

# Ozone Systems

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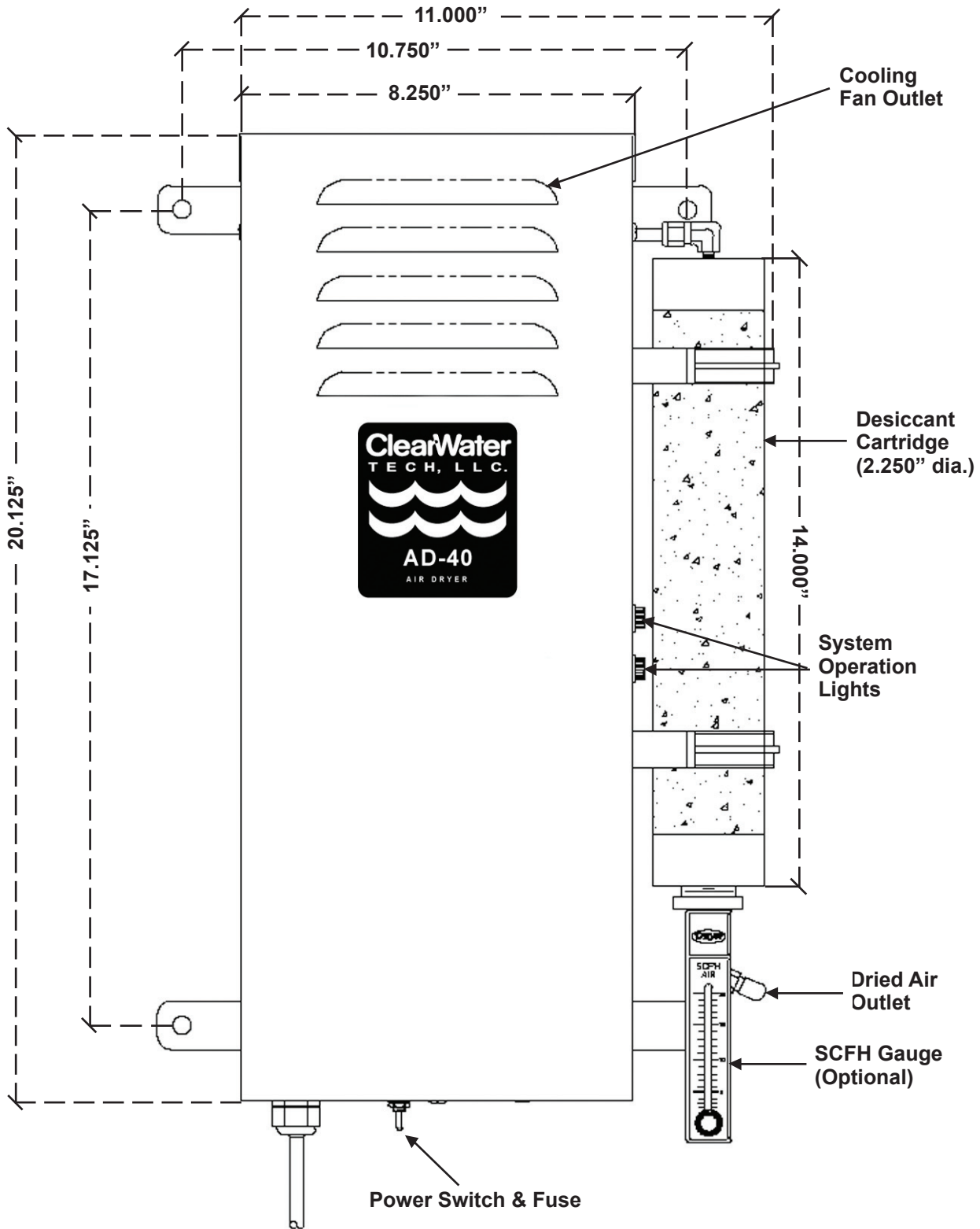
Installation & Operation Manual

## AD-40 Air Dryer



**ClearWater Tech, LLC.**  
Integrated Ozone Systems

# AD-40 Air Dryer Dimensions & Layout



## **INTRODUCTION**

### **The AD-40 Air Dryer**

Corona discharge ozone generators are much more effective, produce more ozone and require far less maintenance if an air preparation unit is included. The air preparation system lowers the dew point of the feed gas. Moist feed gas (air) will cause nitric acid to form inside the generator which decreases ozone production and if not removed, causes corrosion and eventual failure of the generator's internal components. The ability of the ozone generator to produce ozone is drastically reduced as the dew point rises above -55°C. The desiccant material has an average life expectancy of five years under normal use.

## **INSTALLATION**

### **Air Dryer Installation**

The dryer should be protected from direct weather. Four mounting holes are located on the back of the AD-40 for convenient wall mounting. Mounting hardware is not provided.

### **Electrical Installation**

Plug the AD-40 cord into any unswitched 120V electrical outlet. The air dryer should remain energized at all times. Wire it to a 120V source that does not cycle on and off. The dryer should cycle for a minimum of 12 hours without vacuum prior to startup.

### **Tubing Installation**

Install 3/8" braided tubing from the air dryer to the AIR INLET on the bottom of the ozone generator. (See ozone generator installation manual.)

### **Tubing Installation with optional Electrical Interlock Box**

If your system is equipped with an electrical interlock box, follow the steps below:

1. Install 3/8" braided tubing from the air dryer to the AIR INLET on the bottom of the electrical interlock box.
2. Install another piece of 3/8" braided tubing from the AIR OUTLET on the electrical interlock box to the air inlet barb fitting on the bottom of the ozone generator.

## **MAINTENANCE**

Check to see that the air dryer is warm. This indicates that it is working. If the air dryer is not working, call your dealer. The visible indicator cartridge is 25% desiccant beads which should be blue in color. If they are clear to white in appearance, check to be sure that the unit is working. (NOTE: It is not unusual for the indicator beads to change color often. If this happens, cycle the dryer for 24 hours without the ozone generator.) When the desiccant granules become clear to pink in appearance, they have absorbed too much moisture and must be dried to regain their efficiency. To dry the desiccant beads, follow these steps:

1. Disconnect the braided tube from the bottom and the brass compression fitting at the top of the desiccant cartridge.
2. Remove the desiccant cartridge by opening the clamps holding the cartridge to the body of the air dryer.
3. Unscrew the cap on the bottom of the cartridge and spread the granules evenly on a cookie sheet and bake at 350°F in an oven.
4. Check often. Once the desiccant granules regain their blue color, remove from the oven.
5. Return to the cartridge, recap, and reconnect to the air dryer.

The AD-40 is equipped with a fuse. If the fuse blows, replace only with the same type of 5 amp fuse.

## **MODEL AD-40 AIR DRYER SPECIFICATIONS**

Energy Required: 105 Volts minimum, 125 Volts maximum, 60 Hz, 1.0 Amp  
Dimensions: 20.750"H x 11.375"W x 4.250"D  
Shipping Weight: 15 lbs.

# ClearWater Tech, LLC Limited One-Year Warranty

## Summary of the Warranty

ClearWater Tech, LLC (“CWT”) makes every effort to assure that its products meet high quality and durability standards and warrants the products it manufactures against defects in materials and workmanship for a period of one (1) year, commencing on the date of original shipment from CWT, with the following exceptions: 1) The warranty period shall begin on the installation date if the installation is performed within 90 days of the original shipment from CWT; 2) The warranty period shall begin on the date of the bill of sale to the end user if the installation date is more 90 days after the original shipment date. To validate the warranty, a warranty card, accompanied by a copy of the bill of sale, must be returned to CWT and must include the following information:

- End user name
- Complete address, including telephone number
- Date installed
- Complete model and serial number information
- Name of company from which the unit was purchased

Repairs and replacement parts provided under this warranty shall carry only the unexpired portion of this warranty or 90 days, whichever is longer.

## Items Excluded from the Warranty

This warranty does not extend to any product and/or part from which the factory assigned serial number has been removed or which has been damaged or rendered defective as a result of:

- an accident, misuse, alteration or abuse
- an act of God such as flood, earthquake, hurricane, lightning or other disaster resulting only from the forces of nature
- normal wear and tear
- operation outside the usage parameters stated in the product user’s manual
- use of parts not sold by CWT
- service or unit modification not authorized by CWT manual
- check valve/solenoid valve failure
- damage which may occur during shipping
- failure to meet service requirements as outlined in the I & O manual

## Obtaining Service Under the Warranty

Any product and/or part not performing satisfactorily may be returned to CWT for evaluation. A Return Goods Authorization (RGA) number must first be obtained by either calling or writing your local authorized dealer, distributor or CWT direct, prior to shipping the product. The problem experienced with the product and/or part must be clearly described. The RGA number must appear prominently on the exterior of the shipped box(es). The product and/or part must be packaged either in its original packing material or in comparable and suitable packing material, if the original is not available. You are responsible for paying shipping charges to CWT and for any damages to the product and/or part that may occur during shipment. It is recommended that you insure the shipment for the amount you originally paid for the product and/or part.

If, after the product and/or part is returned prepaid and evaluated by CWT, it proves to be defective while under warranty, CWT will, at its election, either repair or replace the defective product and/or part and will return ship at lowest cost transportation prepaid to you **except for shipments going outside the 50 states of the United States of America**. If upon inspection, it is determined that there is no defect or that the damage to the product and/or part resulted from causes not within the scope of this limited warranty, then you must bear the cost of repair or replacement of damaged product and/or part and all return freight charges. Any unauthorized attempt by the end user to repair CWT manufactured products without prior permission shall void any and all warranties. For service, contact your authorized dealer or distributor or CWT direct at (805) 549-9724, extension 23.

## Exclusive Warranty

There is no other expressed warranty on CWT products and/or parts. Neither this warranty, or any other warranty, expressed or implied, including any implied warranties or merchantability of fitness, shall extend beyond the warranty period. Some states do not allow limitations on how long an implied warranty lasts, so that the above limitation or exclusion may not apply to you.

## Disclaimer of Incidental and Consequential Damages

No responsibility is assumed for any incidental or consequential damages; this includes any damage to another product or products resulting from such a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that above limitation or exclusion may not apply to you.

## Legal Remedies of Purchaser

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

**THIS STATEMENT OF WARRANTY SUPERSEDES ALL OTHERS PROVIDED TO YOU AT ANY PRIOR TIME.**