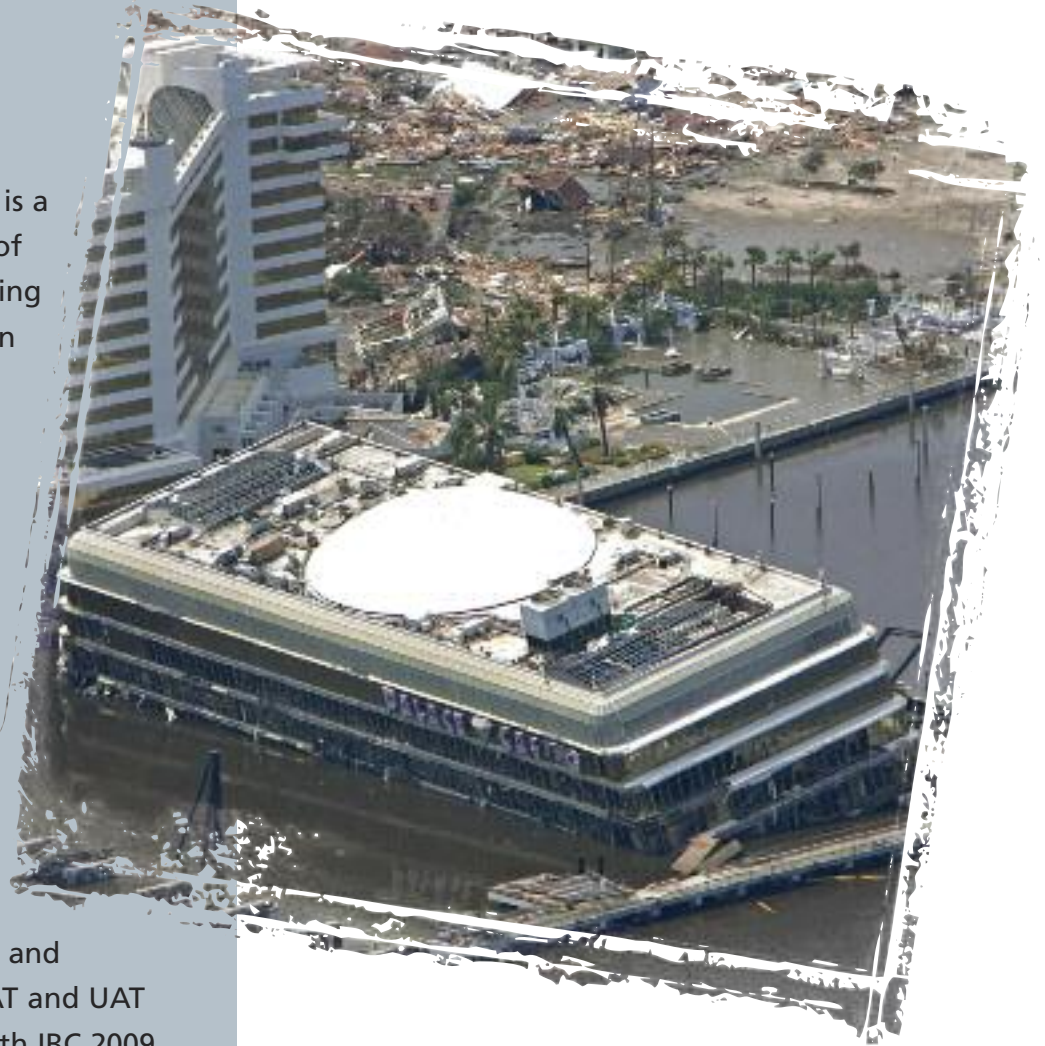


Specify fan noise because it matters! Specify fan noise where it matters!



The International Building Code (IBC) is a comprehensive set of regulations addressing the structural design and installation requirements for building systems – including HVAC and industrial refrigeration equipment.

With the advent of the IBC, EVAPCO is proud to introduce the new and improved line of AT and UAT Cooling Towers with IBC 2009 compliance standard.



We Stand Tall Through it All!

Wind, Rain, Earthquake and Hurricane

EVAPCO Cooling Towers... designed to withstand seismic or wind load forces.

In its continuing commitment to be the leaders in evaporative cooling equipment design and services, EVAPCO AT/UAT Cooling Towers are now **Independently Certified** to withstand Seismic and Wind Loads in accordance with IBC 2009.

What is IBC?

International Building Code

The International Building Code (IBC) is a comprehensive set of regulations addressing both the structural design and the installation requirements for building systems – including HVAC and industrial refrigeration equipment.

Compared to previous building codes that considered only the building structure and component anchorage, the requirements contained within the IBC address anchorage, structural integrity, and the operational capability of a component following either a seismic or wind load event. **Simply stated, the IBC code provisions require that evaporative cooling equipment, and all other components permanently installed on a structure, must be designed to meet the same seismic or wind load forces as the building to which they are attached.**

How Does IBC 2009 Apply to Cooling Towers?

Based on site design factors, calculations are made to determine the equivalent seismic “g force” and wind load (kilo-Newton per square meter, kN/m²) on the unit. The cooling tower must be designed to withstand the greater of either the seismic or wind load.

The New AT/UAT is offered with a choice of TWO structural design packages:

- **Standard Structural Design** – For projects with ≤1.0g seismic or 2,87 kN/m² wind loads
- **Upgraded Structural Design** – Required for projects with >1.0 g seismic or 6,94 kN/m² wind loads

All locations with design criteria resulting in a seismic design force of up to 1.0g or a wind load of 2,87 kN/m² or below will be provided with the standard AT/UAT structural design. An upgraded structural design is available for installations with design criteria resulting in “g forces” greater than 1.0g. The highest “g force” location in North America is 5.12g. The highest wind load shown on the maps is 273 km/h, which is approximately equal to 6,94 kN/m² velocity pressure. **Therefore, the upgraded structural design package option for the New AT/UAT is designed for 5.12 g and 6,94 kN/m² making it applicable to ALL building locations in North America.**

Design Implementation

EVAPCO applies the seismic design and wind load information provided for the project to determine the equipment design necessary to meet IBC requirements. This process ensures that the mechanical equipment and its components are compliant per the provisions of the IBC as given in the plans and specifications for the project.

Independent Certification

Although the IBC references and is based on the structural building code ASCE 7, many chapters and paragraphs of ASCE 7 are superseded by the IBC, independent certification and methods of analysis are such paragraphs. Per the most recent edition of the code, the EVAPCO compliance process included an exhaustive analysis by an independent approval agency. As required by the International Building Code, EVAPCO supplies a certificate of compliance as part of its submittal documents. The certificate of compliance demonstrates that the equipment has been independently tested and analyzed in accordance with the IBC seismic and wind load requirements. Evapco has worked closely with the independent approval agency, The VMC Group, to complete the independent equipment testing and analysis.

For further questions regarding IBC compliance, please contact your local EVAPCO Representative.





CTI-Eurovent Certified AT and UAT Cooling Towers

ECC-CTI

CTI Standard-201

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

In its continuing commitment to be the leaders in evaporative cooling equipment design and services, EVAPCO AT/UAT Cooling Towers 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 2008 CTI certified more than 5000 Evaporative Heat Transfer Systems (EHTS) from 49 product line of 24 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.

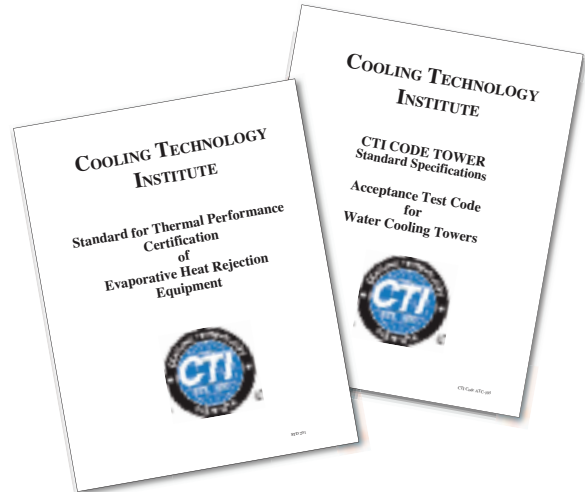
CTI Mission Statement

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.



CTI CERTIFICATION

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 successful certification has been completed. The Certification Validation Number assigned should be fixed to each tower 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 airflow 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 AT Product Line

AT Line of CTI Certified Cooling Towers

- CTI Certification Validation Number 99-13-01
- Includes UAT model numbers
- Includes CE compliant fan screen
- Includes the use of side, end or bottom water inlet configuration
- Includes optional Super Low Sound Fan (SLSF)
- Includes optional pan Water Silencers (WS)
- Includes optional Low Sound Fan (LSF)
- Includes optional Discharge Attenuation
- Includes optional Offset Sound Attenuation Walls
- Includes optional Wide-Pak Fill
- Includes optional external service platform and ladders for access
- **evapSelect™** Technical data sheet will state "ECC-CTI Certified Cooling Tower"
- Unit will receive a CTI and ECC 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>



† Mark owned by the Cooling Technology Institute

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 Cooling Towers" and the "Eurovent Rating Standard for Cooling Towers" 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 cooling towers. All Evapco CTI Certified cooling towers 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



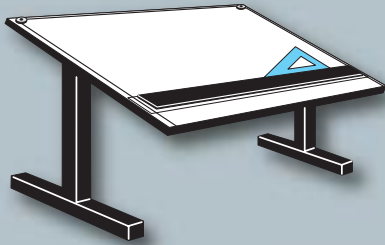
The main objective of the EUROVENT Certification Company (ECC) is to certify cooling equipment (and/or components) independent-

ly 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.





Thermal Performance



Engineering Data & Dimensions



AT/UAT

COOLING CAPACITY MODELS AT/UAT 14-64 TO 14-912 MODELS AT/UAT 18-49 TO 18-914

ENGINEERING

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 14-64		9,3	5,2	8,6	4,7	7,7	4,1	6,8	4,4	8,9	5,8	8,0	5,3	6,9	9,8	4,6	6,5	7,3	8,8	4,9	5,9
AT/UAT 14-74		10,1	6,0	9,4	5,5	8,5	4,9	7,6	5,2	9,7	6,6	8,8	6,1	7,7	10,6	5,4	7,3	8,1	9,7	5,7	6,8
AT/UAT 14-84		10,7	6,2	10,0	5,7	9,1	5,1	8,0	5,4	10,4	6,9	9,4	6,3	8,2	11,3	5,6	7,7	8,6	10,3	5,9	7,1
AT/UAT 14-94		11,5	7,1	10,8	6,5	9,9	5,9	8,9	6,2	11,2	7,8	10,2	7,2	9,0	12,1	6,4	8,6	9,4	11,1	6,7	7,9
AT/UAT 14-66		15,8	9,1	14,7	8,3	13,3	7,4	11,7	7,8	15,2	10,1	13,8	9,2	11,9	16,7	8,1	11,3	12,5	15,1	8,6	10,3
AT/UAT 14-76		17,0	10,4	15,9	9,5	14,5	8,6	13,0	9,0	16,5	11,4	15,0	10,5	13,2	17,9	9,4	12,6	13,8	16,4	9,8	11,6
AT/UAT 14-86		18,3	10,9	17,1	10,0	15,6	9,0	13,9	9,5	17,7	12,1	16,1	11,0	14,1	19,3	9,8	13,4	14,8	17,6	10,3	12,3
AT/UAT 14-96		19,5	12,2	18,3	11,2	16,8	10,2	15,1	10,7	18,9	13,3	17,3	12,3	15,3	20,5	11,0	14,6	16,0	18,8	11,6	13,5
AT/UAT 14-69		21,4	12,0	19,8	10,8	17,8	9,6	15,7	10,2	20,6	13,5	18,5	12,2	16,0	22,7	10,6	15,1	16,8	20,5	11,2	13,7
AT/UAT 14-79		23,3	13,9	21,7	12,7	19,8	11,4	17,6	12,0	22,5	15,4	20,4	14,1	17,9	24,5	12,5	17,0	18,8	22,4	13,1	15,6
AT/UAT 14-89		24,9	14,4	23,1	13,1	21,0	11,7	18,6	12,4	24,0	16,1	21,7	14,6	18,9	26,2	12,9	17,9	19,8	23,8	13,6	16,3
AT/UAT 14-99		26,7	16,4	25,0	15,1	22,9	13,6	20,5	14,3	25,9	18,0	23,6	16,6	20,8	28,1	14,8	19,8	21,7	25,7	15,5	18,3
AT/UAT 14-612		32,1	18,5	29,8	16,8	27,0	15,0	23,9	15,8	31,0	20,6	28,0	18,7	24,3	33,9	16,5	22,9	25,5	30,8	17,4	21,0
AT/UAT 14-712		34,6	21,1	32,3	19,4	29,6	17,5	26,5	18,4	33,5	23,2	30,5	21,3	26,9	36,4	19,0	25,6	28,1	33,3	20,0	23,6
AT/UAT 14-812		37,3	22,2	34,8	20,3	31,7	18,2	28,2	19,2	36,0	24,6	32,7	22,5	28,7	39,2	19,9	27,2	30,1	35,8	21,0	25,0
AT/UAT 14-912		39,7	24,7	37,2	22,9	34,1	20,8	30,7	21,8	38,5	27,1	35,1	25,0	31,1	41,8	22,5	29,7	32,5	38,2	23,5	27,5

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 18-49		51	31	48	28	43	25	39	27	49	34	45	31	39	54	28	38	41	49	29	35
AT/UAT 18-59		53	31	50	29	45	26	40	27	52	35	47	32	41	56	28	39	43	51	30	35
AT/UAT 18-69		58	36	54	33	49	30	44	31	56	39	51	36	45	61	32	43	47	55	34	40
AT/UAT 18-79		59	37	55	35	51	32	46	33	57	41	52	38	46	62	34	44	48	57	36	41
AT/UAT 18-89		62	39	58	36	53	32	48	34	60	42	55	39	48	65	35	46	51	59	37	43
AT/UAT 18-99		64	40	60	38	55	35	49	36	62	44	56	41	50	---	37	48	52	61	39	44
AT/UAT 18-511		58	35	54	32	49	29	44	30	56	38	51	35	45	61	31	42	47	55	33	39
AT/UAT 18-611		66	39	61	36	56	32	50	34	64	43	58	40	51	69	35	48	53	63	37	44
AT/UAT 18-711		67	42	63	39	58	36	52	38	65	46	59	43	53	71	39	50	55	65	40	47
AT/UAT 18-811		71	44	66	41	61	37	55	39	68	48	62	44	55	74	40	53	58	68	42	49
AT/UAT 18-911		73	46	68	43	63	40	57	41	71	50	65	47	57	77	42	55	60	70	44	51
AT/UAT 18-312		64	38	60	35	55	32	49	33	62	43	56	39	50	68	34	47	52	62	36	43
AT/UAT 18-412		68	43	63	39	58	36	52	38	66	46	60	43	53	71	39	51	55	65	41	47
AT/UAT 18-512		73	43	68	40	62	35	55	37	71	48	64	44	56	77	39	53	59	70	41	49
AT/UAT 18-612		79	49	74	45	67	41	61	43	76	54	70	49	62	83	44	59	64	76	46	54
AT/UAT 18-712		82	52	77	48	70	44	63	46	79	56	72	52	64	86	47	61	67	79	49	57
AT/UAT 18-812		83	52	78	48	71	44	64	46	80	57	73	52	65	87	47	62	68	80	49	58
AT/UAT 18-912		86	54	80	51	74	47	67	49	83	59	76	55	68	---	50	64	70	83	52	60
AT/UAT 18-214		79	47	73	43	67	39	60	41	76	52	69	48	61	83	43	58	64	75	45	53
AT/UAT 18-314		82	52	77	48	70	44	63	46	80	56	73	52	64	86	47	61	67	79	49	57
AT/UAT 18-414		86	51	80	46	73	42	65	44	83	56	75	51	66	90	46	62	69	82	48	57
AT/UAT 18-514		86	53	80	48	73	44	66	46	83	58	76	53	67	90	47	64	70	82	50	59
AT/UAT 18-614		89	56	84	53	77	48	69	50	87	61	79	57	70	94	52	67	73	86	54	62
AT/UAT 18-714		92	57	86	53	79	48	71	50	89	63	81	58	72	97	52	69	75	88	54	64
AT/UAT 18-814		96	60	89	55	82	50	74	52	93	65	84	60	75	100	54	71	78	92	57	66
AT/UAT 18-914		99	63	93	59	85	54	77	56	96	68	88	64	78	---	58	75	81	96	60	69

* CE compliant AT/UAT cooling towers require a special protective fan screen. This fan screen reduces the indicated cooling capacity with 2%. This reduction is incorporated in the CTI certification.

Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.

COOLING CAPACITY MODELS AT/UAT 28-518 TO 216-914

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 28-518		99	62	92	57	85	52	76	55	95	68	87	62	77	104	56	74	81	95	59	68
AT/UAT 28-618		108	63	100	58	91	52	81	55	104	70	94	64	82	114	57	78	86	103	60	71
AT/UAT 28-718		116	72	109	67	100	60	90	63	113	79	103	73	91	122	65	87	95	112	68	80
AT/UAT 28-818		125	78	117	72	107	66	97	69	121	86	111	79	98	131	71	94	102	120	74	87
AT/UAT 28-918		129	82	121	76	111	70	100	73	125	89	114	82	101	---	75	97	106	124	78	90
AT/UAT 28-521		117	70	109	64	99	58	89	61	113	78	102	71	90	123	63	86	94	112	66	79
AT/UAT 28-621		121	76	113	70	103	64	93	67	117	83	107	77	95	127	69	90	99	116	72	84
AT/UAT 28-721		133	79	124	72	113	65	100	68	128	87	116	80	102	140	71	97	107	127	74	89
AT/UAT 28-821		143	89	133	82	122	75	110	78	138	97	126	90	112	150	81	107	117	137	84	99
AT/UAT 28-921		148	93	138	87	127	80	114	83	143	102	130	94	116	155	86	111	121	142	89	103
AT/UAT 28-524		136	85	127	79	116	72	105	75	131	93	120	86	106	143	78	101	111	130	81	94
AT/UAT 28-624		147	87	137	79	125	71	111	75	142	96	129	88	113	155	78	107	118	141	82	98
AT/UAT 28-724		157	98	147	90	135	82	121	86	152	107	139	99	123	165	89	117	128	151	93	109
AT/UAT 28-824		166	104	155	96	142	87	128	91	161	113	147	105	130	174	94	124	136	159	98	115
AT/UAT 28-924		172	109	161	101	148	93	133	97	166	118	152	110	135	---	100	129	141	165	104	120
AT/UAT 28-428		157	95	146	87	134	78	120	82	152	105	138	96	121	165	85	115	127	151	90	106
AT/UAT 28-528		172	101	160	93	146	83	130	88	166	113	151	103	132	181	91	125	138	165	96	114
AT/UAT 28-628		184	114	172	105	158	96	142	100	178	125	163	115	144	193	104	137	150	177	108	127
AT/UAT 28-728		191	119	179	110	164	100	148	105	185	131	169	120	150	201	108	143	156	184	113	132
AT/UAT 28-828		191	121	179	113	164	104	148	108	185	132	169	122	150	201	111	143	156	184	116	133
AT/UAT 28-928		199	126	186	117	171	108	154	112	193	137	176	127	156	---	116	149	163	191	120	139
AT/UAT 38-236		180	102	167	92	150	81	132	86	173	114	156	103	135	190	90	127	142	172	95	116
AT/UAT 38-336		193	115	180	106	164	95	146	100	187	128	169	117	149	203	103	141	156	185	109	130
AT/UAT 38-436		203	128	190	118	174	108	157	113	197	139	180	129	159	214	116	152	166	195	122	141
AT/UAT 38-536		220	130	205	119	187	106	166	112	213	144	193	132	169	232	117	160	177	211	123	147
AT/UAT 38-636		216	132	202	122	185	110	166	115	209	145	190	134	168	227	119	160	176	208	125	148
AT/UAT 38-736		236	146	221	135	202	123	182	128	229	161	209	148	185	248	133	176	193	227	139	163
AT/UAT 38-836		249	155	233	144	213	131	192	137	241	170	220	157	195	262	141	186	203	239	148	173
AT/UAT 38-936		258	163	241	152	221	140	200	146	250	178	228	165	203	---	150	193	211	248	156	180
AT/UAT 38-442		223	139	209	129	191	118	172	123	216	153	197	141	175	235	127	167	182	215	133	155
AT/UAT 38-542		258	152	240	139	219	125	194	131	249	169	226	154	198	271	137	187	207	247	144	172
AT/UAT 38-642		276	171	258	158	237	143	213	150	267	188	244	173	216	290	155	206	225	265	163	191
AT/UAT 38-742		287	179	268	165	246	150	221	157	278	196	253	181	225	301	162	214	234	276	170	199
AT/UAT 38-842		287	182	268	169	246	155	222	162	278	197	254	183	225	302	166	215	235	276	173	200
AT/UAT 38-942		298	189	279	176	256	162	231	168	289	205	264	191	234	---	173	224	244	287	181	208
AT/UAT 216-49		102	62	95	57	87	51	78	54	99	68	90	62	79	107	56	75	83	98	58	69
AT/UAT 216-59		107	63	99	57	91	51	80	54	103	70	94	64	82	112	56	77	86	102	59	71
AT/UAT 216-69		115	71	108	66	99	60	89	63	112	78	102	72	90	121	65	86	94	111	68	79
AT/UAT 216-79		118	75	111	70	101	64	92	67	115	81	105	75	93	124	69	89	97	114	71	83
AT/UAT 216-89		124	77	116	71	106	65	95	68	120	84	109	78	97	130	70	92	101	119	73	86
AT/UAT 216-99		127	81	119	75	109	69	99	72	123	88	113	81	100	---	74	96	104	122	77	89
AT/UAT 216-511		117	70	109	64	99	58	89	61	113	78	102	71	90	123	63	86	94	112	67	79
AT/UAT 216-611		133	79	124	72	113	65	101	69	128	88	117	80	102	140	71	97	107	127	75	89
AT/UAT 216-711		136	86	127	80	116	73	105	76	131	93	120	86	106	142	78	102	111	130	82	94
AT/UAT 216-811		143	89	133	82	122	75	110	78	138	97	126	90	112	150	81	107	117	137	85	99
AT/UAT 216-911		148	93	138	87	127	80	114	83	143	102	130	94	116	155	86	111	121	142	89	103
AT/UAT 216-312		126	75	117	68	107	61	95	65	122	83	110	76	97	132	67	92	101	121	71	84
AT/UAT 216-412		133	83	124	77	114	70	102	73	128	91	117	84	104	139	76	99	108	127	79	92
AT/UAT 216-512		143	84	134	77	122	69	108	73	139	94	126	85	110	151	75	104	115	138	80	95
AT/UAT 216-612		154	95	144	88	132	80	119	83	149	104	136	96	120	162	86	115	126	148	90	106
AT/UAT 216-712		160	101	150	94	137	87	124	90	155	110	142	102	126	168	93	120	131	154	97	112
AT/UAT 216-812		162	101	152	93	139	85	125	89	157	111	143	102	127	171	92	121	133	156	96	112
AT/UAT 216-912		168	106	157	99	144	91	130	95	163	116	149	107	132	177	98	126	138	162	102	117
AT/UAT 216-214		155	93	145	85	132	77	118	81	150	103	136	94	120	163	84	114	125	149	88	105
AT/UAT 216-314		162	102	152	95	139	87	125	90	157	111	143	103	127	171	93	121	133	156	97	113
AT/UAT 216-414		170	100	158	91	144	82	128	86	164	111	149	101	130	179	89	123	136	163	94	113
AT/UAT 216-514		169	104	158	95	145	86	130	90	164	114	149	105	132	178	94	125	138	163	98	116
AT/UAT 216-614		177	112	165	104	152	95	137	99	171	121	156	113	139	186	102	132	144	170	106	123
AT/UAT 216-714		182	113	170	104	156	94	140	99	176	123	161	114	142	191	102	135	148	175	107	125
AT/UAT 216-814		189	118	176	109	162	99	146	103	183	129	167	119	148	198	107	141	154	181	112	131
AT/UAT 216-914		197	124	184	116	169	107	152	111	190	135	174	126	154	207	114	147	161	189	119	137

* CE compliant AT/UAT cooling towers require a special protective fan screen. This fan screen reduces the indicated cooling capacity with 2%. This reduction is incorporated in the CTI certification.

Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.



AT/UAT

COOLING CAPACITY MODELS AT/UAT 19-56 TO 110-918

ENGINEERING

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 19-56		32	18	29	16	26	14	23	15	31	20	27	18	24	34	16	22	25	30	17	20
AT/UAT 19-66		34	20	32	18	29	16	25	17	33	22	30	20	26	36	18	24	27	33	19	22
AT/UAT 19-76		37	23	35	21	32	19	28	20	36	25	33	23	29	39	20	27	30	36	21	25
AT/UAT 19-86		40	25	37	23	34	21	31	22	39	27	35	25	31	42	22	30	33	38	23	28
AT/UAT 19-96		45	28	42	27	39	24	35	25	44	31	40	29	35	47	26	34	37	43	27	31
AT/UAT 19-28		39	22	36	20	32	17	28	18	37	24	34	22	29	41	19	27	30	37	20	25
AT/UAT 19-38		42	24	39	21	35	19	31	20	40	26	36	24	31	44	21	30	33	40	22	27
AT/UAT 19-48		44	26	41	23	37	21	33	22	43	28	39	26	34	47	23	32	35	42	24	29
AT/UAT 19-58		45	27	42	25	38	22	34	23	43	30	39	27	34	47	24	33	36	43	25	30
AT/UAT 19-68		48	29	45	27	41	24	37	25	46	32	42	30	37	50	26	35	39	46	28	33
AT/UAT 19-78		49	31	46	29	42	26	38	27	48	34	43	31	39	52	28	37	40	47	30	34
AT/UAT 19-88		52	32	49	30	45	27	40	28	50	35	46	33	41	55	29	39	43	50	31	36
AT/UAT 19-98		54	34	51	32	47	29	42	31	53	37	48	35	43	57	31	41	44	52	33	38
AT/UAT 26-517		64	36	59	32	53	29	47	30	61	40	55	36	48	67	32	45	50	61	33	41
AT/UAT 26-617		69	40	64	36	58	32	51	34	67	44	60	40	52	73	35	49	55	66	37	45
AT/UAT 26-717		74	45	69	42	64	37	57	39	72	50	66	46	58	78	41	55	60	72	43	51
AT/UAT 26-817		80	50	75	46	69	41	62	43	78	54	71	50	63	85	45	60	66	77	47	55
AT/UAT 26-917		90	57	84	53	78	49	70	51	87	62	80	58	71	95	52	68	74	87	55	63
AT/UAT 28-217		78	43	72	39	65	35	57	37	75	49	67	44	58	82	38	55	61	74	41	50
AT/UAT 28-317		83	47	77	43	70	38	62	40	80	53	72	48	63	88	42	59	66	80	45	54
AT/UAT 28-417		89	51	82	47	75	41	66	44	86	57	77	52	67	94	46	63	71	85	48	58
AT/UAT 28-517		89	54	83	49	76	44	68	47	86	59	78	54	69	94	48	66	72	86	51	60
AT/UAT 28-617		96	58	89	54	82	48	73	51	93	64	84	59	74	101	53	71	78	92	55	65
AT/UAT 28-717		98	62	92	58	84	53	76	55	95	67	87	63	77	103	57	74	80	94	59	68
AT/UAT 28-817		104	65	97	60	89	54	80	57	101	71	92	65	82	110	59	78	85	100	61	72
AT/UAT 28-917		109	69	102	64	93	59	84	61	105	75	96	69	85	114	63	82	89	105	66	76
AT/UAT 212-59		64	36	59	32	53	29	47	30	61	40	55	36	48	67	32	45	50	61	33	41
AT/UAT 212-69		69	40	64	36	58	32	51	34	67	44	60	40	52	73	35	49	55	66	37	45
AT/UAT 212-79		74	45	69	42	64	37	57	39	72	50	66	46	58	78	41	55	60	72	43	51
AT/UAT 212-89		80	50	75	46	69	41	62	43	78	54	71	50	63	85	45	60	66	77	47	55
AT/UAT 212-99		90	57	84	53	78	49	70	51	87	62	80	58	71	95	52	68	74	87	55	63
AT/UAT 215-29		78	43	72	39	65	35	57	37	75	49	67	44	58	82	38	55	61	74	41	50
AT/UAT 215-39		83	47	77	43	70	38	62	40	80	53	72	48	63	88	42	59	66	80	45	54
AT/UAT 215-49		89	51	82	47	75	41	66	44	86	57	77	52	67	94	46	63	71	85	48	58
AT/UAT 215-59		89	54	83	49	76	44	68	47	86	59	78	54	69	94	48	66	72	86	51	60
AT/UAT 215-69		96	58	89	54	82	48	73	51	93	64	84	59	74	101	53	71	78	92	55	65
AT/UAT 215-79		98	62	92	58	84	53	76	55	95	67	87	63	77	103	57	74	80	94	59	68
AT/UAT 215-89		104	65	97	60	89	54	80	57	101	71	92	65	82	110	59	78	85	100	61	72
AT/UAT 215-99		109	69	102	64	93	59	84	61	105	75	96	69	85	114	63	82	89	105	66	76
AT/UAT 110-112		83	50	78	46	71	41	63	43	81	55	73	51	64	88	45	61	67	80	47	56
AT/UAT 110-212		90	52	83	48	76	43	67	45	87	58	78	53	68	94	47	65	72	86	50	59
AT/UAT 110-312		90	55	84	51	77	46	69	48	87	61	80	56	70	95	50	67	73	87	52	62
AT/UAT 110-412		93	55	87	51	79	45	71	48	90	61	82	56	72	98	50	68	75	90	52	62
AT/UAT 110-512		96	59	90	55	82	49	74	52	93	65	85	60	75	101	54	71	78	92	56	66
AT/UAT 110-612		98	62	92	58	84	53	76	55	95	67	87	63	77	103	57	74	80	94	59	68
AT/UAT 110-712		101	62	94	58	86	52	78	55	97	69	89	63	79	106	57	75	82	97	59	70
AT/UAT 110-812		103	65	97	61	89	56	80	58	100	71	91	66	81	108	60	77	84	99	62	72
AT/UAT 110-912		108	68	101	64	92	58	83	61	104	74	95	69	85	---	63	81	88	104	65	75
AT/UAT 110-118		111	62	102	56	92	49	81	52	107	69	95	63	82	117	55	78	87	106	58	71
AT/UAT 110-218		111	69	104	64	95	58	86	61	108	76	98	70	87	117	63	83	91	107	66	77
AT/UAT 110-318		119	71	111	65	101	58	90	61	115	78	104	71	91	125	63	87	96	114	67	80
AT/UAT 110-418		124	71	115	65	104	58	92	61	120	79	108	72	94	131	63	89	98	119	67	81
AT/UAT 110-518		127	77	118	70	108	63	97	66	123	85	112	77	98	134	69	93	103	122	72	86
AT/UAT 110-618		134	81	125	75	114	67	102	71	129	90	118	82	104	141	73	99	108	128	77	91
AT/UAT 110-718		137	87	128	80	118	74	106	77	133	94	121	87	108	144	79	103	112	132	83	96
AT/UAT 110-818		145	90	136	83	124	75	112	78	141	98	128	91	113	153	81	108	118	140	85	100
AT/UAT 110-918		150	95	140	88	128	81	116	84	145	103	132	96	118	157	87	112	122	144	90	104

* CE compliant AT/UAT cooling towers require a special protective fan screen. This fan screen reduces the indicated cooling capacity with 2%. This reduction is incorporated in the CTI certification.

Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.

COOLING CAPACITY MODELS AT/UAT 210-124 TO 112-914

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 210-124		167	100	156	92	142	83	127	87	161	111	147	102	129	176	90	122	135	160	95	113
AT/UAT 210-224		179	105	167	96	152	86	134	90	173	117	157	106	137	189	94	129	144	172	99	119
AT/UAT 210-324		181	110	169	101	154	91	138	96	175	121	159	112	141	190	100	134	147	174	105	123
AT/UAT 210-424		187	111	174	101	159	91	141	95	181	123	164	112	143	197	99	136	150	179	104	125
AT/UAT 210-524		192	118	179	109	164	99	147	104	186	130	169	120	150	202	107	143	156	184	112	132
AT/UAT 210-624		196	124	183	115	168	106	152	110	190	135	173	125	154	206	114	147	160	189	118	137
AT/UAT 210-724		201	125	188	115	173	105	155	110	195	137	178	126	157	211	113	150	164	193	119	139
AT/UAT 210-824		206	131	193	122	177	112	160	116	200	142	182	132	162	217	120	155	169	198	125	144
AT/UAT 210-924		215	136	201	127	185	117	167	122	209	148	190	138	169	---	125	162	176	207	130	150
AT/UAT 210-136		221	124	204	112	184	98	162	105	213	139	191	125	165	234	109	155	173	211	116	141
AT/UAT 210-236		223	138	208	128	191	116	172	122	216	151	197	139	174	235	126	166	182	214	131	154
AT/UAT 210-336		238	141	221	129	202	116	180	122	230	157	208	143	183	250	126	173	191	228	133	159
AT/UAT 210-436		248	142	230	130	208	115	184	122	239	159	216	144	187	262	127	177	197	238	134	162
AT/UAT 210-536		254	153	237	140	216	126	193	133	246	169	223	155	196	267	137	187	205	244	145	172
AT/UAT 210-636		267	163	250	150	228	135	204	142	259	179	236	164	208	281	147	197	217	257	154	182
AT/UAT 210-736		275	173	257	161	236	147	212	153	266	189	243	175	216	289	158	206	225	264	165	191
AT/UAT 210-836		290	179	271	165	249	150	223	157	281	197	256	181	227	305	162	216	237	279	170	200
AT/UAT 210-936		300	189	280	176	257	162	232	169	290	206	265	191	235	315	173	225	245	288	181	209
AT/UAT 310-136		247	149	231	136	211	122	188	128	239	164	217	150	191	260	133	181	200	237	140	167
AT/UAT 310-236		265	155	247	141	224	127	199	133	256	172	232	157	202	280	139	192	212	255	146	175
AT/UAT 310-336		268	163	250	150	229	135	205	142	259	180	236	165	208	282	147	198	217	257	155	183
AT/UAT 310-436		277	163	258	149	235	134	209	141	268	181	243	165	212	291	146	201	222	266	154	184
AT/UAT 310-536		284	175	266	161	243	146	219	153	275	192	251	177	222	299	158	211	232	273	166	195
AT/UAT 310-636		291	184	272	171	250	157	225	163	282	200	257	185	228	306	168	218	238	280	175	203
AT/UAT 310-736		298	185	279	171	256	155	230	162	289	203	263	187	233	314	168	222	243	287	176	206
AT/UAT 310-836		306	193	286	180	263	165	237	172	296	211	270	195	240	322	177	229	250	294	185	213
AT/UAT 310-936		319	202	299	188	274	173	247	180	309	220	282	204	251	336	185	240	261	307	193	223
AT/UAT 310-154		328	183	303	165	273	145	240	155	316	205	283	185	244	348	162	230	257	313	171	209
AT/UAT 310-254		332	205	310	190	284	173	255	181	321	225	292	207	259	349	187	247	270	319	195	228
AT/UAT 310-354		353	209	329	191	300	171	267	181	342	232	310	212	271	372	187	257	284	339	198	236
AT/UAT 310-454		369	211	342	192	309	171	273	180	356	236	321	214	278	389	188	263	292	353	199	240
AT/UAT 310-554		378	227	352	208	322	187	287	197	365	251	332	230	292	397	204	277	305	363	215	255
AT/UAT 310-654		397	241	371	222	339	200	304	210	385	266	350	244	308	418	218	293	322	382	229	270
AT/UAT 310-754		409	257	382	239	350	219	316	228	396	280	361	260	320	430	235	306	334	393	245	284
AT/UAT 310-854		432	266	404	245	370	222	332	233	418	292	381	269	337	454	241	321	352	415	253	297
AT/UAT 310-954		446	281	417	262	382	240	345	250	431	306	394	284	350	468	258	334	364	428	269	311
AT/UAT 112-012		94	53	87	48	79	43	69	45	91	60	81	54	70	99	47	67	74	90	50	61
AT/UAT 112-112		101	58	94	53	85	47	75	50	98	65	88	59	77	107	52	72	81	97	55	66
AT/UAT 112-212		108	63	100	57	91	51	81	54	104	70	94	64	82	113	56	78	86	103	59	71
AT/UAT 112-312		108	66	101	61	92	55	83	57	105	73	95	67	84	114	59	80	88	104	62	74
AT/UAT 112-412		113	67	105	61	96	55	85	58	109	74	99	68	87	119	60	82	91	109	63	75
AT/UAT 112-512		111	70	104	65	95	59	86	62	107	76	98	71	87	117	64	83	91	107	67	77
AT/UAT 112-612		115	71	108	66	99	59	89	62	112	78	102	72	90	121	64	86	94	111	68	79
AT/UAT 112-712		122	76	114	70	105	64	94	67	118	83	108	77	96	128	69	91	100	117	72	84
AT/UAT 112-812		126	80	118	75	109	69	98	71	122	87	112	81	99	133	73	95	103	122	76	88
AT/UAT 112-912		135	86	126	80	116	73	105	76	131	93	120	86	106	---	79	101	111	130	82	94
AT/UAT 112-314		124	72	116	66	105	59	93	62	120	81	109	73	95	131	65	89	99	119	68	82
AT/UAT 112-414		126	77	118	71	108	64	96	67	122	85	111	78	98	133	69	93	102	121	73	86
AT/UAT 112-514		130	82	121	76	111	70	100	73	126	89	115	83	102	137	75	97	106	125	78	90
AT/UAT 112-614		133	82	125	76	114	68	103	72	129	90	118	83	104	140	74	99	109	128	78	92
AT/UAT 112-714		138	87	129	81	118	74	107	77	134	95	122	88	108	145	80	103	113	133	83	96
AT/UAT 112-814		145	90	136	83	124	76	112	79	140	99	128	91	114	152	82	108	118	139	86	100
AT/UAT 112-914		151	95	141	89	129	82	117	85	146	104	133	96	118	158	87	113	123	145	91	105

* CE compliant AT/UAT cooling towers require a special protective fan screen. This fan screen reduces the indicated cooling capacity with 2%. This reduction is incorporated in the CTI certification.

Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.



AT/UAT

COOLING CAPACITY MODELS AT/UAT 112-018 TO 312-936

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 112-018		147	84	136	76	123	68	109	72	142	94	128	85	111	155	75	105	116	141	79	95
AT/UAT 112-118		154	89	143	81	130	72	114	76	148	99	134	90	116	162	79	110	122	147	84	101
AT/UAT 112-218		156	94	146	87	133	78	119	82	151	104	138	96	121	165	85	115	127	150	89	106
AT/UAT 112-318		164	100	153	92	140	83	126	87	159	110	145	101	128	173	90	121	133	158	95	112
AT/UAT 112-418		169	107	158	99	145	91	131	94	164	116	149	108	132	178	97	127	138	162	102	118
AT/UAT 112-518		179	111	167	102	153	93	138	97	173	122	158	112	140	188	100	133	146	172	105	123
AT/UAT 112-618		185	117	173	109	159	100	143	104	179	127	164	118	145	195	107	139	151	178	112	129
AT/UAT 112-718		191	119	179	110	164	100	148	105	185	131	169	120	150	201	108	143	156	184	113	132
AT/UAT 112-818		199	126	186	117	171	108	154	112	192	137	176	127	156	---	115	149	163	191	120	139
AT/UAT 112-918		206	131	193	122	177	112	160	117	200	142	182	132	162	---	120	155	169	198	125	144
AT/UAT 112-520		186	109	173	100	158	89	140	94	180	121	163	111	142	196	98	135	149	178	103	123
AT/UAT 112-620		192	121	179	112	164	103	148	107	186	132	169	122	150	202	111	144	157	184	115	133
AT/UAT 112-720		201	124	188	115	172	104	155	109	194	136	177	126	157	211	113	150	164	193	118	138
AT/UAT 112-820		207	131	194	122	178	112	160	117	201	142	183	132	163	218	120	155	169	199	125	144
AT/UAT 112-920		215	136	201	127	184	116	166	121	208	148	190	137	169	226	125	161	176	206	130	150
AT/UAT 212-024		203	117	188	106	171	95	151	100	196	130	176	118	153	214	104	145	161	194	110	132
AT/UAT 212-124		200	120	187	110	170	99	152	104	193	133	176	121	154	211	108	147	162	192	113	135
AT/UAT 212-224		215	126	200	115	182	103	161	108	208	140	188	127	164	227	113	156	172	207	119	142
AT/UAT 212-324		216	132	202	121	185	109	165	115	209	145	190	133	168	227	119	160	176	208	125	147
AT/UAT 212-424		226	134	211	122	192	110	171	115	219	148	198	135	174	238	120	164	182	217	126	151
AT/UAT 212-524		231	142	216	131	198	119	178	125	224	156	204	144	180	243	129	172	188	222	135	159
AT/UAT 212-624		239	151	223	140	205	129	185	134	231	164	211	152	187	251	138	179	195	229	144	166
AT/UAT 212-724		244	152	228	140	209	127	188	133	236	166	216	153	191	257	138	182	199	235	144	169
AT/UAT 212-824		253	160	237	149	217	137	196	143	245	174	224	162	199	266	147	190	207	243	153	176
AT/UAT 212-924		270	171	253	160	232	147	209	153	262	186	239	173	212	---	157	203	221	260	164	189
AT/UAT 212-128		236	136	220	124	199	110	176	117	228	152	206	138	179	249	121	169	188	226	128	154
AT/UAT 212-228		237	143	221	130	202	117	180	123	229	158	208	144	183	249	128	174	191	227	135	160
AT/UAT 212-328		248	145	231	132	210	118	186	124	240	161	217	147	189	262	129	179	199	238	137	164
AT/UAT 212-428		252	154	236	141	216	127	193	134	244	169	222	155	196	265	139	186	205	242	146	172
AT/UAT 212-528		260	164	243	152	223	139	201	145	252	178	230	165	204	273	150	195	212	250	156	181
AT/UAT 212-628		267	164	249	151	228	137	205	144	258	180	236	166	208	281	148	198	217	256	156	183
AT/UAT 212-728		276	174	258	162	237	149	213	155	267	190	244	176	216	290	160	207	225	265	166	192
AT/UAT 212-828		290	181	271	167	249	151	224	159	281	198	256	182	227	305	164	217	237	279	172	201
AT/UAT 212-928		301	191	282	178	259	163	233	170	292	207	266	193	237	317	175	226	247	290	182	210
AT/UAT 212-036		296	177	276	162	252	145	224	153	286	196	260	179	228	312	158	216	239	284	167	199
AT/UAT 212-136		308	178	286	162	259	144	229	152	297	198	268	180	233	325	158	220	245	295	167	201
AT/UAT 212-236		320	201	299	186	274	170	247	178	309	219	282	203	250	336	183	239	261	307	191	222
AT/UAT 212-336		328	200	307	184	281	166	251	174	318	221	289	203	255	345	181	243	267	316	190	224
AT/UAT 212-436		338	213	316	198	290	181	261	189	327	232	298	215	265	355	195	253	276	325	203	235
AT/UAT 212-536		358	221	335	205	307	185	276	194	347	243	316	224	280	376	201	267	292	344	210	247
AT/UAT 212-636		370	234	346	218	318	200	287	209	359	255	327	236	291	389	215	278	303	356	224	258
AT/UAT 212-736		382	238	357	220	328	200	295	210	370	261	338	241	300	402	217	286	312	367	227	265
AT/UAT 212-836		397	252	372	235	341	216	308	224	385	274	351	254	312	---	231	298	325	382	240	277
AT/UAT 212-936		412	261	386	243	354	224	319	233	399	284	364	264	324	---	240	309	337	396	250	288
AT/UAT 312-036		307	178	285	162	259	144	229	152	297	198	268	180	233	324	158	220	244	294	167	201
AT/UAT 312-136		303	182	283	167	258	150	230	158	293	201	266	184	234	319	163	222	245	291	172	205
AT/UAT 312-236		326	191	304	175	276	156	245	165	315	212	286	194	249	344	171	236	262	313	181	216
AT/UAT 312-336		327	200	306	184	280	166	251	174	317	220	289	202	255	344	180	242	266	315	189	223
AT/UAT 312-436		336	212	314	197	288	180	260	188	325	231	297	214	264	354	194	252	275	323	202	234
AT/UAT 312-536		350	216	327	199	300	180	269	189	339	237	309	218	273	368	195	260	285	336	205	241
AT/UAT 312-636		361	228	338	213	310	195	280	203	350	249	319	231	284	380	209	271	296	347	218	252
AT/UAT 312-736		370	230	346	212	317	193	285	202	358	252	327	232	289	389	209	276	302	355	218	256
AT/UAT 312-836		383	242	358	226	329	208	296	216	371	264	339	245	301	403	222	287	313	368	232	267
AT/UAT 312-936		410	260	383	242	352	222	317	231	397	282	362	262	322	---	238	307	335	394	248	286

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Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.

COOLING CAPACITY MODELS AT/UAT 310-042 TO 220-918

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 312-042		335	198	312	182	284	163	253	171	323	220	293	201	257	352	178	244	269	321	187	224
AT/UAT 312-142		358	207	333	188	302	168	267	177	346	230	312	210	271	378	184	256	285	343	195	234
AT/UAT 312-242		342	213	319	198	293	180	263	188	331	233	302	215	267	359	194	255	279	328	203	237
AT/UAT 312-342		359	216	335	198	306	178	273	187	347	239	315	219	277	378	194	264	290	345	205	243
AT/UAT 312-442		382	233	357	214	327	193	293	203	370	257	337	236	297	402	211	283	310	367	221	261
AT/UAT 312-542		394	248	368	231	338	211	304	220	381	270	348	251	309	414	227	295	322	378	237	274
AT/UAT 312-642		404	249	378	229	346	208	311	218	391	274	357	252	315	425	225	301	329	388	236	278
AT/UAT 312-742		418	264	391	246	358	225	323	235	404	287	369	266	328	439	242	313	342	402	252	291
AT/UAT 312-842		439	274	411	253	377	230	339	241	425	300	388	276	344	462	249	328	359	422	260	304
AT/UAT 312-942		456	289	427	269	392	247	353	258	442	314	403	292	358	---	265	342	373	439	276	319
AT/UAT 312-054		464	268	431	244	391	217	345	230	448	299	404	272	351	489	239	332	369	444	252	304
AT/UAT 312-154		472	285	440	262	402	235	359	247	456	315	415	288	365	496	256	347	382	453	270	320
AT/UAT 312-254		504	297	469	271	427	243	379	256	487	329	441	300	386	530	266	365	404	483	280	335
AT/UAT 312-354		495	302	462	278	423	250	379	263	479	333	436	306	385	520	273	366	402	476	286	338
AT/UAT 312-454		509	321	476	298	437	273	394	285	493	350	450	324	399	536	293	381	416	490	306	355
AT/UAT 312-554		540	334	505	309	463	280	416	293	522	367	477	338	422	567	303	402	440	519	317	372
AT/UAT 312-654		558	353	522	329	479	302	432	314	541	384	493	356	438	587	323	419	456	537	337	389
AT/UAT 312-754		576	360	539	333	494	302	445	317	558	394	509	363	452	605	327	431	471	554	342	399
AT/UAT 312-854		599	379	560	353	514	325	464	338	580	413	530	383	470	---	348	449	490	576	362	418
AT/UAT 312-954		---	394	581	367	533	338	481	351	602	428	549	397	488	---	361	466	508	597	376	434
AT/UAT 312-260		476	282	443	258	403	231	359	243	460	313	417	285	365	501	252	347	382	456	266	318
AT/UAT 312-360		487	304	455	282	417	257	376	268	472	333	430	307	381	512	277	364	397	468	289	337
AT/UAT 312-460		555	326	517	298	470	267	417	281	536	362	486	330	425	585	292	402	445	532	308	368
AT/UAT 312-560		557	341	520	313	476	282	427	297	539	375	491	344	433	585	307	412	452	535	323	380
AT/UAT 312-660		572	361	535	336	491	307	442	320	554	393	506	364	449	602	330	429	468	550	345	398
AT/UAT 312-760		599	371	560	342	514	310	461	325	580	407	529	375	468	630	336	446	489	576	352	413
AT/UAT 312-860		618	391	578	364	530	334	478	348	599	425	546	395	485	650	358	463	506	594	373	431
AT/UAT 312-960		641	406	600	378	550	347	496	361	621	441	567	410	503	674	372	481	524	616	388	447
AT/UAT 220-112		167	100	156	92	142	83	127	87	161	111	147	102	129	176	90	122	135	160	95	113
AT/UAT 220-212		179	105	167	96	152	86	134	90	173	117	157	106	137	189	94	129	144	172	99	119
AT/UAT 220-312		181	110	169	101	154	91	138	96	175	121	159	112	141	190	100	134	147	174	105	123
AT/UAT 220-412		187	111	174	101	159	91	141	95	181	123	164	112	143	197	99	136	150	179	104	125
AT/UAT 220-512		192	118	179	109	164	99	147	104	186	130	169	120	150	202	107	143	156	184	112	132
AT/UAT 220-612		196	124	183	115	168	106	152	110	190	135	173	125	154	206	114	147	160	189	118	137
AT/UAT 220-712		201	125	188	115	173	105	155	110	195	137	178	126	157	211	113	150	164	193	119	139
AT/UAT 220-812		206	131	193	122	177	112	160	116	200	142	182	132	162	217	120	155	169	198	125	144
AT/UAT 220-912		215	136	201	127	185	117	167	122	209	148	190	138	169	---	125	162	176	207	130	150
AT/UAT 220-118		221	124	204	112	184	98	162	105	213	139	191	125	165	234	109	155	173	211	116	141
AT/UAT 220-218		223	138	208	128	191	116	172	122	216	151	197	139	174	235	126	166	182	214	131	154
AT/UAT 220-318		238	141	221	129	202	116	180	122	230	157	208	143	183	250	126	173	191	228	133	159
AT/UAT 220-418		248	142	230	130	208	115	184	122	239	159	216	144	187	262	127	177	197	238	134	162
AT/UAT 220-518		254	153	237	140	216	126	193	133	246	169	223	155	196	267	137	187	205	244	145	172
AT/UAT 220-618		267	163	250	150	228	135	204	142	259	179	236	164	208	281	147	197	217	257	154	182
AT/UAT 220-718		275	173	257	161	236	147	212	153	266	189	243	175	216	289	158	206	225	264	165	191
AT/UAT 220-818		290	179	271	165	249	150	223	157	281	197	256	181	227	305	162	216	237	279	170	200
AT/UAT 220-918		300	189	280	176	257	162	232	169	290	206	265	191	235	315	173	225	245	288	181	209

* CE compliant AT/UAT cooling towers require a special protective fan screen. This fan screen reduces the indicated cooling capacity with 2%. This reduction is incorporated in the CTI certification.

Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.



AT/UAT

COOLING CAPACITY MODELS AT/UAT 420-124 TO 424-936

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 420-124		332	200	310	183	283	164	252	173	321	221	292	202	256	349	179	243	268	319	189	224
AT/UAT 420-224		356	209	332	190	302	170	267	180	344	232	312	211	272	376	186	257	285	342	197	236
AT/UAT 420-324		359	219	336	202	307	182	275	191	348	242	317	222	280	378	198	266	292	345	208	245
AT/UAT 420-424		372	220	346	201	315	180	281	190	359	244	326	222	285	391	197	270	299	357	207	248
AT/UAT 420-524		382	235	357	217	327	196	293	206	369	258	337	238	298	401	213	284	311	367	223	262
AT/UAT 420-624		391	247	365	230	335	210	302	219	378	268	345	249	306	411	226	293	319	375	236	272
AT/UAT 420-724		400	249	374	230	343	208	309	218	388	273	354	251	313	421	226	299	327	385	236	277
AT/UAT 420-824		411	260	384	242	352	222	318	231	398	283	363	262	322	432	238	308	336	395	248	287
AT/UAT 420-924		429	271	401	253	368	232	332	242	415	295	379	274	337	451	249	322	351	412	259	299
AT/UAT 420-136		427	237	394	214	355	187	311	199	411	266	368	240	317	453	209	299	334	408	222	271
AT/UAT 420-236		433	267	404	247	370	225	333	235	419	293	382	270	338	455	243	321	352	416	254	297
AT/UAT 420-336		461	272	429	248	391	222	347	234	446	302	404	275	353	486	243	335	370	442	256	307
AT/UAT 420-436		480	274	445	249	402	221	355	233	463	306	417	277	361	508	243	341	380	460	258	311
AT/UAT 420-536		493	295	460	270	419	242	374	255	477	326	433	299	380	519	265	361	398	473	278	332
AT/UAT 420-636		519	314	484	288	442	259	396	272	502	347	457	317	402	546	282	382	420	498	297	352
AT/UAT 420-736		534	336	499	312	458	285	412	297	517	366	471	339	418	561	306	399	436	513	320	371
AT/UAT 420-836		564	347	527	319	483	288	433	303	546	381	498	350	440	593	313	419	459	542	329	387
AT/UAT 420-936		582	367	544	342	499	313	450	326	563	400	514	371	456	612	336	436	476	559	351	405
AT/UAT 224-018		294	168	273	153	247	136	218	143	284	188	256	170	221	311	149	209	233	282	158	191
AT/UAT 224-118		308	178	286	162	259	144	229	152	297	198	268	180	233	325	158	220	245	295	167	201
AT/UAT 224-218		313	189	292	173	267	156	238	164	303	209	275	191	242	329	170	230	253	300	179	212
AT/UAT 224-318		334	197	311	180	283	161	251	169	323	218	293	199	256	352	176	242	268	321	186	222
AT/UAT 224-418		328	200	307	184	281	166	251	174	318	221	289	203	255	345	181	243	267	316	190	224
AT/UAT 224-518		338	213	316	198	290	181	261	189	327	232	298	215	265	355	195	253	276	325	203	235
AT/UAT 224-618		358	221	335	205	307	185	276	194	347	243	316	224	280	376	201	267	292	344	210	247
AT/UAT 224-718		382	238	357	220	328	200	295	210	370	261	338	241	300	402	217	286	312	367	227	265
AT/UAT 224-818		397	252	372	235	341	216	308	224	385	274	351	254	312	---	231	298	325	382	240	277
AT/UAT 224-918		412	261	386	243	354	224	319	233	399	284	364	264	324	---	240	309	337	396	250	288
AT/UAT 224-720		376	237	351	220	322	202	291	210	364	258	332	239	295	395	217	282	307	361	226	262
AT/UAT 224-820		406	257	380	239	348	219	314	229	393	279	359	259	319	427	235	304	332	390	245	283
AT/UAT 224-920		421	266	394	248	361	228	326	237	408	290	372	269	331	443	244	316	344	405	254	294
AT/UAT 424-024		374	212	346	192	312	170	275	180	360	237	324	214	280	395	187	264	295	357	199	241
AT/UAT 424-124		403	232	375	211	339	188	300	199	389	259	351	235	305	425	207	288	320	386	218	263
AT/UAT 424-224		398	239	371	218	339	196	302	207	385	264	350	242	307	419	214	291	321	382	225	268
AT/UAT 424-324		429	250	399	228	362	204	321	215	414	278	375	253	327	452	224	309	343	411	236	283
AT/UAT 424-424		430	262	402	241	367	217	329	228	416	289	379	265	334	452	236	318	349	413	248	293
AT/UAT 424-524		450	266	419	243	382	218	340	229	435	295	394	269	345	474	238	327	362	432	251	300
AT/UAT 424-624		442	278	413	259	379	237	342	247	428	303	390	281	346	465	254	331	361	425	265	307
AT/UAT 424-724		460	283	430	261	394	236	353	248	445	311	406	286	359	483	256	342	375	442	269	316
AT/UAT 424-824		486	302	454	279	417	253	375	265	470	331	429	305	380	511	274	362	397	467	286	336
AT/UAT 424-924		538	341	503	318	462	292	417	304	521	371	476	344	423	---	313	404	440	518	326	376
AT/UAT 424-028		441	250	408	226	368	201	324	212	425	280	382	253	330	466	221	312	347	421	234	284
AT/UAT 424-128		438	272	409	252	375	230	337	240	424	298	386	275	342	460	248	327	357	421	259	302
AT/UAT 424-228		470	271	437	246	395	219	349	232	454	302	409	274	355	496	241	336	373	450	255	307
AT/UAT 424-328		471	283	440	259	401	233	358	245	456	313	414	287	364	496	254	346	381	453	268	318
AT/UAT 424-428		483	303	452	281	414	257	373	268	468	331	427	306	379	508	277	361	395	465	289	336
AT/UAT 424-528		502	305	469	281	429	253	384	266	486	337	442	309	390	528	276	371	408	483	289	342
AT/UAT 424-628		517	326	484	303	444	277	400	289	501	355	457	329	406	544	298	387	423	497	311	360
AT/UAT 424-728		531	326	496	301	455	272	408	285	514	359	469	330	414	558	295	394	432	510	310	364
AT/UAT 424-828		549	347	513	323	471	296	425	308	532	377	485	350	431	577	318	411	449	528	331	383
AT/UAT 424-928		600	380	561	354	515	325	464	338	581	413	530	383	471	631	348	450	491	577	363	419
AT/UAT 424-036		542	304	501	275	452	242	397	258	522	341	468	308	404	574	268	381	426	518	284	347
AT/UAT 424-136		570	323	528	292	476	260	420	275	549	361	493	327	427	602	286	403	449	545	303	368
AT/UAT 424-236		607	365	566	334	517	300	461	316	587	403	533	369	469	639	327	445	490	583	344	410
AT/UAT 424-336		648	378	603	345	548	309	485	326	626	421	567	383	494	683	338	468	518	621	357	428
AT/UAT 424-436		638	387	595	355	544	319	487	336	617	426	561	391	494	670	348	470	517	612	366	433
AT/UAT 424-536		656	413	613	383	563	351	507	366	635	450	580	417	514	690	377	491	536	631	394	456
AT/UAT 424-636		695	428	650	395	595	357	535	375	673	471	614	433	543	731	387	517	567	668	407	478
AT/UAT 424-736		742	462	694	426	636	387	573	405	718	506	656	466	581	780	419	554	606	713	438	513
AT/UAT 424-836		772	488	722	455	662	418	597	435	747	531	682	493	606	811	448	579	631	742	467	539
AT/UAT 424-936		801	507	749	473	687	434	620	452	775	551	708	512	629	---	465	601	655	770	484	559

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Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.

COOLING CAPACITY MODELS AT/UAT 114-0124 TO 428-1248

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT/UAT 114-0124		206	114	190	103	171	91	150	97	198	129	177	116	153	218	101	144	161	196	107	131
AT/UAT 114-0224		220	125	204	113	184	100	162	106	212	139	191	126	165	233	110	156	173	211	117	142
AT/UAT 114-0324		221	137	206	127	189	116	170	121	214	150	195	139	173	232	125	165	180	212	131	153
AT/UAT 114-0424		234	134	217	122	197	109	174	115	226	150	204	136	177	247	120	167	186	224	126	152
AT/UAT 114-0524		230	144	215	133	197	122	178	127	223	157	203	145	180	242	131	172	188	221	137	160
AT/UAT 114-0624		241	145	225	133	205	119	183	126	233	160	212	147	186	253	130	177	195	231	137	163
AT/UAT 114-0724		250	157	233	146	214	133	193	139	242	171	220	158	196	263	143	187	204	240	149	173
AT/UAT 114-0824		255	155	238	143	218	128	195	135	246	171	224	157	198	268	140	188	207	245	147	173
AT/UAT 114-0924		263	166	246	154	225	141	203	147	254	180	232	167	206	276	151	197	215	253	158	183
AT/UAT 114-1024		269	165	251	152	230	138	206	144	260	182	237	167	209	282	149	199	219	258	157	184
AT/UAT 114-1124		278	175	260	163	238	150	215	156	269	191	245	177	218	292	161	208	227	267	168	194
AT/UAT 114-1224		292	185	273	172	251	158	226	165	283	201	258	187	229	307	169	219	239	281	177	204
AT/UAT 214-0148		403	223	372	202	335	176	294	188	388	251	347	226	299	427	197	282	315	385	209	256
AT/UAT 214-0248		432	243	399	220	360	194	317	206	416	272	373	246	323	457	215	304	339	413	228	277
AT/UAT 214-0348		460	262	426	239	385	212	340	224	444	293	399	266	346	486	233	327	364	440	247	298
AT/UAT 214-0448		434	269	406	250	371	227	334	238	420	295	383	272	339	456	245	324	354	417	256	299
AT/UAT 214-0548		453	282	423	261	388	239	349	249	438	309	400	285	354	476	257	338	369	435	269	313
AT/UAT 214-0648		473	284	441	259	402	233	359	246	457	314	415	287	365	497	254	346	382	454	268	319
AT/UAT 214-0748		491	308	459	286	420	261	379	272	475	336	433	311	384	516	281	367	401	472	293	341
AT/UAT 214-0848		516	325	483	302	443	276	399	288	500	354	456	328	405	543	297	386	422	496	310	359
AT/UAT 214-0948		528	324	493	298	451	269	405	283	511	356	466	327	411	555	292	391	429	507	307	361
AT/UAT 214-1048		546	345	510	321	468	294	422	306	529	375	482	348	428	574	315	409	446	525	329	380
AT/UAT 214-1148		574	363	537	338	493	310	444	323	556	395	508	366	451	604	333	431	470	552	347	401
AT/UAT 314-0172		600	331	554	299	498	262	436	278	577	373	516	335	444	636	291	419	468	572	310	380
AT/UAT 314-0272		643	361	594	326	536	288	471	307	619	404	556	366	480	680	319	452	505	614	338	412
AT/UAT 314-0372		684	390	634	354	573	314	505	332	660	436	594	395	514	723	346	486	541	655	367	443
AT/UAT 314-0472		646	401	604	371	553	338	498	354	626	439	570	405	505	680	365	482	527	621	382	446
AT/UAT 314-0572		674	420	630	389	578	355	520	371	653	460	595	425	527	709	383	503	550	648	400	466
AT/UAT 314-0672		704	422	656	386	599	346	534	365	681	467	618	427	543	741	378	515	568	676	398	474
AT/UAT 314-0772		745	452	696	415	636	373	569	392	721	498	656	457	578	784	406	549	604	716	428	506
AT/UAT 314-0872		731	458	683	425	626	388	564	405	707	501	645	463	572	768	418	546	597	702	437	508
AT/UAT 314-0972		769	484	719	449	659	411	594	429	744	528	679	489	603	809	442	576	628	739	461	535
AT/UAT 314-1072		786	482	735	443	672	400	603	420	761	530	693	487	612	827	435	582	639	756	456	538
AT/UAT 314-1172		813	513	760	477	697	437	629	456	787	559	719	518	638	855	469	609	665	782	490	566
AT/UAT 314-1272		856	541	800	504	734	462	662	481	828	588	756	546	671	900	496	641	700	823	516	597
AT/UAT 228-0124		430	242	398	218	359	193	315	205	414	271	372	245	321	455	214	303	338	411	226	276
AT/UAT 228-0224		458	261	424	237	383	210	338	223	442	292	397	264	344	483	232	325	362	438	246	297
AT/UAT 228-0324		432	268	404	248	370	226	333	237	418	294	381	271	338	455	244	322	352	415	255	298
AT/UAT 228-0424		451	281	421	260	386	238	348	248	436	307	398	284	353	474	256	337	368	433	267	312
AT/UAT 228-0524		471	283	439	258	401	232	357	244	455	312	414	286	363	496	253	345	380	452	266	317
AT/UAT 228-0624		498	302	465	278	425	250	380	262	482	333	439	306	386	524	272	367	404	479	286	339
AT/UAT 228-0724		526	322	491	296	450	267	403	281	509	354	464	326	409	553	291	390	428	505	305	360
AT/UAT 228-0824		544	343	508	319	466	292	421	305	526	374	480	346	427	572	314	407	444	523	328	379
AT/UAT 228-0924		572	362	535	337	491	309	443	322	554	394	506	365	449	602	331	429	468	550	345	399
AT/UAT 428-0148		757	413	698	370	626	324	548	345	728	466	651	419	559	804	360	525	589	722	385	475
AT/UAT 428-0248		813	450	750	407	675	356	592	380	782	507	700	456	603	861	397	569	636	776	422	516
AT/UAT 428-0348		867	489	802	441	723	391	636	415	835	547	750	495	648	917	432	611	682	828	458	557
AT/UAT 428-0448		823	508	769	470	704	428	632	447	797	557	726	513	642	866	462	611	670	791	484	566
AT/UAT 428-0548		859	533	802	493	735	449	661	470	831	583	757	538	671	903	485	640	700	825	507	592
AT/UAT 428-0648		895	530	834	485	759	434	676	457	865	588	784	536	687	943	475	652	720	858	500	598
AT/UAT 428-0748		949	570	885	521	808	468	721	493	917	630	833	576	732	998	511	695	766	911	538	640
AT/UAT 428-0848		931	582	870	539	797	492	718	514	901	636	822	587	728	979	530	695	759	894	554	646
AT/UAT 428-0948		979	615	916	570	840	521	756	544	948	671	865	621	767	1030	561	732	800	941	586	680
AT/UAT 428-1048		1001	607	935	558	854	502	764	528	969	670	882	614	776	1053	547	738	812	962	576	680
AT/UAT 428-1148		1036	653	968	606	888	554	801	578	1003	711	915	659	812	1089	596	775	846	996	622	721
AT/UAT 428-1248		1090	688	1019	640	935	586	843	611	1055	749	963	694	855	1146	629	817	891	1048	657	759
AT/UAT 428-1348		1176	744	1100	693	1009	636	910	663	1139	809	1039	751	923	1236	682	882	962	1131	710	820

* CE compliant AT/UAT cooling towers require a special protective fan screen. This fan screen reduces the indicated cooling capacity with 2%. This reduction is incorporated in the CTI certification.

Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.



AT/UAT

COOLING CAPACITY

MODELS AT/UAT114-526 TO 456-926

Cooling capacity in l/s*																					
MODEL NO.	EWT	32	36	32	36	32	36	32	37	35	40	35	40	35	37	40	42	36	37	41	42
	LWT	27	26	27	26	27	26	27	27	30	30	30	30	30	32	30	32	31	32	31	32
	WB	19	19	20	20	21	21	22	22	24	24	25	25	26	26	26	26	27	27	27	27
AT 114-526		260	167	244	155	225	142	204	148	252	181	232	168	207	272	152	198	215	251	159	184
AT 114-626		277	179	261	167	241	153	219	160	269	195	248	181	222	290	164	212	230	268	171	198
AT 114-726		292	190	275	177	254	163	231	170	284	207	261	192	234	305	175	225	243	282	182	209
AT 114-826		316	209	298	195	277	179	252	187	307	226	284	211	255	330	192	245	265	306	200	229
AT 114-926		336	224	317	209	295	193	269	201	327	242	302	226	273	349	206	262	283	325	214	245
AT 214-552		511	327	480	304	443	278	401	290	496	357	456	330	406	535	299	389	423	493	312	361
AT 214-652		546	353	513	328	474	301	430	313	530	384	487	356	436	570	323	417	453	527	336	388
AT 214-752		575	374	541	349	501	320	455	333	558	407	514	378	461	600	343	442	479	555	358	412
AT 214-852		623	411	588	383	545	353	496	367	606	445	559	414	503	650	377	482	522	602	393	450
AT 214-952		662	440	625	411	580	379	530	395	644	476	596	444	537	689	405	515	556	640	422	482
AT 314-578		762	487	716	452	660	414	597	432	739	531	679	492	606	797	445	579	630	735	464	538
AT 314-678		814	525	765	488	707	447	641	467	790	571	726	530	650	850	480	622	675	785	501	579
AT 314-778		857	557	807	519	746	476	678	496	832	606	767	562	687	895	511	658	714	828	533	613
AT 314-878		929	612	876	571	812	525	739	547	903	663	834	617	749	969	562	718	777	898	585	671
AT 314-978		987	656	932	613	865	565	790	588	960	710	888	662	800	1028	604	768	829	955	628	718
AT 228-526		510	326	479	303	441	277	399	289	494	355	454	329	405	533	297	387	421	491	311	360
AT 228-626		544	351	511	326	472	299	428	312	528	382	486	354	435	568	321	416	451	525	335	387
AT 228-726		573	373	539	347	499	319	453	332	556	405	513	376	459	598	342	440	477	553	356	410
AT 228-826		621	409	586	382	543	351	494	365	603	443	557	413	501	647	376	480	520	600	391	449
AT 228-926		659	439	623	410	578	378	528	393	641	475	594	443	535	687	404	513	554	638	420	480
AT 428-552		1003	639	942	593	868	543	785	567	972	698	893	645	796	1049	584	760	828	967	610	707
AT 428-652		1071	690	1006	641	929	587	842	613	1039	751	955	696	854	1119	631	817	888	1033	658	760
AT 428-752		1128	732	1062	682	982	625	892	652	1095	796	1009	739	904	1179	671	865	939	1089	700	806
AT 428-852		1223	804	1153	750	1068	689	973	718	1189	872	1097	811	986	1276	738	945	1023	1182	769	883
AT 428-952		1300	863	1228	806	1139	742	1039	772	1264	934	1169	870	1053	1354	794	1010	1091	1257	825	944
AT 342-526		750	478	704	443	649	406	587	423	727	521	668	482	595	785	436	568	619	723	456	528
AT 342-626		801	515	752	479	695	439	630	458	777	561	714	520	638	837	471	611	664	772	492	568
AT 342-726		844	547	794	509	734	467	667	487	819	595	754	552	676	881	501	647	702	814	523	603
AT 342-826		915	601	862	560	799	515	727	537	889	652	820	606	737	954	552	706	765	884	574	660
AT 342-926		972	645	918	602	852	555	777	577	945	698	874	651	787	1013	593	755	816	940	617	706
AT 456-526		990	630	929	584	856	534	774	558	960	687	881	636	785	1036	575	750	817	954	600	696
AT 456-626		1057	679	993	631	917	578	831	604	1026	740	943	686	842	1105	621	806	876	1020	648	749
AT 456-726		1114	722	1048	672	969	616	880	642	1082	785	996	728	892	1164	661	854	926	1076	689	795
AT 456-826		1209	793	1139	739	1055	679	960	708	1174	860	1083	800	973	1261	728	932	1010	1168	758	871
AT 456-926		1285	851	1213	795	1125	732	1026	761	1249	921	1155	858	1039	1339	783	997	1078	1243	814	932

* CE compliant AT/UAT cooling towers require a special protective fan screen. This fan screen reduces the indicated cooling capacity with 2%. This reduction is incorporated in the CTI certification.

Note: For alternate selections and conditions other than those stated, consult the online selection program or your local EVAPCO representative.

AT-215-89L

NOMENCLATURE

Product Type
 AT – Indicates an AT tower
 UAT - An AT tower with stainless steel construction, 304L, 316L or a combination

of Cells
 Determined by the number of inlet connections, can be 1, 2, 3, or 4

Unit Width
 The total width of the unit in feet, all cells included. The value is rounded up to the next whole number

Capacity Indicator
 Relative performance indicator, an AT-215-89 has more capacity than an AT-215-49

Unit Length
 The total length of the unit in feet, all cells included. The value is rounded up to the next whole number

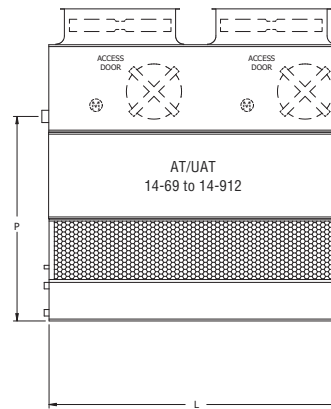
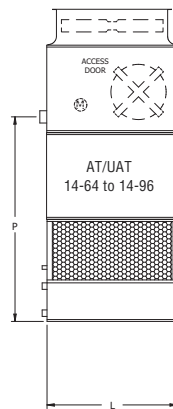
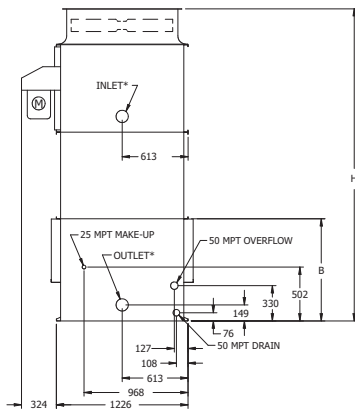
Other
 Some, but not all units end with a letter: L – Indicates a reduced horsepower motor
 U – Indicates a twice reduced horsepower motor
 S – Indicates a non-cataloged design

ENGINEERING DATA & DIMENSIONS

MODELS: AT 14-64 to 14-912

*14-64 to 14-99
(1) 100 Inlet MPT
(1) 100 Outlet MPT

*14-612 to 14-912
(1) 150 Inlet BFW
(1) 150 Outlet BFW



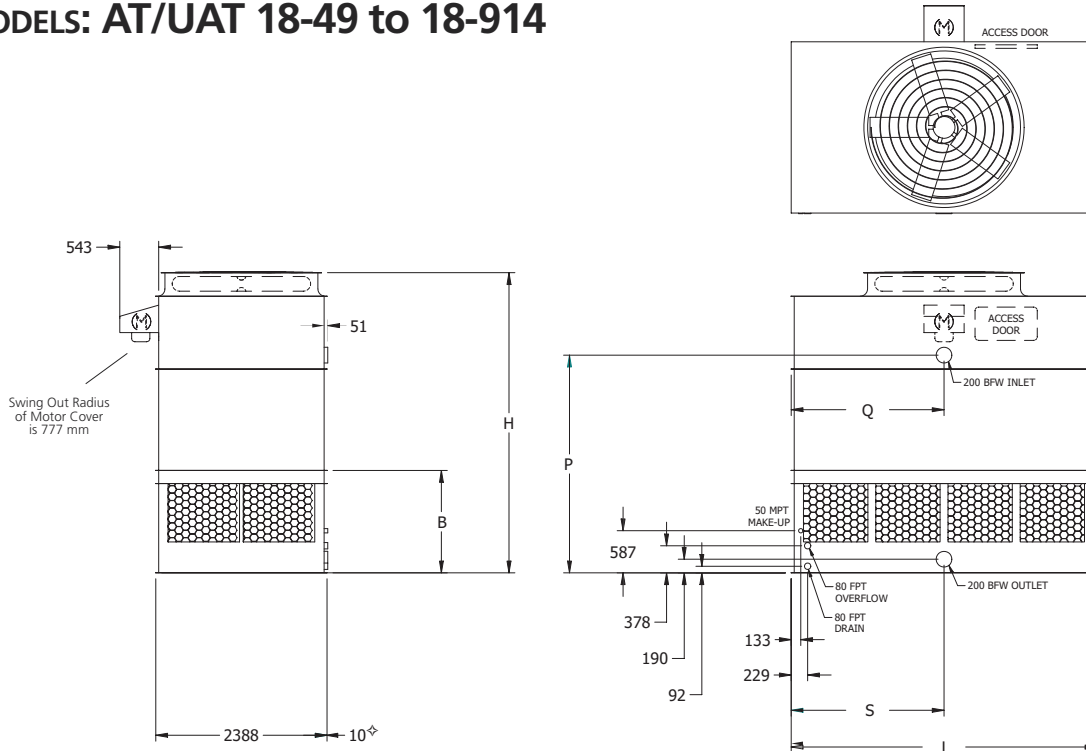
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	Heaviest Section (upper)			H [†]	B	P	L
AT 14-64	490	798	330	1,5	4,5	2908	952	1905	1213
AT 14-74	526	835	365	1,5	4,4	3213	952	2210	1213
AT 14-84	513	821	355	2,2	5,1	2908	952	1905	1213
AT 14-94	549	857	390	2,2	5,0	3213	952	2210	1213
AT 14-66	630	1116	430	2,2	7,2	2908	952	1905	1822
AT 14-76	676	1161	475	2,2	7,1	3213	952	2210	1822
AT 14-86	640	1125	440	4,0	8,5	2908	952	1905	1822
AT 14-96	685	1170	485	4,0	8,3	3213	952	2210	1822
AT 14-69	907	1633	625	(2)1,5	10,0	2908	952	1905	2737
AT 14-79	980	1705	700	(2)1,5	9,8	3213	952	2210	2737
AT 14-89	953	1678	670	(2)2,2	11,3	2908	952	1905	2737
AT 14-99	1025	1751	745	(2)2,2	11,1	3213	952	2210	2737
AT 14-612	1148	2132	805	(2)2,2	14,6	2908	952	1905	3651
AT 14-712	1238	2223	895	(2)2,2	14,3	3213	952	2210	3651
AT 14-812	1166	2150	820	(2)4,0	17,2	2908	952	1905	3651
AT 14-912	1256	2241	910	(2)4,0	16,8	3213	952	2210	3651

NOTE: An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

Unit dimensions and connections are subject to change to meet application requirements and shipping restrictions. See factory certified prints for detailed drawing information.

† Height includes fan guard which ships factory mounted.

MODELS: AT/UAT 18-49 to 18-914



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

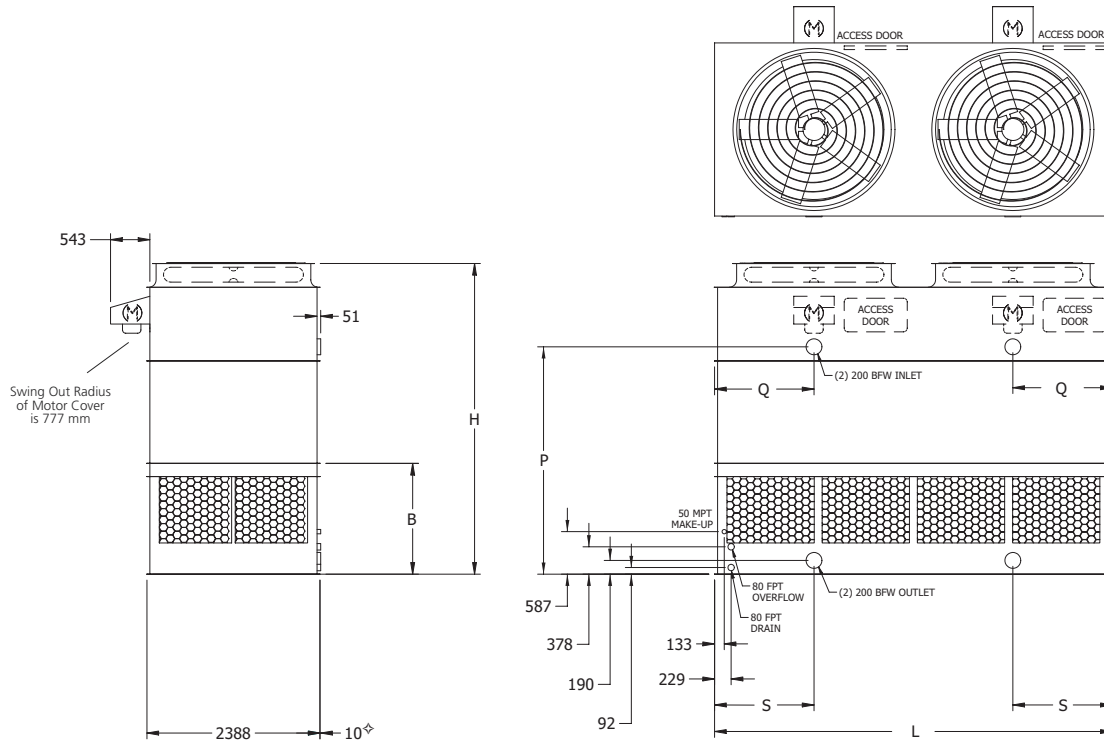
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)				
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L	S&Q
AT/UAT 18-49	1830	3050	1275	7,5	19,4	3769	1316	2619	2730	1365
AT/UAT 18-59	1745	2965	1195	11,0	22,5	3464	1316	2315	2730	1365
AT/UAT 18-69	1860	3080	1305	11,0	22,0	3769	1316	2619	2730	1365
AT/UAT 18-79	1985	3205	1435	11,0	21,7	4074	1316	2924	2730	1365
AT/UAT 18-89	1880	3105	1330	15,0	24,1	3769	1316	2619	2730	1365
AT/UAT 18-99	2010	3230	1455	15,0	23,7	4074	1316	2924	2730	1365
AT/UAT 18-511	2075	3495	1455	7,5	21,9	3769	1316	2619	3188	1594
AT/UAT 18-611	2000	3415	1380	15,0	27,8	3464	1316	2315	3188	1594
AT/UAT 18-711	2260	3675	1635	11,0	24,5	4074	1316	2924	3188	1594
AT/UAT 18-811	2130	3545	1510	15,0	27,3	3769	1316	2619	3188	1594
AT/UAT 18-911	2280	3695	1660	15,0	26,8	4074	1316	2924	3188	1594
AT/UAT 18-312	2305	3955	1605	7,5	24,4	3769	1316	2619	3651	1826
AT/UAT 18-412	2470	4120	1770	7,5	24,0	4074	1316	2924	3651	1826
AT/UAT 18-512	2210	3860	1510	15,0	31,0	3464	1316	2315	3651	1826
AT/UAT 18-612	2360	4010	1660	15,0	30,4	3769	1316	2619	3651	1826
AT/UAT 18-712	2520	4175	1825	15,0	29,9	4074	1316	2924	3651	1826
AT/UAT 18-812	2370	4025	1675	18,5	32,7	3769	1316	2619	3651	1826
AT/UAT 18-912	2535	4185	1835	18,5	32,1	4074	1316	2924	3651	1826
AT/UAT 18-214	2550	4485	1765	11,0	30,4	3880	1427	2730	4261	2130
AT/UAT 18-314	2735	4670	1950	11,0	29,8	4185	1427	3035	4261	2130
AT/UAT 18-414	2415	4350	1630	18,5	36,3	3575	1427	2426	4261	2130
AT/UAT 18-514	2570	4510	1785	15,0	33,2	3880	1427	2730	4261	2130
AT/UAT 18-614	2760	4695	1975	15,0	32,7	4185	1427	3035	4261	2130
AT/UAT 18-714	2585	4520	1800	18,5	35,6	3880	1427	2730	4261	2130
AT/UAT 18-814	2595	4530	1810	22,0	37,8	3880	1427	2730	4261	2130
AT/UAT 18-914	2780	4715	1995	22,0	37,1	4185	1427	3035	4261	2130

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

◇ Outlet connection extends 10mm beyond bottom flange.
 † Height includes fan guard which ships factory mounted

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 28-518 to 28-921



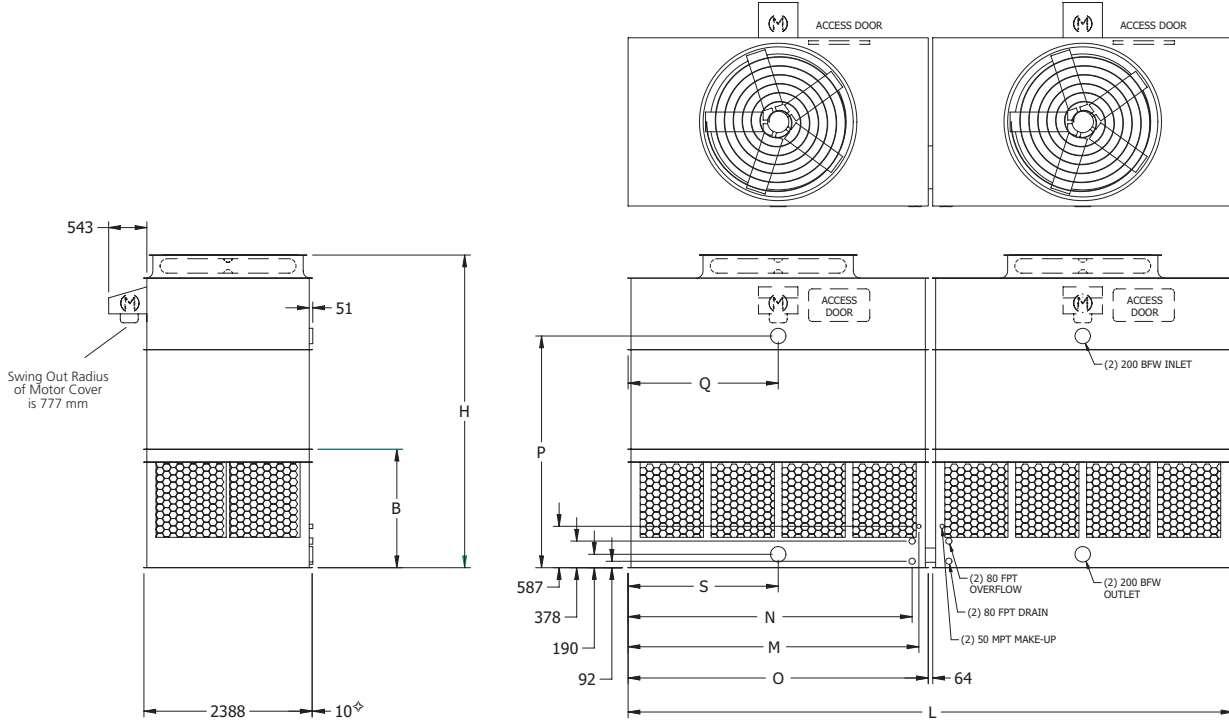
Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)				
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L	S&Q
AT/UAT 28-518	3685	6205	2605	(2) 5,5	35,2	4286	1529	3137	5486	1372
AT/UAT 28-618	3265	5790	2185	(2) 11,0	45,4	3677	1529	2527	5486	1372
AT/UAT 28-718	3490	6010	2410	(2) 11,0	44,5	3981	1529	2832	5486	1372
AT/UAT 28-818	3510	6035	2430	(2) 15,0	48,8	3981	1529	2832	5486	1372
AT/UAT 28-918	3750	6275	2670	(2) 15,0	47,9	4286	1529	3137	5486	1372
AT/UAT 28-521	3945	6915	2760	(2) 7,5	44,2	3981	1529	2832	6401	1600
AT/UAT 28-621	4225	7195	3040	(2) 7,5	43,4	4286	1529	3137	6401	1600
AT/UAT 28-721	3745	6720	2565	(2) 15,0	56,0	3677	1529	2527	6401	1600
AT/UAT 28-821	4000	6970	2815	(2) 15,0	54,9	3981	1529	2832	6401	1600
AT/UAT 28-921	4275	7250	3095	(2) 15,0	54,0	4286	1529	3137	6401	1600

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

- ◇ Outlet connection extends 10mm beyond bottom flange.
- † Height includes fan guard which ships factory mounted.

MODELS: AT/UAT 28-524 to 28-928



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)							
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L	S&Q	N	M	O
AT/UAT 28-524	4925	8230	1770	(2) 7,5	47,8	4286	1529	3137	7366	1826	3423	3518	3651
AT/UAT 28-624	4410	7710	1510	(2) 15,0	61,7	3677	1529	2527	7366	1826	3423	3518	3651
AT/UAT 28-724	4710	8010	1660	(2) 15,0	60,5	3981	1529	2832	7366	1826	3423	3518	3651
AT/UAT 28-824	4735	8040	1675	(2) 18,5	65,0	3981	1529	2832	7366	1826	3423	3518	3651
AT/UAT 28-924	5060	8365	1835	(2) 18,5	63,8	4286	1529	3137	7366	1826	3423	3518	3651
AT/UAT 28-428	5125	9000	1765	(2) 11,0	61,7	4134	1681	2984	8585	2130	4032	4128	4261
AT/UAT 28-528	4855	8725	1630	(2) 18,5	73,7	3829	1681	2680	8585	2130	4032	4128	4261
AT/UAT 28-628	5200	9070	1800	(2) 18,5	72,3	4134	1681	2984	8585	2130	4032	4128	4261
AT/UAT 28-728	5215	9090	1810	(2) 22,0	76,7	4134	1681	2984	8585	2130	4032	4128	4261
AT/UAT 28-828	5570	9445	1985	(2) 18,5	71,1	4439	1681	3289	8585	2130	4032	4128	4261
AT/UAT 28-928	5590	9460	1995	(2) 22,0	75,3	4439	1681	3289	8585	2130	4032	4128	4261

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

(4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.

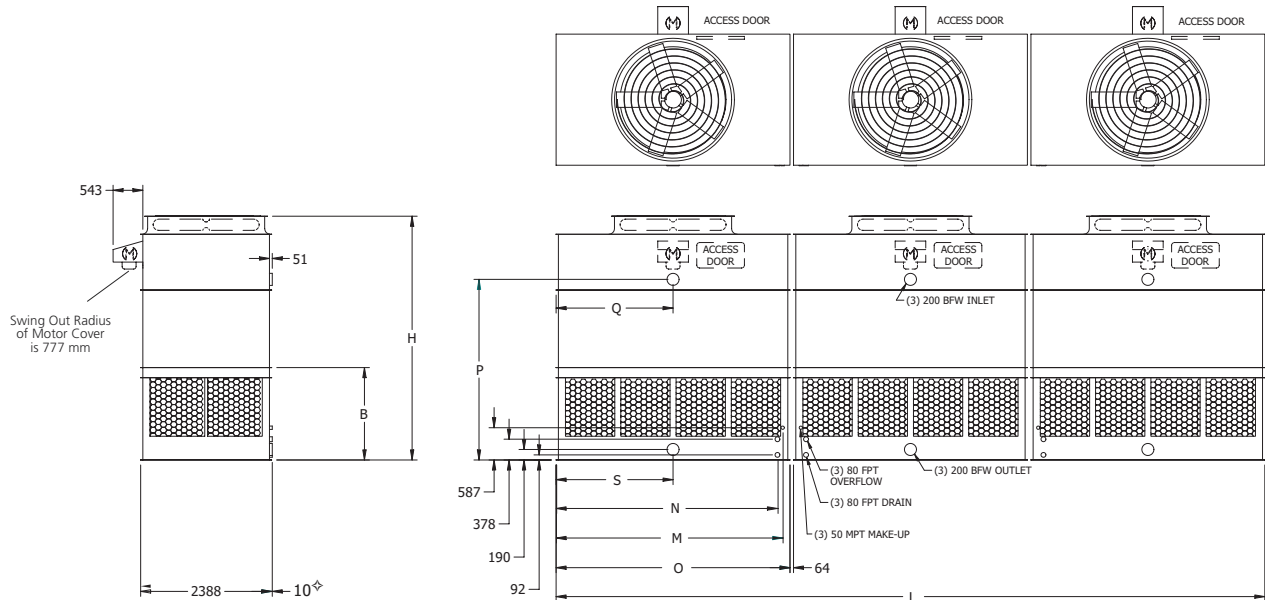
(5) "S&Q", "N", "M" and "O" dimension are similar for both cells.

◇ Outlet connection extends 10mm beyond bottom flange.

† Height includes fan guard which ships factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 38-236 to 38-942

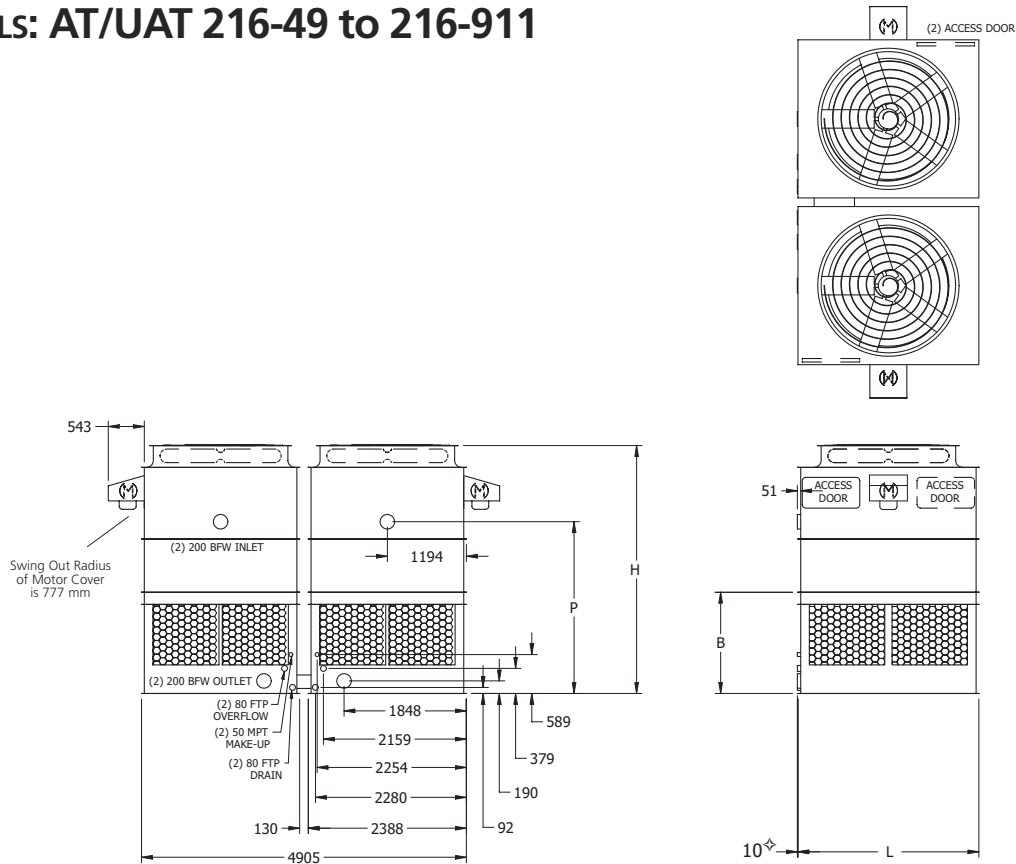


Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)							
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L	S&Q	N	M	O
AT/UAT 38-236	6490	11445	1455	(3) 7,5	73,8	3829	1681	2680	11081	1826	3423	3518	3651
AT/UAT 38-336	6940	11895	1605	(3) 7,5	72,6	4134	1681	2984	11081	1826	3423	3518	3651
AT/UAT 38-436	7430	12385	1770	(3) 7,5	71,3	4439	1681	3289	11081	1826	3423	3518	3651
AT/UAT 38-536	6655	11605	1510	(3) 15,0	92,0	3829	1681	2680	11081	1826	3423	3518	3651
AT/UAT 38-636	7035	11990	1635	(3) 11,0	82,4	4134	1681	2984	11081	1826	3423	3518	3651
AT/UAT 38-736	7105	12055	1660	(3) 15,0	90,2	4134	1681	2984	11081	1826	3423	3518	3651
AT/UAT 38-836	7145	12095	1675	(3) 18,5	96,9	4134	1681	2984	11081	1826	3423	3518	3651
AT/UAT 38-936	7635	12585	1835	(3) 18,5	95,2	4439	1681	3289	11081	1826	3423	3518	3651
AT/UAT 38-442	8135	13950	1920	(3) 7,5	79,4	4439	1681	3289	12910	2130	4032	4128	4261
AT/UAT 38-542	7265	13075	1630	(3) 18,5	110,0	3829	1681	2680	12910	2130	4032	4128	4261
AT/UAT 38-642	7785	13595	1800	(3) 18,5	107,9	4134	1681	2984	12910	2130	4032	4128	4261
AT/UAT 38-742	7810	13620	1810	(3) 22,0	114,4	4134	1681	2984	12910	2130	4032	4128	4261
AT/UAT 38-842	8340	14150	1985	(3) 18,5	106,1	4439	1681	3289	12910	2130	4032	4128	4261
AT/UAT 38-942	8370	14180	1995	(3) 22,0	112,4	4439	1681	3289	12910	2130	4032	4128	4261

- NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) Unit can operate as three (3) independent cells with the addition of two flume plates or water tight partition.
 (5) "S&Q", "N", "M" and "O" dimensions are similar for all the cells.
- ◇ Outlet connection extends 10mm beyond bottom flange.
 † Height includes fan guard which ships factory mounted.

MODELS: AT/UAT 216-49 to 216-911



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	(Upper) Heaviest Section			H†	B	P	L
AT/UAT 216-49	3655	6095	1275	(2) 7,5	38,4	4048	1529	2899	2730
AT/UAT 216-59	3495	5935	1195	(2) 11,0	44,5	3743	1529	2594	2730
AT/UAT 216-69	3720	6160	1305	(2) 11,0	43,6	4048	1529	2899	2730
AT/UAT 216-79	3975	6415	1435	(2) 11,0	43,0	4353	1529	3204	2730
AT/UAT 216-89	3765	6205	1330	(2) 15,0	47,9	4048	1529	2899	2730
AT/UAT 216-99	4020	6460	1455	(2) 15,0	47,0	4353	1529	3204	2730
AT/UAT 216-511	4155	6985	1455	(2) 7,5	44,2	4048	1529	2899	3188
AT/UAT 216-611	4000	6830	1380	(2) 15,0	56,0	3743	1529	2594	3188
AT/UAT 216-711	4520	7350	1635	(2) 11,0	49,4	4353	1529	3204	3188
AT/UAT 216-811	4265	7095	1510	(2) 15,0	55,0	4048	1529	2899	3188
AT/UAT 216-911	4565	7395	1660	(2) 15,0	54,0	4353	1529	3204	3188

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

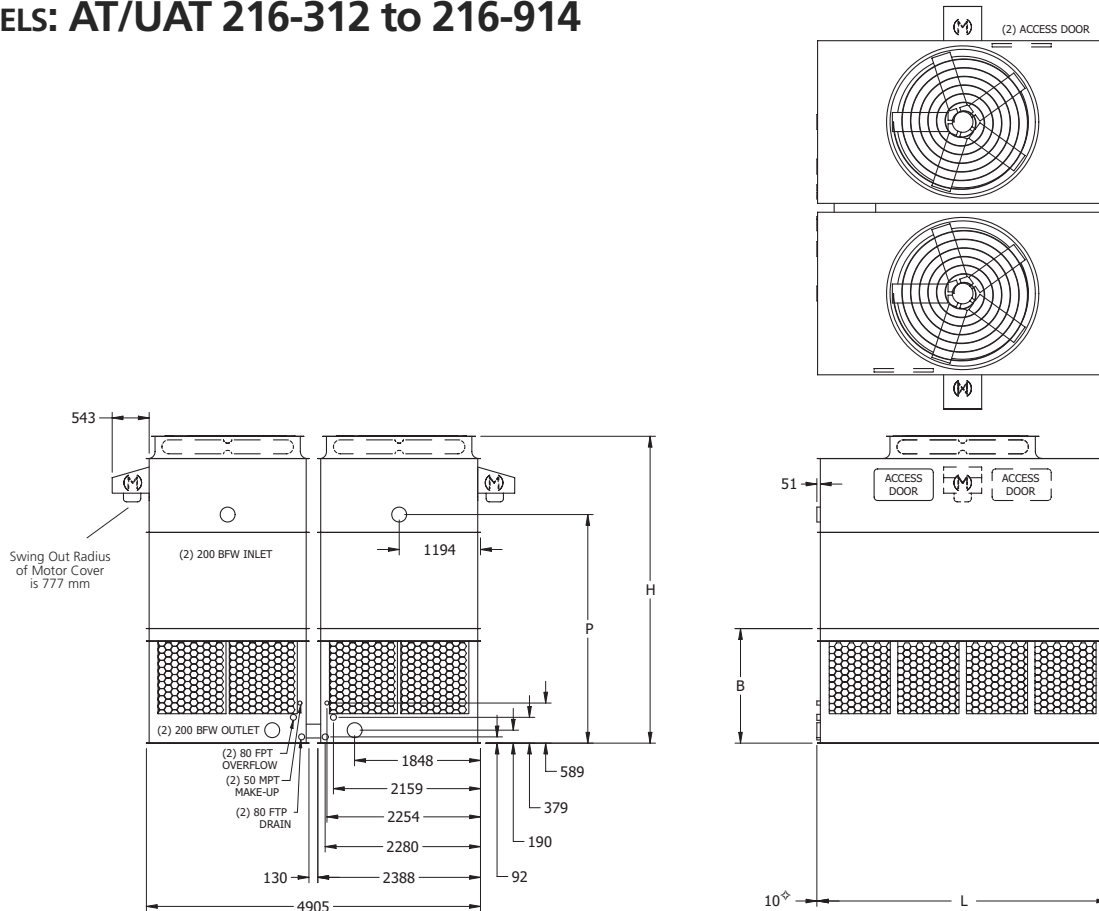
(4) These models are available as (2) independent operating cells. Consult the factory for details.

◇ Outlet connection extends 10 mm beyond bottom flange.

† Height includes fan guard which ships factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 216-312 to 216-914



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	(Upper) Heaviest Section			H†	B	P	L
AT/UAT 216-312	4610	7910	1605	(2) 7,5	48,0	4048	1529	2899	3651
AT/UAT 216-412	4935	8235	1770	(2) 7,5	47,1	4353	1529	3204	3651
AT/UAT 216-512	4420	7720	1510	(2) 15,0	60,8	3743	1529	2594	3651
AT/UAT 216-612	4715	8020	1660	(2) 15,0	59,6	4048	1529	2899	3651
AT/UAT 216-712	5045	8345	1825	(2) 15,0	58,7	4353	1529	3204	3651
AT/UAT 216-812	4745	8045	1675	(2) 18,5	64,1	4048	1529	2899	3651
AT/UAT 216-912	5070	8375	1835	(2) 18,5	62,9	4353	1529	3204	3651
AT/UAT 216-214	5100	8970	1765	(2) 11,0	61,6	4201	1681	3051	4261
AT/UAT 216-314	5470	9345	1950	(2) 11,0	60,5	4505	1681	3356	4261
AT/UAT 216-414	4825	8700	1630	(2) 18,5	73,6	3896	1681	2746	4261
AT/UAT 216-514	5145	9015	1785	(2) 15,0	67,4	4201	1681	3051	4261
AT/UAT 216-614	5515	9390	1975	(2) 15,0	66,2	4505	1681	3356	4261
AT/UAT 216-714	5170	9045	1800	(2) 18,5	72,2	4201	1681	3051	4261
AT/UAT 216-814	5190	9065	1810	(2) 22,0	76,6	4201	1681	3051	4261
AT/UAT 216-914	5560	9435	1995	(2) 22,0	75,3	4505	1681	3356	4261

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

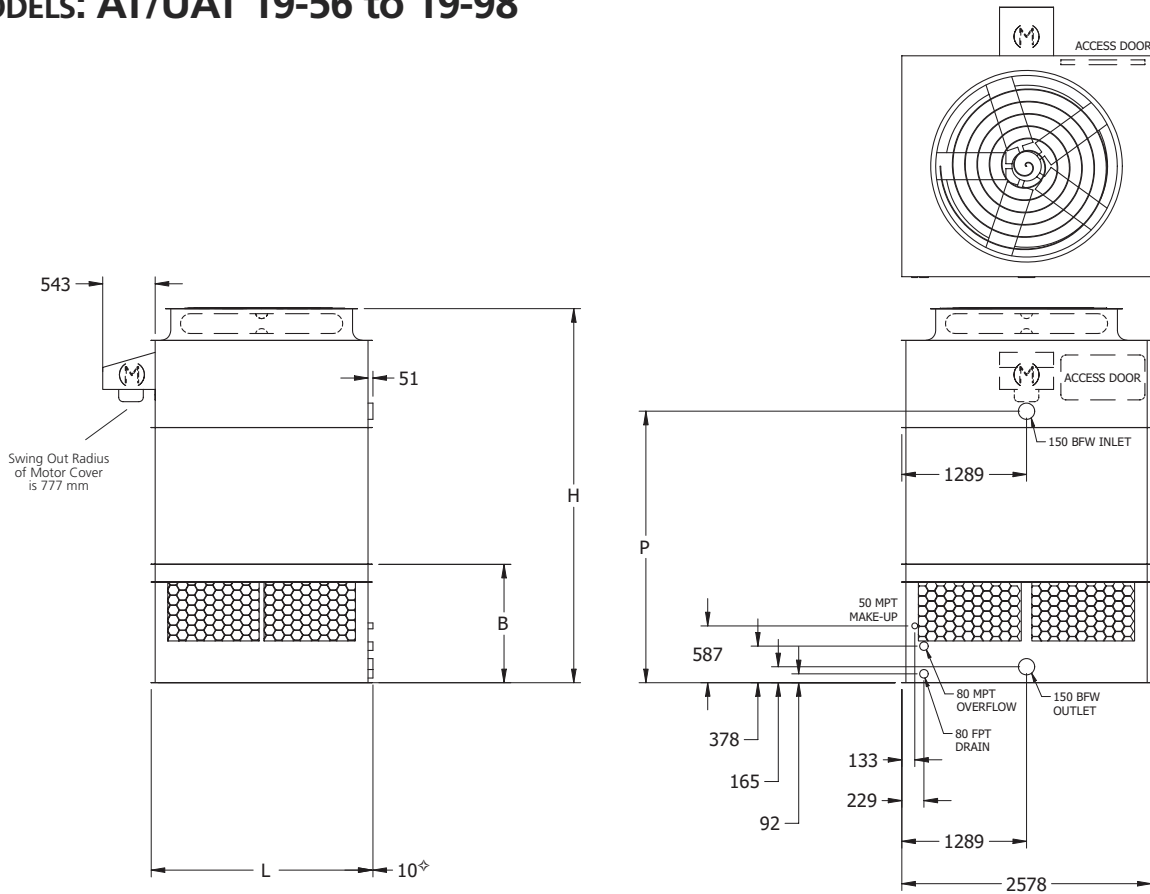
(3) Adequate spacing must be allowed for access to the cooling tower.

(4) These models are available as (2) independent operating cells. Consult the factory for details.

◇ Outlet connection extends 10 mm beyond bottom flange.

† Height includes fan guard which ships factory mounted.

MODELS: AT/UAT 19-56 to 19-98



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

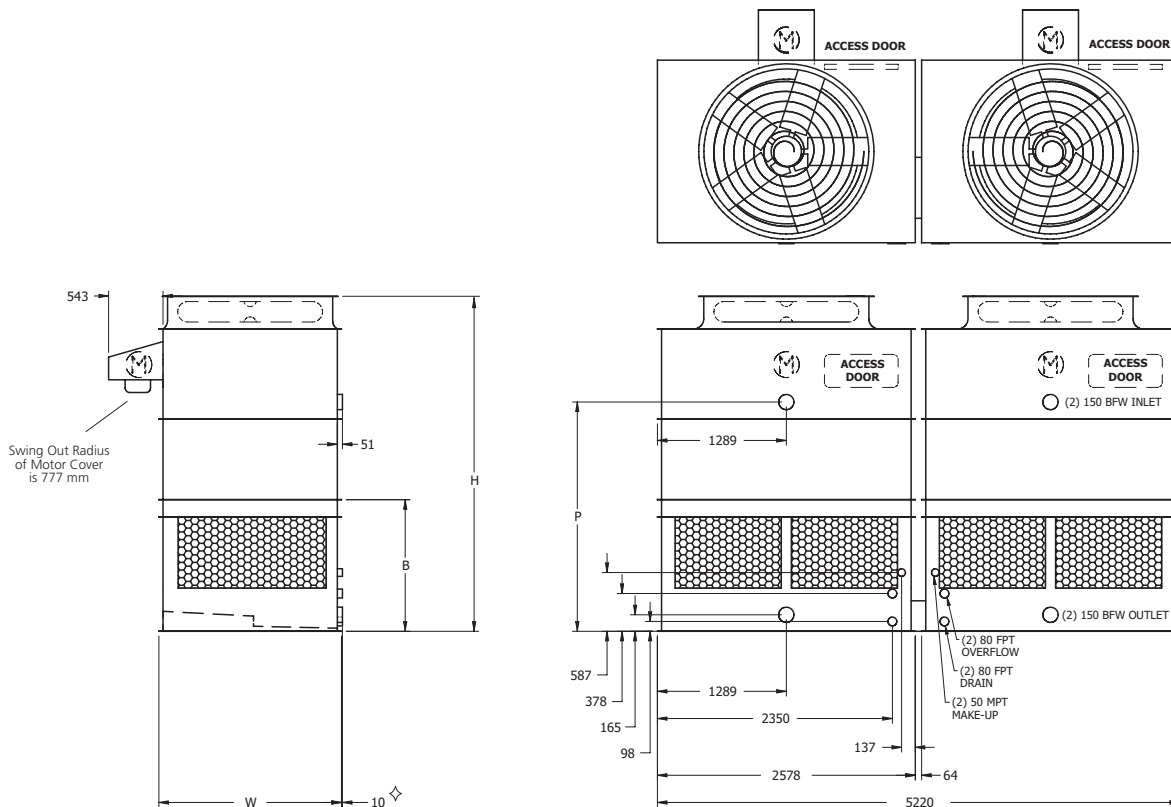
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L
AT/UAT 19-56	1390	2315	910	4,0	12,5	3258	1224	2197	1826
AT/UAT 19-66	1405	2330	930	5,5	14,2	3258	1224	2197	1826
AT/UAT 19-76	1495	2420	1020	5,5	14,0	3562	1224	2502	1826
AT/UAT 19-86	1510	2435	1035	7,5	15,3	3562	1224	2502	1826
AT/UAT 19-96	1640	2565	1165	11,0	17,1	3867	1224	2807	1826
AT/UAT 19-28	1565	2665	1035	4,0	14,7	3258	1224	2197	2283
AT/UAT 19-38	1585	2680	1050	5,5	16,8	3258	1224	2197	2283
AT/UAT 19-48	1595	2695	1065	7,5	18,5	3258	1224	2197	2283
AT/UAT 19-58	1685	2785	1155	5,5	16,5	3562	1224	2502	2283
AT/UAT 19-68	1700	2800	1170	7,5	18,1	3562	1224	2502	2283
AT/UAT 19-78	1825	2920	1295	7,5	17,8	3867	1224	2807	2283
AT/UAT 19-88	1730	2825	1195	11,0	20,6	3562	1224	2502	2283
AT/UAT 19-98	1850	2950	1320	11,0	20,3	3867	1224	2807	2283

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

◇ Outlet connection extends 10 mm beyond bottom flange.
 † Height includes fan guard which ships factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 26-517 to 28-917



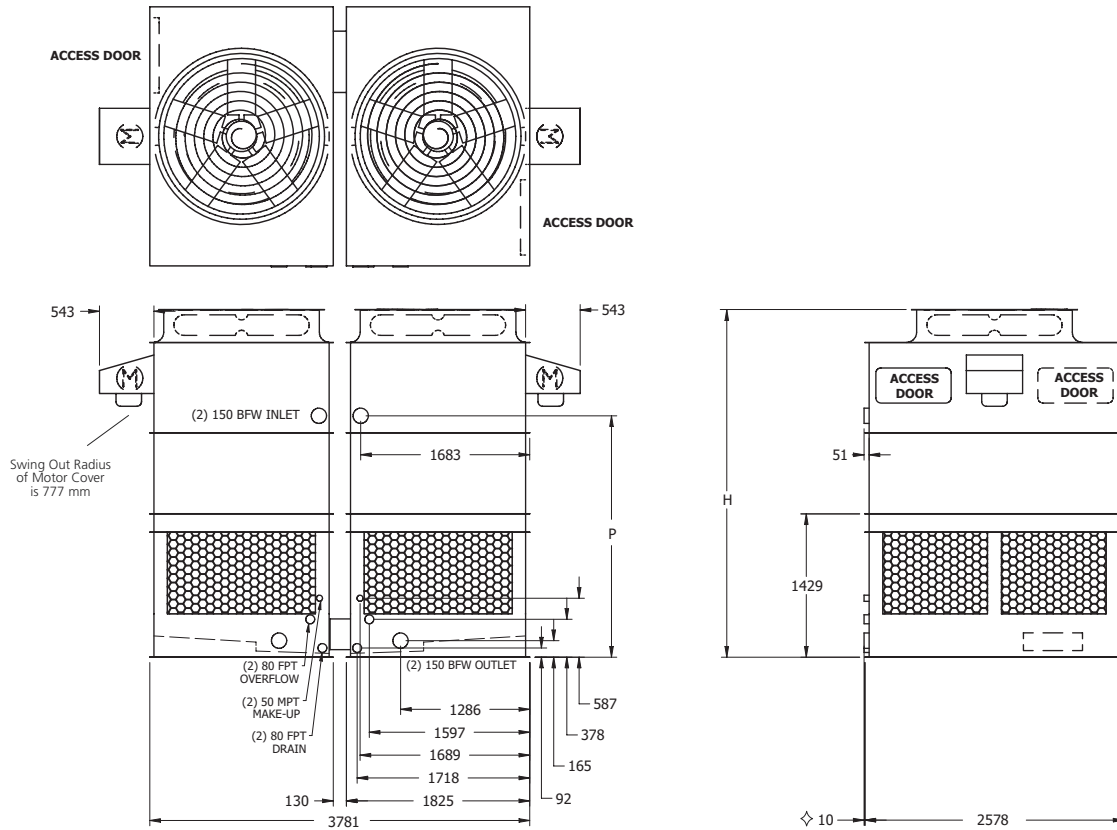
Note: for additional Weights and Heights of optional **Low & Super Low Sound Fan** execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	W
AT/UAT 26-517	2775	4625	910	(2) 4,0	25,1	3350	1318	2289	1826
AT/UAT 26-617	2810	4665	930	(2) 5,5	28,6	3350	1318	2289	1826
AT/UAT 26-717	2995	4845	1020	(2) 5,5	28,0	3654	1318	2594	1826
AT/UAT 26-817	3020	4870	1035	(2) 7,5	30,7	3654	1318	2594	1826
AT/UAT 26-917	3285	5135	1165	(2) 11,0	34,4	3959	1318	2918	1826
AT/UAT 28-217	3130	5325	1035	(2) 4,0	29,5	3461	1429	2400	2283
AT/UAT 28-317	3165	5360	1050	(2) 5,5	33,7	3461	1429	2400	2283
AT/UAT 28-417	3195	5390	1065	(2) 7,5	37,0	3461	1429	2400	2283
AT/UAT 28-517	3375	5570	1155	(2) 5,5	33,1	3766	1429	2705	2283
AT/UAT 28-617	3400	5595	1170	(2) 7,5	36,3	3766	1429	2705	2283
AT/UAT 28-717	3645	5840	1295	(2) 7,5	35,7	4070	1429	3010	2283
AT/UAT 28-817	3455	5650	1195	(2) 11,0	41,3	3766	1429	2705	2283
AT/UAT 28-917	3700	5895	1320	(2) 11,0	40,6	4070	1429	3010	2283

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) These models are available as (2) independent operating cells. Consult the factory for details.

◇ Outlet connection extends 10 mm beyond bottom flange.
 † Height includes fan guard which ships factory mounted.

MODELS: AT/UAT 212-59 to 212-99



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

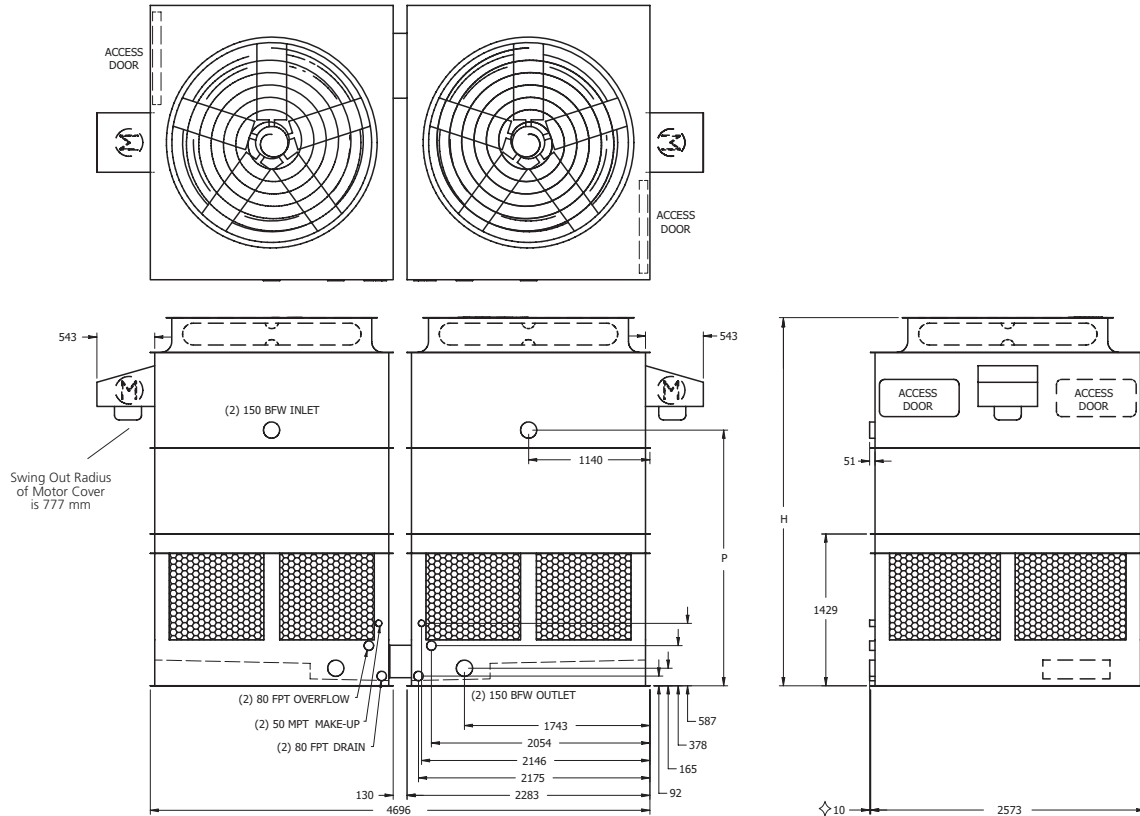
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)	
	Shipping	Operating	Heaviest Section (Upper)			H†	P
AT/UAT 212-59	2775	4625	910	(2) 4,0	25,1	3461	2400
AT/UAT 212-69	2810	4665	930	(2) 5,5	28,6	3461	2400
AT/UAT 212-79	2995	4845	1020	(2) 5,5	28,0	3766	2705
AT/UAT 212-89	3020	4870	1035	(2) 7,5	30,7	3766	2705
AT/UAT 212-99	3285	5135	1165	(2) 11,0	34,4	4070	3010

- NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) These models are available as (2) independent operating cells. Consult the factory for details.

◇ Outlet connection extends 10 mm beyond bottom flange.
 † Height includes fan guard which ships factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 215-29 to 215-99



Note: for additional Weights and Heights of optional **Low & Super Low Sound Fan** execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)	
	Shipping	Operating	Heaviest Section (Upper)			H †	P
AT/UAT 215-29	3130	5325	1035	(2) 4,0	29,5	3461	2400
AT/UAT 215-39	3165	5360	1050	(2) 5,5	33,7	3461	2400
AT/UAT 215-49	3195	5390	1065	(2) 7,5	37,0	3461	2400
AT/UAT 215-59	3375	5570	1155	(2) 5,5	33,1	3766	2705
AT/UAT 215-69	3400	5595	1170	(2) 7,5	36,3	3766	2705
AT/UAT 215-79	3645	5840	1295	(2) 7,5	35,7	4070	3010
AT/UAT 215-89	3455	5650	1195	(2) 11,0	41,3	3766	2705
AT/UAT 215-99	3700	5895	1320	(2) 11,0	40,6	4070	3010

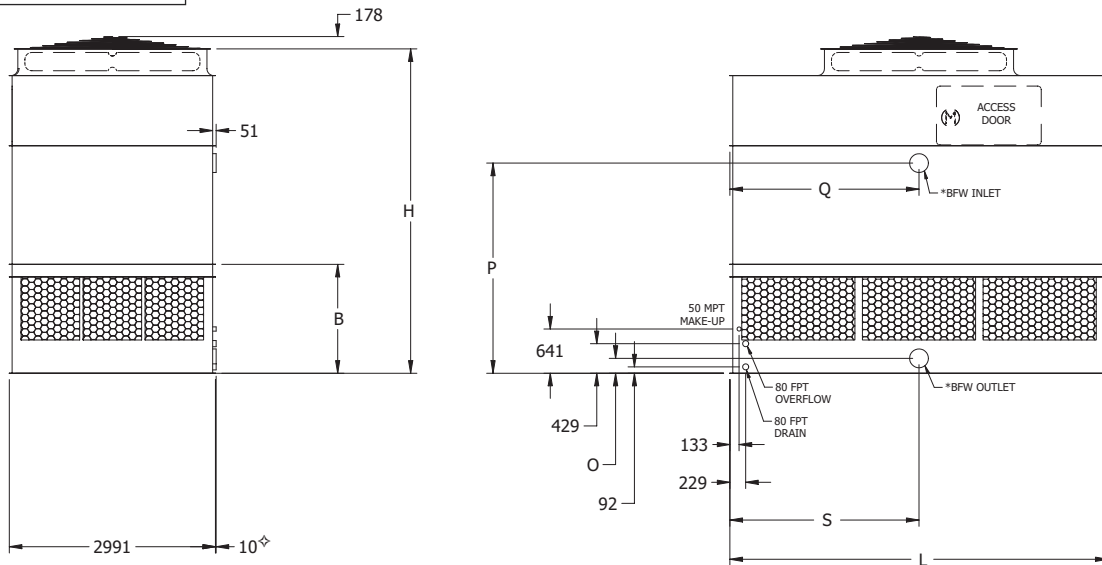
NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) These models are available as (2) independent operating cells. Consult the factory for details.

- ◇ Outlet connection extends 10 mm beyond bottom flange.
- † Height includes fan guard which ships factory mounted.

MODELS: AT/UAT 110-112 to 110-918

*AT/UAT 110-112 thru 912
(1) 200mm Inlet
(1) 200mm Outlet

AT/UAT 110-118 thru 918
(1) 250mm Inlet
(1) 250mm Outlet



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)				
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L	S&Q
AT/UAT 110-112	3105	5615	2155	11,0	34,1	4401	1580	2769	3651	1826
AT/UAT 110-212	2930	5445	1980	18,5	40,8	4096	1580	2464	3651	1826
AT/UAT 110-312	3125	5640	2175	15,0	37,3	4401	1580	2769	3651	1826
AT/UAT 110-412	2975	5490	2030	22,0	43,3	4096	1580	2464	3651	1826
AT/UAT 110-512	3150	5660	2200	18,5	40,0	4401	1580	2769	3651	1826
AT/UAT 110-612	3340	5850	2390	18,5	39,4	††4705	1580	3073	3651	1826
AT/UAT 110-712	3195	5705	2245	22,0	42,4	4401	1580	2769	3651	1826
AT/UAT 110-812	3385	5895	2435	22,0	41,7	†† 4705	1580	3073	3651	1826
AT/UAT 110-912	3495	6010	2550	30,0	43,8	†† 4705	1580	3073	3651	1826
AT/UAT 110-118	4040	7855	2615	15,0	50,6	4096	1580	2438	5486	2743
AT/UAT 110-218	4620	8430	3190	11,0	44,7	†† 4705	1580	3048	5486	2743
AT/UAT 110-318	4355	8170	2925	15,0	49,8	4401	1580	2743	5486	2743
AT/UAT 110-418	4110	7925	2680	22,0	57,6	4096	1580	2438	5486	2743
AT/UAT 110-518	4375	8190	2950	18,5	53,4	4401	1580	2743	5486	2743
AT/UAT 110-618	4425	8235	2995	22,0	56,5	4401	1580	2743	5486	2743
AT/UAT 110-718	4710	8525	3280	22,0	55,6	†† 4705	1580	3048	5486	2743
AT/UAT 110-818	4535	8350	3105	30,0	61,9	4401	1580	2743	5486	2743
AT/UAT 110-918	4820	8635	3395	30,0	60,9	†† 4705	1580	3048	5486	2743

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
(3) Adequate spacing must be allowed for access to the cooling tower.

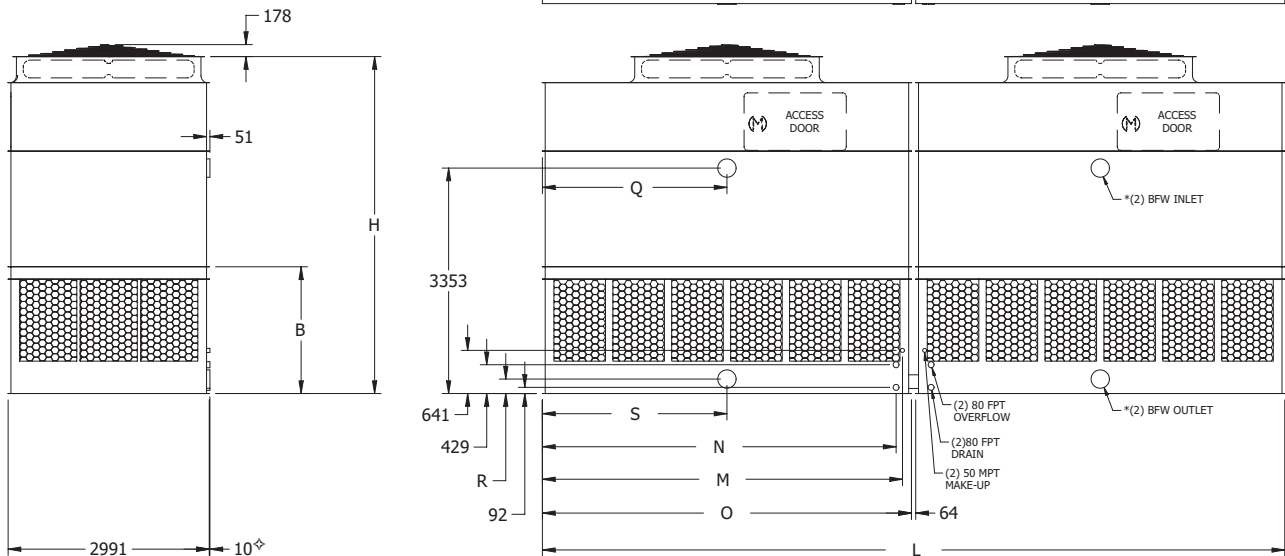
- ◇ Outlet connection extends 10mm beyond bottom flange.
- † Height does not includes fan guard.
- †† Fan guard which ships loose for field mounting.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 210-124 to 210-936

*AT/UAT 210-124 thru 924
(2) 200mm Inlet
(2) 200mm Outlet

*AT/UAT 210-136 thru 936
(2) 250mm Inlet
(2) 250mm Outlet



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)								
	Shipping	Operating	Heaviest Section (Upper)			H [†]	B	P	L	S&Q	N	M	O	R
AT/UAT 210-124	6285	11315	2155	(2) 11,0	68,2	4705	1884	3073	7366	1826	3423	3518	3651	184
AT/UAT 210-224	5940	10970	1980	(2) 18,5	81,6	4401	1884	2769	7366	1826	3423	3518	3651	184
AT/UAT 210-324	6330	11360	2175	(2) 15,0	74,6	4705	1884	3073	7366	1826	3423	3518	3651	184
AT/UAT 210-424	6035	11060	2030	(2) 22,0	86,5	4401	1884	2769	7366	1826	3423	3518	3651	184
AT/UAT 210-524	6380	11405	2200	(2) 18,5	80,1	4705	1884	3073	7366	1826	3423	3518	3651	184
AT/UAT 210-624	6760	11785	2390	(2) 18,5	78,8	5010	1884	3378	7366	1826	3423	3518	3651	184
AT/UAT 210-724	6470	11495	2245	(2) 22,0	84,8	4705	1884	3073	7366	1826	3423	3518	3651	184
AT/UAT 210-824	6850	11875	2435	(2) 22,0	83,5	5010	1884	3378	7366	1826	3423	3518	3651	184
AT/UAT 210-924	7075	12100	2550	(2) 30,0	87,6	5010	1884	3378	7366	1826	3423	3518	3651	184
AT/UAT 210-136	8255	15880	2615	(2) 15,0	101,2	4401	1884	2743	11036	2743	5258	5353	5486	216
AT/UAT 210-236	9410	17030	3190	(2) 11,0	89,4	5010	1884	3353	11036	2743	5258	5353	5486	216
AT/UAT 210-336	8880	16505	2925	(2) 15,0	99,5	4705	1884	3048	11036	2743	5258	5353	5486	216
AT/UAT 210-436	8390	16015	2680	(2) 22,0	115,1	4401	1884	2743	11036	2743	5258	5353	5486	216
AT/UAT 210-536	8925	16550	2950	(2) 18,5	106,7	4705	1884	3048	11036	2743	5258	5353	5486	216
AT/UAT 210-636	9015	16640	2995	(2) 22,0	113,0	4705	1884	3048	11036	2743	5258	5353	5486	216
AT/UAT 210-736	9590	17215	3280	(2) 22,0	111,2	5010	1884	3353	11036	2743	5258	5353	5486	216
AT/UAT 210-836	9245	16870	3105	(2) 30,0	123,7	4705	1884	3048	11036	2743	5258	5353	5486	216
AT/UAT 210-936	9815	17440	3395	(2) 30,0	121,7	5010	1884	3353	11036	2743	5258	5353	5486	216

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

(4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.
"N", "M", "O", "S&Q" dimension are similar for both cells.

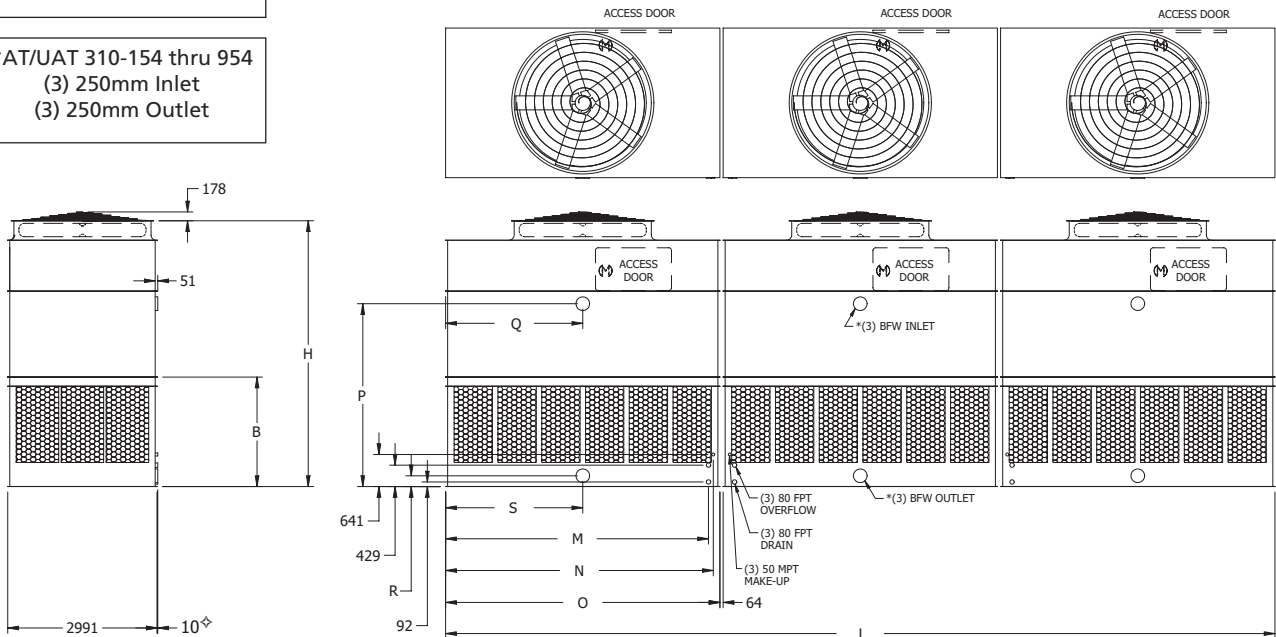
◇ Outlet connection extends 10mm beyond bottom flange.

† Height does not include fan guard.

MODELS: AT/UAT 310-136 to 310-954

*AT/UAT 310-136 thru 936
(3) 200mm Inlet
(3) 200mm Outlet

*AT/UAT 310-154 thru 954
(3) 250mm Inlet
(3) 250mm Outlet



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m³/s)	Dimensions (mm)								
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L	S&Q	N	M	O	R
AT/UAT 310-136	9540	17080	2155	(3) 11,0	102,4	5010	2189	3378	11081	1826	3423	3518	3651	184
AT/UAT 310-236	9020	16560	1980	(3) 18,5	122,6	4705	2189	3073	11081	1826	3423	3518	3651	184
AT/ UAT 310-336	9605	17145	2175	(3) 15,0	112,1	5010	2189	3378	11081	1826	3423	3518	3651	184
AT/UAT 310-436	9160	16695	2030	(3) 22,0	130,0	4705	2189	3073	11081	1826	3423	3518	3651	184
AT/UAT 310-536	9675	17215	2200	(3) 18,5	120,3	5010	2189	3378	11081	1826	3423	3518	3651	184
AT/UAT 310-636	10245	17785	2390	(3) 18,5	118,5	5315	2189	3683	11081	1826	3423	3518	3651	184
AT/UAT 310-736	9810	17350	2245	(3) 22,0	127,5	5010	2189	3378	11081	1826	3423	3518	3651	184
AT/UAT 310-836	10385	17920	2435	(3) 22,0	125,4	5315	2189	3683	11081	1826	3423	3518	3651	184
AT/UAT 310-936	10725	18260	2550	(3) 30,0	131,6	5315	2189	3683	11081	1826	3423	3518	3651	184
AT/UAT 310-154	12370	23810	2615	(3) 15,0	152,0	4705	2189	3048	16586	2743	5258	5353	5486	216
AT/UAT 310-254	14100	25535	3190	(3) 11,0	134,2	5315	2189	3658	16586	2743	5258	5353	5486	216
AT/UAT 310-354	13310	24750	2925	(3) 15,0	149,5	5010	2189	3353	16586	2743	5258	5353	5486	216
AT/UAT 310-454	12575	24015	2680	(3) 22,0	173,0	4705	2189	3048	16586	2743	5258	5353	5486	216
AT/UAT 310-554	13375	24815	2950	(3) 18,5	160,3	5010	2189	3353	16586	2743	5258	5353	5486	216
AT/UAT 310-654	13515	24950	2995	(3) 22,0	169,8	5010	2189	3353	16586	2743	5258	5353	5486	216
AT/UAT 310-754	14370	25810	3280	(3) 22,0	167,1	5315	2189	3658	16586	2743	5258	5353	5486	216
AT/UAT 310-854	13855	25290	3105	(3) 30,0	185,8	5010	2189	3353	16586	2743	5258	5353	5486	216
AT/UAT 310-954	14710	26150	3395	(3) 30,0	182,9	5315	2189	3658	16586	2743	5258	5353	5486	216

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

(4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.

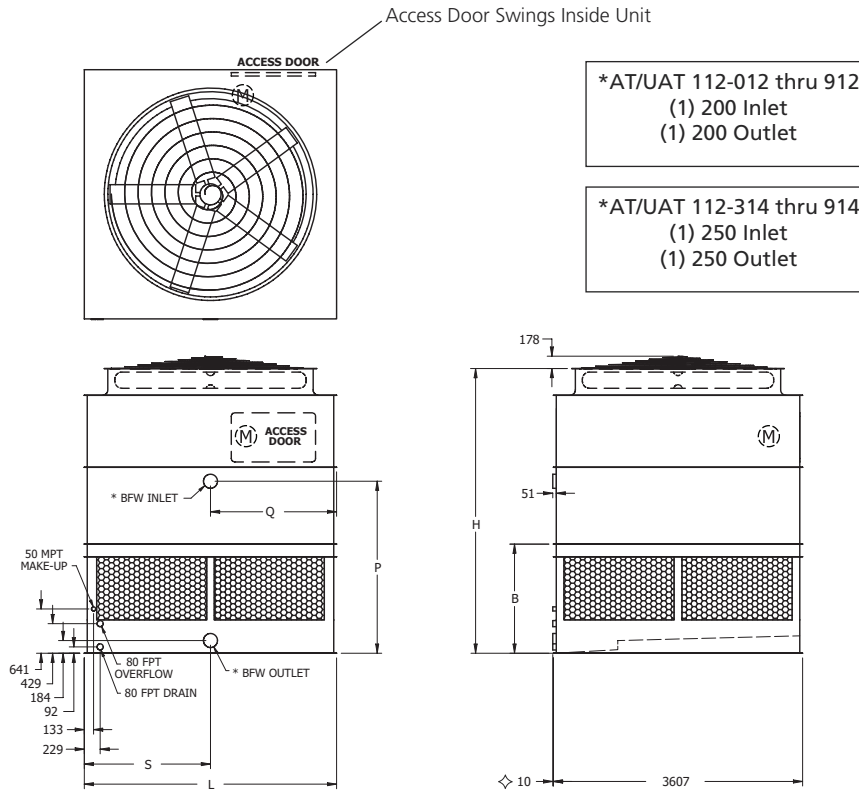
"N", "M", "O", "S&Q" dimension are similar for both cells.

◇ Outlet connection extends 10mm beyond bottom flange.

† Height does not include fan guard.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 112-012 to 112-914



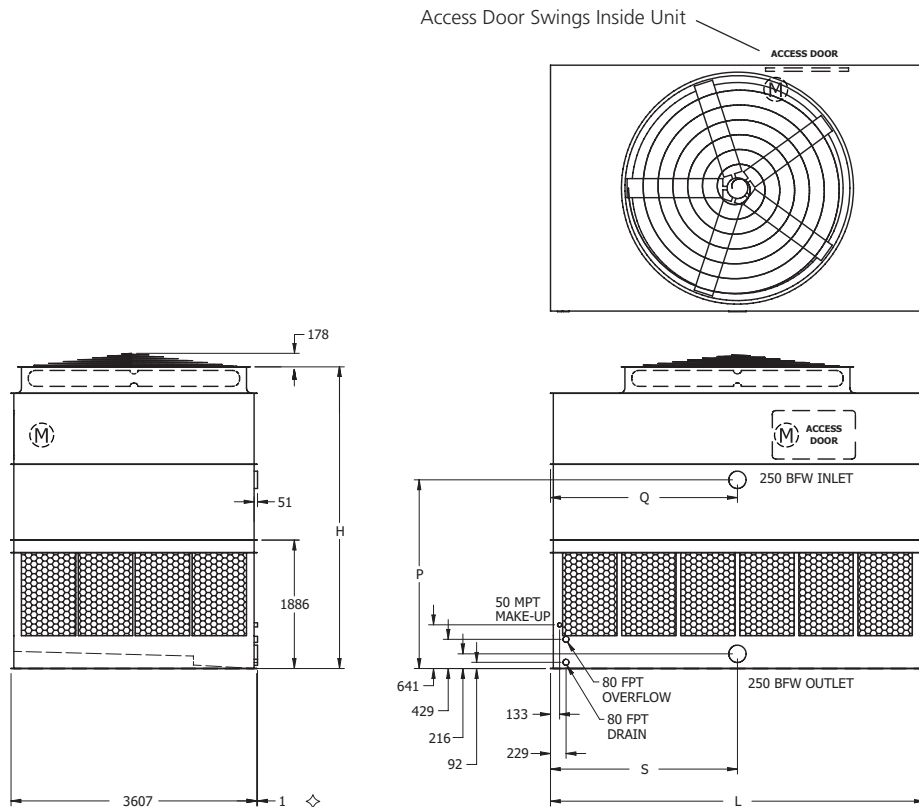
Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L
AT/UAT 112-012	3375	6190	2270	11,0	38,4	4121	1581	2489	3651
AT/UAT 112-112	3395	6215	2290	15,0	42,1	4121	1581	2489	3651
AT/UAT 112-212	3420	6235	2315	18,5	45,2	4121	1581	2489	3651
AT/UAT 112-312	3640	6460	2535	15,0	41,4	4426	1581	2794	3651
AT/UAT 112-412	3465	6280	2360	22,0	47,9	4121	1581	2489	3651
AT/UAT 112-512	3865	6680	2760	15,0	40,7	†† 4731	1581	3099	3651
AT/UAT 112-612	3665	6480	2560	18,5	44,4	4426	1581	2794	3651
AT/UAT 112-712	3710	6525	2605	22,0	47,0	4426	1581	2794	3651
AT/UAT 112-812	3935	6750	2825	22,0	46,2	†† 4731	1581	3099	3651
AT/UAT 112-912	4045	6865	2940	30,0	50,6	†† 4731	1581	3099	3651
AT/UAT 112-314	3750	7075	2550	22,0	52,1	4274	1734	2616	4261
AT/UAT 112-414	4020	7345	2815	18,5	48,3	4578	1734	2921	4261
AT/UAT 112-514	4255	7580	3055	18,5	47,5	†† 4883	1734	3226	4261
AT/UAT 112-614	4050	7375	2850	22,0	51,1	4578	1734	2921	4261
AT/UAT 112-714	4285	7610	3085	22,0	50,3	†† 4883	1734	3226	4261
AT/UAT 112-814	4170	7495	2965	30,0	56,0	4578	1734	2921	4261
AT/UAT 112-914	4405	7730	3200	30,0	55,0	†† 4883	1734	3226	4261

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

- ◇ Outlet connection extends 10mm beyond bottom flange.
- † Height does not include fan guard.
- †† Fan Guard ships loose for field mounting.

MODELS: AT/UAT 112-018 to 112-920



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	Heaviest Section (Upper)			H†	P	L	S&Q
AT/UAT 112-018	4705	8910	3090	18,5	61,2	4426	2769	5486	2743
AT/UAT 112-118	4755	8960	3140	22,0	64,9	4426	2769	5486	2743
AT/UAT 112-218	5060	9260	3445	18,5	60,2	4731	3073	5486	2743
AT/UAT 112-318	5105	9310	3495	22,0	63,7	4731	3073	5486	2743
AT/UAT 112-418	5445	9650	3830	22,0	62,7	†† 5036	3378	5486	2743
AT/UAT 112-518	5225	9430	3610	30,0	69,7	4731	3073	5486	2743
AT/UAT 112-618	5560	9765	3945	30,0	68,6	†† 5036	3378	5486	2743
AT/UAT 112-718	5255	9455	3640	37,0	74,8	4731	3073	5486	2743
AT/UAT 112-818	5590	9795	3975	37,0	73,5	†† 5036	3378	5486	2743
AT/UAT 112-918	5640	9845	4025	45,0	77,9	†† 5036	3378	5486	2743
AT/UAT 112-520	5215	9935	3490	37,0	78,1	4426	2769	6096	3048
AT/UAT 112-620	5930	10645	4200	30,0	70,3	†† 5036	3378	6096	3048
AT/UAT 112-720	5545	10265	3820	37,0	76,6	4731	3073	6096	3048
AT/UAT 112-820	5955	10675	4225	37,0	75,3	†† 5036	3378	6096	3048
AT/UAT 112-920	6002	10725	4275	45,0	79,8	†† 5036	3378	6096	3048

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

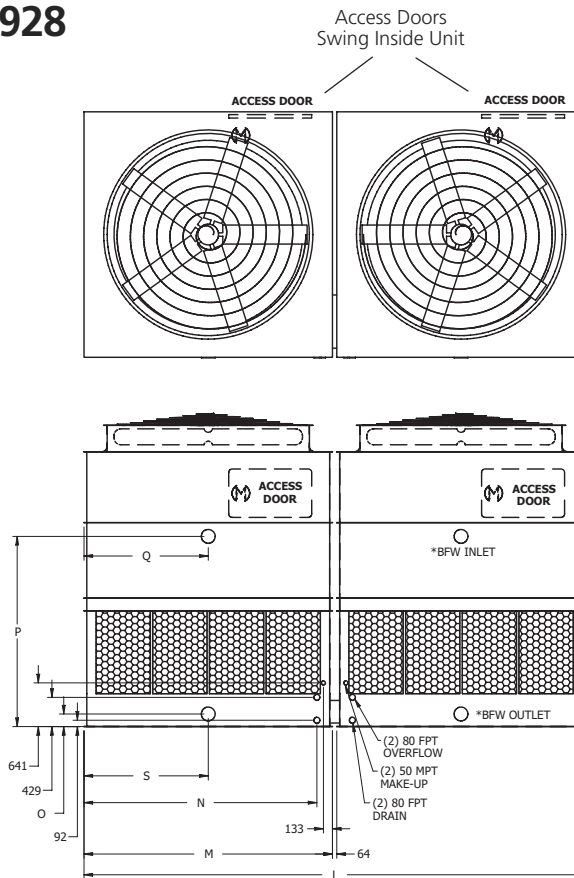
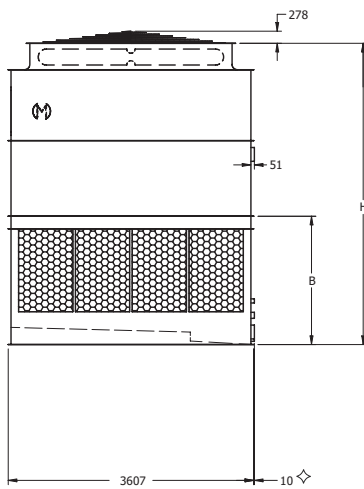
- ◇ Outlet connection extends 10mm beyond bottom flange.
- † Height does not include fan guard.
- †† Fan Guard ships loose for field mounting.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 212-024 to 212-928

*AT/UAT 212-024 thru 924
(2) 200 Inlets
(2) 200 Outlets

*AT/UAT 212-128 thru 928
(2) 250 Inlets
(2) 250 Outlets

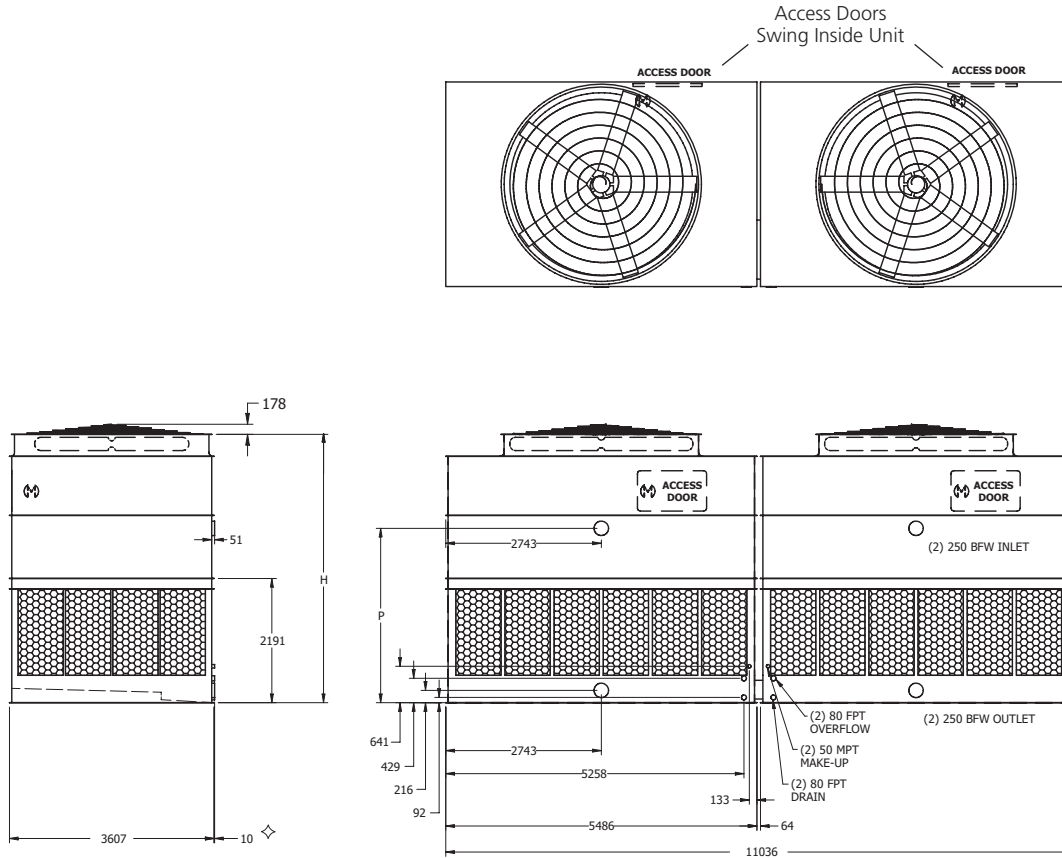


Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)							
	Shipping	Operating	Heaviest Section (Upper)			†H	B	P	L	N	M	O	S&Q
AT/UAT 212-024	6775	12410	2290	(2) 15,0	84,3	4426	1886	2794	7366	3423	3651	184	1826
AT/UAT 212-124	7220	12855	2515	(2) 11,0	75,6	4731	1886	3099	7366	3423	3651	184	1826
AT/UAT 212-224	6820	12455	2315	(2) 18,5	90,4	4426	1886	2794	7366	3423	3651	184	1826
AT/UAT 212-324	7265	12900	2535	(2) 15,0	82,7	4731	1886	3099	7366	3423	3651	184	1826
AT/UAT 212-424	6915	12545	2360	(2) 22,0	95,8	4426	1886	2794	7366	3423	3651	184	1826
AT/UAT 212-524	7310	12945	2560	(2) 18,5	88,7	4731	1886	3099	7366	3423	3651	184	1826
AT/UAT 212-624	7755	13390	2780	(2) 18,5	87,3	††5036	1886	3404	7366	3423	3651	184	1826
AT/UAT 212-724	7405	13035	2605	(2) 22,0	93,9	4731	1886	3099	7366	3423	3651	184	1826
AT/UAT 212-824	7845	13480	2825	(2) 22,0	92,4	††5036	1886	3404	7366	3423	3651	184	1826
AT/UAT 212-924	8075	13710	2940	(2) 30,0	101,1	††5036	1886	3404	7366	3423	3651	184	1826
AT/UAT 212-128	7430	14080	2515	(2) 18,5	98,4	4731	2191	3073	8585	4032	4261	216	2130
AT/UAT 212-228	7975	14625	2790	(2) 15,0	90,1	5036	2191	3378	8585	4032	4261	216	2130
AT/UAT 212-328	7495	14145	2550	(2) 22,0	104,2	4731	2191	3073	8585	4032	4261	216	2130
AT/UAT 212-428	8030	14680	2815	(2) 18,5	96,6	5036	2191	3378	8585	4032	4261	216	2130
AT/UAT 212-528	8500	15150	3055	(2) 18,5	95,1	††5340	2191	3683	8585	4032	4261	216	2130
AT/UAT 212-628	8090	14740	2850	(2) 22,0	102,3	5036	2191	3378	8585	4032	4261	216	2130
AT/UAT 212-728	8565	15215	3085	(2) 22,0	100,6	††5340	2191	3683	8585	4032	4261	216	2130
AT/UAT 212-828	8330	14980	2965	(2) 30,0	112,0	5036	2191	3378	8585	4032	4261	216	2130
AT/UAT 212-928	8800	15450	3200	(2) 30,0	110,0	††5340	2191	3683	8585	4032	4261	216	2130

- NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.
 "N", "M", "O", "S&Q" dimension are similar for both cells.
- ◇ Outlet connection extends 10mm beyond bottom flange.
 - † Height does not include fan guard.
 - †† Fan Guard ships loose for field mounting.

MODELS: AT/UAT 212-036 to 212-936



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)	
	Shipping	Operating	Heaviest Section (Upper)			H†	P
AT/UAT 212-036	10190	18595	3420	(2) 15,0	112,1	5036	3378
AT/UAT 212-136	9625	18035	3140	(2) 22,0	129,8	4731	3073
AT/UAT 212-236	10905	19315	3780	(2) 18,5	118,5	††5340	3683
AT/UAT 212-336	10335	18740	3495	(2) 22,0	127,5	5036	3378
AT/UAT 212-436	11005	19415	3830	(2) 22,0	125,4	††5340	3683
AT/UAT 212-536	10570	18980	3610	(2) 30,0	139,5	5036	3378
AT/UAT 212-636	11240	19650	3945	(2) 30,0	137,2	††5340	3683
AT/UAT 212-736	10625	19035	3640	(2) 37,0	149,7	5036	3378
AT/UAT 212-836	11295	19705	3975	(2) 37,0	147,0	††5340	3683
AT/UAT 212-936	11395	19805	4025	(2) 45,0	155,7	††5340	3683

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.

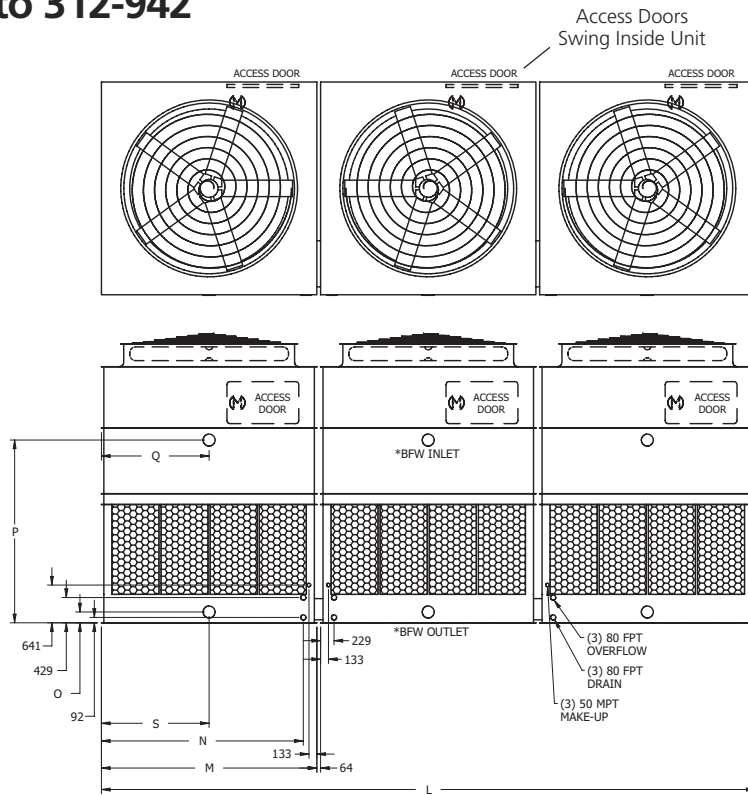
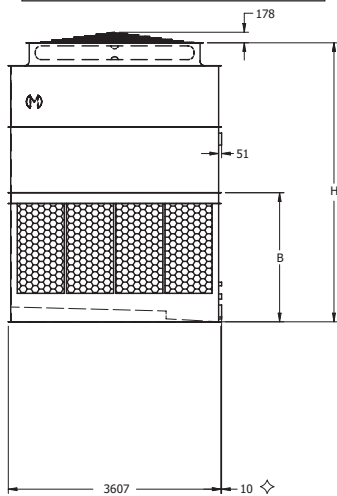
- ◇ Outlet connection extends 10mm beyond bottom flange.
- † Height does not include fan guard.
- †† Fan Guard ships loose for field mounting.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 312-036 to 312-942

*AT/UAT 312-036 thru 936
(3) 200 Inlets
(3) 200 Outlets

*AT/UAT 312-042 thru 942
(3) 250 Inlets
(3) 250 Outlets



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

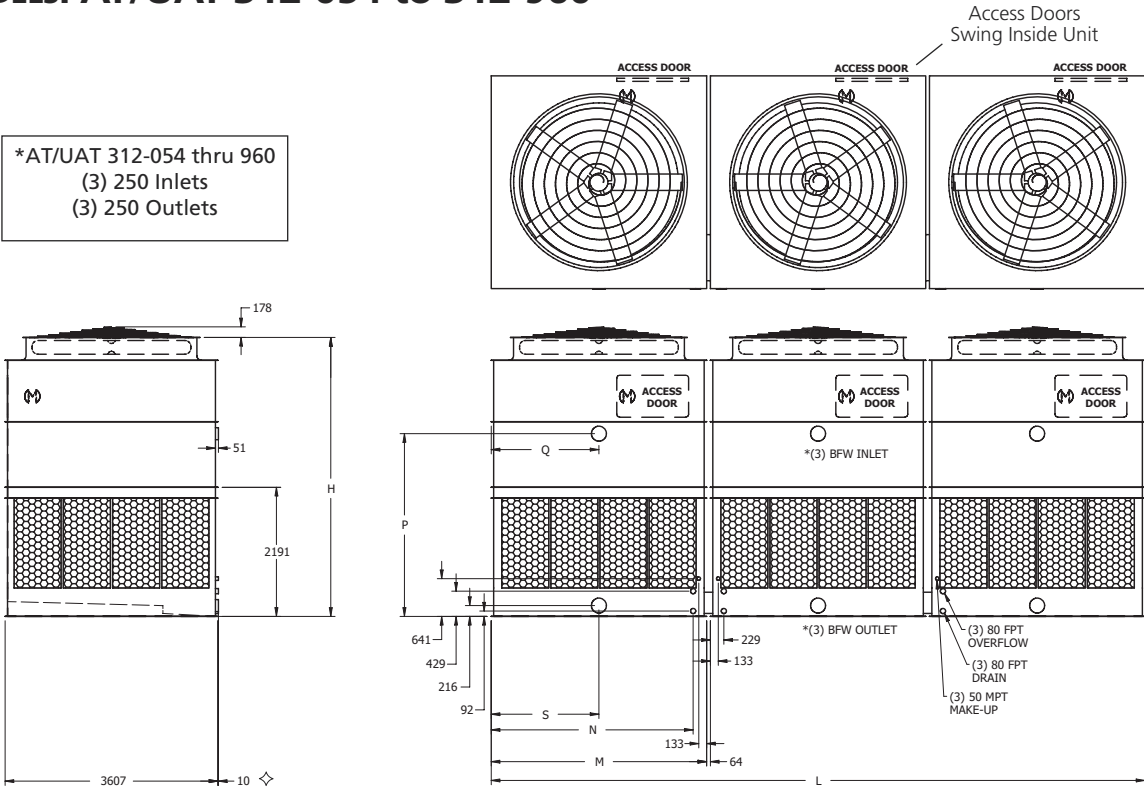
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m³/s)	Dimensions (mm)						
	Shipping	Operating	Heaviest Section (Upper)			†H	B	P	L	N	M	S&Q
AT/UAT 312-036	10095	18545	2290	(3) 15,0	127,6	4731	2191	3099	11081	3423	3651	1826
AT/UAT 312-136	10765	19215	2515	(3) 11,0	114,5	5036	2191	3404	11081	3423	3651	1826
AT/UAT 312-236	10165	18615	2315	(3) 18,5	137,0	4731	2191	3099	11081	3423	3651	1826
AT/UAT 312-336	10830	19280	2535	(3) 15,0	125,3	5036	2191	3404	11081	3423	3651	1826
AT/UAT 312-436	11500	19950	2760	(3) 15,0	123,4	††5340	2191	3708	11081	3423	3651	1826
AT/UAT 312-536	10900	19350	2560	(3) 18,5	134,4	5036	2191	3404	11081	3423	3651	1826
AT/UAT 312-636	11565	20015	2780	(3) 18,5	132,2	††5340	2191	3708	11081	3423	3651	1826
AT/UAT 312-736	11035	19485	2605	(3) 22,0	142,3	5036	2191	3404	11081	3423	3651	1826
AT/UAT 312-836	11705	20155	2825	(3) 22,0	139,9	††5340	2191	3708	11081	3423	3651	1826
AT/UAT 312-936	12045	20495	2940	(3) 30,0	153,2	††5340	2191	3708	11081	3423	3651	1826
AT/UAT 312-042	12150	22125	2760	(3) 11,0	124,5	5340	2496	3683	12910	4032	4261	2130
AT/UAT 312-142	11415	21390	2515	(3) 18,5	148,9	5036	2496	3378	12910	4032	4261	2130
AT/UAT 312-242	12860	22835	3000	(3) 11,0	122,4	††5645	2496	3988	12910	4032	4261	2130
AT/UAT 312-342	12235	22210	2790	(3) 15,0	136,3	5340	2496	3683	12910	4032	4261	2130
AT/UAT 312-442	12315	22290	2815	(3) 18,5	146,2	5340	2496	3683	12910	4032	4261	2130
AT/UAT 312-542	13025	22995	3055	(3) 18,5	143,9	††5645	2496	3988	12910	4032	4261	2130
AT/UAT 312-642	12410	22385	2850	(3) 22,0	154,8	5340	2496	3683	12910	4032	4261	2130
AT/UAT 312-742	13120	23090	3085	(3) 22,0	152,3	††5645	2496	3988	12910	4032	4261	2130
AT/UAT 312-842	12765	22740	2965	(3) 30,0	169,5	5340	2496	3683	12910	4032	4261	2130
AT/UAT 312-942	13470	23445	3200	(3) 30,0	166,5	††5645	2496	3988	12910	4032	4261	2130

- NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.
 "N", "M", "O", "S&Q" dimension are similar for both cells.

◇ Outlet connection extends 10mm beyond bottom flange.
 † Height does not include fan guard.
 †† Fan Guard ships loose for field mounting.

MODELS: AT/UAT 312-054 to 312-960

*AT/UAT 312-054 thru 960
(3) 250 Inlets
(3) 250 Outlets



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)					
	Shipping	Operating	Heaviest Section (Upper)			H†	P	L	N	M	S&Q
AT/UAT 312-054	14640	27255	3140	(3) 22,0	194,8	5036	3378	16586	5258	5486	2743
AT/UAT 312-154	15555	28170	3445	(3) 18,5	180,6	5340	3683	16586	5258	5486	2743
AT/UAT 312-254	14995	27610	3255	(3) 30,0	213,4	5036	3378	16586	5258	5486	2743
AT/UAT 312-354	15705	28320	3495	(3) 22,0	191,3	5340	3683	16586	5258	5486	2743
AT/UAT 312-454	16710	29325	3830	(3) 22,0	188,3	††5645	3988	16586	5258	5486	2743
AT/UAT 312-554	16055	28670	3610	(3) 30,0	209,3	5340	3683	16586	5258	5486	2743
AT/UAT 312-654	17065	29680	3945	(3) 30,0	205,9	††5645	3988	16586	5258	5486	2743
AT/UAT 312-754	16140	28755	3640	(3) 37,0	224,6	5340	3683	16586	5258	5486	2743
AT/UAT 312-854	17145	29760	3975	(3) 37,0	220,6	††5645	3988	16586	5258	5486	2743
AT/UAT 312-954	17295	29910	4025	(3) 45,0	233,7	††5645	3988	16586	5258	5486	2743
AT/UAT 312-260	16465	30615	3625	(3) 18,5	184,3	5340	3683	18415	5867	6096	3048
AT/UAT 312-360	17690	31840	4030	(3) 18,5	181,3	††5645	3988	18415	5867	6096	3048
AT/UAT 312-460	16055	30210	3490	(3) 37,0	233,2	5036	3378	18415	5867	6096	3048
AT/UAT 312-560	16970	31120	3790	(3) 30,0	213,3	5340	3683	18415	5867	6096	3048
AT/UAT 312-660	18195	32345	4200	(3) 30,0	209,9	††5645	3988	18415	5867	6096	3048
AT/UAT 312-760	17050	31205	3820	(3) 37,0	228,6	5340	3683	18415	5867	6096	3048
AT/UAT 312-860	18275	32425	4225	(3) 37,0	224,9	††5645	3988	18415	5867	6096	3048
AT/UAT 312-960	18425	32575	4275	(3) 45,0	238,4	††5645	3988	18415	5867	6096	3048

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

(4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.

"N", "M", "O", "S&Q" dimension are similar for both cells.

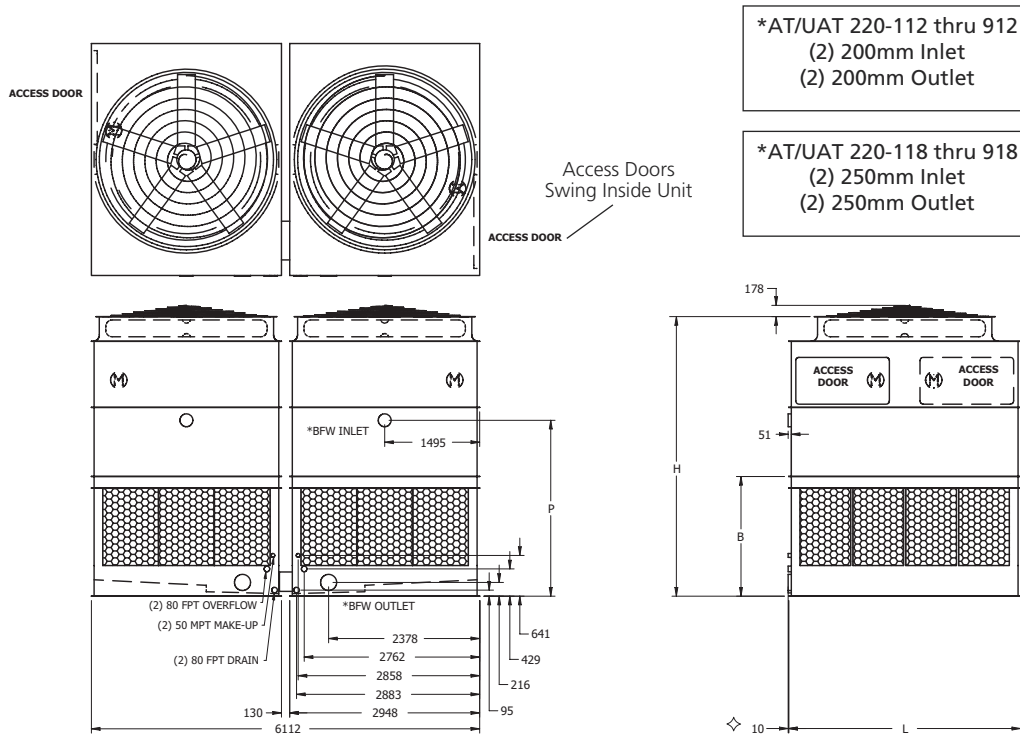
◇ Outlet connection extends 10mm beyond bottom flange.

† Height does not include fan guard.

†† Fan Guard ships loose for field mounting.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 220-112 to 220-918



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	Heaviest Section (Upper)			H†	B	P	L
AT/UAT 220-112	6350	11375	2155	(2) 11,0	67,9	4705	1886	3073	3651
AT/UAT 220-212	6005	11030	1980	(2) 18,5	81,3	4401	1886	2769	3651
AT/UAT 220-312	6395	11420	2175	(2) 15,0	74,3	4705	1886	3073	3651
AT/UAT 220-412	6095	11120	2030	(2) 22,0	86,2	4401	1886	2769	3651
AT/UAT 220-512	6440	11465	2200	(2) 18,5	79,8	4705	1886	3073	3651
AT/UAT 220-612	6820	11850	2390	(2) 18,5	78,5	††5010	1886	3378	3651
AT/UAT 220-712	6530	11560	2245	(2) 22,0	84,5	4705	1886	3073	3651
AT/UAT 220-812	6915	11940	2435	(2) 22,0	83,2	††5010	1886	3378	3651
AT/UAT 220-912	7140	12165	2550	(2) 26,0	87,3	††5010	1886	3378	3651
AT/UAT 220-118	8190	15815	2615	(2) 15,0	100,8	4705	2191	3048	5486
AT/UAT 220-218	9345	16970	3190	(2) 11,0	89,0	††5315	2191	3658	5486
AT/UAT 220-318	8820	16445	2925	(2) 15,0	99,1	5010	2191	3353	5486
AT/UAT 220-418	8330	15955	2680	(2) 22,0	114,7	4705	2191	3048	5486
AT/UAT 220-518	8865	16490	2950	(2) 18,5	106,3	5010	2191	3353	5486
AT/UAT 220-618	8955	16580	2995	(2) 22,0	112,6	5010	2191	3353	5486
AT/UAT 220-718	9525	17150	3280	(2) 22,0	110,8	††5315	2191	3658	5486
AT/UAT 220-818	9180	16805	3105	(2) 30,0	123,2	5010	2191	3353	5486
AT/UAT 220-918	9750	17375	3395	(2) 30,0	121,2	††5315	2191	3664	5486

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

(4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.

◇ Outlet connection extends 10mm beyond bottom flange.

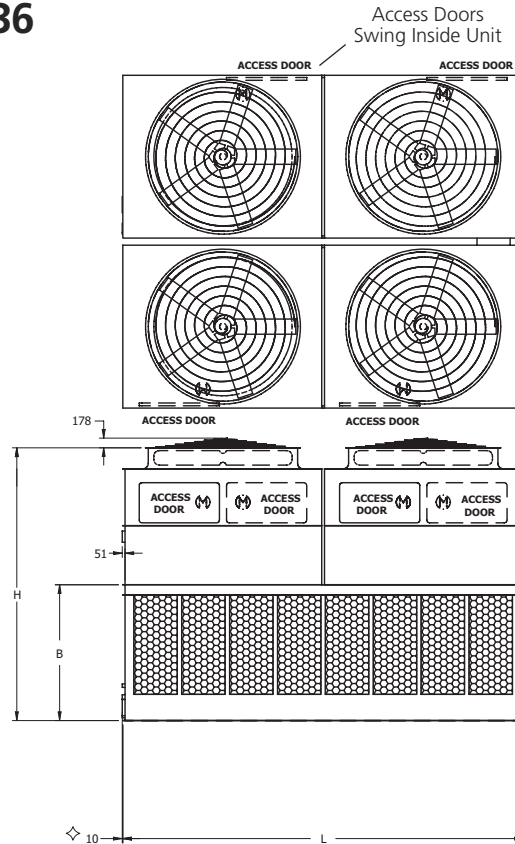
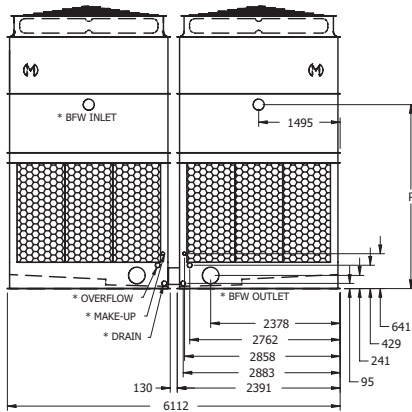
† Height does not include fan guard.

†† Fan Guard ships loose for field mounting.

MODELS: AT/UAT 420-124 to 420-936

*AT/UAT 420-124 thru 924
 (4) 200 mm Inlet
 (2) 300 mm Outlet
 (2) 80 FPT Overflow
 (2) 50 MPT Make-Up
 (2) 80 FPT Drain

*AT/UAT 420-136 thru 936
 (4) 250 mm Inlet
 (4) 250 mm Outlet
 (4) 80 FPT Overflow
 (4) 50 MPT Make-Up
 (4) 80 FPT Drain



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)			
	Shipping	Operating	Heaviest Section †			H †	B	P	L
AT/UAT 420-124	12565	22605	U 2155	(4) 11,0	135,2	5315	2496	3683	7360
AT/UAT 420-224	11875	21920	U 1980	(4) 18,5	161,9	5010	2496	3378	7360
AT/UAT 420-324	12655	22700	U 2175	(4) 15,0	148,0	5315	2496	3683	7360
AT/UAT 420-424	12055	22100	U 2030	(4) 22,0	171,6	5010	2496	3378	7360
AT/UAT 420-524	12745	22790	U 2200	(4) 18,5	158,8	5315	2496	3683	7360
AT/UAT 420-624	13510	23550	U 2390	(4) 18,5	156,4	††5620	2496	3988	7360
AT/UAT 420-724	12925	22970	U 2245	(4) 22,0	168,3	5315	2496	3683	7360
AT/UAT 420-824	13690	23730	U 2435	(4) 22,0	165,6	††5620	2496	3988	7360
AT/UAT 420-924	14145	24185	U 2550	(4) 26,0	173,7	††5620	2496	3988	7360
AT/UAT 420-136	16230	31635	L 2890	(4) 15,0	194,6	5010	2496	3353	11036
AT/UAT 420-236	18535	33940	U 3190	(4) 11,0	171,9	††5620	2496	3962	11036
AT/UAT 420-336	17480	32885	U 2925	(4) 15,0	191,5	5315	2496	3658	11036
AT/UAT 420-436	16500	31905	L 2890	(4) 22,0	221,5	5010	2496	3353	11036
AT/UAT 420-536	17570	32975	U 2950	(4) 18,5	205,4	5315	2496	3658	11036
AT/UAT 420-636	17755	33160	U 2995	(4) 22,0	217,5	5315	2496	3658	11036
AT/UAT 420-736	18895	34300	U 3280	(4) 22,0	214,0	††5620	2496	3962	11036
AT/UAT 420-836	18205	33610	U 3105	(4) 30,0	238,1	5315	2496	3658	11036
AT/UAT 420-936	19350	34755	U 3395	(4) 30,0	234,2	††5620	2496	3962	11036

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

(4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.

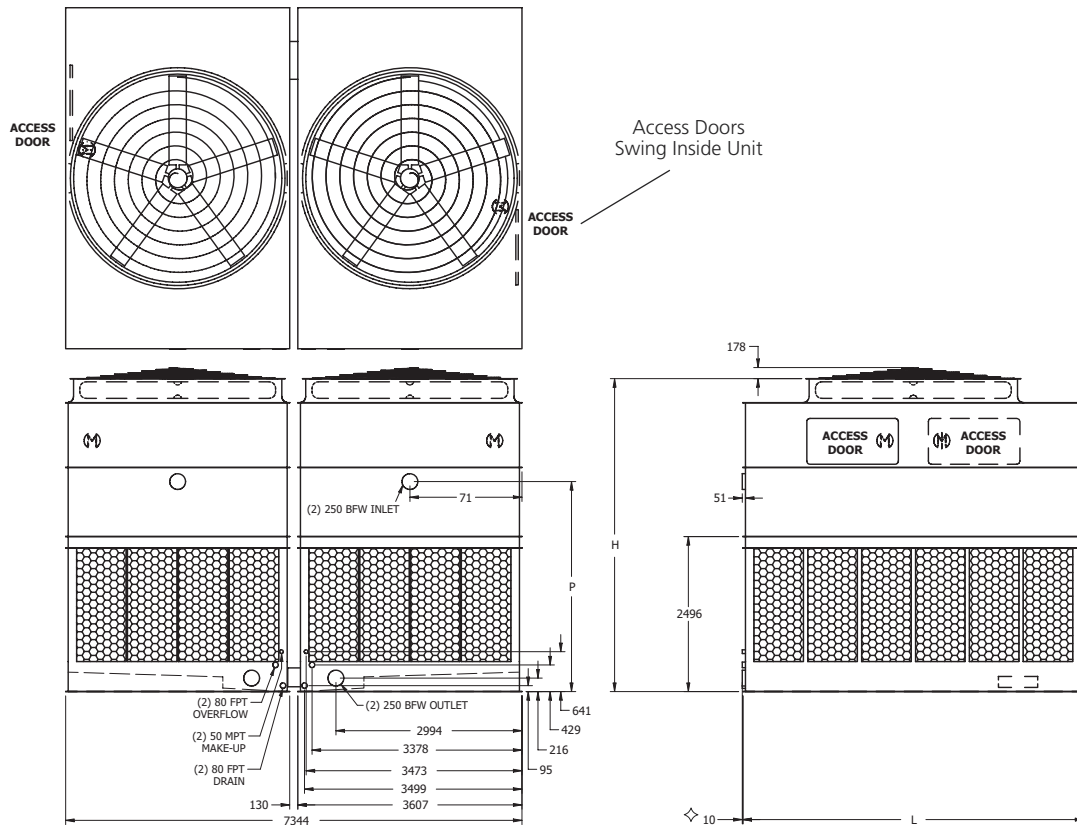
◇ Outlet connection extends 10mm beyond bottom flange.

‡ L = Lower Section, U = Upper Section

† Height does not include fan guard. †† Fan Guard ships loose for field mounting.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 224-018 to 224-920



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)		
	Shipping	Operating	Heaviest Section (Upper)			H†	P	L
AT/UAT 224-018	9555	17960	3090	(2) 18,5	122,0	5036	3378	5486
AT/UAT 224-118	9650	18060	3140	(2) 22,0	129,3	5036	3378	5486
AT/UAT 224-218	10260	18670	3445	(2) 18,5	119,9	5340	3683	5486
AT/UAT 224-318	9890	18300	3255	(2) 30,0	141,7	5036	3378	5486
AT/UAT 224-418	10360	18770	3495	(2) 22,0	127,0	5340	3683	5486
AT/UAT 224-518	11030	19440	3830	(2) 22,0	125,0	††5645	3988	5486
AT/UAT 224-618	10595	19005	3610	(2) 30,0	138,9	5340	3683	5486
AT/UAT 224-718	10650	19060	3640	(2) 37,0	149,1	5340	3683	5486
AT/UAT 224-818	11320	19730	3975	(2) 37,0	149,4	††5645	3988	5486
AT/UAT 224-918	11420	19830	4025	(2) 45,0	155,1	††5645	3988	5486
AT/UAT 224-720	11975	21410	4200	(2) 30,0	138,6	††5645	3988	6096
AT/UAT 224-820	12030	21465	4225	(2) 37,0	148,5	††5645	3988	6096
AT/UAT 224-920	12130	21565	4275	(2) 45,0	157,4	††5645	3988	6096

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

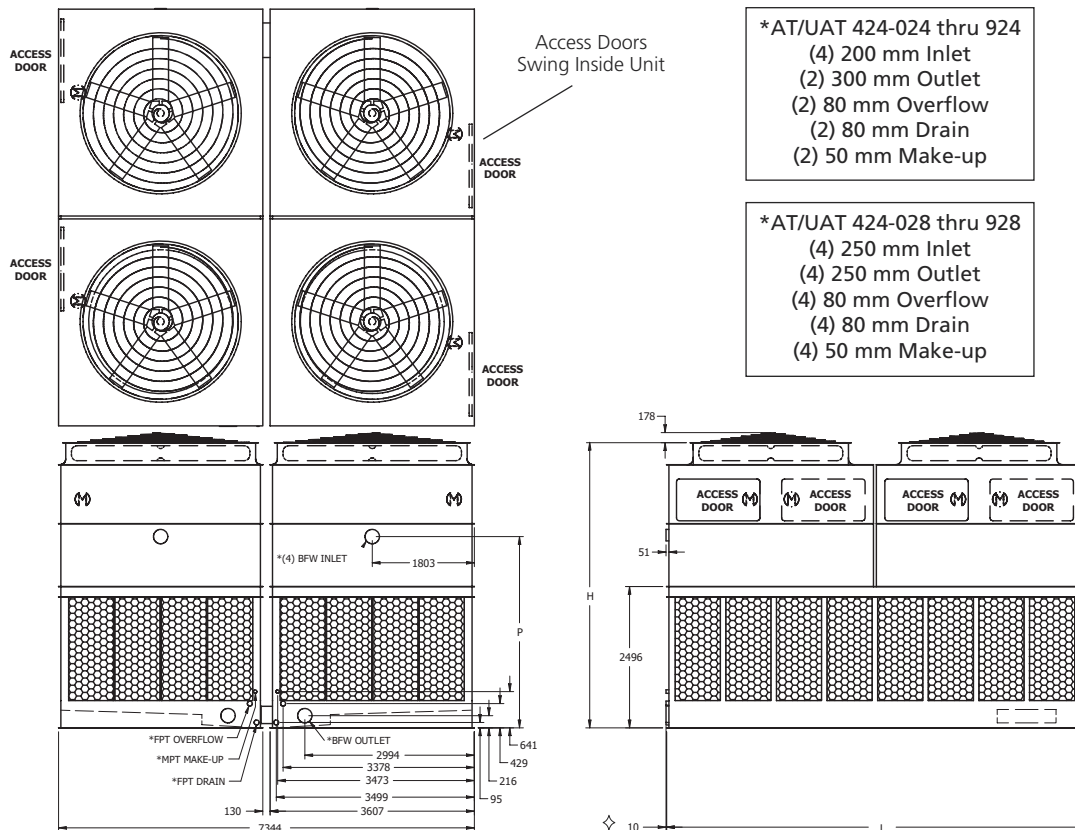
(4) Unit can operate as two (2) independent cells with the addition of a flume plate or water tight partition.

◇ Outlet connection extends 10mm beyond bottom flange.

† Height does not include fan guard.

†† Fan Guard ships loose for field mounting.

MODELS: AT/UAT 424-024 to 424-928



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)		
	Shipping	Operating	Heaviest Section [†]			H [†]	P	L
AT/UAT 424-024	13625	24900	L 2275	(4) 11,0	152,1	5036	3461	7360
AT/UAT 424-124	13715	24995	U 2290	(4) 15,0	166,8	5036	3461	7360
AT/UAT 424-224	14605	25880	U 2515	(4) 11,0	149,6	5340	3771	7360
AT/UAT 424-324	13805	25085	U 2315	(4) 18,5	179,1	5036	3461	7360
AT/UAT 424-424	14695	25975	U 2535	(4) 15,0	164,0	5340	3771	7360
AT/UAT 424-524	13990	25265	U 2360	(4) 22,0	189,7	5036	3461	7360
AT/UAT 424-624	15585	26860	U 2760	(4) 15,0	161,4	††5645	4081	7360
AT/UAT 424-724	14785	26065	U 2560	(4) 18,5	175,8	5340	3771	7360
AT/UAT 424-824	14970	26245	U 2605	(4) 22,0	186,1	5340	3771	7360
AT/UAT 424-924	16310	27585	U 2940	(4) 30,0	200,4	††5645	4081	7360
AT/UAT 424-028	15185	28550	L 2615	(4) 15,0	176,0	5036	3378	8579
AT/UAT 424-128	17220	30580	U 3000	(4) 11,0	155,6	††5645	3988	8579
AT/UAT 424-228	15295	28660	L 2615	(4) 18,5	188,9	5036	3378	8579
AT/UAT 424-328	16385	29745	U 2790	(4) 15,0	173,0	5340	3683	8579
AT/UAT 424-428	17325	30690	U 3025	(4) 15,0	170,2	††5645	3988	8579
AT/UAT 424-528	16495	29855	U 2815	(4) 18,5	185,8	5340	3683	8579
AT/UAT 424-628	17435	30800	U 3055	(4) 18,5	182,8	††5645	3988	8579
AT/UAT 424-728	16620	29980	U 2850	(4) 22,0	196,4	5340	3683	8579
AT/UAT 424-828	17565	30925	U 3085	(4) 22,0	193,5	††5645	3988	8579
AT/UAT 424-928	18035	31400	U 3200	(4) 30,0	211,6	††5645	3988	8579

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.

(2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.

(3) Adequate spacing must be allowed for access to the cooling tower.

(4) These models are available as (4) independent operating cells. Consult the factory for details.

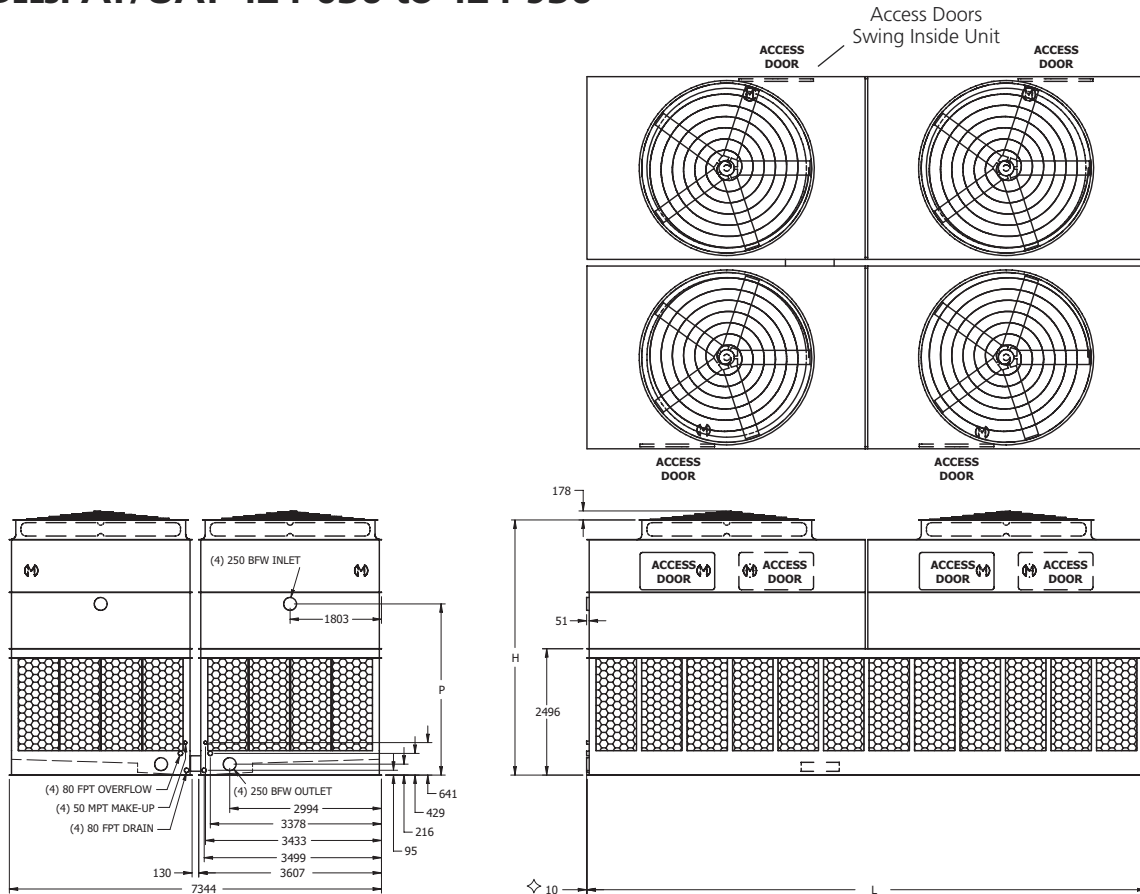
◇ Outlet connection extends 10 mm beyond bottom flange.

◆ L = Lower Section, U = Upper Section

† Height does not include Fan Guard. †† Fan Guard ships loose for field mounting.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 424-036 to 424-936



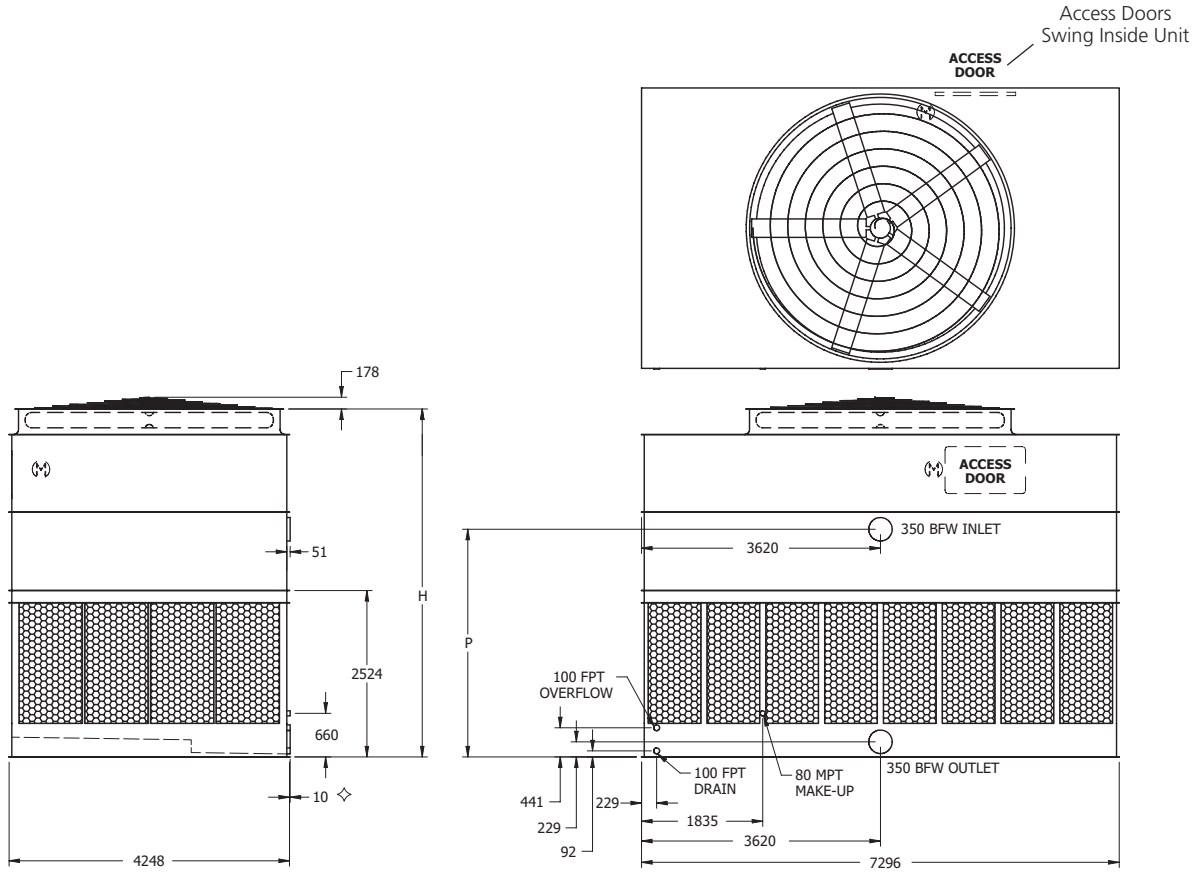
Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m³/s)	Dimensions (mm)		
	Shipping	Operating	Heaviest Section [♦]			H [†]	P	L
AT/UAT 424-036	19050	35960	L 3395	(4) 15,0	218,7	5036	3378	11030
AT/UAT 424-136	19140	36050	L 3395	(4) 18,5	235,0	5036	3378	11030
AT/UAT 424-236	20555	37465	U 3445	(4) 18,5	231,1	5340	3683	11030
AT/UAT 424-336	19815	36725	L 3395	(4) 30,0	273,0	5036	3378	11030
AT/UAT 424-436	20755	37665	U 3495	(4) 22,0	245,0	5340	3683	11030
AT/UAT 424-536	22100	39010	U 3830	(4) 22,0	241,1	††5645	3988	11030
AT/UAT 424-636	21230	38140	U 3610	(4) 30,0	268,0	5340	3683	11030
AT/UAT 424-736	21335	38245	U 3640	(4) 37,0	287,5	5340	3683	11030
AT/UAT 424-836	22680	39590	U 3975	(4) 37,0	282,6	††5645	3988	11030
AT/UAT 424-936	22880	39790	U 4025	(4) 45,0	299,5	††5645	3988	11030

- NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) These models are available as (4) independent operating cells. Consult the factory for details.

- ◇ Outlet connection extends 10 mm beyond bottom flange.
- ♦ L = Lower Section, U = Upper Section
- † Height does not include fan guard. †† Fan guard ships loose for field mounting.

MODELS: AT/UAT 114-0124 to 114-1224



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

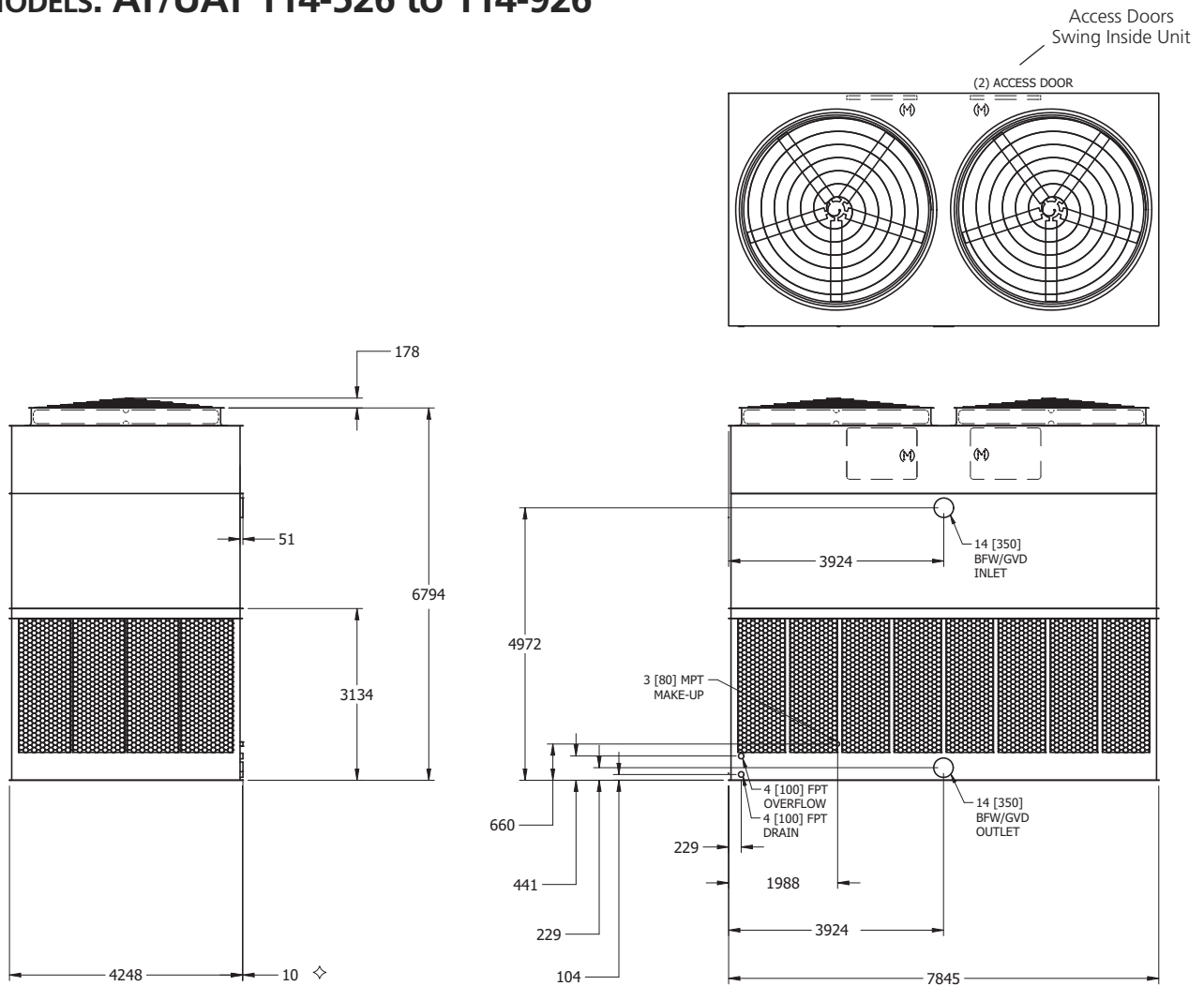
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)	
	Shipping	Operating	Heaviest Section (Upper)			H†	P
AT/UAT 114-0124	7490	14680	4840	22,0	85,1	††5324	3451
AT/UAT 114-0224	7555	14745	4910	30,0	93,3	††5324	3451
AT/UAT 114-0324	8425	15615	5775	18,5	77,0	5934	4061
AT/UAT 114-0424	7715	14905	5065	37,0	100,2	††5324	3451
AT/UAT 114-0524	8430	15620	5785	22,0	81,8	5934	4061
AT/UAT 114-0624	8030	15220	5380	30,0	91,6	5629	3756
AT/UAT 114-0724	8500	15690	5850	30,0	90,1	5934	4061
AT/UAT 114-0824	8185	15375	5540	37,0	98,4	5629	3756
AT/UAT 114-0924	8660	15850	6010	37,0	96,7	5934	4061
AT/UAT 114-1024	8265	15455	5615	45,0	104,1	5629	3756
AT/UAT 114-1124	8735	15925	6085	45,0	102,5	5934	4061
AT/UAT 114-1224	8845	16035	6195	55,0	112,3	5934	4061

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

- ◇ Outlet connection extends 10 mm beyond bottom flange.
- † Height does not include fan guard.
- †† Fan guard is factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 114-526 to 114-926



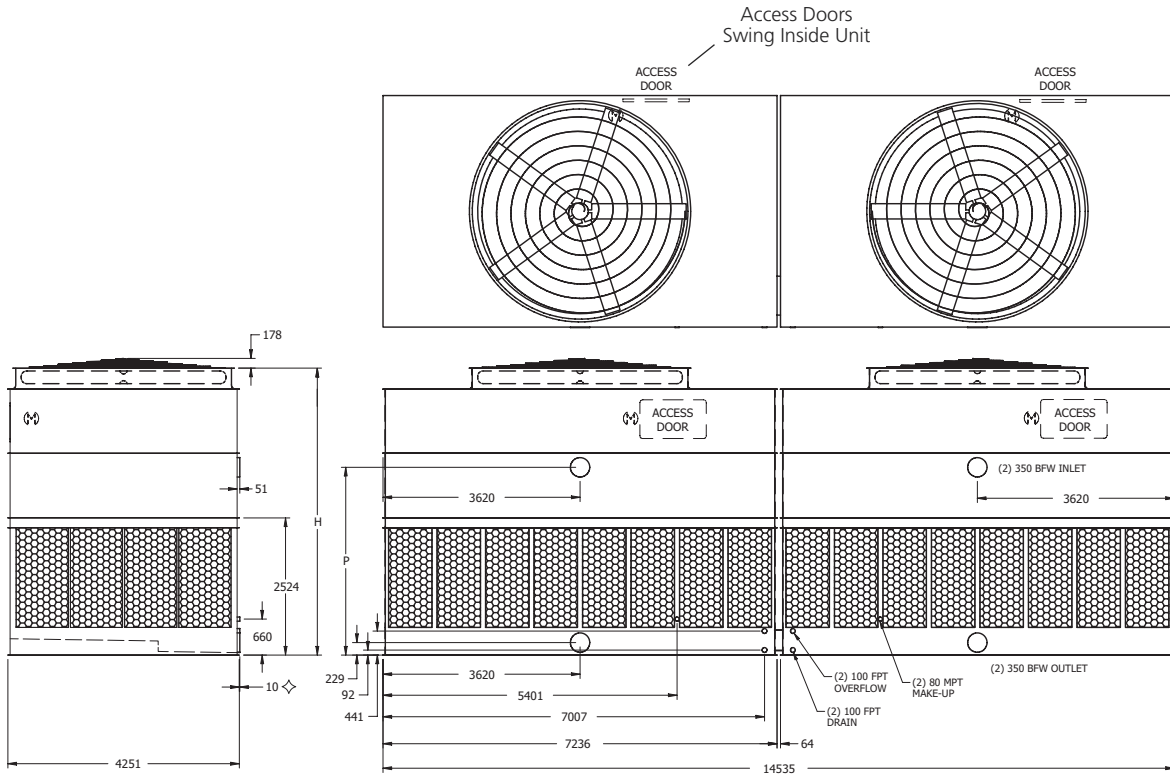
Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)
	Shipping	Operating	Heaviest Section (Upper)		
AT/UAT 114-526	11250	18885	8010	(2) 15,0	94,5
AT/UAT 114-626	11275	18910	8040	(2) 18,5	101,3
AT/UAT 114-726	11320	18955	8085	(2) 22,0	107,3
AT/UAT 114-826	11465	19100	8230	(2) 30,0	117,3
AT/UAT 114-926	11475	19110	8235	(2) 37,0	125,7

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

◇ Outlet connection extends 10 mm beyond bottom flange.

MODELS: AT/UAT 214-0148 to 214-1148



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

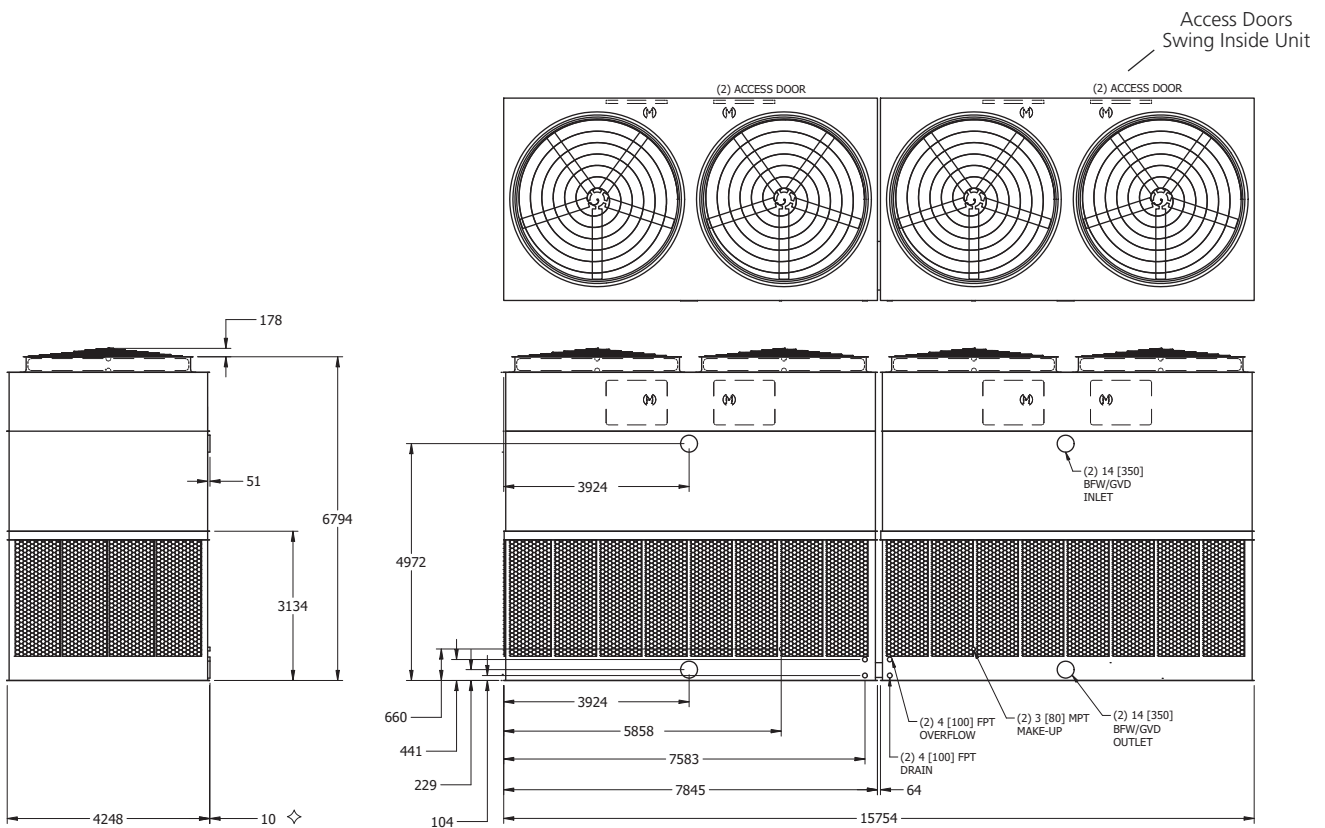
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)	
	Shipping	Operating	Heaviest Section (Upper)			H†	P
AT/UAT 214-0148	14870	29250	4840	(2) 22,0	168,5	††5324	3451
AT/UAT 214-0248	15005	29385	4910	(2) 30,0	184,6	††5324	3451
AT/UAT 214-0348	15320	29700	5065	(2) 37,0	198,4	††5324	3451
AT/UAT 214-0448	16740	31115	5775	(2) 18,5	152,5	5934	4061
AT/UAT 214-0548	16755	31135	5785	(2) 22,0	162,0	5934	4061
AT/UAT 214-0648	15950	30325	5380	(2) 30,0	181,4	5629	3756
AT/UAT 214-0748	16890	31270	5850	(2) 30,0	178,4	5934	4061
AT/UAT 214-0848	17210	31590	6010	(2) 37,0	191,6	5934	4061
AT/UAT 214-0948	16420	30800	5615	(2) 45,0	206,1	5629	3756
AT/UAT 214-1048	17365	31740	6085	(2) 45,0	202,9	5934	4061
AT/UAT 214-1148	17580	31960	6195	(2) 55,0	222,4	5934	4061

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

- ◇ Outlet connection extends 10 mm beyond bottom flange.
- † Height does not include fan guard.
- †† Fan guard is factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 214-552 to 214-952



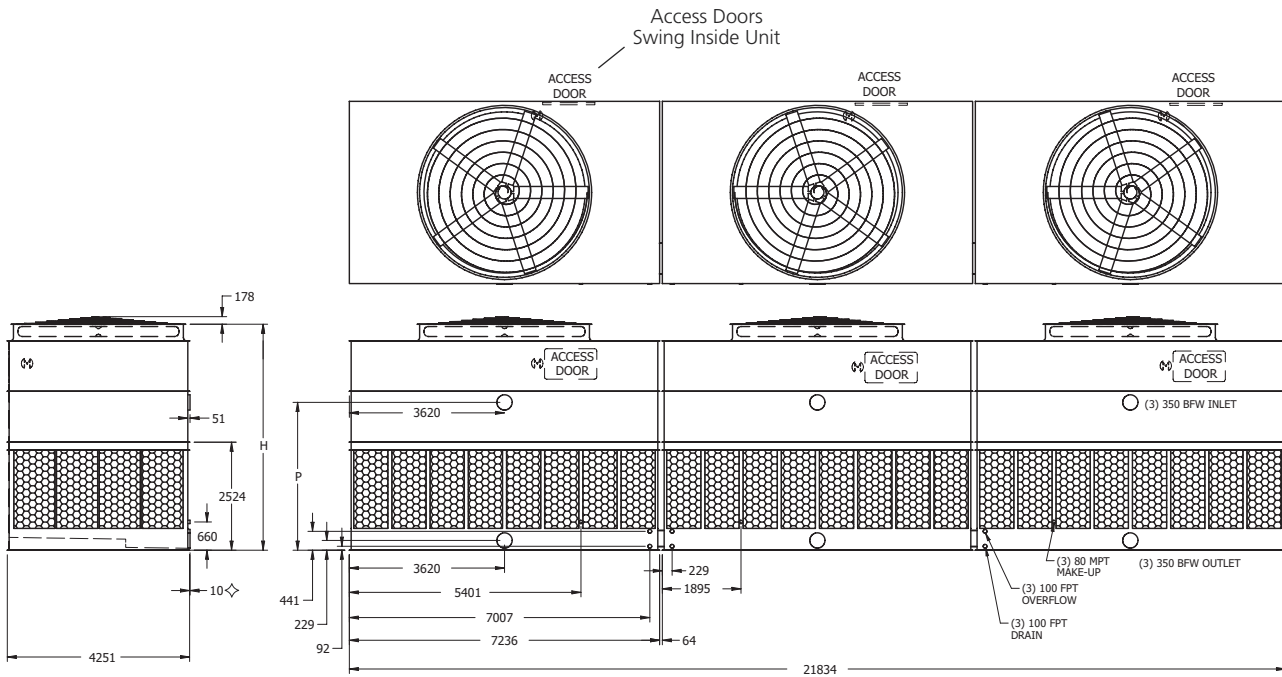
Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)
	Shipping	Operating	Heaviest Section (Upper)		
AT/UAT 214-552	22315	37585	8010	(4) 15,0	185,7
AT/UAT 214-652	22370	37640	8040	(4) 18,5	199,2
AT/UAT 214-752	22460	37730	8085	(4) 22,0	210,9
AT/UAT 214-852	22750	38020	8230	(4) 30,0	230,6
AT/UAT 214-952	22770	38040	8235	(4) 37,0	247,2

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

◇ Outlet connection extends 10 mm beyond bottom flange.

MODELS: AT/UAT 314-0172 to 314-1272



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

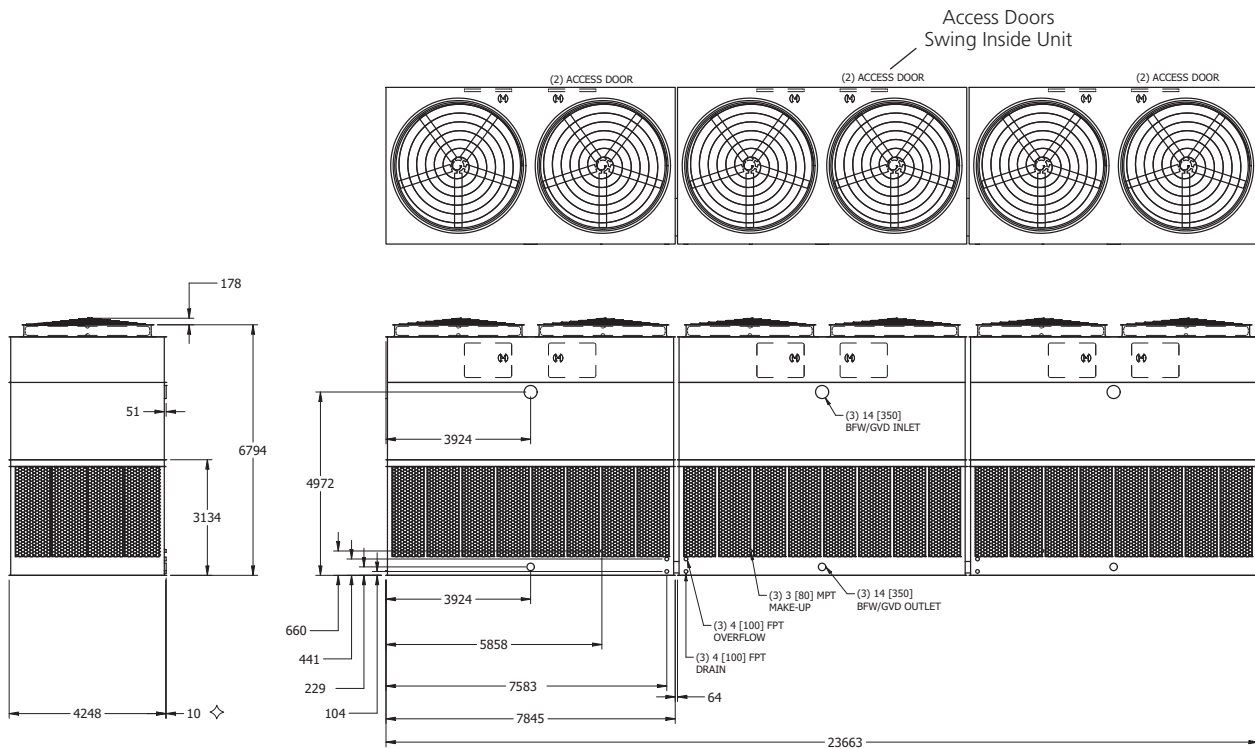
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)	
	Shipping	Operating	Heaviest Section (Upper)			H†	P
AT/UAT 314-0172	24290	45860	4840	(3) 22,0	250,2	†† 5324	3451
AT/UAT 314-0272	24495	46060	4910	(3) 30,0	274,2	†† 5324	3451
AT/UAT 314-0372	24970	46540	5065	(3) 37,0	294,6	†† 5324	3451
AT/UAT 314-0472	27095	48660	5775	(3) 18,5	226,4	5934	4061
AT/UAT 314-0572	27120	48690	5785	(3) 22,0	240,6	5934	4061
AT/UAT 314-0672	25910	47480	5380	(3) 30,0	269,3	5629	3756
AT/UAT 314-0772	26385	47955	5540	(3) 37,0	289,3	5629	3756
AT/UAT 314-0872	27325	48895	5850	(3) 30,0	264,9	5934	4061
AT/UAT 314-0972	27800	49370	6010	(3) 37,0	284,4	5934	4061
AT/UAT 314-1072	26615	48185	5615	(3) 45,0	306,1	5629	3756
AT/UAT 314-1172	28030	49600	6085	(3) 45,0	301,2	5934	4061
AT/UAT 314-1272	28360	49925	6195	(3) 55,0	323,4	5934	4061

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

- ◇ Outlet connection extends 10 mm beyond bottom flange.
- † Height does not include fan guard.
- †† Fan guard is factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 314-578 to 314-978



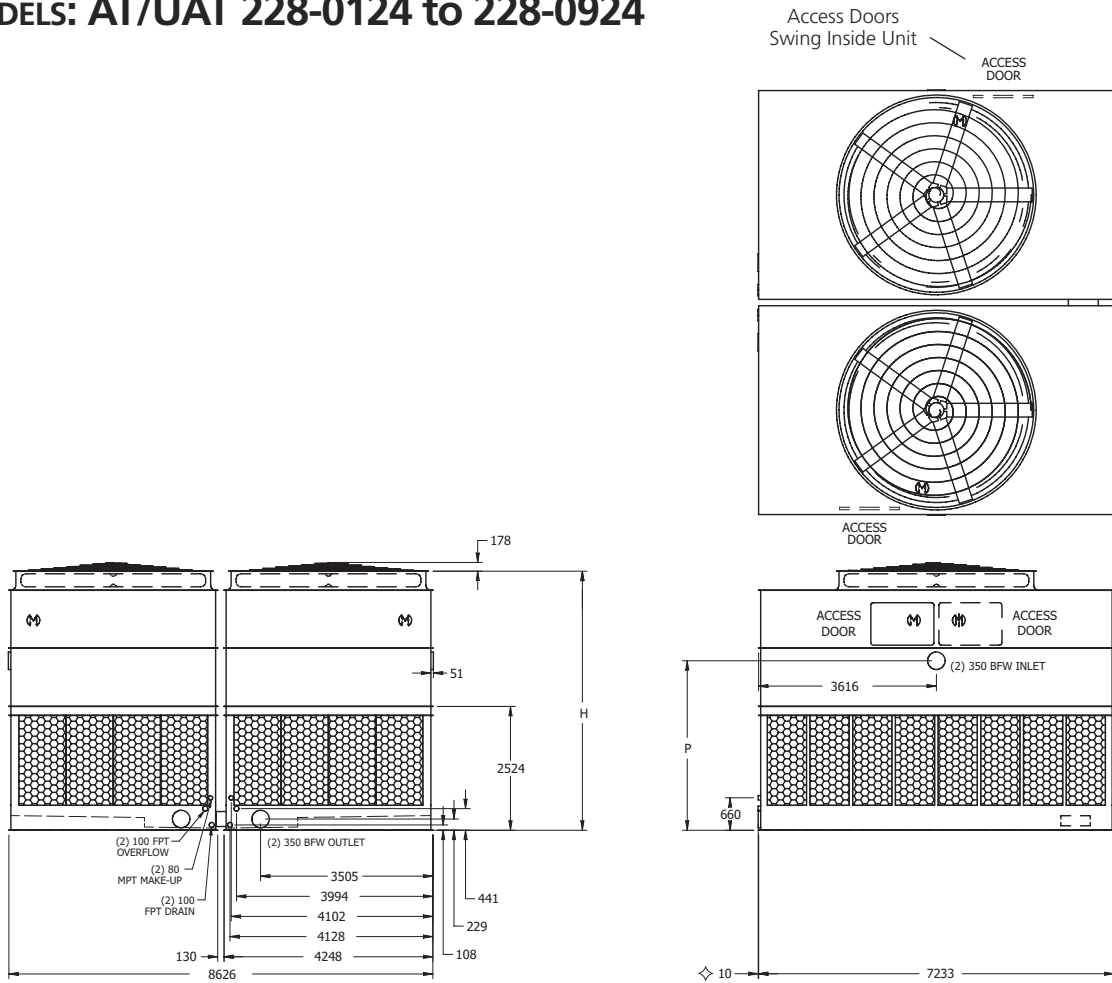
Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)
	Shipping	Operating	Heaviest Section (Upper)		
AT/UAT 314-578	33395	56295	8010	(6) 15,0	276,7
AT/UAT 314-678	33475	56375	8040	(6) 18,5	296,8
AT/UAT 314-778	33610	56515	8085	(6) 22,0	314,2
AT/UAT 314-878	34045	56950	8230	(6) 30,0	343,6
AT/UAT 314-978	34075	56975	8235	(6) 37,0	368,3

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

◇ Outlet connection extends 10 mm beyond bottom flange.

MODELS: AT/UAT 228-0124 to 228-0924



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

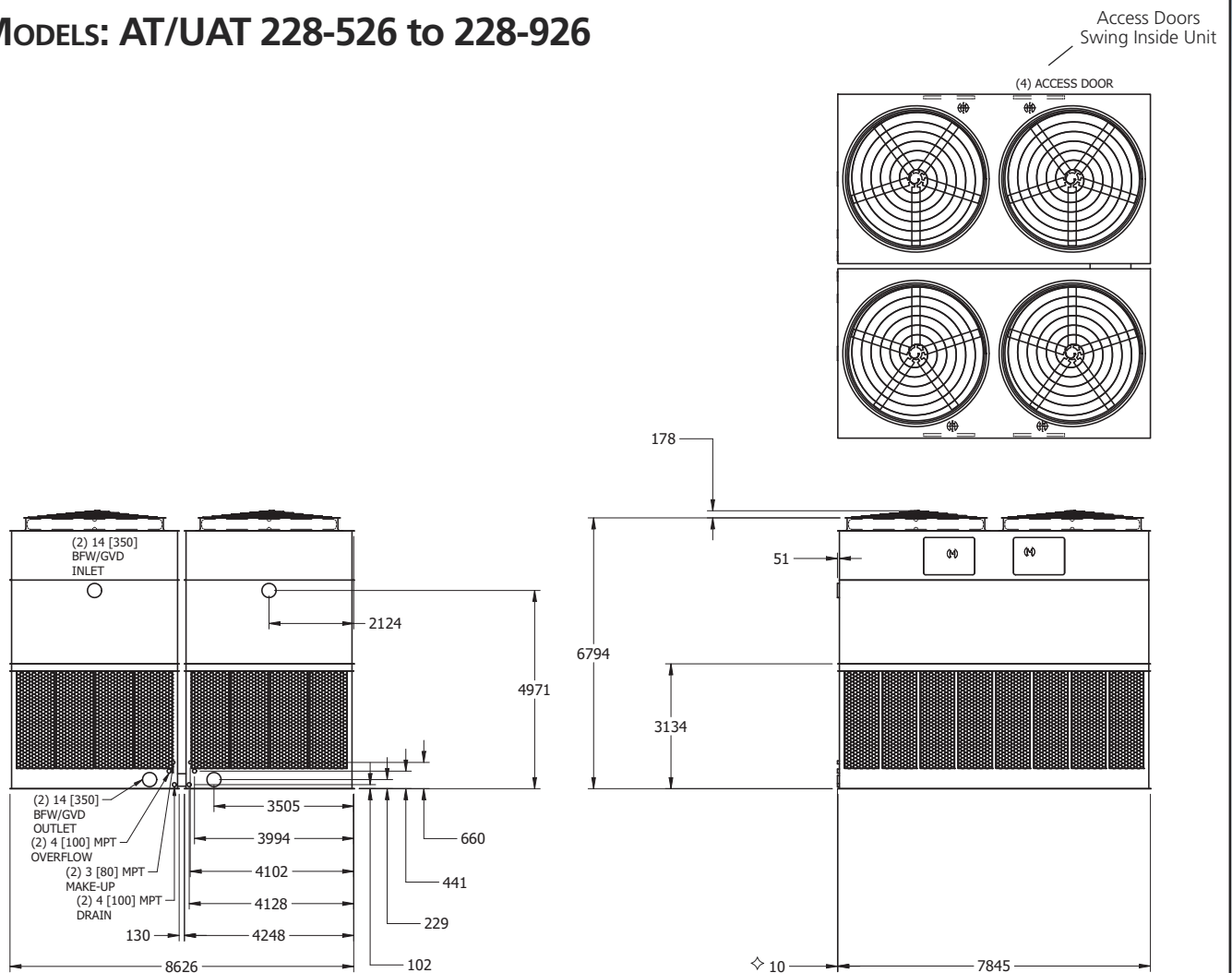
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)	
	Shipping	Operating	Heaviest Section (Upper)			H†	P
AT/UAT 228-0124	14860	29240	4910	(2) 30,0	183,8	†† 5324	3451
AT/UAT 228-0224	15175	29555	5065	(2) 37,0	197,4	†† 5324	3451
AT/UAT 228-0324	16590	30970	5775	(2) 18,5	152,1	5934	4061
AT/UAT 228-0424	16610	30990	5785	(2) 22,0	161,5	5934	4061
AT/UAT 228-0524	15805	30180	5380	(2) 30,0	180,5	5629	3756
AT/UAT 228-0624	16120	30500	5540	(2) 37,0	193,7	5629	3756
AT/UAT 228-0724	16275	30655	5615	(2) 45,0	205,2	5629	3756
AT/UAT 228-0824	17220	31595	6085	(2) 45,0	201,9	5934	4061
AT/UAT 228-0924	17435	31815	6195	(2) 55,0	221,3	5934	4061

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

- ◇ Outlet connection extends 10 mm beyond bottom flange.
- † Height does not include fan guard.
- †† Fan guard is factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 228-526 to 228-926



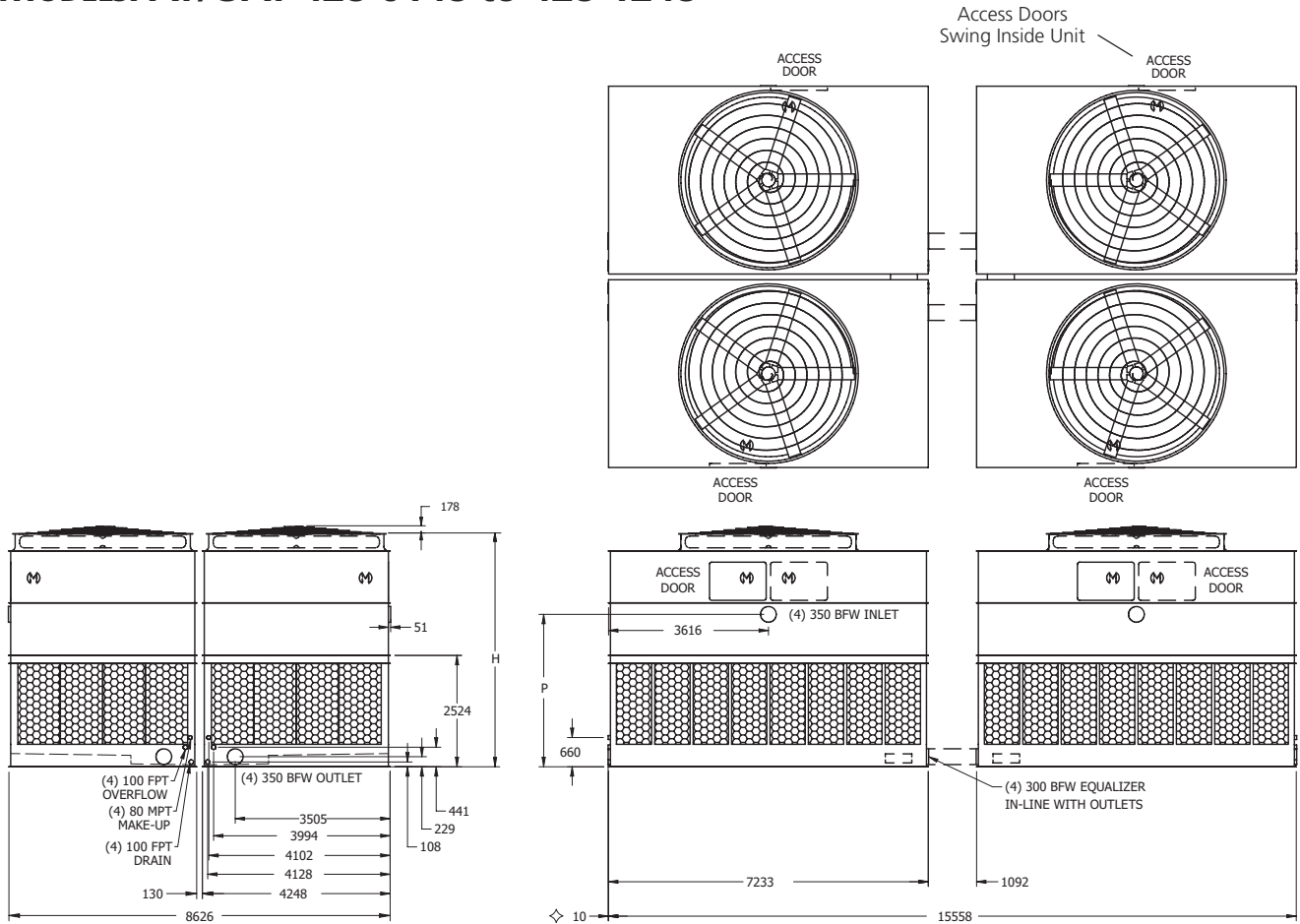
Note: for additional Weights and Heights of optional *Low & Super Low Sound Fan* execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)
	Shipping	Operating	Heaviest Section (Upper)		
AT/UAT 228-526	22200	37465	8010	(4) 15,0	185,0
AT/UAT 228-626	22255	37520	8040	(4) 18,5	198,4
AT/UAT 228-726	22345	37610	8085	(4) 22,0	210,1
AT/UAT 228-826	22635	37900	8230	(4) 30,0	229,7
AT/UAT 228-926	22650	37920	8235	(4) 37,0	246,2

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

◇ Outlet connection extends 10 mm beyond bottom flange.

MODELS: AT/UAT 428-0148 to 428-1248



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

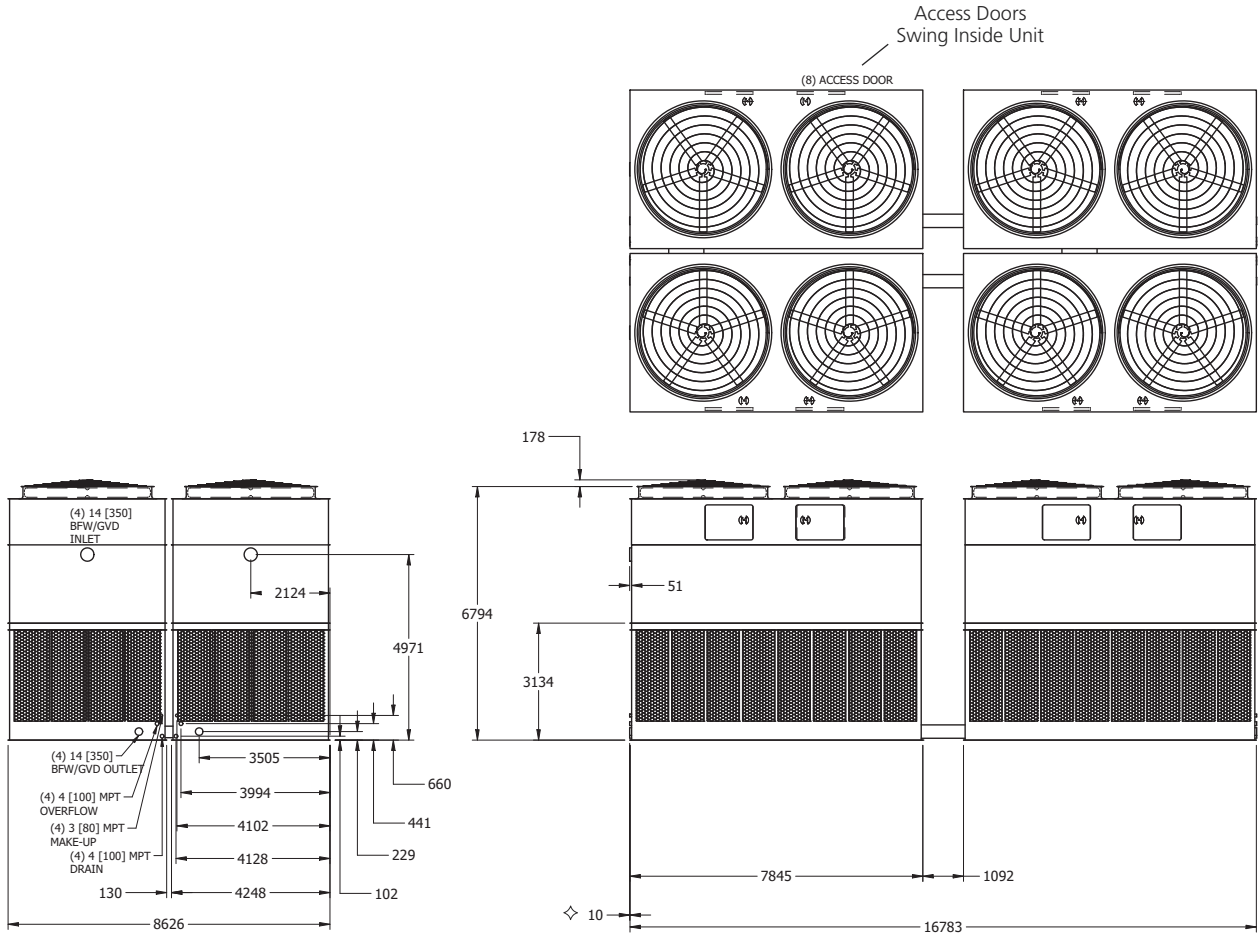
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)	Dimensions (mm)	
	Shipping	Operating	Heaviest Section (Upper)			H†	P
AT/UAT 428-0148	29740	58495	4840	(4) 22,0	323,5	†† 5324	3451
AT/UAT 428-0248	30010	58765	4910	(4) 30,0	354,9	†† 5324	3451
AT/UAT 428-0348	30645	59400	5065	(4) 37,0	380,9	†† 5324	3451
AT/UAT 428-0448	33475	62235	5775	(4) 18,5	293,1	5934	4061
AT/UAT 428-0548	33510	62270	5785	(4) 22,0	311,5	5934	4061
AT/UAT 428-0648	31895	60655	5380	(4) 30,0	348,9	5629	3756
AT/UAT 428-0748	32530	61290	5540	(4) 37,0	348,7	5629	3756
AT/UAT 428-0848	33785	62540	5850	(4) 30,0	342,9	5934	4061
AT/UAT 428-0948	34420	63175	6010	(4) 37,0	368,2	5934	4061
AT/UAT 428-1048	32840	61600	5615	(4) 45,0	396,6	5629	3756
AT/UAT 428-1148	34725	63485	6085	(4) 45,0	389,9	5934	4061
AT/UAT 428-1248	35160	63920	6195	(4) 55,0	427,1	5934	4061

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

◇ Outlet connection extends 10 mm beyond bottom flange.
 † Height does not include fan guard.
 †† Fan guard is factory mounted.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 428-552 to 428-952



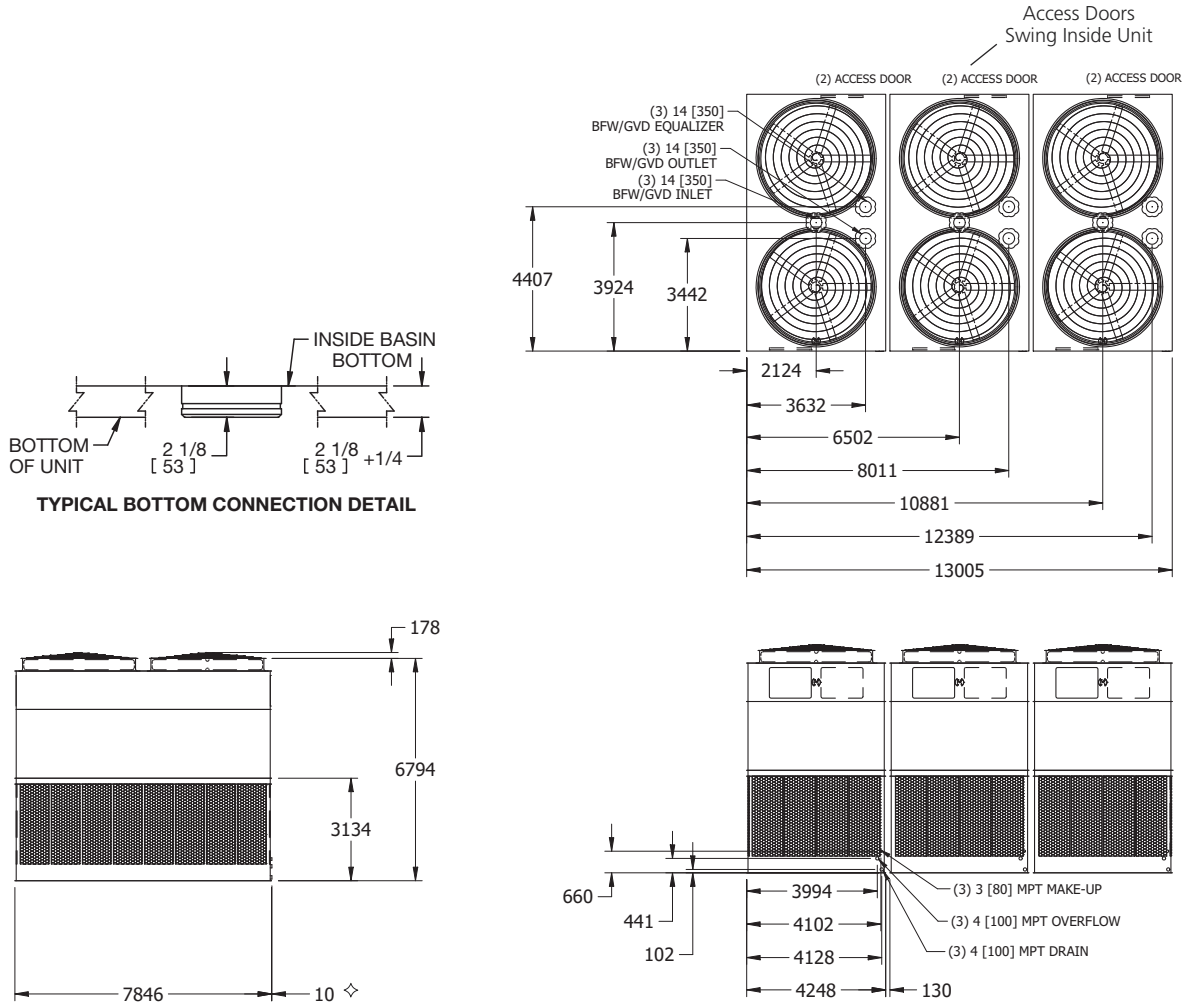
Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)
	Shipping	Operating	Heaviest Section (Upper)		
AT/UAT 428-552	44435	74970	8010	(8) 15,0	352,8
AT/UAT 428-652	44545	75080	8040	(8) 18,5	378,5
AT/UAT 428-752	44725	75260	8085	(8) 22,0	400,7
AT/UAT 428-852	45305	75840	8230	(8) 30,0	438,4
AT/UAT 428-952	45340	75875	8235	(8) 37,0	469,9

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.

◇ Outlet connection extends 10 mm beyond bottom flange.

MODELS: AT/UAT 342-526 to 342-926



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

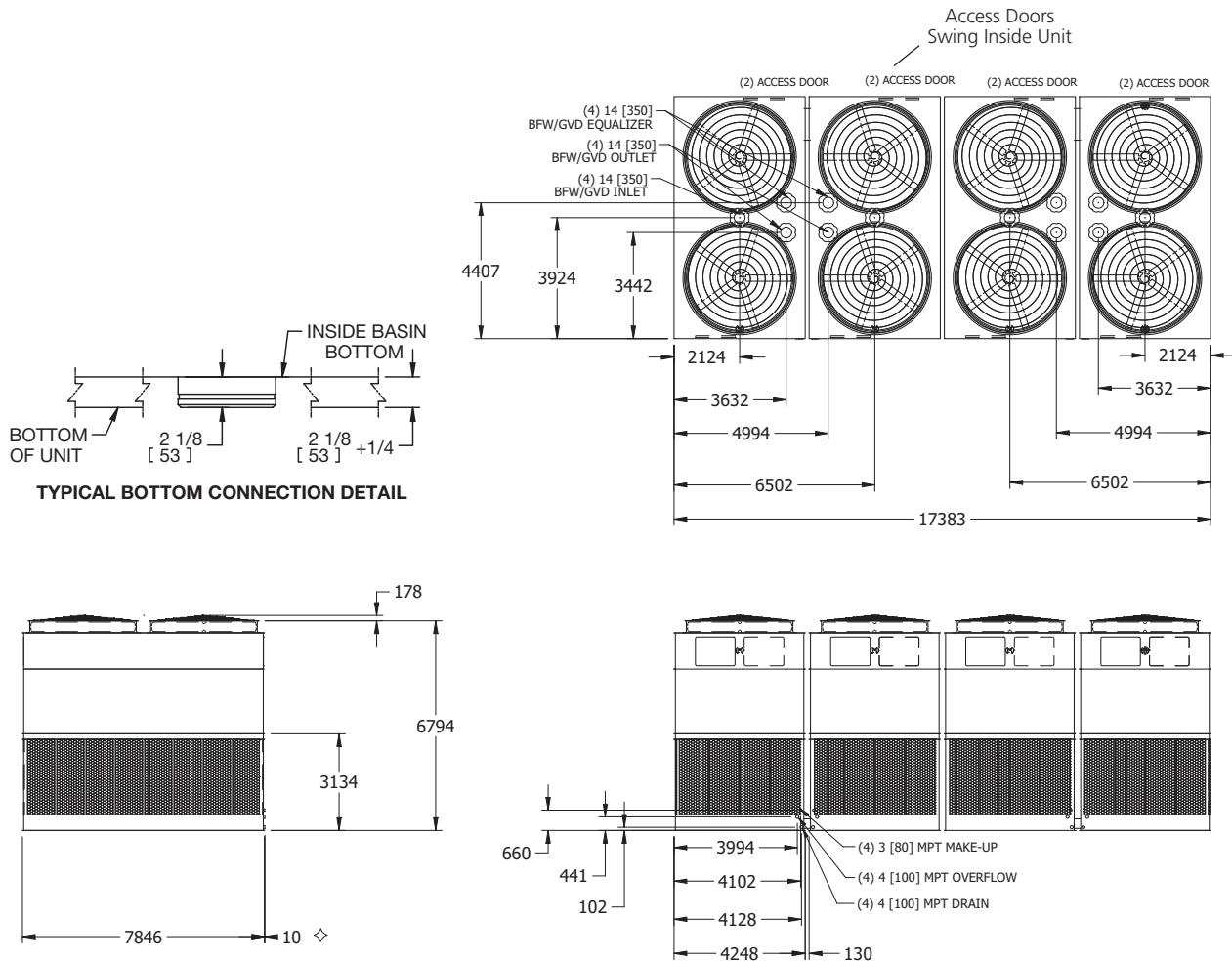
Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)
	Shipping	Operating	Heaviest Section (Upper)		
AT/UAT 342-526	33298	56200	8010	(6) 15,0	277,8
AT/UAT 342-626	33380	56282	8038	(6) 18,5	298,0
AT/UAT 342-726	33516	56418	8083	(6) 22,0	315,5
AT/UAT 342-826	33951	56853	8228	(6) 30,0	345,1
AT/UAT 342-926	33979	56880	8237	(6) 37,0	369,9

- NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) Standard configuration is bottom inlet, bottom outlet and bottom equalizer.

◇ Outlet connection extends 10 mm beyond bottom flange.

ENGINEERING DATA & DIMENSIONS

MODELS: AT/UAT 456-526 to 456-926



Note: for additional Weights and Heights of optional Low & Super Low Sound Fan execution, see table on page 74.

Model No.	Weights (kg)			Fan Motor (kW)	Air Flow (m ³ /s)
	Shipping	Operating	Heaviest Section (Upper)		
AT/UAT 456-526	44398	74933	8010	(8) 15,0	352,5
AT/UAT 456-626	44506	75042	8038	(8) 18,5	378,1
AT/UAT 456-726	44688	75224	8083	(8) 22,0	400,3
AT/UAT 456-826	45269	75804	8228	(8) 30,0	437,9
AT/UAT 456-926	45305	75841	8237	(8) 37,0	469,3

NOTE: (1) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
 (2) Do not use catalog drawings for certified prints. Dimensions and weights are subject to change.
 (3) Adequate spacing must be allowed for access to the cooling tower.
 (4) Standard configuration is bottom inlet, bottom outlet and bottom equalizer.

◇ Outlet connection extends 10 mm beyond bottom flange.

AT/UAT Model No	Low Sound Fan Additional Height (mm)	Super Low Sound Fan	
		Additional Height (mm)	Additional Weight (kg)
14-64 to 14-912	0	n.a.	-
18-49 to 18-914	101	432	60
28-518 to 28-521	101	432	120
28-524 to 28-928	101	432	120
38-236 to 38-942	101	432	180
216-49 to 216-911	101	432	120
216-312 to 216-914	101	432	120
19-56 to 19-96	101	331	70
19-28 to 19-98	101	432	70
26-517 to 26-917	101	331	140
28-217 to 28-917	101	432	140
212-59 to 212-99	101	331	140
215-29 to 215-99	101	432	140
110-112 to 110-918	0	546	320
210-124 to 210-936	0	546	640
310-136 to 310-954	0	546	960
112-012 to 112-914	0	546	320
112-918 to 112-920	178	394	550
212-024 to 212-928	0	546	640
212-036 to 212-936	178	394	1100
312-036 to 312-942	0	546	960
312-054 to 312-960	178	394	1650
220-112 to 220-918	0	546	640
420-124 to 420-936	0	546	1280
224-018 to 224-920	178	394	1100
424-024 to 424-928	0	546	1280
424-036 to 424-936	178	394	2200
114-0124 to 114-1224	127	343	570
214-0148 to 214-1148	127	343	1140
314-0172 to 314-1272	127	343	1710
224-0124 to 228-0924	127	343	1140
428-0148 to 428-1248	127	343	2280
114-526 to 114-926	178	394	1820
214-552 to 214-952	178	394	3640
314-578 to 314-978	178	394	5460
228-526 to 228-926	178	394	3640
428-552 to 428-952	178	394	7280
342-526 to 342-926	178	394	5460
456-526 to 456-926	178	394	7280

DRAIN DOWN VOLUME FOR REMOTE SUMP APPLICATIONS

The following chart provides the maximum drain down volume allowable per AT/UAT model number. Use this chart when sizing indoor or outdoor remote sumps tanks. Remote sump applications are commonly used whenever a cooling tower is idle during sub-freezing weather to protect the water in the basin from freezing or for large multi-tower industrial applications. Either application allows the circulating water to gravity drain into a remote sump tank indoors or a large outdoor concrete basin located underneath the cooling tower.

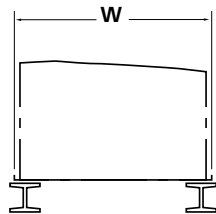
The water volume provided is the cooling tower portion of the remote sump tank only. The tank should allow for drain down water from external piping and pump suction coverage.

AT/UAT Model No.	Maximum Liters of drain down
AT/UAT 14-64 to 94	341
14-66 to 96	530
14-69 to 99	833
14-612 to 912	1041
18-49 to 99	1442
18-511 to 911	1692
18-312 to 912	1945
18-214 to 914	2279
28-518 to 918	2945
28-521 to 921	3444
28-524 to 924	3891
28-428 to 928	4557
38-236 to 936	5836
38-442 to 942	6836
216-49 to 99	2884
216-511 to 911	3217
216-312 to 912	3690
216-214 to 914	4353
19-56 to 96	1056
19-28 to 98	1245
26-517 to 917	2112
28-217 to 917	24191
212-59 to 99	2112
215-29 to 99	2491
110-112 to 912	3149
110-118 to 918	4769
210-124 to 924	6298
210-136 to 936	9538
310-136 to 936	9447
310-154 to 954	14307
112-012 to 912	3149
112-314 to 914	3687
112-018 to 918	4769
112-520 to 920	5303
212-024 to 924	6298
212-128 to 928	7373
212-036 to 936	9538
312-036 to 936	9447
312-042 to 942	11060
312-054 to 954	14307
312-260 to 960	15908

AT/UAT Model No.	Maximum Liters of drain down
220-112 to 912	6298
220-118 to 918	9538
420-124 to 924	12839
420-136 to 936	19076
224-018 to 918	9538
224-720 to 920	10606
424-024 to 924	12839
424-028 to 928	14939
424-036 to 936	19311
114-0124 to 1224	8274
114-526 to 926	9478
214-0148 to 1148	16548
214-552 to 952	18956
314-0172 to 1272	24822
314-578 to 978	28434
228-0124 to 924	16548
228-526 to 926	18956
428-0148 to 1248	33096
428-552 to 952	37912
342-526 to 926	28434
456-526 to 926	37912

Models AT/UAT 14-64 to 314-978

Suggested Two "I" Beam Arrangement



End Elevation



Plan View

Models AT/UAT 14-64 through 210-924

Two "I" Beams Required (by Others)

Dimensions (mm)		
Model No.	W	L
4-64 to 94	1321	1213
14-66 to 96	1321	1822
14-69 to 99	1321	2737
14-612 to 912	1321	3651
26-517 to 917	1826	5220
28-217 to 917	2283	5220
19-56 to 96	1826	2578
19-28 to 98	2283	2578
18-49 to 99	2388	2731
18-511 to 911	2388	3188
18-312 to 912	2388	3654
18-214 to 914	2388	4261
28-518 to 918	2388	5486
28-521 to 921	2388	6401
28-524 to 924	2388	7366
28-428 to 928	2388	8585
38-236 to 936	2388	11081
38-442 to 942	2388	12910
110-112 to 912	2991	3651
110-118 to 918	2991	5486
210-124 to 924	2991	7366

Models AT/UAT 210-936 through 314-978

Two "I" Beams Required (by Others)

Dimensions (mm)		
Model No.	W	L
210-136 to 936	2991	11036
310-136 to 936	2991	11081
310-154 to 954	2991	16586
112-012 to 912	3607	3651
112-314 to 914	3607	4261
112-018 to 918	3607	5486
112-520 to 920	3607	6096
212-024 to 924	3607	7366
212-128 to 928	3607	8585
212-036 to 936	3607	11036
312-036 to 936	3607	11081
312-042 to 942	3607	12910
312-054 to 954	3607	16586
312-260 to 960	3607	18415
114-0124 to 1224	4248	7239
214-0148 to 1148	4248	14535
314-0172 to 1272	4248	21834
114-526 to 926	4248	7845
214-552 to 952	4248	15754
314-578 to 978	4248	23663

Notes:

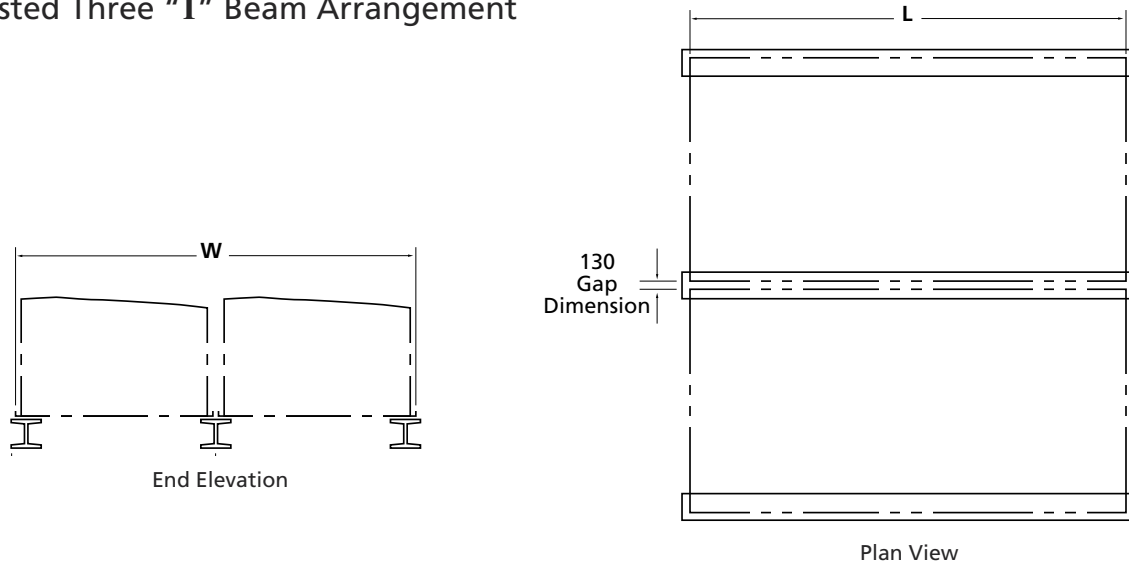
Models AT/UAT 14-64 through 314-978

- These are suggested arrangements for preliminary layout purposes. Consult your EVAPCO representative or www.evapco.eu for factory certified steel support drawings.
- The recommended support for the AT/UAT Cooling Tower 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 to provide for bolting to the structural steel.
- Beams should be sized in accordance with accepted structural practices. Maximum deflection of beam under unit to be 1/360 of the unit length, not to exceed 13 mm.
- For these models where two support beams are required, deflection may be calculated by using 55% of the operating weight as a uniform load on each beam.
- Beams should be level before setting the unit in place. Do not level the unit by shimming between it and the "I" beams.
- Support beams and Anchor bolts are to be furnished by others.
- Dimensions, weights and data are subject to change without notice. Refer to the factory certified drawings for exact dimensions.
- For alternate layout arrangements please consult the factory. **NOTE: OPTIONAL BOTTOM CONNECTIONS WILL REQUIRE THE UNIT TO BE ELEVATED TO ALLOW FOR PIPING.**

STRUCTURAL STEEL SUPPORT

Models AT/UAT 212-59 to 428-952

Suggested Three "I" Beam Arrangement



Models AT/UAT 212-59 through 428-952

Three "I" Beams Required (by Others)

Model No.	Dimensions (mm)	
	W	L
212-59 to 99	378	2578
215-29 to 99	4696	2578
216-49 to 99	5286	2731
216-511 to 911	5286	3188
216-312 to 912	5286	3651
216-214 to 914	5286	4261
220-112 to 912	6112	3651
220-118 to 918	6112	5486
420-124 to 924	6112	7360
420-136 to 936	6112	11036
224-018 to 918	7344	5486
224-720 to 920	7344	6096
424-024 to 924	7344	7360
424-028 to 928	7344	8579
424-036 to 936	7344	11030
228-0124 to 0924	8626	7239
428-0148 to 1248	8626	15570
228-526 to 926	8626	7845
428-552 to 952	8626	16783

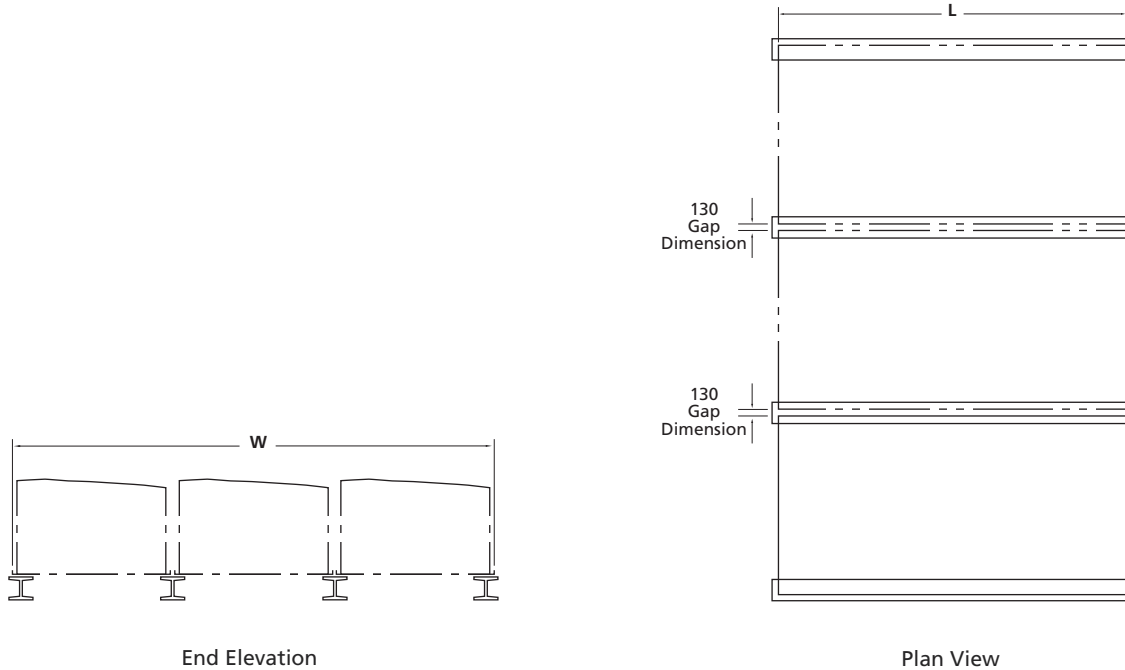
Notes:

Models AT/UAT 212-59 through 428-952

1. These are suggested arrangements for preliminary layout purposes. Consult your EVAPCO representative or www.evapco.eu for factory certified steel support drawings.
2. The recommended support for the AT/UAT Cooling Tower 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, 19mm in diameter are located in the bottom flanges of the pan to provide for bolting to the structural steel.
3. Beams should be sized in accordance with accepted structural practices. Maximum deflection of beam under unit to be 1/360 of the unit length, not to exceed 13mm.
4. For these models only where three support beams are required, deflection may be calculated using 56% of the operating weight on the CENTER BEAM and 27% on each OUTBOARD beam.
5. Beams should be level before setting the unit in place. Do not level the unit by shimming between it and the "I" beams.
6. Support beams and Anchor bolts are to be furnished by others.
7. Dimensions, weights and data are subject to change without notice. Refer to the factory certified drawings for exact dimensions.
8. For alternate layout arrangements please consult the factory. **NOTE: OPTIONAL BOTTOM CONNECTIONS WILL REQUIRE THE UNIT TO BE ELEVATED TO ALLOW FOR PIPING.**

Models AT/UAT 342-526 to 342-926

Suggested Four "I" Beam Arrangement



Models AT/UAT 342-526 through 342-926

Four "I" Beams Required (by Others)

Dimensions (mm)		
Model No.	W	L
342-526 to 926	13005	7845

Notes:

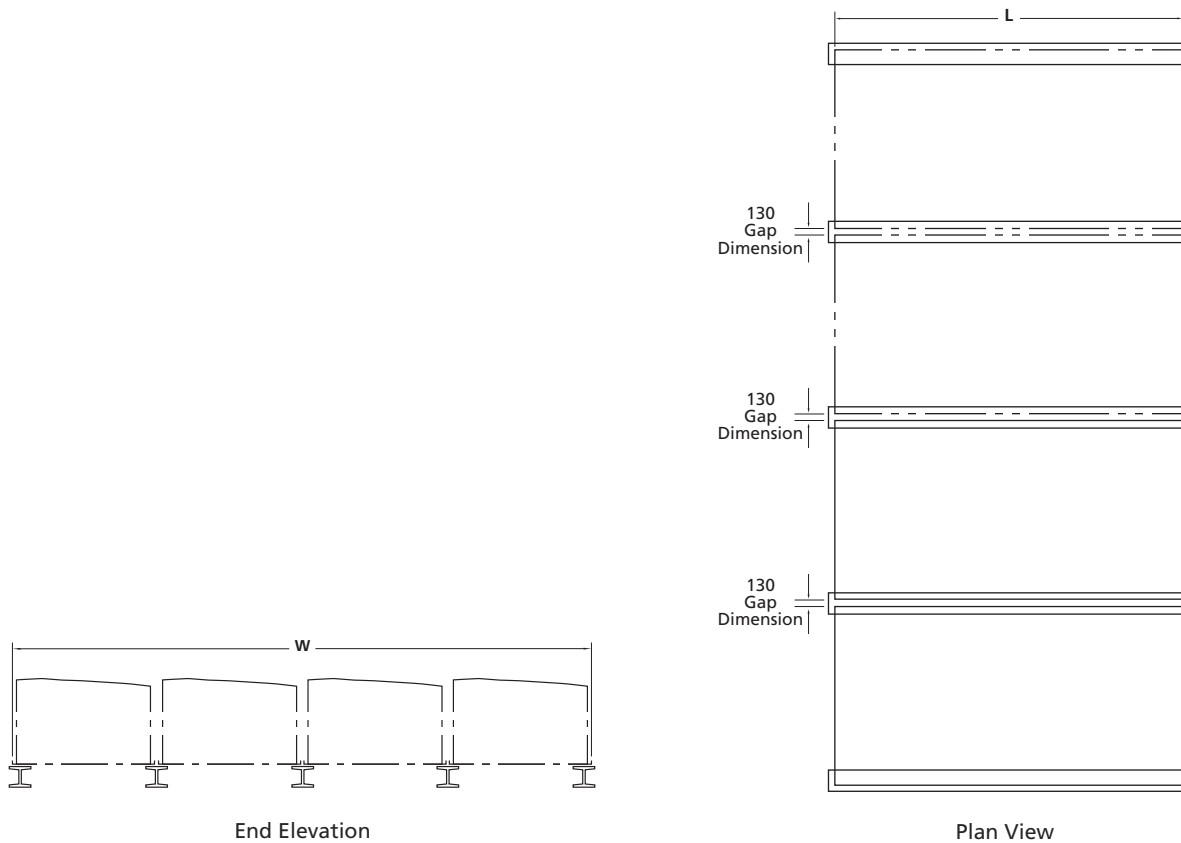
Models AT/UAT 342-526 through 342-926

1. These are suggested arrangements for preliminary layout purposes. Consult your EVAPCO representative or www.evapco.eu for factory certified steel support drawings.
2. The recommended support for the AT/UAT Cooling Tower 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 to provide for bolting to the structural steel.
3. Beams should be sized in accordance with accepted structural practices. Maximum deflection of beam under unit to be 1/360 of the unit length, not to exceed 13 mm.
4. For these models where two support beams are required, deflection may be calculated by using 55% of the operating weight as a uniform load on each beam.
5. Beams should be level before setting the unit in place. Do not level the unit by shimming between it and the "I" beams.
6. Support beams and Anchor bolts are to be furnished by others.
7. Dimensions, weights and data are subject to change without notice. Refer to the factory certified drawings for exact dimensions.
8. For alternate layout arrangements please consult the factory. *NOTE: OPTIONAL BOTTOM CONNECTIONS WILL REQUIRE THE UNIT TO BE ELEVATED TO ALLOW FOR PIPING.*

STRUCTURAL STEEL SUPPORT

Models AT/UAT 456-526 to 456-926

Suggested Five "I" Beam Arrangement



Models AT/UAT 456-526 through 456-926

Five "I" Beams Required (by Others)

Dimensions (mm)		
Model No.	W	L
456-526 to 926	17383	7845

Notes:

Models AT/UAT 456-526 through 456-926

1. These are suggested arrangements for preliminary layout purposes. Consult your EVAPCO representative or www.evapco.eu for factory certified steel support drawings.
2. The recommended support for the AT/UAT Cooling Tower 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, 19mm in diameter are located in the bottom flanges of the pan to provide for bolting to the structural steel.
3. Beams should be sized in accordance with accepted structural practices. Maximum deflection of beam under unit to be 1/360 of the unit length, not to exceed 13mm.
4. For these models only where three support beams are required, deflection may be calculated using 56% of the operating weight on the CENTER BEAM and 27% on each OUTBOARD beam.
5. Beams should be level before setting the unit in place. Do not level the unit by shimming between it and the "I" beams.
6. Support beams and Anchor bolts are to be furnished by others.
7. Dimensions, weights and data are subject to change without notice. Refer to the factory certified drawings for exact dimensions.
8. For alternate layout arrangements please consult the factory. **NOTE: OPTIONAL BOTTOM CONNECTIONS WILL REQUIRE THE UNIT TO BE ELEVATED TO ALLOW FOR PIPING.**

1.0 FACTORY FABRICATED INDUCED DRAFT COOLING TOWERS

1.1 General

Furnish and install factory assembled cooling tower of blow through, counterflow design with a horizontal single air side entry and a vertical air discharge. The unit shall be completely factory assembled and be conform to the specifications and schedules.

The total fan power should not exceed ____ kW and the total overall unit dimensions should not exceed the following:

Length: mm
Width: mm
Height: mm

The unit will be delivered in two parts: the basin – louver section and the heat transfer – fan section.

The unit (top and bottom section) shall be joined together with elastic sealer and bolted together with corrosion resistant fasteners.

Approved manufacturer: Evapco – model AT/UAT _____

1.2 Thermal Performance – Performance Warranty

The tower 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 CTI-ECC certification for the proposed model or an independent field performance test shall not be accepted.

1.3 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

1.4 Submittals

- a) The manufacturer shall submit a five year history of the proposed type of cooling tower with a minimum of 10 installations for similar sized equipment.
- b) Shop drawings: submit shop drawings indicating dimensions, weight loadings and required clearances.
- c) Product data: submit manufacturer's technical product data, original selection printouts and clearance requirements.
- d) Performance data: submit curves showing certified and guaranteed cooling tower performance with variation in outdoor air wet bulb temperature at design air flow and design flow rate.
In addition submit performance curves for 90% and 110% of design water flow rate, indicating the cooling tower temperatures versus the ambient air wet bulb temperatures.
- e) Complete noise data sheet for the selected cooling tower.
- f) Maintenance data for the cooling tower and accessories.
- g) The cooling tower manufacturer shall provide factory test run certificates of the fans and fan motor.

1.5 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 that the units remain clean and protected from any dust and mechanical damage.

1.6 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 9001:2008.

This is to guarantee a consistent level of product and service quality.

- b) Manufacturers without ISO 9001:2008 certification are not acceptable.

1.7 Warranty

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

2.0 PRODUCT

2.1 Construction – Corrosion Resistance

STANDARD EXECUTION – GALVANIZED STEEL Z-725

- 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.

OPTIONAL EXECUTION – BASIN IN SST 304L or 316L

- a) The structure and all steel elements of the Basin and Louver section up to the water level shall be made of SST 304L or 316L.
- b) Alternatives with hot dip galvanized steel and epoxy coatings in lieu of the SST 304L or 316L 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 are not accepted as equal.
- d) The strainer shall be made of stainless steel type 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.

UAT EXECUTION – Complete Unit SST 304L and/or 316L (except fans and moving parts)

- a) The structure and all steel elements shall be made of SST 304L and/or 316L.
- b) Alternatives with hot dip galvanized steel and epoxy coatings in lieu of the SST 304L and/or 316L are not considered equal and accepted.
- c) Casing materials shall be of non flammable construction.
- d) The assembly material shall be SST 304L and/or 316L bolt and nuts.

2.2 Construction – Seismic and wind load resistance

- a) The structural design must withstand 1g seismic or 2.87 kN/m² wind loads.
- b) Cooling Towers must be independently certified according to IBC 2009.

2.3 Cooling Tower Basin

- a) Standard basin accessories include: overflow, drain, anti vortex hood and brass make up with plastic float ball.
- b) The entire pan area shall incorporate a sloped basin design to prevent sediment built up, biological film and standing water.
- c) 2.3 m wide and more units shall have a stepped basin design with sloped upper and lower basin bottoms to reduce water volume.
- d) The basin can be inspected while the unit is in operation with the fan(s) and pump(s) running.
- e) Depressed side outlet sumps which are not an integral part of the basin shall not be accepted.

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2.4 Air Inlet Louvers

- a) The air inlet louver screens shall be constructed of polyvinyl chloride (PVC), mounted in easily removable frames.
- b) The louvers shall be at multiple 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 to enter the basin.

2.5 Casing Section

2.5.1 Heat Transfer

- a) The cooling tower fill shall be PVC (Polyvinyl Chloride) of cross fluted design for optimum heat transfer and efficiency.
- b) The cross fluted sheets shall be bonded together for maximum strength and durability. Fill packs which are not bonded are not allowed. The fill sheets will be bonded together in such a way that the structural integrity of the fill makes the fill useable as a working platform.
- c) The PVC fill shall be self extinguishing for fire resistance with a flame spread rating of 5 per ASTM E 84 – 81a.
- d) The fill shall be resistant to rot, decay or biological attack.
- e) The fill shall be able to withstand a water temperature of 55°C.
- f) The cooling tower manufacturer shall be responsible for the manufacturing and performance testing of the fill. This is to assure single source responsibility.
- g) The casing shall totally encase the complete fill section to protect the complete fill from direct atmosphere contact.
- h) The construction of the unit shall allow easy removal of the fill bundles for maintenance purposes.

2.5.2 Water Distribution

- a) The water distribution system shall be completely enclosed and protected from direct sunlight exposure, environmental elements and debris. Water distribution systems with direct exposure to the environmental are not allowed.
- b) The spray header and branches shall be constructed of Schedule 40, Polyvinyl Chloride (PVC) pipe for corrosion resistance and shall have a steel connection to attach the external piping.
- c) All spray branches shall have threaded end caps and are easily removable for cleaning purposes.
- d) The water shall be distributed over the fill by precision molded ABS spray nozzles with large minimum 25 mm orifice openings and integral sludge ring to eliminate clogging.
- e) The nozzles shall be threaded into the water distribution piping to assure positive positioning. The nozzles are located on the side of the header to allow the larger debris to flow easily through the water distribution system.
- f) Each cell shall have only one hot water return inlet, otherwise the cooling tower manufacturer shall provide the necessary extra provisions (piping, balancing, valves, ...) to achieve the same at no extra cost.

2.5.3 Drift Eliminators

- a) The drift eliminators shall be constructed 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 recirculated water rate.
- d) The Drift Eliminators shall be certified according to Eurovent Standard OM-14-2009.

2.5.4 Acces Door

- a) A large hinged access door shall provide access to the fan section for maintenance.

2.6 Mechanical Equipment

2.6.1 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) Each fan blade shall be individually adjustable.
- d) The fan cowl shall be covered with a heavy gauge hot dip galvanized wire fan guard.
- e) The fan – drive system (fan – drive – motor) shall be factory mounted, adjusted and undergo a trial run in the factory before shipment.

2.6.2 Axial Propeller Fan(s) - Low Sound Fan (optional)

- 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 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 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.

2.6.3 Axial Propeller Fan(s) - Super Low Sound Fan (optional)

- 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 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

2.6.4 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 grease fittings shall be extended to the outside of the unit.
- c) The bearings shall be rated for an L-10 life of 75.000 to 135.000 hours.
- d) The fan drive sheaves shall be aluminum alloy.
- e) The belt shall be a multigroove belt system, constructed of neoprene with polyester cords and designed for 150% of the motor nameplate horsepower.

2.6.5 Motor (models AT 14-64 to AT 38-942)

- 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 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 greased for life or external grease nipples shall be provided.
- e) The motor shall be mounted on an adjustable heavy duty steel motor base.
- f) A protective cover shall shield the motor and sheave from the weather.
- g) The motor power supply shall be ___ Volts, ___ Hertz and ___ phase.

2.6.6 Motor (models AT 110-112 to AT 456-926)

- a) The fan motor shall be Totally Enclosed Air Over (TEAO), squirrel cage, ball bearing type motor.



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- 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 greased for life 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.

2.6.3 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.

2.7 Sound Levels

The maximum sound pressure levels (dB) measured 15m from the cooling tower operating at full fan speed shall not exceed the sound levels detailed below.

Location	63Hz	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	8000Hz	dB(A)
Discharge									
Air inlet									

3.0 ACCESSORIES (optional)

3.1 Electric Heaters

- a) The cooling tower cold water basin shall be provided with a electric heater package to prevent freezing of the water in the cold water basin.
- b) The electric heater package includes: electric heater elements and a combination of 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.

3.2 Three Probe Electric Water Level Control Package

- a) The cooling tower 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 SST 316 static probes mounted in a stilling chamber outside the unit. Electrodes or sensors mounted inside the unit are not accepted because the functionality 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 for automatic filling and a level alarm.
 - The power supply to the control package is 24 Vac / 230 Vac - ___ Hz.
 - A weather protected solenoid valve for the water make up ready for Piping to a water supply with pressure between 140 kPa and 340 kPa.

3.3 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 will be interrupt power to the motor in the event of excessive vibration.
- b) The switch shall be adjustable for sensitivity, and shall require manual reset.

3.4 Vertical Access Ladders

- a) A vertical type ladder arrangement which provides easy access to the water distribution system and drive components shall be provided with the cooling tower.

- b) The ladder will be completed with a safety cage for safety purposes.
- c) Ladder and safety cage shall meet CE requirements.
- d) Ladders shall be made of aluminum.

3.5 Multipurpose Davit

- a) The cooling tower will be completed with a davit to facilitate the removal of fan(s) and fan motor(s).
- b) The davit is constructed of aluminum, the bracket is constructed of the same material as the upper section 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.

3.6 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 1.5m 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.

3.7 External Service Platform

- a) The cooling tower shall be supplied with an external service platform.
- b) The external service platform will be self supporting and includes access ladders with safety cage to the platform and handrailing.
- c) The external service platform will be installed in front of the fan access doors.
- d) The platform shall meet OSHA – CE requirements. Platforms shall be made of hot dip galvanized steel.

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