



# THERMAL PERFORMANCE GUARANTEE

## DRY FLUID COOLERS

Dear EVAPCO Customers,

EVAPCO is pleased to announce that we have significantly expanded our air cooled product capability by launching global air cooled product lines produced in Evapco factories around the world.

Our new global product line of dry coolers is called eco-Air Series Dry Coolers. EVAPCO is proud to launch the eco-Air Series Dry Cooler product line with units which are designed, rated, tested and guaranteed to provide 100% thermal capacity.

EVAPCO has tested the thermal performance of dry coolers produced by companies other than Evapco in our state of the art Research and Development Test Facility. Consequently, we realize that our strategic decision to always quote and provide 100% capacity dry coolers may often mean that our units are larger and provide greater thermal capacity than a competitor's units.

In order to level the playing field and help eliminate dry cooler products with commercialized ratings, we strongly encourage you to incorporate the suggested DRY COOLER THERMAL PERFORMANCE GUARANTEE language shown on the reverse side of this page into your dry cooler equipment specifications and/or contracts.

Sincerely,  
EVAPCO, INC.

William G. Bartley  
President & Chief Executive Officer

## **DRY COOLER THERMAL PERFORMANCE GUARANTEE**

### **THERMAL CAPACITY**

Units shall be guaranteed by the manufacturer to cool a design flow rate of \_\_\_\_\_USGPM of water ( \_\_\_% glycol, if applicable) from \_\_\_\_°F entering fluid temperature to \_\_\_\_°F leaving fluid temperature at a \_\_\_\_°F entering dry bulb temperature. Coil pressure drop shall not exceed \_\_\_\_ psi at the design flow rate.

### **THERMAL CAPACITY GUARANTEE**

Units shall be guaranteed to provide the THERMAL CAPACITY when field tested in accordance with EXHIBIT 1, Field Thermal Test Procedure for Dry Coolers.

If the units are suspected to be deficient in thermal capacity, the owner/user has the right to request a field thermal performance test per EXHIBIT 1, Field Thermal Test Procedure for Dry Coolers, at their own expense. The test shall be conducted by an independent third party test agency per the EXHIBIT 1 test procedure within one year from date of shipment. The third party test agency shall be a CTI licensed thermal test agency (<http://cti.org/licensedTestingAgencies.php>). The manufacturer shall be given a minimum thirty (30) day notice prior to the test date and shall be allowed to both pre-inspect the unit and witness the test.

If the field thermal performance test results report the unit capacity to be less than 100% of the guaranteed THERMAL CAPACITY, the equipment manufacturer shall reimburse the owner for the cost of the field performance test. Additionally, the manufacturer shall absorb all costs to make corrective measures to increase unit capacity to 100% or greater without exceeding the specified total fan motor energy of the unit(s). Corrective measures must be completed by the equipment manufacturer within six (6) months of a test which finds the unit to be less than 100% of guaranteed capacity.

The equipment manufacturer shall then pay to have the modified/corrected units retested per EXHIBIT 1 to confirm that corrective actions have improved capacity to 100% or greater. If the retest results report the capacity to still be less than 100%, the manufacturer shall provide new units which provide the specified thermal capacity free of charge and absorb all costs for removing and replacing the thermally deficient units.

The manufacturer shall pay to have the new/replacement units field thermal performance tested per EXHIBIT 1 to confirm 100% capacity. If the test on the new/replacement units reports capacity to be less than 100%, the manufacturer shall repeat the process (at their own expense) of providing new units and field tests per Exhibit 1 until a field test result reports the installed units to be 100% or greater capacity without exceeding the specified total fan motor energy of the unit(s).

## EXHIBIT 1

### FIELD THERMAL PERFORMANCE TEST PROCEDURE FOR DRY COOLERS

The applicable field test procedure is CTI ATC-105S (11), Acceptance Test Code for Closed Circuit Cooling Towers, except as modified as follows to be appropriate for Dry Coolers.

1. The introduction section which occurs at the start of page 1 is hereby deleted since this section applies to evaporative coolers.
2. Section 2.3 is hereby deleted since this section does not apply to dry coolers.
3. RE: Section 3.1.1 – the words “dry bulb” are hereby inserted in place of the words “wet bulb”.
4. Section 3.1.3.e is hereby deleted since this section does not apply to dry coolers.
5. Section 3.2 is hereby deleted since this section does not apply to dry coolers.
6. RE: Section 3.3 – air density shall be based on dry air, since this Exhibit 1 field test procedure applies to dry coolers.
7. Section 3.4.1 is hereby added to read: 3.4.1 Testing Tolerance. A 3% testing tolerance is recognized by these test procedures. Therefore, equipment which is field tested to have 97% or greater THERMAL CAPACITY is deemed to have passed the field test as a 100% Thermal Capacity unit.



#### **eco-Air Flat Series**

Air Cooled Fluid Cooler  
(EC Motor Configuration Shown)



#### **eco-Air V Series**

Air Cooled Fluid Cooler  
(NEMA Motor Configuration Shown)



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