



# Owner's Manual – Dri-Eaz® EnviroBoss™ 6000

DRI-EAZ PRODUCTS, INC.

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*The EnviroBoss 6000 (EB6000) is a trailer-mountable system, for effective drying in tropical, cold, cool/dry weather as well as for heating, cooling and air exchange.*

Read And Save These Instructions

## **WARNING**



**Read and understand manual before operating.**

### ELECTRIC SHOCK HAZARD

- Unit requires grounded 230-volt power supply.
- Never operate in standing water.

### ROTATING FAN, HOT SURFACE HAZARDS



- Keep covers closed while operating.
- Turn off power and wait two minutes before opening covers.

**Follow all safety instructions and service procedures.**

## **SAFETY INSTRUCTIONS**

**WARNING! Unplug unit before opening cover for cleaning or servicing.**

- Keep cover closed while operating unit. Wait two minutes after shutting off power before opening cover to allow impeller to stop.
- Never operate in standing water. Keep electrical components dry. If they become wet, allow to dry before operating unit.
- Keep bystanders and children away. If unit is left unattended, be sure to lock covers securely.

- Rough treatment can damage the unit, and may create a hazardous condition or void the warranty.
- Secure properly to trailer when transporting to prevent sliding and possible injury to vehicle occupants.
- Do not attempt to disassemble or repair the unit. For Authorized Service Centers, go to [www.dri-eaz.com/howtobuy](http://www.dri-eaz.com/howtobuy) or call Dri-Eaz Service at 800-932-3030.

**Electrical Requirements.** Always operate the EB6000 on a minimum service of 50 amps at 230V, whether running on shore power or generator.

**Generator Operation.** When powering the unit by generator, take care not to let the generator run out of fuel or otherwise interrupt the supply of power to the EB6000. If generator power is interrupted for any reason, please follow these steps to ensure proper startup and prevent potential damage to EB6000 components due to inadequate voltage from the generator:

1. Unplug EB6000 from the generator.
2. Fill generator with fuel (or otherwise resolve the problem that caused the generator to shut down).
3. Start generator and let run for 5 minutes.
4. Plug EB6000 back into generator.

## **INTRODUCTION**

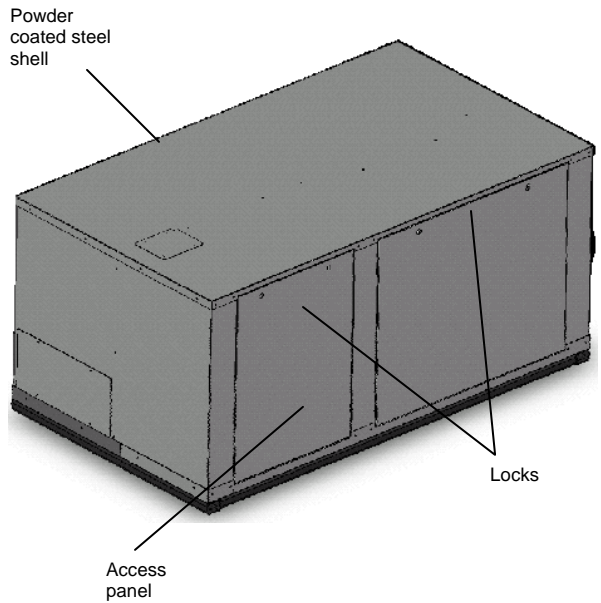
The EB6000 is a versatile environmental control unit that effectively handles tropical, cold and cool/dry weather. It can even be used for heating, cooling and air exchange. The split-stream dehumidification offers versatility for commercial or large residential jobs.

### FEATURES:

- Maximum versatility for drying, cooling and heating for all climates.
- Provides 5-ton cooling
- Maximum drying with 720 pints/day water removal at AHAM (80°F/60%RH); 1400 pints/day at 90°F/90%RH; low grain dehumidification of 100 pints/day at 80°F/20%RH

- Maximum airflow up to 5,400 CFM (using both air streams)
- Dehumidification amplifier for precooling air entering evaporator coil.
- Refrigerant condenser for heating
- Refrigerant evaporator for dehumidification and cooling
- Separate air streams for increased versatility
- Uniform 18" ducting size for all outlets
- Digital control panel operation
- Durable powder-coated steel housing
- Trailer-ready design

**PARTS IDENTIFICATION** (Shown, below)



**Back/Side View**

**OPERATING INSTRUCTIONS**

**GETTING STARTED**

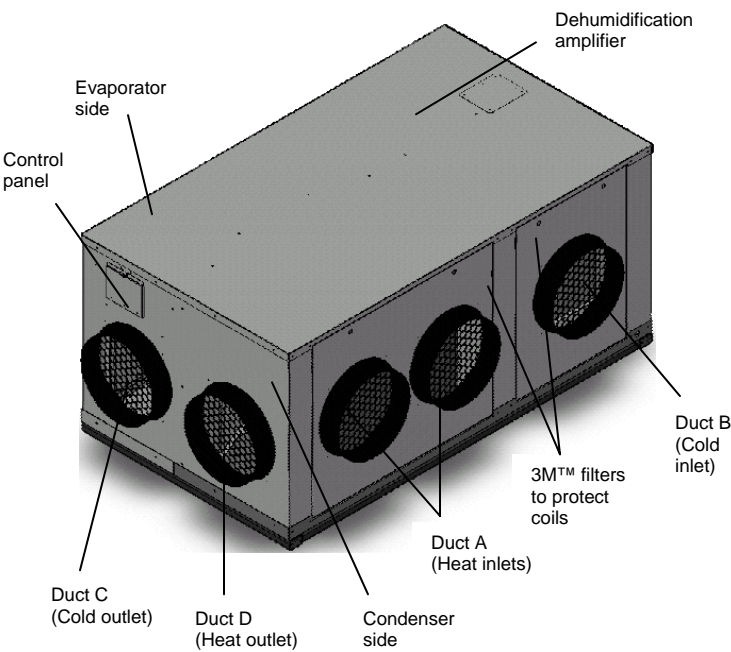
Placement:

**WARNING!** Keep back cover closed and locked while operating. Moving fan inside could cause injury.

1. Place the unit on a level surface.
2. Attach duct rings. Duct rings and the necessary hardware to install them are both stored inside unit prior to initial installation. Mount duct rings using supplied hardware prior to first use.
3. If using a generator for power make sure it is up and running before plugging the power cord in.
4. Plug the power cord from the 230V supply into the receptacle under the touchpad.
5. Once the touchpad display comes on the unit may be started.
6. Check for proper operation before leaving the unit unattended.

**Operating Range**

Recommended operating range is between 33° – 100° F. The EB6000 will not perform effectively when operating with ducted-in air outside this range. To operate the unit when temperatures fall below this range, please refer to the “Cold Weather Start-up” procedure described on p. 6.



**Front/Side View**

## TOUCH CONTROL OPERATION PANEL

### Touch Controls



### HOW TO USE THE TOUCHPAD CONTROLS:

The Touchpad on the EB6000 has one display and four buttons. The following paragraphs will explain how to use these keys to perform various functions. Be sure to follow instructions closely.

The four buttons are:

- Power On-Off
- Dehumidification Amplifier On/Off
- Display
- Clear

**Power On-Off.** Press the Power ON-OFF key to turn the unit on or off. Immediately after turning the machine on, the display usually reads CMPRSR DELAY and performs a numerical countdown from a maximum of 60 seconds to 0. If a compressor delay countdown is not visible, the machine is ready to go. Once the unit completes the CMPRSR DELAY, the display reads DEHUMIDIFIER ON, and continues to cycle through TOTAL HOURS, JOB HOURS and DEHUMIDIFIER ON. Press the ON-OFF key again to turn the unit off. The display will read DEHUMIDIFIER OFF.

### Dehumidification Amplifier On/Off

When the unit is turned on, the display reads Dehumidifier On; this function comes ON by default. Press this button once to turn the Dehumidification Amplifier OFF for cooling (the display will read A/C On). Pressing the DEHUMIDIFICATION AMPLIFIER ON/OFF button engages or disengages the low grain pre-cooling loop. The low grain pre-cooling loop is used for increasing dehumidifier efficiency.

### Display

Press the DISPLAY key to stop the display at DEHUMIDIFIER ON or OFF, TOTAL HOURS, or JOB HOURS as it cycles. Press DISPLAY again to re-start the display cycle.

### How to change the language display

Use the DISPLAY key to change the display language. Follow these steps:

1. Start with the unit unplugged.
2. While holding down the DISPLAY key, plug the unit in. The display reads ENGLISH.
3. To change to FRANCAIS, DEUTSCH, or ESPANOL, press the DISPLAY key or the CLEAR key.
4. When the desired language is shown in the display, unplug the unit, and the language is set.

**Note:** While in the change-language mode, pressing other keys can change the programming of the machine. Do NOT press keys other than the DISPLAY or CLEAR.

### Clear

Press the CLEAR key to reset the JOB HOURS: As the display cycles between DEHUMIDIFIER ON, JOB HOURS, OR TOTAL HOURS, press the DISPLAY key when JOB HOURS appears on the screen. The screen will display JOB HOURS steadily. Then press the CLEAR key to re-set the numerals to 00000. Press DISPLAY again to re-start the display cycle. **Note:** The TOTAL HOURS reading cannot be re-set.

### Other Displays

#### Defrost Cycle

During normal operation, the temperature sensor detects frost forming on the coils, causing a defrost cycle to start. The display will read DEFROST ON. Dehumidification stops during the defrost cycle. When the unit completes the cycle the display will return to DEHUMIDIFIER ON.

#### Messages

When the display menu shows the error message "GET SERVICE," followed by "ER01" or another numeral, follow these steps:

1. Unplug the unit and then plug it back in. This may re-set the electronics.
2. If that does not fix the problem, contact Dri-Eaz Service at 800-932-3030.

#### Other Messages

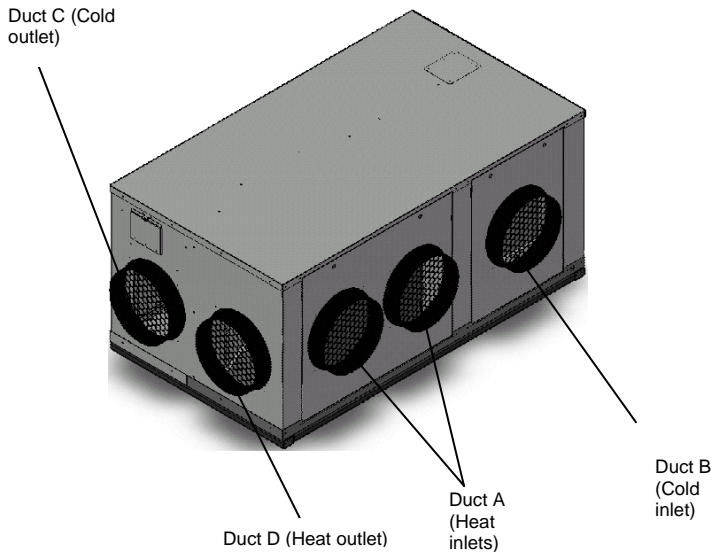
If ER 1, 2, 3, 5, 6 appears there is a problem with the electronic control panel. Contact Dri-Eaz Service at 800-932-3030

If ER 4 appears unplug the unit and check the temperature or sensor cable. Contact Service for instructions 800-932-3030.

If ER 8 appears check the touchpad key controls. Press and release each key several times to reset.

### GENERAL DUCTING INSTRUCTIONS:

- DUCT A: HEAT INLETS
- DUCT B: COLD INLET
- DUCT C: COLD OUTLET
- DUCT D: HEAT OUTLET



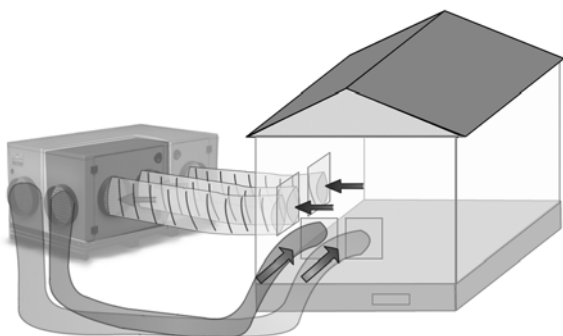
- **DUCTING:** The unit is ductable for directing conditioned air or heat into specific spaces.
- **DUCTING SIZE:** Use 18" diameter ducting
- **INLET DUCTING:** When using duct on the inlet side, use negative air rated (reinforced) ducting so it doesn't collapse on itself while in use.
- **OUTLET DUCTING:** Use positive air ducting (layflat ducting may be used, although reinforced ducting provides better insulation of airflow temperature).

## APPLICATIONS

DEHUMIDIFICATION:  
(Shown below)

In Structural Drying

- Balanced air pressure for the optimum setup in general drying projects.
- Best balance between heating and dehumidifying the same space.



Note: Dehumidification amplification engaged  
**Dehumidification Setup**

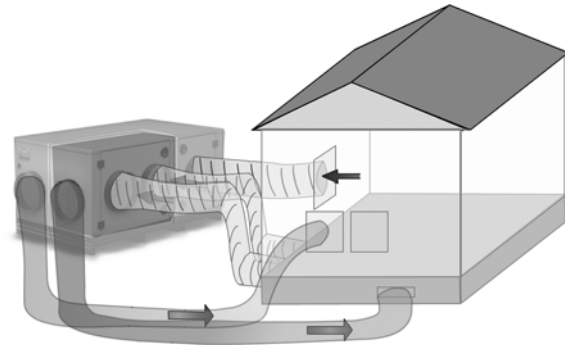
DEHUMIDIFICATION: SPLIT STREAM  
(Shown below)

Structural Drying

- Heat can be applied immediately to the wet materials while providing separate humidity control.
- Results in a cooler, more comfortable humidity controlled environment.

Restoration

- Use to control humidity where dust and particulates control are an issue.

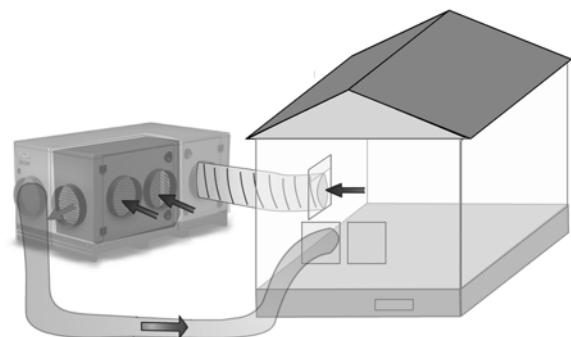


Note: Dehumidification amplification engaged  
**Dehumidification Split-Stream Setup**

COOLING AND DEHUMIDIFICATION  
(Shown below)

Structural Drying in Tropical Climates

- Optimized for drying in warm, humid climates.
- This installation will provide large amounts of dehumidification without heating .
- Will result in a neutral air pressure.



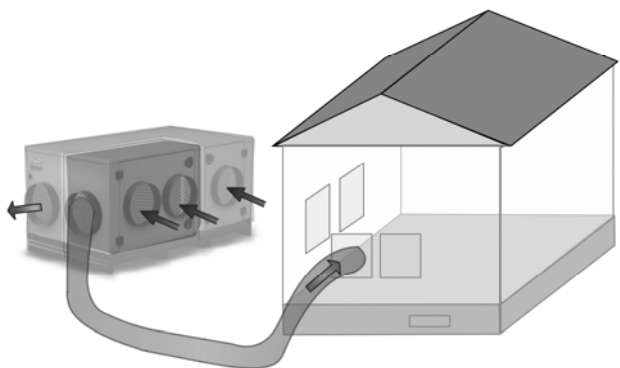
Note: Dehumidification amplification engaged  
**Dehumidification and Cooling in Tropical Climates Setup**

## HEATING AND VENTILATION - SPOT HEATING

(Shown below)

### Restoration/Commercial

- Provides heating when outdoor air temperatures are cooler than your target indoor temperature.
- Heat absorbed and generated by the EB6000 is directed into the structure.



Note: Dehumidification amplifier not engaged

### Heating and Ventilation - Spot Heating Setup

## COOLING AND VENTILATING - SPOT COOLING

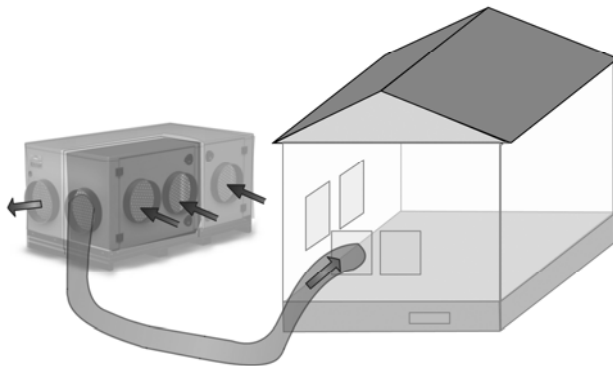
(shown below)

### Commercial

- Provides cooling to an immediate area within a structure or space.
- Results in positive air pressurization, which is ideal for a space that is intended to be kept clean and unaffected by surrounding work activities (dust, etc.).

### Rental

- Good for temporary temperature control for large rooms, temporary structures (e.g. tents), etc.



Note: Dehumidification amplifier not engaged

### Cooling and Ventilating - Spot Cooling Setup

## COOLING

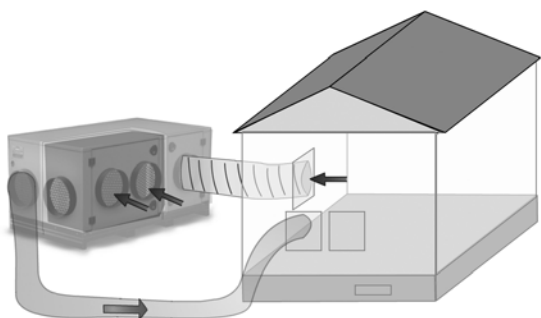
(Shown below)

### Commercial

- Ideal for controlling temperature in a large environment with 5 tons of cooling capacity.
- Neutral air pressure increases unit's ability to control humidity and temperature over a large area.

### Rental

- Ideal for temporary temperature control for large rooms, temporary structures (e.g. tents), etc.



Note: Dehumidification amplifier engaged

### Cooling Setup

## HEATING AND VENTILATING

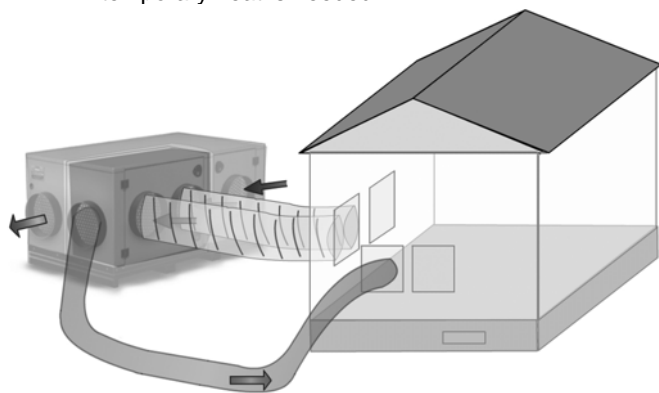
(Shown below)

### Commercial

- Ideal configuration for heating small to medium sized areas.
- Neutral air pressure allows the system to heat larger areas than if area was pressurized.

### Rental

- Good for heating small to medium sized spaces when temporary heat is needed.



Note: Dehumidification amplifier not engaged

### Heating and Ventilating Setup

## CONFIGURATIONS

(For diagrams look to the right of the control panel on the unit)

### DEHUMIDIFICATION & HEATING (Cold Weather)

A cold weather (closed system) is optimal for temperatures around 40°F (4°C) and less.

Air enters the unit from the structure from both the condenser intakes and flows into the dehumidification amplifier (split stream of pre-cooling and heating). Both processed air outlets are ducted back into the structure for 5400 CFM.

**NOTICE:** Operating unit outside operating range (33° – 100°F / 1° – 38°C) in a closed system could deplete the system of refrigerant and could cause liquid refrigerant to enter the compressor leading to premature compressor wear and possible failure.

### DEHUMIDIFICATION & VENTILATION (COOL/DRY WEATHER)

Cool/dry configuration is optimal for temperatures around 40° – 60°F (4° – 16°C) where the outside lower ambient air is dry (low humidity). Dry outside air enters through the condenser intakes and is ducted into the structure. Air from the structure enters into the dehumidification amplifier (split stream of pre-cooling and heating) and is also ducted into the structure.

### DEHUMIDIFICATION & COOLING (TROPICAL WEATHER)

Warm humid air from the structure enters the dehumidification amplifier and is processed and ducted back into the structure. Outside air is ducted into the condenser and exits back outside (operation of the condenser is necessary to support the refrigerant by-pass system). Optimal for temperatures above 60°F (16°C).

### COOLING

This is the cooling system for high temperatures. Air from the structure is ducted into the evaporator coil (the dehumidification amplifier is turned off so no heat re-enters the process). Outside ambient air enters the unit and exits back outside after going through the condenser. The processed/cooled air is ducted back into the structure.

## COLD WEATHER SOLUTIONS

**Cold Weather Start-up.** To help protect the EB6000 when operating in freezing temperatures, the compressor has been equipped with a heating circuit that activates whenever the EB6000 is plugged in. Before operating the unit, sufficient time must be allowed for the compressor to reach a safe operating temperature. Follow these steps whenever it is necessary to operate the EB6000 in ambient temperatures below 40°F:

1. Follow this chart to determine recommended heat-up times:

| Ambient temperature | Warm-up time       |
|---------------------|--------------------|
| 0° – 10°F           | 2.0 hrs            |
| 10° – 20°F          | 1.5 hrs            |
| 20° – 33°F          | 1.0 hr             |
| 33° – 40°F          | 0.5 hrs (optional) |

2. Plug the unit into a 230V 50 amp power source as required for normal operation.
3. The touchpad comes on as normal displaying total hours.

4. The compressor heater activates automatically, so no action is necessary. Do not start the EB6000 until sufficient warming time has passed.
5. After the required warm time has passed, the unit may be started as in normal operation.

Included with the EB6000 is a **12-foot insulated drain hose** that you can connect to the drain outlet on the unit to help direct condensate away from the unit. When not in use, disconnect the hose and store where ambient temperatures remain above freezing.

## MAINTENANCE

### TRANSPORTING AND STORING

If mounted on a trailer, it must be installed on a trailer with suspension rated for a minimum of the total weight of the unit and any additional components. Use of a trailer without such rated suspension could void the warranty.

**Note:** Make sure the cover is locked when leaving unit unattended.

**Note:** Make sure the drain pan is completely empty before storing the unit in temperatures below 33°F (1°C).

### REGULAR MAINTENANCE

**WARNING!** Turn off and unplug unit before opening to clean or service. Wait two minutes before opening the rear access cover. To open cover, unlatch latches, unlock, twist ¼ turn and lift cover up and out.

#### Weekly

##### Inspect Filters

There are three filters in the EB6000, two of the same size on the condenser side and a different one on the evaporator side. The filters are mounted in front of each refrigeration coil. Inspect for damage or excessive dirt. Use a clean 3M™ HAF Filter (see below). Replace condenser filter every four months (if excessive dirt is present) or earlier if necessary. Replace evaporator filter before each job. For Parts and Service call your local distributor, or the Dri-Eaz Service Department at 800-932-3030 or (360) 757-7776.

##### Use Clean 3M HAF Filters

Keep clean filters in the unit at all times to protect internal components from dust and other particulate build-up. Vacuum filter up to 3 times and reuse. **Note:** There are three filters in the unit, all are the same type but two different sizes. Be sure the appropriate size is installed.

#### Monthly

##### 1. Exterior Inspection

Inspect exterior and make sure it is not damaged. Listen to the unit for abnormal sounds. For Parts and Service call your local distributor, or the Dri-Eaz Service Department at 800-932-3030 or (360) 757-7776.

##### 2. Clean Exterior

Clean the housing with a damp cloth.

## TROUBLESHOOTING

**Touchpad doesn't come on:** Check power supply via the 50-amp building outlet or the generator.

**Water in bottom of unit:** Check condensate drain for blockages. Check to make sure there is adequate insulation around the compressor and refrigerant vapor lines.

### **SPECIFICATIONS**

|                       |  |
|-----------------------|--|
| Model                 | F376 (skid mounted)<br>F358 (trailer mounted)  |
| Weight                | 1400 lbs. (635 kg)   |
| Amp Draw              | 38 amps (maximum draw at start-up)   |
| CFM                   | 1800 CFM cooling/dehu airstream<br>3600 CFM heating airstream<br>5400 CFM combined airstreams      |
| Maximum water removal | 1400 pints/day at 90°F/90%Rh<br>720 pints/day at AHAM (80°F/60%Rh)<br>100+ pints/day at 80°F/20%Rh |
| Rated BTU (cooling)   | 5 Ton (= 60,000 BTU/hr or 17.58 kWh)   |
| Power                 | 230V 50 amp  |
| Filter                | 3M™ HAF Filters  |
| Duct ring size        | Standard 18"   |
| Construction          | Powder-coated steel  |
| Safety                | ETL listed to UL and CSA standards   |

Specifications are subject to change without notice. Some values may be approximate.

**FOR PARTS AND SERVICE CALL YOUR LOCAL DISTRIBUTOR**, or the Dri-Eaz Service Department at 800-932-3030 or (360) 757-7776. [www.dri-eaz.com](http://www.dri-eaz.com)