Bulletin 167B-AU

evapco® for LIFE

CONTAINERISED

Cooling Towers
Closed Circuit Fluid Coolers
Evaporative Condensers

SUPER LOW SOUND TECHNOLOGY

Compliant

AS/NZS 3666.1:2011
AS 1657-2013
AS 1210-2010
BIM-MEP^{AUS}
CTI STD-201RS
CTI ATC-128
IBC
FM

U.S. GREEN BUILDING COUNCIL MEMBER

Member of iiar
International Institute of Ammonia Refrigeration
www.iiar.org

LOW SOUND, LOW ENERGY, LOW RISK

Since its founding in 1976, EVAPCO Incorporated has become an industry leader in the engineering and manufacturing of quality heat transfer products around the world. EVAPCO's mission is to provide first class service and quality products for the following markets:

- Commercial HVAC
- District Energy
- Industrial Process
- Industrial Refrigeration
- Power

EVAPCO's powerful combination of financial strength and technical expertise has established the company as a recognised manufacturer of market-leading products on a worldwide basis. EVAPCO is also recognised for the superior technology of its environmentally friendly product innovations in sound reduction and water management.

EVAPCO is an employee owned company with a strong emphasis on research & development and modern manufacturing plants. EVAPCO has earned a reputation for technological innovation and superior product quality by featuring products that are designed to offer these operating advantages:

- Higher System Efficiency
- Environmentally Friendly
- Lower Annual Operating Costs
- Reliable, Simple Operation and Maintenance

With an ongoing commitment to Research & Development programs, EVAPCO provides the most advanced products in the industry.

EVAPCO products have been marketed in Australia for more than 25 years beginning in the mid 1980's under an exclusive manufacturing agreement with F. Muller and continuing with the appointment of Aqua-Cool Towers as EVAPCO's exclusive licensee in 1995. In October 2009 EVAPCO, Inc acquired the controlling interest in Aqua-Cool Towers. The organisation was quickly restructured and all activities re-established under the new company name EVAPCO Australia Pty Ltd.

evapco® for LIFE

EVAPCO is the global innovator in heat transfer solutions. Our pledge is to make everyday life easier, more comfortable, more reliable, and more sustainable for people everywhere. With manufacturing facilities and sales offices in more than 40 countries and 28 patents worldwide in the last 10 years alone, we are the team that engineers and contractors know they can count on for life.

One World - One Product

All EVAPCO cooling towers, closed circuit fluid coolers, and evaporative condensers are professionally designed, tested, and engineered at EVAPCO headquarters in the USA. With decades of evaporative cooling experience, the Product Development team is constantly refining mature product designs while simultaneously experimenting with new concepts and innovations. The centralised structure of EVAPCO's design group ensures incredible product consistency and incorporation of collective feedback into future products. By manufacturing in accordance with uniform design specifications, EVAPCO is able to deliver the same final product to every corner of the globe regardless of the factory of origin, thereby defining the "One World – One Product" philosophy.

In-House Manufacturing

EVAPCO takes pride in manufacturing product components in-house rather than outsourcing to third-party suppliers. EVAPCO's wholly-owned, state-of-the-art factories in Shanghai and Kuala Lumpur execute the design instructions from the USA and manufacture cooling towers, closed circuit fluid coolers, and evaporative condensers for projects in Australia, New Zealand, Papua New Guinea, Fiji, New Caledonia, and other islands in the Asia Pacific region. These facilities are purpose-built to manufacture components for evaporative cooling equipment and are governed by EVAPCO's global manufacturing standards. The effects of this value-added approach to manufacturing compound during each step of the process and result in a high-value final product with EVAPCO ingenuity built into every aspect.

EVAPCO's Wholly-Owned Office & Factory in Shanghai, China

Engineered to Deliver the **Maximum Capacity** and **Highest Quality** to the Worldwide Market - with the **Lowest Shipping Costs!**

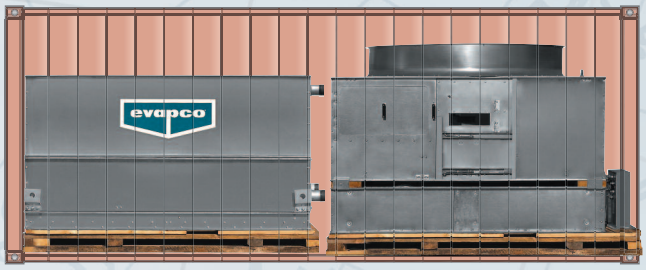
The Containerised AT and CAT lines of Cooling Towers, Evaporative Condensers & Closed Circuit Coolers have been custom-engineered to ship in standard shipping containers. This feature greatly reduces the transportation costs associated with shipping. Customers around the world will benefit from the Advanced Technology features which are standard on the Containerised design:

- Low-Energy Consumption
- Induced-Draft Operation
- Thermal-Pak® Coils
- ZM®II Nozzles
- EvapJet™ Nozzles
- PVC Water Distribution System
- WST Air Inlet Louvers
- Simple Operation and Maintenance

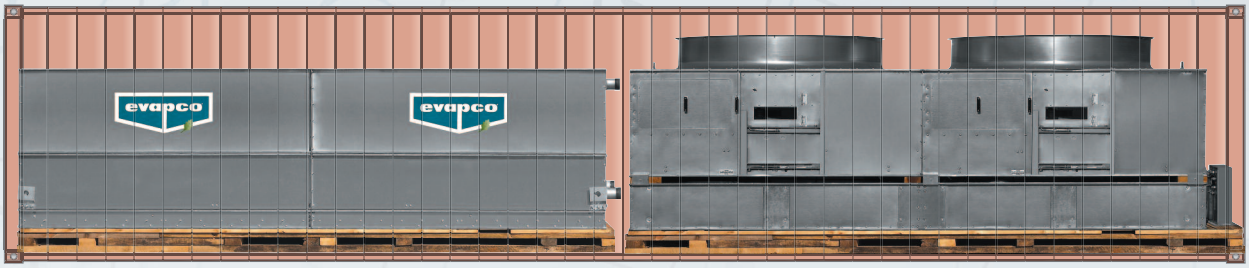
The Containerised Towers, Condensers & Coolers have been designed for simplified field assembly and rigging, while delivering the quality and reliability of a factory-built unit. These units provide the maximum capacity with the lowest ocean shipping cost!

Designed to lower transportation and installation costs while delivering advanced technology, superior performance, ease of maintenance and long, trouble-free operation.

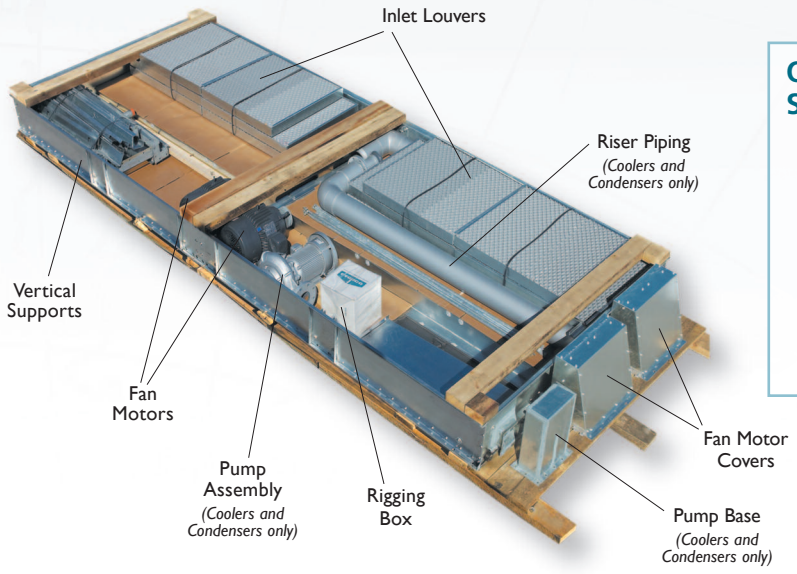
A complete 2.24M x 2.74M unit will fit in a 20' Shipping Container!



A complete 2.24M x 5.49M unit will fit in a 40' Shipping Container!



All Parts Required for Assembly Ship Inside the Basin.



Optional Accessories Ship Inside the Container

- Sloped Ladder
- Motor Davit
- Vibration Cutout Switch
- Basin Heater Package
- Electric Water Level Control
- Specialty Motors

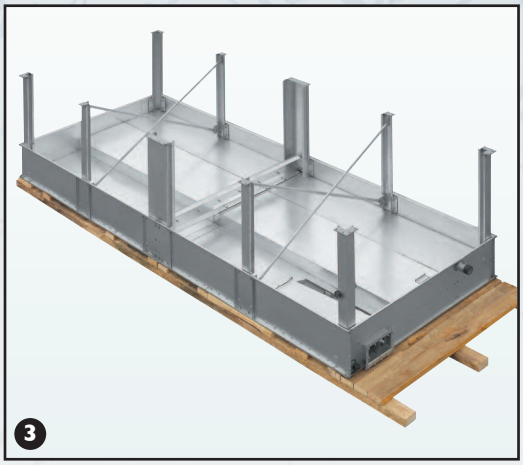
NOTE: THIS SPECIFIC SHIPPING ARRANGEMENT IS APPLICABLE ONLY TO MODEL NUMBERS WITH CAT PREFIX

Easy Field Assembly

(See rigging and assembly instructions for fully detailed procedure)

Unload Unit from Container

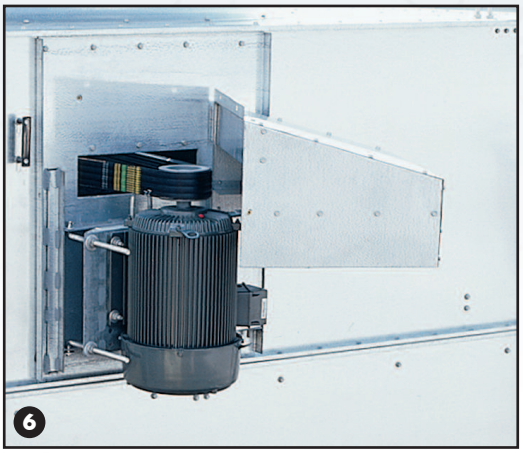
Mount Fan Section to Fill/Coil Section



Install Vertical Posts in Basin Section

Mount Fill or Coil/Fan to Basin Section

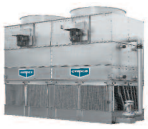
Mount Pump and Piping
(Coolers and Condensers only)



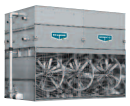
Mount Fan Motor

NOTE: THIS SPECIFIC ASSEMBLY PROCEDURE IS APPLICABLE ONLY TO MODEL NUMBERS WITH CAT PREFIX

Containerised

	Cooling Towers				Closed Circuit		
							
Product Line	**AT UT USS**	**CAT**	**LSTE**	**LPT**	**ATWB**	**CATWB**	**eco-ATWB**
Standard Features							
Counterflow	●	●	●	●	●	●	●
Induced Draft	●	●			●	●	●
Forced Draft			●	●			
Axial Fan	●	●			●	●	●
Centrifugal Fan			●	●			
CTI Certified	●		●	●	●	●	●
FM Approved	●		●		●		
IBC Compliant	●		●	●	●		●
AS 1210 Coil Design	N/A	N/A	N/A	N/A			
Five Year Motor & Drive Warranty	●	●	●	●	●	●	●
Materials of Construction							
G235 / SS304 / SS316	●	●	●	●	●	●	●
Options and Accessories							
Super Low Sound Fan	●	●			●		●
Discharge Sound Attenuation	●	●	●	●	●	●	●
Indoor Applications			●	●			
Containerised Shipment EXW EVAPCO Shanghai	●	●	●	●	●	●	●

Product Range

Fluid Coolers			Evaporative Condensers					
								
ESWB	**LSWE**	**LRWB**	**ATC-E**	**CATC**	**eco-ATC-A**	**PMC-E**	**LSC-E**	**LRC**
●	●	●	●	●	●	●	●	●
●			●	●	●			
	●	●				●	●	●
●			●	●	●	●		
	●	●					●	●
●	●	●	N/A	N/A	N/A	N/A	N/A	N/A
	●		●			●	●	
●	●	●	●		●	●	●	●
			●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●	●	●	●	●	●	●	●	●
●			●	●	●	●		
●	●	●	●	●	●	●	●	●
	●	●					●	●
●	●	●	●	●	●	●	●	●

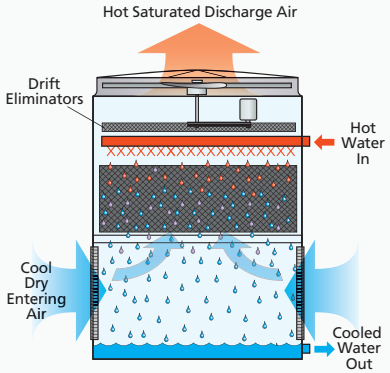
AT/UT/USS/cAT Cooling Towers

Design and Construction Features

The AT family of cooling towers reflects EVAPCO's continuing commitment to research and development. The advanced design provides owners with many operational and performance advantages.

Principle of Operation

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.



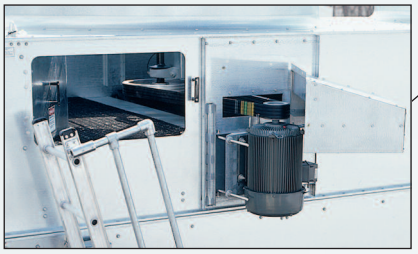
Principle of Operation

For particularly corrosive environments EVAPCO Cooling Towers are available with type 304 or 316 Stainless Steel construction. Consult your local sales representative for details on available options.

Fan Drive System

The fan motor and drive assembly is designed to allow easy servicing of the motor and adjustment of the belt tension from the exterior of the unit. The totally enclosed fan cooled (TEFC) fan motor is mounted on the outside for easy access. A protective cover swings away to allow servicing and belt adjustment.

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



External Motor Mount (Optional Ladder Shown)

Banded Drive Belt

The Banded Drive Belt is a solid-back, multi-groove belt system that has high lateral rigidity. The belt is constructed of neoprene with polyester cords. The drive belt is designed for 150% of the motor nameplate power for long life and durability.

Fan Shaft Bearings

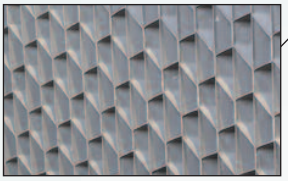
The Fan Shaft Bearings are specially selected for long, trouble-free life. They are rated for an L-10 life of 75,000 to 135,000 hours and are the heaviest pillow block bearings available.

Aluminium Alloy Pulleys

Fan pulleys located in the air stream are constructed of corrosion free aluminium for long life. The aluminium also helps belts last longer.

WST Air Inlet Louvers

Water and Sight Tight Air Inlet Louvers are designed to effectively eliminate splash-out and sunlight, greatly reducing the potential for algae formation inside the cooling tower. They are manufactured of corrosion-free PVC and mounted in light-weight frames to allow for easy removal and convenient access to the basin section.



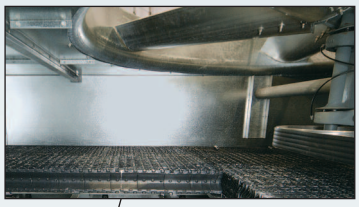
Clause 4.6 "Sunlight" of Australian Standard 3666.1 explicitly states that the *"design, orientation and placement of cooling towers shall be such that direct sunlight is minimised from the wetted areas of the cooling tower."* EVAPCO's WST air inlet louver ensures that the spray water is entirely concealed from sunlight from the moment it enters the tower to the moment it exits making it the most AS 3666.1 compliant cooling tower in the market.

Type 304 Stainless Steel Strainers

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

Totally Enclosed Motors

EVAPCO uses Totally Enclosed Motors as standard for all fan motors. These superior motors help to assure longer equipment life without motor failures, which result in costly downtime.

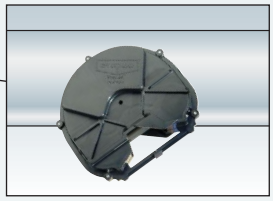


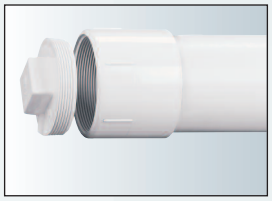
U.S. Patent No. 6315804

PVC Drift Eliminators

The final elements in the upper part of the cooling tower are Drift Eliminators. They strip the entrained water droplets from the leaving air stream.
EVAPCO eliminators are constructed entirely of inert, corrosion-free PVC. This patented PVC material has been specially treated to resist damaging ultraviolet light. The eliminators are assembled in easily handled sections to facilitate removal, thereby exposing the upper portion of the unit and water distribution system for periodic inspection.

- Patented design reduces drift rate to 0.001%.
- Made from corrosion resistant PVC for long life.
- Clause 4.4 "Drift Control" of Australian Standard 3666.1 explicitly states that the *"maximum drift loss shall not exceed 0.002% of the maximum design water circulation rate through the tower."* EVAPCO's counterflow cooling method and patented cellular drift eliminator design far exceeds this standard by limiting the drift rate to a maximum of only 0.001% making it the most AS 3666.1 compliant cooling tower in the market.





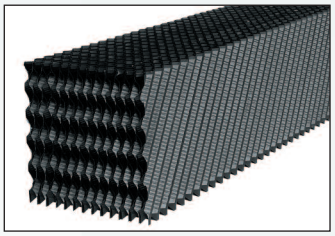
EvapJet™ Nozzle

Water Distribution System

- Non-corrosive PVC construction with EvapJet™ nozzles.
- Large orifice nozzles prevent clogging and are threaded for easy removal and positive positioning.
- Compatible with 50% turndown flow rate as standard. Even lower turndown ratios can be achieved by calling your local EVAPCO representative and requesting a custom EvapJet™ nozzle selection for your equipment.

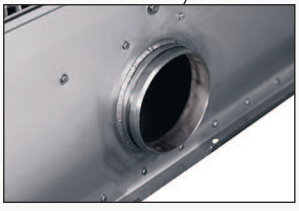
Patented** EVAPAK® Fill

The patented EVAPAK® Fill design is specially designed to induce highly turbulent mixing of the air and water for superior heat transfer. Special drainage tips allow high water loadings without excessive pressure drop. The fill is constructed of PVC, will not rot or decay, and is formulated to withstand water temperatures of 55˚C. Because of the unique way in which the crossfluted sheets are bonded together, and the bottom support of the fill section, the structural integrity of the fill is greatly enhanced, making the fill usable as a working platform.



It also has excellent fire resistant qualities with a flame spread rating of 5 per ASTM-E84-81a.

A higher temperature fill is available for water temperatures exceeding 55˚C. Consult your local EVAPCO representative for further details.



Quick Connect Piping System

- All inlet and outlet piping connections are beveled for welding and grooved to accept a mechanical coupling device as standard.
- Facilitates easy pipe connections for quick installation.
- Flanged connections are available as an option.

Selections for AT/UT/USS Cooling Towers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

AT/UT/USS Models 1.2M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM	
	AT 14-2E4 THRU 14-3F9	AT 14-2F12 THRU 14-3G12
SYSTEM FLUID IN (INLET)	(1) 100	(1) 150
SYSTEM FLUID OUT (OUTLET)	(1) 100	(1) 150
MAKE-UP (MU)	(1) 25	(1) 25
OVERFLOW (OF)	(1) 50	(1) 50
DRAIN (D)	(1) 50	(1) 50

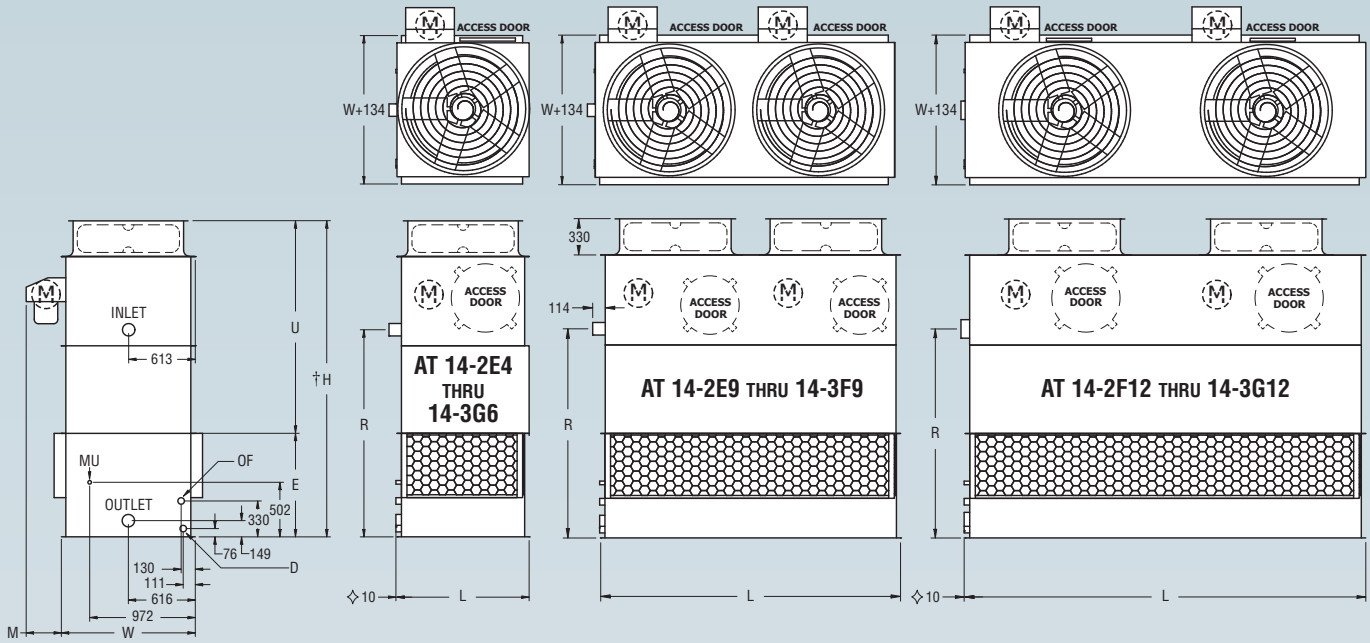


Table 1 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section			W	L	H	E	U	R	M
AT 14-2E4	490	800	UPPER	330	1.5	4.5	1232	1216	2908	953	1955	1905	324
AT 14-2F4	515	820	UPPER	355	2.2	5.1	1232	1216	2908	953	1955	1905	324
AT 14-3E4	525	835	UPPER	365	1.5	4.5	1232	1216	3213	953	2260	2210	324
AT 14-3F4	550	855	UPPER	390	2.2	5.0	1232	1216	3213	953	2260	2210	324
AT 14-2F6	630	1115	UPPER	430	2.2	7.2	1232	1826	2908	953	1955	1905	324
AT 14-2G6	640	1125	UPPER	440	4	8.5	1232	1826	2908	953	1955	1905	324
AT 14-3F6	675	1160	UPPER	475	2.2	7.1	1232	1826	3213	953	2260	2210	324
AT 14-3G6	685	1170	UPPER	485	4	8.4	1232	1826	3213	953	2260	2210	324
AT 14-2E9	905	1635	UPPER	625	(2) 1.5	10.0	1232	2737	2908	953	1955	1905	324
AT 14-2F9	955	1680	UPPER	670	(2) 2.2	11.4	1232	2737	2908	953	1955	1905	324
AT 14-3E9	980	1705	UPPER	700	(2) 1.5	9.8	1232	2737	3213	953	2260	2210	324
AT 14-3F9	1025	1750	UPPER	745	(2) 2.2	11.1	1232	2737	3213	953	2260	2210	324
AT 14-2F12	1150	2130	UPPER	805	(2) 2.2	14.6	1232	3651	2908	953	1955	1905	324
AT 14-2G12	1165	2150	UPPER	820	(2) 4	17.2	1232	3651	2908	953	1955	1905	324
AT 14-3F12	1240	2225	UPPER	895	(2) 2.2	14.3	1232	3651	3213	953	2260	2210	324
AT 14-3G12	1255	2240	UPPER	910	(2) 4	16.8	1232	3651	3213	953	2260	2210	324

NOTES: (1) Do not use catalogue drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

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

Selections for cAT Cooling Towers are available from EVAPCO's equipment selection program.
Please contact your local sales representative for access to the program.

cAT Models 2.2M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM	
	cAT 17-49 THRU 17-914	cAT 27-518 THRU 27-918
SYSTEM FLUID IN (INLET)	(1) 200	(2) 200
SYSTEM FLUID OUT (OUTLET)	(1) 200	(2) 200
MAKE-UP (MU)	(1) 50	(2) 50
OVERFLOW (OF)	(1) 80	(2) 80
DRAIN (D)	(1) 80	(2) 80

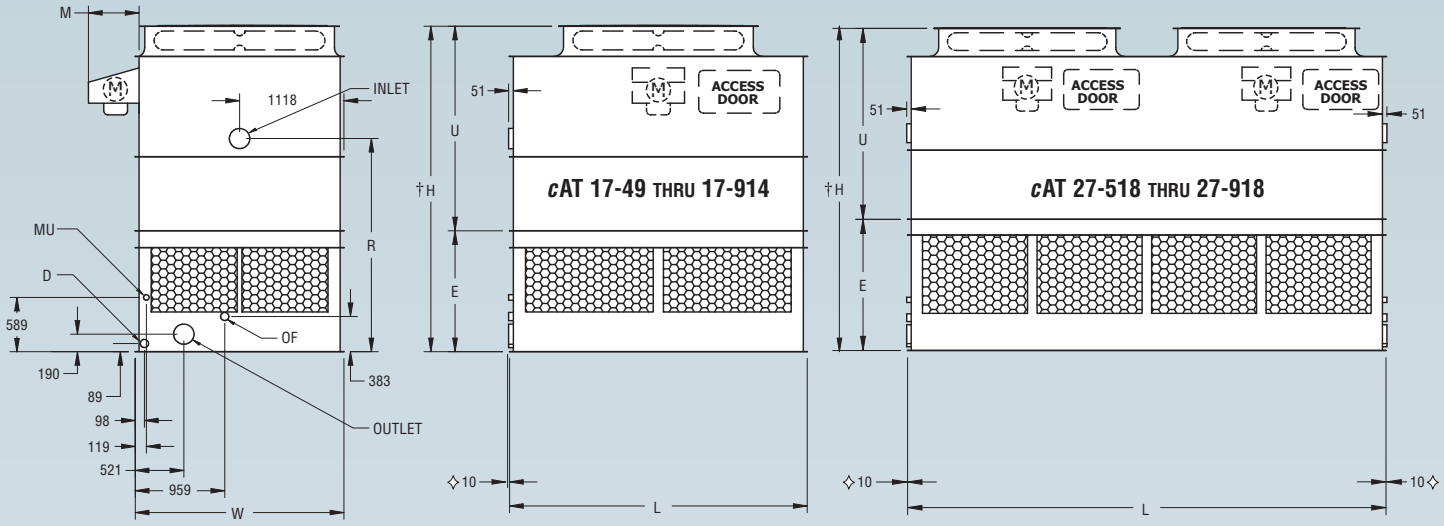


Table 2 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section			W	L	H	E	U	R	M
cAT 17-59	1880	2930	FAN ON BASIN	1295	11	21.0	2235	2737	3534	1318	2216	2315	534
cAT 17-49	1970	3015	FAN ON BASIN	1260	7.5	19.0	2235	2737	3839	1318	2521	2619	534
cAT 17-69	2000	3050	FAN ON BASIN	1295	11	21.0	2235	2737	3839	1318	2521	2619	534
cAT 17-89	2025	3070	FAN ON BASIN	1315	15	23.0	2235	2737	3839	1318	2521	2619	534
cAT 17-79	2130	3180	FAN ON BASIN	1295	11	21.0	2235	2737	4143	1318	2825	2924	534
cAT 17-99	2155	3200	FAN ON BASIN	1315	15	23.0	2235	2737	4143	1318	2825	2924	534
cAT 17-611	2130	3335	FAN ON BASIN	1450	15	27.0	2235	3188	3534	1318	2216	2315	534
cAT 17-511	2210	3410	FAN ON BASIN	1395	7.5	21.0	2235	3188	3839	1318	2521	2619	534
cAT 17-811	2265	3465	FAN ON BASIN	1450	15	26.0	2235	3188	3839	1318	2521	2619	534
cAT 17-711	2390	3590	FAN ON BASIN	1430	11	23.0	2235	3188	4143	1318	2825	2924	534
cAT 17-911	2415	3615	FAN ON BASIN	1450	15	26.0	2235	3188	4143	1318	2825	2924	534
cAT 17-512	2285	3720	FAN ON BASIN	1540	15	30.0	2235	3651	3534	1318	2216	2315	534
cAT 17-312	2375	3810	FAN ON BASIN	1490	7.5	23.0	2235	3651	3839	1318	2521	2619	534
cAT 17-612	2430	3865	FAN ON BASIN	1540	15	29.0	2235	3651	3839	1318	2521	2619	534
cAT 17-812	2445	3880	FAN ON BASIN	1555	18.5	31.0	2235	3651	3839	1318	2521	2619	534
cAT 17-412	2530	3965	FAN ON BASIN	1490	7.5	23.0	2235	3651	4143	1318	2825	2924	534
cAT 17-712	2585	4020	FAN ON BASIN	1540	15	29.0	2235	3651	4143	1318	2825	2924	534
cAT 17-912	2600	4030	FAN ON BASIN	1555	18.5	31.0	2235	3651	4143	1318	2825	2924	534
cAT 17-414	2600	4235	FAN ON BASIN	1745	18.5	35.0	2235	4261	3645	1429	2216	2426	534
cAT 17-214	2730	4370	FAN ON BASIN	1710	11	29.0	2235	4261	3950	1429	2521	2731	534
cAT 17-514	2755	4390	FAN ON BASIN	1735	15	32.0	2235	4261	3950	1429	2521	2731	534
cAT 17-714	2765	4405	FAN ON BASIN	1745	18.5	34.0	2235	4261	3950	1429	2521	2731	534
cAT 17-814	2775	4415	FAN ON BASIN	1755	22	36.0	2235	4261	3950	1429	2521	2731	534
cAT 17-314	2925	4565	FAN ON BASIN	1710	11	28.0	2235	4261	4255	1429	2826	3035	534
cAT 17-614	2950	4585	FAN ON BASIN	1735	15	31.0	2235	4261	4255	1429	2826	3035	534
cAT 17-914	2970	4610	FAN ON BASIN	1755	22	35.0	2235	4261	4255	1429	2826	3035	534
cAT 27-618	3515	5710	FAN ON BASIN	2450	(2) 11	43.0	2235	5486	3747	1527	2220	2527	534
cAT 27-718	3740	5935	FAN ON BASIN	2450	(2) 11	42.0	2235	5486	4051	1527	2524	2832	534
cAT 27-818	3760	5955	FAN ON BASIN	2470	(2) 15	47.0	2235	5486	4051	1527	2524	2832	534
cAT 27-518	3915	6110	FAN ON BASIN	2405	(2) 5.5	34.0	2235	5486	4356	1527	2829	3137	534
cAT 27-918	3985	6180	FAN ON BASIN	2470	(2) 15	46.0	2235	5486	4356	1527	2829	3137	534

NOTES: (1) Do not use catalogue drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

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

Selections for AT/UT/USS Cooling Towers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

AT/UT/USS Models 1.8M and 2.3M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	AT 19-2F6 THRU AT 19-4J8
SYSTEM FLUID IN (INLET)	(1) 150
SYSTEM FLUID OUT (OUTLET)	(1) 150
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 80

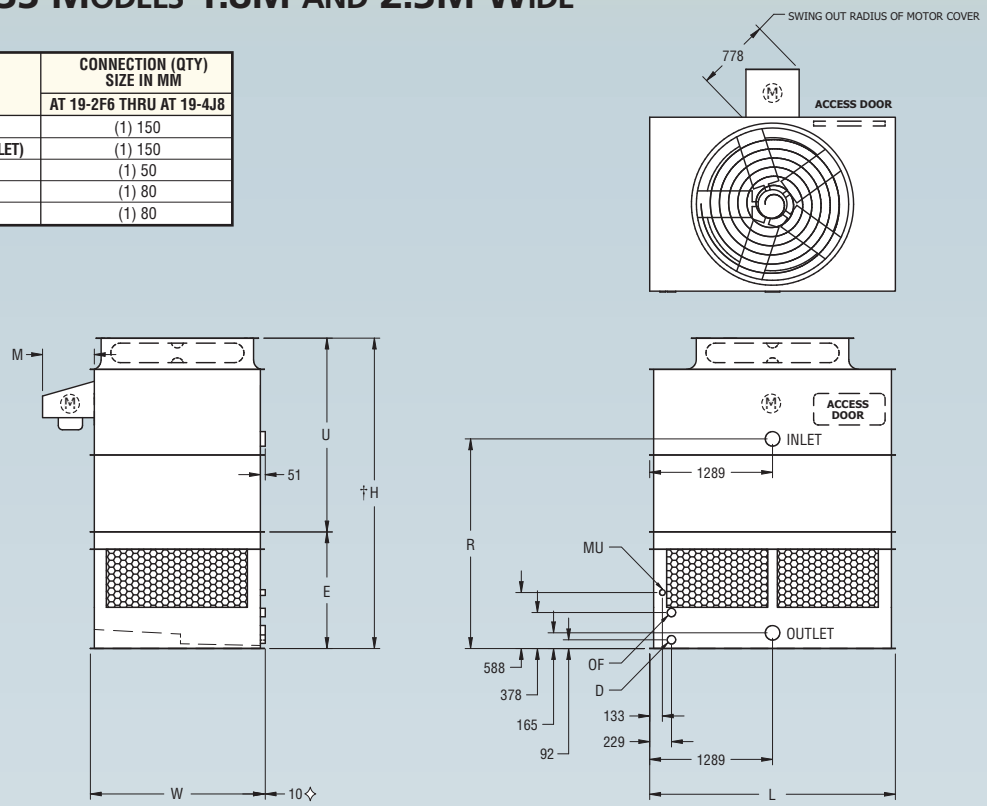


Table 3 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section			W	L	H	E	U	R	M
AT 19-2F6	1360	2285	UPPER	885	2.2	10.7	1826	2578	3258	1226	2032	2197	543
AT 19-2G6	1390	2315	UPPER	910	4	12.5	1826	2578	3258	1226	2032	2197	543
AT 19-2H6	1405	2330	UPPER	930	5.5	14.3	1826	2578	3258	1226	2032	2197	543
AT 19-3F6	1450	2375	UPPER	975	2.2	10.5	1826	2578	3562	1226	2336	2502	543
AT 19-3G6	1480	2405	UPPER	1000	4	12.3	1826	2578	3562	1226	2336	2502	543
AT 19-3H6	1495	2420	UPPER	1020	5.5	14.0	1826	2578	3562	1226	2336	2502	543
AT 19-3I6	1510	2435	UPPER	1035	7.5	15.3	1826	2578	3562	1226	2336	2502	543
AT 19-4F6	1550	2475	UPPER	1075	2.2	10.3	1826	2578	3867	1226	2641	2807	543
AT 19-4G6	1580	2505	UPPER	1100	4	12.1	1826	2578	3867	1226	2641	2807	543
AT 19-4H6	1595	2520	UPPER	1120	5.5	13.8	1826	2578	3867	1226	2641	2807	543
AT 19-4I6	1610	2535	UPPER	1135	7.5	15.1	1826	2578	3867	1226	2641	2807	543
AT 19-4J6	1640	2565	UPPER	1165	11	17.2	1826	2578	3867	1226	2641	2807	543
SLSF ADDITION	+70	+70		+70					+331		+331		
AT 19-2F8	1540	2635	UPPER	1005	2.2	12.6	2283	2578	3258	1226	2032	2197	543
AT 19-2G8	1565	2665	UPPER	1035	4	14.8	2283	2578	3258	1226	2032	2197	543
AT 19-2H8	1585	2680	UPPER	1050	5.5	16.8	2283	2578	3258	1226	2032	2197	543
AT 19-2I8	1595	2695	UPPER	1065	7.5	18.5	2283	2578	3258	1226	2032	2197	543
AT 19-3F8	1640	2740	UPPER	1110	2.2	12.4	2283	2578	3562	1226	2336	2502	543
AT 19-3G8	1670	2765	UPPER	1140	4	14.5	2283	2578	3562	1226	2336	2502	543
AT 19-3H8	1685	2785	UPPER	1155	5.5	16.6	2283	2578	3562	1226	2336	2502	543
AT 19-3I8	1700	2800	UPPER	1170	7.5	18.1	2283	2578	3562	1226	2336	2502	543
AT 19-3J8	1730	2825	UPPER	1195	11	20.6	2283	2578	3562	1226	2336	2502	543
AT 19-4F8	1765	2860	UPPER	1235	2.2	12.2	2283	2578	3867	1226	2641	2807	543
AT 19-4G8	1790	2890	UPPER	1260	4	14.3	2283	2578	3867	1226	2641	2807	543
AT 19-4H8	1810	2910	UPPER	1280	5.5	16.3	2283	2578	3867	1226	2641	2807	543
AT 19-4I8	1825	2920	UPPER	1295	7.5	17.8	2283	2578	3867	1226	2641	2807	543
AT 19-4J8	1850	2950	UPPER	1320	11	20.3	2283	2578	3867	1226	2641	2807	543
SLSF ADDITION	+70	+70		+70					+432		+432		

NOTES: (1) Do not use catalogue drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

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

Selections for AT/UT/USS Cooling Towers are available from EVAPCO's equipment selection program.
Please contact your local sales representative for access to the program.

AT/UT/USS Models 1.8M and 2.3M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	AT 26-2F17 THRU AT 28-4J17
SYSTEM FLUID IN (INLET)	(2) 150
SYSTEM FLUID OUT (OUTLET)	(2) 150
MAKE-UP (MU)	(2) 50
OVERFLOW (OF)	(2) 80
DRAIN (D)	(2) 80

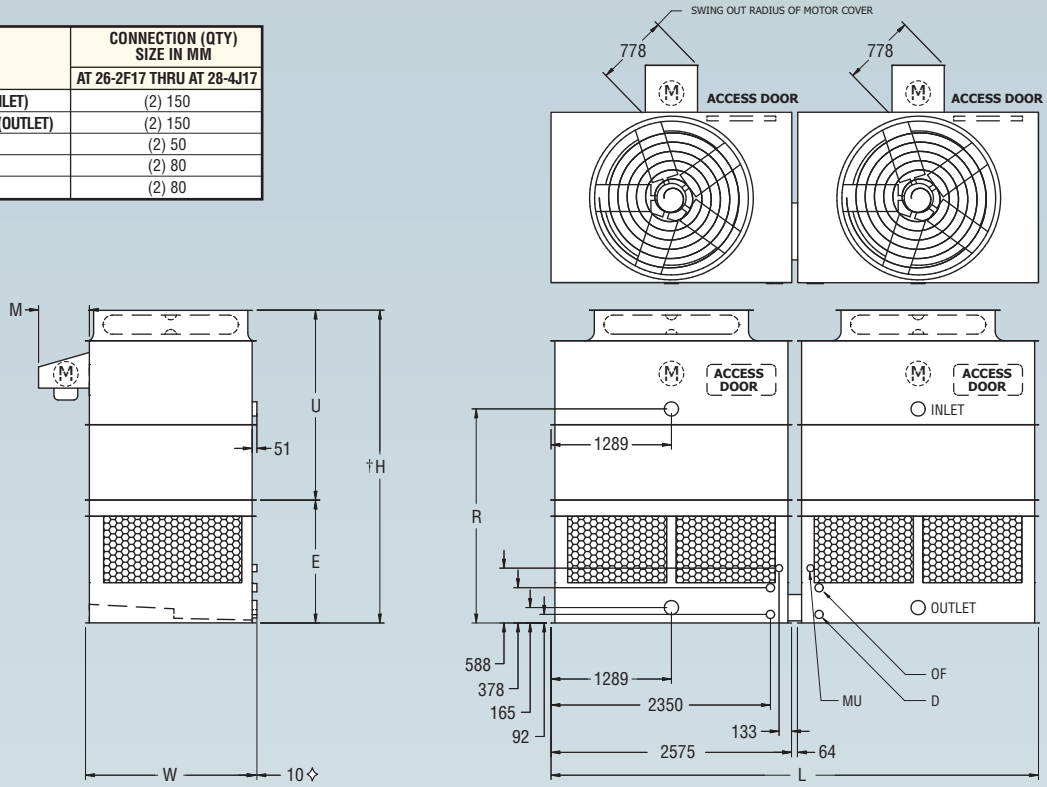


Table 4 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section			W	L	H	E	U	R	M
AT 26-2F17	2760	4610	UPPER	905	(2) 2.2	21.3	1826	5220	3350	1318	2032	2289	543
AT 26-2G17	2775	4625	UPPER	910	(2) 4	25.1	1826	5220	3350	1318	2032	2289	543
AT 26-2H17	2810	4665	UPPER	930	(2) 5.5	28.6	1826	5220	3350	1318	2032	2289	543
AT 26-3F17	2940	4790	UPPER	995	(2) 2.2	21.0	1826	5220	3654	1318	2336	2594	543
AT 26-3G17	2955	4810	UPPER	1000	(2) 4	24.7	1826	5220	3654	1318	2336	2594	543
AT 26-3H17	2995	4845	UPPER	1020	(2) 5.5	28.0	1826	5220	3654	1318	2336	2594	543
AT 26-3I17	3020	4870	UPPER	1035	(2) 7.5	30.7	1826	5220	3654	1318	2336	2594	543
AT 26-4F17	3140	4990	UPPER	1095	(2) 2.2	20.7	1826	5220	3959	1318	2641	2899	543
AT 26-4G17	3155	5010	UPPER	1100	(2) 4	24.3	1826	5220	3959	1318	2641	2899	543
AT 26-4H17	3195	5045	UPPER	1120	(2) 5.5	27.6	1826	5220	3959	1318	2641	2899	543
AT 26-4I17	3220	5070	UPPER	1135	(2) 7.5	30.2	1826	5220	3959	1318	2641	2899	543
AT 26-4J17	3285	5135	UPPER	1165	(2) 11	34.4	1826	5220	3959	1318	2641	2899	543
SLSF ADDITION	+140	+140		+140					+331		+331		
AT 28-2F17	3110	5305	UPPER	1025	(2) 2.2	25.1	2283	5220	3461	1429	2032	2400	543
AT 28-2G17	3130	5325	UPPER	1035	(2) 4	29.5	2283	5220	3461	1429	2032	2400	543
AT 28-2H17	3165	5360	UPPER	1050	(2) 5.5	33.7	2283	5220	3461	1429	2032	2400	543
AT 28-2I17	3195	5390	UPPER	1065	(2) 7.5	37.0	2283	5220	3461	1429	2032	2400	543
AT 28-3F17	3320	5515	UPPER	1130	(2) 2.2	24.8	2283	5220	3766	1429	2337	2705	543
AT 28-3G17	3340	5535	UPPER	1140	(2) 4	29.1	2283	5220	3766	1429	2337	2705	543
AT 28-3H17	3375	5570	UPPER	1155	(2) 5.5	33.1	2283	5220	3766	1429	2337	2705	543
AT 28-3I17	3400	5595	UPPER	1170	(2) 7.5	36.3	2283	5220	3766	1429	2337	2705	543
AT 28-3J17	3455	5650	UPPER	1195	(2) 11	41.3	2283	5220	3766	1429	2337	2705	543
AT 28-4F17	3565	5760	UPPER	1250	(2) 2.2	24.4	2283	5220	4070	1429	2641	3010	543
AT 28-4G17	3585	5780	UPPER	1260	(2) 4	28.6	2283	5220	4070	1429	2641	3010	543
AT 28-4H17	3620	5815	UPPER	1280	(2) 5.5	32.6	2283	5220	4070	1429	2641	3010	543
AT 28-4I17	3645	5840	UPPER	1295	(2) 7.5	35.7	2283	5220	4070	1429	2641	3010	543
AT 28-4J17	3700	5895	UPPER	1320	(2) 11	40.6	2283	5220	4070	1429	2641	3010	543
SLSF ADDITION	+140	+140		+140					+432		+432		

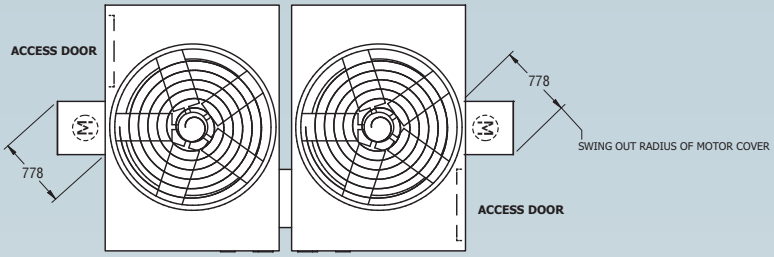
NOTES: (1) Do not use catalogue drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

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

Selections for AT/UT/USS Cooling Towers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

AT/UT/USS Models 3.8M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	AT 212-2F9 THRU AT 212-4J9
SYSTEM FLUID IN (INLET)	(2) 150
SYSTEM FLUID OUT (OUTLET)	(2) 150
MAKE-UP (MU)	(2) 50
OVERFLOW (OF)	(2) 80
DRAIN (D)	(2) 80



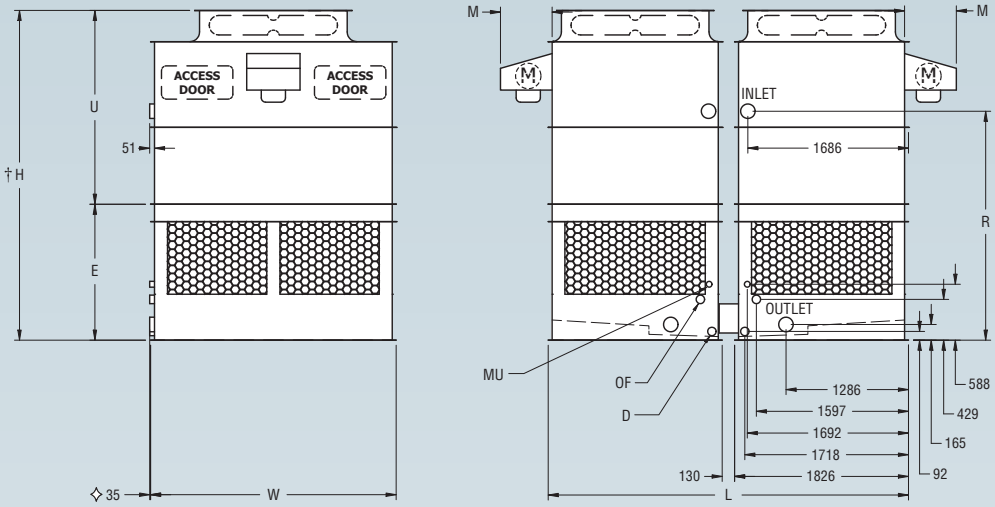


Table 5 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section			W	L	H	E	U	R	M
AT 212-2F9	2760	4610	UPPER	905	(2) 2.2	21.3	3781	2578	3461	1429	2032	2400	543
AT 212-2G9	2775	4625	UPPER	910	(2) 4	25.1	3781	2578	3461	1429	2032	2400	543
AT 212-2H9	2810	4665	UPPER	930	(2) 5.5	28.6	3781	2578	3461	1429	2032	2400	543
AT 212-3F9	2940	4790	UPPER	995	(2) 2.2	21.0	3781	2578	3766	1429	2337	2705	543
AT 212-3G9	2955	4810	UPPER	1000	(2) 4	24.7	3781	2578	3766	1429	2337	2705	543
AT 212-3H9	2995	4845	UPPER	1020	(2) 5.5	28.0	3781	2578	3766	1429	2337	2705	543
AT 212-3I9	3020	4870	UPPER	1035	(2) 7.5	30.7	3781	2578	3766	1429	2337	2705	543
AT 212-4F9	3140	4990	UPPER	1095	(2) 2.2	20.7	3781	2578	4070	1429	2641	3010	543
AT 212-4G9	3155	5010	UPPER	1100	(2) 4	24.3	3781	2578	4070	1429	2641	3010	543
AT 212-4H9	3195	5045	UPPER	1120	(2) 5.5	27.6	3781	2578	4070	1429	2641	3010	543
AT 212-4I9	3220	5070	UPPER	1135	(2) 7.5	30.2	3781	2578	4070	1429	2641	3010	543
AT 212-4J9	3285	5135	UPPER	1165	(2) 11	34.4	3781	2578	4070	1429	2641	3010	543
SLSF ADDITION	+140	+140		+140					+331		+331		

NOTES: (1) Do not use catalogue drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

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

Selections for AT/UT/USS Cooling Towers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

AT/UT/USS Models 4.7M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	AT 215-2F9 THRU AT 215-4J9
SYSTEM FLUID IN (INLET)	(2) 150
SYSTEM FLUID OUT (OUTLET)	(2) 150
MAKE-UP (MU)	(2) 50
OVERFLOW (OF)	(2) 80
DRAIN (D)	(2) 80

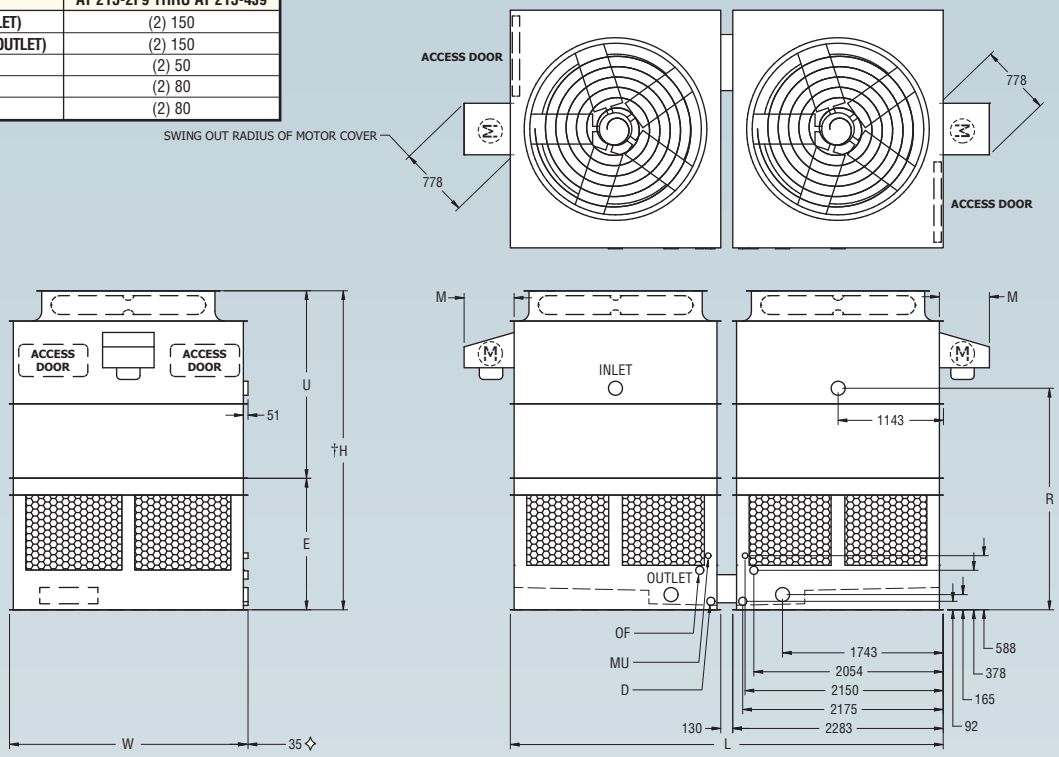


Table 6 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section			W	L	H	E	U	R	M
AT 215-2F9	3110	5305	UPPER	1025	(2) 2.2	25.1	4696	2578	3461	1429	2032	2400	543
AT 215-2G9	3130	5325	UPPER	1035	(2) 4	29.5	4696	2578	3461	1429	2032	2400	543
AT 215-2H9	3165	5360	UPPER	1050	(2) 5.5	33.7	4696	2578	3461	1429	2032	2400	543
AT 215-2I9	3195	5390	UPPER	1065	(2) 7.5	37.0	4696	2578	3461	1429	2032	2400	543
AT 215-3F9	3320	5515	UPPER	1130	(2) 2.2	24.8	4696	2578	3766	1429	2337	2705	543
AT 215-3G9	3340	5535	UPPER	1140	(2) 4	29.1	4696	2578	3766	1429	2337	2705	543
AT 215-3H9	3375	5570	UPPER	1155	(2) 5.5	33.1	4696	2578	3766	1429	2337	2705	543
AT 215-3I9	3400	5595	UPPER	1170	(2) 7.5	36.3	4696	2578	3766	1429	2337	2705	543
AT 215-3J9	3455	5650	UPPER	1195	(2) 11	41.3	4696	2578	3766	1429	2337	2705	543
AT 215-4F9	3565	5760	UPPER	1250	(2) 2.2	24.4	4696	2578	4070	1429	2641	3010	543
AT 215-4G9	3585	5780	UPPER	1260	(2) 4	28.6	4696	2578	4070	1429	2641	3010	543
AT 215-4H9	3620	5815	UPPER	1280	(2) 5.5	32.6	4696	2578	4070	1429	2641	3010	543
AT 215-4I9	3645	5840	UPPER	1295	(2) 7.5	35.7	4696	2578	4070	1429	2641	3010	543
AT 215-4J9	3700	5895	UPPER	1320	(2) 11	40.6	4696	2578	4070	1429	2641	3010	543
SLSF ADDITION	+140	+140		+140					+432		+432		

NOTES: (1) Do not use catalogue drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

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

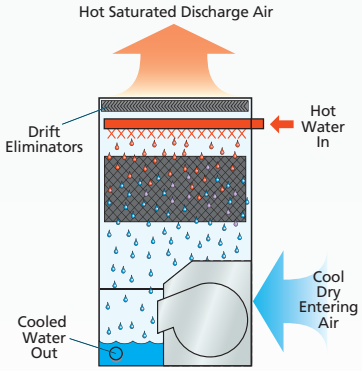
LSTE/LPT

The new & improved EVAPCO Model LSTE and LPT forced draft centrifugal cooling towers feature IBC Compliance in addition to CTI Certification. These features reinforce EVAPCO's position as the leading manufacturer of forced draft evaporative cooling equipment.

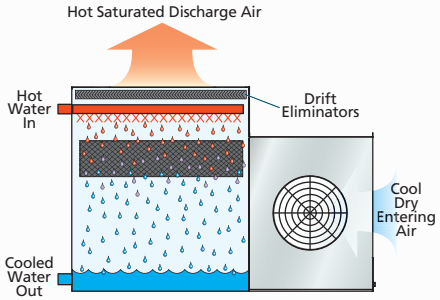
Principle of Operation

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.

LSTE



LPT



Principle of Operation

Easy Field Assembly

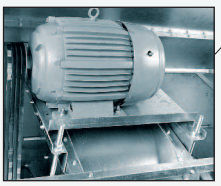
- Ensures easy assembly and fewer fasteners.
- Incorporates self-guiding channels to guide the casing section into position improving the quality of the field seam.

Stainless Steel Strainer

- Resists corrosion better than other materials.

Clean Pan Design

- Sloped design allows water to drain completely from cold water basin.
- Easier removal of dirt and debris.



Totally Enclosed Fan Motors & Superior Drive System

- Assures long life.
- Located in dry, incoming air-stream, allowing normal maintenance to be done from the outside of the unit.
- If required, motor can be easily removed.
- Motors are now located outboard on multi-motor units for even easier drive system access.
- 5 year motor and drive warranty is standard.
- MEPS compliant motors standard.

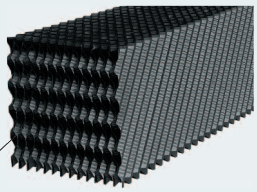
MOTOR AND DRIVE 5 Year WARRANTY

Drift Eliminators Located in Casing

- Eliminators now integrated within casing section for easy mounting of ductwork, discharge hood, and attenuation.

Exclusive EVAPAK® Fill

- Provides the most efficient thermal performance per plan area.
- Suitable for use as a working platform.

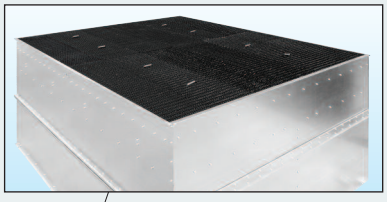


PVC Spray Distribution Header

- Nozzles are threaded into the header to ensure proper orientation.
- Fixed position nozzles require little maintenance.
- Large orifice nozzle with integral sludge ring to prevent clogging.
- Threaded end-caps on distribution piping for ease of cleaning.

High Efficiency Drift Eliminators

- Advanced design limits maximum drift rate to 0.001% of the recirculated water rate.
- Corrosion resistant PVC for long life.
- Clause 4.4 "Drift Control" of Australian Standard 3666.1 explicitly states that the *"maximum drift loss shall not exceed 0.002% of the maximum design water circulation rate through the tower."* EVAPCO's counterflow cooling method and patented cellular drift eliminator design far exceeds this standard by limiting the drift rate to a maximum of only 0.001% making it the most AS 3666.1 compliant cooling tower in the market.



LSTE

LPT

Spray pump & piping, basin access door, make-up connection, overflow connection, and drain connection not shown.

CTI CERTIFIED †

CTI Certified

Double-Brake Flange Joints

- Stronger than single-brake designs by others.
- Increases field rigging joint integrity.
- Greater structural integrity.

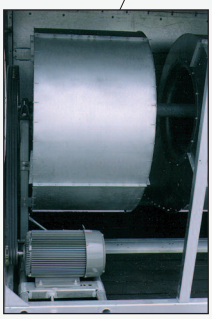
Standard Stainless Steel Cold Water Basin (LPT)

- Eliminates the need for unreliable epoxy coatings.

G235 Heavy Mill Galvanised Steel Construction

(Stainless steel available as an affordable option)

IBC COMPLIANT DESIGNS



Easy to Service Motor & Drive System

- Belt tensioning and bearing lubrication can be performed from outside the unit.
- Locking mechanism can also be used as a wrench to adjust the belt tension (LPT only).
- Motor is fully accessible by removing one inlet screen.
- Split fan housings allow removal of all mechanical equipment through the end of the unit (LPT only).

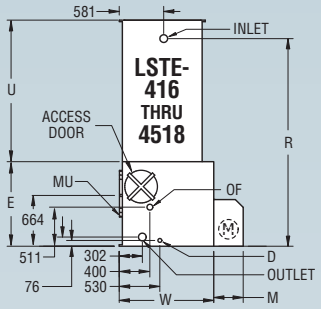
International Building Code (IBC) Compliant Construction

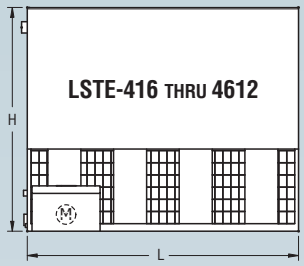
- Suitable for installations vulnerable to high seismic or wind loads.
- Standard construction designed to withstand 0.42 g seismic load (S_{DS}) and 13.7 kPa wind load (P) in applications with an Importance Factor (I_P) of 1.0.
- Upgraded construction designed to withstand 2.00 g seismic load (S_{DS}) and 13.7 kPa wind load (P) in applications with an Importance Factor (I_P) of 1.0.
- Refer to the "IBC Help" document in the White Papers section of the EVAPCO public website for further details.

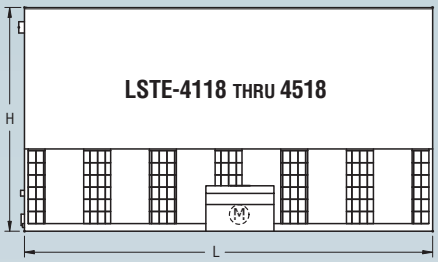
Selections for LSTE Cooling Towers are available from EVAPCO's equipment selection program.
Please contact your local sales representative for access to the program.

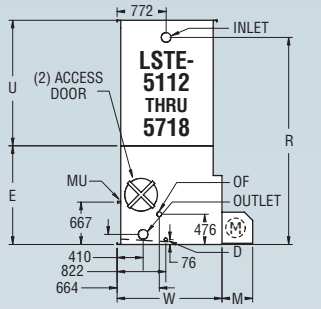
LSTE Models 1.2M and 1.7M Wide

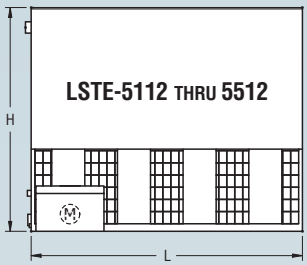
CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM			
	LSTE 416 THRU 466	LSTE 419 THRU 436	LSTE 4112 THRU 4518	LSTE 5112 THRU 5718
SYSTEM FLUID IN (INLET)	(1) 100	(1) 100	(1) 150	(1) 150
SYSTEM FLUID OUT (OUTLET)	(1) 100	(1) 150	(1) 150	(1) 150
MAKE-UP (MU)	(1) 25	(1) 25	(1) 25	(1) 50
OVERFLOW (OF)	(1) 80	(1) 80	(1) 80	(1) 80
DRAIN (D)	(1) 50	(1) 50	(1) 50	(1) 50











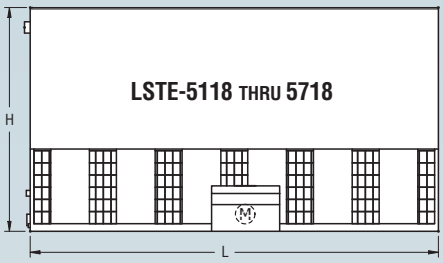


Table 7 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section			W	L	H	E	U	R	M
LSTE 416	745	1045	LOWER	450	1.5	4.3	1238	1826	2648	1105	1543	2407	384
LSTE 426	755	1055	LOWER	465	2.2	4.9	1238	1826	2648	1105	1543	2407	384
LSTE 436	760	1060	LOWER	470	4	5.8	1238	1826	2648	1105	1543	2407	384
LSTE 446	785	1085	LOWER	490	5.5	6.5	1238	1826	2648	1105	1543	2407	384
LSTE 456	815	1115	LOWER	490	5.5	6.3	1238	1826	2953	1105	1848	2711	384
LSTE 466	820	1120	LOWER	495	7.5	6.9	1238	1826	2953	1105	1848	2711	384
LSTE 419	1030	1490	LOWER	620	5.5	8.7	1238	2724	2648	1105	1543	2407	384
LSTE 429	1035	1495	LOWER	625	7.5	9.4	1238	2724	2648	1105	1543	2407	384
LSTE 439	1050	1510	LOWER	625	7.5	9.2	1238	2724	2953	1105	1848	2711	384
LSTE 4112	1330	1925	LOWER	785	7.5	11.6	1238	3651	2702	1105	1597	2435	384
LSTE 4212	1410	2005	LOWER	785	7.5	11.3	1238	3651	3007	1105	1902	2740	384
LSTE 4412	1470	2065	LOWER	845	11	12.7	1238	3651	3007	1105	1902	2740	384
LSTE 4312	1495	2090	LOWER	785	7.5	10.9	1238	3651	3312	1105	2207	3045	384
LSTE 4512	1555	2150	LOWER	845	11	12.3	1238	3651	3312	1105	2207	3045	384
LSTE 4612	1585	2175	LOWER	870	15	13.5	1238	3651	3312	1105	2207	3045	384
LSTE 4118	1965	2870	LOWER	1170	15	19.0	1238	5486	2702	1105	1597	2435	384
LSTE 4218	2085	2995	LOWER	1170	15	18.6	1238	5486	3007	1105	1902	2740	384
LSTE 4318	2100	3005	LOWER	1185	18.5	19.8	1238	5486	3007	1105	1902	2740	384
LSTE 4418	2225	3135	LOWER	1185	18.5	19.2	1238	5486	3312	1105	2207	3045	384
LSTE 4518	2250	3155	LOWER	1210	22	20.3	1238	5486	3312	1105	2207	3045	384
LSTE 5112	1875	2835	LOWER	1190	15	18.3	1651	3651	3223	1553	1670	2953	483
LSTE 5212	1980	2945	LOWER	1190	15	17.8	1651	3651	3527	1553	1974	3258	483
LSTE 5312	1995	2955	LOWER	1205	18.5	19.1	1651	3651	3527	1553	1974	3258	483
LSTE 5412	2105	3065	LOWER	1205	18.5	18.7	1651	3651	3832	1553	2279	3562	483
LSTE 5512	2125	3090	LOWER	1225	22	19.8	1651	3651	3832	1553	2279	3562	483
LSTE 5118	2710	4155	LOWER	1680	18.5	26.1	1651	5486	3223	1553	1670	2953	483
LSTE 5218	2730	4180	LOWER	1705	22	27.6	1651	5486	3223	1553	1670	2953	483
LSTE 5318	2805	4250	LOWER	1775	30	30.3	1651	5486	3223	1553	1670	2953	483
LSTE 5418	2890	4335	LOWER	1705	22	26.9	1651	5486	3527	1553	1974	3258	483
LSTE 5518	2960	4410	LOWER	1775	30	29.4	1651	5486	3527	1553	1974	3258	483
LSTE 5618	3120	4570	LOWER	1775	30	28.7	1651	5486	3832	1553	2279	3562	483
LSTE 5718	3125	4570	LOWER	1780	37	29.9	1651	5486	3832	1553	2279	3562	483

NOTES: (1) Do not use catalogue drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

Selections for LPT Cooling Towers are available from EVAPCO's equipment selection program.
Please contact your local sales representative for access to the program.

LPT Models 1.0 and 1.5M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM		
	LPT 316 THRU 366	LPT 516 THRU 596	LPT 519 THRU 5712
SYSTEM FLUID IN (INLET)	(1) 100	(1) 100	(1) 150
SYSTEM FLUID OUT (OUTLET)	(1) 100	(1) 100	(1) 150
MAKE-UP (MU)	(1) 25	(1) 25	(1) 25
OVERFLOW (OF)	(1) 50	(1) 75	(1) 75
DRAIN (D)	(1) 50	(1) 50	(1) 50

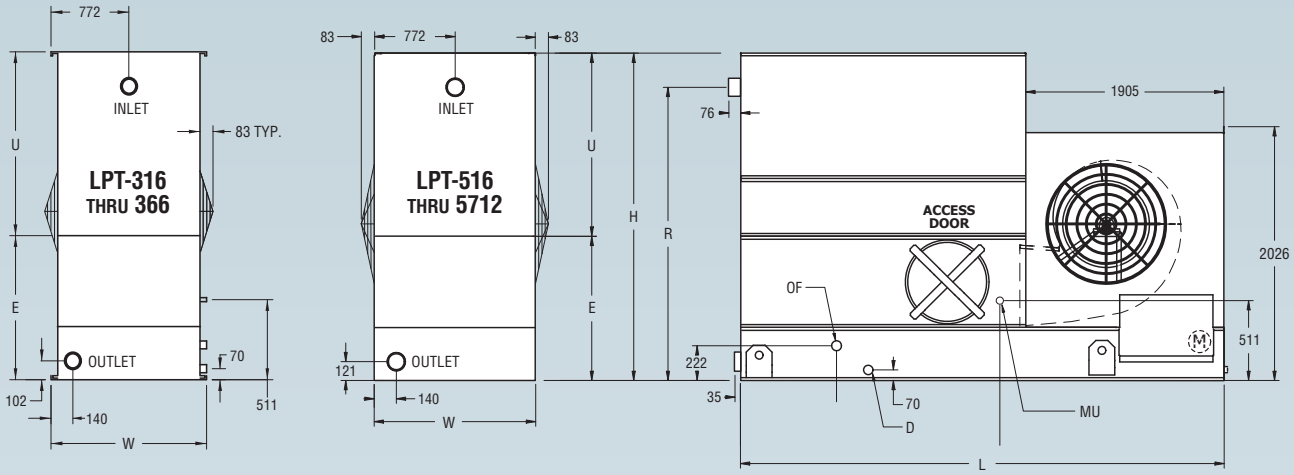


Table 8 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Dimensions (mm)					
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section			W	L	H	E	U	R
LPT 316	685	1130	ENTIRE UNIT	685	1.1	3.3	1029	3099	2096	921	1175	1876
LPT 326	690	1130	ENTIRE UNIT	690	1.5	4.2	1029	3099	2096	921	1175	1876
LPT 336	695	1140	ENTIRE UNIT	695	2.2	4.8	1029	3099	2096	921	1175	1876
LPT 346	735	1175	ENTIRE UNIT	735	2.2	4.7	1029	3099	2096	921	1175	1876
LPT 356	740	1180	ENTIRE UNIT	740	4	5.6	1029	3099	2096	921	1175	1876
LPT 366	755	1195	ENTIRE UNIT	755	5.5	6.4	1029	3099	2096	921	1175	1876
LPT 516	1050	1835	ENTIRE UNIT	1050	2.2	7.0	1540	3734	2099	921	1178	1873
LPT 526	1055	1835	ENTIRE UNIT	1055	4	8.3	1540	3734	2099	921	1178	1873
LPT 546	1095	1875	ENTIRE UNIT	1095	4	8.2	1540	3734	2099	921	1178	1873
LPT 556	1075	1860	ENTIRE UNIT	1075	5.5	9.5	1540	3734	2099	921	1178	1873
LPT 566	1090	1870	ENTIRE UNIT	1090	5.5	9.4	1540	3734	2099	921	1178	1873
LPT 576	1125	1910	ENTIRE UNIT	1125	7.5	10.1	1540	3734	2099	921	1178	1873
LPT 536	1120	1900	ENTIRE UNIT	1120	2.2	6.9	1540	3734	2403	921	1482	2178
LPT 586	1145	1925	ENTIRE UNIT	1145	5.5	9.3	1540	3734	2403	921	1482	2178
LPT 596	1160	1940	ENTIRE UNIT	1160	7.5	10.1	1540	3734	2403	921	1482	2178
LPT 519	1280	2465	ENTIRE UNIT	1280	7.5	12.5	1540	4632	2149	921	1228	1902
LPT 529	1330	2510	ENTIRE UNIT	1330	11	14.3	1540	4632	2149	921	1228	1902
LPT 539	1355	2535	ENTIRE UNIT	1355	11	14.1	1540	4632	2149	921	1228	1902
LPT 549	1360	2540	ENTIRE UNIT	1360	15	15.2	1540	4632	2149	921	1228	1902
LPT 559	1440	2615	ENTIRE UNIT	1440	11	14.0	1540	4632	2454	921	1533	2207
LPT 569	1470	2645	ENTIRE UNIT	1470	15	15.2	1540	4632	2454	921	1533	2207
LPT 5112	1560	3170	ENTIRE UNIT	1560	11	15.2	1540	5556	2149	921	1228	1902
LPT 5212	1565	3180	ENTIRE UNIT	1565	15	16.7	1540	5556	2149	921	1228	1902
LPT 5312	1570	3185	ENTIRE UNIT	1570	18.5	18.0	1540	5556	2149	921	1228	1902
LPT 5412	1585	3195	ENTIRE UNIT	1585	22	19.1	1540	5556	2149	921	1228	1902
LPT 5512	1680	3290	ENTIRE UNIT	1680	18.5	17.9	1540	5556	2454	921	1533	2207
LPT 5612	1685	3300	ENTIRE UNIT	1685	22	19.0	1540	5556	2454	921	1533	2207
LPT 5712	1805	3410	ENTIRE UNIT	1805	22	18.9	1540	5556	2759	921	1838	2511

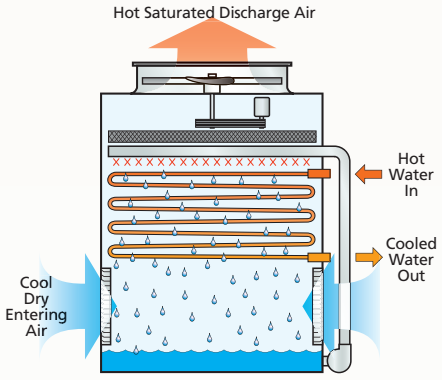
NOTES: (1) Do not use catalogue drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) An adequately sized bleed line must be installed in the cooling tower system to prevent build-up of impurities in the recirculated water.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

Design and Construction Features

The **ATWB/cATWB/eco-ATWB** line of closed circuit coolers reflects EVAPCO's continuing commitment to research and development. Their advanced design provides owners with many operational and performance advantages. For particularly corrosive environments, EVAPCO coolers are available with Type 304 or 316 Stainless Steel construction. Consult your local sales representative for details on available options.

Principle of Operation

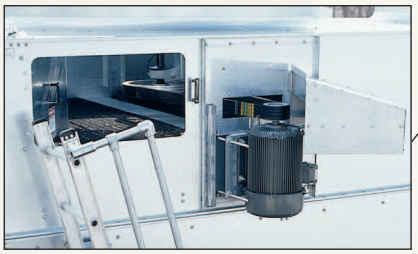
The process fluid is circulated through the coil of the closed circuit cooler. Heat from the process fluid is dissipated through the coil tubes to the water cascading downward over the tubes. Simultaneously, air is drawn in through the air inlet louvers at the base of the cooler and travels upward over the coil opposite the water flow. A small portion of the water is evaporated which removes the heat. The warm moist air is drawn to the top of the closed circuit cooler by the fan and is discharged to the atmosphere. The remaining water falls to the sump at the bottom of the cooler where it is recirculated by the pump up through the water distribution system and back down over the coils.



Fan Drive System

The fan motor and drive assembly is designed to allow easy servicing of the motor and adjustment of the belt tension from the exterior of the unit. The totally enclosed fan cooled (TEFC) fan motor is mounted on the outside for easy access. A protective cover swings away to allow servicing and belt adjustment.

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



External Motor Mount (Optional Ladder Shown)

Fan Shaft Bearings

The Fan Shaft Bearings are specially selected for long, trouble-free life. They are rated for an L-10 life of 75,000 to 135,000 hours and are the heaviest pillow block bearings available.

Aluminium Alloy Pulleys

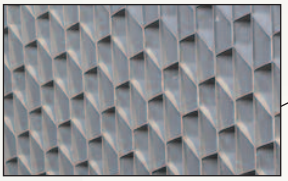
Fan pulleys located in the air stream are constructed of corrosion free aluminium for long life. The aluminium also helps belts last longer.

Banded Drive Belt

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

WST Air Inlet Louvers

Water and Sight Tight Air Inlet Louvers are designed to effectively eliminate splash-out and sunlight, greatly reducing the potential for algae formation inside the cooling tower. They are manufactured of corrosion-free PVC and mounted in light-weight frames to allow for easy removable and convenient access to the basin section.



Clause 4.6 "Sunlight" of Australian Standard 3666.1 explicitly states that the *"design, orientation and placement of cooling towers shall be such that direct sunlight is minimised from the wetted areas of the cooling tower."* EVAPCO's WST air inlet louver ensures that the spray water is entirely concealed from sunlight from the moment it enters the cooler to the moment it exits making it the most AS 3666.1 compliant cooler in the market.

Type 304 Stainless Steel Strainers

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

CATWB/ ATWB

CUIT COOLERS

U.S. Patent No. 6315804

PVC Drift Eliminators

EVAPCO PVC Drift Eiminators are constructed entirely of inert, corrosion-free PVC. This patented design reduces drift rate to 0.001% and has been specially treated to resist damaging ultraviolet light. The eliminators are assembled in easily handled sections to facilitate removal, thereby exposing the upper portion of the unit and water distribution system for periodic inspection.

Clause 4.4 "Drift Control" of Australian Standard 3666.1 explicitly states that the *"maximum drift loss shall not exceed 0.002% of the maximum design water circulation rate through the tower."* EVAPCO's counterflow cooling method and patented cellular drift eliminator design far exceeds this standard by limiting the drift rate to a maximum of only 0.001% making it the most AS 3666.1 compliant cooling tower in the market.

ZM®II Nozzles

Even and constant water distribution is paramount for reliable, scale-free evaporative condensing. EVAPCO's Zero Maintenance Spray Nozzle remains clog-free under the toughest conditions to deliver approximately 4 LPS per square metre of coil plan area.

The heavy-duty, fiber-reinforced ZM®II spray nozzles have a 35.3mm diameter opening and a 31.8mm splash plate clearance, enabling EVAPCO to use 75% fewer nozzles. Furthermore, the fixed position ZM®II Spray Nozzles are mounted in corrosion-free PVC water distribution pipes that have threaded end caps. Together, these elements combine to provide unequalled coil coverage, scale prevention and make the industry's best performing, non-corrosive, maintenance-free water distribution system.

Thermal-Pak® Coil

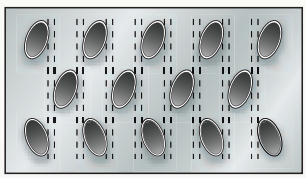
EVAPCO's patented Thermal-Pak® Coils feature a design which assures maximum cooling capacity. The air flow through the coil is counterflow to the process fluid, providing the most efficient heat transfer. This special coil design is utilised to reduce the air pressure drop through the unit while maximising tube surface area and increasing its heat transfer capabilities. The uniquely shaped tubes of the coil are staggered in the direction of air flow to obtain a high film coefficient. In addition, all tubes are pitched in the direction of flow to assure drainage of the process fluid.

These characteristics and other engineering advancements of the Thermal-Pak® Coil have been proven in EVAPCO's world-class research and development laboratory resulting in the following end user benefits:

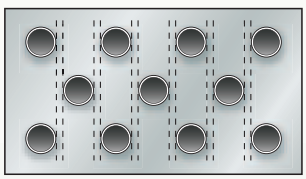
- Low Power Consumption Per kW of heat rejection
- Lower Operating Weight
- Small Plan Area Per kW of heat rejection

The coils are manufactured from high quality steel tubing following the most stringent quality control procedures. Each circuit is inspected to assure the material quality and then tested before being assembled into a coil. Finally, the assembled coil is air pressure tested under water at 26 bar. To protect the coil against corrosion, it is placed in a heavy-duty steel frame and the entire assembly is dipped in molten zinc (hot dip galvanised) at a temperature of approximately 430°C.

U.S. Patent No. 5799725



Thermal-Pak® Coil by EVAPCO

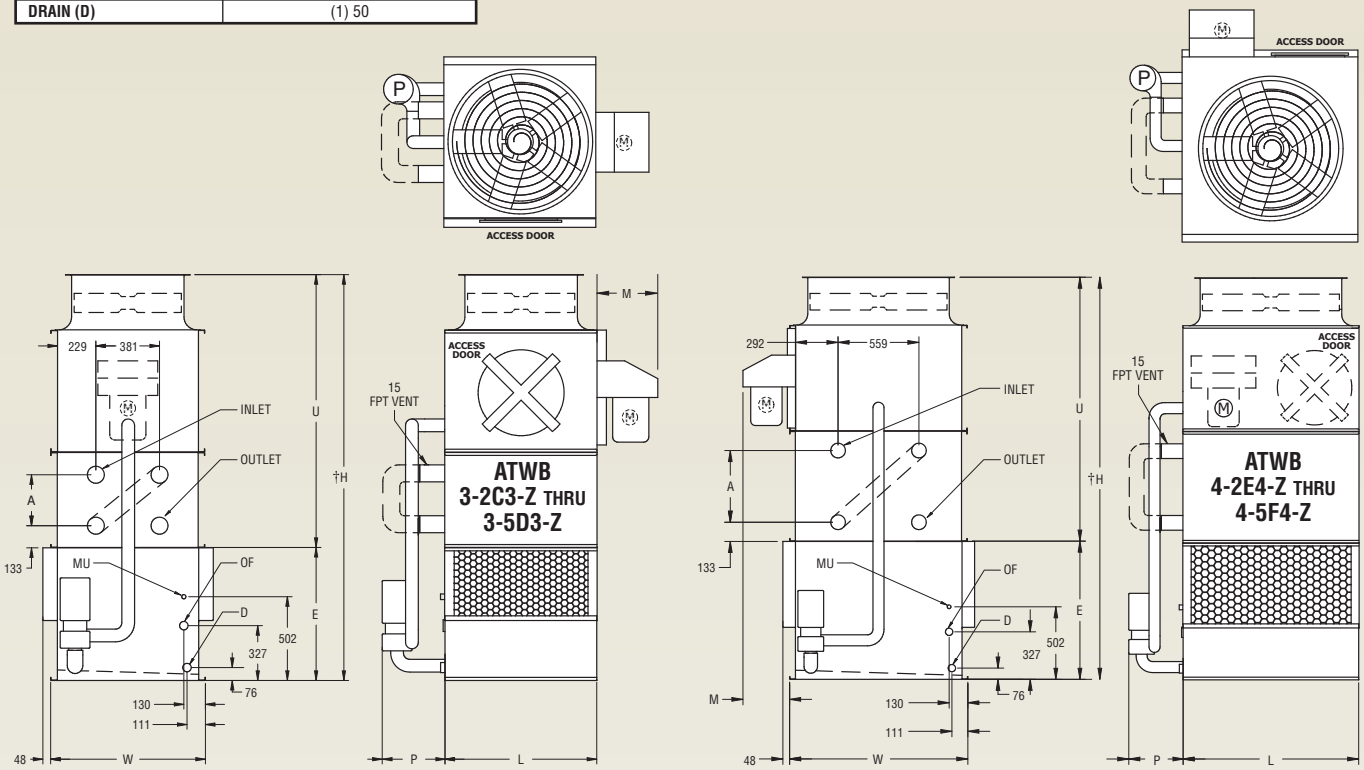


Round Tube Coil by Others

Selections for ATWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ATWB Models 0.9M Wide and 1.2M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	ATWB 3-2C3-Z THRU ATWB 4-5F4-Z
SYSTEM FLUID IN (INLET)	(2) 100
SYSTEM FLUID OUT (OUTLET)	(2) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50



Note: The number of coil connections doubles when the flow rate exceeds 30 LPS on 1.2M wide models. This required option is referred to as the High Flow Coil Configuration.

Table 9 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
ATWB 3-2C3-Z	520	760	UPPER	390	0.75	2.2	0.55	6.3	59	927	908	2429	794	1635	324	305	375
ATWB 3-3C3-Z	590	860	UPPER	470	0.75	2.1	0.55	6.3	78	927	908	2619	794	1825	324	495	375
ATWB 3-4C3-Z	660	940	UPPER	530	0.75	2.0	0.55	6.3	97	927	908	2810	794	2016	324	686	375
ATWB 3-4D3-Z	660	940	UPPER	540	1.1	2.3	0.55	6.3	97	927	908	2810	794	2016	324	686	375
ATWB 3-5C3-Z	730	1030	UPPER	600	0.75	2.0	0.55	6.3	117	927	908	3000	794	2206	324	876	375
ATWB 3-5D3-Z	730	1030	UPPER	600	1.1	2.2	0.55	6.3	117	927	908	3000	794	2206	324	876	375
ATWB 3-5D3-Z	730	1030	UPPER	600	1.1	2.2	0.55	6.3	117	927	908	3000	794	2206	324	876	375
ATWB 4-2E4-Z	780	1210	UPPER	600	1.5	4.1	0.55	6.3	100	1232	1216	2588	953	1635	324	305	375
ATWB 4-3E4-Z	910	1370	UPPER	730	1.5	3.9	0.55	6.3	138	1232	1216	2778	953	1825	324	495	375
ATWB 4-4E4-Z	1020	1520	UPPER	840	1.5	3.8	0.55	6.3	175	1232	1216	2969	953	2016	324	686	375
ATWB 4-4F4-Z	1030	1540	UPPER	860	2.2	4.3	0.55	6.3	175	1232	1216	2969	953	2016	324	686	375
ATWB 4-5E4-Z	1140	1680	UPPER	970	1.5	3.7	0.55	6.3	213	1232	1216	3159	953	2206	324	876	375
ATWB 4-5F4-Z	1160	1700	UPPER	980	2.2	4.2	0.55	6.3	213	1232	1216	3159	953	2206	324	876	375

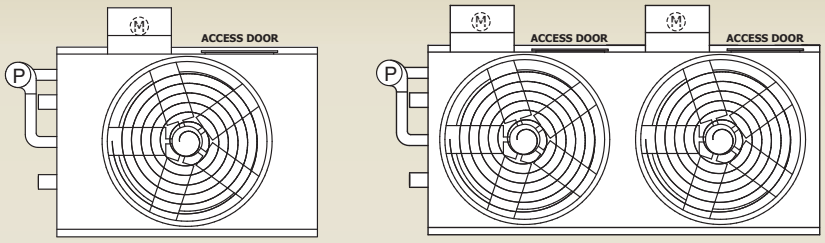
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Model Numbers end in "-Z" for units with Series Flow piping configuration. 0.9x0.9M ATWB units are only available in Series Flow and will require crossover piping which can either be supplied by EVAPCO or by others. Model numbers will include "C" for units with Stainless Steel coil(s), "R" for units with Low Sound Fan(s) and "S" for units with an option that negates CTI certification.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

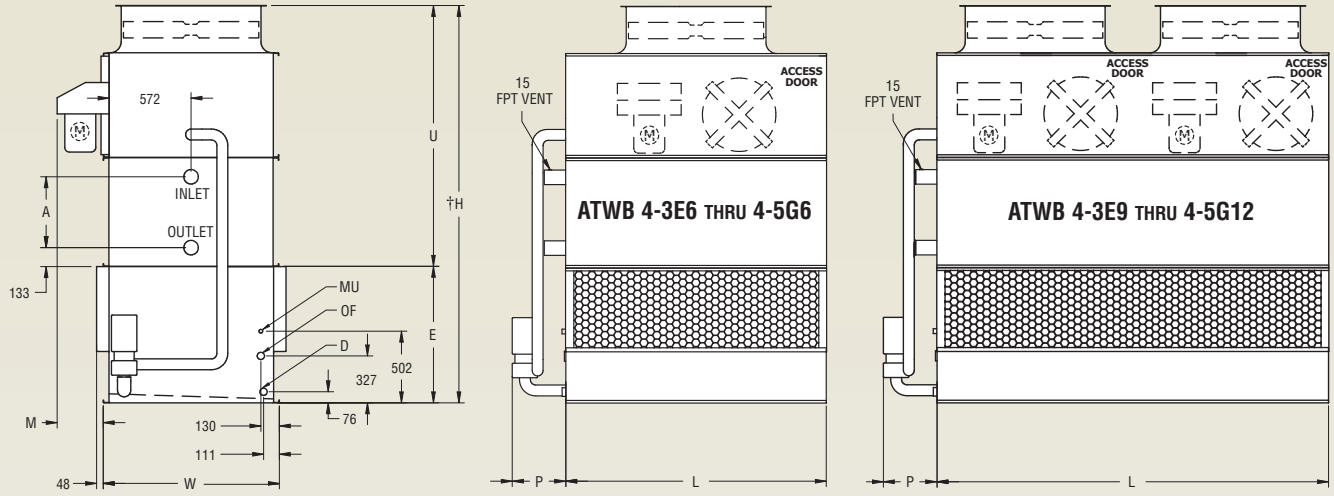
† Height includes fan guard which ships factory mounted.

Selections for ATWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ATWB Models 1.2M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	ATWB 4-3E6 THRU ATWB 4-5G12
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50





Note: The number of coil connections doubles when the flow rate exceeds 30 LPS on ATWB 1.2M wide models. This required option is referred to as the High Flow Coil Configuration.

Table 10 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
ATWB 4-3E6	1250	1940	UPPER	1020	1.5	5.2	0.55	8.5	198	1232	1826	2778	953	1825	324	495	375
ATWB 4-3F6	1260	1950	UPPER	1030	2.2	5.9	0.55	8.5	198	1232	1826	2778	953	1825	324	495	375
ATWB 4-3G6	1270	1950	UPPER	1030	4	6.9	0.55	8.5	198	1232	1826	2778	953	1825	324	495	375
ATWB 4-4E6	1420	2160	UPPER	1180	1.5	5.0	0.55	8.5	255	1232	1826	2969	953	2016	324	686	375
ATWB 4-4F6	1430	2180	UPPER	1200	2.2	5.7	0.55	8.5	255	1232	1826	2969	953	2016	324	686	375
ATWB 4-4G6	1430	2180	UPPER	1200	4	6.7	0.55	8.5	255	1232	1826	2969	953	2016	324	686	375
ATWB 4-5E6	1600	2400	UPPER	1370	1.5	4.9	0.55	8.5	313	1232	1826	3159	953	2206	324	876	375
ATWB 4-5F6	1610	2420	UPPER	1380	2.2	5.6	0.55	8.5	313	1232	1826	3159	953	2206	324	876	375
ATWB 4-5G6	1620	2420	UPPER	1390	4	6.5	0.55	8.5	313	1232	1826	3159	953	2206	324	876	375
ATWB 4-3E9	1840	2830	UPPER	1530	(2) 1.5	8.5	0.75	12.6	288	1232	2737	2778	953	1825	324	495	375
ATWB 4-3F9	1860	2860	UPPER	1560	(2) 2.2	9.6	0.75	12.6	288	1232	2737	2778	953	1825	324	495	375
ATWB 4-4E9	2090	3170	UPPER	1780	(2) 1.5	8.3	0.75	12.6	376	1232	2737	2969	953	2016	324	686	375
ATWB 4-4F9	2110	3200	UPPER	1810	(2) 2.2	9.4	0.75	12.6	376	1232	2737	2969	953	2016	324	686	375
ATWB 4-5E9	2350	3530	UPPER	2050	(2) 1.5	8.0	0.75	12.6	463	1232	2737	3159	953	2206	324	876	375
ATWB 4-5F9	2380	3560	UPPER	2080	(2) 2.2	9.1	0.75	12.6	463	1232	2737	3159	953	2206	324	876	375
ATWB 4-3E12	2220	3530	UPPER	1850	(2) 1.5	10.3	1.1	17.0	378	1232	3651	2778	953	1825	324	495	375
ATWB 4-3F12	2250	3560	UPPER	1870	(2) 2.2	11.8	1.1	17.0	378	1232	3651	2778	953	1825	324	495	375
ATWB 4-3G12	2250	3570	UPPER	1880	(2) 4	13.7	1.1	17.0	378	1232	3651	2778	953	1825	324	495	375
ATWB 4-4E12	2550	3990	UPPER	2180	(2) 1.5	10.0	1.1	17.0	496	1232	3651	2969	953	2016	324	686	375
ATWB 4-4F12	2580	4010	UPPER	2210	(2) 2.2	11.5	1.1	17.0	496	1232	3651	2969	953	2016	324	686	375
ATWB 4-4G12	2590	4020	UPPER	2220	(2) 4	13.3	1.1	17.0	496	1232	3651	2969	953	2016	324	686	375
ATWB 4-5E12	2920	4470	UPPER	2540	(2) 1.5	9.7	1.1	17.0	613	1232	3651	3159	953	2206	324	876	375
ATWB 4-5F12	2940	4500	UPPER	2570	(2) 2.2	11.1	1.1	17.0	613	1232	3651	3159	953	2206	324	876	375
ATWB 4-5G12	2950	4500	UPPER	2580	(2) 4	12.9	1.1	17.0	613	1232	3651	3159	953	2206	324	876	375

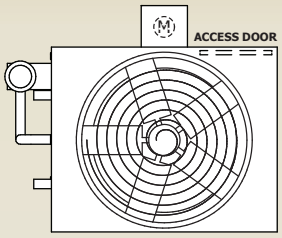
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Model Numbers end in "-Z" for units with Series Flow piping configuration. 0.9x0.9M ATWB units are only available in Series Flow and will require crossover piping which can either be supplied by EVAPCO or by others. Model numbers will include "C" for units with Stainless Steel coil(s), "R" for units with Low Sound Fan(s) and "S" for units with an option that negates CTI certification.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

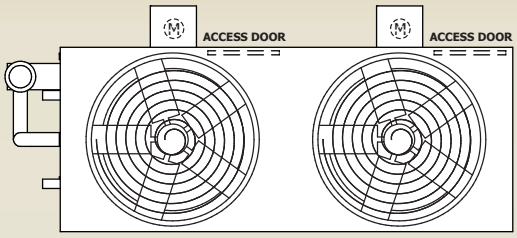
† Height includes fan guard which ships factory mounted.

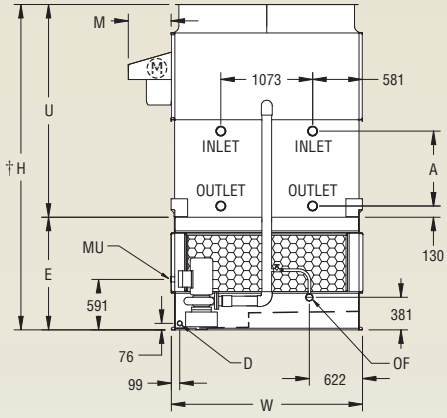
Selections for cATWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

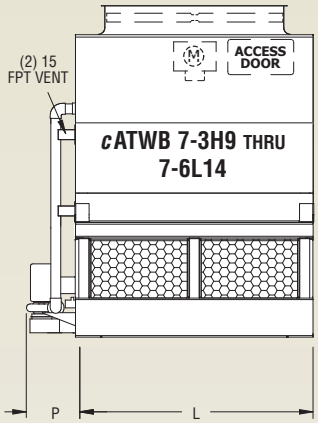
cATWB Models 2.2M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	cATWB 7-3H9 THRU cATWB 7-6J18
SYSTEM FLUID IN (INLET)	(2) 100
SYSTEM FLUID OUT (OUTLET)	(2) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50









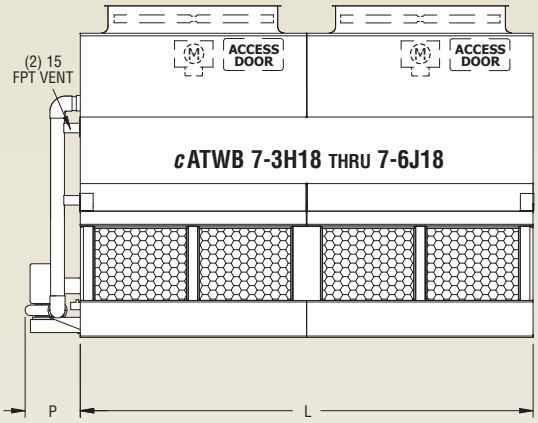


Table 11 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
cATWB 7-3H9	3420	4560	COIL	2690	5.5	16.8	1.5	25.8	544	2235	2737	3423	1318	2105	543	495	563
cATWB 7-3I9	3420	4560	COIL	2690	7.5	18.5	1.5	25.8	544	2235	2737	3423	1318	2105	543	495	563
cATWB 7-4I9	3890	5200	COIL	3160	7.5	17.9	1.5	25.8	710	2235	2737	3613	1318	2295	543	686	563
cATWB 7-4J9	3950	5260	COIL	3220	11	20.1	1.5	25.8	710	2235	2737	3613	1318	2295	543	686	563
cATWB 7-5I9	4380	5860	COIL	3660	7.5	17.4	1.5	25.8	876	2235	2737	3804	1318	2486	543	876	563
cATWB 7-5J9	4440	5910	COIL	3710	11	19.5	1.5	25.8	876	2235	2737	3804	1318	2486	543	876	563
cATWB 7-6J9	4930	6570	COIL	4200	11	18.9	1.5	25.8	1041	2235	2737	3994	1318	2676	543	1067	563
cATWB 7-3J12	4210	5790	COIL	3330	11	25.5	2.2	34.7	715	2235	3651	3423	1318	2105	543	495	631
cATWB 7-4J12	4850	6650	COIL	3970	11	24.8	2.2	34.7	937	2235	3651	3613	1318	2295	543	686	631
cATWB 7-5J12	5470	7500	COIL	4590	11	24.0	2.2	34.7	1160	2235	3651	3804	1318	2486	543	876	631
cATWB 7-5K12	5500	7530	COIL	4620	15	26.0	2.2	34.7	1160	2235	3651	3804	1318	2486	543	876	631
cATWB 7-6K12	6150	8400	COIL	5270	15	25.2	2.2	34.7	1382	2235	3651	3994	1318	2676	543	1067	631
cATWB 7-5J14	6300	8630	COIL	5280	11	26.8	2.2	37.8	1349	2235	4261	3915	1429	2486	543	876	617
cATWB 7-5K14	6320	8650	COIL	5310	15	29.1	2.2	37.8	1349	2235	4261	3915	1429	2486	543	876	617
cATWB 7-6K14	7070	9660	COIL	6060	15	28.2	2.2	37.8	1610	2235	4261	4105	1429	2676	543	1067	617
cATWB 7-6L14	7080	9670	COIL	6070	18.5	30.0	2.2	37.8	1610	2235	4261	4105	1429	2676	543	1067	617
cATWB 7-3H18	6340	8740	COIL	4950	(2) 5.5	33.8	4	50.4	1056	2235	5486	3632	1527	2105	543	495	670
cATWB 7-3I18	6350	8750	COIL	4960	(2) 7.5	37.1	4	50.4	1056	2235	5486	3632	1527	2105	543	495	670
cATWB 7-4I18	7310	10040	COIL	5910	(2) 7.5	36.0	4	50.4	1392	2235	5486	3823	1527	2296	543	686	670
cATWB 7-4J18	7420	10160	COIL	6030	(2) 11	40.3	4	50.4	1392	2235	5486	3823	1527	2296	543	686	670
cATWB 7-5I18	8260	11340	COIL	6870	(2) 7.5	34.9	4	50.4	1728	2235	5486	4013	1527	2486	543	876	670
cATWB 7-5J18	8380	11450	COIL	6990	(2) 11	39.1	4	50.4	1728	2235	5486	4013	1527	2486	543	876	670
cATWB 7-6I18	9240	12650	COIL	7850	(2) 7.5	33.8	4	50.4	2064	2235	5486	4204	1527	2677	543	1067	670
cATWB 7-6J18	9360	12760	COIL	7970	(2) 11	37.9	4	50.4	2064	2235	5486	4204	1527	2677	543	1067	670

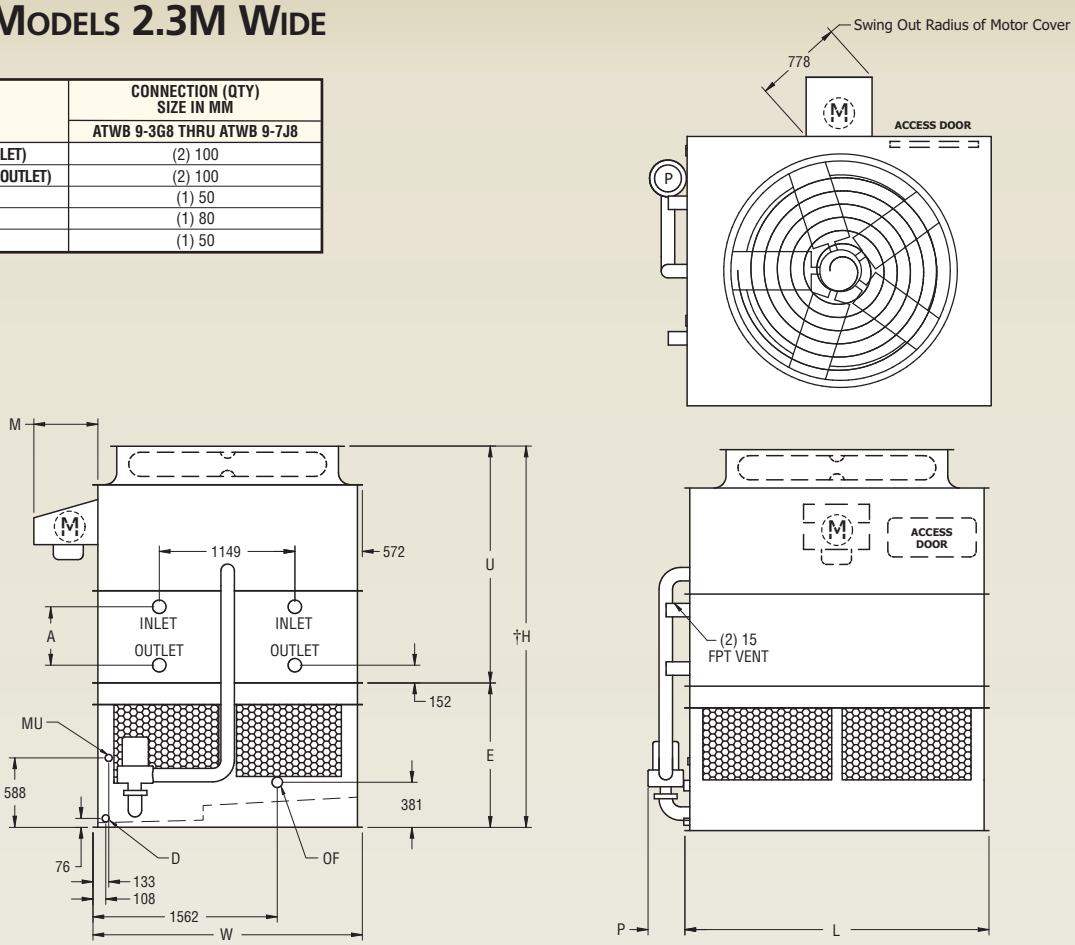
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Contact your local EVAPCO sales representative for thermal selection and pricing.

† Height includes fan guard which ships factory mounted.

Selections for ATWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ATWB Models 2.3M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	ATWB 9-3G8 THRU ATWB 9-7J8
SYSTEM FLUID IN (INLET)	(2) 100
SYSTEM FLUID OUT (OUTLET)	(2) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50



Note: The number of coil connections doubles when the flow rate exceeds 60 LPS on ATWB 2.3M wide models. This required option is referred to as the High Flow Coil Configuration.

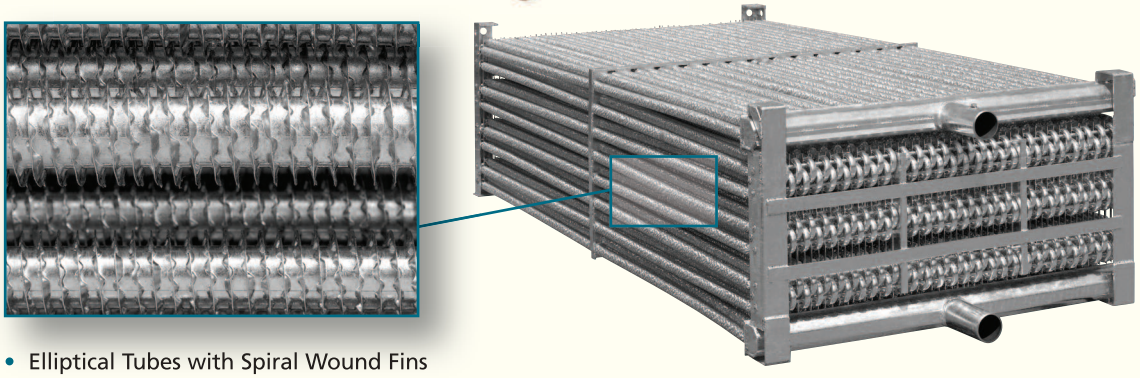
Table 12 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
ATWB 9-3G8	3070	4620	UPPER	2480	4	13.7	1.5	21.4	542	2283	2578	3232	1226	2006	314	495	349
ATWB 9-3H8	3090	4640	UPPER	2500	5.5	15.7	1.5	21.4	542	2283	2578	3232	1226	2006	314	495	349
ATWB 9-3I8	3100	4650	UPPER	2510	7.5	17.2	1.5	21.4	542	2283	2578	3232	1226	2006	314	495	349
ATWB 9-3J8	3160	4710	UPPER	2570	11	19.3	1.5	21.4	542	2283	2578	3232	1226	2006	314	495	349
ATWB 9-4G8	3510	5220	UPPER	2920	4	13.3	1.5	21.4	707	2283	2578	3423	1226	2197	314	686	349
ATWB 9-4H8	3530	5240	UPPER	2940	5.5	15.2	1.5	21.4	707	2283	2578	3423	1226	2197	314	686	349
ATWB 9-4I8	3530	5250	UPPER	2940	7.5	16.7	1.5	21.4	707	2283	2578	3423	1226	2197	314	686	349
ATWB 9-4J8	3590	5310	UPPER	3000	11	18.7	1.5	21.4	707	2283	2578	3423	1226	2197	314	686	349
ATWB 9-5H8	4000	5880	UPPER	3410	5.5	14.8	1.5	21.4	872	2283	2578	3613	1226	2387	314	876	349
ATWB 9-5I8	4010	5890	UPPER	3420	7.5	16.2	1.5	21.4	872	2283	2578	3613	1226	2387	314	876	349
ATWB 9-5J8	4060	5950	UPPER	3470	11	18.1	1.5	21.4	872	2283	2578	3613	1226	2387	314	876	349
ATWB 9-6H8	4470	6510	UPPER	3880	5.5	14.3	1.5	21.4	1038	2283	2578	3804	1226	2578	314	1067	349
ATWB 9-6I8	4470	6520	UPPER	3880	7.5	15.7	1.5	21.4	1038	2283	2578	3804	1226	2578	314	1067	349
ATWB 9-6J8	4530	6580	UPPER	3940	11	17.6	1.5	21.4	1038	2283	2578	3804	1226	2578	314	1067	349
ATWB 9-7H8	4970	7180	UPPER	4380	5.5	13.9	1.5	21.4	1203	2283	2578	3950	1226	2724	314	1213	349
ATWB 9-7I8	4980	7190	UPPER	4390	7.5	15.2	1.5	21.4	1203	2283	2578	3950	1226	2724	314	1213	349
ATWB 9-7J8	5030	7250	UPPER	4450	11	17.0	1.5	21.4	1203	2283	2578	3950	1226	2724	314	1213	349

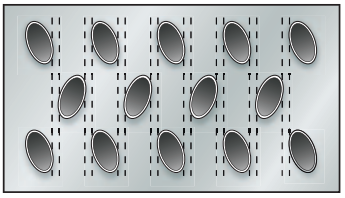
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Contact your local EVAPCO sales representative for thermal selection and pricing.

† Height includes fan guard which ships factory mounted.

NEW Ellipti–*fin*® Heat Transfer Coil



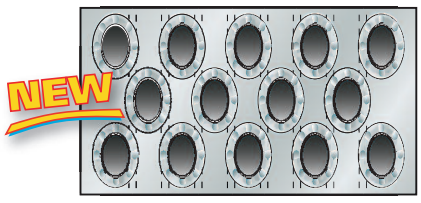
- Elliptical Tubes with Spiral Wound Fins
- Improved Dry and Wet Operation
- All Rows Finned



Thermal-Pak® II Coil by EVAPCO

Research and development is an on-going process at EVAPCO. Through the success of the Thermal Pak® II Coil, EVAPCO saw the potential for new coil configurations and the need for new manufacturing technology to improve processes and efficiency. During this same time, it became evident that a need exists for more environmentally conscious evaporative cooling products.

EVAPCO used the experience gained through the development of the Thermal Pak® and Thermal Pak® II heat transfer coils and combined with new manufacturing procedures to develop the **Ellipti–*fin*®** heat transfer coil. The **Ellipti–*fin*®** coil utilises elliptical shape tube with extended surface fins for maximum heat transfer efficiency. **The extended surface increases the heat transfer efficiency in the evaporative or wet mode as well as the dry mode of operation.**



Ellipti–*fin*® Finned Eliptical Tube by EVAPCO (Patent Pending)

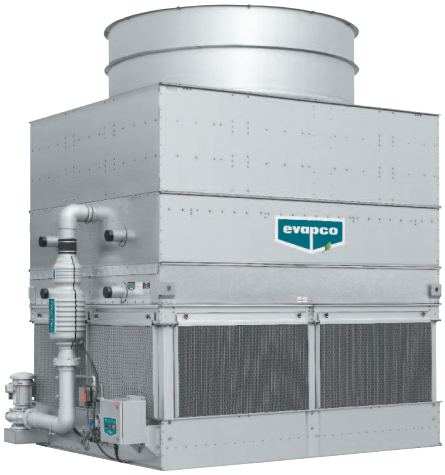
The **Ellipti–*fin*®** coil incorporates features of both the Thermal Pak® and Thermal Pak® II coils as the tubes are oriented vertically yet spaced so as not to increase the airside pressure drop. As such, eco-ATWB closed circuit coolers and eco-ATC condensers are not subject to the performance penalties normally associated with round tube extended surface coils. Additionally, EVAPCO ensures proper evaporative operation by thoroughly wetting the coil surface with one of the highest water loading rates in the industry for conventional evaporative condensers.

Ellipti–*fin*® coils are manufactured from high quality carbon steel tubing following the most stringent quality control procedures and in accordance with the ASME B31.5 Refrigerant Piping Code. Each circuit is inspected to assure the material quality and tested before fins are wound onto the surface of the tube. Each circuit is then assembled into a complete coil. Finally, the assembled coil is tested at 26 Bar air pressure under water to make sure it is leak free. To protect the coil against corrosion, and complete the bond between tube and fin, the entire assembly is dipped in molten zinc (hot dip galvanised) at a temperature of approximately 430°C.

EVAPCO's new **Ellipti–*fin*®** condensing coils are designed for maximum heat transfer efficiency. This unique coil design utilises counterflow heat transfer. The rows of the finned elliptical tubes are positioned vertically in the direction of airflow to enhance turbulence, which increases heat transfer while minimising airside pressure drop. The design features of EVAPCO's **Ellipti–*fin*®** condensing coils ensure the end-user will receive maximised evaporative heat transfer efficiency wet or dry. These characteristics and other engineering advancements of the **Ellipti–*fin*®** have been proven in EVAPCO's world-class research and development laboratory.

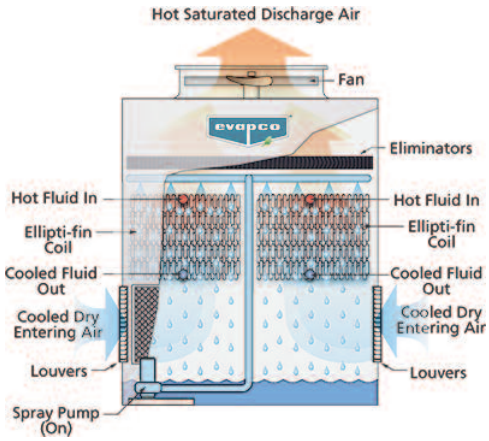
Modes of Operation for eco-ATWB and eco-ATC-A

eco-ATWB Closed Circuit Coolers



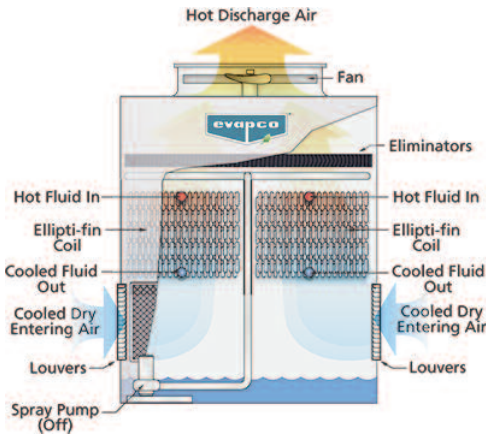
eco ATWB

The eco-ATWB line of Closed Circuit Coolers has been specifically designed to dramatically increase both the evaporative (latent) and dry (sensible) modes of cooling. With this revolutionary design, the EVAPCO eco-ATWB will also save water and energy by increasing the unit's efficiency in both the evaporative and dry cooling modes of operation. The eco-ATWB utilises the EVAPCO **Ellipti–*fin*®** coil which features elliptical spiral fin technology to maximise the surface area available for heat transfer. The **Ellipti–*fin*®** coil now features CROSScool™ Internal Tube Enhancement which increases the internal heat transfer coefficient of the coil and thus increases the cooling capacity of the unit. The eco-ATWB is the ideal solution for: Reducing Water Consumption, Lower Energy Costs, Higher Dry Bulb Switchover, Super Low Sound Levels. **This product is designed with IBC Compliant construction and CTI Certified Performance.**



Evaporative Mode *(Latent Heat Transfer)*

The process fluid is circulated through the finned **Ellipti–*fin*®** coils of the closed circuit cooler. Heat from the process fluid is transferred through the tube wall and extended surface fins to the water cascading downward over the tubes. Simultaneously, air is drawing in through the air inlet louvers at the base of the cooler and travels upward over the coil opposite the spray water flow. A small portion of the water is evaporated which rejects heat. The warm moist air is drawn to the top of the closed circuit cooler by the fan and is discharged to the atmosphere. The remaining water falls to the sump at the bottom of the cooler where it is recirculated by the pump up through the water distribution system and back down over the coils.



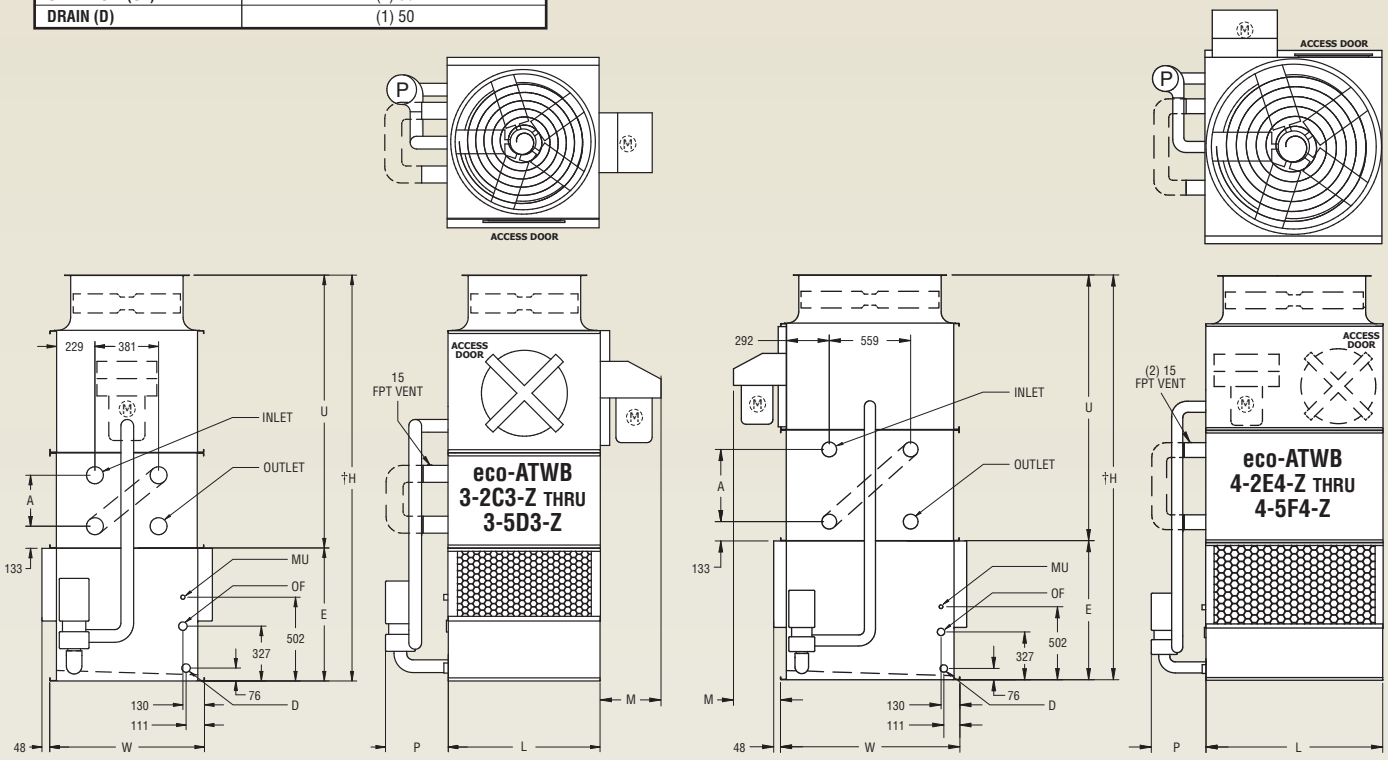
Dry Mode *(Sensible Heat Transfer)*

The eco-ATWB closed circuit cooler is capable of significantly higher dry bulb switchover temperature than a bare tube coil due to the extended surface fins of the full footprint **Ellipti–*fin*®** coil located entirely in the air stream. The number of coil rows and entering air combine to provide dry operation at higher dry bulb switchover temperatures than "most" other closed circuit coolers. The ability to satisfy the heat load without operating the spray pump provides both water and energy savings.

Selections for eco-ATWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ECO-ATWB MODELS 0.9M AND 1.2M WIDE

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	eco-ATWB 3-2C3-Z THRU eco-ATWB 4-5F4-Z
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50



Note: The number of coil connections doubles when the flow rate exceeds 30 LPS on eco-ATWB 0.9M wide models. This required option is referred to as the High Flow Coil Configuration.

Table 13 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
eco-ATWB 3-2C3-Z	570	810	UPPER	440	0.75	2.2	0.55	6.3	59	927	908	2429	794	1635	324	305	375
eco-ATWB 3-3C3-Z	670	930	UPPER	540	0.75	2.1	0.55	6.3	78	927	908	2619	794	1825	324	495	375
eco-ATWB 3-4C3-Z	750	1030	UPPER	630	0.75	2.0	0.55	6.3	97	927	908	2810	794	2016	324	686	375
eco-ATWB 3-4D3-Z	760	1040	UPPER	630	1.1	2.3	0.55	6.3	97	927	908	2810	794	2016	324	686	375
eco-ATWB 3-5C3-Z	840	1140	UPPER	720	0.75	2.0	0.55	6.3	117	927	908	3000	794	2206	324	876	375
eco-ATWB 3-5D3-Z	850	1150	UPPER	720	1.1	2.2	0.55	6.3	117	927	908	3000	794	2206	324	876	375
eco-ATWB 4-2E4-Z	870	1300	UPPER	690	1.5	4.1	0.55	6.3	100	1232	1216	2588	953	1635	324	305	375
eco-ATWB 4-3E4-Z	1040	1510	UPPER	860	1.5	3.9	0.55	6.3	138	1232	1216	2778	953	1825	324	495	375
eco-ATWB 4-4E4-Z	1190	1700	UPPER	1020	1.5	3.8	0.55	6.3	175	1232	1216	2969	953	2016	324	686	375
eco-ATWB 4-4F4-Z	1210	1710	UPPER	1030	2.2	4.3	0.55	6.3	175	1232	1216	2969	953	2016	324	686	375
eco-ATWB 4-5E4-Z	1360	1900	UPPER	1180	1.5	3.7	0.55	6.3	213	1232	1216	3159	953	2206	324	876	375
eco-ATWB 4-5F4-Z	1370	1910	UPPER	1200	2.2	4.2	0.55	6.3	213	1232	1216	3159	953	2206	324	876	375

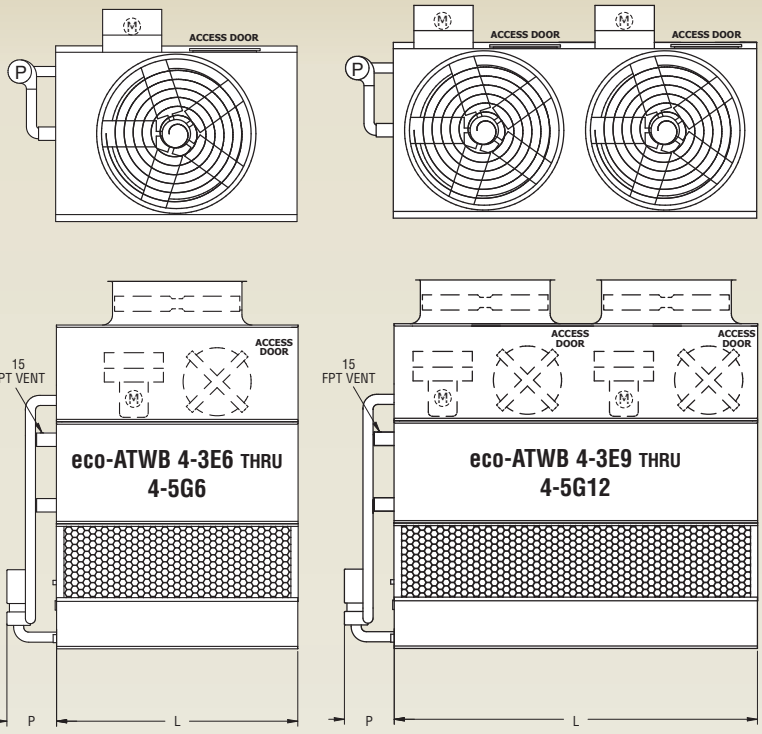
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Model Numbers end in "-Z" for units with Series Flow piping configuration. 0.9Mx0.9M eco-ATWB units are only available in Series Flow and will require crossover piping which can either be supplied by EVAPCO or by others. Model numbers will include "C" for units with Stainless Steel coil(s), "R" for units with Low Sound Fan(s) and "S" for units with an option that negates CTI certification.
(4) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

† Height includes fan guard which ships factory mounted.

Selections for eco-ATWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ECO-ATWB MODELS 1.2M WIDE

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	eco-ATWB 4-3E6 THRU eco-ATWB 4-5G12
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50



Note: The number of coil connections doubles when the flow rate exceeds 30 LPS on eco-ATWB 1.2M wide models. This required option is referred to as the High Flow Coil Configuration.

Table 14 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
eco-ATWB 4-3E6	1450	2140	UPPER	1220	1.5	5.2	0.55	8.5	198	1232	1826	2778	953	1825	324	495	375
eco-ATWB 4-3F6	1460	2150	UPPER	1230	2.2	5.9	0.55	8.5	198	1232	1826	2778	953	1825	324	495	375
eco-ATWB 4-3G6	1470	2150	UPPER	1230	4	6.9	0.55	8.5	198	1232	1826	2778	953	1825	324	495	375
eco-ATWB 4-4E6	1680	2430	UPPER	1450	1.5	5.0	0.55	8.5	255	1232	1826	2969	953	2016	324	686	375
eco-ATWB 4-4F6	1690	2440	UPPER	1460	2.2	5.7	0.55	8.5	255	1232	1826	2969	953	2016	324	686	375
eco-ATWB 4-4G6	1700	2440	UPPER	1470	4	6.7	0.55	8.5	255	1232	1826	2969	953	2016	324	686	375
eco-ATWB 4-5E6	1930	2730	UPPER	1700	1.5	4.9	0.55	8.5	313	1232	1826	3159	953	2206	324	876	375
eco-ATWB 4-5F6	1940	2740	UPPER	1710	2.2	5.6	0.55	8.5	313	1232	1826	3159	953	2206	324	876	375
eco-ATWB 4-5G6	1950	2750	UPPER	1710	4	6.5	0.55	8.5	313	1232	1826	3159	953	2206	324	876	375
eco-ATWB 4-3E9	2140	3130	UPPER	1830	(2) 1.5	8.5	0.75	12.6	288	1232	2737	2778	953	1825	324	495	375
eco-ATWB 4-3F9	2160	3160	UPPER	1860	(2) 2.2	9.6	0.75	12.6	288	1232	2737	2778	953	1825	324	495	375
eco-ATWB 4-4E9	2480	3560	UPPER	2170	(2) 1.5	8.3	0.75	12.6	376	1232	2737	2969	953	2016	324	686	375
eco-ATWB 4-4F9	2500	3590	UPPER	2200	(2) 2.2	9.4	0.75	12.6	376	1232	2737	2969	953	2016	324	686	375
eco-ATWB 4-5E9	2840	4020	UPPER	2540	(2) 1.5	8.0	0.75	12.6	463	1232	2737	3159	953	2206	324	876	375
eco-ATWB 4-5F9	2870	4050	UPPER	2570	(2) 2.2	9.1	0.75	12.6	463	1232	2737	3159	953	2206	324	876	375
eco-ATWB 4-3E12	2610	3930	UPPER	2240	(2) 1.5	10.3	1.1	17.0	378	1232	3651	2778	953	1825	324	495	375
eco-ATWB 4-3F12	2640	3960	UPPER	2270	(2) 2.2	11.8	1.1	17.0	378	1232	3651	2778	953	1825	324	495	375
eco-ATWB 4-3G12	2650	3960	UPPER	2280	(2) 4	13.7	1.1	17.0	378	1232	3651	2778	953	1825	324	495	375
eco-ATWB 4-4E12	3080	4510	UPPER	2700	(2) 1.5	10.0	1.1	17.0	496	1232	3651	2969	953	2016	324	686	375
eco-ATWB 4-4F12	3100	4540	UPPER	2730	(2) 2.2	11.5	1.1	17.0	496	1232	3651	2969	953	2016	324	686	375
eco-ATWB 4-4G12	3110	4540	UPPER	2740	(2) 4	13.3	1.1	17.0	496	1232	3651	2969	953	2016	324	686	375
eco-ATWB 4-5E12	3570	5120	UPPER	3190	(2) 1.5	9.7	1.1	17.0	613	1232	3651	3159	953	2206	324	876	375
eco-ATWB 4-5F12	3590	5140	UPPER	3220	(2) 2.2	11.1	1.1	17.0	613	1232	3651	3159	953	2206	324	876	375
eco-ATWB 4-5G12	3600	5150	UPPER	3230	(2) 4	12.9	1.1	17.0	613	1232	3651	3159	953	2206	324	876	375

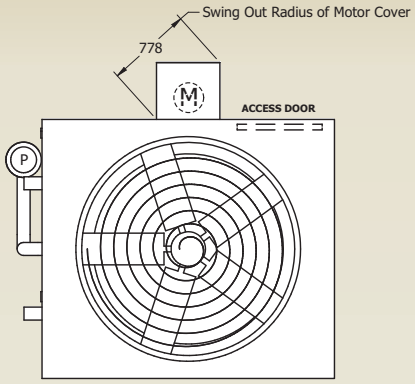
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

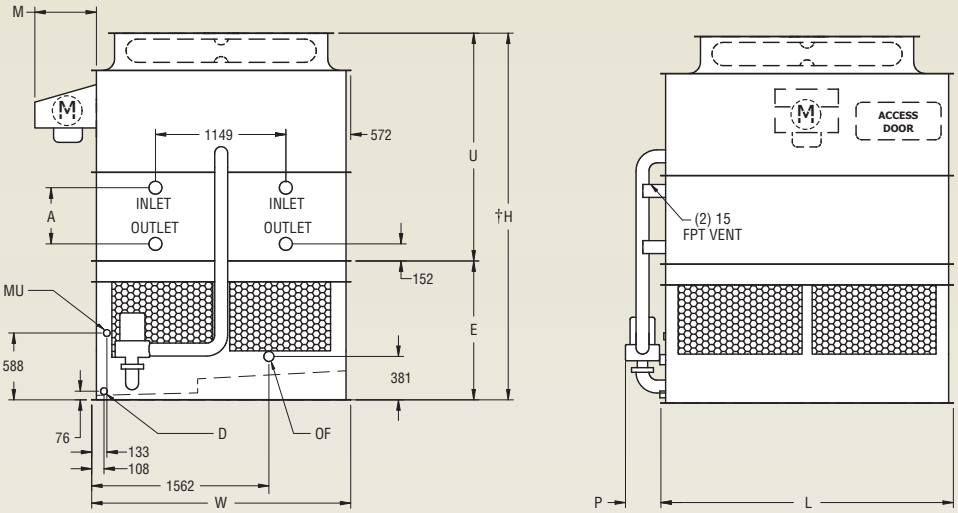
† Height includes fan guard which ships factory mounted.

Selections for eco-ATWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ECO-ATWB MODELS 2.3M WIDE

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	eco-ATWB 9-3G8 THRU eco-ATWB 9-6J8
SYSTEM FLUID IN (INLET)	(2) 100
SYSTEM FLUID OUT (OUTLET)	(2) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50





Note: The number of coil connections doubles when the flow rate exceeds 60 LPS on eco-ATWB 2.3M wide models. This required option is referred to as the High Flow Coil Configuration.

Table 15 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
eco-ATWB 9-3G8	3620	5170	UPPER	3030	4	13.7	1.5	21.4	542	2283	2578	3232	1226	2006	543	495	395
eco-ATWB 9-3H8	3640	5190	UPPER	3050	5.5	15.7	1.5	21.4	542	2283	2578	3232	1226	2006	543	495	395
eco-ATWB 9-3I8	3650	5200	UPPER	3060	7.5	17.2	1.5	21.4	542	2283	2578	3232	1226	2006	543	495	395
eco-ATWB 9-3J8	3710	5260	UPPER	3120	11	19.3	1.5	21.4	542	2283	2578	3232	1226	2006	543	495	395
eco-ATWB 9-4G8	4230	5940	UPPER	3640	4	13.3	1.5	21.4	707	2283	2578	3423	1226	2197	543	686	395
eco-ATWB 9-4H8	4250	5960	UPPER	3660	5.5	15.2	1.5	21.4	707	2283	2578	3423	1226	2197	543	686	395
eco-ATWB 9-4I8	4250	5970	UPPER	3670	7.5	16.7	1.5	21.4	707	2283	2578	3423	1226	2197	543	686	395
eco-ATWB 9-4J8	4310	6030	UPPER	3720	11	18.7	1.5	21.4	707	2283	2578	3423	1226	2197	543	686	395
eco-ATWB 9-5H8	4900	6780	UPPER	4310	5.5	14.8	1.5	21.4	872	2283	2578	3613	1226	2387	543	876	395
eco-ATWB 9-5I8	4900	6790	UPPER	4310	7.5	16.2	1.5	21.4	872	2283	2578	3613	1226	2387	543	876	395
eco-ATWB 9-5J8	4960	6840	UPPER	4370	11	18.1	1.5	21.4	872	2283	2578	3613	1226	2387	543	876	395
eco-ATWB 9-6H8	5540	7580	UPPER	4950	5.5	14.3	1.5	21.4	1038	2283	2578	3804	1226	2578	543	1067	395
eco-ATWB 9-6I8	5540	7590	UPPER	4950	7.5	15.7	1.5	21.4	1038	2283	2578	3804	1226	2578	543	1067	395
eco-ATWB 9-6J8	5600	7650	UPPER	5010	11	17.6	1.5	21.4	1038	2283	2578	3804	1226	2578	543	1067	395

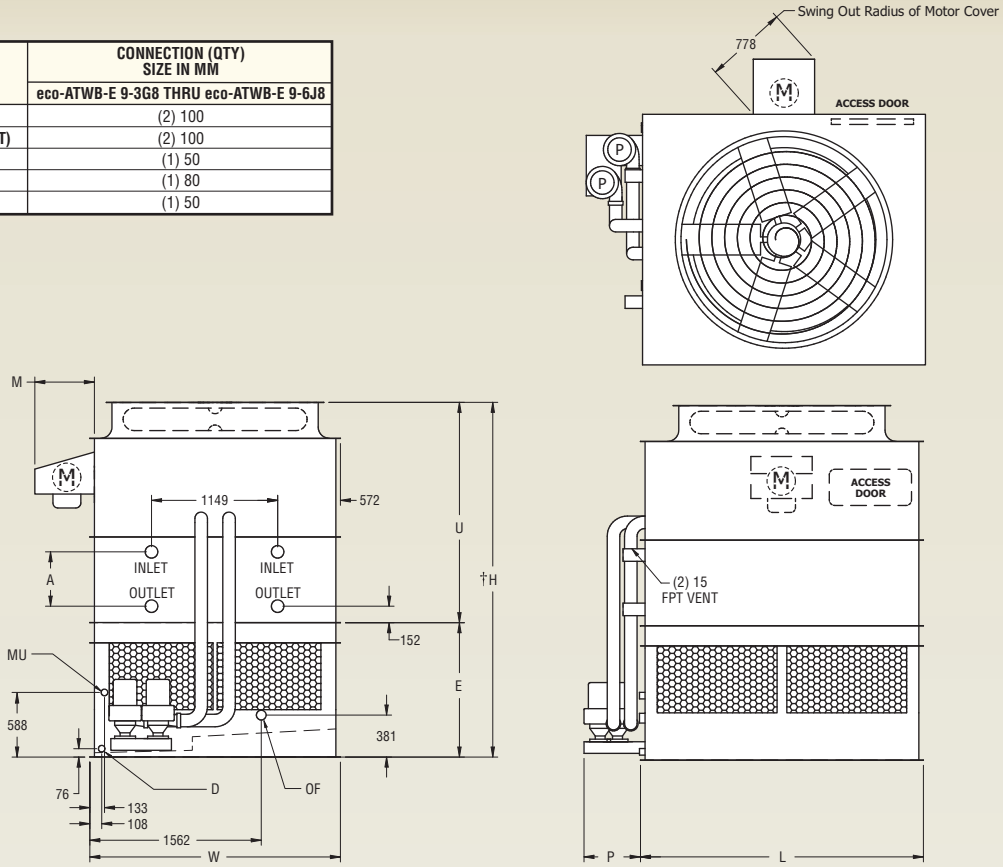
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

† Height includes fan guard which ships factory mounted.

Selections for eco-ATWB-E Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ECO-ATWB-E MODELS 2.3M WIDE

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	eco-ATWB-E 9-3G8 THRU eco-ATWB-E 9-6J8
SYSTEM FLUID IN (INLET)	(2) 100
SYSTEM FLUID OUT (OUTLET)	(2) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50



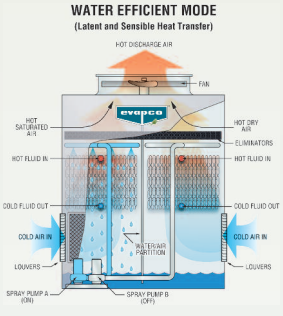
Note: The number of coil connections doubles when the flow rate exceeds 30 LPS on eco-ATWB-E 2.3M wide models. This required option is referred to as the High Flow Coil Configuration.

Table 16 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
eco-ATWB-E 9-3G8	3780	5330	UPPER	3120	4	13.7	(2) 0.55	49.1	542	2283	2578	3232	1226	2006	543	495	525
eco-ATWB-E 9-3H8	3800	5355	UPPER	3145	5.5	15.7	(2) 0.55	49.1	542	2283	2578	3232	1226	2006	543	495	525
eco-ATWB-E 9-3I8	3805	5355	UPPER	3145	7.5	17.2	(2) 0.55	49.1	542	2283	2578	3232	1226	2006	543	495	525
eco-ATWB-E 9-3J8	3865	5415	UPPER	3205	11	19.3	(2) 0.55	49.1	542	2283	2578	3232	1226	2006	543	495	525
eco-ATWB-E 9-4G8	4400	6115	UPPER	3740	4	13.3	(2) 0.55	49.1	707	2283	2578	3423	1226	2197	543	686	525
eco-ATWB-E 9-4H8	4420	6135	UPPER	3765	5.5	15.2	(2) 0.55	49.1	707	2283	2578	3423	1226	2197	543	686	525
eco-ATWB-E 9-4I8	4425	6140	UPPER	3765	7.5	16.7	(2) 0.55	49.1	707	2283	2578	3423	1226	2197	543	686	525
eco-ATWB-E 9-4J8	4485	6200	UPPER	3825	11	18.7	(2) 0.55	49.1	707	2283	2578	3423	1226	2197	543	686	525
eco-ATWB-E 9-5H8	5085	6965	UPPER	4425	5.5	14.8	(2) 0.55	49.1	872	2283	2578	3613	1226	2387	543	876	525
eco-ATWB-E 9-5I8	5085	6970	UPPER	4430	7.5	16.2	(2) 0.55	49.1	872	2283	2578	3613	1226	2387	543	876	525
eco-ATWB-E 9-5J8	5145	7030	UPPER	4485	11	18.1	(2) 0.55	49.1	872	2283	2578	3613	1226	2387	543	876	525
eco-ATWB-E 9-6H8	5735	7780	UPPER	5075	5.5	14.3	(2) 0.55	49.1	1038	2283	2578	3804	1226	2578	543	1067	525
eco-ATWB-E 9-6I8	5740	7785	UPPER	5080	7.5	15.7	(2) 0.55	49.1	1038	2283	2578	3804	1226	2578	543	1067	525
eco-ATWB-E 9-6J8	5800	7845	UPPER	5140	11	17.6	(2) 0.55	49.1	1038	2283	2578	3804	1226	2578	543	1067	525

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

† Height includes fan guard which ships factory mounted.



Water Efficient Mode (exclusive to only the eco-ATWB-E models)

(Evaporative and Sensible Heat Transfer)

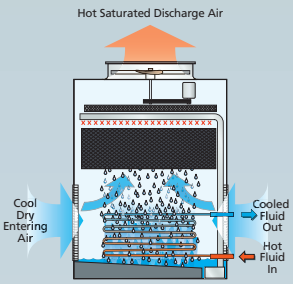
The joint wet and dry operation mode provides water savings as well as low approach temperatures. In this joint mode of operation, the fan is on and the process fluid enters the coils through the top coil connections (Fan on, Pump A on, Pump B off). Recirculating Pump B is turned off and coil B rejects a portion of the heat load to the atmosphere through the tube and fin walls to the air passing over the coils using sensible heat transfer. Pump A is left on where heat from the process fluid is transferred through the coil tubes to the water cascading downward over coil A. This mode of operation minimises the amount of water used while maintaining the cooling capacity required. The cooled fluid then returns to the process via the bottom coil connection.

ESWB Design and Construction Features

The ESWB stands apart as being the most energy efficient and the quietest axial fan closed circuit cooler on the market today. The ESWB is able to provide superior performance as a result of its full footprint patented Sensi-Coil® Technology**. The Sensi-Coil® now features CrossCool™ Internal Tube Enhancement which increases the internal heat transfer coefficient of the coil and thus increases the cooling capacity of the unit.

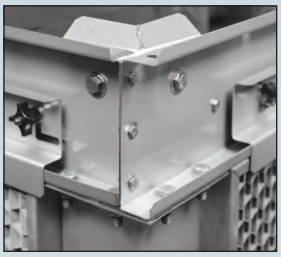
The ESWB's Cooling Technology Institute CTI† certified performance, new owner oriented features and independent certification of the International Building Code (IBC) compliance reinforce the ESWB's position as a premier cooler in the HVAC industry.

Principle of Operation



International Building Code (IBC) Compliant Construction

- Suitable for installations vulnerable to high seismic or wind loads
- Standard construction designed to withstand 1.00 g seismic load (S_{DS}) and 5.7 kPa wind load (P) in applications with an Importance Factor (I_p) up to 1.5
- Refer to the "IBC Help" document in the White Papers section of the EVAPCO public website for further details.



Easy Field Assembly

- A new field assembly seam design ensures easy assembly.
- Self-guiding channels guide the fill section into position improving the quality of the field seam.
- Eliminates up to 66% of fasteners.

(Patent Pending)

NEW

Framed WST II Air Inlet Louvers (Water and Sight Tight)

- Easily removable for access.
- Improved design to keep sunlight out-preventing biological growth.
- Keeps water in while keeping dirt and debris out.
- Clause 4.6 "Sunlight" of Australian Standard 3666.1 explicitly states that the *"design, orientation and placement of cooling towers shall be such that direct sunlight is minimised from the wetted areas of the cooling tower."* EVAPCO's WST air inlet louver ensures that the spray water is entirely concealed from sunlight from the moment it enters the tower to the moment it exits making it the most AS 3666.1 compliant cooling tower in the market.

U.S. Patent #7,927,196

CTI Certified Units

Optional Factory Mounted Non-Chemical Water Treatment System

In North America the ESWB is available with EVAPCO's optional ***Pulse*~Pure®** non-chemical water treatment system. The ***Pulse*~Pure®** Water Treatment System utilises pulsed-power technology to provide CHEMICAL FREE Water Treatment. EVAPCO's ***Pulse*~Pure®** system is an environmentally sensitive alternative for treating water in evaporative cooled equipment. It does not release harmful by-products to the environment and eliminates the use of chemicals completely. The ***Pulse*~Pure®** system delivers short, high frequency bursts of low energy electromagnetic fields to the recirculating water in the ESWB and will:

- Control bacteria to levels below traditional chemical water treatment.
- Control the formation of mineral scale.
- Save water by operating at higher cycles of concentration.
- Yield corrosion rates equivalent to chemical water treatment.

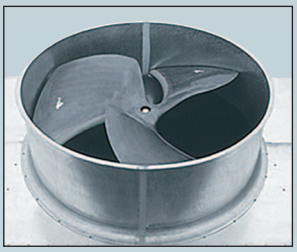
Please contact your local sales representative for more information on the ***Pulse*~Pure®** and its availability in Australia and New Zealand.

† Mark owned by the Cooling Technology Institute

Optional Factory Mounted Solid Chemical Water Treatment System

In North America the ESWB is available with EVAPCO's optional ***Smart Shield®*** solid chemical water treatment system. EVAPCO's ***Smart Shield®*** System is an environmentally sensitive alternative for treating water in evaporative cooled equipment. The ***Smart Shield®*** includes all the components required for an effective water treatment system, factory mounted and wired. Please contact your local sales representative for more information on ***Smart Shield®*** and its availability in Australia and New Zealand.

**U.S. Patent #7,296,620



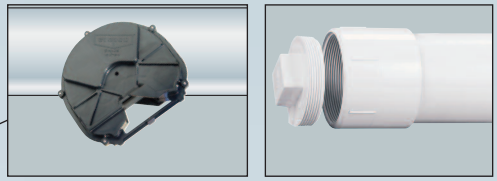
Super Low Sound Fan

The ESWB is available with Low Sound Solutions to reduce the overall sound generated from the top of the already quiet ESWB Closed Circuit Cooler. Each option provides various levels of sound reduction and can be combined to provide the lowest sound level available on a closed circuit cooler.

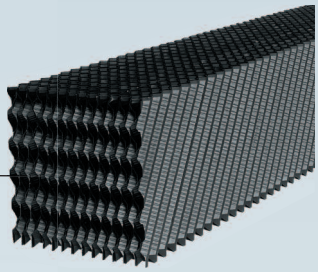
- Select a Super Low Sound Fan for a 9 to 15 dB(A) reduction!
- Select a Low Sound Fan for a 4 to 7 dB(A) reduction!

Water Distribution System

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



EvapJet® Nozzle



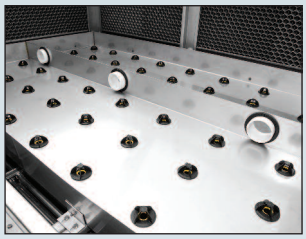
Patented EVAPAK® Fill *

- Induces highly turbulent mixing of the air and water for superior heat transfer.
- Special drainage tips allow high water loading without excessive pressure drop.
- Flame spread rating of 5 per ASTM E84-81a.
- Can be used as an internal working platform.

*U.S. Patent #5,124,087

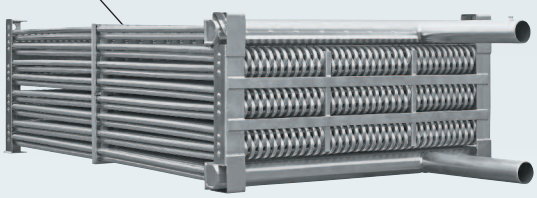
New Redistribution Basin Section

- The redistribution basin ensures even water loading of the full footprint ***Sensi*-Coil®**.
- Large orifice nozzles prevent clogging.
- Easily accessible for routine inspection.



Most Accessible Basin and Coil

- Convenient side access from ground level.
- Large open area simplifies maintenance.
- Easy access to basin floor, float assembly, and pump strainer.



TITAN COIL *option*

Featuring the *Sensi*-Coil® XT Construction

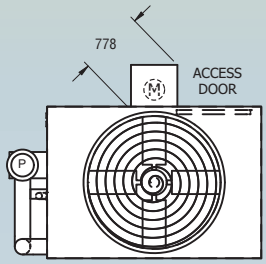
The Premier Closed Circuit Cooler Coil in the HVAC industry!
The Titan provides:

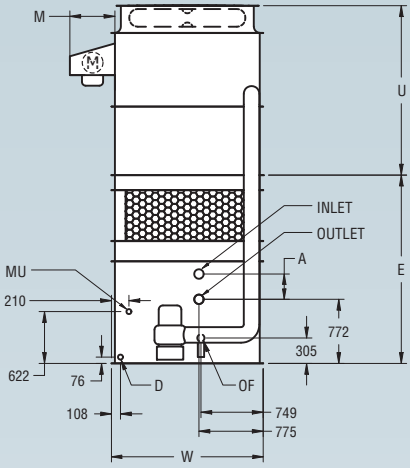
- 304L SST Construction for Superior Corrosion Resistance.
- **5 Year Extended Coil Warranty – STANDARD!!**
- Patented Sensi-Coil® XT elliptical tube design and extra tough construction.

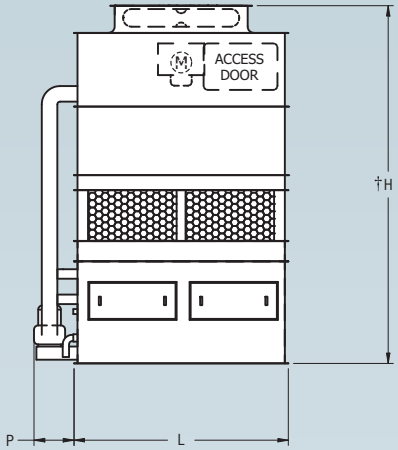
Selections for ESWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ESWB Models 1.8M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	ESWB 9-22F6 THRU ESWB 9-34I6
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50







Note: The coil connections increase to 150 mm nominal diameter when the flow rate exceeds 30 LPS. This required option is referred to as the High Flow Coil Configuration.

Table 17 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
ESWB 9-22F6	3005	4570	LOWER	2095	2.2	10.7	2.2	20.5	331	1826	2578	4305	2267	2038	543	305	483
ESWB 9-22G6	3010	4575	LOWER	2095	4	12.5	2.2	20.5	331	1826	2578	4305	2267	2038	543	305	483
ESWB 9-22H6	3035	4600	LOWER	2095	5.5	14.3	2.2	20.5	331	1826	2578	4305	2267	2038	543	305	483
ESWB 9-22I6	3040	4605	LOWER	2095	7.5	15.7	2.2	20.5	331	1826	2578	4305	2267	2038	543	305	483
ESWB 9-23F6	3475	5185	LOWER	2565	2.2	10.7	2.2	20.5	480	1826	2578	4495	2457	2038	543	495	483
ESWB 9-23G6	3480	5190	LOWER	2565	4	12.5	2.2	20.5	480	1826	2578	4495	2457	2038	543	495	483
ESWB 9-23H6	3500	5210	LOWER	2565	5.5	14.3	2.2	20.5	480	1826	2578	4495	2457	2038	543	495	483
ESWB 9-23I6	3505	5215	LOWER	2565	7.5	15.7	2.2	20.5	480	1826	2578	4495	2457	2038	543	495	483
ESWB 9-24F6	3950	5810	LOWER	3040	2.2	10.7	2.2	20.5	629	1826	2578	4686	2648	2038	543	686	483
ESWB 9-24G6	3955	5815	LOWER	3040	4	12.5	2.2	20.5	629	1826	2578	4686	2648	2038	543	686	483
ESWB 9-24H6	3980	5840	LOWER	3040	5.5	14.3	2.2	20.5	629	1826	2578	4686	2648	2038	543	686	483
ESWB 9-24I6	3985	5840	LOWER	3040	7.5	15.7	2.2	20.5	629	1826	2578	4686	2648	2038	543	686	483
ESWB 9-25F6	4440	6450	LOWER	3530	2.2	10.7	2.2	20.5	778	1826	2578	4876	2838	2038	543	876	483
ESWB 9-25G6	4445	6455	LOWER	3530	4	12.5	2.2	20.5	778	1826	2578	4876	2838	2038	543	876	483
ESWB 9-25H6	4470	6475	LOWER	3530	5.5	14.3	2.2	20.5	778	1826	2578	4876	2838	2038	543	876	483
ESWB 9-25I6	4470	6480	LOWER	3530	7.5	15.7	2.2	20.5	778	1826	2578	4876	2838	2038	543	876	483
ESWB 9-26F6	4910	7065	LOWER	3995	2.2	10.7	2.2	20.5	927	1826	2578	5067	3029	2038	543	1067	483
ESWB 9-26G6	4910	7070	LOWER	3995	4	12.5	2.2	20.5	927	1826	2578	5067	3029	2038	543	1067	483
ESWB 9-26H6	4935	7095	LOWER	3995	5.5	14.3	2.2	20.5	927	1826	2578	5067	3029	2038	543	1067	483
ESWB 9-26I6	4940	7100	LOWER	3995	7.5	15.7	2.2	20.5	927	1826	2578	5067	3029	2038	543	1067	483
ESWB 9-32F6	3100	4665	LOWER	2095	2.2	10.4	2.2	20.5	331	1826	2578	4610	2267	2343	543	305	483
ESWB 9-32G6	3105	4665	LOWER	2095	4	12.3	2.2	20.5	331	1826	2578	4610	2267	2343	543	305	483
ESWB 9-32H6	3125	4690	LOWER	2095	5.5	14.0	2.2	20.5	331	1826	2578	4610	2267	2343	543	305	483
ESWB 9-32I6	3130	4695	LOWER	2095	7.5	15.3	2.2	20.5	331	1826	2578	4610	2267	2343	543	305	483
ESWB 9-33F6	3570	5280	LOWER	2565	2.2	10.4	2.2	20.5	480	1826	2578	4800	2457	2343	543	495	483
ESWB 9-33G6	3575	5285	LOWER	2565	4	12.3	2.2	20.5	480	1826	2578	4800	2457	2343	543	495	483
ESWB 9-33H6	3595	5305	LOWER	2565	5.5	14.0	2.2	20.5	480	1826	2578	4800	2457	2343	543	495	483
ESWB 9-33I6	3600	5310	LOWER	2565	7.5	15.3	2.2	20.5	480	1826	2578	4800	2457	2343	543	495	483
ESWB 9-34F6	4045	5905	LOWER	3045	2.2	10.4	2.2	20.5	629	1826	2578	4991	2648	2343	543	686	483
ESWB 9-34G6	4050	5910	LOWER	3045	4	12.3	2.2	20.5	629	1826	2578	4991	2648	2343	543	686	483
ESWB 9-34H6	4075	5935	LOWER	3045	5.5	14.0	2.2	20.5	629	1826	2578	4991	2648	2343	543	686	483
ESWB 9-34I6	4080	5940	LOWER	3045	7.5	15.3	2.2	20.5	629	1826	2578	4991	2648	2343	543	686	483

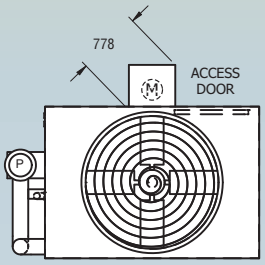
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

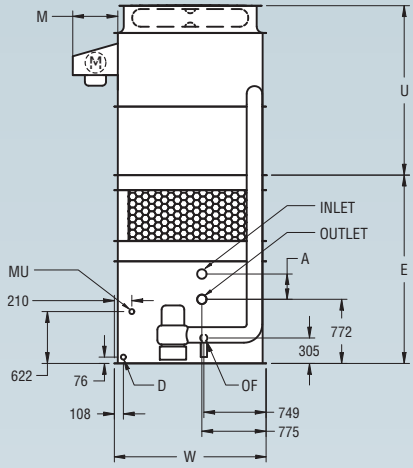
† Height includes fan guard which ships factory mounted.

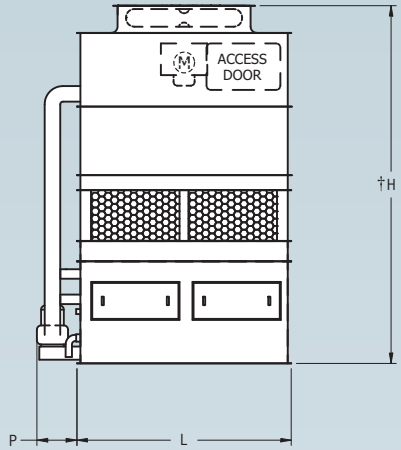
Selections for ESWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ESWB Models 1.8M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	ESWB 9-35F6 THRU ESWB 9-46J6
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50







Note: The coil connections increase to 150 mm nominal diameter when the flow rate exceeds 30 LPS. This required option is referred to as the High Flow Coil Configuration.

Table 18 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
ESWB 9-35F6	4530	6540	LOWER	3530	2.2	10.4	2.2	20.5	778	1826	2578	5181	2838	2343	543	876	483
ESWB 9-35G6	4535	6545	LOWER	3530	4	12.3	2.2	20.5	778	1826	2578	5181	2838	2343	543	876	483
ESWB 9-35H6	4560	6570	LOWER	3530	5.5	14.0	2.2	20.5	778	1826	2578	5181	2838	2343	543	876	483
ESWB 9-35I6	4565	6575	LOWER	3530	7.5	15.3	2.2	20.5	778	1826	2578	5181	2838	2343	543	876	483
ESWB 9-36F6	5000	7160	LOWER	3995	2.2	10.4	2.2	20.5	927	1826	2578	5372	3029	2343	543	1067	483
ESWB 9-36G6	5005	7160	LOWER	3995	4	12.3	2.2	20.5	927	1826	2578	5372	3029	2343	543	1067	483
ESWB 9-36H6	5025	7185	LOWER	3995	5.5	14.0	2.2	20.5	927	1826	2578	5372	3029	2343	543	1067	483
ESWB 9-36I6	5030	7190	LOWER	3995	7.5	15.3	2.2	20.5	927	1826	2578	5372	3029	2343	543	1067	483
ESWB 9-42F6	3200	4765	LOWER	2100	2.2	10.1	2.2	20.5	331	1826	2578	4915	2267	2648	543	305	483
ESWB 9-42G6	3205	4770	LOWER	2100	4	12.0	2.2	20.5	331	1826	2578	4915	2267	2648	543	305	483
ESWB 9-42H6	3230	4795	LOWER	2100	5.5	13.7	2.2	20.5	331	1826	2578	4915	2267	2648	543	305	483
ESWB 9-42I6	3235	4800	LOWER	2100	7.5	15.1	2.2	20.5	331	1826	2578	4915	2267	2648	543	305	483
ESWB 9-42J6	3295	4860	LOWER	2100	11	17.1	2.2	20.5	331	1826	2578	4915	2267	2648	543	305	483
ESWB 9-43F6	3670	5380	LOWER	2565	2.2	10.1	2.2	20.5	480	1826	2578	5105	2457	2648	543	495	483
ESWB 9-43G6	3675	5385	LOWER	2565	4	12.0	2.2	20.5	480	1826	2578	5105	2457	2648	543	495	483
ESWB 9-43H6	3695	5405	LOWER	2565	5.5	13.7	2.2	20.5	480	1826	2578	5105	2457	2648	543	495	483
ESWB 9-43I6	3700	5410	LOWER	2565	7.5	15.1	2.2	20.5	480	1826	2578	5105	2457	2648	543	495	483
ESWB 9-43J6	3760	5470	LOWER	2565	11	17.1	2.2	20.5	480	1826	2578	5105	2457	2648	543	495	483
ESWB 9-44F6	4145	6005	LOWER	3045	2.2	10.1	2.2	20.5	629	1826	2578	5296	2648	2648	543	686	483
ESWB 9-44G6	4150	6010	LOWER	3045	4	12.0	2.2	20.5	629	1826	2578	5296	2648	2648	543	686	483
ESWB 9-44H6	4175	6035	LOWER	3045	5.5	13.7	2.2	20.5	629	1826	2578	5296	2648	2648	543	686	483
ESWB 9-44I6	4180	6035	LOWER	3045	7.5	15.1	2.2	20.5	629	1826	2578	5296	2648	2648	543	686	483
ESWB 9-44J6	4235	6095	LOWER	3045	11	17.1	2.2	20.5	629	1826	2578	5296	2648	2648	543	686	483
ESWB 9-45F6	4630	6640	LOWER	3530	2.2	10.1	2.2	20.5	778	1826	2578	5486	2838	2648	543	876	483
ESWB 9-45G6	4635	6645	LOWER	3530	4	12.0	2.2	20.5	778	1826	2578	5486	2838	2648	543	876	483
ESWB 9-45H6	4660	6670	LOWER	3530	5.5	13.7	2.2	20.5	778	1826	2578	5486	2838	2648	543	876	483
ESWB 9-45I6	4665	6670	LOWER	3530	7.5	15.1	2.2	20.5	778	1826	2578	5486	2838	2648	543	876	483
ESWB 9-45J6	4720	6730	LOWER	3530	11	17.1	2.2	20.5	778	1826	2578	5486	2838	2648	543	876	483
ESWB 9-46F6	5105	7260	LOWER	4000	2.2	10.1	2.2	20.5	927	1826	2578	5677	3029	2648	543	1067	483
ESWB 9-46G6	5105	7265	LOWER	4000	4	12.0	2.2	20.5	927	1826	2578	5677	3029	2648	543	1067	483
ESWB 9-46H6	5130	7290	LOWER	4000	5.5	13.7	2.2	20.5	927	1826	2578	5677	3029	2648	543	1067	483
ESWB 9-46I6	5135	7295	LOWER	4000	7.5	15.1	2.2	20.5	927	1826	2578	5677	3029	2648	543	1067	483
ESWB 9-46J6	5195	7355	LOWER	4000	11	17.1	2.2	20.5	927	1826	2578	5677	3029	2648	543	1067	483

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

† Height includes fan guard which ships factory mounted.

LSWE/LRWB

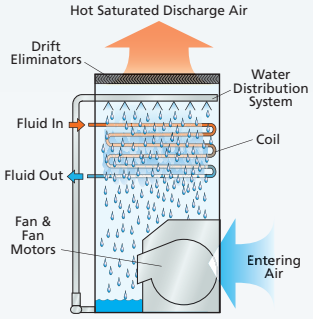
Design and Construction Features

The LSWE and LRWB units are a result of EVAPCO's extensive experience in forced draft centrifugal fan designs. Both models are designed for easy maintenance and long, trouble free operation. These units are also designed with IBC Compliant construction and CTI† certified performance.

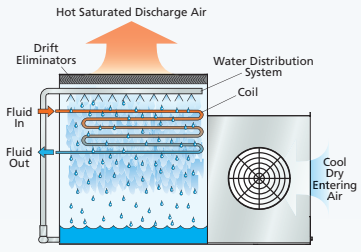
Principle of Operation

The process fluid is circulated through the coil of the closed circuit cooler. Heat from the process fluid is dissipated through the coil tubes to the water cascading downward over the tubes. Simultaneously, air is drawn in through the air inlet louvers at the base of the cooler and travels upward over the coil opposite the water flow. A small portion of the water is evaporated which removes the heat. The warm moist air is drawn to the top of the closed circuit cooler by the fan and is discharged to the atmosphere. The remaining water falls to the sump at the bottom of the cooler where it is recirculated by the pump up through the water distribution system and back down over the coils.

LSWE



LRWB



Principle of Operation

G235 Heavy Mill-Dip Galvanised Steel Construction

(Stainless steel available as an affordable option)

Drift Eliminators Located in Casing

- Drift eliminators integrate with coil casing section for easy mounting of ductwork, discharge hood and attenuation.

Exclusive Thermal-Pak® Coil

- Provides maximum efficiency per plan area.

Easy Field Assembly

- Ensures easy assembly and fewer fasteners.
- Incorporates self-guiding channels to guide the coil casing section into position improving the quality of the field seam.

Totally Enclosed Pump Motors

- Helps assure long, trouble-free operation.

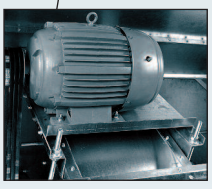
Clean Pan Design

- Sloped design allows water to drain completely from cold water basin.
- Easier Removal of dirt and debris.

MOTOR AND DRIVE 5 Year WARRANTY

Totally Enclosed Fan Motors

- Assures long life.
- All normal maintenance can be performed quickly from outside the unit.
- If required, motor may be easily removed.
- Motors are now located outboard on multi-motor units for even easier drive system access.
- MEPS compliant motors are standard.
- 5 Year Motor and Drive Warranty is standard.



International Building Code (IBC) Compliant Construction

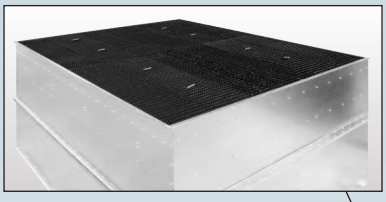
- Suitable for installations vulnerable to high seismic or wind loads.
- Standard construction designed to withstand 0.42 g seismic load (S_{DS}) and 13.7 kPa wind load (P) in applications with an Importance Factor (I_p) of 1.0
- Upgraded construction designed to withstand 2.00 gseismic load (S_{DS}) and 13.7 kPa wind load (P) in applications with an Importance Factor (I_p) of 1.0
- Refer to the "IBC Help" document in the White Papers section of the EVAPCO public website for further details.

CTI Certified

†

Efficient Drift Eliminators

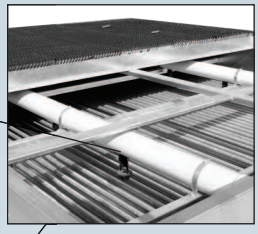
- Advanced design limits maximum drift rate to 0.001% of circulated spray water rate.
- Corrosion resistant PVC for long life.
- Clause 4.4 "Drift Control" of Australian Standard 3666.1 explicitly states that the *"maximum drift loss shall not exceed 0.002% of the maximum design water circulation rate through the tower."* EVAPCO's counterflow cooling method and patented cellular drift eliminator design far exceeds this standard by limiting the drift rate to a maximum of only 0.001% making it the most AS 3666.1 compliant cooling tower in the market.



U.S. Patent # 6,315,804

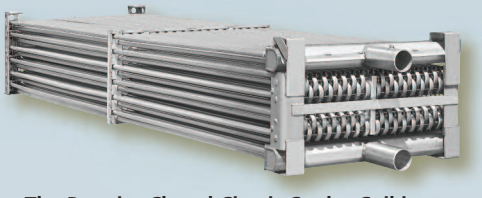
Zero Maintenance PVC Spray Distribution Header with ZM®II Nozzles

- Nozzles are threaded into header at proper orientation.
- Fixed position nozzles require zero maintenance.
- Large orifice nozzles prevent clogging.
- Threaded end caps for ease of cleaning.



Optional TITAN COIL

Featuring Thermal-Pak® XT Construction



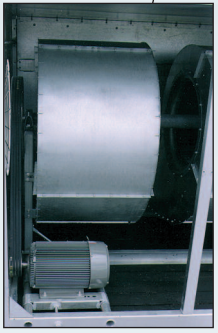
The Premier Closed Circuit Cooler Coil in the HVAC industry! The Titan provides:

- 304L SST Construction for Superior Corrosion Resistance.
- **5 Year Extended Coil Warranty – STANDARD!!**
- Proprietary Thermal-Pak® XT elliptical tube design with elliptical return bends and extra tough construction.

Spray pump & piping, basin access door, make-up connection, overflow connection, and drain connection not shown.

Standard Stainless Steel Cold Water Basin (LRWB)

- Eliminates the need for unreliable epoxy coatings.



Easy to Service Motor & Drive System

- Belt tensioning and bearing lubrication can be performed from outside the unit.
- Locking mechanism can also be used as a wrench to adjust the belts (LRWB only).
- Motor is fully accessible by removing one inlet screen.
- Split fan housings allow removal of all mechanical equipment through the end of the unit (LRWB only).

Pulse~Pure®

U.S. Patent # 7,704,364

Optional *Pulse*~Pure® Water Treatment System

In North America, all units are available with EVAPCO's optional *Pulse*~Pure® non-chemical water treatment system. The *Pulse*~Pure® Water Treatment System utilises pulsed-power technology to provide CHEMICAL FREE Water Treatment. EVAPCO's *Pulse*~Pure® system is an environmentally responsible alternative for treating water in evaporative cooled equipment. It does not release harmful by-products to the environment and eliminates chemicals completely from cooler drift and blowdown. The *Pulse*~Pure® system delivers short, high-frequency bursts of low energy electromagnetic fields to the recirculating water in the LSWE and LRWB and will:

- Control bacteria to levels well below traditional chemical water treatment.
- Control the formation of mineral scale.
- Save water by operating at higher cycles of concentration.
- Yield corrosion rates equivalent to chemical water treatment.

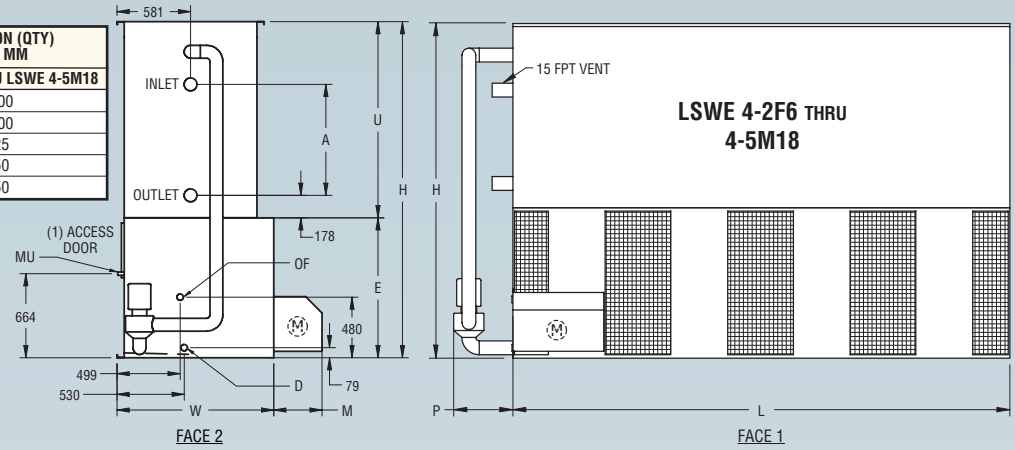
Please contact your local sales representative for more information on the *Pulse*~Pure® and its availability in Australia and New Zealand.

† Mark owned by the Cooling Technology Institute

Selections for LSWE Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

LSWE Models 1.2M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	LSWE 4-2F6 THRU LSWE 4-5M18
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50



Note: The number of coil connections doubles when the flow rate exceeds 30 LPS. This required option is referred to as the High Flow Coil Configuration.

Table 19 Engineering Data

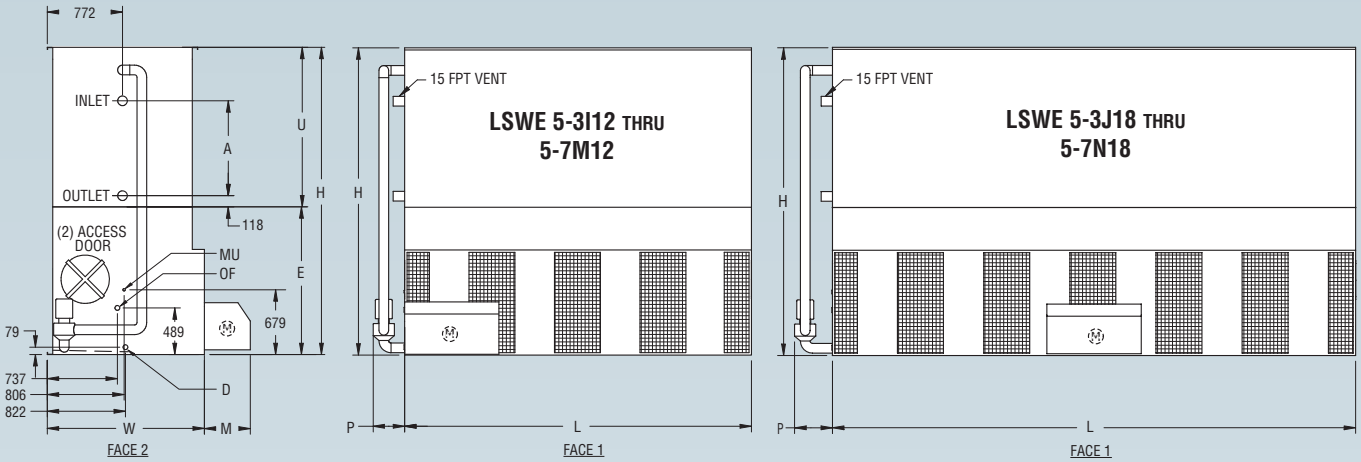
Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
LSWE 4-2F6	1070	1490	UPPER	560	2.2	4.8	0.55	7.6	126	1238	1826	2083	1105	978	381	305	362
LSWE 4-2G6	1075	1495	UPPER	560	4	5.7	0.55	7.6	126	1238	1826	2083	1105	978	381	305	362
LSWE 4-2H6	1100	1520	UPPER	560	5.5	6.6	0.55	7.6	126	1238	1826	2083	1105	978	381	305	362
LSWE 4-3F6	1235	1710	UPPER	720	2.2	4.7	0.55	7.6	177	1238	1826	2273	1105	1168	381	495	362
LSWE 4-3G6	1240	1715	UPPER	720	4	5.6	0.55	7.6	177	1238	1826	2273	1105	1168	381	495	362
LSWE 4-3H6	1260	1735	UPPER	720	5.5	6.4	0.55	7.6	177	1238	1826	2273	1105	1168	381	495	362
LSWE 4-3I6	1270	1745	UPPER	720	7.5	7.1	0.55	7.6	177	1238	1826	2273	1105	1168	381	495	362
LSWE 4-4F6	1395	1920	UPPER	880	2.2	4.6	0.55	7.6	229	1238	1826	2464	1105	1359	381	686	362
LSWE 4-4G6	1395	1925	UPPER	880	4	5.5	0.55	7.6	229	1238	1826	2464	1105	1359	381	686	362
LSWE 4-4H6	1420	1945	UPPER	880	5.5	6.3	0.55	7.6	229	1238	1826	2464	1105	1359	381	686	362
LSWE 4-4I6	1430	1955	UPPER	880	7.5	6.9	0.55	7.6	229	1238	1826	2464	1105	1359	381	686	362
LSWE 4-5G6	1560	2135	UPPER	1045	4	5.4	0.55	7.6	280	1238	1826	2654	1105	1549	381	876	362
LSWE 4-5H6	1585	2160	UPPER	1045	5.5	6.2	0.55	7.6	280	1238	1826	2654	1105	1549	381	876	362
LSWE 4-5I6	1590	2170	UPPER	1045	7.5	6.8	0.55	7.6	280	1238	1826	2654	1105	1549	381	876	36
LSWE 4-3G9	1700	2420	UPPER	1025	4	7.3	0.75	11.4	258	1238	2724	2273	1105	1168	381	495	362
LSWE 4-3H9	1725	2440	UPPER	1025	5.5	8.4	0.75	11.4	258	1238	2724	2273	1105	1168	381	495	362
LSWE 4-3I9	1735	2450	UPPER	1025	7.5	9.3	0.75	11.4	258	1238	2724	2273	1105	1168	381	495	362
LSWE 4-3J9	1785	2505	UPPER	1025	11	10.6	0.75	11.4	258	1238	2724	2273	1105	1168	381	495	362
LSWE 4-4H9	1955	2750	UPPER	1255	5.5	8.2	0.75	11.4	336	1238	2724	2464	1105	1359	381	686	362
LSWE 4-4I9	1965	2760	UPPER	1255	7.5	9.1	0.75	11.4	336	1238	2724	2464	1105	1359	381	686	362
LSWE 4-4J9	2020	2810	UPPER	1255	11	10.4	0.75	11.4	336	1238	2724	2464	1105	1359	381	686	362
LSWE 4-5H9	2195	3070	UPPER	1495	5.5	8.1	0.75	11.4	414	1238	2724	2654	1105	1549	381	876	362
LSWE 4-5I9	2205	3080	UPPER	1495	7.5	8.9	0.75	11.4	414	1238	2724	2654	1105	1549	381	876	362
LSWE 4-5J9	2260	3135	UPPER	1495	11	10.2	0.75	11.4	414	1238	2724	2654	1105	1549	381	876	362
LSWE 4-3H12	2255	3170	UPPER	1360	5.5	10.2	1.1	15.5	338	1238	3651	2273	1105	1168	381	495	435
LSWE 4-3I12	2265	3180	UPPER	1360	7.5	11.2	1.1	15.5	338	1238	3651	2273	1105	1168	381	495	435
LSWE 4-3J12	2320	3235	UPPER	1360	11	12.9	1.1	15.5	338	1238	3651	2273	1105	1168	381	495	435
LSWE 4-3K12	2345	3260	UPPER	1360	15	14.2	1.1	15.5	338	1238	3651	2273	1105	1168	381	495	435
LSWE 4-4I12	2575	3595	UPPER	1675	7.5	11.0	1.1	15.5	443	1238	3651	2464	1105	1359	381	686	435
LSWE 4-4J12	2630	3650	UPPER	1675	11	12.6	1.1	15.5	443	1238	3651	2464	1105	1359	381	686	435
LSWE 4-4K12	2660	3680	UPPER	1675	15	13.9	1.1	15.5	443	1238	3651	2464	1105	1359	381	686	435
LSWE 4-5I12	2870	3995	UPPER	1970	7.5	10.8	1.1	15.5	548	1238	3651	2654	1105	1549	381	876	435
LSWE 4-5J12	2925	4050	UPPER	1970	11	12.4	1.1	15.5	548	1238	3651	2654	1105	1549	381	876	435
LSWE 4-5K12	2955	4080	UPPER	1970	15	13.6	1.1	15.5	548	1238	3651	2654	1105	1549	381	876	435
LSWE 4-3I18	3250	4570	UPPER	2000	7.5	14.8	1.5	23.0	499	1238	5486	2273	1105	1168	381	495	435
LSWE 4-3J18	3305	4620	UPPER	2000	11	16.9	1.5	23.0	499	1238	5486	2273	1105	1168	381	495	435
LSWE 4-3K18	3335	4650	UPPER	2000	15	18.6	1.5	23.0	499	1238	5486	2273	1105	1168	381	495	435
LSWE 4-3L18	3350	4665	UPPER	2000	18.5	20.0	1.5	23.0	499	1238	5486	2273	1105	1168	381	495	435
LSWE 4-4J18	3765	5240	UPPER	2460	11	16.6	1.5	23.0	657	1238	5486	2464	1105	1359	381	686	435
LSWE 4-4K18	3790	5265	UPPER	2460	15	18.2	1.5	23.0	657	1238	5486	2464	1105	1359	381	686	435
LSWE 4-4L18	3805	5280	UPPER	2460	18.5	19.6	1.5	23.0	657	1238	5486	2464	1105	1359	381	686	435
LSWE 4-5J18	4215	5845	UPPER	2910	11	16.2	1.5	23.0	816	1238	5486	2654	1105	1549	381	876	435
LSWE 4-5K18	4240	5875	UPPER	2910	15	17.9	1.5	23.0	816	1238	5486	2654	1105	1549	381	876	435
LSWE 4-5L18	4255	5890	UPPER	2910	18.5	19.2	1.5	23.0	816	1238	5486	2654	1105	1549	381	876	435
LSWE 4-5M18	4275	5910	UPPER	2910	22	20.4	1.5	23.0	816	1238	5486	2654	1105	1549	381	876	435

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

Selections for LSWE Closed Circuit Coolers are available from EVAPCO's equipment selection program.
Please contact your local sales representative for access to the program.

LSWE Models 1.7M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM	
	LSWE 5-3I12 THRU LSWE 5-7M12	LSWE 5-3J18 THRU LSWE 5-7N18
SYSTEM FLUID IN (INLET)	(1) 100	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100	(1) 100
MAKE-UP (MU)	(1) 25	(1) 40
OVERFLOW (OF)	(1) 50	(1) 50
DRAIN (D)	(1) 50	(1) 50



Note: The number of coil connections doubles when the flow rate exceeds 30 LPS. This required option is referred to as the High Flow Coil Configuration.

Table 20 Engineering Data

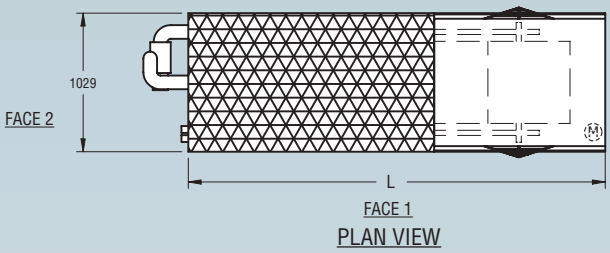
Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	M	A	P
LSWE 5-3I12	2965	4545	UPPER	1800	7.5	14.1	1.5	21.8	479	1651	3651	2797	1553	1244	483	565	337
LSWE 5-3J12	3020	4600	UPPER	1800	11	16.2	1.5	21.8	479	1651	3651	2797	1553	1244	483	565	337
LSWE 5-3K12	3050	4625	UPPER	1800	15	17.8	1.5	21.8	479	1651	3651	2797	1553	1244	483	565	337
LSWE 5-3L12	3060	4640	UPPER	1800	18.5	19.2	1.5	21.8	479	1651	3651	2797	1553	1244	483	565	337
LSWE 5-4I12	3400	5130	UPPER	2235	7.5	13.8	1.5	21.8	629	1651	3651	3013	1553	1460	483	781	337
LSWE 5-4J12	3455	5185	UPPER	2235	11	15.8	1.5	21.8	629	1651	3651	3013	1553	1460	483	781	337
LSWE 5-4K12	3485	5210	UPPER	2235	15	17.4	1.5	21.8	629	1651	3651	3013	1553	1460	483	781	337
LSWE 5-4L12	3495	5225	UPPER	2235	18.5	18.8	1.5	21.8	629	1651	3651	3013	1553	1460	483	781	337
LSWE 5-5J12	3910	5790	UPPER	2690	11	15.5	1.5	21.8	778	1651	3651	3229	1553	1676	483	997	337
LSWE 5-5K12	3935	5815	UPPER	2690	15	17.1	1.5	21.8	778	1651	3651	3229	1553	1676	483	997	337
LSWE 5-5L12	3950	5830	UPPER	2690	18.5	18.4	1.5	21.8	778	1651	3651	3229	1553	1676	483	997	337
LSWE 5-6J12	4355	6380	UPPER	3135	11	15.2	1.5	21.8	928	1651	3651	3445	1553	1892	483	1213	337
LSWE 5-6K12	4380	6410	UPPER	3135	15	16.7	1.5	21.8	928	1651	3651	3445	1553	1892	483	1213	337
LSWE 5-6L12	4395	6425	UPPER	3135	18.5	18.0	1.5	21.8	928	1651	3651	3445	1553	1892	483	1213	337
LSWE 5-6M12	4420	6445	UPPER	3135	22	19.2	1.5	21.8	928	1651	3651	3445	1553	1892	483	1213	337
LSWE 5-7J12	4865	7040	UPPER	3640	11	14.9	1.5	21.8	1077	1651	3651	3445	1553	1892	483	1213	337
LSWE 5-7K12	4890	7065	UPPER	3640	15	16.4	1.5	21.8	1077	1651	3651	3445	1553	1892	483	1213	337
LSWE 5-7L12	4905	7080	UPPER	3640	18.5	17.7	1.5	21.8	1077	1651	3651	3445	1553	1892	483	1213	337
LSWE 5-7M12	4925	7105	UPPER	3640	22	18.8	1.5	21.8	1077	1651	3651	3445	1553	1892	483	1213	337
LSWE 5-3J18	4460	6720	UPPER	2700	11	21.2	2.2	32.5	708	1651	5486	2797	1553	1244	483	565	400
LSWE 5-3K18	4485	6750	UPPER	2700	15	23.4	2.2	32.5	708	1651	5486	2797	1553	1244	483	565	400
LSWE 5-3L18	4500	6765	UPPER	2700	18.5	25.2	2.2	32.5	708	1651	5486	2797	1553	1244	483	565	400
LSWE 5-3M18	4520	6785	UPPER	2700	22	26.7	2.2	32.5	708	1651	5486	2797	1553	1244	483	565	400
LSWE 5-4K18	5140	7625	UPPER	3350	15	22.9	2.2	32.5	934	1651	5486	3013	1553	1460	483	781	400
LSWE 5-4L18	5155	7640	UPPER	3350	18.5	24.7	2.2	32.5	934	1651	5486	3013	1553	1460	483	781	400
LSWE 5-4M18	5175	7660	UPPER	3350	22	26.2	2.2	32.5	934	1651	5486	3013	1553	1460	483	781	400
LSWE 5-4N18	5250	7735	UPPER	3350	30	28.8	2.2	32.5	934	1651	5486	3013	1553	1460	483	781	400
LSWE 5-5K18	5825	8535	UPPER	4035	15	22.4	2.2	32.5	1160	1651	5486	3229	1553	1676	483	997	400
LSWE 5-5L18	5840	8550	UPPER	4035	18.5	24.2	2.2	32.5	1160	1651	5486	3229	1553	1676	483	997	400
LSWE 5-5M18	5860	8575	UPPER	4035	22	25.7	2.2	32.5	1160	1651	5486	3229	1553	1676	483	997	400
LSWE 5-5N18	5935	8645	UPPER	4035	30	28.3	2.2	32.5	1160	1651	5486	3229	1553	1676	483	997	400
LSWE 5-6L18	6505	9445	UPPER	4705	18.5	23.7	2.2	32.5	1386	1651	5486	3445	1553	1892	483	1213	400
LSWE 5-6M18	6525	9465	UPPER	4705	22	25.2	2.2	32.5	1386	1651	5486	3445	1553	1892	483	1213	400
LSWE 5-6N18	6600	9540	UPPER	4705	30	27.7	2.2	32.5	1386	1651	5486	3445	1553	1892	483	1213	400
LSWE 5-7L18	7270	10435	UPPER	5470	18.5	23.2	2.2	32.5	1611	1651	5486	3445	1553	1892	483	1213	400
LSWE 5-7M18	7295	10460	UPPER	5470	22	24.6	2.2	32.5	1611	1651	5486	3445	1553	1892	483	1213	400
LSWE 5-7N18	7365	10530	UPPER	5470	30	27.1	2.2	32.5	1611	1651	5486	3445	1553	1892	483	1213	400

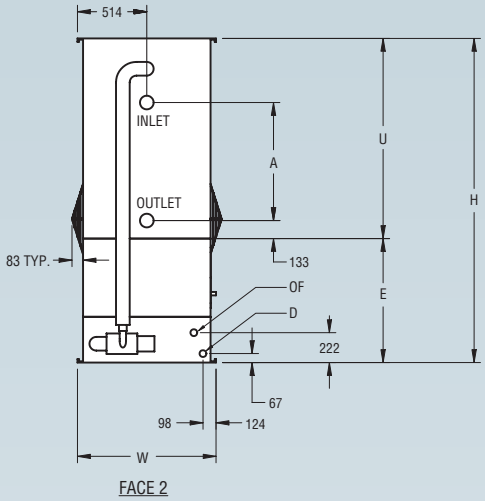
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

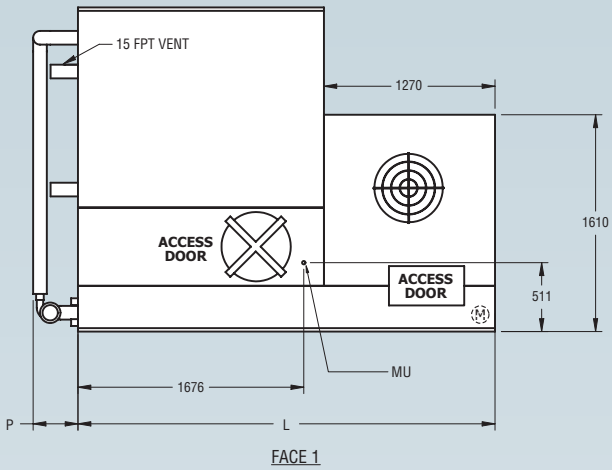
Selections for LRWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

LRWB Models 1.0M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	LRWB 3-2D6 THRU LRWB 3-5I6
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50







Note: The number of coil connections doubles when the flow rate exceeds 30 LPS. This required option is referred to as the High Flow Coil Configuration.

Table 21 Engineering Data

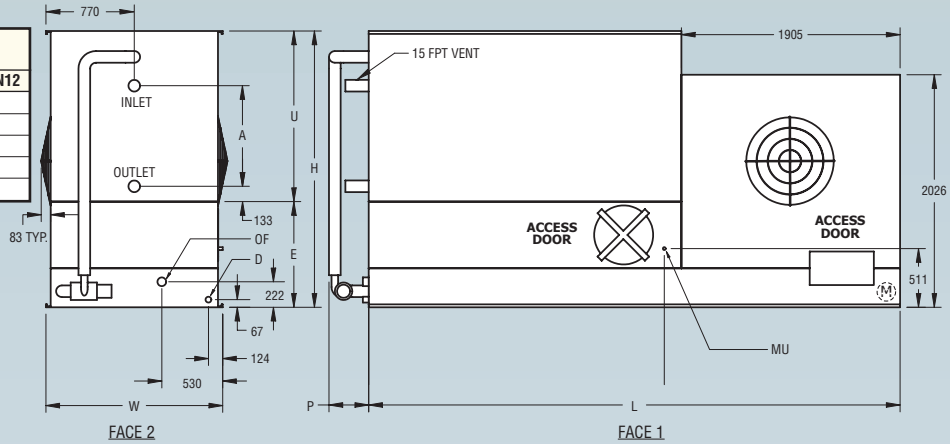
Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	A	P
LRWB 3-2D6	985	1540	ENTIRE UNIT	570	1.1	3.6	0.37	6.3	115	1029	3099	1835	921	914	305	346
LRWB 3-2E6	985	1540	ENTIRE UNIT	570	1.5	3.9	0.37	6.3	115	1029	3099	1835	921	914	305	346
LRWB 3-2F6	1000	1555	ENTIRE UNIT	570	2.2	4.5	0.37	6.3	115	1029	3099	1835	921	914	305	346
LRWB 3-2G6	1000	1560	ENTIRE UNIT	570	4	5.3	0.37	6.3	115	1029	3099	1835	921	914	305	346
LRWB 3-2H6	1025	1585	ENTIRE UNIT	570	5.5	6.1	0.37	6.3	115	1029	3099	1835	921	914	305	346
LRWB 3-3E6	1115	1720	ENTIRE UNIT	705	1.5	3.9	0.37	6.3	162	1029	3099	2026	921	1105	495	346
LRWB 3-3F6	1130	1735	ENTIRE UNIT	705	2.2	4.4	0.37	6.3	162	1029	3099	2026	921	1105	495	346
LRWB 3-3G6	1135	1735	ENTIRE UNIT	705	4	5.2	0.37	6.3	162	1029	3099	2026	921	1105	495	346
LRWB 3-3H6	1155	1760	ENTIRE UNIT	705	5.5	6.0	0.37	6.3	162	1029	3099	2026	921	1105	495	346
LRWB 3-4E6	1260	1910	ENTIRE UNIT	850	1.5	3.8	0.37	6.3	208	1029	3099	2216	921	1295	686	346
LRWB 3-4F6	1275	1925	ENTIRE UNIT	850	2.2	4.3	0.37	6.3	208	1029	3099	2216	921	1295	686	346
LRWB 3-4G6	1280	1930	ENTIRE UNIT	850	4	5.1	0.37	6.3	208	1029	3099	2216	921	1295	686	346
LRWB 3-4H6	1300	1950	ENTIRE UNIT	850	5.5	5.9	0.37	6.3	208	1029	3099	2216	921	1295	686	346
LRWB 3-5F6	1425	2125	ENTIRE UNIT	1000	2.2	4.3	0.37	6.3	255	1029	3099	2407	921	1486	876	346
LRWB 3-5G6	1430	2125	ENTIRE UNIT	1000	4	5.0	0.37	6.3	255	1029	3099	2407	921	1486	876	346
LRWB 3-5H6	1450	2150	ENTIRE UNIT	1000	5.5	5.8	0.37	6.3	255	1029	3099	2407	921	1486	876	346
LRWB 3-5I6	1460	2160	ENTIRE UNIT	1000	7.5	6.3	0.37	6.3	255	1029	3099	2407	921	1486	876	346

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

Selections for LRWB Closed Circuit Coolers are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

LRWB Models 1.6M Wide

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	LRWB 5-2F6 THRU LRWB 5-7N12
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50



Note: The number of coil connections doubles when the flow rate exceeds 30 LPS. This required option is referred to as the High Flow Coil Configuration.

Table 22 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Water Flow (LPS)	Coil Volume (Litres)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section						W	L	H	E	U	A	P
LRWB 5-2F6	1490	2450	ENTIRE UNIT	795	2.2	6.5	0.75	10.1	177	1540	3734	1835	921	914	305	346
LRWB 5-2G6	1490	2455	ENTIRE UNIT	795	4	7.7	0.75	10.1	177	1540	3734	1835	921	914	305	346
LRWB 5-2H6	1515	2475	ENTIRE UNIT	795	5.5	8.8	0.75	10.1	177	1540	3734	1835	921	914	305	346
LRWB 5-2I6	1525	2485	ENTIRE UNIT	795	7.5	9.7	0.75	10.1	177	1540	3734	1835	921	914	305	346
LRWB 5-3F6	1690	2725	ENTIRE UNIT	1000	2.2	6.4	0.75	10.1	251	1540	3734	2026	921	1105	495	346
LRWB 5-3G6	1695	2730	ENTIRE UNIT	1000	4	7.6	0.75	10.1	251	1540	3734	2026	921	1105	495	346
LRWB 5-3H6	1720	2755	ENTIRE UNIT	1000	5.5	8.7	0.75	10.1	251	1540	3734	2026	921	1105	495	346
LRWB 5-3I6	1730	2760	ENTIRE UNIT	1000	7.5	9.5	0.75	10.1	251	1540	3734	2026	921	1105	495	346
LRWB 5-4G6	1915	3020	ENTIRE UNIT	1215	4	7.4	0.75	10.1	324	1540	3734	2216	921	1295	686	346
LRWB 5-4H6	1935	3045	ENTIRE UNIT	1215	5.5	8.5	0.75	10.1	324	1540	3734	2216	921	1295	686	346
LRWB 5-4I6	1945	3055	ENTIRE UNIT	1215	7.5	9.4	0.75	10.1	324	1540	3734	2216	921	1295	686	346
LRWB 5-5G6	2145	3325	ENTIRE UNIT	1445	4	7.3	0.75	10.1	397	1540	3734	2407	921	1486	876	346
LRWB 5-5H6	2170	3350	ENTIRE UNIT	1445	5.5	8.3	0.75	10.1	397	1540	3734	2407	921	1486	876	346
LRWB 5-5I6	2175	3355	ENTIRE UNIT	1445	7.5	9.2	0.75	10.1	397	1540	3734	2407	921	1486	876	346
LRWB 5-3H9	2200	3740	ENTIRE UNIT	1420	5.5	10.6	1.1	16.1	365	1540	4632	2026	921	1105	495	346
LRWB 5-3I9	2210	3745	ENTIRE UNIT	1420	7.5	11.7	1.1	16.1	365	1540	4632	2026	921	1105	495	346
LRWB 5-3J9	2265	3800	ENTIRE UNIT	1420	11	13.4	1.1	16.1	365	1540	4632	2026	921	1105	495	346
LRWB 5-3K9	2290	3830	ENTIRE UNIT	1420	15	14.7	1.1	16.1	365	1540	4632	2026	921	1105	495	346
LRWB 5-4I9	2540	4185	ENTIRE UNIT	1750	7.5	11.4	1.1	16.1	476	1540	4632	2216	921	1295	686	346
LRWB 5-4J9	2595	4240	ENTIRE UNIT	1750	11	13.1	1.1	16.1	476	1540	4632	2216	921	1295	686	346
LRWB 5-4K9	2620	4270	ENTIRE UNIT	1750	15	14.4	1.1	16.1	476	1540	4632	2216	921	1295	686	346
LRWB 5-5I9	2880	4640	ENTIRE UNIT	2090	7.5	11.2	1.1	16.1	588	1540	4632	2407	921	1486	876	346
LRWB 5-5J9	2935	4695	ENTIRE UNIT	2090	11	12.8	1.1	16.1	588	1540	4632	2407	921	1486	876	346
LRWB 5-5K9	2960	4720	ENTIRE UNIT	2090	15	14.1	1.1	16.1	588	1540	4632	2407	921	1486	876	346
LRWB 5-6I9	3170	5040	ENTIRE UNIT	2380	7.5	11.0	1.1	16.1	699	1540	4632	2597	921	1676	1067	346
LRWB 5-6J9	3225	5095	ENTIRE UNIT	2380	11	12.6	1.1	16.1	699	1540	4632	2597	921	1676	1067	346
LRWB 5-6K9	3250	5120	ENTIRE UNIT	2380	15	13.8	1.1	16.1	699	1540	4632	2597	921	1676	1067	346
LRWB 5-7I9	3540	5520	ENTIRE UNIT	2750	7.5	10.8	1.1	16.1	810	1540	4632	2743	921	1822	1213	346
LRWB 5-7J9	3590	5575	ENTIRE UNIT	2750	11	12.3	1.1	16.1	810	1540	4632	2743	921	1822	1213	346
LRWB 5-7K9	3620	5600	ENTIRE UNIT	2750	15	13.5	1.1	16.1	810	1540	4632	2743	921	1822	1213	346
LRWB 5-3J12	2715	4790	ENTIRE UNIT	1780	11	15.0	1.5	21.8	479	1540	5556	2051	921	1130	495	346
LRWB 5-3K12	2745	4815	ENTIRE UNIT	1780	15	16.5	1.5	21.8	479	1540	5556	2051	921	1130	495	346
LRWB 5-3L12	2760	4830	ENTIRE UNIT	1780	18.5	17.7	1.5	21.8	479	1540	5556	2051	921	1130	495	346
LRWB 5-3M12	2780	4855	ENTIRE UNIT	1780	22	18.9	1.5	21.8	479	1540	5556	2051	921	1130	495	346
LRWB 5-4J12	3155	5380	ENTIRE UNIT	2220	11	14.7	1.5	21.8	629	1540	5556	2242	921	1321	686	346
LRWB 5-4K12	3185	5405	ENTIRE UNIT	2220	15	16.1	1.5	21.8	629	1540	5556	2242	921	1321	686	346
LRWB 5-4L12	3200	5420	ENTIRE UNIT	2220	18.5	17.4	1.5	21.8	629	1540	5556	2242	921	1321	686	346
LRWB 5-4M12	3220	5445	ENTIRE UNIT	2220	22	18.5	1.5	21.8	629	1540	5556	2242	921	1321	686	346
LRWB 5-5K12	3615	5985	ENTIRE UNIT	2650	15	15.8	1.5	21.8	778	1540	5556	2432	921	1511	876	346
LRWB 5-5L12	3630	6000	ENTIRE UNIT	2650	18.5	17.0	1.5	21.8	778	1540	5556	2432	921	1511	876	346
LRWB 5-5M12	3650	6025	ENTIRE UNIT	2650	22	18.1	1.5	21.8	778	1540	5556	2432	921	1511	876	346
LRWB 5-5N12	3725	6095	ENTIRE UNIT	2650	30	19.9	1.5	21.8	778	1540	5556	2432	921	1511	876	346
LRWB 5-6L12	4030	6550	ENTIRE UNIT	3050	18.5	16.7	1.5	21.8	928	1540	5556	2623	921	1702	1067	346
LRWB 5-6M12	4050	6575	ENTIRE UNIT	3050	22	17.7	1.5	21.8	928	1540	5556	2623	921	1702	1067	346
LRWB 5-6N12	4125	6645	ENTIRE UNIT	3050	30	19.5	1.5	21.8	928	1540	5556	2623	921	1702	1067	346
LRWB 5-7L12	4600	7270	ENTIRE UNIT	3620	18.5	16.4	1.5	21.8	1077	1540	5556	2769	921	1848	1213	346
LRWB 5-7M12	4620	7295	ENTIRE UNIT	3620	22	17.4	1.5	21.8	1077	1540	5556	2769	921	1848	1213	346
LRWB 5-7N12	4695	7365	ENTIRE UNIT	3620	30	19.1	1.5	21.8	1077	1540	5556	2769	921	1848	1213	346

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) When a remote sump arrangement is selected the spray pump, suction strainer and associated piping are omitted; the unit is provided with an oversized outlet to facilitate drainage to the remote sump.

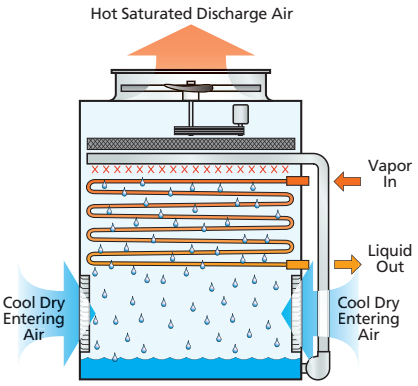
Design and Construction Features

The ATC family of evaporative condensers reflects EVAPCO's continuing commitment to research and development. Their advanced design provides owners with many operational and performance advantages. For particularly corrosive environments, EVAPCO condensers are available with Type 304 or 316 Stainless Steel construction. Contact your local sales representative for details on available options.

ATC-E
eco-A
EVAPORATIVE

Principle of Operation

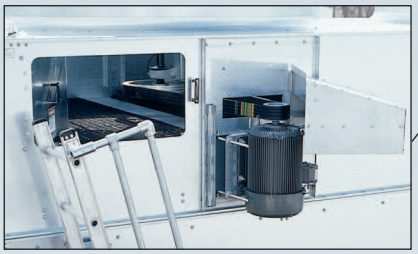
The process fluid is circulated through the coil of the evaporative condenser. Heat from the process fluid is dissipated through the coil tubes to the water cascading downward over the tubes. Simultaneously, air is drawn in through the air inlet louvers at the base of the cooler and travels upward over the coil opposite the water flow. A small portion of the water is evaporated which removes the heat. The warm moist air is drawn to the top of the closed circuit cooler by the fan and is discharged to the atmosphere. The remaining water falls to the sump at the bottom of the cooler where it is recirculated by the pump up through the water distribution system and back down over the coils.



Fan Drive System

The fan motor and drive assembly is designed to allow easy servicing of the motor and adjustment of the belt tension from the exterior of the unit. The totally enclosed fan cooled (TEFC) fan motor is mounted on the outside for easy access. A protective cover swings away to allow servicing and belt adjustment.

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



External Motor Mount (Optional Ladder Shown)

Fan Shaft Bearings

The Fan Shaft Bearings are specially selected for long, trouble-free life. They are rated for an L-10 life of 75,000 to 135,000 hours and are the heaviest pillow block bearings available.

Aluminium Alloy Pulleys

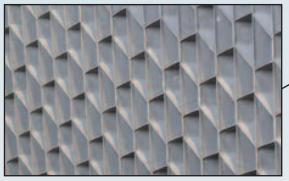
Fan pulleys located in the air stream are constructed of corrosion free aluminium for long life. The aluminium also helps belts last longer.

Banded Drive Belt

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

WST Air Inlet Louvers

Water and Sight Tight Air Inlet Louvers are designed to effectively eliminate splash-out and sunlight, greatly reducing the potential for algae formation inside the cooling tower. They are manufactured of corrosion-free PVC and mounted in light-weight frames to allow for easy removal and convenient access to the basin section.



Clause 4.6 "Sunlight" of Australian Standard 3666.1 explicitly states that the *"design, orientation and placement of cooling towers shall be such that direct sunlight is minimised from the wetted areas of the cooling tower."* EVAPCO's WST air inlet louver ensures that the spray water is entirely concealed from sunlight from the moment it enters the tower to the moment it exits making it the most AS 3666.1 compliant cooling tower in the market.

Type 304 Stainless Steel Strainers

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

/cATC/
ATC-A
CONDENSERS

U.S. Patent No. 6315804

PVC Drift Eliminators

EVAPCO PVC Drift Eiminators are constructed entirely of inert, corrosion-free PVC. This patented design reduces drift rate to 0.001% and has been specially treated to resist damaging ultraviolet light. The eliminators are assembled in easily handled sections to facilitate removal, thereby exposing the upper portion of the unit and water distribution system for periodic inspection.

Clause 4.4 "Drift Control" of Australian Standard 3666.1 explicitly states that the *"maximum drift loss shall not exceed 0.002% of the maximum design water circulation rate through the tower."* EVAPCO's counterflow cooling method and patented cellular drift eliminator design far exceeds this standard by limiting the drift rate to a maximum of only 0.001% making it the most AS 3666.1 compliant cooling tower in the market.

ZM®II Nozzles

Even and constant water distribution is paramount for reliable, scale-free evaporative condensing. EVAPCO's Zero Maintenance Spray Nozzle remains clog-free under the toughest conditions to deliver approximately 4 LPS per square metre of coil plan area.

The heavy-duty, fiber-reinforced ZM®II spray nozzles have a 35.3mm diameter opening and a 31.8mm splash plate clearance, enabling EVAPCO to use 75% fewer nozzles. Furthermore, the fixed position ZM®II Spray Nozzles are mounted in corrosion-free PVC water distribution pipes that have threaded end caps. Together, these elements combine to provide unequalled coil coverage, scale prevention and make the industry's best performing, non-corrosive, maintenance-free water distribution system.

Thermal-Pak® Coil

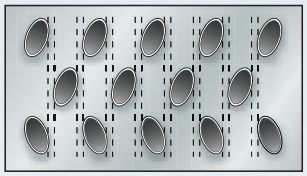
EVAPCO's patented Thermal-Pak® Coils feature a design which assures maximum cooling capacity. The air flow through the coil is counterflow to the process fluid, providing the most efficient heat transfer. This special coil design is utilised to reduce the air pressure drop through the unit while maximising tube surface area and increasing its heat transfer capabilities. The uniquely shaped tubes of the coil are staggered in the direction of air flow to obtain a high film coefficient. In addition, all tubes are pitched in the direction of flow to assure drainage of the process fluid.

These characteristics and other engineering advancements of the Thermal-Pak® Coil have been proven in EVAPCO's world-class research and development laboratory resulting in the following end user benefits:

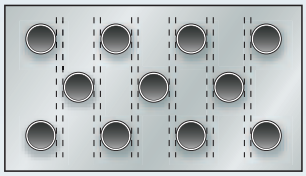
- Low Power Consumption Per kW of heat rejection
- Lower Operating Weight
- Small Plan Area Per kW of heat rejection

The coils are manufactured from high quality steel tubing following the most stringent quality control procedures. Each circuit is inspected to assure the material quality and then tested before being assembled into a coil. Finally, the assembled coil is air pressure tested under water at 26 bar. To protect the coil against corrosion, it is placed in a heavy-duty steel frame and the entire assembly is dipped in molten zinc (hot dip galvanised) at a temperature of approximately 430°C.

U.S. Patent No. 5799725



Thermal-Pak® Coil by EVAPCO

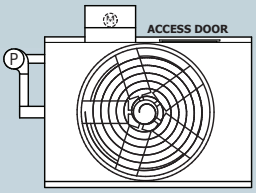


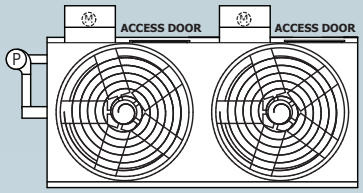
Round Tube Coil by Others

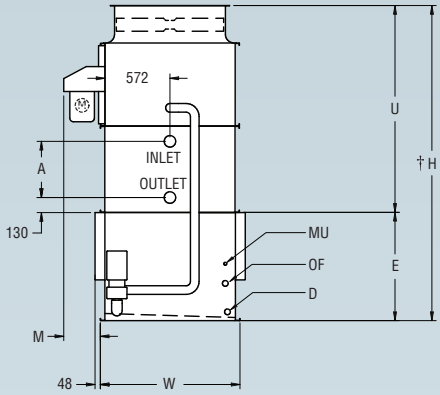
Selections for ATC-E Evaporative Condenser are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

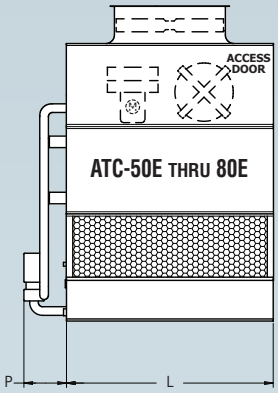
ATC-E Box Sizes 4x6, 4x9, 4x12

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	ATC-50E THRU ATC-165E
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50









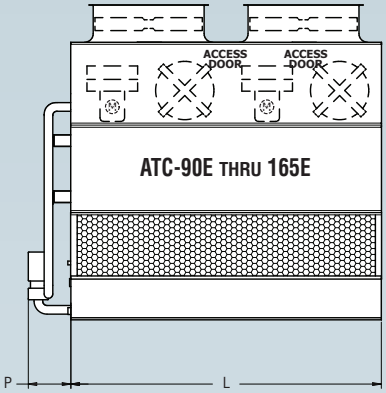


Table 23 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Spray Water Flow (LPS)	Coil Volume (Litres)	Refrigerant Operating Charge (Kg)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section							W	L	H	E	U	M	A	P
ATC-50E	1260	1795	UPPER	1030	2.2	5.6	0.55	8.5	198	23	1232	1826	2778	953	1825	324	495	375
ATC-65E	1435	1980	UPPER	1200	4	5.9	0.55	8.5	255	30	1232	1826	2969	953	2016	324	686	375
ATC-80E	1620	2180	UPPER	1390	4	5.7	0.55	8.5	313	37	1232	1826	3159	953	2206	324	876	375
ATC-90E	1865	2640	UPPER	1560	(2) 2.2	10.0	0.75	12.6	288	34	1232	2737	2778	953	1825	324	495	375
ATC-105E	2115	2910	UPPER	1810	(2) 2.2	9.3	0.75	12.6	376	44	1232	2737	2969	953	2016	324	686	375
ATC-120E	2380	3200	UPPER	2075	(2) 2.2	9.0	0.75	12.6	463	54	1232	2737	3159	953	2206	324	876	375
ATC-135E	2580	3630	UPPER	2210	(2) 2.2	11.9	1.1	17.0	496	58	1232	3651	2969	953	2016	324	686	375
ATC-150E	2945	4020	UPPER	2570	(2) 2.2	11.2	1.1	17.0	613	72	1232	3651	3159	953	2206	324	876	375
ATC-165E	2955	4030	UPPER	2580	(2) 4	12.2	1.1	17.0	613	72	1232	3651	3159	953	2206	324	876	375

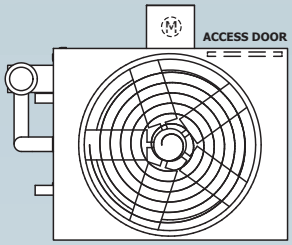
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

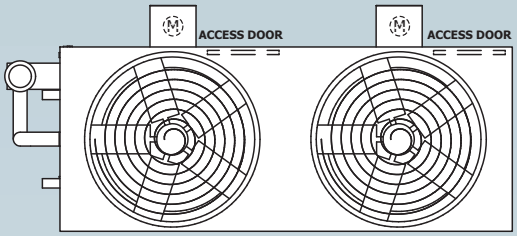
† Height includes fan guard which ships factory mounted.

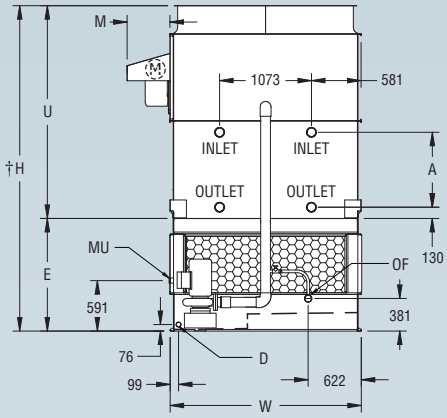
Selections for cATC Evaporative Condenser are available from EVAPCO's equipment selection program.
Please contact your local sales representative for access to the program.

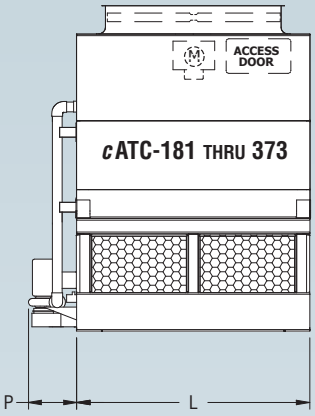
cATC Box Sizes 7x9, 7x12, 7x14, 7x18

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	cATC-181 THRU cATC-504
SYSTEM FLUID IN (INLET)	(2) 100
SYSTEM FLUID OUT (OUTLET)	(2) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50









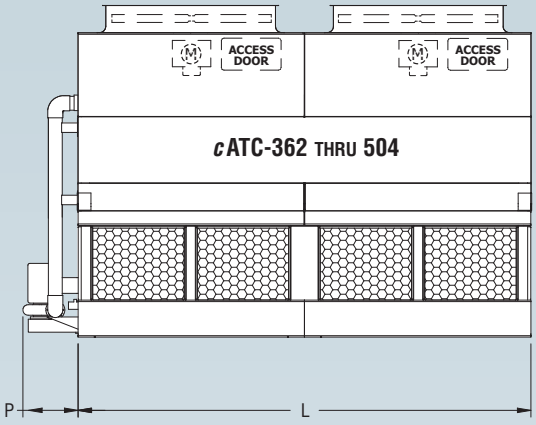


Table 24 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Spray Water Flow (LPS)	Coil Volume (Litres)	Refrigerant Operating Charge (Kg)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section							W	L	H	E	U	M	A	P
cATC-181	3420	4140	COIL	2690	5.5	16.8	1.5	25.8	544	66	2235	2737	3423	1318	2105	543	495	563
cATC-193	3420	4150	COIL	2690	7.5	18.5	1.5	25.8	544	66	2235	2737	3423	1318	2105	543	495	563
cATC-208	3890	4650	COIL	3160	7.5	17.9	1.5	25.8	710	84	2235	2737	3613	1318	2295	543	686	563
cATC-225	3950	4710	COIL	3220	11	20.1	1.5	25.8	710	84	2235	2737	3613	1318	2295	543	686	563
cATC-220	4380	5180	COIL	3660	7.5	17.4	1.5	25.8	876	104	2235	2737	3804	1318	2486	543	876	563
cATC-241	4440	5240	COIL	3710	11	19.5	1.5	25.8	876	104	2235	2737	3804	1318	2486	543	876	563
cATC-251	4930	5760	COIL	4200	11	18.9	1.5	25.8	1041	122	2235	2737	3994	1318	2676	543	1067	563
cATC-264	4210	5240	COIL	3330	11	25.5	2.2	34.7	715	84	2235	3651	3423	1318	2105	543	495	631
cATC-282	4850	5930	COIL	3970	11	24.8	2.2	34.7	937	111	2235	3651	3613	1318	2295	543	686	631
cATC-304	5470	6600	COIL	4590	11	24.0	2.2	34.7	1160	138	2235	3651	3804	1318	2486	543	876	631
cATC-316	5500	6630	COIL	4620	15	26.0	2.2	34.7	1160	138	2235	3651	3804	1318	2486	543	876	631
cATC-338	6150	7330	COIL	5270	15	25.2	2.2	34.7	1382	163	2235	3651	3994	1318	2676	543	1067	631
cATC-329	6300	7580	COIL	5280	11	26.8	2.2	37.8	1349	159	2235	4261	3915	1429	2486	543	876	617
cATC-351	6320	7610	COIL	5310	15	29.1	2.2	37.8	1349	159	2235	4261	3915	1429	2486	543	876	617
cATC-367	7070	8410	COIL	6060	15	28.2	2.2	37.8	1610	191	2235	4261	4105	1429	2676	543	1067	617
cATC-373	7080	8430	COIL	6070	18.5	30.0	2.2	37.8	1610	191	2235	4261	4105	1429	2676	543	1067	617
cATC-362	6340	7920	COIL	4950	(2) 5.5	33.8	4	50.4	1056	125	2235	5486	3632	1527	2105	543	495	670
cATC-387	6350	7940	COIL	4960	(2) 7.5	37.1	4	50.4	1056	125	2235	5486	3632	1527	2105	543	495	670
cATC-415	7310	8970	COIL	5910	(2) 7.5	36.0	4	50.4	1392	166	2235	5486	3823	1527	2296	543	686	670
cATC-453	7420	9080	COIL	6030	(2) 11	40.3	4	50.4	1392	166	2235	5486	3823	1527	2296	543	686	670
cATC-442	8260	10000	COIL	6870	(2) 7.5	34.9	4	50.4	1728	204	2235	5486	4013	1527	2486	543	876	670
cATC-482	8380	10120	COIL	6990	(2) 11	39.1	4	50.4	1728	204	2235	5486	4013	1527	2486	543	876	670
cATC-462	9240	11050	COIL	7850	(2) 7.5	33.8	4	50.4	2064	243	2235	5486	4204	1527	2677	543	1067	670
cATC-504	9360	11170	COIL	7970	(2) 11	37.9	4	50.4	2064	243	2235	5486	4204	1527	2677	543	1067	670

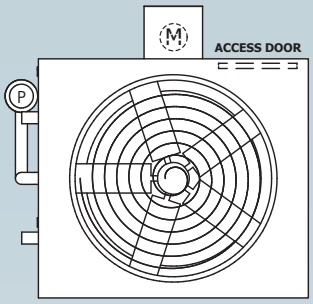
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

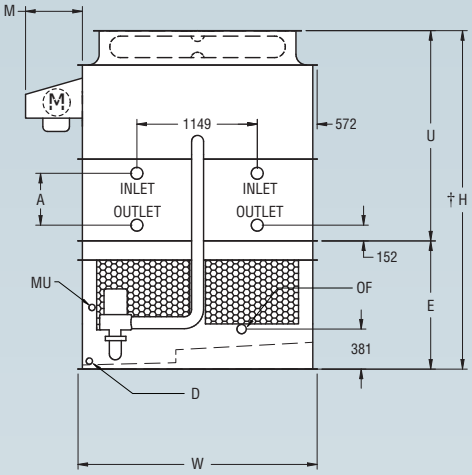
† Height includes fan guard which ships factory mounted.

Selections for ATC-E Evaporative Condenser are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ATC-E Box Size 8.5x7.5

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	ATC-170E THRU ATC-247E
SYSTEM FLUID IN (INLET)	(2) 100
SYSTEM FLUID OUT (OUTLET)	(2) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50





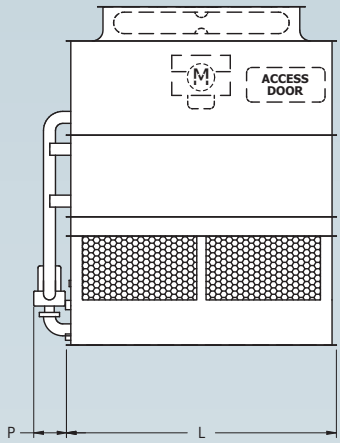


Table 25 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Spray Water Flow (LPS)	Coil Volume (Litres)	Refrigerant Operating Charge (Kg)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section							W	L	H	E	U	M	A	P
ATC-170E	3505	4675	UPPER	2915	4	14.0	1.5	21.5	707	83	2283	2578	3423	1226	2197	543	686	349
ATC-187E	3530	4700	UPPER	2940	5.5	16.0	1.5	21.5	707	83	2283	2578	3423	1226	2197	543	686	349
ATC-199E	3535	4705	UPPER	2945	7.5	17.6	1.5	21.5	707	83	2283	2578	3423	1226	2197	543	686	349
ATC-188E	3980	5185	UPPER	3390	4	13.6	1.5	21.5	872	103	2283	2578	3613	1226	2387	543	876	349
ATC-221E	4005	5210	UPPER	3415	7.5	17.0	1.5	21.5	872	103	2283	2578	3613	1226	2387	543	876	349
ATC-238E	4065	5270	UPPER	3475	11	19.1	1.5	21.5	872	103	2283	2578	3613	1226	2387	543	876	349
ATC-195E	4445	5690	UPPER	3855	4	13.2	1.5	21.5	1038	122	2283	2578	3804	1226	2578	543	1067	349
ATC-247E	4530	5775	UPPER	3940	11	18.5	1.5	21.5	1038	122	2283	2578	3804	1226	2578	543	1067	349

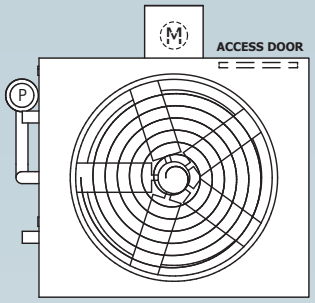
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

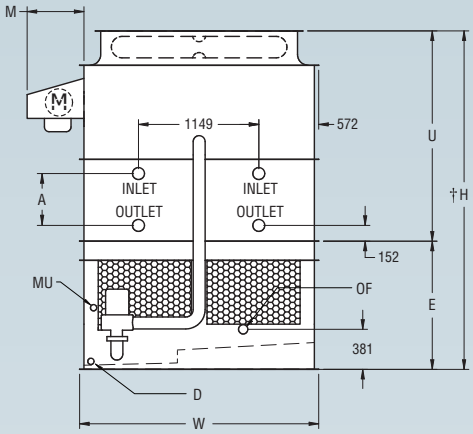
† Height includes fan guard which ships factory mounted.

Selections for eco-ATC-A Evaporative Condenser are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

ECO-ATC-A BOX SIZE 8.5X7.5

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	eco-ATC-122A THRU eco-ATC-263A
SYSTEM FLUID IN (INLET)	(2) 100
SYSTEM FLUID OUT (OUTLET)	(2) 100
MAKE-UP (MU)	(1) 50
OVERFLOW (OF)	(1) 80
DRAIN (D)	(1) 50





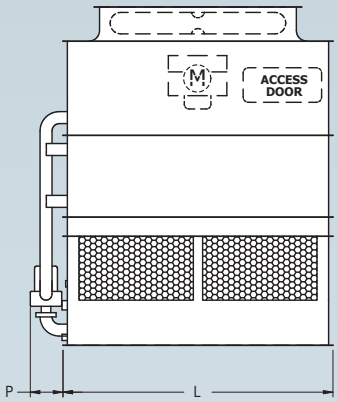
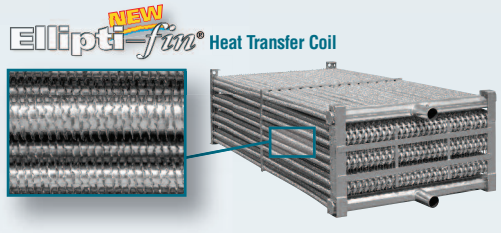


Table 26 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Spray Water Flow (LPS)	Coil Volume (Litres)	Refrigerant Operating Charge (Kg)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section							W	L	H	E	U	M	A	P
eco-ATC-122A	3055	4150	UPPER	2465	2.2	12.5	1.5	21.5	377	44	2283	2578	3042	1226	1816	543	305	395
eco-ATC-138A	3060	4155	UPPER	2470	4	14.8	1.5	21.5	377	44	2283	2578	3042	1226	1816	543	305	395
eco-ATC-152A	3085	4180	UPPER	2495	5.5	16.9	1.5	21.5	377	44	2283	2578	3042	1226	1816	543	305	395
eco-ATC-162A	3090	4180	UPPER	2500	7.5	18.6	1.5	21.5	377	44	2283	2578	3042	1226	1816	543	305	395
eco-ATC-168A	3620	4750	UPPER	3030	4	14.4	1.5	21.5	542	64	2283	2578	3232	1226	2006	543	495	395
eco-ATC-186A	3640	4770	UPPER	3055	5.5	16.5	1.5	21.5	542	64	2283	2578	3232	1226	2006	543	495	395
eco-ATC-198A	3645	4775	UPPER	3055	7.5	18.1	1.5	21.5	542	64	2283	2578	3232	1226	2006	543	495	395
eco-ATC-191A	4225	5400	UPPER	3640	4	14.0	1.5	21.5	707	83	2283	2578	3423	1226	2197	543	686	395
eco-ATC-210A	4250	5420	UPPER	3660	5.5	16.0	1.5	21.5	707	83	2283	2578	3423	1226	2197	543	686	395
eco-ATC-223A	4255	5425	UPPER	3665	7.5	17.6	1.5	21.5	707	83	2283	2578	3423	1226	2197	543	686	395
eco-ATC-180A	4870	6080	UPPER	4280	2.2	11.5	1.5	21.5	872	103	2283	2578	3613	1226	2387	543	876	395
eco-ATC-203A	4875	6085	UPPER	4285	4	13.6	1.5	21.5	872	103	2283	2578	3613	1226	2387	543	876	395
eco-ATC-238A	4905	6110	UPPER	4315	7.5	17.0	1.5	21.5	872	103	2283	2578	3613	1226	2387	543	876	395
eco-ATC-257A	4960	6170	UPPER	4375	11	19.1	1.5	21.5	872	103	2283	2578	3613	1226	2387	543	876	395
eco-ATC-229A	5540	6780	UPPER	4950	5.5	15.1	1.5	21.5	1038	122	2283	2578	3804	1226	2578	543	1067	395
eco-ATC-243A	5545	6785	UPPER	4955	7.5	16.5	1.5	21.5	1038	122	2283	2578	3804	1226	2578	543	1067	395
eco-ATC-263A	5600	6845	UPPER	5010	11	18.5	1.5	21.5	1038	122	2283	2578	3804	1226	2578	543	1067	395

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

† Height includes fan guard which ships factory mounted.



- Elliptical Tubes with Spiral Wound Fins
- Improved Dry and Wet Operation
- All Rows Finned

PMC-E EVAPORATIVE CONDENSERS

Design and Construction Features

The industry standard for forced draft axial fan condensers. The PMC-E is equipped with owner-oriented features and benefits that make it Easy to install...Easy to maintain...Easy on the operating budget...The Easy Choice!

PVC Water Distribution with ZM®II Nozzles

- Large orifice prevents clogging (no moving parts).
- Redesigned nozzles for superior water distribution.
- Threaded nozzles eliminate troublesome grommets.
- Fixed position require zero maintenance.
- Threaded end caps for ease of cleaning.

Thermal Pak®II Heat Transfer Technology

- More surface area per plan area than other designs.
- Improved heat transfer efficiency due to tube geometry and orientation of tubes.
- Lower refrigerant charge.
- Optional TITAN stainless steel coil technology.

Improved Water Distribution Piping

- Simplified piping for easier basin access.
- Totally enclosed pump motors assure long, trouble-free life.

Sloped Pan Bottom

- Pan bottom slopes to drain.
- Easy to clean.
- Stainless steel strainer resists corrosion.

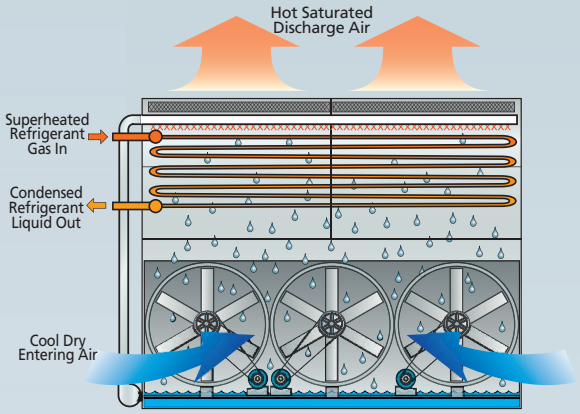
Water Saver Drift Eliminators

- New patented design reduces drift rate to 0.001%.
- Saves water and reduces water treatment cost.
- Greater structural integrity versus old style blade-type.
- Recessed into casing for greater protection.

* Clause 4.4 "Drift Control" of Australian Standard 3666.1 explicitly states that the "maximum drift loss shall not exceed 0.002% of the maximum design water circulation rate through the tower." EVAPCO's counterflow cooling method and patented cellular drift eliminator design far exceeds this standard by limiting the drift rate to a maximum of only 0.001% making it the most AS 3666.1 compliant cooling tower in the market.

U.S. Patent No. 6315804

Principle of Operation



Double-Brake Flange Joints

- Stronger than single-brake designs by others.
- Greater structural integrity.
- Minimises water leaks at field joints.

Unique Field Seam

- Eliminates up to 85% of fasteners.
- Self guiding channels improve quality of field seam to eliminate leaks.
- Easy to install.
- Lower installation cost.

Optional Design Features

- External Service Platforms.
- Stainless Steel Construction.

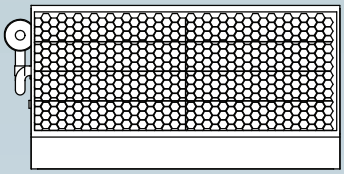
Individual Fan Drive System

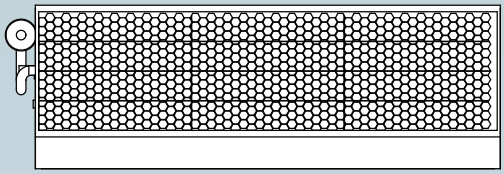
- Increased flexibility for improved capacity control.
- Greater reliability through redundancy.
- Easy motor replacement.
- Front mounted drives for improved maintenance accessibility.

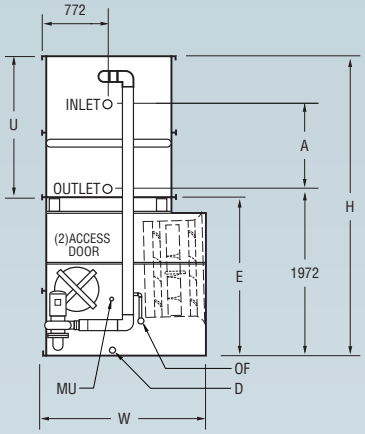
Selections for PMC-E Evaporative Condenser are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

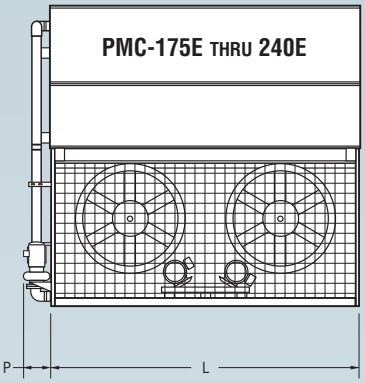
PMC-E Box Sizes 5x12 and 5x18

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	PMC-175E THRU PMC-375E
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50









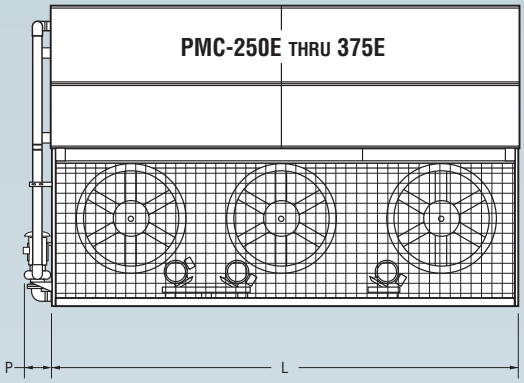


Table 27 Engineering Data

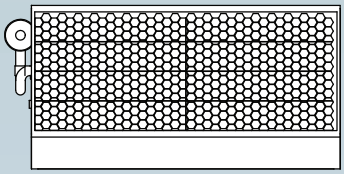
Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Spray Water Flow (LPS)	Coil Volume (Litres)	Refrigerant Operating Charge (Kg)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section							W	L	H	E	U	A	P
PMC-175E	3670	4720	UPPER	2370	(2) 4	14.8	1.5	21.8	623	75	1930	3651	3312	1854	1458	781	318
PMC-190E	3670	4720	UPPER	2370	(2) 4	16.0	1.5	21.8	623	75	1930	3651	3312	1854	1458	781	318
PMC-210E	4105	5170	UPPER	2805	(2) 4	15.8	1.5	21.8	765	90	1930	3651	3527	1854	1673	997	318
PMC-235E	4150	5215	UPPER	2805	(2) 5.5	17.3	1.5	21.8	765	90	1930	3651	3527	1854	1673	997	318
PMC-220E	4560	5645	UPPER	3255	(2) 4	15.6	1.5	21.8	934	110	1930	3651	3743	1854	1889	1213	318
PMC-240E	4605	5690	UPPER	3255	(2) 5.5	16.8	1.5	21.8	934	110	1930	3651	3743	1854	1889	1213	318
PMC-250E	4795	6345	UPPER	2815	(3) 4	25.5	2.2	32.5	708	85	1930	5486	3096	1854	1242	565	356
PMC-275E	5480	7060	UPPER	3500	(3) 4	22.9	2.2	32.5	934	110	1930	5486	3312	1854	1458	781	356
PMC-295E	5480	7060	UPPER	3500	(3) 4	24.5	2.2	32.5	934	110	1930	5486	3312	1854	1458	781	356
PMC-325E	6135	7745	UPPER	4160	(3) 4	24.0	2.2	32.5	1161	135	1930	5486	3527	1854	1673	997	356
PMC-360E	6210	7815	UPPER	4160	(3) 5.5	26.9	2.2	32.5	1161	135	1930	5486	3527	1854	1673	997	356
PMC-335E	6815	8450	UPPER	4840	(3) 4	23.7	2.2	32.5	1388	165	1930	5486	3743	1854	1889	1213	356
PMC-375E	6890	8525	UPPER	4840	(3) 5.5	26.6	2.2	32.5	1388	165	1930	5486	3743	1854	1889	1213	356

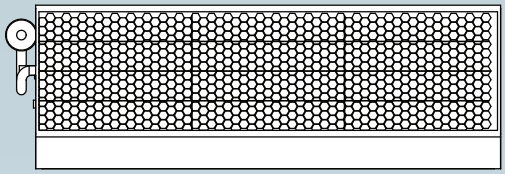
NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.

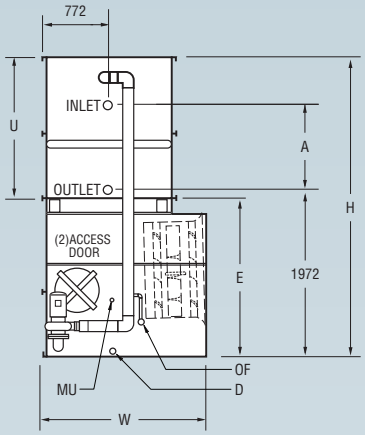
Selections for eco-PMC-E Evaporative Condenser are available from EVAPCO's equipment selection program.
Please contact your local sales representative for access to the program.

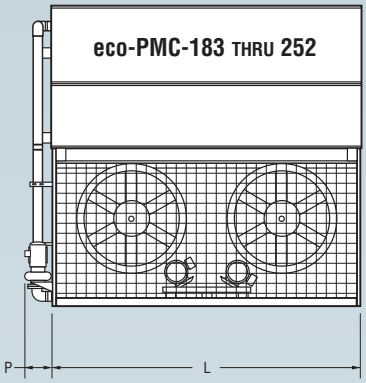
eco-PMC-E Box Sizes 5x12 and 5x18

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM
	eco-PMC-183 THRU eco-PMC-387
SYSTEM FLUID IN (INLET)	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100
MAKE-UP (MU)	(1) 25
OVERFLOW (OF)	(1) 50
DRAIN (D)	(1) 50









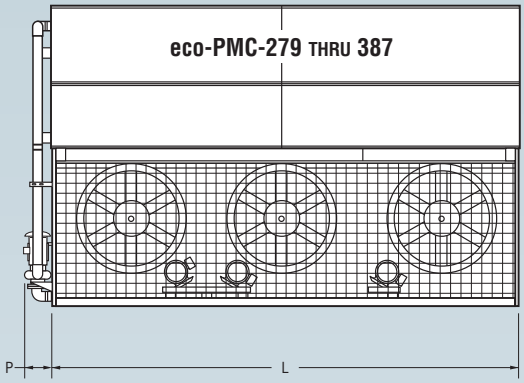
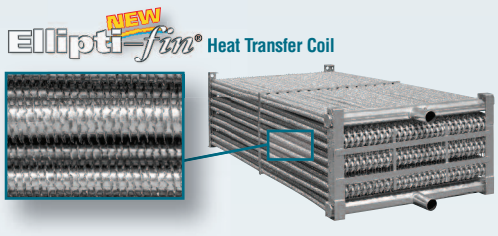


Table 28 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Spray Water Flow (LPS)	Coil Volume (Litres)	Refrigerant Operating Charge (Kg)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section							W	L	H	E	U	A	P
eco-PMC-183	3760	4795	UPPER	2470	(2) 2.2	14.4	1.5	21.8	481	55	1930	3651	3096	1854	1242	565	318
eco-PMC-191	3770	4805	UPPER	2470	(2) 4	15.0	1.5	21.8	481	55	1930	3651	3096	1854	1242	565	318
eco-PMC-196	4355	5405	UPPER	3060	(2) 2.2	14.2	1.5	21.8	623	75	1930	3651	3312	1854	1458	781	318
eco-PMC-205	4365	5415	UPPER	3060	(2) 4	14.8	1.5	21.8	623	75	1930	3651	3312	1854	1458	781	318
eco-PMC-217	4365	5415	UPPER	3060	(2) 4	16.0	1.5	21.8	623	75	1930	3651	3312	1854	1458	781	318
eco-PMC-235	4410	5460	UPPER	3060	(2) 5.5	17.6	1.5	21.8	623	75	1930	3651	3312	1854	1458	781	318
eco-PMC-204	4955	6020	UPPER	3660	(2) 2.2	14.1	1.5	21.8	765	90	1930	3651	3527	1854	1673	997	318
eco-PMC-226	4960	6030	UPPER	3660	(2) 4	15.8	1.5	21.8	765	90	1930	3651	3527	1854	1673	997	318
eco-PMC-244	5010	6075	UPPER	3660	(2) 5.5	17.3	1.5	21.8	765	90	1930	3651	3527	1854	1673	997	318
eco-PMC-220	5585	6670	UPPER	4280	(2) 4	14.7	1.5	21.8	934	110	1930	3651	3743	1854	1889	1213	318
eco-PMC-233	5585	6670	UPPER	4280	(2) 4	15.6	1.5	21.8	934	110	1930	3651	3743	1854	1889	1213	318
eco-PMC-252	5630	6715	UPPER	4280	(2) 5.5	16.8	1.5	21.8	934	110	1930	3651	3743	1854	1889	1213	318
eco-PMC-279	5580	7130	UPPER	3600	(3) 4	24.1	2.2	32.5	708	85	1930	5486	3096	1854	1242	565	356
eco-PMC-295	5580	7130	UPPER	3600	(3) 4	25.5	2.2	32.5	708	85	1930	5486	3096	1854	1242	565	356
eco-PMC-301	6520	8095	UPPER	4540	(3) 4	22.9	2.2	32.5	934	110	1930	5486	3312	1854	1458	781	356
eco-PMC-319	6520	8095	UPPER	4540	(3) 4	24.5	2.2	32.5	934	110	1930	5486	3312	1854	1458	781	356
eco-PMC-336	7430	9035	UPPER	5450	(3) 4	24.0	2.2	32.5	1161	135	1930	5486	3527	1854	1673	997	356
eco-PMC-372	7500	9110	UPPER	5450	(3) 5.5	26.9	2.2	32.5	1161	135	1930	5486	3527	1854	1673	997	356
eco-PMC-346	8370	10000	UPPER	6390	(3) 4	23.7	2.2	32.5	1388	165	1930	5486	3743	1854	1889	1213	356
eco-PMC-387	8440	10075	UPPER	6390	(3) 5.5	26.6	2.2	32.5	1388	165	1930	5486	3743	1854	1889	1213	356

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.
(4) Contact your local EVAPCO sales representative for thermal selection and pricing.



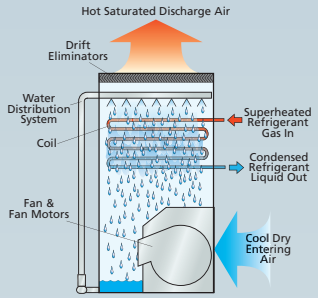
- Elliptical Tubes with Spiral Wound Fins
- Improved Dry and Wet Operation
- All Rows Finned

LSC-E/LRC FORCED DRAFT

Design and Construction Features

The LSC-E and LRC units are a result of EVAPCO's extensive experience in forced draft centrifugal fan designs. Both models are designed for easy maintenance and long, trouble free operation. These units are also designed with IBC Compliant construction.

Principle of Operation LSC-E



Water Saver Drift Eliminators

- New patented design reduces drift rate to 0.001%.
- Saves water and reduces water treatment cost.
- Greater structural integrity versus old style blade-type.
- Recessed into casing for greater protection.
- Clause 4.4 "Drift Control" of Australian Standard 3666.1 explicitly states that the *"maximum drift loss shall not exceed 0.002% of the maximum design water circulation rate through the tower."* EVAPCO's counterflow cooling method and patented cellular drift eliminator design far exceeds this standard by limiting the drift rate to a maximum of only 0.001% making it the most AS 3666.1 compliant cooling tower in the market.

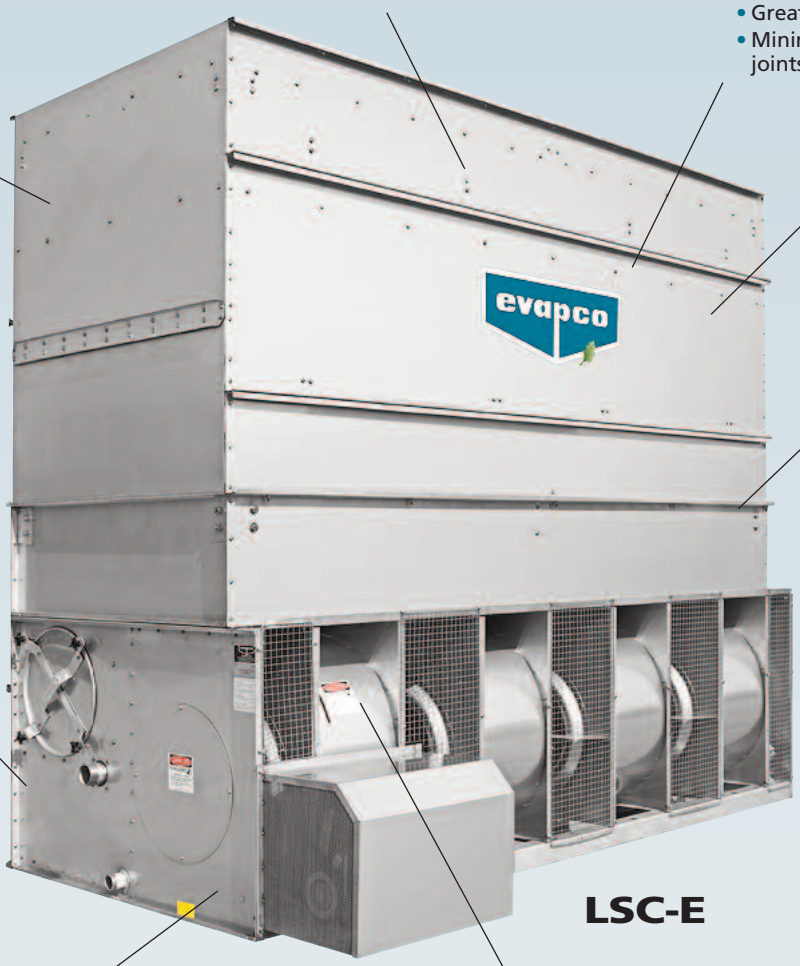
U.S. Patent No. 6,315,804

Double-Brake Flange Joints

- Stronger than single-brake designs by others.
- Greater structural integrity.
- Minimises water leaks at field joints.

Thermal Pak® II Heat Transfer Technology

- More surface area per plan area than other designs.
- Improved heat transfer efficiency due to tube geometry and orientation of tubes.
- Lower refrigerant charge.
- Optional TITAN Stainless Steel Coil technology.



LSC-E

G-235 Heavy Mill-Dip Galvanised Steel Construction

(Stainless steel available as an affordable option)

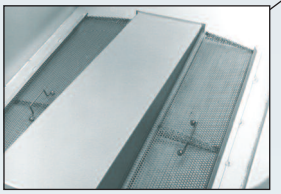
Unique Field Seam

- Eliminates up to 66% of fasteners.
- Self guiding channels improve quality of field seam to eliminate leaks.
- Easy to install.
- Lower installation cost.

(on LSC-E units only)

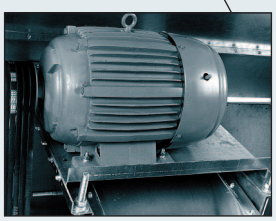
Totally Enclosed Pump Motors

- Help assure long, trouble-free operation.



Sloped Pan Bottom

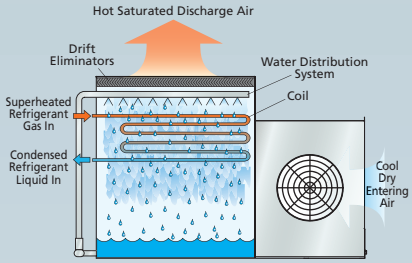
- Pan bottom slopes to drain.
- Easy to clean.
- Stainless steel strainer resists corrosion.



Totally Enclosed Fan Motors and Superior Drive System

- Assures long life.
- All normal maintenance can be performed quickly from outside the unit.
- If required, motor may be easily removed.
- One piece fan shaft–no oil lubrication.
- Motors located outboard on multi-cell units for easier drive system access.

Principle of Operation LRC

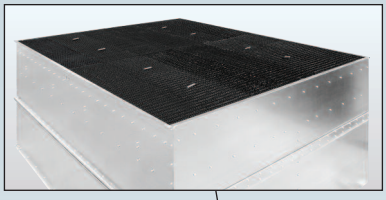


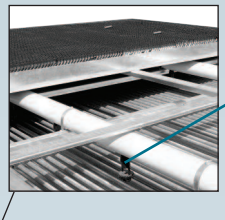
International Building Code (IBC) Compliant Construction

- Suitable for installations vulnerable to high seismic or wind loads.
- Standard construction designed to withstand 0.42 g seismic load (S_{DS}) and 13.7 kPa wind load (P) in applications with an Importance Factor (I_p) of up to 1.5
- Upgraded construction designed to withstand 2.00 g seismic load (S_{DS}) and 13.7 kPa wind load (P) in applications with an Importance Factor (I_p) of up to 1.5
- Refer to the "IBC Help" document in the White Papers section of the Evapco public website for further details.

Efficient Drift Eliminators

- Advanced design limits maximum drift rate to 0.001% of circulated spray water rate.
- Corrosion resistant PVC for long life.
- Clause 4.4 "Drift Control" of Australian Standard 3666.1 explicitly states that the *"maximum drift loss shall not exceed 0.002% of the maximum design water circulation rate through the tower."* EVAPCO's counterflow cooling method and patented cellular drift eliminator design far exceeds this standard by limiting the drift rate to a maximum of only 0.001% making it the most AS 3666.1 compliant cooling tower in the market.

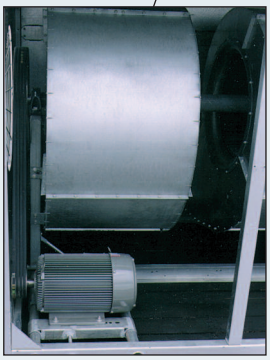




PVC Spray Distribution Header with ZM®II Nozzles

- Large orifice nozzles prevent clogging (no moving parts).
- Redesigned nozzles for superior water distribution.
- Nozzles are threaded into header at proper orientation.
- Fixed position nozzles require zero maintenance.
- Threaded end caps for ease of cleaning.

LRC



Spray pump & piping, basin access door, make-up connection, overflow connection, and drain connection not shown.

Stainless Steel Cold Water Basin (LRC)

- Eliminates the need for unreliable epoxy coatings.

(standard on LRC units only)

Easy to Service Motor & Drive System

- Belt tensioning and bearing lubrication can be performed from outside the unit.
- Locking mechanism can also be used as a wrench to adjust the belts (LRC only).
- Motor is fully accessible by removing one inlet screen.
- Split fan housings allow removal of all mechanical equipment through the end of the unit (LRC only).

Pulse~Pure®

U.S. Patent # 7,704,364

Optional *Pulse*~Pure® Water Treatment System

In North America, all units are available with EVAPCO's optional ***Pulse*~Pure®** non-chemical water treatment system. The ***Pulse*~Pure®** Water Treatment System utilises pulsed-power technology to provide CHEMICAL FREE Water Treatment. EVAPCO's ***Pulse*~Pure®** system is an environmentally responsible alternative for treating water in evaporative cooled equipment. It does not release harmful by-products to the environment and eliminates chemicals completely from cooler drift and blowdown. The ***Pulse*~Pure®** system delivers short, high-frequency bursts of low energy electromagnetic fields to the recirculating water in the LSWE and LRWB and will:

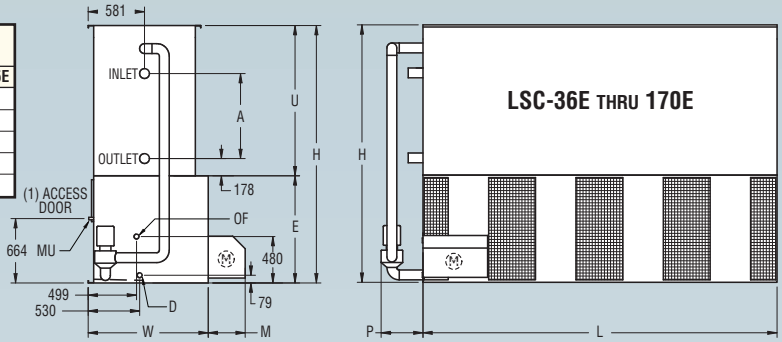
- Control bacteria to levels well below traditional chemical water treatment.
- Control the formation of mineral scale.
- Save water by operating at higher cycles of concentration.
- Yield corrosion rates equivalent to chemical water treatment.

Please contact your local sales representative for more information on the ***Pulse*~Pure®** and its availability in Australia and New Zealand.

Selections for LSC-E Evaporative Condenser are available from EVAPCO's equipment selection program. Please contact your local sales representative for access to the program.

LSC-E Box Sizes 4x6, 4x9, 4x12, 5x12, 5x18

CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM	
	LSC-36E THRU LSC-250E	LSC-280E THRU LSC-385E
SYSTEM FLUID IN (INLET)	(1) 100	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100	(1) 100
MAKE-UP (MU)	(1) 25	(1) 40
OVERFLOW (OF)	(1) 50	(1) 50
DRAIN (D)	(1) 50	(1) 50



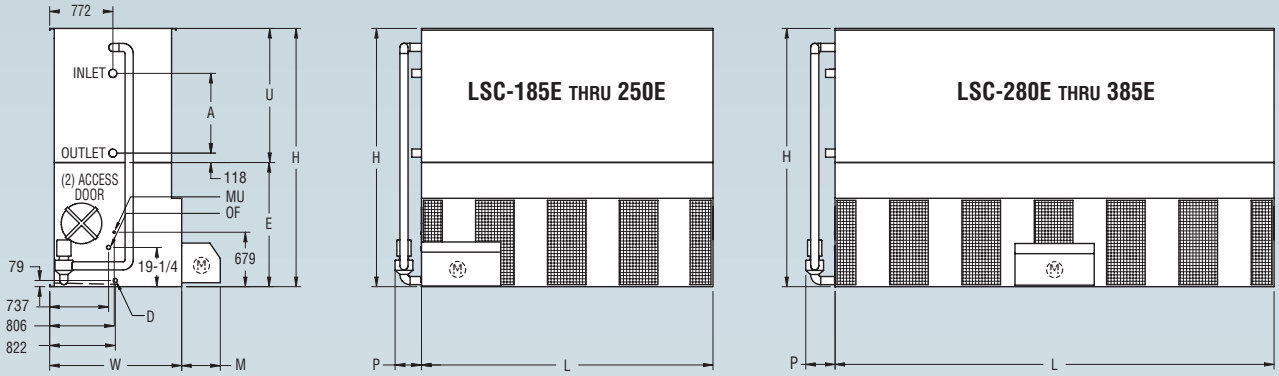


Table 29 Engineering Data

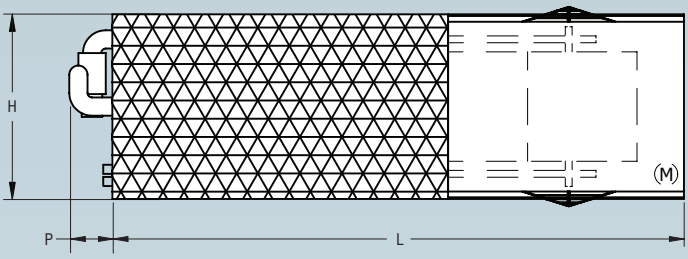
Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Spray Water Flow (LPS)	Coil Volume (Litres)	Refrigerant Operating Charge (Kg)	Dimensions (mm)							
	Shipping	Operating	Shipping Heaviest Section	Heaviest Section							W	L	H	E	U	M	A	P
LSC-36E	1070	1400	UPPER	560	2.2	4.8	0.55	7.6	126	15	1238	1826	2083	1105	978	381	305	362
LSC-41E	1080	1400	UPPER	560	4	5.8	0.55	7.6	126	15	1238	1826	2083	1105	978	381	305	362
LSC-48E	1240	1570	UPPER	720	2.2	4.8	0.55	7.6	177	21	1238	1826	2273	1105	1168	381	495	362
LSC-54E	1240	1580	UPPER	720	4	5.6	0.55	7.6	177	21	1238	1826	2273	1105	1168	381	495	362
LSC-65E	1400	1750	UPPER	880	4	5.5	0.55	7.6	229	27	1238	1826	2464	1105	1359	381	686	362
LSC-70E	1420	1770	UPPER	880	5.5	6.3	0.55	7.6	229	27	1238	1826	2464	1105	1359	381	686	362
LSC-75E	1560	1920	UPPER	1050	4	5.4	0.55	7.6	280	33	1238	1826	2654	1105	1549	381	876	362
LSC-80E	1590	1940	UPPER	1050	5.5	6.2	0.55	7.6	280	33	1238	1826	2654	1105	1549	381	876	362
LSC-90E	1930	2470	UPPER	1260	4	7.2	0.75	11.4	336	39	1238	2724	2464	1105	1359	381	686	362
LSC-100E	1960	2490	UPPER	1260	5.5	8.2	0.75	11.4	336	39	1238	2724	2464	1105	1359	381	686	362
LSC-110E	1970	2500	UPPER	1260	7.5	9.1	0.75	11.4	336	39	1238	2724	2464	1105	1359	381	686	362
LSC-120E	2210	2760	UPPER	1500	7.5	8.9	0.75	11.4	414	49	1238	2724	2654	1105	1549	381	876	362
LSC-135E	2580	3260	UPPER	1680	7.5	11.0	1.1	15.5	443	52	1238	3651	2464	1105	1359	381	686	435
LSC-150E	2630	3310	UPPER	1680	11	12.6	1.1	15.5	443	52	1238	3651	2464	1105	1359	381	686	435
LSC-155E	2870	3580	UPPER	1970	7.5	10.8	1.1	15.5	548	64	1238	3651	2654	1105	1549	381	876	435
LSC-170E	2930	3630	UPPER	1970	11	12.3	1.1	15.5	548	64	1238	3651	2654	1105	1549	381	876	435
LSC-185E	3400	4650	UPPER	2240	7.5	13.8	1.5	21.8	629	74	1651	3651	3013	1553	1460	483	781	337
LSC-200E	3460	4700	UPPER	2240	11	15.9	1.5	21.8	629	74	1651	3651	3013	1553	1460	483	781	337
LSC-210E	3490	4730	UPPER	2240	15	17.5	1.5	21.8	629	74	1651	3651	3013	1553	1460	483	781	337
LSC-225E	3910	5190	UPPER	2690	11	15.5	1.5	21.8	778	92	1651	3651	3229	1553	1676	483	997	337
LSC-240E	3940	5210	UPPER	2690	15	17.1	1.5	21.8	778	92	1651	3651	3229	1553	1676	483	997	337
LSC-250E	4380	5700	UPPER	3140	15	16.8	1.5	21.8	928	109	1651	3651	3445	1553	1892	483	1213	337
LSC-280E	5110	6880	UPPER	3350	11	20.8	2.2	32.5	934	110	1651	5486	3013	1553	1460	483	781	400
LSC-300E	5140	6910	UPPER	3350	15	22.9	2.2	32.5	934	110	1651	5486	3013	1553	1460	483	781	400
LSC-315E	5160	6920	UPPER	3350	18.5	24.7	2.2	32.5	934	110	1651	5486	3013	1553	1460	483	781	400
LSC-335E	5830	7640	UPPER	4040	15	22.5	2.2	32.5	1160	136	1651	5486	3229	1553	1676	483	997	400
LSC-355E	5840	7650	UPPER	4040	18.5	24.2	2.2	32.5	1160	136	1651	5486	3229	1553	1676	483	997	400
LSC-370E	5860	7680	UPPER	4040	22	25.7	2.2	32.5	1160	136	1651	5486	3229	1553	1676	483	997	400
LSC-385E	6530	8390	UPPER	4710	22	25.2	2.2	32.5	1386	163	1651	5486	3445	1553	1892	483	1213	400

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.

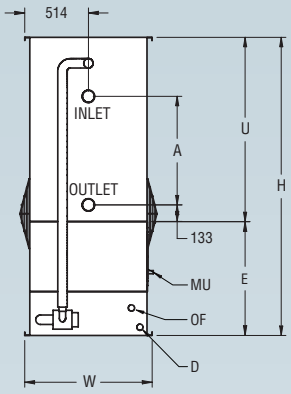
Selections for LRC Evaporative Condenser are available from EVAPCO's equipment selection program.
Please contact your local sales representative for access to the program.

LRC Box Sizes 3x6, 5x6, 5x9, 5x12

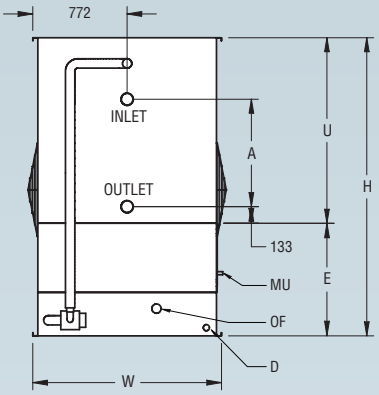
CONNECTION DESCRIPTION	CONNECTION (QTY) SIZE IN MM	
	LRC-25 THRU LRC-72	LRC-76 THRU LRC-246
SYSTEM FLUID IN (INLET)	(1) 100	(1) 100
SYSTEM FLUID OUT (OUTLET)	(1) 100	(1) 100
MAKE-UP (MU)	(1) 25	(1) 25
OVERFLOW (OF)	(1) 50	(1) 80
DRAIN (D)	(1) 50	(1) 50



LRC-25 THRU LRC-72



LRC-76 THRU LRC-246



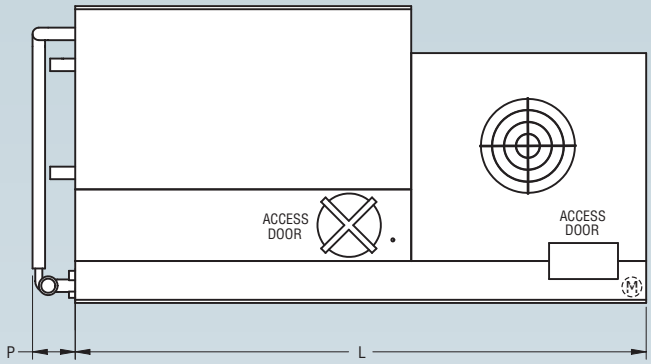


Table 30 Engineering Data

Model No.	Weights (Kg)				Fan Motor (kW)	Air Flow (m^3/s)	Pump Power (kW)	Spray Water Flow (LPS)	Coil Volume (Litres)	Refrigerant Operating Charge (Kg)	Dimensions (mm)						
	Shipping	Operating	Shipping Heaviest Section	Shipping Heaviest Section							W	L	H	E	U	A	P
LRC-25	990	1450	UPPER	570	0.75	3.3	0.37	6.3	115	14	1029	3099	1835	921	914	305	346
LRC-27	990	1450	UPPER	570	1.1	3.8	0.37	6.3	115	14	1029	3099	1835	921	914	305	346
LRC-29	990	1450	UPPER	570	1.5	4.1	0.37	6.3	115	14	1029	3099	1835	921	914	305	346
LRC-35	1120	1600	UPPER	710	1.1	3.7	0.37	6.3	162	19	1029	3099	2026	921	1105	495	346
LRC-38	1120	1600	UPPER	710	1.5	4.1	0.37	6.3	162	19	1029	3099	2026	921	1105	495	346
LRC-42	1130	1610	UPPER	710	2.2	4.6	0.37	6.3	162	19	1029	3099	2026	921	1105	495	346
LRC-48	1140	1620	UPPER	710	4	5.5	0.37	6.3	162	19	1029	3099	2026	921	1105	495	346
LRC-51	1280	1770	UPPER	850	2.2	4.6	0.37	6.3	208	24	1029	3099	2216	921	1295	686	346
LRC-58	1280	1770	UPPER	850	4	5.4	0.37	6.3	208	24	1029	3099	2216	921	1295	686	346
LRC-65	1430	1930	UPPER	1000	4	5.3	0.37	6.3	255	30	1029	3099	2407	921	1486	876	346
LRC-72	1450	1950	UPPER	1000	5.5	6.1	0.37	6.3	255	30	1029	3099	2407	921	1486	876	346
LRC-76	1700	2540	UPPER	1000	4	7.9	0.75	10.1	251	29	1540	3734	2026	921	1105	495	346
LRC-84	1720	2560	UPPER	1000	5.5	9.1	0.75	10.1	251	29	1540	3734	2026	921	1105	495	346
LRC-91	1920	2770	UPPER	1220	4	7.8	0.75	10.1	324	38	1540	3734	2216	921	1295	686	346
LRC-101	1940	2800	UPPER	1220	5.5	8.9	0.75	10.1	324	38	1540	3734	2216	921	1295	686	346
LRC-114	2170	3040	UPPER	1450	5.5	8.8	0.75	10.1	397	47	1540	3734	2407	921	1486	876	346
LRC-108	2200	3460	UPPER	1420	5.5	11.1	1.1	16.1	365	43	1540	4632	2026	921	1105	495	346
LRC-116	2210	3470	UPPER	1420	7.5	12.2	1.1	16.1	365	43	1540	4632	2026	921	1105	495	346
LRC-128	2270	3520	UPPER	1420	11	14.0	1.1	16.1	365	43	1540	4632	2026	921	1105	495	346
LRC-131	2530	3810	UPPER	1750	5.5	10.9	1.1	16.1	476	56	1540	4632	2216	921	1295	686	346
LRC-140	2540	3820	UPPER	1750	7.5	12.0	1.1	16.1	476	56	1540	4632	2216	921	1295	686	346
LRC-155	2600	3880	UPPER	1750	11	13.8	1.1	16.1	476	56	1540	4632	2216	921	1295	686	346
LRC-174	2940	4240	UPPER	2090	11	13.5	1.1	16.1	588	69	1540	4632	2407	921	1486	876	346
LRC-183	3230	4560	UPPER	2380	11	13.2	1.1	16.1	699	82	1540	4632	2597	921	1676	1067	346
LRC-190	3190	4920	UPPER	2220	15	17.0	1.5	21.8	629	74	1540	5556	2242	921	1321	686	346
LRC-201	3200	4940	UPPER	2220	18.5	18.3	1.5	21.8	629	74	1540	5556	2242	921	1321	686	346
LRC-213	3620	5390	UPPER	2650	15	16.6	1.5	21.8	778	92	1540	5556	2432	921	1511	876	346
LRC-225	3630	5400	UPPER	2650	18.5	17.9	1.5	21.8	778	92	1540	5556	2432	921	1511	876	346
LRC-233	3650	5420	UPPER	2650	22	19.0	1.5	21.8	778	92	1540	5556	2432	921	1511	876	346
LRC-246	4050	5860	UPPER	3050	22	18.6	1.5	21.8	928	109	1540	5556	2623	921	1702	1067	346

NOTES: (1) Do not use catalog drawings for pre-fabrication. Dimensions and weights are subject to change.
(2) Adequate spacing must be allowed for unobstructed airflow and access to the unit. Refer to EVAPCO's Equipment Layout Manual (Bulletin 311).
(3) Refrigerant charge is shown for R-717. Multiply by 1.93 for R-22 and 1.98 for R-134a.

ONE WORLD, ONE PRODUCT

evapco® for LIFE

EVAPCO Australia Pty Ltd - Continental Headquarters for Australia, New Zealand and Oceania

EVAPCO Australia Pty Ltd, 34-42 Melbourne Road, Riverstone NSW 2765, Australia
Phone: +61 2 9627 3322 • *Email:* sales@evapco.com.au • *Website:* www.evapco.com.au

EVAPCO North America

EVAPCO, Inc.
World Headquarters
P.O. Box 1300
Westminster, MD 21158 USA
Phone: +1 410-756-2600
Fax: +1 410-756-6450
E-mail: marketing@evapco.com

EVAPCO East
5151 Allendale Lane
Taneytown, MD 21787 USA
Phone: +1 410-756-2600
Fax: +1 410-756-6450
E-mail: marketing@evapco.com

EVAPCO Midwest
1723 York Road
Greenup, IL 62428 USA
Phone: +1 217-923-3431
Fax: +1 217-923-3300
E-mail: evapcomw@evapcomw.com

EVAPCO West
1900 West Almond Avenue
Madera, CA 93637 USA
Phone: +1 559-673-2207
Fax: +1 559-673-2378
E-mail: contact@evapcowest.com

EVAPCO Iowa
925 Quality Drive
Lake View, IA 51450 USA
Phone: +1 712-657-3223
Fax: +1 712-657-3226

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

EVAPCO Newton
701 East Jourdan Street
Newton, IL 62448 USA
Phone: +1 618-783-3433
Fax: +1 618-783-3499
E-mail: evapcomw@evapcomw.com

EVAPCOLD
521 Evapco Drive
Greenup, IL 62428 USA
Phone: +1 217-923-3431
E-mail: evapcomw@evapcomw.com

EVAPCO-BLCT Dry Cooling, Inc.
1011 US Highway 22 West
Bridgewater, New Jersey 08807 USA
Phone: +908-379-2665
E-mail: info@evapco-blct.com

Refrigeration Valves & Systems Corporation
A wholly owned subsidiary of EVAPCO, Inc.
1520 Crosswind Dr.
Bryan, TX 77808 USA
Phone: +1 979-778-0095
Fax: +1 979-778-0030
E-mail: rvs@rvscorp.com

EVAPCO Northwest
5775 S.W. Jean Road, Suite 210
Lake Oswego, Oregon 97035 USA
Phone: +1 503-639-2137
Fax: +1 503-639-1800

EvapTech, Inc.
A wholly owned subsidiary of EVAPCO, Inc.
8331 Nieman Road
Lenexa, KS 66214 USA
Phone: +1 913-322-5165
Fax: +1 913-322-5166
E-mail: marketing@evaptech.com

Tower Components, Inc.
A wholly owned subsidiary of EVAPCO, Inc.
5960 US HWY 64E
Ramseur, NC 27316
Phone: +1 336-824-2102
Fax: +1 336-824-2190
E-mail: mail@towercomponentsinc.com

EVAPCO South America

Evapco Brasil
Equipamentos Industriais Ltda.
Rua Alexandre Dumas, 1601
Conj. 13, 14, 15 - Edifício Stelvio Mazza
04717-004 São Paulo, Brazil
Phone: +55 11-5681-2000

EVAPCO Europe

EVAPCO Europe BVBA
European Headquarters
Heersteveldweg 19
Industrieterrein Oost
3700 Tongeren, Belgium
Phone: +32 1-239-5029
Fax: +32 1-223-8527
E-mail: evapco.europe@evapco.be

EVAPCO Europe, S.r.l.
Via Ciro Menotti 10
I-20017 Passirana di Rho
Milan, Italy
Phone: +39 02-939-9041
Fax: +39 02-935-00840
E-mail: evapcoeurope@evapco.it

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

EVAPCO Europe GmbH
Insterburger Straße 18
40670 Meerbusch, Germany
Phone: +49 2159-695618
Fax: +49 2159-695611
E-mail: info@evapco.de

EVAPCO Air Solutions
Knøsgårdvej 115
DK-9440 Aabybro Denmark
Phone: +45 98-244-999
Fax: +45 98-244-990
E-mail: info@flexcoil.dk

EVAPCO S.A. (Pty.) Ltd.
A licensed manufacturer of EVAPCO, Inc.
18 Quality Road
Isando 1600
Republic of South Africa
Phone: +27 11-392-6630
Fax: +27 11-392-6615
E-mail: evapco@evapco.co.za

Evap Egypt Engineering Industries Co.
A licensed manufacturer of EVAPCO, Inc.
5 El Nasr Road
Nasr City, Cairo, Egypt
Phone: +2 02-2402-2866 / +2 02 2404-4997
Fax: +2 02-2404-4668-7 / +2 02-2404-4668
E-mail: Primacool@link.net / Shady@primacool.net

EVAPCO Asia/Pacific

EVAPCO Asia/Pacific Headquarters
1159 Luoning Rd. Baoshan Industrial Zone
Shanghai, 200949, P. R. China
Phone: +86 21-6687-7786
Fax: +86 21-6687-7008
E-mail: marketing@evapcochina.com

EVAPCO (Shanghai) Refrigeration Equipment Co., Ltd.
1159 Luoning Rd., Baoshan Industrial Zone
Shanghai 200949, P.R. China
Phone: +86 21-6687-7786
Fax: +86 21-6687-7008
E-mail: marketing@evapcochina.com

Beijing EVAPCO Refrigeration Equipment Co., Ltd.
No.13 Yanxi Avenue,
Yanqi Development Zone
Huai Rou Country
Beijing, P.R. China 101407
Phone: +86 10-6166-7238
Fax: +86 10-6166-7395
E-mail: evapcobj@ecapcochina.com

EVAPCO Australia (Pty.) Ltd.
34-42 Melbourne Road
P.O. Box 436
Riverstone, N.S.W. 2765, Australia
Phone: +61 2-9627-3322
Fax: +61 2-9627-1715
E-mail: sales@evapco.com.au

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

EvapTech Asia Pacific Sdn. Bhd
A wholly owned subsidiary of EvapTech, Inc.
B-6-1, IOI Boulevard
Jalan Kenari 5, Bandar Puchong Jaya
47170 Puchong, Selangor, Malaysia
Phone: +60 3-8070-7255
Fax: +60 3-8070-5731
E-mail: marketing-ap@evaptech.com

EVAPCO...*Low Sound, Low Energy, Low Risk*

Visit **EVAPCO's** Website at: **www.evapco.com.au**

Compliant

AS/NZS 3666.1:2011
AS 1657-2013
AS 1210-2010
BIM-MEP^{AUS}
CTI STD-201RS
CTI ATC-128
IBC
FM

Bulletin 167B-AU