Light Weight Maintenance-Free Fiberglass Construction

An ideal and cost-efficient alternative to metal cooling towers, the fiberglass Conair E2F Series Cooling Tower is available for applications ranging from 100 to 240 tons. The E2F Series is designed for outdoor use in industrial manufacturing locations.

All water connections, the water distribution system, and the cellular fill are made to resist rot, decay, and biological attack.

No on-site construction or fabrication is necessary because the entire tower is delivered in one piece. The fan and motor are shipped separately to prevent shipping damage.

Model E2F-100

Remarkable Features; Corrosion-Resistant

The E2F Series Cooling Towers were designed to be environmentally friendly and virtually maintenance free.

Evaporative cooling systems have long caused problems with corrosion, scale, heavy metals and acid feeds (used to control pH levels in cooling water) that damage system equipment and result in environmentally unacceptable discharge levels. As a matter of fact, any time galvanized metal comes in contact with cooling water, problems can arise.

The E2F Series cooling towers provide peace of mind because Conair has eliminated these problems by excluding galvanized metal from the system. All fasteners are made of high quality 304 stainless steel. The tower shell is fiber-reinforced plastic (FRP) with UV inhibitors. PVC is used for fill, drift eliminators, and inlet louvers. Schedule 40 PVC is used for the water distribution system.

- **Designed to perform and keep performing**
  Fiberglass tower casing, basin, and air inlet louvers have a smooth exterior gel coat with UV inhibitors. E2F Series towers are built using completely non-ferrous materials. Large, non-clogging ABS nozzles are used to uniformly distribute water across all fill surfaces. Adjustable pitch, high efficiency, fiberglass reinforced polypropylene fan blades with a cast aluminum alloy fan hub and a heavy duty TEAO (Totally Enclosed Air Over Motor) fan motor with permanently lubricated motor bearings promise longevity and performance.

- **Further improve the performance**
  Pre-engineered options designed exclusively for this series further improve the performance of the tower for specific applications. The outlet strainer can be upgraded to stainless steel. Inlet and outlet flanges can be added for quick connections. A structural steel base and legs can be purchased for quick installation. An optional thermostat saves energy and provides a constant, stable water temperature. A water make-up float valve assembly maintains consistent water level for maximum performance. A basin heater package is ideal for colder locations. An equalization connection for connecting several tower basins equalizes basin water levels by letting cooled water flow between basins.

- **10-year shell warranty**
  A Conair cooling tower installation assures peace-of-mind. We warrant the fiberglass shell and basin against material defects and workmanship for ten years. The remainder of the tower has one year parts warranty.

Features

01

Durable fiberglass shell resists corrosion and harsh weather conditions.

02

Access door to the tower interior with stainless steel fasteners.

03

Louvers made of durable PVC that are designed to eliminate possible back splash and are removable to allow full access to basin.

04

Leak-proof, one piece basin that can be mounted on two I-beams or optional structural steel base.

05

Totally enclosed fan motor with bearings that are permanently lubricated and require no maintenance.

06

PVC water distribution system includes large non-clogging nozzles that efficiently and uniformly distribute water across all fill surfaces.

07

PVC fill media maximizing air / water contact which optimizes heat transfer.

08

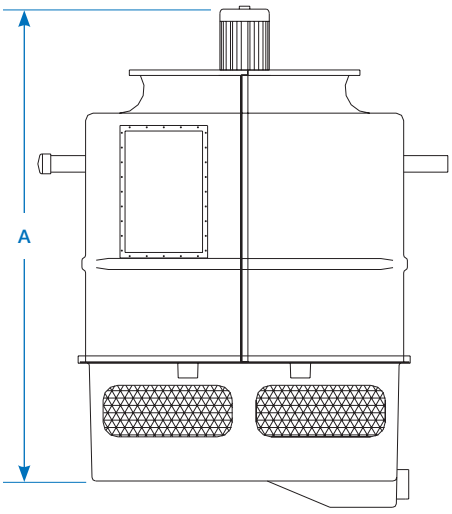
Optional inlet and outlet flanges.

Options

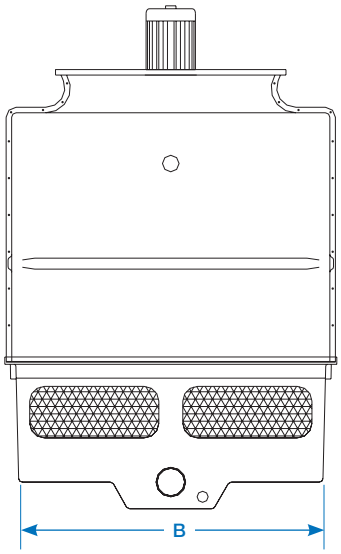
- Stainless steel outlet strainer can be used to provide system filtration when the basin of the tower is used as a reservoir.
- A pre-assembled, painted structural steel base makes tower installation quick and easy. The base is designed to be mounted on four support points and available with legs up to 20 feet {6 meters} long and appropriate cross bracing.
- NEMA 3R thermostat saves energy and provides stable supply water temperature by shutting off power to the fan motor when the water in the basin drops below a set temperature.
- Flanges can be supplied on both inlet and outlet connections for quick mating with plant piping.
- Basin heater package prevents the water in the basin from freezing in applications where the basin is used as a reservoir.
- Equalization connection creates a system reservoir by connecting several tower basins. Piping equalizes basin water levels by letting cooled water flow between the basins.
- Water make-up float valve assembly can be used in applications where a tower basin acts as an integral reservoir. The float valve assembly monitors the water level in the basin, adding water when necessary to maintain a consistent level ensuring maximum system performance.
- A high temperature option allows for the tower to be operated at inlet water temperatures up to 150°F {66°C}.

Specifications

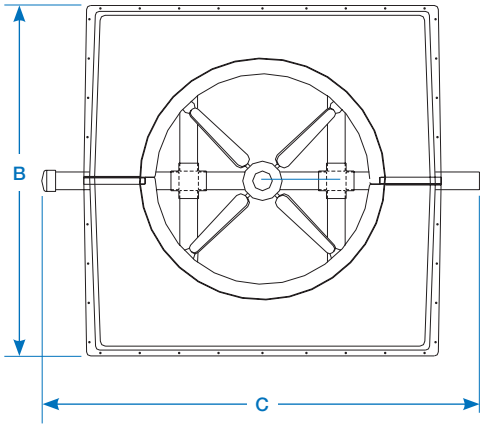
Models E2F-100, E2F-115, E2F-125 and E2F-140



Front view



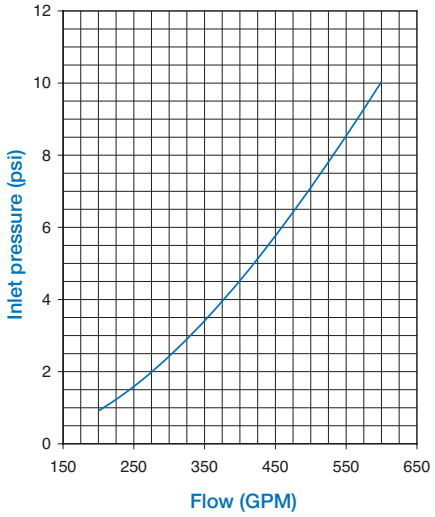
Side view



Top view

Model	E2F-100	E2F-115	E2F-125	E2F-140
Performance characteristics				
Tower capacity tons*	100	115	125	140
Sump capacity gallons {liters}	333 {1260}			
Blower motor Hp {kW}	3.0 {2.24}	5.0 {3.73}		7.5 {5.59}
Dimensions inches {mm}				
A - Height‡	122.75 {3118}	125.00 {3175}		128.25 {3258}
B - Depth	90 {2286}			
C - Width	114.5 {2908}			
Approximate weight lb {kg}				
Shipping (dry)	1760 {799}	1910 {867}		2150 {975}
Operating	4535 {2057}		4685 {2125}	4925 {2234}
Voltage full load amps **				
230v/3 phase/60 Hz	12.0	18.0		24.0
460v/3 phase/60 Hz	6.0	9.0		12.0
Connections inches {mm}				
Water inlet	4 {120} PVC			
Water outlet	8 {203} PVC			
Drain connection	2 {51} FPT			
Water requirements				
Minimum inlet pressure psi {bar}	6.0 {0.41}	4.0 {0.28}		
Maximum flow rate gpm {l/min}	600 {2270}			
Maximum inlet temperature§	110°F {43°C}			

Water Flow



Specification Notes

* Cooling tower tons are based on 15,000 BTU/Hr/ton with 95°F {35°C} entering water, 85°F {29°C} leaving water, 78°F {26°C} ambient wet bulb temperature and 3.0 gpm/ton water flow except note below.

† Maximum gpm for tower.

‡ Height does not include the portion of the basin that extends beyond the bottom of the basin.

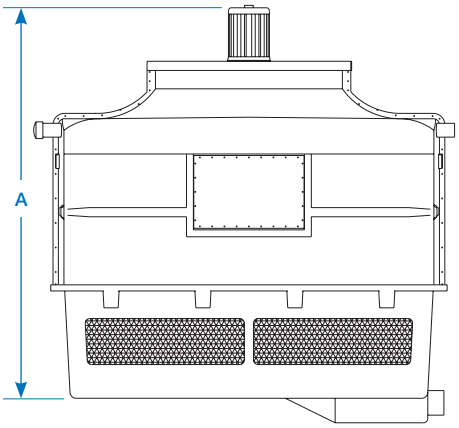
§ Optional high temperature maximum inlet temperature: 150°F {66°C}.

** FLA data for reference purposes only. Does not include any options or accessories on equipment. For full FLA detail for power circuit design of specific machines and systems, refer to the electrical diagrams of the equipment order and the nameplate applied to the machine.

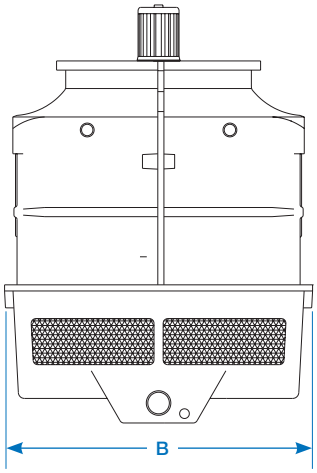
Specifications may change without notice. Consult with a Conair representative for the most current information.

Specifications

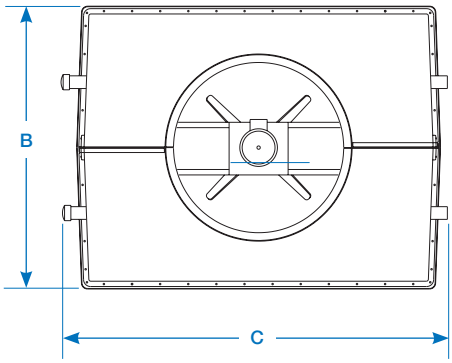
Models E2F-170, E2F-185, E2F-205 and E2F-240



Front view



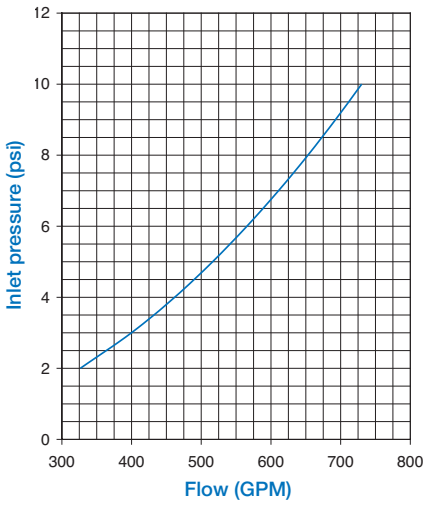
Side view



Top view

Model	E2F-170	E2F-185	E2F-205	E2F-240
Performance characteristics				
Tower capacity tons*	170	185	205	240
Sump capacity gallons {liters}	340 {1285}			
Blower motor Hp {kW}	7.5 {5.59}	10.0 {7.45}		15.0 {11.18}
Dimensions inches {mm}				
A - Height‡	124.5 {3162}	127.5 {3239}		
B - Depth	100.5 {2553}			
C - Width	139.5 {3543}			
Approximate weight lb {kg}				
Shipping (dry)	2660 {1207}	2700 {1225}		2750 {1248}
Operating	5230 {2373}	5530 {2509}	5570 {2527}	
Voltage full load amps **				
230v/3 phase/60 Hz	24.0	34.0		48.0
460v/3 phase/60 Hz	12.0	17.0		24.0
Connections inches{mm}				
Water inlet	2 x 4 {102} PVC			
Water outlet	8 {203} PVC			
Drain Connection	2 {51} FPT			
Water requirements				
Minimum inlet pressure psi {bar}	5.0 {0.34}	6.0 {0.41}	7.0 {0.48}	10.0 {0.69}
Maximum flow rate gpm {l/min}	725 {2740}			
Maximum inlet temperature§	110°F {43°C}			

Water Flow



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