

## E3 SERIES INDUCED DRAFT MODELS 250 TO 500 TONS



Model E3-300

# EFFICIENT COOLING WITH MINIMUM MAINTENANCE

Conair's E3 series induced draft, counterflow cooling towers offer more cooling, but require less space and less maintenance.

From the rust-proof molded polyethylene tower shell to the corrosion-resistant direct drive fan assembly, E3 towers contain fewer components that could fail and hamper performance.

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

## REDUCE WATER AND SEWER USAGE TO SAVE MONEY

Conair cooling towers recirculate process cooling water, paying for themselves in reduced water costs and sewer taxes.

A fixed PVC water distribution system sprays hot water over high-efficiency angled-baffle PVC cellular fill. The spiral fill design extends the water's travel path and exposure to air, increasing the heat transfer area for efficient cooling.

The fans draw air through inlet louver panels at the base, and then upward through the fill. Heat is removed when water on the multiple surfaces of the fill evaporates.

Options include: variable frequency drives on the fan motor to closely control temperature and save energy; an aluminum access ladder with safety cage.

### ■ Easy inlet/outlet connections

Single-point inlet water connection. Choose the optional side outlet with make-up float valve, or the standard bottom outlet for use with remote tanks and sumps.

### ■ Seamless, rust-free design

Our one-piece MDPE tower shell will not rust, corrode, chip, crack or require protective coating or painting. There are no seams, panels or rivets to fail and compromise performance. All fasteners are 304 stainless steel.

### ■ Costs less to install

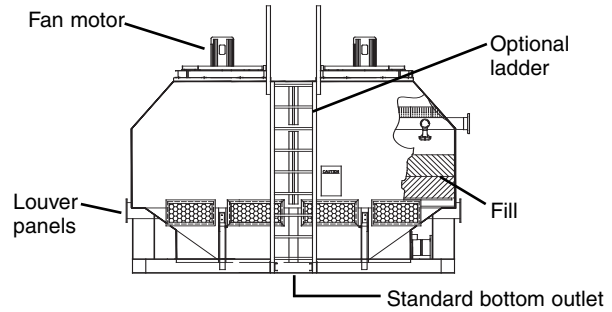
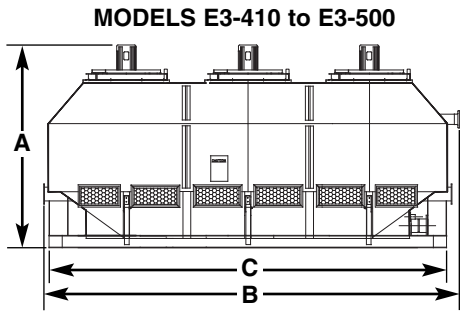
The lightweight design reduces rigging and structural roof support requirements. Everything, including the tower mounted base structure, is factory assembled for easy installation. Just lift the tower into place and hook up water and electricity.

### ■ 15-year warranty

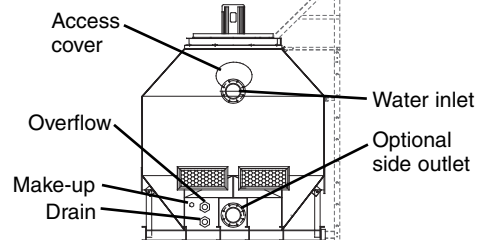
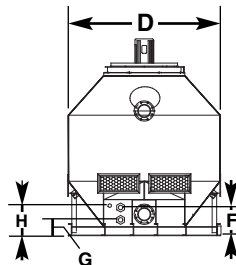
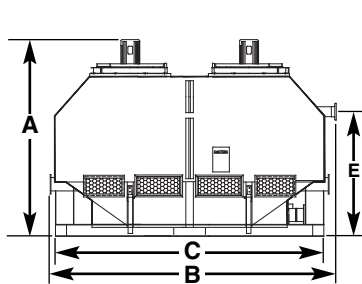
We're so confident our molded polyethylene shell will not rust, chip or crack, we back it with a 15-year warranty. We also warrant the totally enclosed, direct drive fan motors for five years and provide a one-year parts and labor warranty on the entire tower.



**E3 SERIES INDUCED DRAFT MODELS  
250 TO 500 TONS**



**MODELS E3-250 to E3-320**



MODEL	E3-250	E3-290	E3-320	E3-410	E3-460	E3-500
<b>Performance characteristics</b>						
Tower capacity Tons	254	292	319	408	460	502
Sump capacity Gallons {liters}	450 {1703}	450 {1703}	450 {1703}	720 {2725}	720 {2725}	720 {2725}
Fan motor number x Hp {kW}	2x5 {3.73}	2x7.5 {5.59}	2x10 {7.45}	3x5 {3.73}	3x7.5 {5.59}	3x10 {7.45}
<b>Wet bulb temperature / Output tower tons {GPM}*</b>						
70°F {21°C}	376 {1129}	433 {1298}	473 {1418}	604 {1813}	681 {2044}	744 {2231}
72°F {22°C}	353 {1058}	406 {1217}	443 {1329}	567 {1700}	639 {1917}	697 {2092}
75°F {24°C}	306 {918}	352 {1055}	384 {1153}	492 {1475}	554 {1663}	605 {1814}
78°F {26°C}	254 {762}	292 {876}	319 {957}	408 {1224}	460 {1380}	502 {1506}
80°F {27°C}	215 {646}	247 {742}	270 {811}	346 {1037}	390 {1169}	425 {1276}
<b>Dimensions inches {cm}</b>						
A - Total height		131 {333}			131 {333}	
B - Total length		186 {472}			264 {671}	
C - Mounting base length		140 {356}			219 {556}	
D - Total width		101 {257}			101 {257}	
E - Height to inlet		83.0 {211.0}			83.0 {211.0}	
F - Height to center of overflow		18.75 {48.0}			18.75 {48.0}	
G - Height to center of drain		10.5 {27.0}			10.5 {27.0}	
H - Height to center of make-up		20.0 {51.0}			20.0 {51.0}	
<b>Weight lb {kg}</b>						
Shipping (dry)	3900 {1769}	4000 {1814}	4100 {1860}	6050 {2744}	6160 {2764}	6350 {2880}
Operating	8100 {3674}	8200 {3720}	8300 {3765}	12130 {5502}	12240 {5552}	12430 {5638}
Operating with remote sump/tank	5100 {2313}	5200 {2359}	5300 {2404}	7330 {3325}	7440 {3375}	7630 {3461}
<b>Voltage Full Load Amps</b>						
208v/3 phase/60 Hz	35.4	47.3	62.8	53.1	71.0	94.2
230v/3 phase/60 Hz	32.0	42.8	56.8	48.0	64.2	85.2
400v/3 phase/50 Hz	18.4	24.6	32.7	27.6	36.9	49.0
460v/3 phase/60 Hz	16.0	21.4	28.4	24.0	32.1	42.6
575v/3 phase/60 Hz	12.8	17.1	22.7	19.2	25.1	34.1
<b>Connections inches</b>						
Water inlet / outlet - Flanged		6.0 / 8.0			6.0 / 10.0	
Make-up water - NPT		1.0			1.0	
Overflow and drain - NPT		3.0			3.0	
<b>Water requirements †</b>						
Inlet pressure psi {bars}		5 - 7 {0.34 - 0.48}			5 - 7 {0.34 - 0.48}	
Max. inlet temperature °F {°C}		140 {60}			140 {60}	

**SPECIFICATION NOTES**

\* Based on 95°F {35°C} inlet water and 85°F {29°C} outlet water. Consult factory for other conditions. 1 tower ton = 15,000 Btu/hr.

† Due to the unique design of E3 Series Cooling Towers, customer specifications must include design flow requirements.

Specifications may change without notice. Contact your Conair representative for the latest information.

**INSTALLATION NOTES**

For best performance, the tower must be installed in a location free from obstructions that may restrict airflow through the intake louvers or induce recirculation of discharge air.

All external piping must be independently supported. The fan ring, where air is discharged, should be level with or higher than the wall or roof line.